The Changing Landscapes of Rome's Northern Hinterland

The British School at Rome's Tiber Valley Project

Helen Patterson, Robert Witcher and Helga Di Giuseppe

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With contributions by
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The South Etruria surveyors north-west of Veii.

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Preface

John Ward-Perkins's South Etruria Survey was pioneering in many senses. It was the first project of the British School at Rome (BSR), at least in Italy rather than North Africa, to involve a large team of collaborators; it was the first project which realised the sort of ambitions an institute with a permanent base in the country studied can aspire to, of sustained activity over many years, as opposed to the sort of three- to five-year projects that funding schemes in the UK otherwise permitted. And it left an important legacy: not just of material still to be studied (despite a stream of articles and Tim Potter's synthetic account), but of links with archaeologists active both in Britain and Italy who saw the value of pursuing the project further. When, in 1995, I found myself with the responsibility of developing an archaeology research strategy for the British School, despite the impressively ambitious project of my predecessor, Richard Hodges, at San Vincenzo al Volturno, the institution seemed to have lost the Ward-Perkins vision of a flagship project that might pull together the efforts of colleagues both in the UK and in Italy. Following the advice of a review commissioned by Tim Potter and led by Gillian Andrewes, the School agreed to divert the resource used for supporting various projects in Italy with small grants, and to set up a new position of Director of Archaeology, with the aim of developing a new ambitious project.

It was the winning vision of Helen Patterson, strongly encouraged by Tim Potter, not only to return to the unexploited potential of the South Etruria archive (fieldnotes, records, photographs, and enough pottery fragments collected from surface survey to fill two garages), but also to give the geographical boundaries of the South Etruria Project a new spin by treating the Tiber not as a boundary, but as the centre of the project, so bringing the left bank, the Sabina, into the picture. Taking a river valley as the definition of a survey project was a strategy which had been deployed successfully elsewhere, not least in Graeme Barker's Biferno valley project. But unlike most valleys, the Tiber valley offers significant contrasts between its two banks. Geologically, the volcanic landscape of Etruria contrasted with the limestone hills of the Sabina; in terms of settlement, Etruria from antiquity to the present has been relatively densely settled, with numerous independent centres, whereas the settlement of the Sabina has been thinner, and the clusters less notable. But different though the two banks might be, on both the impact of a great megalopolis in Rome made itself felt. The other strategic advantage was the possibility of confronting the more familiar results of the South Etruria Survey with new surveys: in the event, work at Forum Novum/Vescovio and Ocriculum/Otricoli proved fascinating and in various ways unexpected case studies.

It was one thing to set up a new post at the BSR to take responsibility for a major archaeological project (and one free from the increasing burdens of running the institution itself), but another to find the resources to bring together the necessary players to undertake such an ambitious project. A major boost was provided by the Leverhulme Trust, which provided funding for two three-year postdoctoral research positions, filled by Helga Di Giuseppe and Robert Witcher. It is the work of this trio, with Helen Patterson as principal investigator that forms the basis of the present volume. But the design of the project always foresaw the involvement of other players and institutions. The danger of withdrawing small grant funding for projects by UK Universities in Italy was to lose contact with those old allies (though in truth, because BSR funding was usually a small part of the funding of any individual project, the sense of ownership was rarely very strong). Invitations were issued to colleagues in the UK to participate in an initial workshop, and to join in the broader project. The response was enthusiastic, and there rapidly emerged a constellation of projects around the central re-examination of the South Etruria archive. One of the most fruitful was from Simon Keay and Martin Millett, who wished to apply the techniques of geophysical survey to the towns of the Tiber valley (and eventually beyond). Falerii Novi was only a starting point: the spectacular result, in the form of a remarkably complete city plan, was swiftly published. Other sites followed, including Ocriculum on the left bank, at a critical junction point between Lazio, Etruria and Umbria; a site of irresistible beauty, enhanced by the warm hospitality of Enrico and Benedetta Floridi, in whose back garden the town's Roman amphitheatre lay.

But no less important was the project close to the mouth of the Tiber at the maritime port of Rome, Portus. Here the sense of urgency to understand a neglected Roman landscape better was shared by Anna Gallina Zevi, the Soprintendente of Ostia, and Duke Ascanio Sforza Cesarini, who owned those parts of the landscape not expropriated by the Soprintendenza on the one hand, and the airport of Fiumicino on the other (he too was a generous host). This was a project that could only grow, and take on a life of its own. Simultaneously the collaboration between Southampton University and the BSR spawned a spin-off enterprise, meeting the growing market for geophysical surveys. The Archaeological Prospection Service of Southampton (APSS), in the shape of Kris Strutt, Sophie Hay, and a revolving crew of assistants, not only paid its way, but cast important light on a series of Roman sites, including Teanum Sidicinum (Teano) in Campania, Tibur (Tivoli) in Lazio, as well as Amara in Sudan and Utica in Tunisia.

A second major collaboration involved the British Museum, through Paul Roberts, together with the University of Birmingham, through Vince Gaffney (now at Bradford). The site of Vescovio in the Sabina, well-known to Helen Patterson, had clear potential, its attractive tenth-century church marking a centre important enough to have had a bishop, and the surrounding green fields covering whatever was left of the Roman settlement. Its Roman name identified it as a market centre, rather than a major town; and earlier excavations had largely exposed its forum and a small centre. Here it was possible to combine geophysics with excavation, with rich results: a well laid-out villa of early imperial date, a set of elite burials, including the sort of worked-bone funerary bed typical of central Italy, and even an unexpected amphitheatre.

While some of the projects originally associated with the Tiber Valley Project gained a life of their own, there were many other researchers who offered specialist contributions: Ray Laurence (then of Reading) studying the roads (with scientific techniques that could pin down the origin of basalt road-paving slabs); John Patterson of Cambridge working on inscriptions; Simon Stoddart working on Nepi, and with Ulla Rajala at Crustumerium and many others. Equally significant as researchers from the UK were Italian collaborators: the 20 chapters of *Bridging the Tiber* (British School at Rome, 2004), the outcome of the project's first major conference, include some 23 Italian scholars, all more or less closely associated with the project. The most enduring collaboration, however, was to be that of Filippo Coarelli, already working in the upper Tiber Valley at the site of Pliny's villa at Tifernum Tiberinum. The joint forces of Coarelli and Patterson resulted in another conference, published as *Mercator placidissimus: the Tiber Valley in antiquity. New research in the upper and middle river valley* (Quasar, 2008), but also in survey and excavation of the birthplace of the emperor Vespasian at the north-eastern edge of Sabine hill-country at Falacrina.

It is entirely to the credit of Helen Patterson's inspired and sympathetic project leadership that so much grew out of it, with a host of collaborators (see Appendix 1) and a rich crop of publications (see Appendix 2). If the original core project has taken longer to finalize than some of its spin-offs (though many of these are still ongoing), that is a measure of the sheer complexity of what has been involved. To cover an extensive territory over a wide historical period, from the prehistoric to the medieval, required the inputting of tens of thousands of items of information into a database (and that database has been consigned to the Archaeology Data Service and can be consulted there), and the patient extrapolation of pattern from a haze of data points. Had the task of publishing the South Etruria material alone been a simple one, Ward-Perkins, who was nothing if not energetic in publishing, would have done so himself. Now two decades have passed since the Tiber Valley Project was first conceived; but in the interim it has generated ripples of debate, and their consequent publication. The full results of the core Tiber Valley Project presented here are well worth the wait.

Andrew Wallace-Hadrill
Director of the British School at Rome (1995-2009)
Cambridge, January 2019

Chapter 1

The Tiber Valley Project: an introduction

Simon Keay, Martin Millett and Christopher Smith

The Tiber Valley Project was a major and multi-faceted research programme undertaken by the British School at Rome (BSR) between 1997 and 2004. Following his appointment as Director of the BSR in 1995, Andrew Wallace-Hadrill worked with Tim Potter, then chairman of the Faculty of Arts, Humanities and Letters to develop a new research focus for the School. With the selection of Helen Patterson as Assistant Director (Archaeology) in 1996, it was agreed that this project should involve a programme of research on the Tiber valley. This was designed both to contribute to the understanding of this important area to the north of Rome and to act as a focus to attract a new generation of scholars to work on the archaeology of Italy, thereby giving a boost to Italian archaeology in UK universities.

From the outset, the programme was designed to be multi-focal, encouraging the development of a series of externally funded projects as well as enabling PhD students and others to work collaboratively on distinct but related themes. At its core was a project to re-evaluate the British School at Rome's own South Etruria Survey, conceived by its Director John Ward-Perkins in the 1950s to 1970s, focusing not only on the evidence gathered by that project, but also on the broader archaeological and interpretative models which had developed subsequently. This strand of work was funded by the Leverhulme Trust on the basis of a project design (see Millett and Patterson 1998), and ran from 1998 to 2002. Led by Helen Patterson, this core part of the project employed two postdoctoral researchers, Helga Di Giuseppe and Robert Witcher.[1] Financial support from the BSR enabled this work to be continued from 2002 to 2004.

The Leverhulme project was complemented by a series of other pieces of research (discussed below). These varied in scale and ambition from thematic studies by individual scholars to substantial new field projects with additional funding. The two larger endeavours both complemented the Leverhulme project by focusing on urban sites. The first, run by Simon Keay and Martin Millett and funded by the then Arts and Humanities Research Board, was called Roman Towns in the Middle Tiber Valley Project. It involved the Universities of Durham, Southampton and later Cambridge, and deployed surface survey methods to look at a variety of sites across the region. The second, run by Helen Patterson, Paul Roberts and Vince Gaffney involved the British Museum and the University of Birmingham together with the BSR. This focused on the survey and excavation of the town of Forum Novum (Vescovio). The work on a range of smaller sites is well represented in the two publications that grew from the Tiber Valley workshops and seminars held between 1997 and 2004 (Patterson 2004; Coarelli and Patterson 2008).

The overall programme was an ambitious undertaking, examining an area of the middle Tiber valley covering 3500 square kilometres, tracing its development across the two millennia from 1000 BC to AD 1000 (Figure 1.1). It has had an enormous impact on the discipline, not least by networking a whole new generation of researchers.[2] The number of publications and outputs from the project is substantial.[3] At various stages, dozens of UK and Italian staff were involved in processing data and producing interim reports. Workshops, conferences and individual stand-alone summary articles have all enriched the debate.

The Leverhulme-funded project had at its heart a GIS database which gathered the relevant information from decades of fieldwork and combined this with the results of a thorough restudy of the finds by a group of specialist researchers. These data have, as originally intended, been made fully accessible via their consignment with the Archaeology Data Service. This database forms both a key outcome of the project and also the driver for new ideas and new interpretations. A series of published papers have presented ideas about a variety of aspects of research, all of them based on earlier versions of the database. It was always intended that once the database was completed, there would be a monograph in which the three lead researchers would

[1] In her role as BSR Assistant Director, Helen Patterson led the project and developed research on the late antique and early medieval periods (see Chapters 5–7). Helga Di Giuseppe undertook extensive library research to gather data on published sources for surveys and excavations of all periods and also undertook research on the black-gloss pottery and the Republican period (see Chapter 3). Robert Witcher developed the project databases and GIS, working in particular with the South Etruria Survey archive, and conducted research focused on the project methodologies and data integration, and on the archaeology of the imperial period (see Chapters 2 and 4).

[2] For a full list of project participants, see Appendix 1.

[3] For a full project bibliography, see Appendix 2.

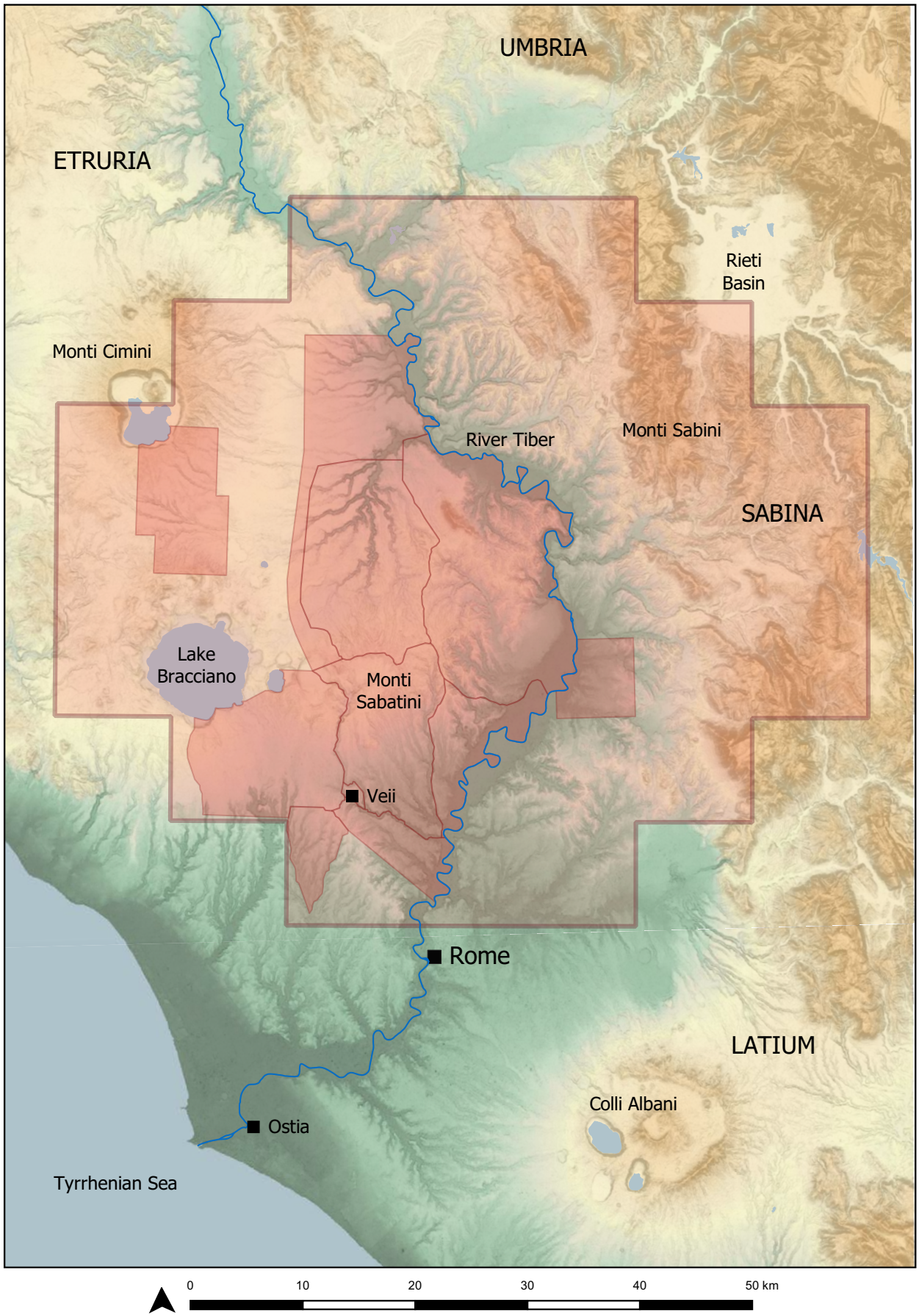


Figure 1.1. Location of the Tiber Valley Project study area and the South Etruria Survey.

have space to present their considered views on the evidence from the region. This volume represents that outcome of the Leverhulme-funded project.[4]

This introductory chapter reviews the original South Etruria Survey; the overall results of the research programme; the reasons for the launching of the Leverhulme Tiber Valley Project; the organization of that project; and its aims, objectives and methodologies. Wider reflections on the results presented in Chapters 2 to 7 are provided in the concluding chapter.

1.1 The South Etruria Survey

John Ward-Perkins became Director of the BSR in 1946.[5] His archaeological career had been fostered under the patronage of Sir Mortimer Wheeler, and he brought an organizational flair which had developed through his wartime duty, as well as a considerable degree of personal ambition. Italian archaeology was not his first priority; instead he completed his work with Joyce Reynolds in Tripolitania,[6] whilst also working on war damage across Italy as part of his varied efforts to create administratively robust and collaborative partnerships which could involve the BSR (these included the foundation of both the Unione Internazionale degli Istituti di Archeologia, Storia e Storia dell'Arte in Roma, and the Associazione Internazionale di Archeologia Classica).

In the mid-1950s, he was at something of a low ebb however. Tripolitania was largely concluded, and the next big project had not yet emerged for him. It was at this stage that he met Martin Frederiksen, who held an award at the BSR in 1954, and he began to work with Frederiksen in the north of Lazio. The original focus of the work was on roads, and it was straightforwardly topographical, developing the tradition of work pioneered (albeit in an idiosyncratic and less systematic way) by the third Director of the BSR, Thomas Ashby.[7] Ashby was working at a time when building and agricultural change were transforming the Italian landscape in the early twentieth century, and the pace of change would only accelerate.[8] Both Ashby and Ward-Perkins were indefatigable recorders of the rapidly disappearing traces of antiquity.

As time went on, Ward-Perkins began to see a larger potential, and the South Etruria Survey began to take shape. He gradually came to define more clearly his strategic aims and objectives as he also evolved a working pattern for the South Etruria Survey.[9] The survey combined excavation at key moments, with ancient Veii being a central focus for the BSR, but the work was dominated by fieldwalking. Although not invented by Ward-Perkins, the method was unusual in Italy, and he developed it to cover much larger areas cumulatively than was normal for field surveys. A particularly novel characteristic of the BSR's fieldwalking was the collection and retention of finds, primarily pottery, the study of which Ward-Perkins encouraged as a means of dating sites (see Chapter 2). Importantly, Ward-Perkins also encouraged the involvement of a new generation of scholars, such as Barri Jones and Tim Potter, whose collective work led to the development of the field methods. As a consequence, the results—plotted carefully over years and preserved in paper records at the BSR (as well as the actual finds)—gave a remarkable picture of the evolution of the Tiber valley from the prehistoric period to the early middle ages. It is worth emphasising that Ward-Perkins from the beginning saw the necessity for and value of a long timescale for the study.

What were the factors which made the Tiber valley such a fruitful area of study? There is no doubt that practicality was significant; the area was relatively close to the BSR, and it was possible to engage a fairly large workforce, including BSR residents who were not archaeologists but who could be persuaded to participate. It is remarkable how little funding Ward-Perkins ever received for the project, so this was not a trivial consideration.

South Etruria had certain geological and natural features which also supported and constrained a large-scale project. It is relatively fertile and so could support a significant agricultural presence. Well-watered by the rivers that flow down the hills, cutting deep fissures where the bedrock is soft, the landscape varies between promontories with steep cliffs, and volcanic craters, some of the latter now drained. Of key importance too was the agrarian revolution which was happening in Italy from the 1950s. The use of tractors and heavy ploughs was becoming more widespread as the larger fields that resulted from land reforms were increasingly brought into cultivation. Such deep ploughing and the bulldozing of boundaries brought much fresh archaeological material to the surface.

[4] The chapters presented here have been completed at various point over the past decade. The volume has been brought together by Robert Witcher, with the support of Martin Millett and Christopher Smith. All the maps, charts and tables have been produced by Robert Witcher from the project database. Our thanks to Peter Attema, Barbara Borg and Chris Wickham for their assistance with the volume, as well as to Durham University and the BSR.

[5] There is no biography of Ward-Perkins, but the BSR has an extensive archive. The story told here is given in more detail in Smith 2018.

[6] Reynolds and Ward-Perkins 1952.

[7] Ward-Perkins 1955, 1957; Frederiksen and Ward-Perkins 1957; Ward-Perkins.

[8] Ashby 1927.

[9] It is regrettable that there is no bibliography of the South Etruria Survey itself, and the several updates which Ward-Perkins gave. Examples of this include Ward-Perkins 1965.

To those with an interest in finds from rural sites, such destruction offered a unique research opportunity. The South Etruria Survey focused upon the upland region to the north of Rome, between the Tiber to the east and the lakes of Bracciano and di Vico to the west. Its focus, however, was largely on microregions within this area defined by their relationship to the larger settlements, notably the Ager Veientanus, the Ager Capenas, the Ager Faliscus and the area around Sutri to the west. Given the significance of ancient urban settlements in the dynamics of this landscape, it is unsurprising that one of the surveys that was generated by the larger project focused on the Ager Veientanus. Only later did the approach developed in South Etruria Survey evolve to study the territory of a town through systematic sampling, for example in Graeme Barker's Tuscania survey in the 1980s.[10] An additional consequence is the significance of roads, since communication is not easy across this landscape. Following the roads, as Ward-Perkins originally did, was a sensible way of understanding the critical infrastructure of the region.

One of Ward-Perkins's greatest gifts was that of administrative drive—his energy seems never to have flagged. Season after season, with increasingly large teams and more supporters, the South Etruria Survey grew and it was Ward-Perkins's skill to be able to add sites which answered key questions. Critical to the whole exercise was the ability to date the pottery which was being gathered and so excavations at Veii,[11] Santa Cornelia,[12] Narce[13] and Nepi[14] amongst others all targeted areas where the pottery sequences were at their weakest. The survey eventually covered nearly 1000 square kilometres and recorded over 2000 sites.[15] Ward-Perkins remained at the BSR until his retirement in 1974, and this had the happy consequence that his directorship—the longest to date—permitted a very long-term focus. He had also enabled a series of scholars to publish the results from the different microregions in the *Papers of the British School at Rome* but he himself never drew together the synthesis that he had planned. This task was taken up by Tim Potter, then at Lancaster University, who had led the work at Narce. *The changing landscape of South Etruria*, published in 1979, was a landmark publication in many ways.[16]

Potter's book was a comprehensive, accessible and clear synthesis, which crystallized the key moments of change and transition. It starts with a brief introduction to survey and excavation in South Etruria, before moving on to provide key contextual information about the landscape. There follows a summary of the prehistoric development of the region, moving from the Palaeolithic, into the Neolithic, Eneolithic and Bronze Age. Potter's account remains a helpful overview of settlement trends in southern Etruria, although recent accounts are beginning to alter the overall picture.[17] There are pervasive difficulties in the chronology of later prehistory in particular because there is a gap between those reliant on ceramic dating and using radiocarbon dating.[18] Metal typo-chronologies and social and economic change map poorly onto each other, and different areas of the peninsula look to different comparanda and material, so typically the southern chronologies are based on ceramics and look to the wider Mediterranean and the northern chronologies look to metalwork and developments in Temperate Europe.

In the context of the Tiber Valley Project, however, the most significant part of his study concerns the chapters which synthesize trends relating to the first millennium BC (Potter's Classical period), and the transition from the Roman to medieval periods (AD 300–1300). For the first of these, Potter identified a major population explosion in the first millennium BC (the Early Iron Age and Orientalizing period), and continuity into the fourth century BC, when major fortifications could be tracked across the region, which he saw as the outcome of the period of sustained population growth. What Potter calls the Classical period, down to the first century AD, sees the development of settlement to peak levels. Transformations of the landscape through deforestation, exploitation of resources, and the emergence of villas and farmhouses on the one hand are signs of a thriving rural economy, but rapid turnover in some sites suggests also the pressure of this competitive environment. This, however, was the high point of the economy; rural life thereafter went into a slow decline, which then accelerated with the abandonment of the rural settlements for more defended and fortified sites, reflecting a narrative of the decline and fall of the Roman empire and growing incursions from the north. However, the picture is not straightforward; the pace, date and reason for this change varied across the region. Continuity in some areas contrasts with innovation elsewhere, and the rise of a different quality of documentary evidence permits the assessment of the role of the new infrastructures of Christianity, for instance, in driving change.

[10] Barker and Rasmussen 1988.
[11] Cascino, Di Giuseppe and Patterson 2012
[12] Christie 1991.
[13] Potter 1979.
[14] Rajala 2013.
[15] Potter 1979: 5.
[16] Potter 1979.
[17] Summary of the whole of the earliest period in Mussi 2001; for a summary continuing through to the Late Bronze Age, Guidi and Piperno 1992; for the Bronze and Iron Age, Bietti Sestieri 2010. For a summary of the state of play in southern Etruria, see Negroni Catacchio 2012.
[18] Loney 2013: 19–34; a key list of dates is provided by Skeates 1994. See also Skeates 2003; Cocchi Genick 2004; Pearce 2013.

One impact of the South Etruria Survey was that it inspired as well as accompanied major Italian work on the landscape, and in addition to the longstanding Forma Italiae series, and a deep tradition of local topographical studies, medieval Italian archaeology was becoming increasingly significant, partly as a result of figures such as David Whitehouse and Richard Hodges (both later directors of the BSR) and also historians such as Chris Wickham, all of whom worked with Riccardo Francovich at the University of Siena, one of the key figures in this intellectual tradition.[19]

Neither Ward-Perkins nor Potter were unaware of the methodological difficulties inherent in what they were attempting to undertake. The extent to which surface scatters are representative of population densities, the problems of dating ceramics, the various biases intrinsic in the collection of surface material, and the very coarse-grained interpretation provided even by such a large dataset were all flagged up at the start of *The changing landscape of South Etruria*.[20] Despite this, however, Potter's synthesis struck a note of positivist certainty that was soon to appear overly innocent in the light of important theoretical developments in our understanding of archaeological evidence in the 1980s and 1990s.[21] These included increasingly nuanced understandings of the relationship between surface materials and sub-surface archaeology, and how to distinguish between 'site' and 'off-site' material. Geophysical survey was beginning to provide an important tool in teaching us more about the character of the sites themselves. There were also some major challenges to Potter's chronological scheme, owing to the fact that the sites he discussed were dated on the basis of ceramic chronologies current in the 1950s and 1960s, which had been superseded by major publications in the 1980s and 1990s, notably those relating to black-gloss and African red slip wares, coarse-wares and Forum Ware (see below). These very different chronologies inevitably raised questions about Potter's ideas on the pace of settlement development in the later Republican and imperial period, and in the transition to the medieval period.

The degree of uncertainty that grew up over Potter's synthesis was in some senses exacerbated by the realization of how much weight was being placed on survey data by historians. One of the South Etruria Survey's main findings for Potter's Classical period was that the late second-century BC landscape was densely settled, in total contrast to the alleged complaint of Tiberius Gracchus that it was deserted. This led to complex arguments over the spread of slave-based agriculture, the nature of land ownership and the entire economic system of the later Republic.[22] As this argument morphed into the still unresolved arguments over Roman demography, survey data became both a critical tool and a key problem in assessing the merits of diverse and divergent arguments.[23]

So by the late 1990s the South Etruria Survey represented a substantial dataset covering a vast area, which had itself been subject to repeated subsequent scrutiny, and was adjacent to areas where additional work had been undertaken to answer a range of questions whose significance was not to be doubted. Furthermore, the specific findings of the South Etruria Survey, as outlined by Potter, were both centrally significant to key debates surrounding the economy and demography of Roman Italy and profoundly questionable due to new pottery sequences. So it was timely to reconsider the material on a wider scale.

1.2 An overview of the Tiber Valley Project

The Tiber Valley Project (1997–2002) was co-ordinated by Helen Patterson, then Assistant Director (Archaeology) at the BSR, and involved participants from the Universities of Bradford, Birmingham, Bristol, Cambridge, Durham, Leicester, Oxford, Reading, Southampton and the British Museum, as well as from a range of Italian institutions. Its aim was to examine changing landscapes on both sides of the river in the middle Tiber valley from approximately 70 km north of Rome down to the mouth of the river at Ostia from *c.* 1000 BC to AD 1000 (Figure 1.1), through a review of extant archaeological survey data and the execution of a number of targeted archaeological projects. One of the critical features of the Tiber valley Project, as opposed to the South Etruria Survey, was the inclusion of the Sabina, the so-called left bank of the Tiber, incorporating the results of survey work at Farfa by John Moreland. (The more distant survey of the Rieti basin led by David Mattingly was not incorporated into the study).[24] This inclusion of the Sabina Tiberina was a significant choice since it indicated that the project's intention was comparative.[25]

The research programme comprised three levels of activity:

[19] See, for instance, Francovich and Hodges 2003.

[20] Potter 1979: 10–18.

[21] The literature on survey methodology is huge; for a more or less contemporary project see Barker and Mattingly 1999–2000; more recently Johnson and Millett 2012.

[22] The classic statement remains Frederiksen 1971; see also Hopkins 1978.

[23] The demography debate is now an industry of its own. A milestone publication was Brunt 1971, but Brunt gave scarce attention to archaeology. His minimalist figures are now the subject of intense challenge, and for an interesting attempt to use survey data (though without reference to the Tiber Valley data) to support a maximalist figure, see Launaro 2011.

[24] See Coccia and Mattingly 1992, 1995.

[25] Patterson and Millett 1998.

Level 1 was the Leverhulme-funded project directed by Helen Patterson, which is the subject of this volume. Its objective was to create a comprehensive database that would incorporate material from all of the rural sites from the South Etruria Survey, as well those from then unpublished BSR work (including John Ward-Perkins's survey of Veii[26] and a major survey at Farfa), as well as several Italian surveys.[27] This was linked to a GIS to make it possible for the team to produce a new generation of distribution maps for each historical periods. This necessarily involved revising the chronology of all the sites in the light of recent ceramic publications, by going back over the ceramic material collected during the survey and subsequently stored at the BSR. Thus, in many ways the Tiber Valley Project was a test-bed for diverse methodologies, a pioneer in the reassessment of so-called legacy data, which has now become a major field of research,[28] and a challenging historical exercise.

The success of this approach can be gauged from the fundamental article of Patterson, Di Giuseppe and Witcher (2004), which highlighted three major differences in interpretation between Potter's synthesis and the results of the Tiber Valley Project.[29] First, Potter saw a fairly even growth through his early period, but the Tiber Valley Project detected more instability and change in the fifth and fourth centuries BC. Similarly, Potter's model of steady growth through the Republican period seemed at odds with the historical sources, but depended on his analysis of black-gloss pottery, which at the time of the South Etruria Survey was assigned a relatively long life. Taking into account the more recent revised chronology of black-gloss pottery, which dated it to earlier in the Republican period, the authors pointed to a diminution of evidence in the second and first centuries BC, and a concentration at Rome as a result of rural to urban migration. If so, this would fit the historical record better, although the historical record itself is problematic. For the late Roman and early medieval period, again the major change has been the greater visibility of datable ceramics after closer scrutiny, suggesting more continuity across the period, and a later date for the retreat to upland sites, which might then suggest different motivations for the changes than Potter had given.

The debates over the pace and character of the collapse of the Roman empire have been intense, and are reflected in the relevant chapter of this book. The significance of the events of AD 410 is now regarded as perhaps more symbolic than real.[30] However, Bryan Ward-Perkins made a strong challenge to the idea that the fall of the Roman empire was gradual and that we should emphasize continuity instead.[31] This debate then follows through into arguments over the depth of the Italian crisis. Within this debate, pottery has proved increasingly important for discussions of trade and commerce, and the increasingly accurate identification of the origins and chronological point of specific forms is critical, so again the Tiber Valley Project has left a substantial legacy for future study.[32]

One of the key findings is that here at least we do see clear differences between the two banks of the Tiber, with the Sabina seeming to have an economic system separate from that of Rome, especially from the sixth century AD. If this is correct, both in areas of continuity and where new settlement patterns can be identified (viz. the so-called *domuscultae*) then it reinforces the significance of focusing on the relationship between the situation at Rome, and local responses to change. The economic, political and social power of the city was fundamental to the ways in which local systems operated, but when Rome faltered, those systems adapted. So the Tiber Valley Project has more than anything else demonstrated the complexity of the central Italian environment, a complexity aided by the relatively high population and strong resource-base, which allows for multiple outcomes in different economic circumstances.

Level 2 comprised a series of parallel thematic studies into a range of topics which involved both fieldwork and the specialized study of finds. Central to the whole endeavour was the restudy of the finds collected during the South Etruria Survey, as well as the analysis of finds collected from the subsequent surveys incorporated in the database. This work, which involved a sherd-by-sherd re-examination of the pottery and glass, was undertaken by a team including Roberta Cascino, Helen Patterson, Helga Di Giuseppe, Alessandra Bousquet, Sabrina Zampini, Fabrizio Felici, Sergio Fontana and Franca Del Vecchio. The results of their work were incorporated within the database and GIS and provide the fundamental underpinning of the studies in the book.

Other scholars were involved in the development of a range of complementary studies. Ray Laurence, for example, analysed the *selce* (basalt) slabs used in the major consular roads in the Tiber valley in order to characterize their geological origins and to better understand the economics of their transport across the region.[33] Will Clarke undertook an analysis of the different ornamental stone types found at sites in

[26] See now Cascino, Di Giuseppe and Patterson 2012.
[27] The database is archived with the Archaeology Data Service and can be freely downloaded at https://archaeologydataservice.ac.uk/
[28] Allison 2008 for an introduction; Witcher 2008b for an example from the Tiber Valley.
[29] Patterson, Di Giuseppe and Witcher 2004a.
[30] Lipps, Machado and von Rummel 2013.
[31] Ward-Perkins 2005; cf. Heather 2005; *contra* e.g. Wickham 2009.
[32] A good example is Cirelli, Diosono and Patterson 2015.
[33] Laurence 1999.

the South Etruria Survey.[34] Shawn Graham's PhD by contrast applied network analysis to brick stamps from sites within the middle Tiber valley with a view to understanding social relationships between the producers based at the brickyards and the consumers of the building materials.[35] Andrew Wilson studied the distribution of rural cisterns and aqueducts to gain a better understanding of water management and horticulture in the regional economy of the region.[36] John Patterson reviewed the very rich epigraphic and historical information to obtain a new understanding of the economy of the Tiber valley and the dynamics of imperial involvement in its development;[37] and Helen Goodchild studied patterns of agricultural productivity through an analysis of settlement data and the creation of crop suitability maps within a GIS.[38]

Level 3 involved the development of new projects that were specifically co-ordinated with the aims of the overall research programme. These included Roman Towns in the Middle Tiber Valley Project, led by Simon Keay and Martin Millett and which received AHRB funding; Nepi, (Simon Stoddart and Ulla Rajala);[39] Forum Novum (Vince Gaffney, Helen Patterson, Paul Roberts)[40] and Ostia (Janet Delaine).[41] Of these, the Roman Towns work (1997–2004) was specifically designed to make use of geophysics, using expertise based at the Universities of Southampton and Durham (later Cambridge). The various sites studied provide a diverse list of urban examples from major sites such as Falerii Novi, Capena and Ocriculum to small road stations, for example Ad Baccanas and Forum Cassii on the Via Cassia and Castellum Amerinum on the Via Amerina.[42] This project also led on to a much larger survey of Portus near the mouth of the Tiber, which has itself resulted in a long-term project there.[43] At Falerii Novi, after Rome's defeat of a revolt led by Falerii Veteres in 241 BC, the remarkable geophysics results have revealed much of the layout of the town, with its roads, houses, forum and theatre. Falerii Novi was a new town which formed part of the substantial intervention in central Italy in the third century BC as Rome dominated the Faliscan and Etruscan territories. Its classic Roman town plan when compared with the evidence produced by the survey has been much debated.[44]

Ocriculum, the other monumental town studied as part of the Roman Towns project shows the remarkable richness of imperial-period central Italy, but in the context of a much less formal plan, with only a small area laid-out on a grid. Substantially equipped with a theatre, amphitheatre and baths, the site probably benefitted both from its harbour location on the Tiber and its position on the Via Flaminia. Here, however, there is a mismatch between the relatively small settlement and the very high-quality sculpture and architecture found here, which suggests that the town may have been unusually well-connected, perhaps already from the time of Julius Caesar. This elite support, and perhaps as a consequence the town itself, does not survive beyond the end of the Roman empire.[45]

The work by Helen Patterson, Paul Roberts and Vince Gaffney at Forum Novum highlighted one characteristic of certain towns (including Ocriculum), namely that their monumental public centres were surrounded by very little in the way of residential building. This suggests that in the later Republican and imperial periods, these were important centres for administration, entertainment and cult, which principally served a scattered rural population, perhaps also acting as regular periodic market centres as well as hosting larger seasonal or annual festivals. Despite the absence of a substantial residential population, such sites clearly became the focus of patronage and euergetism. It follows that this represents a period of relative calm and security when life was sufficiently ordered that a calm routine of market days and predictable festivals could exist, as well as the mechanisms of communication.[46] So, unmonumentalized riverside or roadside settlements (such as Castellum Amerinum and Ad Baccanas) and monumental but largely non-residential central places offer examples of how in the settled Roman empire local communities engaged with and profited from stability and trade.

In sum, the work on urban landscapes in the middle Tiber valley reveals that regularly gridded towns such as Falerii Novi were the exception rather than the rule, and that there was considerably more variety to Roman urban forms in this part of Rome's *suburbium* than has generally been assumed. It underlines the need to move beyond the commonly received urban stereotypes to understand the nature of such variation in terms of the functions, histories and geographical contexts of the different settlements. It also suggests that *mansiones* remained a critical part of an overall landscape of power and control, and of an administrative system; it is perhaps surprising therefore that of three such sites studied, two did not survive the late antique period,

[34] Clarke 2008, 2012.
[35] Graham 2006.
[36] Wilson 2008b.
[37] J.R. Patterson 2006.
[38] Goodchild 2006, 2008, 2013.
[39] Mills and Rajala 2011; Rajala 2013.
[40] Gaffney, Patterson and Roberts 2004a, 2004b.
[41] Delaine 2001, 2002, 2004, 2005.
[42] Keay and Millett 2016.
[43] For a recent overview, O'Connell *et al.* 2019; for further details, see http://www.portusproject.org
[44] Keay *et al.* 2000.
[45] Millett 2007; Hay, Keay and Millett 2013; Wallace-Hadrill 2013; Keay and Millett 2016.
[46] See Frayn 1993.

though one (Forum Cassii) seems to have gained a new ecclesiastical focus in the ninth century.[47]

The imperial development of Ostia and Portus at the mouth of the Tiber, and the complex social and economic structures which sustained their growth and function, have an important bearing upon the relative prosperity of the middle Tiber valley, as well as the city of Rome. One major contribution of the Tiber Valley Project was to foster our understanding of both of these sites and to show that they had very different histories. While the bustling river port of Ostia is well known in many aspects, it is also poorly understood in others, notwithstanding the remarkable preservation of the site. Janet Delaine's work on the micro-history of individual *insulae* within the context of the Tiber Valley Project was a key step in being able to track individual choice and transformation in this most unusual of cities.[48] By contrast, the systematic geophysical survey of the maritime port of Portus by Simon Keay and Martin Millett[49] greatly enhanced our understanding of the huge Claudian harbour basin and associated canals, the internal hexagonal harbour and canals built under Trajan, the warehouses, administrative buildings and temple, and their surrounding landscape.[50] It also showed that, in contrast to Ostia, its residential occupation was very limited, even though it eventually gained constitutional autonomy as a town in the early fourth century AD. While Portus was probably intended to function in tandem with neighbouring Ostia *ab initio*, its role was primarily to process incoming cargoes of grain, olive oil, marble and a range of luxuries in huge quantities destined for Rome and, one guesses, for the *suburbium*. It also seems likely that it was sustained by a comparatively small population that probably fluctuated in tandem with the shipping seasons. The results of the work at Ostia and Portus thus lend support to the impression of urban variety gained from the study of towns in middle Tiber valley.

In the next chapter, Robert Witcher considers the history of studies in the middle Tiber valley and details the collation of the various legacy data including the restudy of the South Etruria Survey material. He also provides a methodological analysis of the strengths and weaknesses of the resulting dataset and considers the implications for the use of the data for characterizing long-term settlement change; the chapter concludes with an overview of the key project results. His analysis forms an important backdrop to the chapters that follow; these discuss each of the major periods of study in chronological order: the Bronze Age to the end of the Republic (Chapter 3 by Helga Di Giuseppe), the early and mid-imperial periods (Chapter 4 by Robert Witcher) and the late antique and early medieval periods (Chapters 5 to 7 by Helen Patterson).

[47] Johnson, Keay and Millett 2004.
[48] Delaine 2001, 2002, 2004, 2005.
[49] Keay *et al.* 2005.
[50] This work has been boosted by the more recent study of the Isola Sacra in the course of the *Portus Project*; Germoni *et al.* 2011.

Chapter 2

The middle Tiber valley: history of studies and project methodologies

Robert Witcher*

'A great deal of the work of a survey such as this lies in the methodical collation of results which individually may be of only modest interest, but which cumulatively offer a unique opportunity of studying the economic and social development of the territory concerned through the successive phases of its history' (Ward-Perkins 1965: 35)

2.1 Landscape archaeology in the middle Tiber valley

The Tiber Valley Project builds on the results of more than a century of archaeological fieldwork in the study area. These excavations and field surveys provide a huge 'legacy dataset' with which to address the project's research questions. At the heart of this rich body of material is the British School at Rome's South Etruria Survey. The restudy of the artefacts collected as part of that work, almost 75,000 sherds of pottery plus a variety of other artefacts such as glass, marble and brickstamps, forms the heart of the Tiber Valley Project's database.[51]

This chapter introduces these datasets, in the form of a history of the archaeological study of the middle Tiber valley, focusing on landscape surveys and rural settlement. It builds on the idea of 'source criticism',[52] that is, the careful examination of the data within their various methodological contexts in order to understand their significance and their comparability. The chapter then explains how the data were collated and processed within the Tiber Valley Project database. The second half of the chapter focuses on the restudy of the South Etruria Survey, discussing the organization and implications of the pottery restudy, the reanalysis of site dating and classification (section 2.2) and a reconstruction of the survey methodology (section 2.3). The chapter then considers how to interpret or 'read' the maps of settlement distributions and the charts of changing settlement numbers extracted from the project database and used in the following chapters (section 2.4). Finally, after a summary of the main themes (section 2.5), the chapter concludes with a synthetic overview of the principal long-term settlement trends (section 2.6), to set the scene for the more detailed period-specific analyses provided in the following chapters.

Archaeologically, the area around Rome is one of the most intensively studied regions of the Mediterranean; this presents both opportunities and challenges. Over the past 25 years, a series of projects across Italy and the Mediterranean have sought to collate and compare the results of different surveys in order to examine regional-scale variability and to address broader questions of economy and demography. One of the earliest of these 'side-by-side' studies was Susan Alcock's influential assessment of settlement patterns across Roman Greece;[53] more recent contributions include the Regional Pathways to Complexity Project, comparing three Italian regional landscapes through

* Many colleagues have contributed to the results presented here and in Chapter 4. I am grateful to Helen Patterson, Tim Potter and Andrew Wallace-Hadrill for inviting me to join the project back in 1998. I learnt a huge amount from all the researchers involved, many based in the *camerone*, including Alessandra Bousquet, Sally Cann, Roberta Cascino, Will Clarke, Michael Craven, Maria Teresa Di Sarcina, Sergio Fontana, Helen Goodchild, Shawn Graham, Alessandro Guidi, Inge Lyse Hansen, Stephen Kay, Paul Johnson, Ray Laurence, John Moreland, John Patterson, Sarah Poppy, Ulla Rajala, Marco Rendeli, Marta Sansoni, Marta Solinas, Kris Strutt, Andrew Wilson, Sabrina Zampini and, most of all, Helga Di Giuseppe. There were also plenty of field visits and convivial lunches. My thanks to the BSR staff and the many fellows and visitors, too numerous to mention, who discussed ideas over dinner or out and about in the Tiber valley. Thanks also to the staff and scholars of other schools, academies and authorities in Rome, and beyond, who shared their time and expertise, including Peter Attema, Gert-Jan Burgers and Frank Vermeulen. Over the subsequent years, others have provided help with the database and GIS including Cory Clover, Ed Cumbley, Alex Kirton, Elizabeth Robinson and, especially, Darrell Rohl and Michelle De Gruchy. Most recently, the Roman Hinterland Project team, and Tymon de Haas, Martijn van Leusen, Gijs Tol and Niels Wouda in particular, have provided invaluable help. In drawing together the volume as a whole, Stephen Milner, Barbara Borg and Alessandra Giovenco of the BSR provided institutional and archival assistance; the BSR and the Department of Archaeology at Durham provided financial support, and Malcolm Nicholson worked on the manuscript. I owe special thanks to Martin Millett and Christopher Smith for their encouragement and support. Alice and William have tolerated the project for two decades and a lifetime respectively; I'm looking forward to making up for all those weekends spent 'doing a bit more on the volume'. The completion of this monograph took far longer than any of us could ever have imagined and not everyone is still around to see it finished: in memory of D and the summer of '99.

[51] The TVP-ID numbers quoted throughout the volume (e.g. TVP-ID 01234) relate to site records in the project database; the full Tiber Valley Project database is archived with the Archaeology Data Service and can freely downloaded at https://archaeologydataservice.ac.uk/.

[52] Alcock 1993: 49–71.

[53] Alcock 1993.

the first millennium BC,[54] an analysis of the evidence for the early imperial period from 30 surveys across Etruria,[55] and a monograph using 27 Italian regional surveys to attempt to resolve the long-running debate about the so-called high or low counts of Roman population.[56] This growing interest in the comparison and integration of multiple datasets coincides with, and is strongly underpinned by, advances in database management and, especially, spatial technologies such as GIS and remote sensing.[57] It has also led to the explicit formalization of the concept of legacy data, that is, the reuse of datasets from earlier archaeological projects to answer new or broader-scale questions.[58]

At the heart of this recent work to compare and integrate legacy data within new digital environments is the question of compatibility; specifically, because each survey uses a different methodology to collect and interpret its data, the results are not always easily comparable. This issue dominated the attention of Mediterranean surveyors during the 1990s, perhaps best epitomized by the work of the POPULUS project.[59] It was within this context of the ambition to address new larger-scale research questions, rapid technological developments and deep anxiety about survey methodologies that the Tiber Valley Project came into being.

2.1.1 A century-and-a-half of landscape studies

The aims and objectives of the wider project are set out in Chapter 1.[60] This section introduces the data collated to address these research questions, exploring issues of data quality and comparability that potentially affect how the results can be used and interpreted. The discussion takes the form of a history of archaeological fieldwork in the middle Tiber valley, moving chronologically from the activities of antiquarians in the nineteenth century through to the present. The aim is to characterize the development of archaeological knowledge of the middle Tiber valley in order to evaluate critically the strengths and weaknesses of each legacy dataset. A chronological approach also permits some consideration of the changing political, economic and physical landscapes of the area (e.g. the Risorgimento, agricultural change) and their influence on the development of research questions and visibility of archaeological sites in the landscape.[61] This approach reveals some significant shifts in the aims, methods and results of each survey and each generation of fieldwork, that then informs the analysis and interpretation of the data in the subsequent chapters.[62] A theme that becomes particularly apparent is the degree of spatial overlap between surveys and revisiting by later surveyors of previously documented sites, for example, some sites found by Pasqui in the nineteenth century were relocated by Ashby in the early twentieth, revisited and reinterpreted by the South Etruria Survey in the 1960s and then again as part of the Forma Italiae surveys in the 1970s.

2.1.2 From antiquarians to topographers

Excavations of ancient monuments in the territory of Rome have been undertaken since at least the Renaissance period, often directed by the Papal authorities and intended to locate works of classical art.[63] This focus on monumental Roman-period structures is reflected in the artistic works associated with the seventeenth- and eighteenth-century Grand Tour, depicting landscapes of isolated ruins—tombs and aqueducts, and medieval towers.[64] It was not, however, until towards the mid-nineteenth century that a more systematic approach to the archaeology of this area developed, typified by the work of Canina, Nibby and Gell.[65] Whereas earlier work had focused on a relatively limited number of sites, usually located along the ancient consular roads and away from malarial areas,[66] the new topographical approach sought to investigate a wider range of site types across the region. Nonetheless, the emphasis remained focused on historically known centres (e.g. Veii), extant structures and, especially in Etruria, rock-cut tombs.[67] During the nineteenth century, the Campagna was still thinly populated and undeveloped; subsequent urban and agricultural expansion has destroyed much of what these antiquarians saw and their testimony is therefore of the utmost importance. Their records, however, are not always easy to use; for example, topographical descriptions of site locations are of limited use when the landscape has been radically transformed and it can sometimes be difficult to be certain that the same sites have been relocated (e.g. TVP-ID 01962). Similarly, the small-scale mapping usually used by these early topographers makes it difficult to integrate precisely

[54] Attema, Burgers and van Leusen 2010.
[55] Witcher 2006a, 2006b.
[56] Launaro 2011.
[57] Wheatley and Gillings 2002; Conolly and Lake 2006.
[58] Allison 2008; Witcher 2008b.
[59] Bintliff and Sbonias 1999; Gillings, Mattingly and van Dalen 1999; Leveau, Walsh and Trément 1999; Pasquinucci and Trément 2000; and esp. Francovich, Patterson and Barker 2000.
[60] See also Millett and Patterson 1998; Patterson *et al.* 2000.
[61] For a general history of Italian landscape archaeology, see Cambi and Terrenato 1994: 13–43; for general history of Etruscan studies, see Pallottino 1975: 23–33 and various papers in Turfa 2013.
[62] For an early assessment of the influence of survey history on the protohistoric evidence in this area, see di Gennaro and Stoddart 1982; di Gennaro 1990.
[63] Bignamini 2004; Dyson 2006 for a general overview of the development of work
[64] E.g. Cambi and Terrenato 1994; De Rosa and Trastulli 2001; Hornsby 2000.
[65] Canina 1839; Nibby 1848-1849; Gell 1846.
[66] Cambi and Terrenato 1994: 14.
[67] See Cambi and Terrenato 1994: 22; Rajala, Harrison and Stoddart 1999.

and accurately some of their spatial information into geographical information systems.

Political events conspired to cause a gear change in archaeological research in the last quarter of the nineteenth century. The Risorgimento, or Italian unification, of 1861 and creation of Rome as the capital in 1870, had important implications for the study of the valley's archaeology. As many times before, the area was the scene of military action, for example, the ancient Ponte Salario was destroyed by Papal troops in 1867 during Garibaldi's occupation of Monterotondo.[68] More significantly, Rome's new status as the nation's capital required major and rapid development of the city's urban infrastructure leading to the discovery and destruction of huge amounts of archaeology.[69] Developments also spilled over into the Campagna in the form of the construction of suburbs, roads, railway lines and, perhaps most significantly, the expansion of agriculture.[70] At the same time, national programmes of archaeological research were initiated. The *Carta archeologica d'Italia* was intended to map the archaeology of the whole of Italy at a scale of 1: 50 000.[71] The first two volumes covering Etruria and Sabina—notably both areas close to the new capital—offer highly detailed topographical surveys.[72] As before they demonstrate a strong emphasis on standing structures and rock-cut features, but there was greater emphasis on the pre-Roman evidence (Etruscan, Faliscan and Sabine) and an emerging interest in prehistoric periods.[73] As with the material collected by antiquarians, the re-use today of these topographical sources can sometimes be difficult; some of the terminology, for example, is deceptive (e.g. referring to Faliscan *pagi* as medieval castles, tombs as *abitazioni* and cisterns as *piscinae*) and despite the careful presentation of maps and tables, some errors in detail have been detected.[74] Nonetheless this topographical work constituted a major intensification in survey coverage of the middle Tiber valley and a broadening of its scope in terms of the types of site documented and the landscapes explored.

The turn of the century was also the period of the great 'wanderers' of the Campagna—Ashby, Lanciani and Tomassetti.[75] Ashby, the third director of the British School at Rome, produced a series of articles, and later a book, based on the sites located along the consular roads.[76] His emphasis was predominantly on the Roman period and evidence such as villas, funerary monuments, bridges and tufo quarries; however, he also made brief reference to many scatters of pottery and building material in the fields in between the roads. Indeed, during these early decades of the twentieth century, the way in which agricultural work served to reveal ancient sites by disturbing their buried stratigraphy was increasingly observed and commented upon.[77] Ashby's photographic record is particularly valuable, revealing a treeless and thinly populated Campagna on the eve of its subsequent transformation through agricultural and demographic expansion.[78]

Ashby was not the only wanderer during these years. Lanciani's *Wanderings in the Campagna* provides a rich, anecdotal account of the author's detailed acquaintance with the Roman Campagna. Although not his stated intention, it focuses heavily on the Latin area to the south of Rome where he noted an extremely high density of sites—even by the standards of recent survey, for example, around Tusculum (near Frascati). In contrast, he observed much lower densities of settlement in the northern 'Etruscan' Campagna, particularly the areas of the Via Aurelia and Via Cornelia leading to the Maremma.[79] Despite strenuous attempts to locate sites in the northern Campagna, Lanciani was only able to identify a small number of sites such as single example on the shores of Lake Bracciano and not a trace of the *domusculta* of Santa Cornelia.[80] Lanciani's results equate with settlement densities at Tusculum and in the Maremma of approximately 3.9 and 0.004 sites per km^2 respectively. Lanciani put this enormous difference down to the different land cover of the area—the northern Campagna had been 'covered with forests, the haunt of deer and the wild boar'.[81] The density of settlement subsequently documented by surveys across this northern area refutes this interpretation.[82] The situation identified by Lanciani can probably be explained by his emphasis on the recording of large built structures of imperial date that are far less common north of Rome than to the south and east of the City. Meanwhile, the work of Tomassetti was more focused on the medieval period, emphasising the importance of the documentary sources for locating and interpreting later historical sites.[83]

As the number of increasingly systematic investigations grew during the first half of the twentieth century, the form of the archaeological landscape as we know it today began to take shape. For example, many of the Etruscan and Roman towns of the area had long been

[68] E.g. Tomassetti 1979a and b.
[69] Palombi 2006.
[70] For deforestation, Ashby 1924.
[71] Cambi and Terrenato 1994: 25.
[72] Cozza and Pasqui 1981; Gamurrini *et al.* 1972.
[73] Rajala, Harrison and Stoddart 1999: 6.1.
[74] Potter 1979: 2.
[75] Cambi and Terrenato 1994: 27; Potter 1979: 1–3.
[76] Ashby 1927; Hodges 2000.
[77] E.g. Paribeni 1907: 675.
[78] See, for example, his photographs of the Villa Domiziana at Vicarello and the Muro del Peccato across the Treia, Scott 1986.
[79] Lanciani 1909: cf. 19–20, 43.
[80] The latter was subsequently located by the South Etruria Survey, in the location Lanciani had predicted, Christie and Daniels 1991.
[81] Lanciani 1909: 19–20.
[82] For surveys, beyond the Tiber Valley Project study area, see Enei 2001; Tartara 1999.
[83] Tomassetti 1979 a and b.

known as they featured in ancient texts such as Livy, but only now were their physical locations definitively traced on the ground and agreed upon, as new evidence was discovered and long-running debates were settled.[84] It was also during these inter-war years, as questions about such locations receded, that some modern towns reverted to their earlier names seeking consciously to emphasise their antiquity (e.g. Leprignano changed to Capena in 1933, Corneto switched to Tarquinia in 1922). Other towns altered their names to stake new historical claims; Scrofano was renamed Sacrofano with reference to the nearby alleged Sanctuary of Hercules Musinus and the newly constructed Volusia district took its name from an inscription naming the Volusii family discovered in the 1920s.[85]

During the interwar years, the growing impact of agriculture on the archaeological record was increasingly recognized for the way in which it both revealed and damaged buried sites.[86] Stefani, for example, noted 'frequenti trovamenti di marmi, di anfore vinarie e di altro materiale che i contadini del luogo [Monte Maggiore, Magliano], col dissodamento del terreno, vengono man mano rimettendo alla luce'.[87] Particularly in proximity to the larger sites, this sometimes led to archaeological intervention; for example, at the Valle di Fata necropolis near Veii, the Soprintendenza instigated excavations in response to agricultural damage.[88]

It was, however, during the decades following the Second World War that the destruction—and, ironically, the visibility—of the archaeological record reached its peak.[89] It was in this post-War period that the work of the *Carta archeologica d'Italia* evolved into the Forma Italiae series,[90] and the topographical approach to the archaeology of the Campagna was taken up and developed by one of Ashby's successors as director of the British School, John Ward-Perkins.

2.1.3 The South Etruria Survey

During the 1950s, the social and economic changes of the post-war period created the opportunity for the next great development in the archaeological study of the middle Tiber valley. The city of Rome continued to grow—its population expanded six-fold, from 500,000 to 3 million in a very short space of time. This population growth was reflected, though on a smaller scale, in the territory around Rome; notably, the *comuni* closest to the city, such as Formello and Campagnano experienced some of the highest levels of growth, with consistent double-digit increases from the 1950s onwards, while population change was more modest in more distant areas such as the *comuni* of Ronciglione and Sutri (Figure 2.1a-c).[91] Linked to this demographic growth were major changes in agriculture and land use. Not only did agricultural fields continue to expand into previously uncultivated areas, with large estates broken up and divided into fields, but there was also significant intensification of farming practices. Most obviously, the *Riforma fondiaria* of the 1950s saw deep and mechanized ploughing widely adopted for the first time (Figure 2.2). As a result, both those areas that had been under traditional shallow ploughing regimes and those areas unploughed for centuries were subject to new farming practices that disturbed previously buried stratigraphy and revealed the presence of formerly buried sites on the ploughed surfaces of fields. The scale of the destruction was unprecedented but, paradoxically, it also revealed a density of settlement neither previously seen nor imagined. A new generation of fieldwork emerged in response to these threats and opportunities. One of the earliest projects was what later came to be known as the South Etruria Survey. A number of other Italian and foreign schools also responded to these developments, for example, the Topographic Institute of Rome University organized surveys along the Etruscan coast, at Tuscania, and on the Via Gabina to the east of Rome.[92]

The results of the South Etruria Survey have helped to revolutionize understanding of not just the Roman Campagna, but Italian and the Mediterranean landscapes more generally. The remainder of this section outlines the development of the survey from its inception under Ward-Perkins through to the synthesis of its results published by Potter;[93] section 2.2 then focuses on the organization of the restudy and re-evaluation of the South Etruria Survey as part of the wider Tiber Valley Project. Here, it is useful to set out the survey's principal objectives, methodologies and results, in order to demonstrate how it fits into the longer history of archaeological study in the middle Tiber valley. Though much methodological detail featured in the original reports published in the *Papers of the British School at Rome*, and Potter offered a brief overview in *The changing landscape of South Etruria*, no detailed overview was ever published by the original surveyors.[94]

[84] E.g. Fidenae, Ashby 1906; Quilici and Quilici Gigli 1986; Lucus Feroniae, however, was not discovered until 1953, see Jones 1962: 191.
[85] Manacorda 1982.
[86] The deterioration of the archaeological record was already visible to Dennis during his lifetime; Dennis 1848.
[87] Stefani 1924.
[88] Bartoloni and Delpino 1979: 20.
[89] Potter and Stoddart 2001.
[90] Cambi and Terrenato 1994: 27.
[91] In many of these *comuni*, this was almost certainly the first time that population levels returned to those reached during the early imperial period (*c.* 50 BC–AD 100), see Witcher 2005.
[92] Potter 1979: 4; see also Barker 1991; Nardi 1972; Nardi 1981; Sommella Mura 1969.
[93] Potter 1979: 5–18; Ward-Perkins 1955.
[94] Potter 1979; for a reconstruction of the survey methodology used at Veii, see Witcher and Craven 2012.

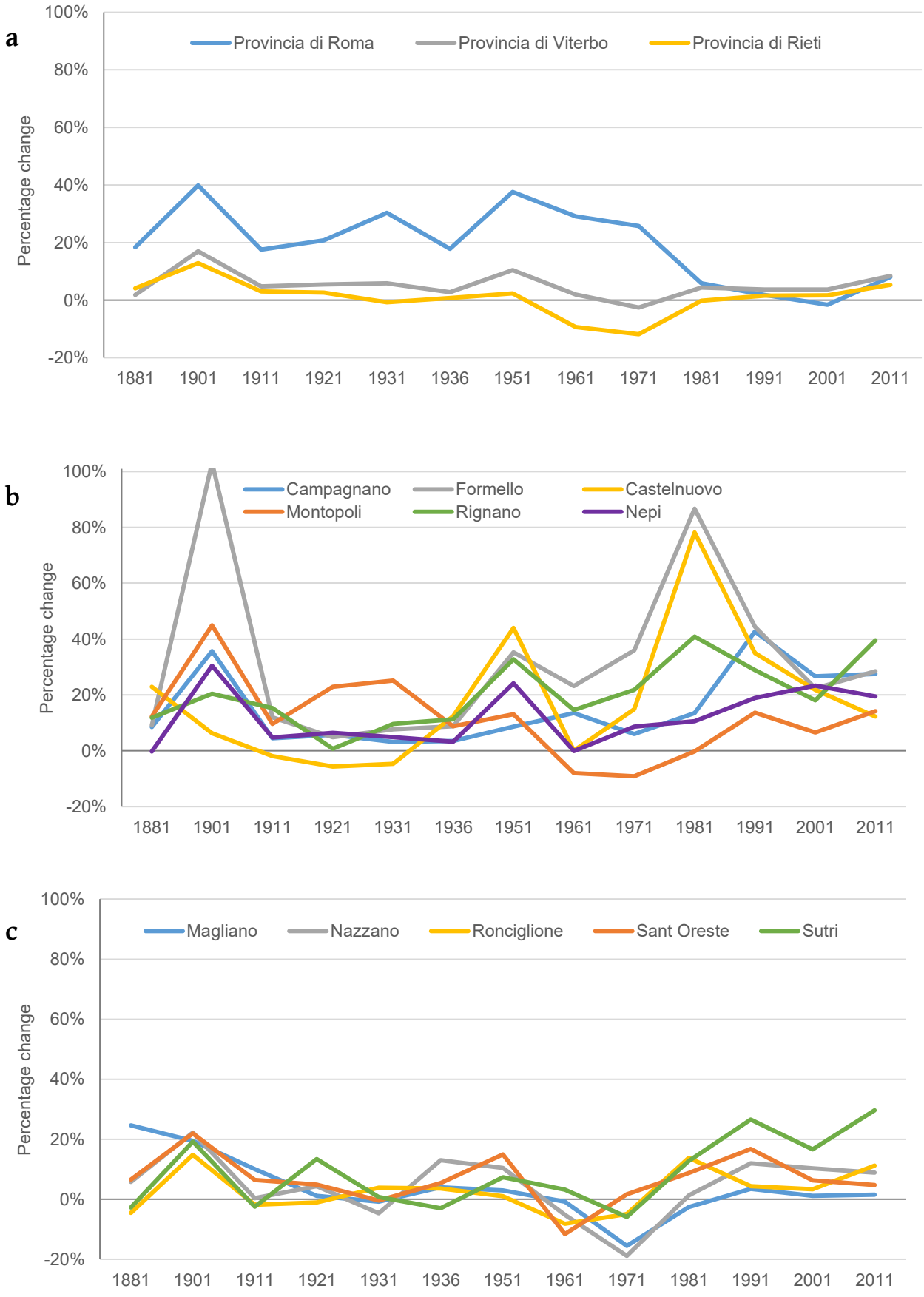


Figure 2.1a-c. Population change, as percentage growth or decline, from 1881 to 2011 in the *provincie* of Rome, Viterbo and Rieti, and in select *comuni* within the study area (based on ISTAT figures).

Figure 2.2. Agricultural work near the Caere Gate at Veii during the course of the original survey work. ©BSR Photographic Archive, Ward-Perkins Collection, wpset-03109.

Ward-Perkins envisaged the first season of work during 1954 as part of a wider programme to record the 'strangely neglected' area to the north of Rome between the Tiber and the Tyrrhenian Sea that was undergoing rapid destruction as a result of land reform schemes.[95] The original intended scope of the work is, however, unclear. Despite the now-standard moniker—the South Etruria Survey—the work comprised a number of distinct but closely coordinated field projects that developed over the following 20 years (Table 2.1). By its completion, the South Etruria Survey had covered a continuous block of land on the west of the Tiber from the outskirts of Rome to north of Civita Castellana, with two outlying areas of work at Sutri in the west and at Eretum, across the Tiber, in the east (Figure 2.3). In broad chronological order the areas covered were the Via Veientana/Via Clodia, the northern Ager Faliscus, Sutri, Cassia-Clodia, Ager Capenas, Ager Veientanus, Eretum, Eastern Ager Veientanus, and the Central and Southern Ager Faliscus. In addition, there was an 'urban' survey of the site of Veii,[96] and, beyond the Tiber Valley Project study area, blocks of work on the Via Cassia in northern Lazio/southern Tuscany and on the Via Gabina to the east of Rome.[97] There was also a thin spread of sites, stretching from the Castelli Romani south of Rome to Grosseto in the north, recorded as and when the BSR surveyors encountered them during their exploration of the wider territory of Rome. As well as fieldwalking, there were important excavations of Etruscan, Roman and medieval sites encompassing urban, rural and funerary contexts,[98] and innovative environmental studies.[99]

From the outset, the survey built explicitly on the fieldwork of earlier surveyors, providing an important framework for the organization of the fieldwork. In particular, the work of Ashby, Nibby and Tomassetti was of central importance, as was the (then unpublished) work of the early Forma Italiae.[100] In many ways, the South Etruria Survey was a resurvey of a comparatively well-known landscape. Previously documented sites were relocated and more precise chronologies identified through the collection of material—with a new attentiveness to the importance of ceramics for dating—though agricultural destruction and occasionally the ambiguity of earlier records meant that not all sites could be relocated. Jones, for example, could not find the catacomb previously seen in the

[95] Ward-Perkins 1955: 44. See Smith 2018 for an extended discussion of the wider context in which the survey was conceived and the role of Ward-Perkins in particular.
[96] Ward-Perkins 1961.
[97] Cassia/Traiana survey: Harris 1965; Via Gabina: Kahane and Ward-Perkins 1972.
[98] Christie 1991; Duncan 1965; Jones 1960; Jones 1963a; Potter 1976a.
[99] Potter 1976b.
[100] Cozza and Pasqui 1981; Gamurrini *et al.* 1972.

Table 2.1. The South Etruria surveys and key publications. (Related survey areas outside the Tiber Valley Project study area include work on the Via Cassia and the Via Traiana Nova (Harris 1965) and the Via Gabina (Kahane and Ward-Perkins 1972.)

Survey	Fieldwork core dates	Publication	Comments
Via Veientana & Via Clodia	1954	Ward-Perkins 1955	Early work, focused on tracing roads and associated sites, with little material collected; concentrated on the Via Veientana and Via Clodia (from La Storta to Bracciano)
Northern Ager Faliscus	1954-1955	Frederiksen & Ward-Perkins 1957	Early work, focused on tracing roads and associated sites, with little material collected; concentrated on the roads around Falerii Veteres and Falerii Novi.
Sutri	1957-1958	Duncan 1958	A relatively concentrated period of five months of fieldwork in late 1957 and early 1958. Small, representative samples of material collected within clearly defined research area; survey followed up with excavation of kiln site.
Veii	1959-1960	Ward-Perkins 1961	Intensive work concentrated on the plateau of Veii; a gridded survey (the 'Quadrettatura') was subsequently undertaken in 1964
Ager Capenas	1959-1961	Jones 1962, 1963	Survey area divided into the northern and southern areas; the former characterised by rougher terrain and lower visibility; the latter focused around (the then recently identified site of) Lucus Feroniae and characterised by rapid development.
Eretum	1963-1965	Ogilvie 1965	The only South Etruria survey work to the east of the Tiber, largely undertaken by R.M. Ogilvie. Although work was concentrated in just a few years, a relatively high number of sites were systematically revisited.
Northern and Eastern Ager Veientanus	1957-1968	Kahane, Threipland & Ward-Perkins 1968	The most intensively surveyed of all the South Etruria survey areas; repeated visits were made over a decade in order to cover the territory systematically and to revisit important sites or those with potential to produce more evidence under better conditions
Via Cassia & Via Clodia	1958-1963	Hemphill 1975	A consolidation of ad hoc work conducted in the late 1950s and through the 1960s by a variety of surveyors.
South and West of La Storta	1960-1968	Kahane 1977	Extensive work largely undertaken by Anne Kahane, building on early work by John Ward-Perkins, with revisits through to 1973.
Eastern Ager Veientanus	1965-1966	Unpublished	Extensive work undertaken by Michael Craven in the area between the Via Flaminia and the Tiber.
Central & Southern Ager Faliscus	1966-1967	Largely unpublished	The most systematic of the all the South Etruria surveys in terms of coverage and documentation. The final report (Potter n.d.) was unpublished due to concerns about the developments in pottery dating, though parts of the survey are reported in Potter & King 1997 and Potter et al. 1999.
Grottarossa	1969-1970	Unpublished	Work in the area of Grottarossa, between the Tiber and the Via Veientana, by Miranda Buchanan.

nineteenth century (TVP-ID 03354) at Cerreto in the Ager Capenas.[101] The original contribution of the survey, however, was not the relocation of known sites, but rather its recognition of the new, dense distribution of artefact scatters created by agricultural modernization.

Much of the fieldwork was organized around the ridge systems that dominate many parts of the region. The importance attached to ridges (rather than valleys) as coherent topographical units is well illustrated by the Ager Veientanus survey; the eastern boundary of this survey was not, as might have been assumed, defined by the ridge-top Via Flaminia, but by the stream to the immediate west and thus the road and significant associated remains were consciously excluded from consideration by this particular survey.[102] This was because Ward-Perkins felt that the Flaminia ridge, and the sites on both its eastern and western slopes, should be treated as a single topographical entity.[103] The ridge-by-ridge organization of the fieldwork was subsequently reflected in the presentation of the survey publications, though towards the end of the survey, this

[101] Jones 1963a: 107 site number 332.

[102] Kahane, Murray-Threipland and Ward-Perkins 1968.

[103] Michael Craven *pers. comm*.

Figure 2.3. Location of the South Etruria Survey areas.

was recognized as an increasingly less useful format in terms of wider understanding of the landscape.[104]

A particular innovation of the survey was use of a set of Royal Air Force (RAF) vertical aerial photographs taken during the Second World War. These, clearly, were not created for archaeological purposes, but John Bradford recognized their potential for identifying sites and for developing general landscape context for the ongoing survey work. The images were particularly valuable as aerial photography was highly restricted in Italy at the time and remained so through until the end of the twentieth century.[105] In general terms,

[104] Potter n.d.

[105] Though it is worth noting a few bespoke images were acquired, for example, a view of the Santa Cornelia *domusculta* site taken from a helicopter in 1963 (BSR Archive: WP[PHP]-SEtD35-004a); and photographs of the Ager Capenas in 1960 by Barri Jones, also from a helicopter, (WP[PHP]-SEtD09).

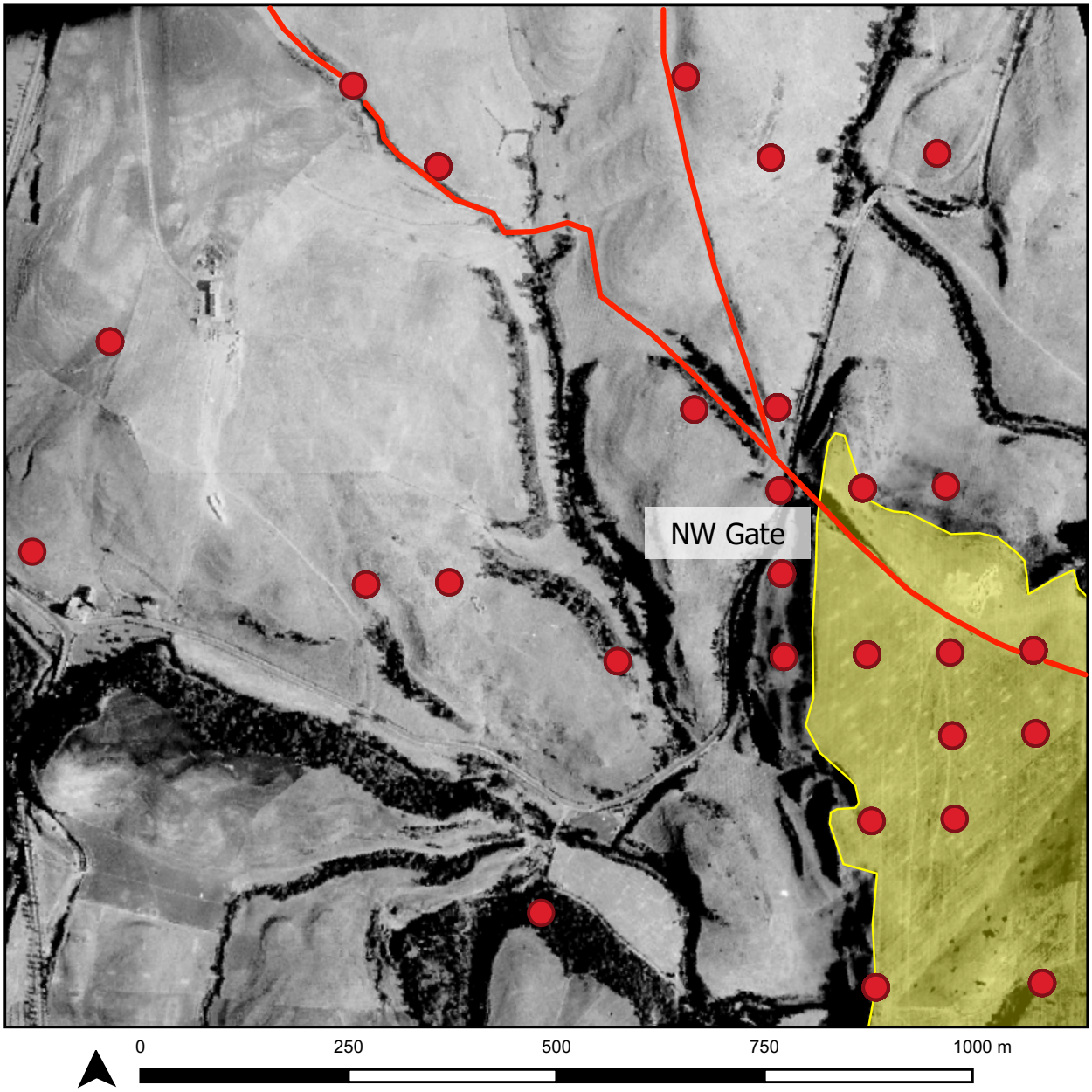


Figure 2.4. Etruscan roads (red lines) leading out of the North-west gate of Veii (yellow) visible on a 1944 RAF aerial photograph, with South Etruria Survey findspots (red circles).

the RAF photographs proved more revolutionary for archaeological studies of the Tavoliere region of Puglia, where prehistoric and Roman sites were more clearly visible as cropmarks. In southern Etruria, natural soilmarks were more apparent on the photographs than archaeological cropmarks, and the images proved most useful for tracing roads and road cuttings.[106] Figure 2.4, for example, clearly shows the two Etruscan roads leading out of the North-west gate of Veii, running through deep cuttings to level the gradients and crossing streams by means of cuniculated valleys. Figure 2.5 a short distance further north, shows the continuation of one of these roads towards the richly furnished Orientalizing-period tumulus of Monte Tondo, with cuniculated valleys to the west and the line of the later Via Cassia.

During the early years of the survey in the late 1950s and early 1960s, large stretches of the middle Tiber valley came under arable cultivation for the first time in centuries. In some cases, the surveyors were able to walk land immediately following its first deep ploughing and in many other cases the plough had only been active for a few years before survey (Figure 2.6). As a result, much of the material collected is of a different qualitative order to that which can be found

[106] Bradford 1957; Jones 1962: 203 for roads and cuttings; for an idea of what lower altitude, oblique photography at the right time of year can achieve in this area, see Guaitoli 2003.

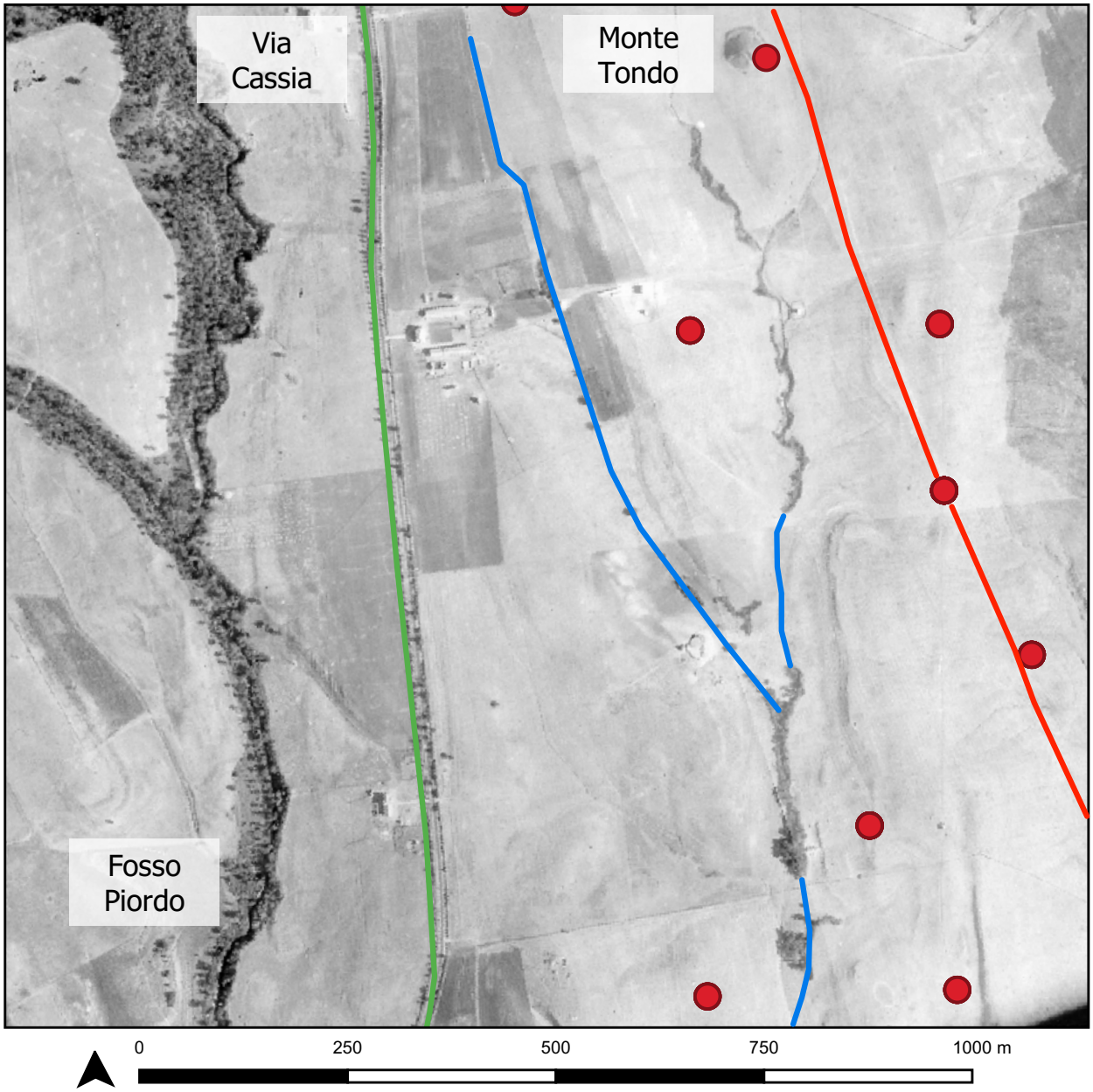


Figure 2.5. Cuniculi (blue) and the line of an Etruscan road (red), leading past the tumulus of Monte Tondo to the north of Veii, visible on RAF 1944 photograph. Also shown are the Via Cassia (green) and South Etruria Survey finds spots (red circles).

in the fields of this and other areas today.[107] Tile and pottery were not highly fragmented and abraded by years of rolling around in the ploughsoil; rather, individual sherds were large and the breaks fresh. Much of this material compares well with that from excavated assemblages—a major advantage for the restudy and analysis of this pottery today (see section 2.2.1). This brief window of opportunity between the first deep ploughing and archaeological survey is also attested by the documentation of scatters that clearly reflected the shape or outline of buried structures (e.g. TVP-ID 00452, 02713) and by the visibility of areas of dark soil, organically enriched archaeological layers brought into the ploughsoil (e.g. TVP-ID 00045, 02001, 02071, 02182/02183). Such indicators of the existence of sub-surface archaeological features gave confidence to the surveyors in their interpretation of these scatters as sites, even if these indicators were subsequently rapidly lost due to repeated ploughing.

The scatters located were marked onto Istituto Geografico Militare (IGM) 1:25 000 maps and six-figure grid references then read off and used as unique identifiers for the sites and for any material collected from them and retained. On these maps, six-figure grid references effectively locate a scatter to the nearest 100 m. In addition, the topographical positioning of scatters was nearly always recorded and commented

[107] See di Gennaro *et al.* 2002: 45.

Figure 2.6. Fieldwalking at Veii during the South Etruria Survey. ©BSR Photographic Archive, Ward-Perkins Collection, wpset-1920.42.

upon. The location of a site on the brow of a hill, beneath the crest of a ridge and so on was central to understanding possible post-depositional factors (e.g. erosion) and hence the question of what each scatter might represent.

A small sample of material was collected from most sites including fine-wares, mosaic tesserae and marble veneers; notes were also made about structures and building materials and other artefacts that were not collected.[108] The principal chronological evidence was provided by the fine-ware pottery, but select coarse-wares also played a role (e.g. horizontal handles, Almond rims).[109] Indeed, it was with great foresight, that the surveyors collected and retained a substantial quantity of—what was then—largely undiagnostic coarse-ware in the belief that it would subsequently be possible to identify and date some of this material, a belief well borne out by the restudy undertaken by the Tiber Valley Project.

There is no evidence for any systematic policy of revisiting areas to assess the changing visibility and character of surface archaeological material, though some individual sites were flagged for revisiting during periods of higher visibility in order to collect more material, especially that of prehistoric and medieval date.[110] Large and promising sites were also often revisited.

Many of the issues that concern field surveyors today—particularly artefact sampling practices and site definition—were of less immediate concern. This is not, however, to imply that the surveyors were ignorant of these issues—far from it, they demonstrate great sensitivity towards issues such as erosion (e.g. an Etruscan site with 'invasive/washed in' Roman material; TVP-ID 01416) and intra-site variability (e.g. distinct nuclei identified within a single continuous scatter; TVP-ID 01670 and 02392). Similarly, the low quantities of diagnostic sherds and the (im)probability of finding them on any particular site were also perceived in terms of 'chance'[111] or as we might now describe this, stochastic variation.[112]

The surveyors appear to have made an initial classification or interpretation of scatters in the field. Questions such as 'How many sherds make a site?' concerned Ward-Perkins just as much as they vex

[108] E.g. among the uncollected materials was a number of inscriptions, mostly funerary in nature, ploughed up and identified during the South Etruria Survey, see Reynolds 1966.
[109] Kahane, Murray-Threipland and Ward-Perkins 1968: 146.
[110] Potter 1979: 15; e.g. TVP-ID 02419.
[111] E.g. Kahane, Murray-Threipland and Ward-Perkins 1968: 154.
[112] Terrenato 1996.

surveyors today. For example, in the Cisternozze valley where an almost continuous spread of Roman material ploughed off the ridges above was identified, careful thought was given the question of whether a few earlier sherds was sufficient to identify the presence an Etruscan site.[113] As well as the quantity of material (occasionally considered in terms of its surface density), another important criterion considered in relation to site status was scatter size. This is clear from both the record cards and the published reports, using terms such as large, medium and small. But this information was not systematically documented (at least on the record cards) and, until the Southern Ager Faliscus Survey at the end of the project, was rarely quantified in any way. It is clear, however, that there must have been some working consensus around roughly what large, medium and small denoted on the ground, even if this was not set out in numerical terms, and the wide range of scatter sizes is apparent. Throughout, the surveys recognized very small scatters of material (e.g. TVP-ID 02166 [6 × 7 m], 02116 [8 × 8 m], 02115 [10 × 10 m]), some considered by the surveyors as no more than 'outbuildings' (e.g. TVP-ID 01884, 00954, 03448). Some of the scatters from the Southern Ager Faliscus Survey were even identified as individual ploughed-out pits (e.g. 1 × 2 m) within the extent of much larger scatters (e.g. TVP-ID 02001). At the other end of the scale, some scatters were noted to extend several hundreds of metres in length (e.g. TVP-ID 01291).[114] Similar to the issue of size, despite the surveyors' attention to topography, scatter shape was not always systematically recorded—though occasionally it is possible to glimpse this relationship, for example, site TVP-ID 03354 was noted to extend approximately 300 m along a ridge/spur.

The South Etruria Survey collected material of all periods, but the Roman period was the only one for which the surveyors felt it possible to define a clear settlement hierarchy on the basis of surface materials.[115] The archaeological material from this period is more diverse, better preserved and more plentiful than for earlier and later periods, and readily suggests some differentiation of settlement types. In an attempt to rationalize the results of the South Etruria Survey, in his synthesis of the survey results, Tim Potter proposed a three-level hierarchy differentiating the assorted surface scatters and noting that the majority of sites fitted clearly into one of these classes (see section 2.2.2).[116]

The fieldwork continued at a varying pace for 20 years, from the mid-1950s to the mid-1970s. Inevitably over such as period of time, the methodology evolved. The earliest surveys, for example, were focused along the courses of Roman roads (the Veientana, Clodia, Amerina), similar to the 'Ashby' model; subsequent surveys were broadened to cover contiguous blocks of land. The boundaries of these later projects were variously defined, taking combinations of ancient political boundaries, Roman roads and natural features (e.g. for the Ager Veientanus Survey)[117] or purely arbitrary definitions (e.g. Eretum, Sutri). Within each of these survey areas, there was never any attempt to sample systematic random transects or particular environmental 'strata' as common today; as with the slightly later Forma Italiae series, the aim was complete coverage of all available land. Collection and recording procedures also developed across the course of time, for example, early work collected relatively small amounts of material compared with later surveys. The core working practices, however, were quickly established and maintained throughout the duration of the survey; the 'site', for example, remained the principal unit of record throughout. Ward-Perkins's archaeological training and early career, and his subsequent military experience during Second World War, appear to have contributed much to this systematic approach.[118] Most importantly a recording system was developed that noted basic details about each site and the material collected, or observed but uncollected, on a pre-printed record card. The location of each site was fixed with its six-figure grid reference; this coordinate was also marked on each sherd and became the reference number for the site, pending publication when an additional survey-specific number was allocated. Without the thoroughness with which this procedure was followed over 20-plus years, the restudy reported below would have been impossible.

Undoubtedly, by modern standards, the South Etruria Survey can appear a little haphazard. Much of the basic information now routinely recorded by surveys was only inconsistently noted, if at all, and quantification was extremely limited (notebooks were extensively used, though sadly few have been subsequently located). It is, however, important to consider the survey in its historical context. As one of the pioneering surveys of its kind in the Mediterranean, it had few models on which to base itself. More importantly, survey conditions and research questions were quite different 60 years ago. But this is not to say that the South Etruria surveyors were naive in any sense; they would have recognized the

[113] Kahane, Murray-Threipland and Ward-Perkins 1968: 5, 20; TVP-ID 01264.
[114] Kahane, Murray-Threipland and Ward-Perkins 1968: 76.
[115] Kahane, Murray-Threipland and Ward-Perkins 1968: 154; Potter 1980: 74.
[116] Potter 1979: 122–23.
[117] Kahane, Murray-Threipland and Ward-Perkins 1968: 2–3.
[118] Pallottino and Reynolds 1980; Wilkes 1983; Smith 2018. An insight into his mindset can perhaps be glimpsed through his use of the term 'infantry' to refer to the many BSR scholars and visitors who contributed to the survey (Frederiksen and Ward-Perkins 1957: 71).

fundamental methodological questions that underlie many of the problems that fixate survey archaeologists today: what is a site? Is this a representative sample of pottery? Have post-depositional factors affected visibility? Some of these issues were relatively less important at the time of the South Etruria Survey (e.g. site definition was a less pressing problem before scatters were dispersed by ploughing and erosion), but most significantly the South Etruria surveyors operated on a pragmatic basis. The idea, for example, of a fixed artefact density threshold for separating sites from 'background noise'/off-site scatters would have made no sense; sites were identified intuitively on a case-by-case basis with full weight given to local context. More than anything, understanding of the landscape came through extended time spent in the field, either in consolidated blocks (as part of a PhD project) or spread across many years while based at the BSR; of his first report on the Ager Capenas, Jones notes: 'The pages that follow ... depend as much on the feet as the head'.[119]

2.1.4 From the South Etruria Survey to the Tiber Valley Project

As the South Etruria Survey work drew to a close in the 1970s other projects were initiated across the middle Tiber valley. Four surveys, published as part of the Forma Italiae series, for example, started work: Nomentum,[120] Vicus Matrini,[121] Sutrium,[122] and Cures Sabini (Figure 2.7; Table 2.2).[123] The latter three volumes included substantial areas of spatial overlap with the South Etruria Survey (the Sutrium and Ager Capenas Surveys). Meanwhile, to the immediate south-east of the project study area, the Latium Vetus surveys set about systematically documenting the territories of Latin centres such as Crustumerium and Fidenae, often in advance of rapid urbanization and landscape change.[124]

All this activity notwithstanding, for one of the South Etruria surveyors at least, the value of survey in the area had passed its peak. Presumably partly reflecting on the experience of his own survey of the Southern Ager Faliscus, the last of the main South Etruria Survey components, Potter observed that many areas were already reverting to grass and scrub and the surface record had been badly eroded leaving 'little of archaeological interest'; instead he argued that attention should focus on excavation.[125] Potter put his own advice into practice with his excavation of the Roman villa at Mola di Monte Gelato between 1986 and 1990.[126] This continued the long tradition of excavations undertaken throughout the life of the South Etruria Survey, some driven by specific research questions, others created by opportunities arising from construction work or accidental discoveries.[127]

Other archaeologists, however, saw further potential in survey work in the middle Tiber valley, not the least, inspired by the publication of Potter's own synthesis of the South Etruria Survey. The BSR continued to develop survey projects around Italy, including the Biferno valley survey in Molise, representing a direct successor project to the South Etruria Survey.[128] In the middle Tiber valley, meanwhile, questions about the late antique and early medieval periods motivated John Moreland to look to the Sabina on the east bank of the Tiber for a new project under the auspices of the BSR.[129] Although the Farfa Survey was initiated not much more than decade after the end of the South Etruria Survey, methodologically it was of a new and different era, reflecting wider developments in survey 'best practice'. In contrast to the focus on sites and small collections of material, the Farfa Survey adopted an off-site strategy, systematically collecting and mapping every artefact on a field-by-field basis.

A number of other surveys also commenced during the 1980s and early 1990s. Work on several more Forma Italiae surveys was started, including the map sheets of Formello and Rignano Flaminio. Both of these areas had been fully covered by the South Etruria Survey—the Ager Veientanus and the Ager Capenas Surveys respectively. This new fieldwork was therefore effectively a resurvey of, and control on, the results of the original South Etruria Survey. The results of the Rignano Flaminio survey, documented in a preliminary publication,[130] suggest that only some of the original sites found by Jones 30 years earlier could be relocated as a result of significant landscape changes. The surveyors were, however, able to directly compare the material collected in the early 1990s with the South Etruria Survey material held at the BSR. For a number of these sites at least, the Forma Italiae survey identified much new material, leading at several sites to the recognition of new periods of activity. For example, one site (TVP-ID 02517) was identified by Jones as 'Another large site ploughed out with ... little pottery available;' the Tiber Valley Project restudy of the material collected by Jones revealed just 11 sherds, all coarse-wares and amphorae. After three decades of further ploughing, however, the

[119] Jones 1962: 118, echoing the words of the Frederiksen and Ward-Perkins 1957: 71.
[120] Pala 1976.
[121] Andreussi 1977.
[122] Morselli 1980.
[123] Muzzioli 1980.
[124] Quilici and Quilici Gigli 1980, 1986; the restudy of these surveys now forms part of Sapienza University's *Suburbium* project, see Capanna and Carafa 2009.
[125] Potter 1979: 9.
[126] Potter and King 1997.
[127] Specific: e.g. Narce, Potter 1976a; Santa Cornelia, Christie 1991. Opportunistic: Jones 1962; Ward-Perkins 1959a.
[128] Barker, Hodges and Clark 1995.
[129] Moreland 1986, 1987.
[130] Camilli and Vitali Rosati 1995.

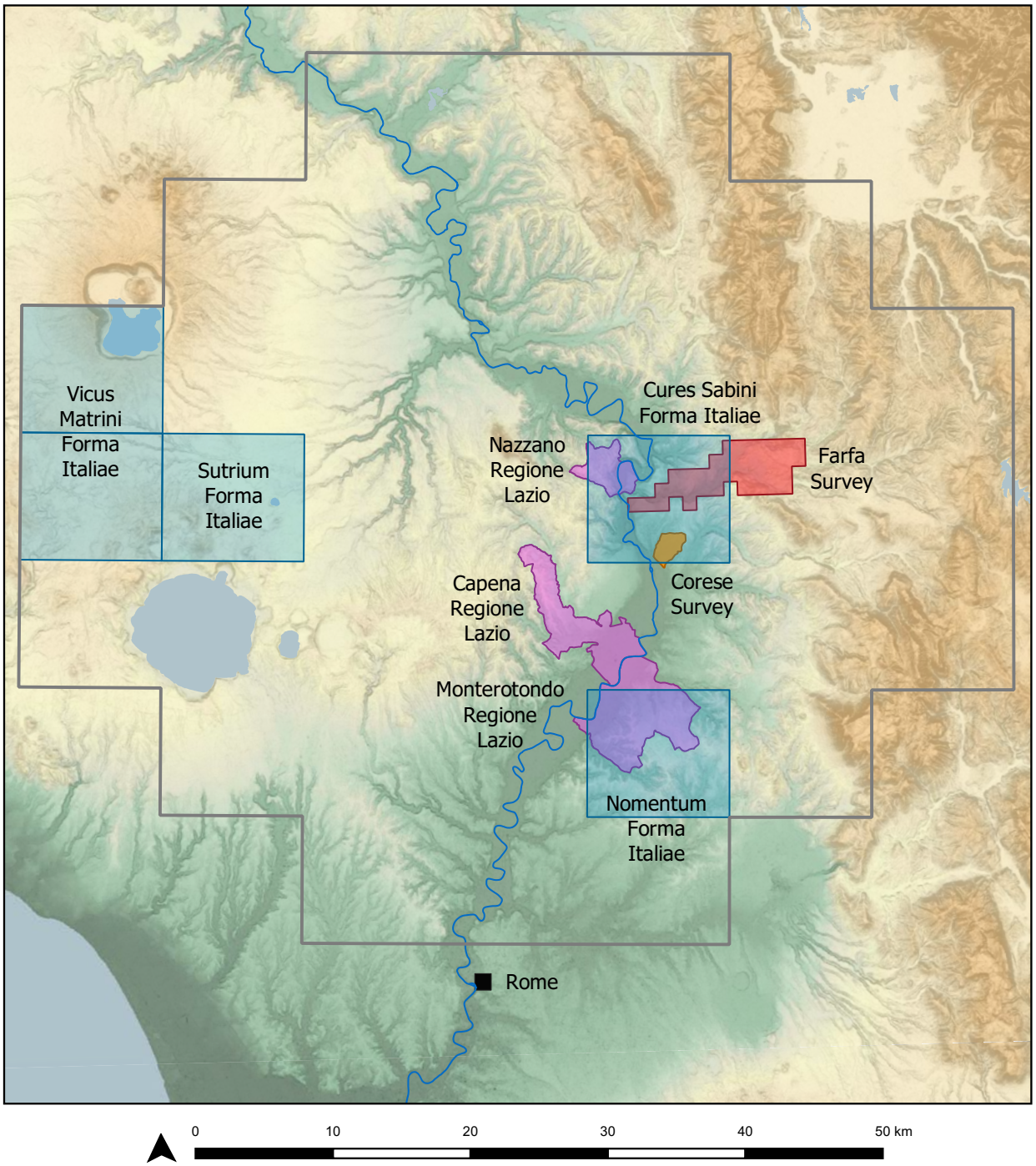


Figure 2.7. Other surveys included in the Tiber Valley Project database: Farfa; Forma Italiae; Corese; Regione Lazio.

Forma Italiae 'resurvey' identified 'un grande complesso di eta' romana con terme e strutture produttive, tra cui i blocchi in travertino dall'ara e delle pilae di un trapetum e frammenti di macine', plus abundant pottery helping to refine and extend settlement activity dates.[131] (The final Rignano Flaminio report has not yet appeared and the Formello map sheet survey remains unpublished.) Another survey instigated at this time to investigate a map sheet area already survey covered by the South Etruria Survey is the work of the Gruppo Archeologico Romano (GAR) around the Archaic-period centre at Narce.[132] Again, the preliminary publication of this work was able to relocate many of the sites documented by Potter as part of the Southern Ager Faliscus Survey, but also to identify a number of new sites. Figure 2.8, for example, shows how the GAR survey work significantly extends the distribution of early imperial (first century AD) settlement in the north-eastern corner of the Nepi

[131] Camilli and Vitali Rosati 1995: 403.

[132] Camilli *et al.* 1995.

Table 2.2. Other surveys incorporated into the Tiber Valley Project database.

Survey	***Directors/series***	***Publications***	***TVP DB***
Etruria and Sabina	Carta archeologica d'Italia	Gamurrini et al. 1972	Yes
Agro Falisco	Carta archeologica d'Italia	Cozza and Pasqui 1981	Yes
Nomentum	Forma Italiae (Pala)	Pala 1976	Yes
Vicus Matrini	Forma Italiae (Andreussi)	Andreussi 1977	Yes
Sutrium	Forma Italiae (Morselli)	Morselli 1980	Yes
Cures Sabini	Forma Italiae (Muzzioli)	Muzzioli 1980	Yes
Ager Foronovanus	Forma Italiae (Verga)	Verga 2006	No
Ager Ciminius	Forma Italiae (Scardozzi)	Scardozzi 2004	No
Crustumerium	Latium Vetus (Quilici; Quilici Gigli)	Quilici and Quilici Gigli 1980	No
Fidenae	Latium Vetus (Quilici; Quilici Gigli)	Quilici and Quilici Gigli 1986	No
Ficulea	Latium Vetus (Quilici; Quilici Gigli)	Quilici and Quilici Gigli 1993	No
Capena	Regione Lazio	Mazzi and Cotroneo 1995	Yes
Monterotondo	Regione Lazio	Cristallini 1995	Yes
Filacciano	Regione Lazio	Calabri 1995	Yes
Nazzano	Regione Lazio	Resini *et al.* 2002	Yes
Agro Capenate	Gruppo Archaeologico Romano	Camilli and Vitali Rosati 1995	No
Ager Faliscus meridionale	Gruppo Archaeologico Romano	Camilli *et al.*1995	No
Sabatia Stagna	Agri e chorai tra Magna Grecia e Etruria	Accardo *et al.* 2007; Cordiano *et al.* 2011	No
Farfa	BSR (J. Moreland; T. Leggio)	Moreland 1986, 1987, 2005, 2008	Yes
Galantina	BSR (A. Guidi; H. Patterson; P. Santoro)	Candelato *et al.* 2004; Gabrielli *et al.* 2003; Guidi *et al.* 2004, 2005, 2008	No
Nepi	BSR (F. di Gennaro; U. Rajala; S. Stoddart)	di Gennaro *et al.* 2002, 2008; Mills and Rajala 2011; Rajala 2013, 2016, 2017	No
Corese	BSR (H. Di Giuseppe; R. Witcher)	Di Giuseppe *et al.* 2002	Yes

map sheet, while notably increasing the density of known sites to the south and west.[133]

A slightly different approach to survey at this time was the work initiated by the Regione Lazio. Instead of IGM map sheets, the project investigated the territories of individual *comuni*, starting with Capena in the late 1980s.[134] Each study commenced with archival and bibliographical research followed by 'ground-truthing'; the *comune* of Capena was chosen due to the particular threat of construction in the area. Following Jones's survey of the early 1960s, there was major industrial expansion, agricultural intensification, a new railway and illegal excavations. All of these processes both destroyed old sites and revealed new ones. Like the South Etruria Survey, the Regione Lazio survey sites were recorded on 1: 25 000 maps. Low visibility conditions caused by the abandonment of arable land, meant that work had to be spread over different seasons of the year. The whole territory of the *comune* was surveyed, except wooded and urbanized areas and the archaeological zone of Lucus Feroniae. The fieldwork was conducted from September 1986 to February 1990 allowing the re-

[133] The results are not yet published in full and so have not been incorporated into the Tiber Valley Project database.
[134] Ramelli di Celle 1988; Calabri 1995; Cristallini 1995; Mazzi and Cotroneo 1995; Resini and de Maria 2002.

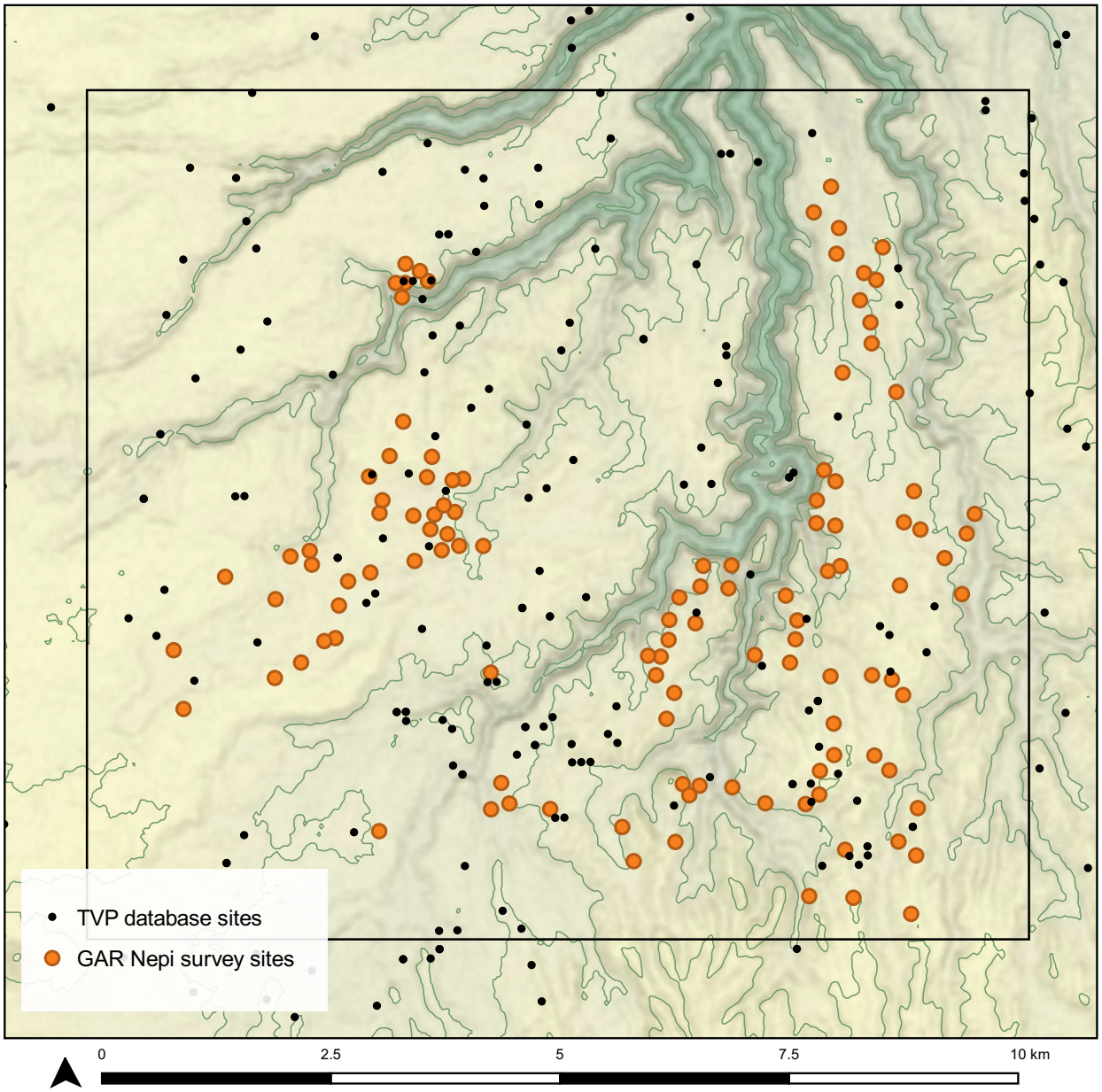


Figure 2.8. Distribution of sites identified by the Nepi survey of the Gruppo Archeologico Romano (after Camilli *et al.* 1995) in relation to sites mapped by the South Etruria Survey.

identification (or not) of published sites, refinement of their dating and assessment of their preservation, as well the identification of new sites.[135] There are no published details of the survey's methodology, but the increased numbers of sites discovered suggests that the Regione work was of higher intensity than Jones's Ager Capenas Survey. Similarly, as with the Forma Italiae work in the Rignano Flaminio area (above), major improvements in ceramic typologies by this time enabled modifications of Jones's proposed dates and settlement patterns.

By the mid-1990s, the concept of the Tiber Valley Project, with a full and systematic restudy of all the South Etruria Survey material, had begun to develop. Within the context of this project several new surveys were initiated. These included another survey in the Nepi region to complement the excavation work in the centre of Nepi undertaken in the early 1990s and to facilitate an integrated analysis of a town and its hinterland.[136] To the east of the Tiber, the Galantina project began work surveying the area to the north of the Farfa river, aiming to fill a significant blank on the archaeological map.[137] Finally, as part of the

[135] Mazzi and Cotroneo 1995: 41.

[136] di Gennaro *et al.* 2002; Mills and Rajala 2011; Rajala 2013.

[137] Gabrielli, Guidi and Santoro 2003.

Tiber Valley Project, a small area to the south-west of Cures Sabini was selected for resurvey during autumn 2000.[138] The latter was initiated following bibliographic research and the restudy of the South Etruria Survey material from the other side of the Tiber that had raised several problems of interpretation. These included the great disparity in settlement densities on either bank of the river, the possibility of using new coarse-ware chronologies to extend the dating of known sites (particularly into late antiquity), and the opportunity to search for any evidence in support of an hypothesized area of land division (*ager quaestorius*).[139] At the same time, other new surveys (unaffiliated with the Tiber Valley Project) have been initiated, including the Sabatia Stagna project, to investigate the landscapes around Lake Bracciano, including resurvey of some of the area covered by the Cassia-Clodia Survey to the south of the lake.[140]

As well as new survey (or resurvey) work, there has also been an enormous amount of excavation in advance of development, as the example of Capena (above) makes clear. It is striking to observe that the area around Lucus Feroniae that Jones considered on the basis of the South Etruria Survey to be 'a patchwork of sporadic evidence' as a result of long-term agricultural damage[141] is now recognized as one of the most intensively explored and archaeologically productive areas. Questions, for example, about the course of the Via Tiberina and the apparent dearth of settlement activity to the west of Lucus Feroniae have been directly addressed by excavations in advance of extensive development in this area. But similar work has added to knowledge of the archaeological landscape across the wider study area and, unsurprisingly, led to new insights about sites first documented by the South Etruria Survey. A good example comes from the area of Pietroso on Monte Petrolo to the north of Rignano Flaminio. Here, in 1962, Jones identified two related sites (TVP-ID 02489 and 03468) approximately 100 m apart. In the Tiber Valley Project database, these are interpreted as a villa and farm respectively. In 2000, excavations prior to development work in this area identified a substantial Roman industrial complex including kilns and vats for the preparation of clay[142] significantly expanding the range and scale of activities suggested by the surface materials. Meanwhile, south of Crustumerium, exploratory trenches excavated within surface scatters in advance of the movement of agricultural soils have documented highly variable sub-surface activity including cut (negative) features, artefacts and structures, some surviving to 1 m in height.[143] The systematic integration of all these recent sub-surface interventions that post-date the Tiber Valley Project would be a massive and invaluable project in itself.

2.1.5 Summary

The period from the end of the South Etruria Survey to the present has seen continued intensification of archaeological research in middle valley.[144] In part this can be ascribed to the success of earlier survey work in the area, as well as to the emergence of new research agendas to which the evidence from this area has a special contribution to make; but it is also a response to the continued and intensifying threat to the archaeological record resulting from the ongoing expansion of modern Rome and the economic exploitation of its surroundings.

It was noted above that the middle Tiber valley is one of the most intensively surveyed areas of the Mediterranean. As this brief overview of archaeological survey work has shown, the essence of this observation lies not only in the size of the area covered, but also in the amount of repeat survey that has taken place. In many senses, the South Etruria Survey was a resurvey of territory already well traversed by the likes of Ashby, Cozza and Pasqui. Each resurvey brings new knowledge about both the archaeological record itself and about the methods of earlier work. A 'biographical' approach therefore becomes invaluable for developing knowledge of the ideas, methods and the archaeology of individual sites through time.

Something of the intensity of this re-survey can be demonstrated with a few statistics. The South Etruria Survey covered approximately 1100 km^2. Of this, the Sutrium Forma Italiae re-examined 29 km^2 of the 84 km^2 surveyed by Duncan around ancient Sutri and a further 31 km^2 of Duncan's coverage was resurveyed for the Vicus Matrini Forma Italiae volume. Further east, Muzzioli's Cures Sabini Forma Italiae volume included 32 km^2 of Jones's Ager Capenas Survey and the Regione Lazio survey of the *comune* of Capena intensively resurveyed a further 30 km^2. Meanwhile 15 km^2 of Muzzioli's Forma Italiae was itself partly resurveyed by the Farfa Survey and another 3 km^2 by the Corese Survey. As a result, including both published and unpublished surveys, as much as 50 per cent of the South Etruria Survey area has been subject to resurvey work of some kind or another. And, of course, as the South Etruria surveyors themselves made clear, much their own work was resurveying sites and landscapes documented decades before.

[138] Di Giuseppe *et al.* 2002.
[139] Muzzioli 1980: 37–9.
[140] Accardo *et al.* 2007; Cordiano *et al.* 2011.
[141] Jones 1962: 201.
[142] Manigrasso n.d.
[143] Di Napoli 2016: 33.
[144] Barker 1991; Potter and Stoddart 2001.

The resulting legacy data are rich but uneven. Some sites and areas have been the focus of almost continuous exploration (e.g. Veii); others have attracted repeated survey campaigns, particularly around Nepi and in the southern Ager Faliscus; other sites, however, have been visited once and will probably never be visited again, not least because they will have already disappeared beneath buildings, infrastructure or regenerating scrub and woodland. The Sabina has clearly received much less attention from archaeological surveyors than Etruria, and the surveys that have been completed in the Sabina have focused relatively close to the Tiber. The evolution of survey questions and methods has also had a clear effect on results; for example, surveys that focused on roads have produced linear distributions of sites, and areas subject to more intensive surveys have produced much higher densities of sites. All of this means that simple maps and charts of site numbers generated from the Tiber Valley Project database must be treated with caution; some parts of the dataset are more reliable and detailed than others due to spatial and chronological unevenness. With this unevenness in mind, section 2.4 of this chapter considers how to 'read' the distribution maps and charts that underpin the analyses presented in the subsequent chapters.

In the meantime, however, it is worth stressing that even if all the surveyors had been using the same methods to document the archaeological record for the past 150 years, the results would still be highly uneven simply because the archaeological evidence itself is so dynamic. There is no definitive set of sites to record or artefacts to collect because development and, especially, agricultural activities are constantly changing what is available to record. This works across both the long-term (e.g. the sudden visibility of thousands of sites as a result of post-war deep ploughing) and the short-term (e.g. whether a field is left fallow in any particular year). Generally speaking, the quantity and especially the quality of material available on the surface for collection today are greatly reduced, but nonetheless survey work continues to find sites never previously identified. Put simply, the harder we look, the more we find, a process taken to a new level through the growing use of open-area excavation in advance of development.

The success of the South Etruria Survey was down to timing: 'The ploughing of ancient grassland or scrub does for a brief while reveal much that has long been hidden'.[145] That brief window has remained open longer than Ward-Perkins may have dared to believe, but it will not last forever.[146] Instead, new methods and technologies will be needed for another transformative shift in understanding at a landscape scale, such as the use of LiDAR to identify sites in forested landscapes, or the large-scale application of geophysical survey.[147]

2.2 The South Etruria Survey revisited

The first sections of this chapter have summarized the range of archaeological legacy data from the middle Tiber valley; this section turns to consider how the core dataset amassed by the South Etruria Survey has been restudied and integrated into the Tiber Valley Project database. In particular, it draws attention to the way in which the process of data entry involved the constant checking and correcting of data, and crosschecking with other legacy data sources. Through this process, new insights have been gained into the how the South Etruria Survey data were collected, and the possibilities and limitations for their subsequent use.[148]

Despite the good number of reports published by the South Etruria surveyors (see Table 2.1), several significant components remained partly or wholly unpublished. The most important gaps are the Central and Southern Ager Faliscus Survey (by Tim Potter), work along the Via Veientana and at Grottarossa (by Miranda Buchanan) and survey in the wedge-shaped territory between the Via Flaminia and the Tiber (Eastern Ager Veientanus Survey, by Michael Craven). The latter two surveys are particularly important given the subsequent levels of quarrying and development in these areas. There are also many individual sites identified by the South Etruria Survey that remained unpublished as they were only located after the publication of the relevant survey area reports (e.g. sites found in the Ager Veientanus after 1968). In addition to these gaps in the core publication record, a major problem for previous attempts to use the South Etruria Survey dataset as a whole has been the uneven and increasingly out-of-date ceramic knowledge on which it was based. As explained below, pottery typologies developed enormously during the course of the original survey work. As a result, it has been impossible to be certain that key periods of activity were consistently recognized across the dataset. Many more advances in pottery typologies were made in the years following the survey, especially in relation to coarse-wares. These limitations had long been known and the call for a full and systematic restudy of the material on these grounds was made by Potter in his 1979 synthesis of the South Etruria Survey.[149] As interest in reusing the South Etruria Survey data grew, these issues were increasingly noted in the literature and the impetus for a restudy of

[145] Ward-Perkins 1961: 1. Ashby 1927: 52 expressed similar concerns 30 years earlier, though the scale and intensity of agricultural development following the Second World War was certainly greater than during the earlier twentieth century.

[146] Cherry 2004: 31 discusses the idea that the surface archaeological record will be gone by 2050.

[147] e.g. Cifani, Opitz and Stoddart 2007; Campana 2017, 2018.

[148] See Witcher 2008b on legacy survey data generally.

[149] Potter 1979: 18.

all the survey material, alongside the digitization of the site information, gained pace.[150]

Data collation for the Tiber Valley Project has involved the systematic checking of all the information about each findspot including its location, finds, activity dates and interpretation. Each South Etruria Survey or legacy data findspot has been assigned a unique number in the database (TVP-ID). In the vast majority of cases, these findspots represent 'sites'—discrete, individual foci of activity such as a settlement or a burial. In a small number of cases, findspots (and hence TVP-IDs) relate to parts of a larger site; this usually occurs where an additional scatter(s) of material was located by the original surveyors but was explicitly stated to be an extension of the first (main) site or to be material derived from it, for example, through erosion. Several of the urban sites also have multiple findspots (and hence multiple TVP-IDs)—most obviously Veii.[151] In each of these cases, full details for the whole site complex are aggregated into a single 'parent' record, with findspot-specific details retained in the relevant 'child' records (database users can therefore work at the level of sites or, where the data exist, within sites). Data entry has been controlled through a series of checks and constraints designed to screen the data and to ensure they are as 'clean' as possible. For example, users were required to select terms from drop-down menus and were prevented from entering incomplete information such as artefacts that lacked a related site record. This approach helped to identify and resolve many inconsistencies that had previously passed unnoticed in the paper archive, such as positioning of sites, matching material to findspots and typological misclassifications. The resulting database cannot claim to be 100 per cent error free; no digitization of a 20-year project undertaken half a century earlier could be. Nonetheless, a substantial number of inconsistencies that had been incorporated into the analogue record over the course of the original survey have been systematically identified and corrected as a result of digitization work of the Tiber Valley Project.

Where a site had been visited more than once, a comprehensive database record for that site was built up that might, for example, use dating information from visits by several different surveys to create a single overall chronological profile. The locations of sites were also visualized against a range of digital mapping to confirm their coordinates and to check the descriptions of their topographical contexts. The visualization and checking of site locations was also vital for evaluating whether nearby findspots documented by other surveys, such as the Forma Italiae, were distinct sites or whether, taking into account the descriptions provided and the form of the intervening landscape, the records should be combined as a single settlement.

Alongside the collation of the archaeological data, a series of digital datasets was assembled. In the late 1990s, the idea that high-resolution satellite imagery, digital elevation models and a host of other environmental data would be free to access and available at the click of a mouse was unheard of (Google Earth launched in 2001 and Google Maps in 2005; the EU INSPIRE Directive on spatial data infrastructure did not come into force until 2007). As a result, from 1999 to 2001, a huge amount of time and money was spent acquiring and processing a basic set of GIS data including a 30 m-resolution DEM built from digital contours and spot heights from 42 IGM 1: 25 000 map sheets covering a total area of approximately 4000 km^2. Particularly important for understanding how sites were positioned in the landscape were sets of georectified 1: 25 000 and 1: 10 000 maps supplied by the IGM and the Regione Lazio respectively. Other digital datasets from these sources included rivers and watercourses, modern land use and geolocated toponyms.

In collecting and integrating diverse geographical and archaeological data, perhaps the most important concerns are the scale, precision and accuracy of data capture. The archaeological data collated by the project derived from a variety of different sources with very different standards for recording spatial information. As noted above the South Etruria Survey sites were recorded on 1: 25 000 maps using six-figure grid references, locating sites to the nearest 100 m on the ground. In contrast, more recent surveys have made use of larger-scale mapping (e.g. 1:10 000) plotting the location of individual transects, or even finds, using GPS with accuracies of a few metres or less.[152] GIS can handle data collected any scale, but there is also a danger that it can inadvertently disguise these differences in data capture making data seem more comparable or more accurate and precise than they really are. Site records were therefore 'tagged' with information about the recording of spatial data.

2.2.1 South Etruria Survey restudy: pottery

As explained above, the South Etruria Survey comprised many closely related sub-projects completed over the course of 20 years. During and since that time there have been significant advances in ceramic typologies and a major limitation of the data has long been the

[150] See for instance Morley 1996: 96.

[151] Cascino, Di Giuseppe and Patterson 2012.

[152] Again, in relation to the scale of technological advances since the Tiber Valley Project began, it is worth recalling that the intentional introduction of error to the GPS system by the US government—so-called 'selective availability'—was not disabled until 2000. The regular use of GPS for archaeological survey (and for all other civilian applications) was quickly established after this date, e.g. in the Tiber valley, Di Giuseppe *et al.* 2002.

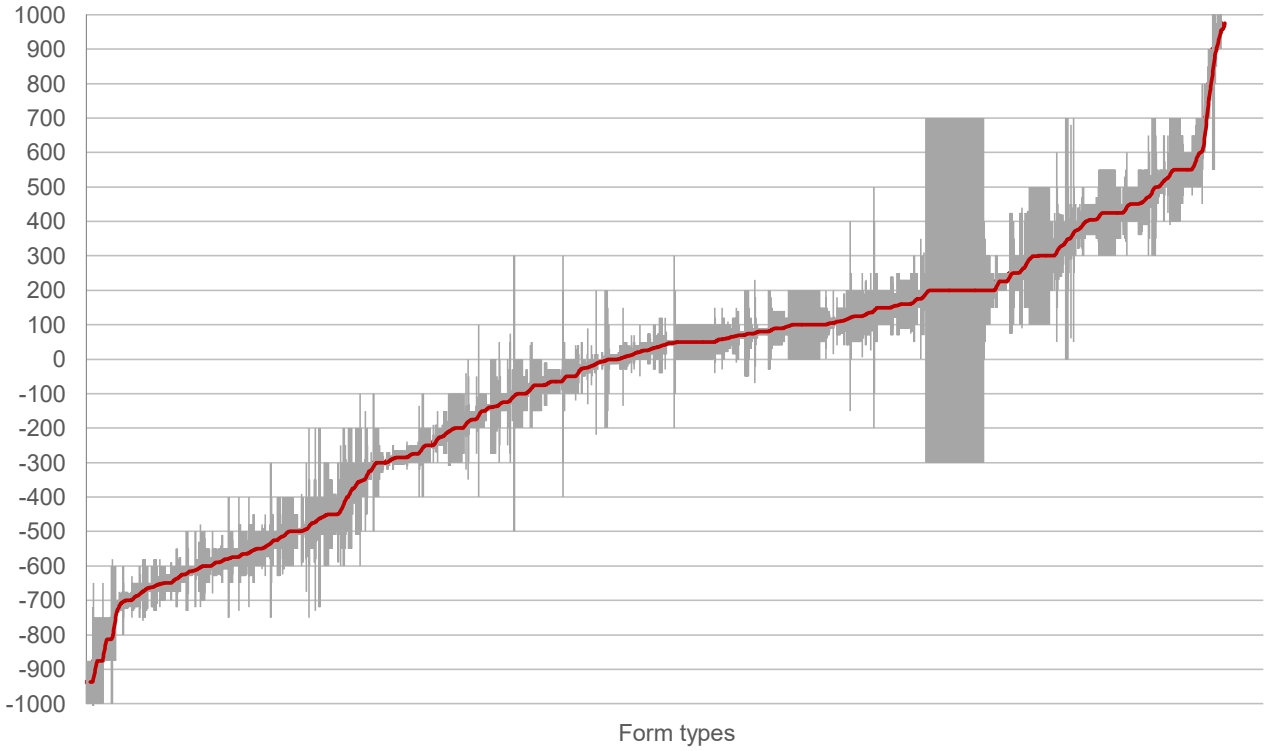


Figure 2.9. Timespans of all pottery form types in the Tiber valley Project database (n=2715); red line shows mid-point of date spans.

inconsistent and out-of-date ceramic identifications. A particularly important development was Hayes's study of African red slip wares (previously known as Red Polished ware), the results of which were only available after several early surveys had already been published;[153] Potter's 1979 synthesis of late antiquity was therefore (knowingly) based on a less-than-perfect understanding of the distribution of late antique sites. Subsequent work has continued to refine ceramic typologies for all periods. Hence, whilst the dating of most of the basic wares (e.g. *terra sigillata*) remains unchanged or only slightly modified, some classes have been shifted to notably earlier or later dates—and others have disappeared altogether. Indeed, during the original survey period, there was often confusion between forms, decoration and wares as they would now more strictly be defined: for example, Beaker ware is now thin-walled ware, Cuniculus ware (so-called after its discovery in a cuniculus at Veii)[154] is now internal slip ware, and Almond Rims and Cogged wares are now recognized as specific form types of Roman plain- and coarse-wares.

The potential of coarse-wares as important indices of chronology and function was recognized from early during the survey, even if knowledge was limited;[155] much subsequent work has therefore concentrated on improving coarse-ware and amphora typologies and, in particular, pre- and post-Roman ceramics.[156] It would, however, be wrong to believe that increasing knowledge only refines—that is, narrows—the date ranges of ceramic types; excavation can demonstrate that some forms have longer chronological ranges than previously believed as, for example, is the case with the so-called Almond Rims, which are now known to have circulated beyond the fifth and early fourth centuries BC. Figure 2.9 visualizes the date range of every form type featuring in the database (including both standard published typologies and those defined as part of the restudy of the South Etruria Survey material); Figure 2.10 shows the date ranges of the principal diagnostic ceramic classes.[157] Table 2.3 lists the classes of pottery for which there are more than 100 sherds in the project database; Table 2.4 lists the individual (published) pottery form types with more than 50 sherds in the database. This sequence of charts and tables draws attention to the large number of form types in circulation, but also the fact that many are attested by only a few examples. Nonetheless, as a result of the Tiber Valley Project restudy, for the first time it is possible to move beyond

[153] Hayes 1972; cf. Duncan 1958; Kahane, Murray-Threipland and Ward-Perkins 1968.
[154] Ward-Perkins 1959b.
[155] E.g. 'horizontal handles' were an important indicator for the Etruscan period, Kahane, Murray-Threipland and Ward-Perkins 1968: 8–9.
[156] E.g. Patterson and Roberts 1998.
[157] Cf. Potter 1979: 17, tab. 2.

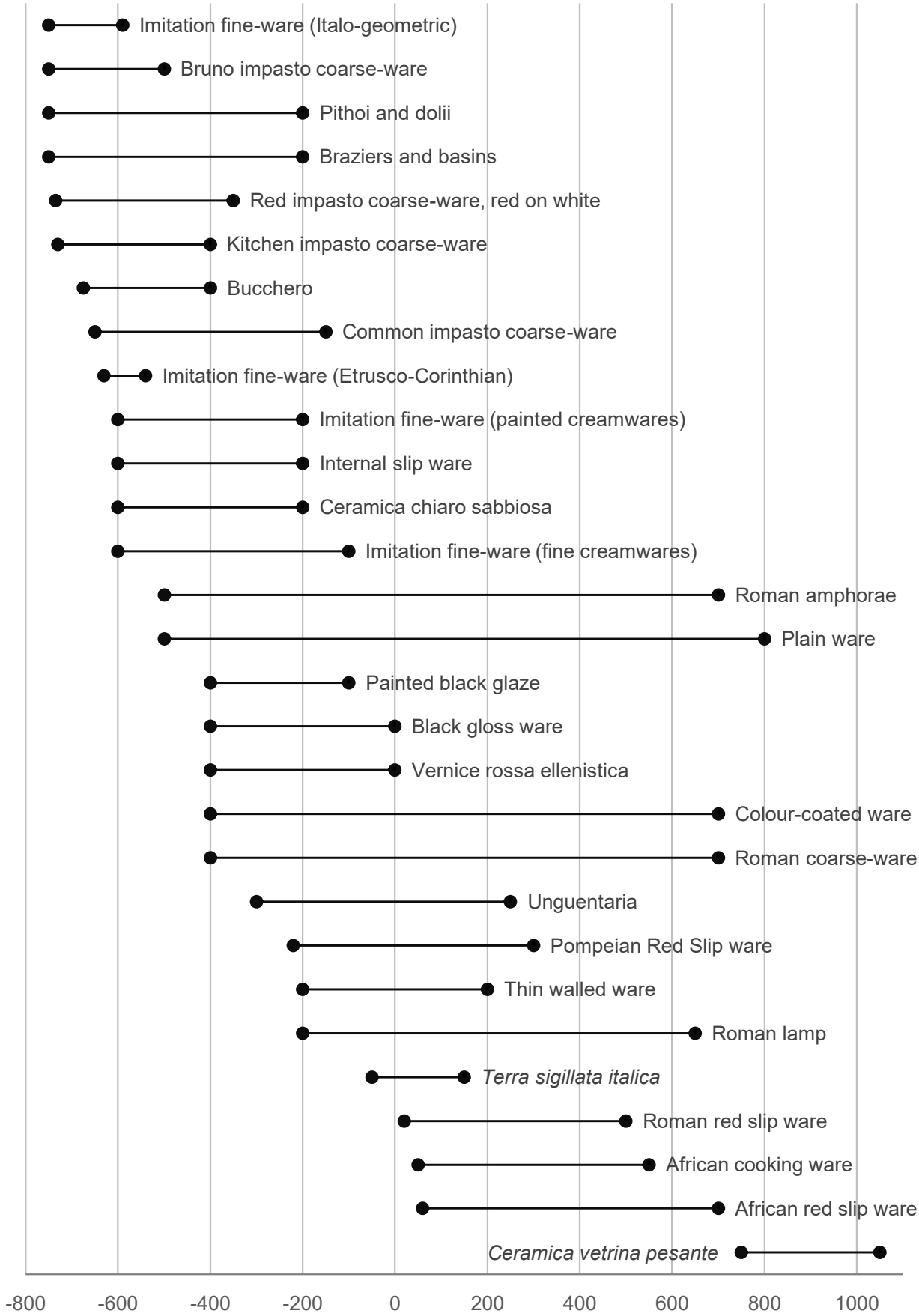


Figure 2.10. Timespans of principal diagnostic classes of pottery (n>50 sherds) in the Tiber Valley Project database.

Table 2.3. Numbers of restudied sherds by pottery class, with more than 100 examples in the Tiber Valley Project database (in order of start date).

Pottery class	Start date	End date	No. of form types	Total no. of sherds
Impasto	-2300	-750	107	1873
Bruno impasto coarse-ware	-720	-600	62	903
Red impasto coarse-ware, red on white	-720	-550	83	4122
Pithoi and dolii	-720	-550	32	328
Imitation fine ware (Italo-geometric)	-675	-625	35	255
Bucchero	-650	-450	87	2358
Common impasto coarse-ware	-650	-400	55	1574
Imitation fine ware (Etrusco-Corinthian)	-630	-540	15	152
Kitchen impasto coarse-ware	-610	-500	35	662
Braziers and basins	-600	-500	64	303
Ceramica chiaro sabbiosa	-600	-200	26	402
Imitation fine ware (fine creamwares)	-600	-100	21	217
Internal slip ware	-510	-200	14	531
Black gloss-ware	-350	-1	275	7077
Roman coarse-ware	-300	700	629	21921
Plain ware	-300	700	255	7153
Pompeian red slip ware	-220	200	16	113
Thin-walled ware	-200	200	43	2421
Colour-coated ware	-100	700	64	707
Roman amphorae	-75	700	107	3443
Terra sigillata italica	-10	120	233	6074
African red slip ware	60	700	166	4963
African cooking-ware	75	425	51	2779
Roman red slip ware	100	500	37	110
Roman lamp	350	500	38	279
Medieval coarse-ware	800	1400	39	683
Ceramica vetrina pesante	900	1000	16	126

the use of the South Etruria Survey material to give general dates based on ceramic class or ware (e.g. black-gloss pottery indicating Republican activity) to access the chronological information associated with ceramic form types, offering the basis of a more detailed insight into the dating of settlement sites.

At the start of the Tiber Valley Project restudy, all the ceramic material collected by the South Etruria Survey and stored at the BSR was subject to an initial 'spot-check' by a pottery specialist. For each bag of material, this involved counting the numbers of sherds and assigning them to a general class (e.g. bucchero or *terra sigillata*); period specialists then undertook a detailed study of each sherd—a total of just under 75,000. All the details were then entered into the Tiber Valley Project database. Similar procedures were followed with the other categories of material including brickstamps, marble veneers, and window and vessel glass. Inevitably, after 50 years and a number of storage relocations, not everything listed on the original survey record cards was found in the hundreds of crates of material stored at the BSR. For example, the intriguing 'amphora handle [with] undecipherable stamp' from TVP-ID 00806 was not found with the other finds from this site, perhaps suggesting that it had been taken away for further investigation and never made its way back to the store. Much more disappointing, however, was the almost complete absence of the material from the northern Ager Capenas Survey area.[158] Again,

[158] Published in Jones 1963a.

Table 2.4. Numbers of restudied sherds by published pottery form type, with more than 50 examples in the Tiber Valley Project database (in order of start date).

Pottery class	Form type	Start date	End date	Total no. of sherds
Bucchero	Rasmuss. 2d=3a	-625	-550	131
Black-gloss ware	Morel 2775c	-305	-265	249
Black-gloss ware	Morel 321c4	-305	-265	87
Black-gloss ware	Morel 2784c	-300	-200	190
Roman coarse-ware	Dyson CF 23	-300	-100	64
Roman coarse-ware	Duncan 65, f. 10, F. 34	-275	0	93
Roman coarse-ware	Ostia II, 507	-275	50	313
Black-gloss ware	Morel 174a	-250	-200	59
Roman coarse-ware	Dyson PD 44/47	-200	-30	59
Roman coarse-ware	Duncan 65, f. 12, F.38a	-150	0	52
Roman amphorae	Dressel 1	-130	-10	55
Roman amphorae	Dressel 2–4	-75	175	149
Terra sigillata italica	Conspectus 18.2	-10	40	67
Terra sigillata italica	Conspectus 33	0	40	81
Roman coarse-ware	Ostia II, 477	0	140	74
Roman coarse-ware	Ostia II, 478	0	140	78
Roman coarse-ware	Ostia II, 513	0	200	79
Roman coarse-ware	Ostia II, 514	0	200	69
Roman coarse-ware	Ostia II, 516	0	200	76
Roman amphorae	Spello	5	250	137
Terra sigillata italica	Conspectus 36.4	15	100	87
Terra sigillata italica	Conspectus 37.5	15	100	57
Terra sigillata italica	Conspectus 34	20	100	123
Terra sigillata italica	Conspectus 20.4	30	100	54
Terra sigillata italica	Conspectus 3	30	120	178
Terra sigillata italica	Conspectus 3.2	30	120	58
Roman coarse-ware	Ostia II, 483/484	40	140	71
Roman coarse-ware	Ostia III, 630	40	140	157
Roman coarse-ware	Curia II, fig.255, 97	40	140	75
Roman coarse-ware	Ostia II, 511	50	150	80
Roman coarse-ware	Ostia III, 49	50	200	134
Roman coarse-ware	Ostia III, 520	70	200	63
Roman coarse-ware	Ostia III, 521	70	200	71
Terra sigillata italica	Dragendorff 29 (SIGIT)	75	150	93
African cooking ware	Hayes 23	75	425	101
African red slip ware	Hayes 8a (A1/2)	80	200	116
African red slip ware	Hayes 8a (A1)	80	200	57
African red slip ware	Hayes 3c	100	175	63
African red slip ware	Hayes 9a	100	200	74
African cooking ware	Ostia I 18	100	250	88
African cooking ware	Ostia I 261	100	425	421
African cooking ware	Ostia III 267	100	425	405
African red slip ware	Hayes 9b	150	250	52
African red slip ware	Hayes 14a	150	300	83
African red slip ware	Hayes 8b	150	300	127
African cooking ware	Hayes 23b. 24	150	425	94
African red slip ware	Hayes 14b	200	250	73
African red slip ware	Hayes 27	200	300	79
African red slip ware	Hayes 50a	200	350	65
Roman coarse-ware	Ostia I, 399	240	420	55
African red slip ware	Hayes 91	350	650	52
African red slip ware	Hayes 67	360	470	53
African red slip ware	Hayes 61b	375	450	54

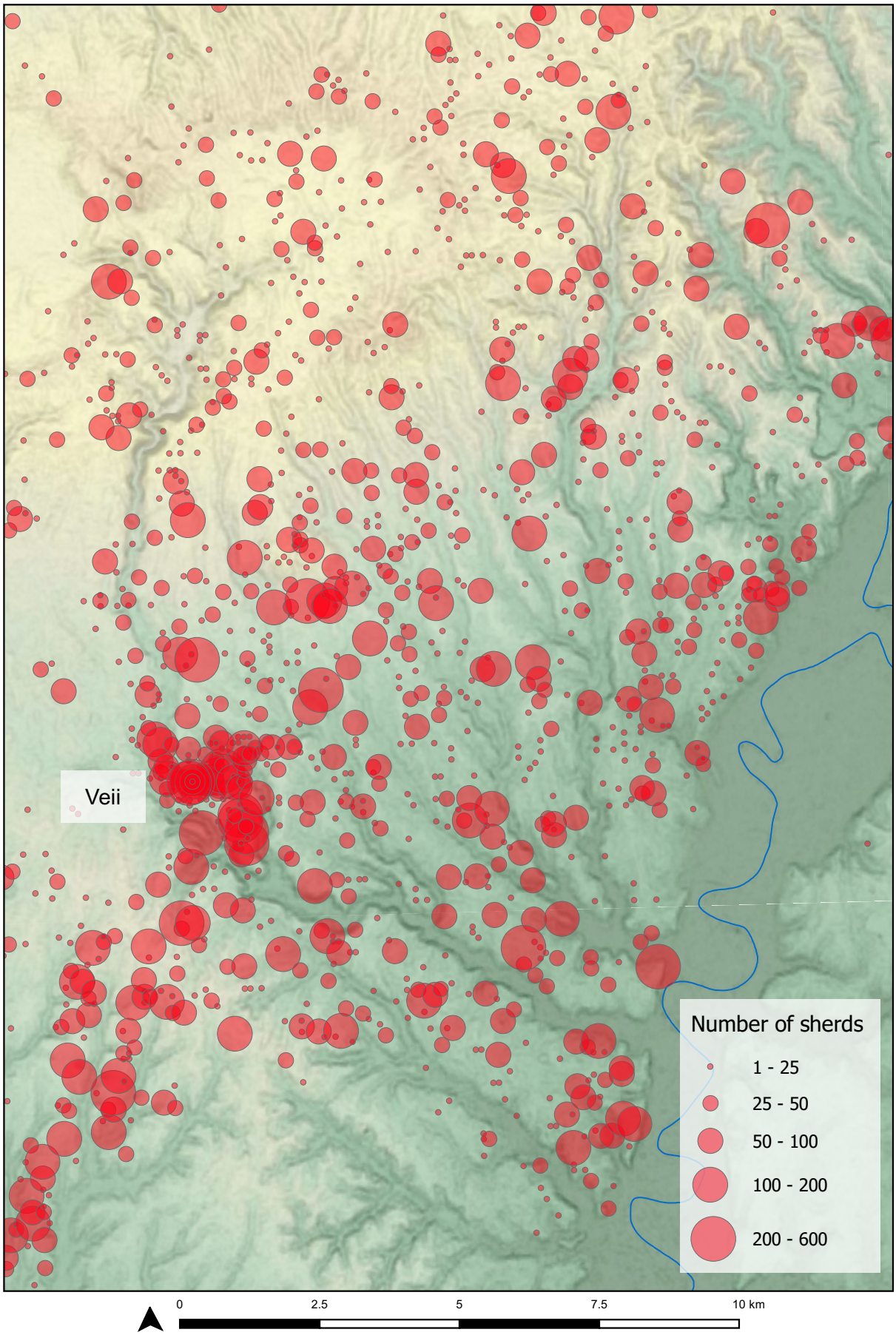


Figure 2.11. Total numbers of artefacts collected and retained by the South Etruria Survey from each site in the eastern Ager Veientanus, and restudied as part of the Tiber Valley Project.

presumably this material had been systematically extracted for re-examination and then never returned; it can only be hoped that it still exists and will become available for future study. Such gaps notwithstanding, the vast majority of the material collected by the survey and retained at the BSR was relocated and fully and systematically studied for the first time.

Alongside the restudy of the material—much of which as noted above is of 'excavation quality'—is the question of how it was collected or sampled and consequently what it represents. Potter believed that the greatest bias in using the South Etruria Survey material lay not with the representativeness of the material per se, but rather with its collection.[159] It is indeed true that the survey made no attempt to document how the samples of material collected related to the material visible on the surface at each site (what, for example, if a surveyor had a particular interest in Republican rather Etruscan material or was better at spotting marble than pottery?). Equally, however, it is easy to overcomplicate the issue. The basic strategy appears to have been to collect small quantities of representative diagnostic classes of material such as 'black-glazed' and 'Red polished' wares[160] as well as a representative range of domestic coarse-wares (usually rims, bases and handles), and other artefacts such as marble veneers and brickstamps (Figure 2.11). As already noted, the collection and careful cataloguing of what were, at the time, often undiagnostic coarse-wares demonstrates great foresight and a belief that future excavations would allow this material to be securely dated; the current restudy has been able in part to realize this objective. Today, as storerooms gradually fill with similar 'undiagnostic' material from other surveys, the pressure to retain only limited quantities—or even no material at all—is growing. At the same time, surveyors in the East Mediterranean have developed the so-called 'chrono-type' system; this seeks to minimize the amount of material collected while maximizing the chronological information, though in turning away from full collection the method is not universally accepted.[161] In many ways, the South Etruria Survey collection strategy is likely to have resembled the chrono-type system, even if not formally defined in the same systematic fashion. Either way, the lack of an explicitly stated artefact collection strategy should not be taken to suggest that the survey lacked any strategy; the surveyors had enormous individual and collective experience; they knew the basic indicators to look out for, but were also alert for unexpected finds. We should assume their approach was flexible, but not without rules.

At the same time, the restudy has revealed new insights into the collection strategies used. Amphora sherds, for example, were frequently observed in the field and usually listed as 'Uncollected' (along with brick and tile), on site record cards (823 sites); amphora sherds are listed as 'Collected' at a surprisingly small number of sites (n=132). In contrast, the restudy has identified significant numbers of amphora sherds among the collected material from 984 sites, far exceeding the number suggested by the record cards. Notably, when compared to other classes of pottery, most of the amphora fragments collected by the survey are body sherds, with comparatively few rims, handles or bases (foot, spike or toe) (Figure 2.12).[162] Why would the most diagnostic fragments have been actively disregarded in favour of the collection of less diagnostic body sherds? One interpretation is that the easily identifiable rims, handles and bases were recognized as amphorae in the field and recorded but not collected; meanwhile, amphora body sherds were mistakenly collected and retained in the belief that they were coarse-wares. If correct, the implication would seem to be that the surveyors considered the (then) poorly dated coarse-wares to offer greater potential than recognizable amphorae, offering an interesting insight into the perceived value of pottery as relating primarily to dating rather than, for example, economic activity.

Other patterns in the sampling and collection of material have also been detected. The use of local ornamental stones such as *pietra paesina*, for example, is well known from excavated late Republican contexts, but this material is very rare among the large amounts of ornamental stone collected by the South Etruria Survey. This could reflect the fact that stones such as these are less visible than marbles (in terms of colour and their ability to take a polish), but also that it is simply harder for non-specialists to recognize them compared with more distinctive imported, coloured marbles such as *porfido rosso* or *cipollino*.[163]

All of the results of the ceramic and other material restudy were entered into the Tiber Valley Project database and used to confirm, refine and extend the dating of each individual South Etruria Survey findspot. Some recent survey projects have developed sophisticated methods for moving from an assemblage of dated sherds to a dating profile for the site from which they were collected.[164] As we do not know how the South Etruria Survey material was sampled, it is inappropriate to apply any sophisticated method for establishing activity dates at any individual site. In the case of the Tiber Valley Project, therefore, the

[159] Potter 1979: 15.
[160] Now known as *vernice nera* or black-gloss ware and African red slip ware respectively.
[161] Caraher, Nakassis and Pettegrew 2006; Fentress and Perkins 1988; Fentress *et al.* 2004.
[162] Fontana 2008: 655 suggests that the heavier amphorae pieces were left in the field.
[163] Clarke 2008: 695–6.
[164] Carter and Prieto 2011; on the edge of the Tiber Valley Project area, Capanna and Carafa 2009.

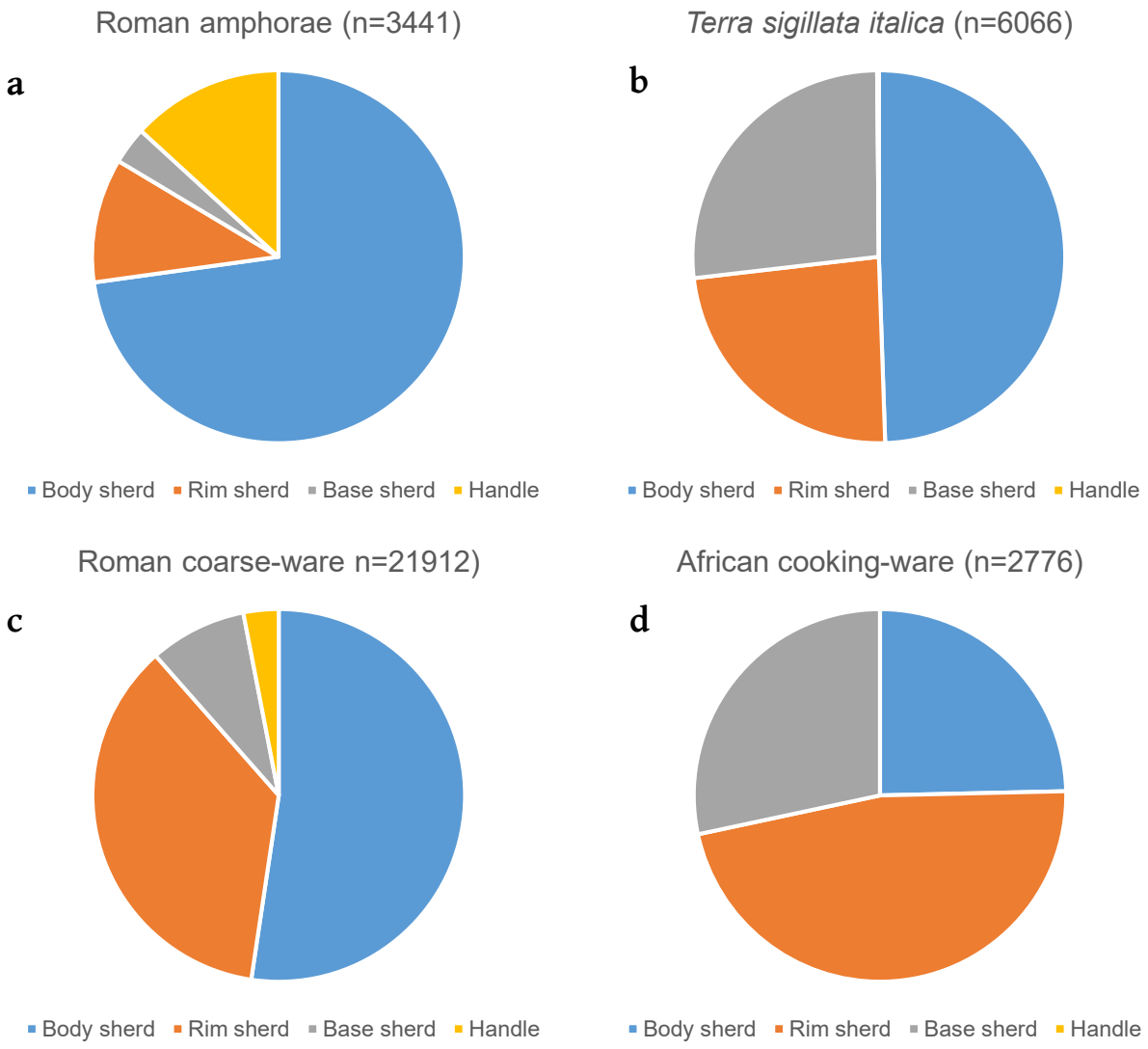


Figure 2.12. Comparison of pottery vessel parts collected by the South Etruria Survey for select ceramic classes: a) Roman amphorae; b) *terra sigillata italica*; c) Roman coarse-ware; d) African cooking-ware

restudied South Etruria material has been used much more simply. The presence of a sherd with a date range falling entirely within the start and end dates of any period is taken to indicate activity or occupation during that period (Table 2.5). For example, a sherd of Hayes 14b African red slip, with a date of AD 200 to 250 falls entirely within the bracket AD 100 to 250 and therefore is taken to indicate mid-imperial period activity. The presence of a sherd of Roman coarse-ware identified as Dyson PD 44/47 (200–30 BC) is considered sufficient to indicate late Republican (250–50/1 BC) activity, but not late Republican 1 (250–150 BC) or late Republican 2 (150–50/1 BC). Most importantly, we lack a quantitative understanding of what was collected. The South Etruria surveyors took the presence of, for example, 'black-glazed' wares to represent Republican activity and we should presume they collected material on that basis, but we cannot assign specific meaning to the numbers of sherds from any particular site. Figure 2.13a-b illustrates how this dating works at the level of an individual site. The date ranges, grouped by form type, of the 109 sherds collected from TVP-ID 00827 are shown beneath a chart of the weighted average number of sherds per decade for the site. This provides evidence for occupation in the mid-Republican and late Republican 2 periods, with a possible break in activity in the late Republic 1; then solid evidence for activity in the early and mid-imperial and late antique 1 periods.

The effects of the redating of material are significant but their impact varies considerably depending on individual classes of pottery and form types, and the extent to which knowledge of their dating has evolved over the past 50 years. One the most obvious changes concerns the restudy of the black-gloss pottery. While aware that there was some potential to refine the dating, the South Etruria Survey treated this material as generically Republican (fourth to first centuries BC).

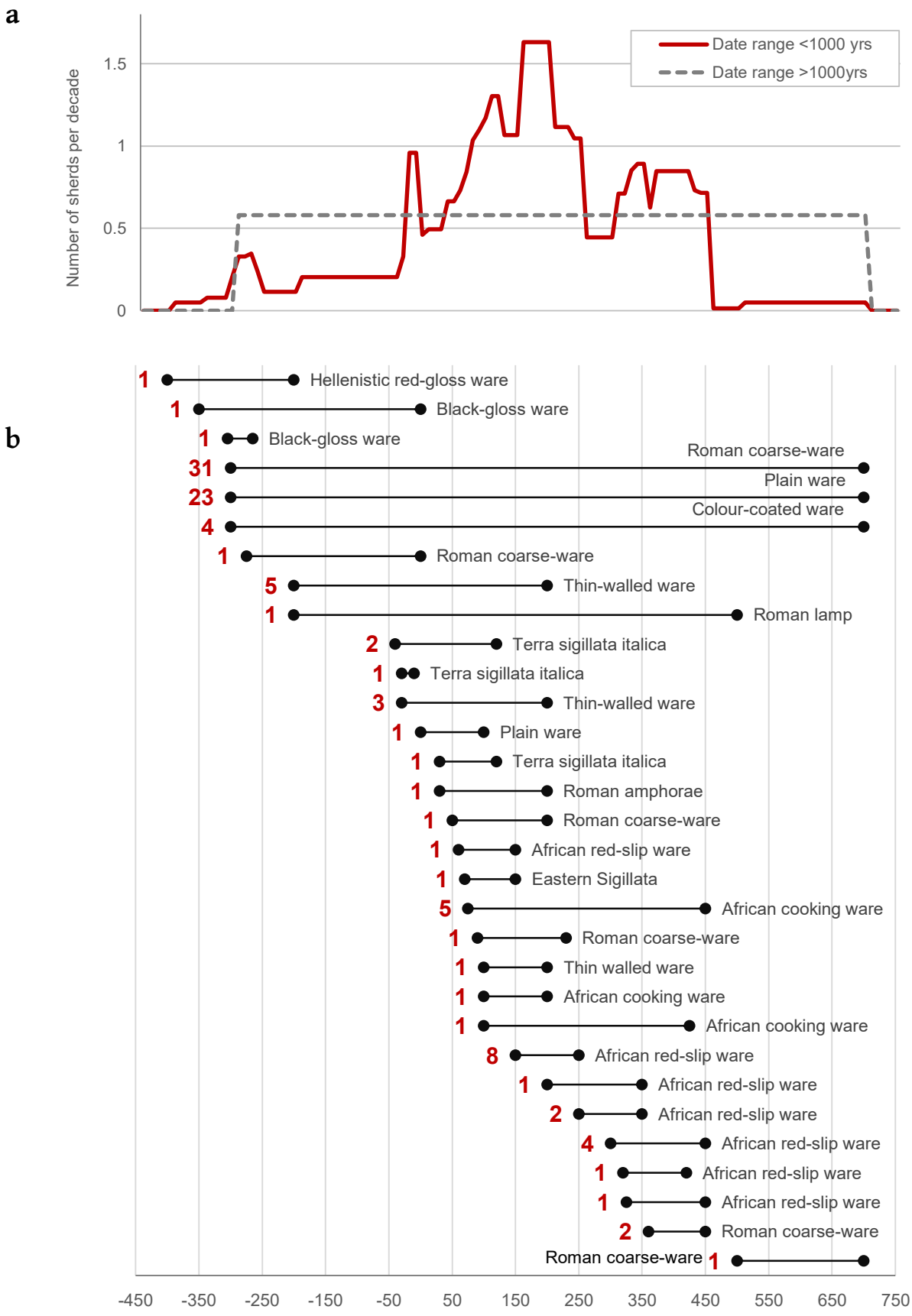


Figure 2.13a-b. Weighted average number of sherds per decade from site TVP-ID 00827, grouped by material with date ranges of more (n=58) or less (n=51) than 1000 years; below, the date range and total number (in red) of sherds of each form type collected from the site.

Table 2.5. Date ranges of select ceramic form types in relation to chronological periods used in the Tiber Valley Project database (the most specific period attribution possible for each form type highlighted in bold).

Class	Form type	Date	350	300	250	200	150	100	50	1/1	50	100	150	200	250	300	350	400	450	500	Periods
Black-gloss ware	Unid. black gloss	350-1BC	■	■	■	■	■	■	■												Roman; **republican**
Roman amphorae	Greco-Italic	350-130BC	■	■	■	■	■														Roman; **republican**
Black-gloss ware	Morel 4255a1	300-250BC		■																	Roman; republican; **mid-republican**
Black-gloss ware	Morel 1128b	300-200BC		■	■																Roman; **republican**
Black-gloss ware	Morel 2737b	250-225BC			■																Roman; republican; late republican; **LR1**
Thin-walled ware	Unid. thin-walled	200BC-AD200				■	■	■	■	■	■	■	■								Roman
Roman coarse-ware	Dyson PD 44/47	200–30BC				■	■	■													Roman; republican; **late republican**
Roman coarse-ware	Dyson PD 39	100-40BC						■													Roman; republican; late republican; **LR2**
Black-gloss ware	Morel 251a1	100-1BC						■	■												Roman; republican; late republican; **LR2**
Roman amphorae	Pelichet 47	50BC-AD300							■	■	■	■	■	■	■						Roman; **imperial**
Thin-walled ware	Atlante II 1/30	30BC-AD200							■	■	■	■	■								Roman; **imperial**
Terra sigillata italica	Unid. terra sigillata	40BC-AD150							■	■	■	■									Roman; **imperial**
Terra sigillata italica	Conspectus 50	3 BC-AD100							■	■	■										Roman; imperial; **early imperial**
Terra sigillata italica	Conspectus 8.1	30-1BC							■												Roman; imperial; **early imperial**
Roman coarse-ware	Dyson 22 II 69	AD1-100								■	■										Roman; imperial; **early imperial**
African red slip	Unid. ARSA	AD70-250									■	■	■	■							Roman; **imperial**
African red slip	Hayes 7	AD 75-150									■	■	■								Roman; **imperial**
Roman amphorae	Africana II	AD150-400											■	■	■	■	■				Roman; **imperial**
Roman amphorae	Kapitan II	AD200-400												■	■	■	■				Roman; **imperial**
Roman coarse-ware	Ostia I, 395	AD200-300												■	■						Roman; **imperial**
African red slip	Hayes 14b	AD200-250												■							Roman; imperial; **mid-imperial**
African cooking ware	Ostia III 269	AD200-250												■							Roman; imperial; **mid-imperial**
African red slip	Unid. ARSD1	AD300-500														■	■	■	■		Roman; imperial; **late antique**
African cooking ware	Ostia IV 60	AD320-440														■	■	■			Roman; imperial; late antique; **LA1**
Roman coarse-ware	M Gelato fig.230,129	AD300-399														■	■				Roman; imperial; late antique; **LA1**
African red slip	Hayes 87b	AD450-550																	■	■	Roman; imperial; late antique; **LA2**
Roman amphorae	Keay 35b	AD450-550																	■	■	Roman; imperial; late antique; **LA2**
			MR		LR1		LR2		EI			MI			LA1				LA2		

The restudy of all this material and its identification with reference to Morel's (1981) *Céramique campanienne* now permits the Republican period to be divided into three sub-periods and, consequently, for the first systematic identification and discussion of the changes in numbers of sites within that four-century block of time (see section 3.3). Other effects are more subtle though no less significant. The potential diagnostic significance of coarse-wares was recognized by the South Etruria surveyors, but typologies have developed significantly over the subsequent decades, now allowing a substantial proportion of this material to be dated more closely than before. Of just under 22,000 sherds of Roman coarse-ware from the South Etruria Survey, approximately 4500 can now be dated more specifically than generic Roman (300 BC–AD 700), around 21 per cent of the total. Although this still leaves much generic material, it can help in the identification of specific sub-phases of occupation, and especially at sites where no fine-wares at all are present.

The South Etruria Survey materials have long been central to Italian and wider Mediterranean ceramics studies, in particular the African red slip ware. This section has reviewed the ways in which the evolution of ceramic studies made a reconsideration of the South Etruria Survey material necessary. It has surveyed how the pottery was originally collected and how the material has been restudied. Although the sampling strategy restricts the types of analysis, especially quantitative methods, that can be applied, the clear objectives and systematic documentation of the surveyors give grounds for confidence in the general value of this ceramic material.

2.2.2 South Etruria Survey restudy: sites

As noted above, several significant component parts of the original South Etruria Survey remained partly or wholly unpublished. These are the Southern Ager Faliscus Survey, the work along the Via Veientana and at Grottarossa and the Eastern Ager Veientanus Survey. Although the results from these surveys were incorporated into Potter's (1979) synthesis, included in both his maps and tables, no separate or detailed survey reports were published (despite the preparation of a complete manuscript for the Southern Ager Faliscus Survey, Potter, n.d.). As a result, around one-quarter of the entire South Etruria Survey by area remained unpublished and inaccessible except for those with access to the BSR record cards. This was clearly impetus enough for a systematic restudy and publication of the South Etruria Survey. In addition, however, there are also many individual unpublished sites, which were only identified following the publication of the relevant survey reports. Site TVP-ID 03086, for example, was first discovered by Ward-Perkins in 1960, two years after Duncan's (1958) Sutrium publication, which covered the area in which the site was found; hence when Morselli identified the site in the early 1970s as part of the Forma Italiae survey (S234), she was unaware that it had already been documented.[165] Similarly, site TVP-ID 00904 in the Ager Capenas was located in 1965, three years subsequent to Jones's (1962) publication of this area. Individually, few of these sites was significant in its own right, but collectively they supported the case for a comprehensive restudy and publication of all the South Etruria Survey sites and material. This objective would for the first time allow the mapping of Etruscan, Roman and medieval activity across the landscape with a significant degree of confidence, and feed into a wide range of scholarly debates. The potential of such a comprehensive dataset had long been recognized. By the time moves towards this objective were underway in the 1990s, the necessity of some form of digital format was obvious, both a database of sites and material that could be systematically searched and a GIS interface allowing the results to be visualized and their spatial distribution analysed.

This section details how the South Etruria Survey site data was collated, cleaned and reclassified. The project began by entering the details from approximately 2700 record cards into the database (Figure 2.14). These included details of site location, lists of material collected (or observed but uncollected), and the dates of visits and the initials of the surveyor(s) responsible. As far as possible, the information was separated into distinct fields to allow the details to be searched and used analytically.

As already noted, during the course of the survey, site scatters were named with six-figure grid references. Using a grid reference both to locate and to uniquely identify a scatter has led to much confusion over the years; most obviously, if a scatter was revisited and its location slightly adjusted on the map, then there would be a discrepancy between the 'name' coordinates and the location coordinates. This, in fact, happened a number of times and it is for this reason that unique TVP-ID numbers have been allocated to each findspot. The data entry process has helped to systematically identify and resolve these location problems. On the whole, the attention given to the systematic recording of spatial information by the South Etruria surveyors was a great advance over the mapping of earlier topographers. Where these coordinates have been ground-truthed by subsequent revisits, they have usually been found to very accurate (e.g. TVP-ID 00771, 01878). Another issue flagged up by the data entry process has been incomplete or missing information. It became clear during the ceramic restudy, for example, that there were some sherds of pottery marked with coordinates for which there was no associated record

[165] Morselli 1980.

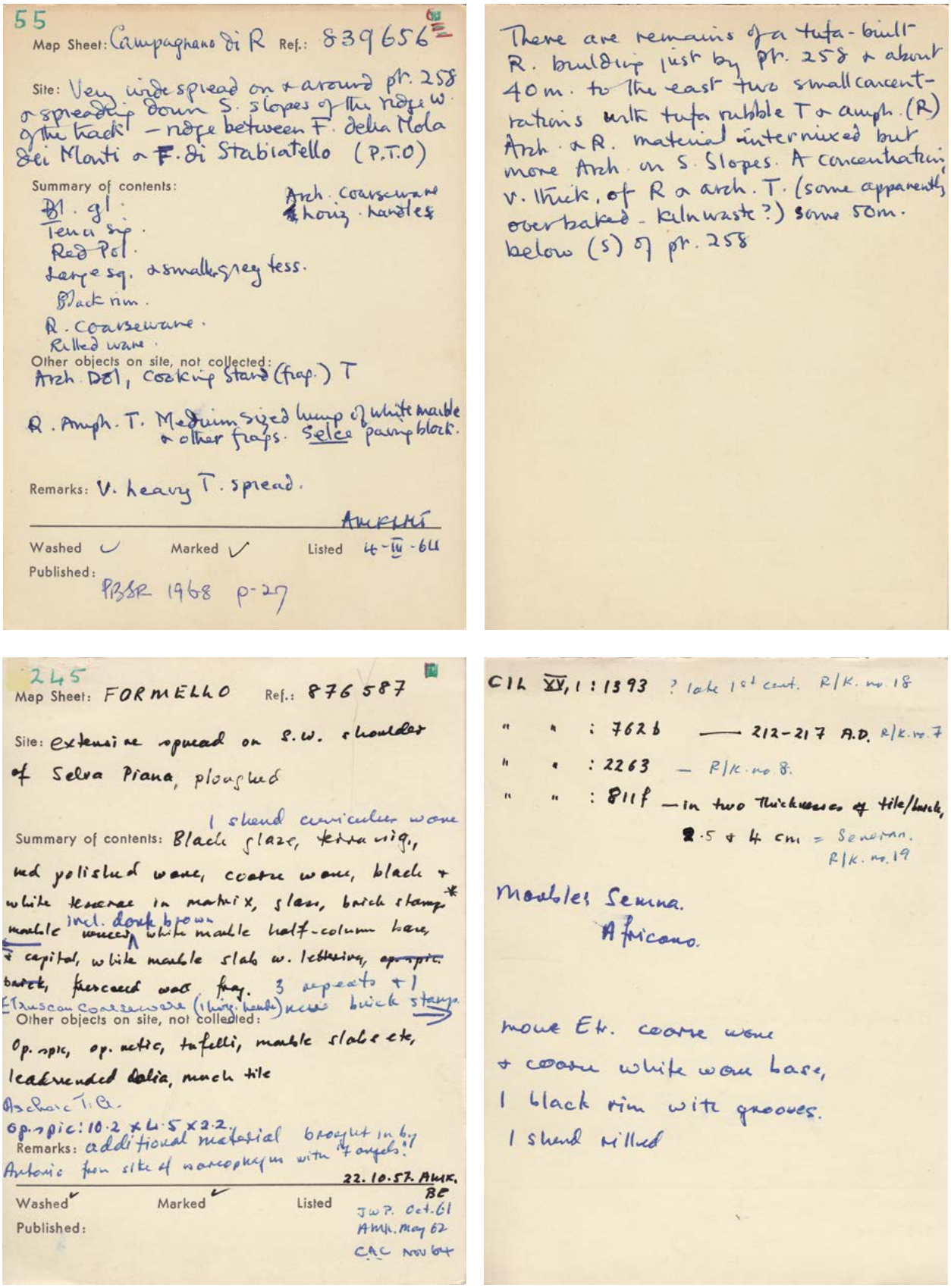
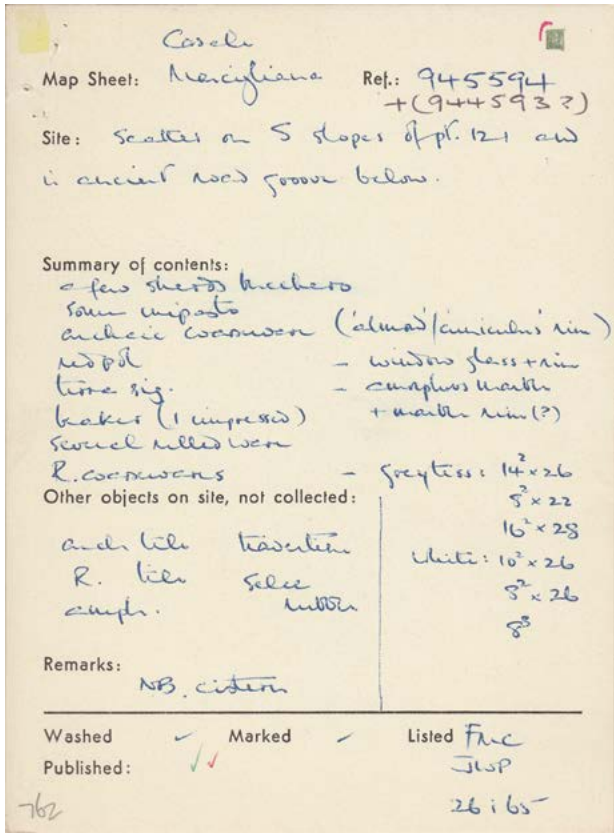
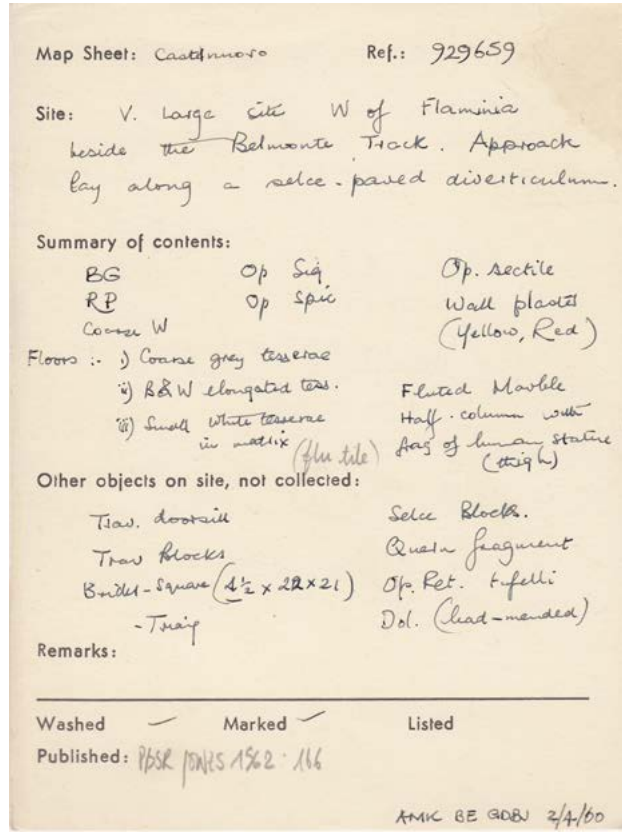
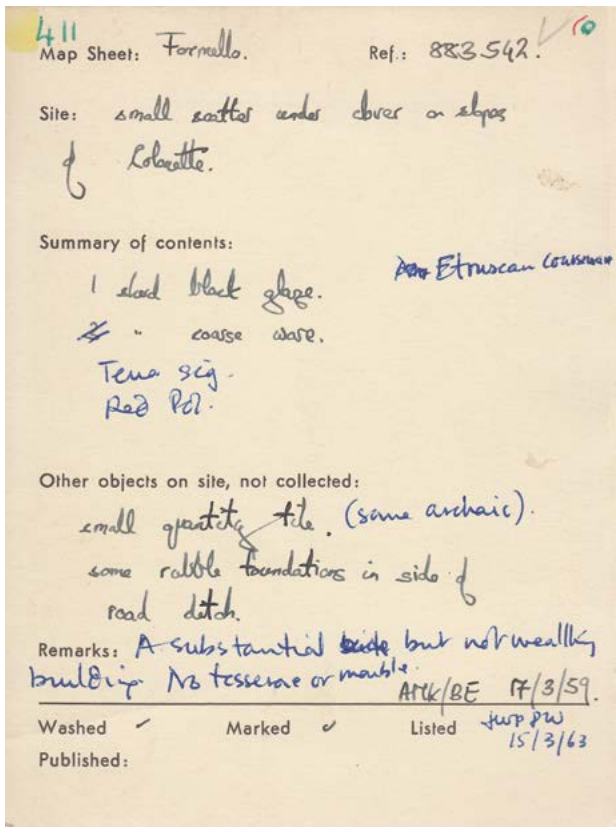


Figure 2.14. Examples of original South Etruria Survey record cards; ©BSR Photographic Archive, Ward-Perkins Collection, South Etruria Survey Series.


Casola
Map Sheet: Nerciliana Ref.: 945594 +(944593?)
Site: Scatter on S slopes of pt. 121 and in ancient road groove below.
Summary of contents:
a few sherds buccheros
some impasto
archaic coarseware ('almond'/'amiculus' rim)
red pol. – window glass + rim
lime sig. – amphora + marble rim (?)
beaker (1 impressed)
scored ribbed ware
R. coarsewares – greyware: 14²×26, 5²×22, 16²×28
Other objects on site, not collected:
arch. tile, tessellation, R. tile, select rubble, amph.
unit: 10²×26, 5²×26, 8³
Remarks:
NB. cistern
Washed ✓ Marked ✓ Listed FNC JTSP
Published: ✓✓ 26:65
762


Map Sheet: Castelnuovo Ref.: 929659
Site: V. large site W of Flaminia beside the Belmonte Track. Approach lay along a selce-paved diverticulum.
Summary of contents:
BG, RP, Coarse W
Op Sig, Op Spic
Op. sectile, Wall plaster (Yellow, Red)
Floors: i) Coarse grey tesserae
ii) B&W elongated tess.
iii) Small white tesserae in matrix (flu tile)
Fluted Marble Half-column with drag of human statue (orig.)
Other objects on site, not collected:
Trav. doorsill, Trav. Blocks, Brickt-Square (4½ × 22 × 21), -Triang
Selce Blocks, Quern fragment, Op. Ret. t. felli, Dol. (lead-mended)
Remarks:
Washed — Marked ✓ Listed
Published: PBSR PAPERS 1962 · 116
AMK BE GOBI 2/4/60


411
Map Sheet: Formello. Ref.: 883542.
Site: small scatter under cover on slope of Colarette.
Summary of contents:
1 sherd black glaze.
Etruscan coarseware
" coarse ware.
Terra sig.
Red Pol.
Other objects on site, not collected:
small quantity tile. (some archaic).
some rubble foundations in side of road ditch.
Remarks: A substantial but not wealthy building. No tesserae or marble.
AMK/BE 17/3/59.
Washed ✓ Marked ✓ Listed JTSP PW 15/3/63
Published:

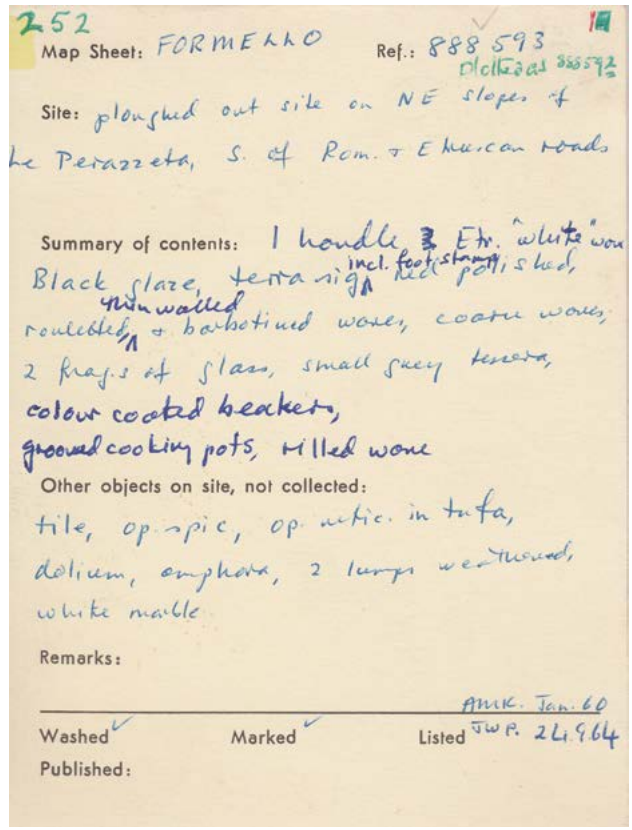

252
Map Sheet: FORMELLO Ref.: 888593
Site: ploughed out site on NE slopes of Le Terrazzeta, S. of Rom. + Etruscan roads
Summary of contents: 1 handle, 3 Etr. "white" ware incl. foot, strong red pol., shed, Black glaze, terra sig, rouletted + barbotined ware, coarse ware, 2 frags of glass, small grey tesserae, colour coated beakers, grooved cooking pots, rilled ware
Other objects on site, not collected:
tile, op. spic, op. sectile in tufa, dolium, amphora, 2 lumps weathered white marble
Remarks:
AMK. Jan. 60
Washed ✓ Marked ✓ Listed JTSP 24.9.64
Published:

Figure 2.14 continued. Examples of original South Etruria Survey record cards; ©BSR Photographic Archive, Ward-Perkins Collection, South Etruria Survey Series.

card. In some cases, this problem was resolved by successfully matching the pottery to coordinates that had been revised or corrected on other record cards, often as a result of subsequent visits to sites by the original surveyors. Other 'missing' coordinates were located in published reports (see Table 2.1). In the remaining cases, approximately 125, where material was found in the archive but with no associated record card, new findspot records were added to the database.

The South Etruria surveyors usually completed a record card for each scatter or assemblage of material found. Not all of these scatters, however, were considered to be 'sites' raising the question of site definition. Today, surveyors go to great lengths to differentiate sites from 'non-sites';[166] as usual, the South Etruria surveyors were confronted by similar issues and came up with pragmatic methods to address them, but did not always document these consistently. Using their first-hand knowledge of local topographical and geological context, for example, they were able to classify some findspots as material redeposited from elsewhere ('wash'), but it is difficult to evaluate these interpretations independently with only a partial record of the factors taken into account by the surveyors. Therefore, while we can have some confidence in the individual decisions, in terms of restudying the dataset as a whole, it is impossible to establish systematically whether the same basic 'threshold' between site and non-site was used consistently across all the separate surveys.

In contrast, there is more scope for re-assessing the category of 'villa', since many of the surveyors made explicit statements about their classification criteria. The Ager Veientanus Survey report provides a particularly clear list of features and post-depositional factors that fed into their interpretation of scatters as a villas;[167] the Forma Italiae survey of the Nomentum area also specifies the basis on which sites were categorized as villas (though if this was inspired by the Ager Veientanus work, it applied a lower threshold).[168] The Ager Veientanus report aside, some of the other South Etruria publications were less explicit in their approach. Jones's work in the Ager Capenas, for example, rarely made use of the term 'villa', except for a few very large and wealthy sites (e.g. TVP-ID 00849). If, however, the Ager Veientanus Survey definition had been applied to the Ager Capenas results, there would certainly have been more villas than Jones suggested;[169] indeed, the Regione Lazio Capena survey identified many more villas in the area than had Jones. Though the Regione Lazio Capena survey does not explicitly state the criteria used for defining villas, it clearly adopted a broader definition than Jones's cautious approach. Villas therefore provide a good example of how the inconsistent classification has led to unevenness within the South Etruria Survey dataset and across the wider body of legacy data collated by the Tiber Valley Project.

Building on the foundations established by the Ager Veientanus report, Potter developed a system to rationalize and compare the results of all the individual South Etruria Surveys as part of his 1979 synthesis (Table 2.6). In that volume, he states that the majority of (Roman) sites could be neatly fitted into one of three categories (huts, farms, and villas) based on 'distinct and well defined differences of rank between these sites'; there were, however, problems with this simple classification, as Potter acknowledged, including the lack of information about scatter size.[170] Potter's classification was also intended to deal only with sites of Roman date; both Potter and Jones believed it impossible to distinguish any clear Etruscan settlement hierarchy due to the poor preservation of these sites (though settlement and funerary sites were differentiated); the same issue applied to late antique and early medieval settlement.[171] It is certainly true to say that within Potter's Roman settlement hierarchy, the most important factor is the presence or absence of indicators of luxury such as marble and painted wall plaster—crudely, their presence defines sites as villas and their absence defines them as farms.

In restudying any individual South Etruria Survey site, it is clear that there must be a significant level of dependence on the surveyors' original interpretations; through their primary field observations, the surveyors had access to and awareness of far more information about each site, and how it compared to the others around it. In-field interpretation is not currently *en vogue* amongst survey archaeologists; site status is an interpretation to be made after all the primary fieldwork has been concluded and all the data collected. The South Etruria surveyors, however, made their interpretations, if not 'at the trowel's edge', then with their 'boots on'.[172] As argued above, however, the critical threshold between villa and farm may not have been consistently applied between the individual surveys and it is therefore necessary to review and in some cases reclassify sites. The inclusion of a simple measure of certainty/uncertainty of interpretation for each site type allows for the effective extension of the settlement hierarchy without introducing completely new categories of site (hence, 'villa'

166 De Haas 2012.

167 Kahane, Murray-Threipland and Ward-Perkins 1968 154–6; for further discussion of villa classification, see section 4.5.1.

168 Pala 1976: 82.

169 The Ager Capenas fieldwork and subsequent publications (Jones 1962, 1963) were completed before the Ager Veientanus report by Kahane, Murray-Threipland and Ward-Perkins 1968.

170 Potter 1979: 122; see section 4.5.1 for further consideration of these issues in relation to Roman-period villas.

171 Potter 1979: 13; Jones 1962.

172 See discussion by various contributors in Francovich and Patterson 2000; Hodder 1997: 694; Fleming 2013.

and 'possible villa'). In each case, however, this (un) certainty addresses slightly different concerns; a 'possible villa' is clearly a site though its precise social and economic status is unclear; on the other hand, a 'possible farm' indicates that there is some doubt as to the status of the findspot as a site at all.[173]

In order to address the problem of inconsistent site classification, the restudy has systematically reviewed the evidence for each site in relation to a revised site classification system (Table 2.7). The surveyors' original interpretation takes precedence, unless there is reason to doubt it due to the additional discoveries (e.g. further material, a nearby site, etc.).

This section has addressed one of the key challenges that has arisen in the wider context of comparative survey and 'Big Data' studies of legacy survey projects: site classification and comparability.[174] If the restudy of the South Etruria Survey pottery in the light of up-to-date ceramic typologies has provided a more systematic basis for chrononlogical analysis, the reclassification of site interpretations is inevitably more tentative. Even with the most comprehensively documented surface scatter, site classification is an act of interpretation rather than identification; the inability to go back and to experience these sites as they existed in the 1950s limits our ability to reclassify the survey results systematically and the results should be used with this caveat in mind. Having now reviewed the restudy of the South Etruria Survey in relation to the pottery (section 2.2.1) and the site classification (this section), this final part of the review turns to the component surveys and evaluates the resulting dataset as whole.

2.2.3 South Etruria Survey restudy: surveys

As noted earlier, the South Etruria Survey was, in fact, a composite of multiple related but distinct survey areas (Table 2.1), linked by shared field practices and overlapping personnel, ensuring broadly compatible results. Yet, the reality was still more complex, as work often was not completed one survey at a time. Indeed, the distinct survey areas that were allocated by Ward-Perkins to different individuals such as Pamela Hemphill in the Cassia-Clodia area and Michael Craven in the Eastern Ager Veientanus, had often already been subject to some investigations by the core BSR group. These early results—establishing the potential of different areas—were then built upon with more systematic coverage and rationalized as part of the final survey reports. In other words, some of the individual South Etruria Surveys are themselves composites of work that that been undertaken over a number of years by a variety of surveyors. This suggests that we should not assume that each area was surveyed with distinct methods, consistently applied; it would be mistaken, for example, to take all the sites found in the Ager Capenas and look for patterns in the way that Barri Jones surveyed this area. On the other hand, precisely because of these overlapping visits and the personnel involved, we can be more confident about the overall comparability of the individual survey methodologies.

Table 2.6. South Etruria Survey site classification (based on Potter 1979: 122–3).

Site type	Criteria	Comments
Shack, hut, outbuilding, ploughed-out or poorly preserved remains of a more substantial site	Small scatters of tile and pottery, rarely covering more than a few hundred square metres	Similar to huts used by [twentieth-century] shepherds wintering in the lowlands; subsidiary buildings on larger estates; denuded remains of larger sites
Small farm	Averaging 1000-1400m^2 [equivalent to 35x35m] and rarely exceeding 2000m^2. A nucleus of material featuring large quantities of building rubble (tufo blocks, *opus spicatum*, black and white *tesserae* and sometimes even painted wall plaster and a few fragments of white Italian marble) as well as tile and pottery.	Modest, but fairly comfortable, independent farmstead with small associated estate
Villa	Scatters of material, averaging 3500m^2 [60x60m] frequently including indicators of luxury such as hypocaust tiles, column drums and other architectural pieces, multi-coloured painted wall plaster, a variety of marble veneers (Italian and imported), stucco, complex mosaics and glass *tesserae;* cisterns also common	Rich country house, with luxurious accommodation for the owner and family on occasional visits to the countryside

[173] Witcher 2012.
[174] See http://comparativesurveyarchaeology.org/

Table 2.7. Tiber Valley Project: site classification.

Settlement type	**Notes**
Nucleated	Large or very large settlement site with central-place functions such as craft production, and sometimes elements of planning and defensive walls; usually associated with large cemeteries. Used predominantly for pre-Roman sites, though this term is retained for those sites that continue in occupation, but which do not develop into Etruscan/Sabine or Roman-style towns.
High status settlement	Isolated scatters of material with evidence for residential function (e.g. tile) and differentiated from others of the same date by the presence of high-status pottery (e.g. painted cream wares) or architectural terracottas; pre-Roman periods only.
Domestic	Small scatters of material, lacking sufficient size and/or complexity to be considered as 'farms'; used predominantly for the pre-Roman periods.
Hut	Small, isolated concentration of material including impasto pottery and/or daub; Protohistoric periods only.
Town	Urban centre attested through historical sources and inscriptions, with evidence for monumentality and varied residential, economic and political functions.
Road station	Site attested either epigraphically and/or by a large concentration of material and/or structures along principal route.
Village	Large scatter, or cluster of smaller scatters, of material and occasionally structures indicating a multi-household settlement/agricultural site with limited evidence for wealth or luxury; used predominantly for the pre-Roman and medieval periods.
Villa	Large scatter (e.g. 50x50m+) of surface material including significant quantities/high densities of pottery (fine- and coarse-wares) and building materials, with consistent and multiple indicators of luxury or architectural complexity, such as column drums and other structural elements, multi-coloured painted wall plaster, a variety of white and coloured marble veneers, mosaics and glass *tesserae*; may also be associated with cisterns and *diverticula*.
Farm	Small- to medium-sized (up to ~1500m^2) scatters of material, sometimes in substantial quantities, including pottery (fine- and coarse-wares) and building material such as tile, shaped stone blocks (e.g. tufo, limestone), *opus spicatum* bricks, black and white tesserae, and sporadic finds such as fragments of plain wall plaster.
Building	Small, discrete scatter of material and/or structural remains that indicate an architectural feature, but lacking specific evidence for function.
Promontory fort	Activity (surface materials and/or structures) located at elevated and naturally defensible sites; medieval periods only.
Settlement	Solid evidence for residential function (e.g. concentration of pottery and/or building material) but lacking further specific indicators; used predominantly for the pre-Roman and medieval periods.
Other	**Notes**
Lithic scatter	Surface concentration of lithic artefacts.
High status scatter	Surface scatters with evidence for high-status residential activity, located within a larger composite settlement site.
Outbuilding	A small concentration of mainly utilitarian pottery and/or tile, lacking indicators of residence or luxury; may be in proximity to a larger settlement site.
House / tomb	Solidly attested activity, but uncertain whether this is residential or funerary (i.e. settlement or burial site).
Occupation	Solidly attested activity, but insufficient to specify character or settlement status, with the exception of medieval-period sites where occupation is assumed to represent residential activity (i.e. a settlement).
Scatter	A spread of surface material; may be a component of larger site or an isolated concentration of material that does not provide sufficient indicators to be considered as a settlement, e.g. small size, lack of tile or building material.
Wash / off-site	Material unlikely to be associated sub-surface archaeology either due to erosion/redeposition or potentially representing off-site activities.
Sporadic	An isolated find, or very small group of finds, lacking meaningful context.

Table 2.7 continued. Tiber Valley Project: site classification.

Ritual	**Funerary**
Abbey	Catacomb
Chapel	Columbarium
Church	Mausoleum
Convent	Tumulus
Cult area	Tomb (a camera) / chamber tomb
Monastery	Tomb (a cappuccina)
Oratory	Tomb (a fossa)
Sanctuary	Tomb (a pozzetto)
Temple	Tomb / grave / burial
Votive deposit	Cemetery / necropolis
Production	**Infrastructure**
Kiln	Aqueduct
Kiln (lime)	Bridge
Kiln (pottery)	Cistern
Kiln (pottery/tile)	Cuniculus
Kiln (tile)	Road
Mill	
Quarry	

The previous two sections have considered the restudy of the South Etruria Survey material and the individual findspots and sites. This section explores some of the archival evidence for the organization and practice of the survey as a whole and the implications for the reinterpretation of its results. This includes consideration of the methodologies with a particular emphasis on coverage of the landscape, both within individual survey areas and across the wider region. The following section brings all of these strands together through a case study of the survey of one small area of the Eastern Ager Veientanus intended to demonstrate how the survey worked 'on the ground' (section 2.3).

A crucial question for assessing the results of any survey concerns the completeness or otherwise of the settlement patterns recorded. This operates at different scales; firstly, how the wider region is sampled and, secondly, the accessibility of any individual parcel of land for survey. The work of the early South Etruria Surveys was organized, in the same way as their topographical predecessors, around the (Roman) road system; the linear distributions of sites in areas such as the northern Ager Faliscus need to be assessed in this light.[175] Most of the subsequent South Etruria Surveys, however, aimed to cover blocks rather than corridors of land. Notably, some of this area-based work has confirmed the linear distribution of settlement along roads. Barri Jones, for example, was confident enough of his coverage to argue that some linear distributions of sites along Roman roads in the northern Ager Capenas were genuine, probably the result of the forested nature of the landscape during the past.[176] Indeed, other South Etruria surveyors express their confidence about the absence of sites (i.e. 'negative' evidence) as an indication of ancient forest cover.[177]

During the 1980s and 1990s, there was much debate among Mediterranean survey archaeologists about how regions should be sampled.[178] Should they use stratified random transect surveys? And what sample size was most appropriate? The South Etruria Survey preceded this methodological mire (characterized by Blanton as 'Mediterranean myopia').[179] Instead, apart from the very earliest work, the South Etruria Surveys all aimed to provide complete coverage of their respective survey areas in the same way as the slightly later Forma Italiae surveys. For multiple reasons, however, 100 per cent coverage is rarely achievable by any survey, including the presence of dense woodland, fallow land, infrastructure and buildings. Potter's clear statement that, of the 200 km^2 of the Southern Ager Faliscus Survey, approximately 10 km^2 was not walked as there was 'macchia of sufficient density to preclude any effective field-work' implies that the survey covered 95 per cent of the area, even if, as he notes, 'the most peripheral and inaccessible regions were checked in a more cursory way'.[180] Such a clear statement about the extent of coverage is rare for the South Etruria Survey as a whole. It is also unclear what this figure represents on the ground; how exactly was the 95 per cent covered? Does it imply 95 per cent of the actual land surface, one field at a time or simply a 'good sample' from each ridge and valley? A full and systematic search or a more targeted checking within each survey unit of the places where in-situ material was most likely to be found? Some potential answers to these questions are found through analysis of the land use (unsystematically) recorded when the scatters were found (see below).

During the 1950s and 1960s, much of the area, especially in the Ager Veientanus, was still unenclosed by fences and access to private land was less of an issue than it can be today. Indeed, one word that is surprisingly infrequent on the record cards and in the survey reports is 'field'. Whereas today, the field is more or less the standard unit of record, for the South Etruria surveyors, the landscape was still structured

[175] Rajala, Harrison and Stoddart 1999; Frederiksen and Ward-Perkins 1957.

[176] Jones 1963a: 117.

[177] E.g. around Sutrium, Duncan 1958 and west of the Via Amerina, Frederiksen and Ward-Perkins 1957: 181.

[178] See papers in Francovich, Patterson and Barker 2000.

[179] Blanton 2001.

[180] Potter n.d.

in relation to roads, ridges, valleys and hilltops rather than private, enclosed fields. One area where the latter issue was explicitly encountered, however, was the Cassia-Clodia survey.[181] Indeed, there may have been particular problems with access in this area and, unique amongst the survey publications, Hemphill provides a sketch map indicating the location and extent of the principal inaccessible areas including defence installations, private estates and the Vatican Radio antennae farm. Overlaying site distributions on this map neatly explains some of the most obvious 'gaps'; in particular, it becomes clear that the major discrepancy in the density of sites either side of the Fosso Piordo is a product of (in)accessibility for surveying rather than a genuine absence of ancient settlement.[182] The coverage achieved by each South Etruria Survey was therefore certainly less than 100 per cent of surface area; in most cases, however, the only record for coverage comes indirectly in the form of the location of recorded scatters. In effect, we are dealing with *presence*, not presence/absence data, meaning that we cannot be confident whether gaps in distributions are genuine or simply areas that were unsurveyed.

Of course, even if an area is walked, it is not inevitable that surface survey will detect sites. Archaeological stratigraphy may be too deeply buried and therefore protected from the disturbance by ploughing necessary to make sites visible on the surface; conversely, a site may have been ploughed up and washed away. Land use and vegetation cover is also critical (see below). All of these issues of access and visibility raise the question of what percentage of sites a survey can successfully identify. Estimates for modern survey, even intensive ones, tend to assume that only a small fraction of sites are recognized.[183] The South Etruria surveyors, on the other hand, believed that they recovered very high levels of sites, often the majority, again indirectly indicating a sense of confidence in their coverage of the landscape. Duncan suggested a recovery rate of over 90 per cent at Sutrium with only a few sites lost in woodland or destroyed by cultivation; Kahane, Murray-Threipland and Ward-Perkins talked about settlement that had 'very nearly reached saturation point', implying there were few more sites to find. And in the Ager Capenas, Jones lamented that he had probably 'only' recovered around 66 per cent of sites in the area due to the much less favourable survey conditions compared with the Ager Veientanus, indirectly echoing the impression of Kahane, Murray-Threipland and Ward-Perkins.[184] Taking an overview of the South Etruria Survey results, Potter suggested 'the body of evidence is now comparatively full, so much so that for many parts of this region we can draw detailed maps showing the location of what must be almost every farm and villa'.[185] As the surveys were usually working not long after these areas had been first brought under plough, it might be argued that it was indeed possible that the surveyors were privileged to be able to find a much higher percentage of sites than might be assumed today. Repeat survey, or surveys of nearby areas, however, tends to suggest that the surveyors' estimates are simply too high. Not far from Sutrium, just outside the study area, for example, the Civitella Cesi Survey has identified much higher densities of sites than Duncan reported at Sutrium;[186] similarly, resurvey of part of the Ager Capenas by the Regione Lazio Capena survey also has documented additional sites, while development-led excavations around Lucus Feroniae have identified still more sites (see section 4.5.1).[187]

One reason that surveys might not discover every site is that not every site is visible on the surface every year; the surface archaeological record is highly dynamic as a result of variation in vegetation, light and erosion.[188] Single-season fieldwork in particular therefore risks underestimating the numbers of sites, especially the smallest scatters.[189] This suggests that those areas of the South Etruria Survey that were subject to the most prolonged fieldwork might have achieved higher recovery rates. This can be thought about in terms of survey 'intensity', that is, the numbers of visits and revisits, and over how long, and the numbers of personnel involved. Using data from the survey record cards on the number and date of visits, and the personnel involved, it is possible to model some of the differences between the survey areas; as the record cards provide only partial information in this regard, the results of the exercise are only indicative, but there is no need to doubt the overall trends (Figure 2.15). Some surveys were considerably more intensive in their coverage, for example, the northern and eastern Ager Veientanus was the subject of repeated investigation and many more sites were revisited compared with the other survey areas; in contrast, sites in the Ager Capenas area were largely visited only once (though several subsequent surveys have revisited the sites mapped by Barri Jones; see Figure 2.8 for the Ager Faliscus).[190] It is also possible to look at how fieldwork was scheduled, for example, the Cassia-Clodia work concentrated in October; in contrast,

[181] Hemphill 1975; see esp. fig. 1.
[182] For more sites in this area, see Lugli 1962.
[183] For review and discussion, see Witcher 2011.
[184] Duncan 1958: 65; Kahane, Murray-Threipland and Ward-Perkins 1968: 150; Jones 1962: 191.
[185] Potter 1979: 121.
[186] Hemphill 2000; notably, this survey was undertaken by a key member of the South Etruria Survey group.
[187] Mazzi and Cotroneo 1995.
[188] See e.g. Lloyd and Barker 1981: 291.
[189] Bintliff 2000.
[190] Accardo *et al.* 2007; Cordiano *et al.* 2011 for resurvey of the Cassia/Clodia area.

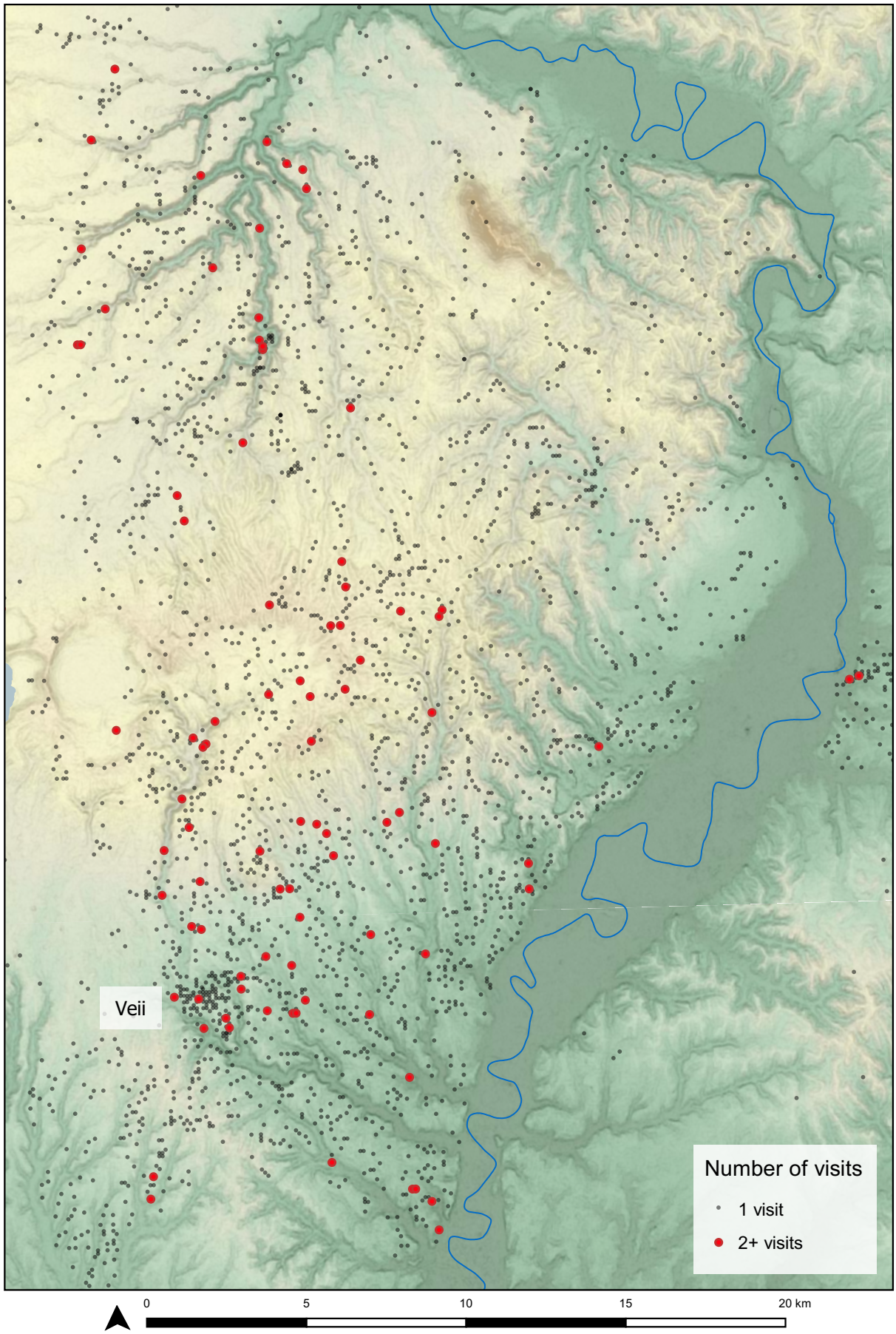


Figure 2.15. South Etruria Survey sites by number of recorded visits.

work in the Ager Veientanus was extended right through the autumn and winter months (Figure 2.16). Other surveys were completed in single blocks of time; Duncan's Sutrium Survey was completed over five months in 1957–1958, Duncan records that his work was assisted by a variety of other individuals including Anne Kahane and Betty Eastwood as available (though these co-workers are usually unmentioned on the record cards).[191] Figure 2.17 shows the numbers of sites identified during each year of fieldwork and, as some records can only be narrowed to a group of years, Figure 2.18 shows the numbers of sites identified during five-year time blocks; a concentration of fieldwork activity in the late 1950s and early 1960s is apparent.

As one of the earliest regional field surveys conducted in Italy, the South Etruria Survey is often considered to be of comparatively low intensity, as measured by the number of person days per square kilometre. More recent surveys have generally invested growing amounts of time and energy into smaller survey units.[192] The South Etruria surveyors did not record details of survey intensity that allow direct comparison with subsequent surveys, but a reconstruction of part of the Eastern Ager Veientanus Survey in the following section suggests that at least some of the South Etruria Survey coverage compares favourably with later field surveys in other parts of Italy.

Within the South Etruria Survey area, the investment of varying amounts of time and labour in different parts of the study area may therefore partially explain some differences in settlement densities documented across the region. When other legacy datasets are integrated into the equation, the problems increase; by using different and more intensive methodologies compared with the South Etruria Surveys, these complementary datasets extend spatial coverage but also add to the spatial and chronological unevenness of the site distributions in the study area; these issues are taken up in more detail in sections 2.4.1 and 2.4.2 respectively.

Another factor that deeply affects the ability of surveyors to identify material, and hence sites, is surface 'visibility', often considered in terms of the influence of land use and vegetation on the percentage of the surface available for inspection. Today, surveyors go to great lengths to document, and often quantify, visibility conditions in order to calibrate the numbers of sherds found. The South Etruria surveyors were very aware of the influence of land use on their ability to locate sites and they discussed the issue with great insight in the individual survey reports. The survey record cards demonstrate that some form of land use was documented at two-thirds of the scatters found. For the Tiber Valley Project, this information has been grouped into a small number of categories (ploughed, grass, woodland, etc.) in order to identify potential patterns (the terminology necessarily reflects that used by the surveyors but note the ambiguity of 'ploughed'—does this mean a ploughed arable surface? Or does it mean that the site has been ploughed in the past? The latter is perhaps most clearly denoted by the surveyors' regular use of the term 'ploughed out').

Figure 2.19 reveals an unexpectedly high percentage of scatters found within lower visibility classes such as grass/pasture, macchia and even woodland, emphasising that the landscape was well sampled overall. (Even if it is assumed that the one-third of sites where details are not recorded were all ploughed, the point remains valid.) A more significant problem is that we lack information about the absolute or relative amounts of land that fell within each different land-use category (e.g. vineyards, olive groves, woodland) in order to assess how significant the samples actually are, for example, whether there were areas of excellent visibility where nothing was found. It is unclear whether any attempt was made to record the extent of different categories of land use within each area regardless of whether or not any scatters of archaeological material were found. General estimates for the percentages of different land use categories are only provided for one survey; around Narce, in the southern Ager Faliscus, Potter estimated 19 per cent woodland/macchia, 27 per cent pasture, 40 per cent arable and 14 per cent nuts, olives, vines and vegetables.[193] Nonetheless, the details that are recorded for the sites in other areas make clear, especially when examined alongside the RAF photographs, that it is possible to recognize some localized variation in land use; for example, there were few ploughed fields or even grass/pasture around Sutrium, which was instead dominated by vineyards and areas disturbed by modern infrastructure. In contrast, there were larger amounts of ploughed land closer to Rome in the Ager Veientanus.

The surveyors were highly sensitive to the effects of land use and vegetation on their ability to find both artefacts and sites (e.g. TVP-ID 01551, 01717, 03445) and this was systematically factored into interpretations even if it was not always documented on the record cards. It is also worth emphasising that, although the survey is strongly associated with the idea of documenting sites destroyed by the introduction of deep and mechanized ploughing (see above), many sites were found in areas 'Under grass/pasture'.

[191] Duncan 1958: 65.

[192] Barker and Mattingly 1999–2000; Blanton 2001; Mattingly and Witcher 2004; Witcher 2006a.

[193] Potter 1976a: 6.

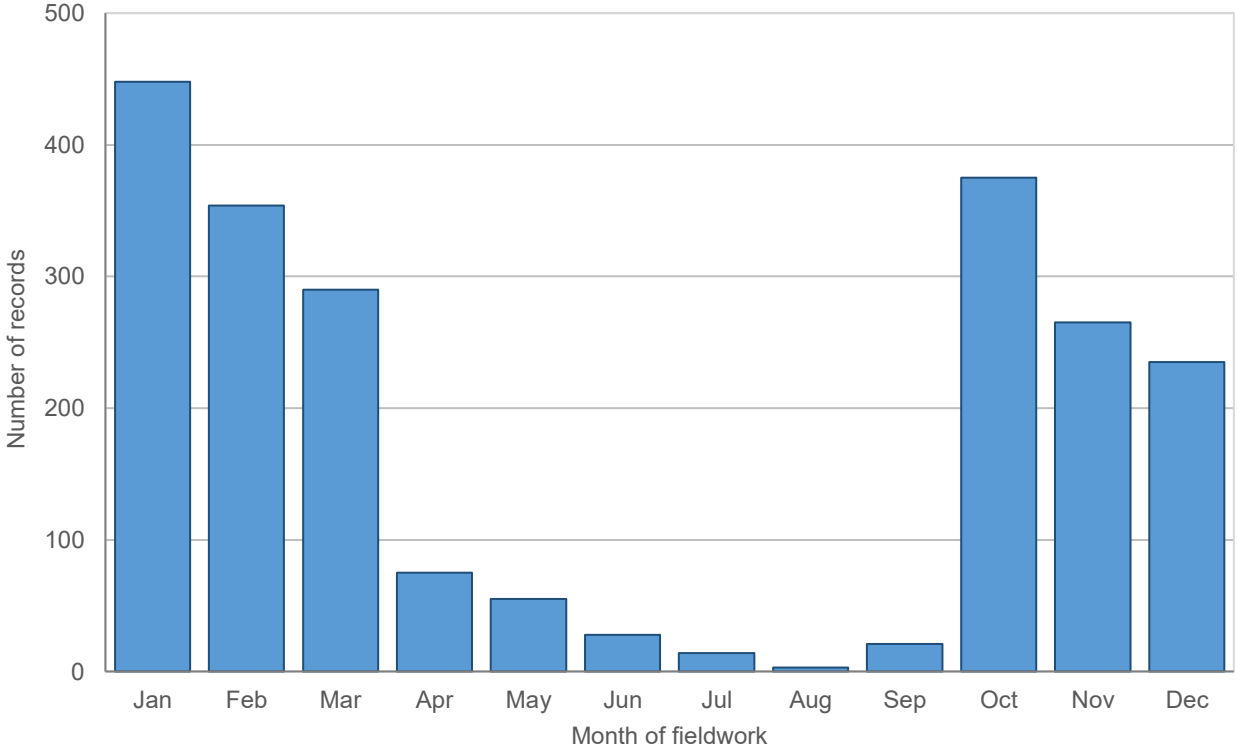


Figure 2.16. South Etruria Survey records by month of fieldwork; note, month was not documented for every record (n=2177)

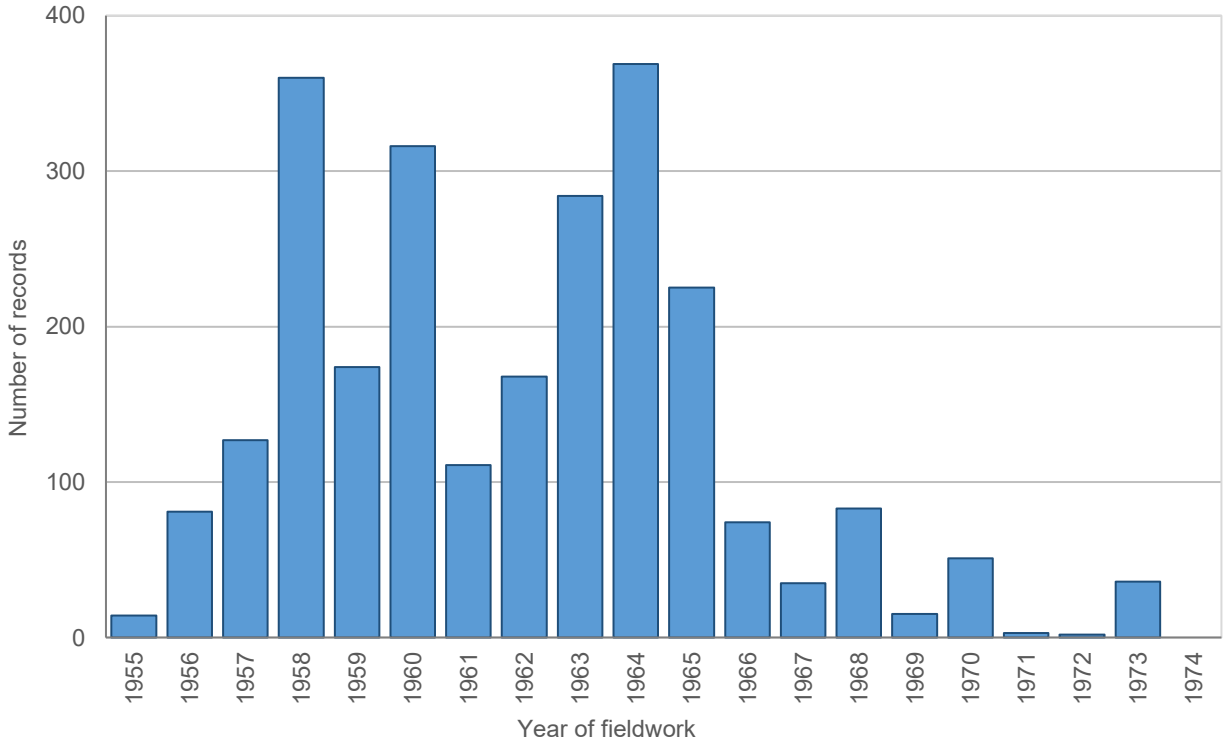


Figure 2.17. South Etruria Survey records by year of fieldwork, 1955–1974; note, year was not documented for every record (n=2556)

As well as the effects of contemporaneous land use on the visibility (or preservation, as they might have termed it) of sites, it is particularly significant to note the surveyors' sensitivity to the effects of past land use on the visibility of ancient sites. Around the medieval and modern centres of Formello and Sacrofano, for example, Kahane, Murray-Threipland and Ward-Perkins note major post-classical cultivation, eroding Roman and Etruscan material off the ridges and into the valleys. Similarly, in explaining the poor preservation

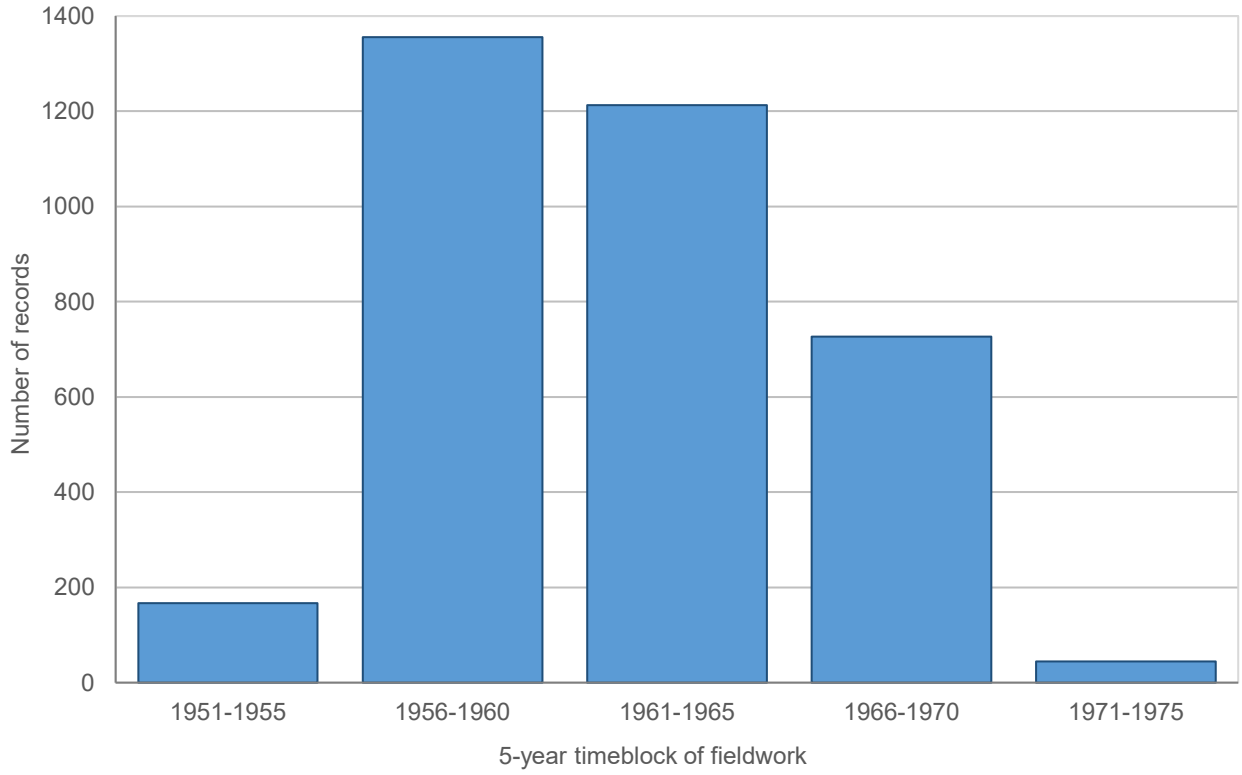


Figure 2.18. South Etruria Survey records by date (5-year timeblocks) of fieldwork; note, approximate date was not documented for every record (n=3539)

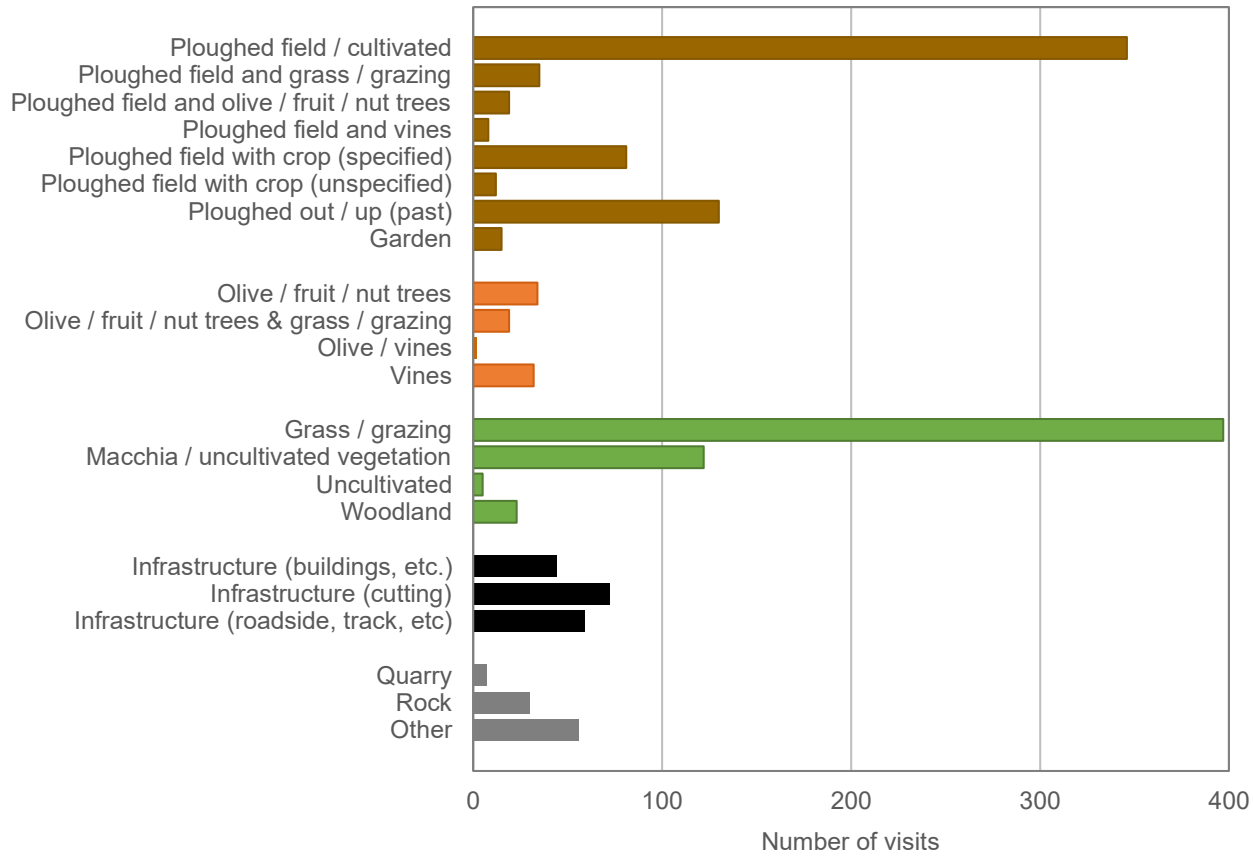


Figure 2.19. Land use categories recorded for each site during the South Etruria Survey; note, information on land use was not documented for every site (n=1548).

of sites between Nepi and Civita Castellana, Potter suggests heavy cultivation (including scraps of post-medieval pottery that he links to possible agricultural manuring) long before the twentieth century.[194] At Sutrium, Duncan suggests that south of the town and on Monte Calvi, there were higher levels of damage and artefact dispersal pointing to an earlier phase of agricultural disturbance.[195] There is even the suggestion of Roman sites having destroyed earlier Etruscan settlements through occupation of the same location or by the use of these earlier sites for agriculture.[196]

This section has considered some of the evidence collected as part of the South Etruria Survey restudy for the methodological organization and practice of the survey and, in particular, its coverage of the landscape. The discussion has focused at the level of the South Etruria Survey as a whole and at the level of its individual constituent surveys. The following section takes a different approach by focusing down on a small area, or micro-region, in the Eastern Ager Veientanus Survey area and reconstructing how the survey was actually conducted on the ground.

2.3 South Etruria Survey: rewalking the Eastern Ager Veientanus

It has sometimes been suggested that the South Etruria Survey was something of a 'glorified picnic', with various BSR scholars and visitors encouraged to join Ward-Perkins for weekend visits to the countryside around Rome.[197] Such a characterization seriously underestimates the careful planning involved and the skills and experience developed by the core group of surveyors. Nevertheless, the great detail and sensitive discussion provided in the individual survey reports is not matched by any general published accounts of how the fieldwork was planned or undertaken on a practical level (e.g. the choice of where to walk, how personnel covered the ground, how long was spent collecting material, or what the collection strategy was). It is possible, however, to use some of the unpublished detail recorded on the BSR record cards to reconstruct aspects of the fieldwork that in turns adds nuance to our understanding of particular results and, more generally, builds confidence in the results of the overall survey. Here the example of the triangle of land between the Via Flaminia and the Tiber, designated as the Eastern Ager Veientanus Survey area, is used to illustrate the organization of the fieldwork. This area was allocated to Michael Craven to survey during this time at the BSR in 1964–1965, though parts of the area had been previously visited by John Ward-Perkins and others. The final results of Craven's work were incorporated into Potter's *The changing landscape of South Etruria*, but were never published in detail in the form of a separate report. By taking one small part of this territory, to the immediate east of the Via Flaminia and the south of Riano, it is possible to focus down on the complexity of the survey's working methods. The aim is to put the surveyors and their practices back into the account (e.g. the personnel, the repeat visits and the accumulation of knowledge). What follows is a detailed narrative of just one small area of the South Etruria Survey intended to underline the scale of organization and nuance of the fieldwork that underlie the many distribution maps and charts of site numbers that have been published over the past 70 years—and in the present volume.

In 1957, just three or four years after John Ward-Perkins (JWP) began recording sites in southern Etruria, Anne Kahane (AMK) visited and recorded a site (TVP-ID 00854) close to the Via Flaminia at km 24.7 (Figure 2.20). She collected samples of material including black-glazed ware, *terra sigillata* and Red Polished ware. She also noted the presence of mosaic tesserae and a piece of a millstone. There is no further detail about the specific day or month of the visit, about the land use at that time, or the possible interpretation of the site; nor is it stated whether anyone else was present. The location of the site close to the (ancient and modern) Via Flaminia might suggest accessibility was a key consideration, possibly even a speculative or unplanned stop during a visit elsewhere.

Six years later, on Saturday 30th November 1963, Kahane returned to the area with John Ward-Perkins (conversation may well have turned to JFK's assassination a week earlier). The record card notes a point (TVP-ID 00853) 100 m to the south of the original findspot but observes that this is the 'Site first noted years ago' (i.e. TVP-ID 00854). The group collected further black-glazed ware, *terra sigillata* and Red Polished ware, as well as Roman coarse-wares. They also collected pre-Roman material: bucchero and Etruscan coarse-wares. In addition, they identified the presence of architectural material: tile (including a flue tile), tufo *opus reticulatum* blocks or *tufelli*, marble wall veneers and mosaic tesserae.

On the same day, Kahane and Ward-Perkins also recorded a further nine sites to the south of TVP-ID 00853/00854. From various combinations of initials on the relevant record cards, the team included at least two additional members—Margaret Ward-Perkins and 'JK'. We do not know the order in which the sites

[194] Kahane, Murray-Threipland and Ward-Perkins 1968: 20, 89, 150; Potter n.d.
[195] Duncan 1958: 96.
[196] Kahane, Murray-Threipland and Ward-Perkins 1968: 20.
[197] See discussion in Potter and Stoddart 2001: 13.

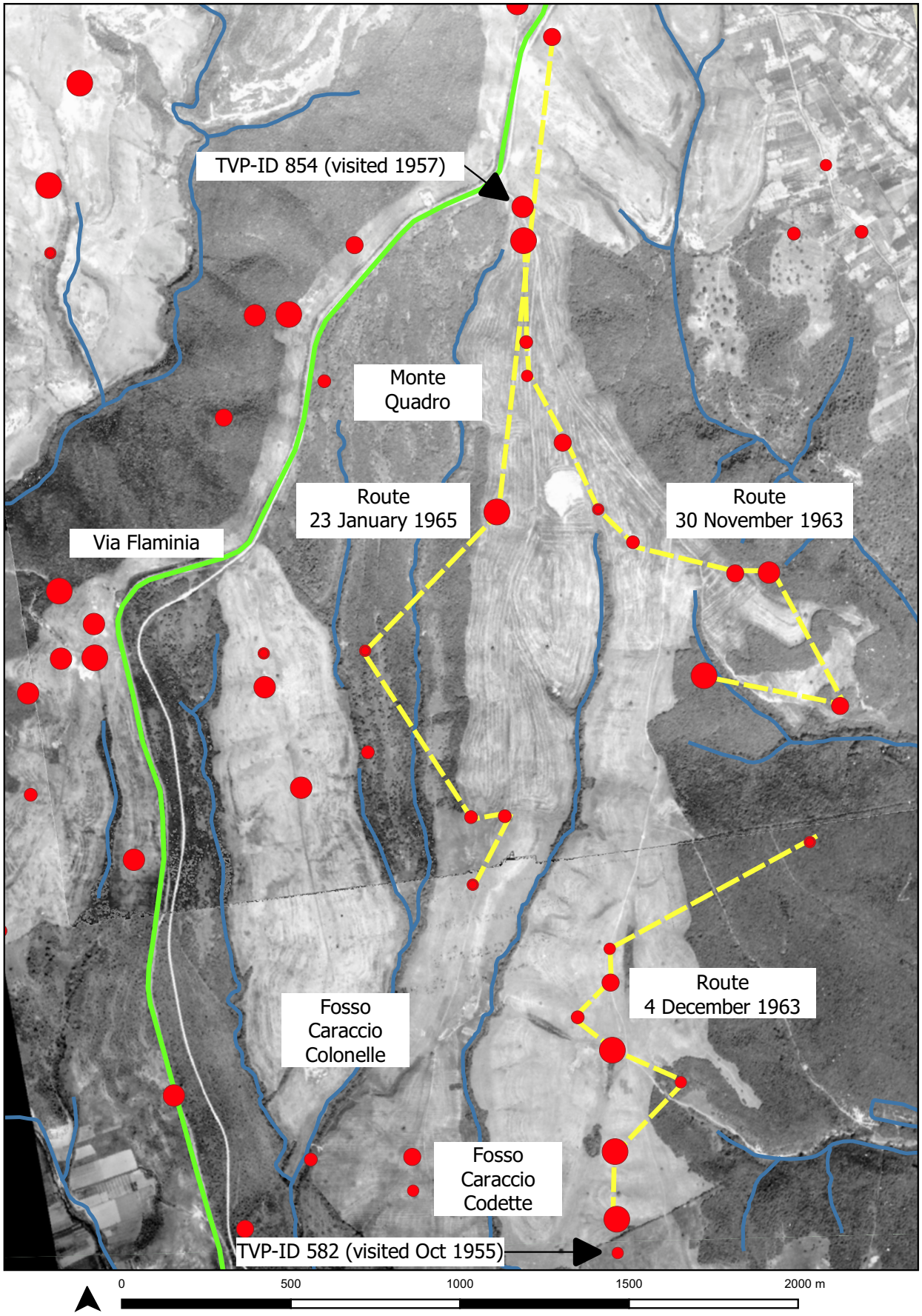


Figure 2.20. A reconstruction of South Etruria Survey fieldwork around Monte Quadro in the Eastern Ager Veientanus survey area; probable routes walked (yellow) and sites recorded (red circles; size relative to quantity of material collected).

were visited, but it would be reasonable to assume that they started on Via Flaminia at TVP-ID 00853/00854 and worked south along the ridge at Monte Quadro, towards Carbonara and Il Quadro. The shortest possible route between the nine sites is approximately 2.2 km providing a sense of amount of ground that might be covered in a day (the ridge is about 300 m wide, giving a total area of 0.66 km^2).

At most but not all of the sites located, the team recorded modern land use. In combination with the date (the end of November), this gives an impression of surface visibility. Sites TVP-ID 00857, 00860 and 00862 are explicitly noted to be have been found under ploughed conditions. Sites TVP-ID 00853 and 00871 are noted to have been 'ploughed out'. It is worth noting that this refers to the preservation of the site, not surface visibility, as is made clear by TVP-ID 00601 which is noted as 'Ploughed out. Now under sheep weeds and vegetables'. On some of the cards only one set of initials is noted. It is unclear whether or not the team split up in order to cover more ground. Site TVP-ID 00619, for example, lies some distance from the other sites and bears only JWP's initials—perhaps he set off alone downhill from TVP-ID 00868 or 00871 to check whether material had been washed down the slope?

By plotting the location of these sites over the RAF 1944 aerial photographs, it is clear that woodland and scrub in this area had been cleared back during the two decades between 1944 and the survey in 1963, for example, in relation to sites TVP-ID 00868, 00601 and, especially, 00871 which is explicitly noted to have been 'Recently ploughed out'. Cross referencing the sites surveyed on 30th November 1963 with the material restudied for the Tiber Valley Project, it is clear that the team collected only small amounts of material. The largest collections were 29 and 45 sherds at sites TVP-ID 00854 and 00601 respectively—perhaps significantly, likely to have been the first and the last sites visited that day.

The following week, on Wednesday 4th December 1963, work continued to the immediate south of site TVP-ID 00601 and likely moved south towards Carraccio Codette and Monte Rosso. Presumably, the 800 m or so of territory along the ridge between the final site identified the previous week (i.e. TVP-ID 00601) and the first site (TVP-ID 00586) recorded on 4th December was surveyed and no sites found. JWP and AMK were again present, this time accompanied by 'LV' and 'SM' and, like the week before, the combinations of initials vary from site to site. Eight sites were located, with land use recorded at some but not all: TVP-ID 00587 beans; 00586 and 00579 lucerne; 00583 and 00584 vegetables and, notably, 00613 located in 'Thick woods' (as is this location today). The latter suggests that the survey was not restricted to the investigation of cultivated fields but made efforts to cover areas of poor visibility, presumably on the basis that the extent of past settlement was more extensive than that of the 1960s. Assuming the group was walking north to south, the day's work seems to have finished at a site that had been previously recorded, this time by JWP in October 1955 (TVP-ID 00582). The revisit in 1963 appears to have led to the reinterpretation of the original 1955 findspot as part of a much larger site (i.e. TVP-ID 00583; this site was then visited for a third time by 'FMC' [Michael Craven] and 'AJS' on Friday 19th February 1965). The minimum distance between the sites visited on 4th December is 1.8 km, perhaps representing a total area of 0.5 km^2.

The South Etruria Survey was not finished with this area, however, and on Saturday 23rd January 1965 'FMC', 'AJS' and 'AT' walked down the western side of Monte Quadro towards Monte del Morto. The group presumably began, as before, from the north end accessing from the Via Flaminia, but there is no evidence that they revisited TVP-ID 00854/00853. The first site, TVP-ID 00847, was found in a ploughed area approximately 300 m west of 00860 seen in 1963. As 00847 was apparently not seen in 1963, this might suggest that the earlier visit concentrated on a corridor of 150 to 200 m either side of the ridge track. Again, there are indications in 1965 that the surveyors did not restrict themselves to areas of the highest visibility: TVP-ID 00548 was found in thick grass on the west side of the stream around Lo Stazzo. Site TVP-ID 00570 was revealed by disturbance of the ground by a bulldozer.

There is no reason to believe that the general organization of fieldwork documented here, though concentrated in one small area, should not be taken to illustrate the wider working practices of the South Etruria Survey. Survey work was carefully planned to cover territory systematically. It may have been designed to work from previously visited sites—perhaps the most accessible or visible—ensuring full coverage, but also offering the surveyors the opportunity to revisit sites and, especially if some years had passed, to reacquaint themselves with the lie of the land. The amount of terrain covered will have varied, but the examples here suggest that teams of around four persons (a carload?) might cover perhaps 0.5–1 km^2 per day (or 4–8 person days/km^2; this figure cannot be generalized to the whole of the South Etruria Survey—there was simply too much variation—but it is perhaps higher than might have been previously assumed and it is informative to compare it with the figures for the Oria Survey (Puglia) at 10 person days/km^2 and the Farfa Survey at 28 person days/km^2).[198] The surveyors systematically recorded what was and was not

[198] Yntema 1993; on how the South Etruria Survey compares with comtemporaneous and subsequent surveys, see Cherry 1983: fig. 1

collected—and much of the former is confirmed by the Tiber Valley Project restudy of the South Etruria Survey material. In this area, the surveyors were not entirely systematic in their recording of land use, documenting details in just over half of cases—at least on the record cards; notebooks may well have contained other valuable information. Most sites were visited only once, but key sites might have been revisited once or even twice more. Knowledge was therefore developed incrementally, in some cases over a decade or more; continuity was provided by the presence of a core group of personnel, passing on experience about the survey's methods. This may also have allowed a more rapid and targeted collection of material.

Although the general planning and organization of fieldwork was similar across the component surveys, in some areas—Sutrium, the northern Agri Capenas and Faliscus, Eretum and the Cassia-Clodia areas—the intensity of work was undoubtedly lower. Hence although the surveyors of these areas all 'trained' alongside the surveyors in the core region of the Ager Veientanus to familiarize themselves with basic methods, the more distant areas were not subject to the same long-term fieldwork, returning year after year, as clearly happened in the areas closer to Rome.

In summary, the aim of this extended case study, drawing together the many different clues gleaned from the unpublished records, has been to provide a sense of the planning and practice of the South Etruria Survey on the ground. This not only gives a sense of how the work was coordinated and undertaken, giving reason for confidence in the value of the results, but also illustrates some of the important local detail on which the numbers and long-term settlement trends discussed in the next section are built. Conventionally, a survey report might be structured by outlining the methodology, then a catalogue of the sites found, and an appendix of all the pottery and other artefacts collected. Here, in restudying the South Etruria Survey, the structure has been the exact opposite. At the core of the Tiber Valley Project work has been the archive of pottery collected by the South Etruria Survey; the restudy of this material has fed into a wider re-analysis of the scatters and sites from which the material was originally collected, leading in turn to new insights into the methodology of the survey as a whole.

2.4 Tiber Valley Project database

The extraordinary body of data collected by South Etruria Survey lies at the heart of the Tiber Valley Project database, supplemented by a range of other legacy datasets. These sources have been introduced in section 2.1 and include topographical works,[199] four of the Forma Italiae series (Cures Sabini, Nomentum, Sutrium and Vicus Matrini) and two of the Regione Lazio surveys (Capena, Nazzano). The aim of the Tiber Valley Project was never for a comprehensive database including every single archaeological findspot ever attested within the study area. Rather, the intention was to provide a context for the South Etruria Survey by integrating the evidence of other projects, such as the Farfa Survey and the Forma Italiae surveys. Systematic library research (through to 2001) was undertaken to identify published excavations and other archaeological work within the study area. Sources of data that were not integrated into the database include the *Carta storica archeologica monumentale e paesistica del suburbio e dell'agro romano* (1982–1988; itself a compilation of a variety of survey and archive data) and any unpublished material (apart from that available at the BSR), such as reports in the archives of the Soprintendenza. Several surveys located on the very edge of the survey area, but falling largely beyond it, are excluded including the Forma Italiae survey of the Torrimpietra map sheet and all of the Latium Vetus series including the volumes for Fidenae and Crustumerium that, in fact, fall wholly within the area but which are the subject of ongoing re-evaluation by others.[200] Obviously, surveys published since the main phase of the project ended in 2002 are not included in the database, for example, the Forma Italiae survey of the Ager Foronovanus and the Sabatia Stagna survey work around Lake Bracciano.[201]

The integration of all these legacy data into the Tiber Valley Project database greatly enhances our understanding of specific details, for example, showing how individual sites have been visited and revisited over 100 or more years. In aggregate, these data provide a view of the archaeological landscape that would never have been visible at any single point in time; structures seen by the topographers had been lost by the time of the South Etruria Survey, but many more surface sites had appeared; in turn, many of the South Etruria sites have now disappeared, yet subsequent surveys have also found yet further new sites. The resulting overall distribution of sites and their chronological profile therefore encompass data of variable quality and completeness. It has already been shown that there is some variability between the individual South Etruria Surveys; the legacy datasets add another level of complexity to the database. This final section therefore examines the spatial and temporal (or chronological) unevenness within the complete database; it considers

[199] E.g. Gamurrini *et al.* 1972.

[200] Quilici and Quilici Gigli 1980, 1986. Carandini, Carafa and Capanna 2007; Seubers and Tol 2016.

[201] Verga 2006; Accardo *et al.* 2007; Cordiano *et al.* 2011. In addition, a number of surveys undertaken around the periphery of the study area, published after data collection had been completed include: Scardozzi 2004 (*Ager Ciminius*); Gasperoni 2010a (Mugnano, Bassano in Teverina Attigliano, Soriano nel Cimino); Tartara 1999 (Torrimpietra); Hemphill 2000 (Civitella Cesi).

the effects of this variability of the quantity and quality of data on the distribution of sites and their dating, with implications for all the maps and charts that feature throughout the rest of this volume.

2.4.1 The spatial dimension: reading the maps

Looking at a map of the overall distribution of site records from the Tiber Valley Project database, it is clear that the spatial distributions of sites are uneven and variable (Figure 2.21). In the first instance, this is most obviously affected by the areas that have (or have not) been subject to sustained survey work. There are, however, some more general influences that also structure the overall visibility of sites in the middle Tiber valley. Most obviously, a very broad division can be drawn between the volcanic landscape of South Etruria and the predominantly limestone landscape of the Sabina. These different basic geologies have led to very different physical types of landscape, for example their topographical form and their different agricultural uses, past and present. In turn, these differences have significant implications for the preservation and visibility of the archaeological record. But a general contrast between volcanic and karstic, Etruria and the Sabina, conceals great micro-regional variability. For example, there are very different types of tufo—some hard, some soft—within the volcanic areas. These differences have led to distinctive landscapes within Etruria, some flat and undulating open territory (e.g. the northern Ager Veientanus), others deeply incised by rivers with thickly wooded canyons (e.g. the southern Ager Faliscus). In the past, these distinctive landscapes afforded diverse opportunities, for example, for agriculture or for defended settlement. As a region, the study area encompasses localities as different as the chestnut groves of Canepina on the volcanic slopes on Monte Cimino, the abandoned limestone landscape of Prati di Cottanello in the Apennine foothills, to olive groves of the Farfa area, and the open but deeply incised landscape between Rome and Bracciano.[202]

To interpret Figure 2.21, and the many other maps in this volume, it is therefore necessary to consider a whole range of environmental and ecological influences both on the archaeological visibility of sites (preservation and recovery) and on the underlying variability in past use of the landscape (areas of greater or lesser settlement and exploitation). Of course, these two considerations may be correlated; steep rocky slopes, for example, have low archaeological visibility and were unattractive places to construct sites in many—though not all—periods. Examples of environmental influences on surface archaeology visibility include alluviation and colluviation (the deposition of soils by rivers and at the bases of slopes respectively) and changes in the courses of rivers. Despite recognition of the importance of environmental reconstruction and awareness of the impact of geomorphological processes on survey results,[203] there has been comparatively little new environmental work in the middle Tiber valley area since that undertaken in association with the South Etruria Survey (cf. the wealth of new environmental work to the south of Rome and along the coast of Etruria, including at mouth of the Tiber).[204]

One of the largest archaeological 'blanks' on the map is the Tiber floodplain, where archaeology is buried by deep deposits of alluvium; knowledge of archaeological evidence in this area comes exclusively through excavations in advance of development of transport infrastructure. More generally, the movement of rivers is constantly burying and exposing archaeological deposits and structures, as noted by the South Etruria surveyors during the 1950s and 1960s (e.g. Fosso della Crescenza, TVP-ID 01472).[205] The soft volcanic soil of South Etruria is particularly prone to erosion, especially when deep ploughing on steep slopes (Figure 2.22) combines with heavy rainfall to create 'rilling', washing vast quantities of ploughsoil—and surface archaeology—down from ridges and hillsides into valley bottoms (Figure 2.23). As a result, further ploughing cuts deeper—into buried archaeological stratigraphy and eventually bedrock. Even during the course of the South Etruria Survey, shortly after the start of deep ploughing, extensive erosion was observed;[206] subsequent work has noted the intensification of the effects of this erosion, though this has not prevented other surveys continuing to achieve good results, for example, at Nepi.[207] In the Sabina, the different underlying geology—and slower encroachment of urban and infrastructural development—means that the massive erosion experienced in southern Etruria is much less severe and recent surveys here have had some success (e.g. Farfa, Corese); nonetheless, surface erosion is still a significant consideration in the Sabina, especially as eroded soils are not so easily replenished in such karstic (limestone) landscapes. Geology and related soil type can also have highly localized effects on archaeological surface visibility; Jones, for example, believed many sites on the clay soils to the west of Monte Soratte and to the north-east of Lucus Feroniae had been destroyed as a result of erosion, hence the thin

[202] See Bevilacqua 2013 for overview.

[203] E.g. Leveau, Walsh and Trément 1999; Brown 1997; Brown and Ellis 1995.

[204] South Etruria Survey geomorphological work included investigations at Narce, Potter 1976a. For summary, see Potter 1976b. See also Fentress *et al.* 1983; Jones 1960; Judson and Kahane 1963. For recent work on and around the Tiber delta, see Bellotti *et al.* 2007; Di Rita, Celant and Magri 2010; Giraudi 2012; Rendell, Claridge and Clark 2007.

[205] Jones 1963a: 103.

[206] Kahane, Murray-Threipland and Ward-Perkins 1968: 5; Potter 1979: 12; Potter n.d.

[207] Camilli *et al.* 1995. For a particularly pessimistic assessment, see King 1993.

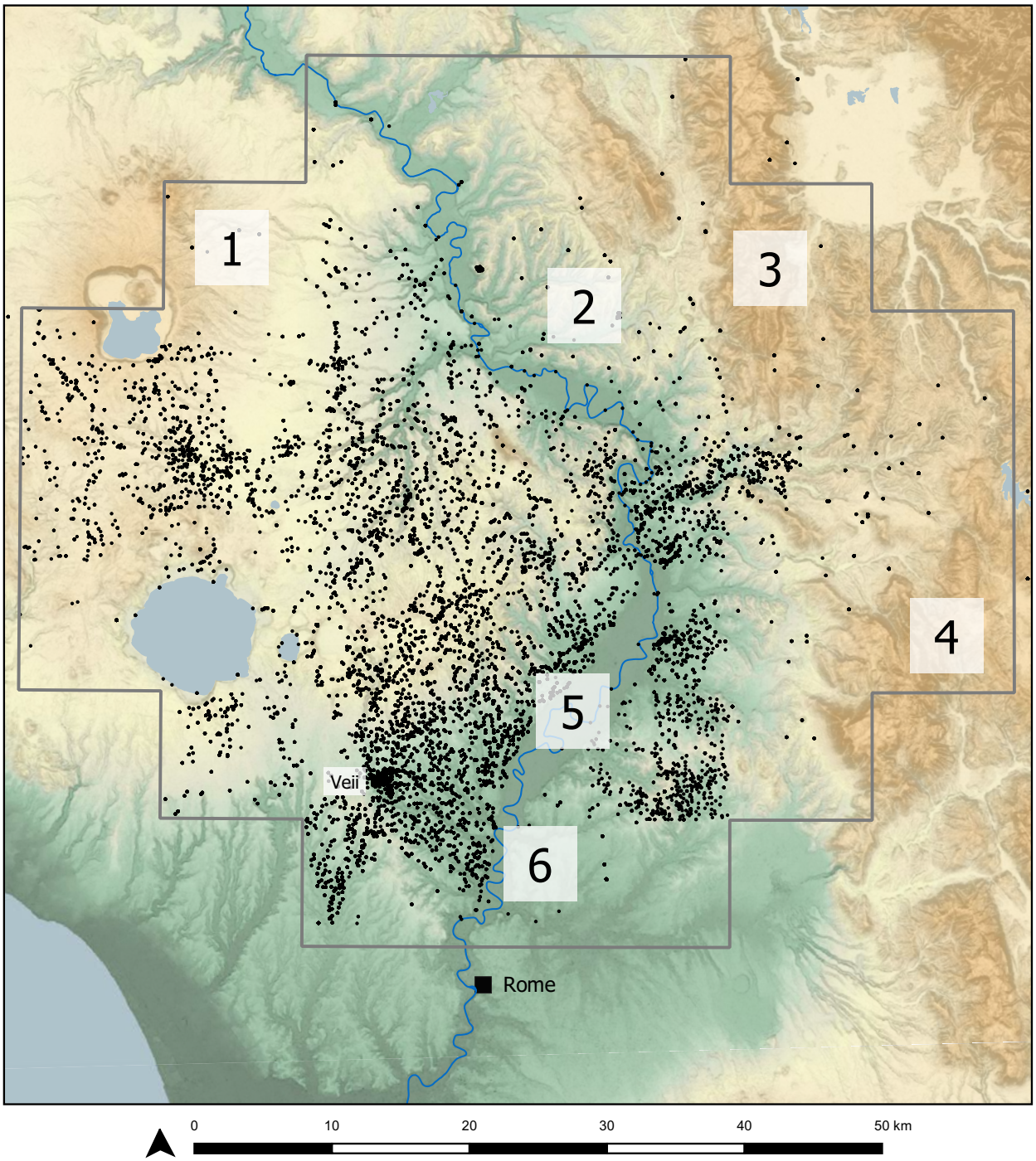


Figure 2.21. Distribution of all Tiber Valley Project database records. Numbered gaps: surveys published after project data gathering complete: 1) Ager Ciminus Forma Italiae and 2) Ager Foronovanus Forma Italiae; 3) and 4) heavily forested and mountainous areas; 5) Tiber valley floodplain; 6) published surveys restudied by other projects: Latium Vetus volumes.

distribution of settlement in these areas.[208] Conversely, as soils erode from elevated and sloping ground, colluvial deposits on lower slopes and in valley bottoms have deepened, concealing any surface materials and putting any buried stratigraphy well beyond the reach of the plough. These areas may well not have been as densely settled in the past as the ridges above, but development work and erosion caused by shifting river channels demonstrates that there certainly was more activity in these areas than surface archaeology alone would suggest (Figure 2.24).

Land use, has a particular bearing on the preservation and visibility of the surface archaeological record. Areas of arable cultivation offer the highest visibility, while areas of *macchia* and woodland offer much reduced opportunity for examining surfaces, and urban development and extraction lead to permanent

[208] Jones 1963a: 101–2.

Figure 2.22. Ploughing of steep slopes near the defences in the north-west area of Veii ©BSR Photographic Archive, Ward-Perkins Collection, wpset-00557.

destruction. The precise visibility conditions at the time of survey have a strong influence on whether or not individual sites will be found (e.g. whether a field is newly ploughed; whether the crop has sprouted) but, at a broader level, it is useful to compare wider settlement distributions with general land use categories in order to appreciate the significance of particular gaps or clusters of activity. Figure 2.25 shows a detail of the area where the Farfa river joins the Tiber and a landscape of predominantly arable fields, olive groves and vineyards; Figure 2.26 shows the more thickly vegetated (*macchia* and woodland) but also urbanized landscape of the Treia valley.

Finally, we return to the unevenness of the archaeological datasets. As discussed above, the Tiber Valley Project database contains both the South Etruria Survey data and a selection of other legacy datasets. There is significant variability in the methods and reporting within and between all of these surveys meaning that, in effect, some areas of the middle Tiber valley have been more intensively investigated and published than others. Particular concentrations of sites may therefore reflect greater research intensity rather than genuine patterns of higher or lower settlement numbers; this most evident when comparing the area to the north and east of Veii with areas such as the northern Ager Faliscus; the former was revisited by surveyors many more times than the latter. In addition to blocks of resurvey work, many individual sites have been targeted for revisits, often in order to check particular details or to acquire more dating materials. The Nepi Survey, for example, attempted to revisit 16 South Etruria Survey sites and managed to relocate 11 of them; the remaining 5 were either not relocated or could not be clearly defined.[209] Ted Peña aimed to revisit TVP-ID 02709 and 02992 to

[209] di Gennaro *et al.* 2002: 45.

Figure 2.23. Soil erosion in a ploughed field on the Pietra Pertusa ridge in October 1963 showing movement of soil and exposure of bedrock. ©BSR Photographic Archive, Ward-Perkins Collection, wpset-07187.

check reports of waste material from kilns, though he could not relocate either, and Tersilio Leggio, who first recorded a site at TVP-ID 10714 in the Farfa area in 1980, found the site much damaged when he revisited with John Moreland in 1986.[210]

Information about the evolving preservation, or destruction, such as this is vital at the site scale, but less significant at the regional scale of the middle Tiber valley. A third approach is to look at the intermediate scale of the survey; the overlap between the Ager Capenas Survey and the Regione Lazio Capena survey provides a good example (see section 2.1.4). Resurveying in the 1980s, the Regione Lazio surveyors identified only half of the sites originally found by Jones in the 1960s, the rest having been destroyed, inaccessible or mislocated (e.g. TVP-ID 02584, 02585). Those found were often eroded as a result of agriculture, though there were just as many that produced new dating evidence as those that had been further damaged. Some produced larger assemblages than Jones reports, sometimes even previously undocumented structures (e.g. TVP-ID 03405). In most cases, Jones's observations and interpretations were modified and amplified; for example, valuable new details were added to Jones's basic record of a 'large Archaic site' on Monte Aquila (TVP-ID 00935), establishing its extent (2 ha) and recovering

[210] Peña 1987: 227–8 and 256–8. See also King 1993 and Di Giuseppe *et al.* 2002.

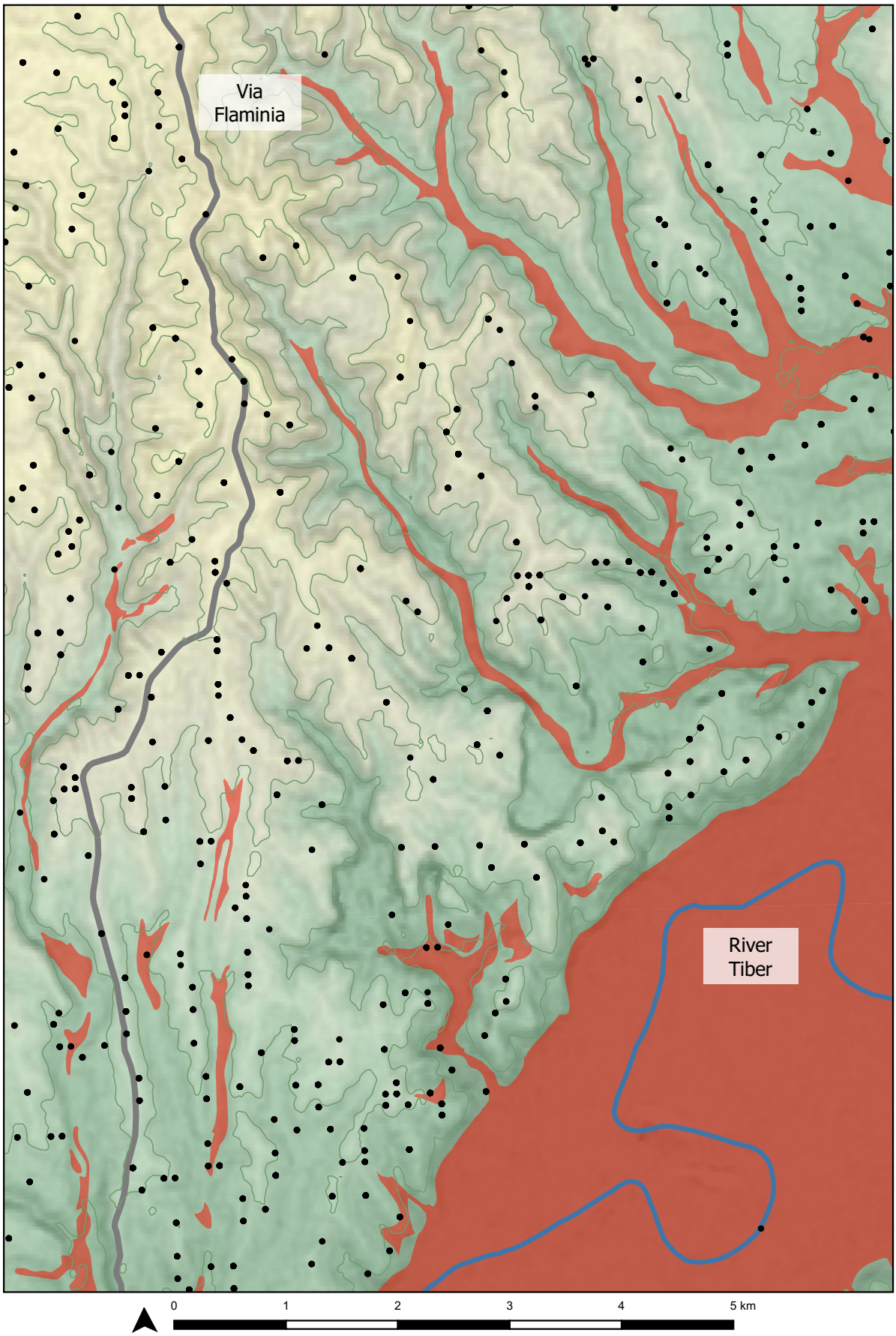


Figure 2.24. Distribution of all Tiber Valley Project records in relation to topography (north-eastern Ager Veientanus/ southern Ager Capenas on west bank of the Tiber). 50 m-contours; orange/brown areas = alluvial deposits.

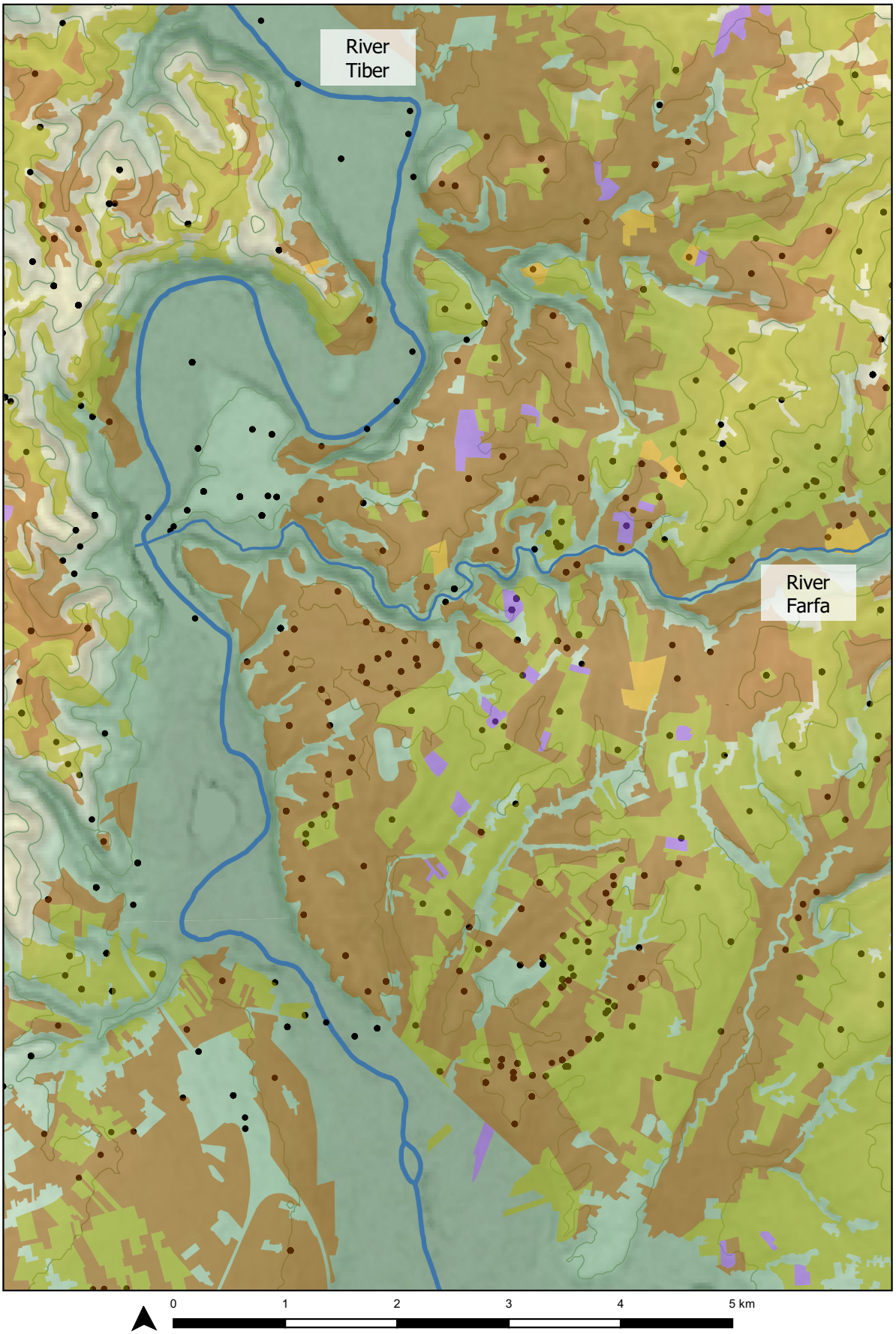


Figure 2.25. Distribution of all Tiber Valley Project records in the eastern Ager Capenas and Sabina Tiberina/Farfa river valley in relation to unirrigated arable fields (brown), olive groves (green), fruit trees (orange) and vineyards (purple). The Tiber floodplain is mainly irrigated arable land with limited archaeological visibility due to thick alluvium.

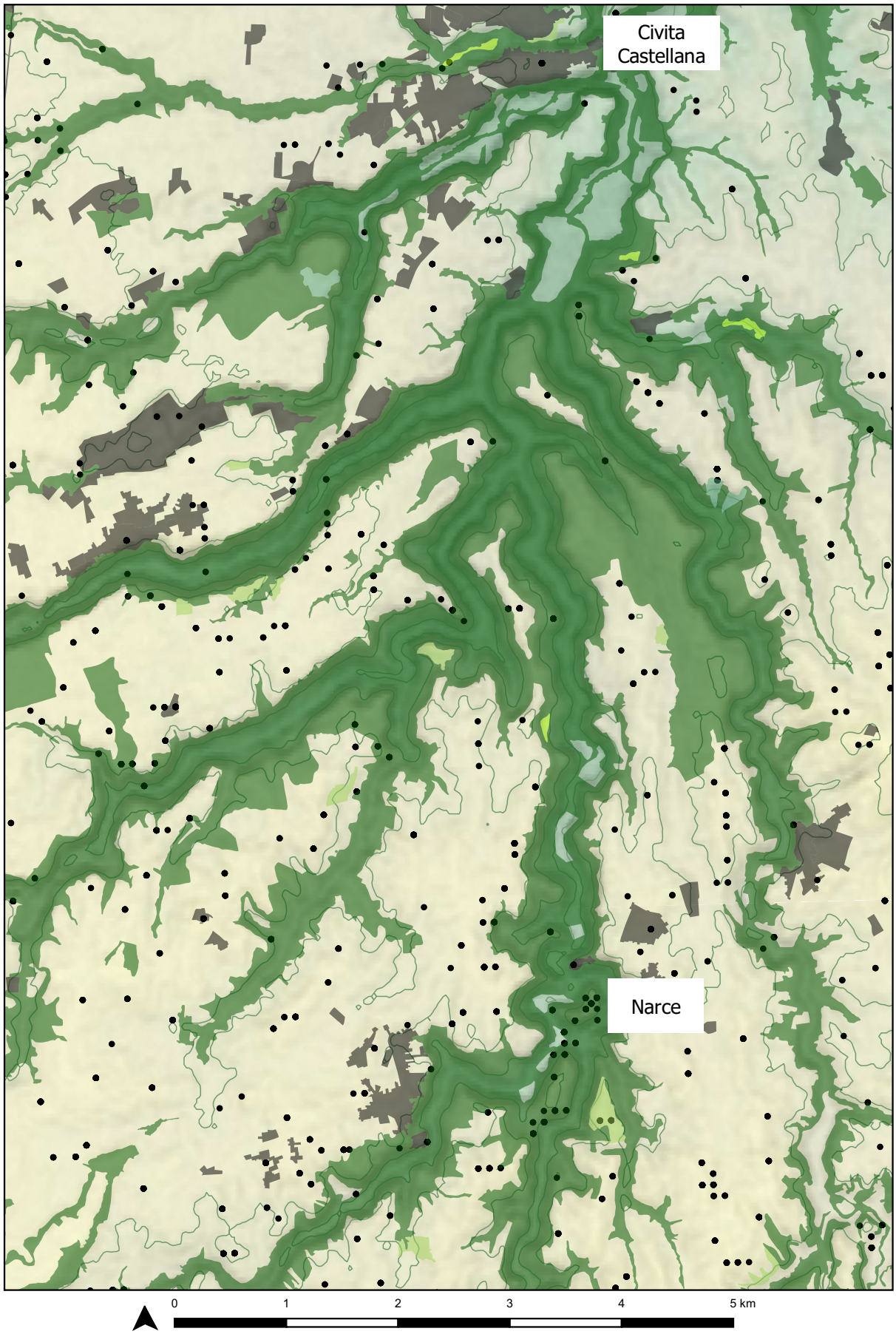


Figure 2.26. Distribution of all Tiber Valley Project records in relation to land use (southern Ager Faliscus). Dark grey = urban areas and infrastructure; greens = wooded and vegetated areas.

earlier (bucchero) pottery. In addition, many new sites were discovered, especially of Roman date, though also for the Archaic and late antique periods.[211] The latter results from improved knowledge of ceramics to extend the dating of sites, though coarse-wares were still not used for dating by this particular survey. (In turn, the Tiber Valley Project's restudy of Jones's material now offers a new level of detail, especially for dating, for some of these sites). In total, the Regione Lazio Capena survey roughly doubles the number of findspots, though many of these are scatters of material that are not in situ and others have been 'created' through more recent development (e.g. railway construction). There are, however, still sites we might have expected Jones to have documented in the 1960s, for example, because of their size or location; possibly he was unable to locate them because of inaccessibility, or because agriculture had not yet disturbed the buried archaeological deposits in order to bring material to the surface.

Another different type of documentary overlap that it is useful to consider is found between the Via Flaminia and the Tiber: the southern half of the Eastern Ager Veientanus Survey and the *Carta storica archeologica monumentale e paesistica del suburbio e dell'agro romano* (1982–1988). Because the former was unpublished, its details were not incorporated into the *Carta*. Comparison of the two datasets therefore offers a way of seeing what the South Etruria Survey contributes to archaeological understanding of this landscape, much of which has been subsequently quarried or developed. Within this area, the *Carta* identified 41 scatters (including four interpreted as villas); the Eastern Ager Veientanus Survey identified 92 scatters (including 21 interpreted as villas). The percentage of villas documented—10 per cent and 23 per cent respectively—suggests that the two surveys relied on quite different criteria for defining villas. Many of the sites are documented by both surveys, though the Eastern Ager Veientanus Survey appears more generous with the use of the term villa. There are, however, many differences. The area of Drago, a 1 km-long ridge to the east of the Fosso del Drago, for example, appears unoccupied on the *Carta*, but is populated by a string of farms and a villa according to the Eastern Ager Veientanus Survey. Similarly, the cuniculated valley to the north-east of Malborghetto, and the areas to the east (La Macchia Grande and Valle Cianca) are unoccupied or thinly populated on the *Carta* but densely settled according to the Eastern Ager Veientanus Survey. Conversely, the *Carta* includes a number of features not catalogued by the Eastern Ager Veientanus Survey, including 14 quarries. Through such comparisons, the different characteristics—the particular strengths and weaknesses—of individual datasets become clearer. Similar exercises, comparing the overlapping surveys around Nepi and at Farfa demonstrate that repeat surveys are usually able to relocate a core group of sites, while failing to find some others, and documenting a number of new sites.[212] The cumulative effect of this variable intensity of coverage and methodologies, spread across the entire study area, is to create a 'patchy' dataset. As some areas have been more intensively and/or more frequently visited than others, and at different times over the past 70 years, the application of spatial statistics or the use of the raw figures for demographic reconstructions is not straightforward. The limitations and the possibilities are discussed at the relevant points throughout the following chapters.

2.4.2 The temporal dimension: dividing up time

As well as maps, the following chapters also build on a series of charts showing changing settlement numbers over time to narrate the history of the middle Tiber valley. These charts illustrate several cycles of increasing and decreasing landscape activity, informing discussion of settlement, economy and population. As with the spatial distribution of sites, however, the changing numbers of sites over time also must be critically evaluated. Aside from the fact that the raw numbers do not communicate important qualitative context (e.g. the massive diversification and increased abundance of manufactured material culture in the early imperial period means that sites of this date are not directly comparable with those of the Archaic period), it is also important to recognize how different methods of dating sherds and sites and of dividing up time into specific periods can affect the shape of the resulting chronological trends. This section therefore considers variation in the amount of material culture in circulation over time, how this can be used to define meaningful periods of activity, how these activity periods relate to the numbers of records/sites and their change over time, and finally, how the integration of legacy datasets with the South Etruria Survey in the Tiber Valley Project database influences the overall chronological trends.

The principal determinant of survey chronological resolution is ceramic typology—and until comparatively recently this meant, in effect, fine-wares. Although the South Etruria Survey made use of some distinctive coarse-ware forms (e.g. Almond Rim ware), and used stratigraphic excavations to develop chronologies,[213] the vast majority of sites were dated on the basis of the presence of fine-wares (and some building materials and techniques). The dangers of relying heavily upon fine-wares (such as missing the smaller, poorer sites) were noted at the time and this may explain the otherwise extraordinary decision to collect and

[211] Ramelli di Celle 1988: 510.

[212] Patterson, Di Giuseppe and Witcher 2004b: 68–72.

[213] E.g. Duncan 1965; Ward-Perkins 1959b.

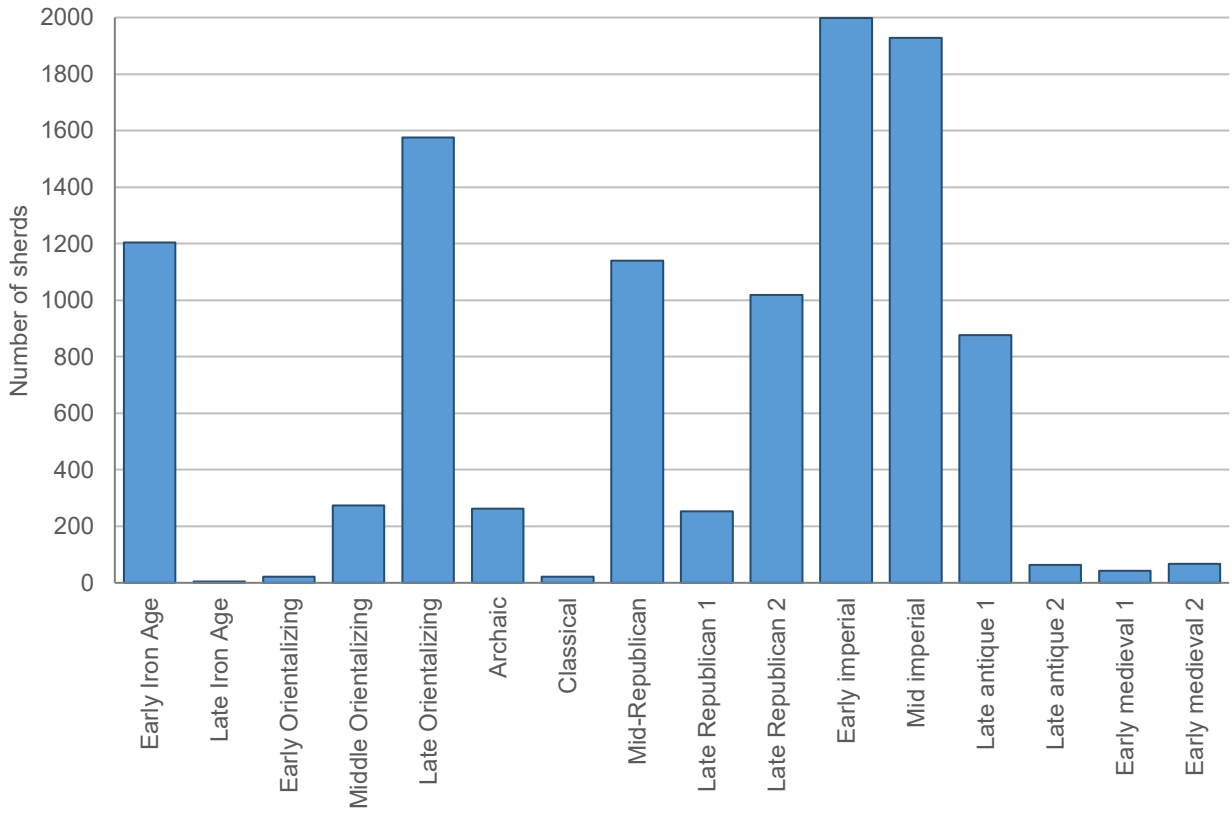


Figure 2.27. Numbers of restudied sherds recorded in the Tiber Valley Project database that can be dated precisely to each chronological period.

retain so much (then) undiagnostic material. The quantities of sherds collected vary enormously by pottery class (e.g. bucchero, *terra sigillata italica*) and by form type (e.g. Hayes 8a, Ostia III, 499) and each is dated to a different time span. Two different ways to visualize how the amounts of material in circulation varied over time shown are Figure 2.27, visualising the numbers of sherds dated precisely to each period (i.e. their start and end date fall completely within the timespan of a specific period), and Figure 2.28, which uses the weighted average (*media ponderata*) method to look a variation in the quantity of pottery over time, assuming that every sherd has an even probability of deposition across its entire date range.[214] As Figure 2.29 demonstrates, however, there is great variation in the date ranges of form types, with small numbers of very closely dated sherds and much larger quantities of material of more generic date.

Generally, surveys have tended to make use of quite broad time periods, usually of several centuries each; the individual South Etruria Surveys used a simple Etruscan / Roman / Medieval division, differentiating within these periods only as and when the data allowed. Potter's *The changing landscape of South Etruria* refined this approach with 12 periods, from prehistory to the medieval period; half of these periods subdivide the Roman era, with four of these spanning just a single century each. Reflecting both the higher quantities and diagnostic value of the material, the Roman period was therefore 'sliced' more finely. In recent years, some surveys have attempted to standardize the lengths of periods, often to 100 years, in order to increase comparability and to identify trends that might relate to historical events.[215] A different approach, however, has been taken by the Tiber Valley Project, which retains the idea of periods of different length, sensitive to the diagnostic value of the underlying ceramic evidence. Moreover, although consistent 100-year periods would provide a welcome level of chronological resolution, by slicing up time into century-long periods, more of the pottery is rendered 'non-diagnostic' (e.g. a sherd of a form type in circulation for 150 years or which spans the start or end of a century would not contribute to the calculation of settlement numbers). This would be particularly unfortunate given the efforts to establish better coarse-ware dates: that is, just as the value of much of this material for dating finally has been realized, the use of shorter, standard-length periods would render much of it 'non-diagnostic' again.

[214] See, for example, Fentress and Perkins 1988; Terrenato and Ricci 1998.

[215] E.g. Albegna Valley Survey, see Carandini *et al.* 2002.

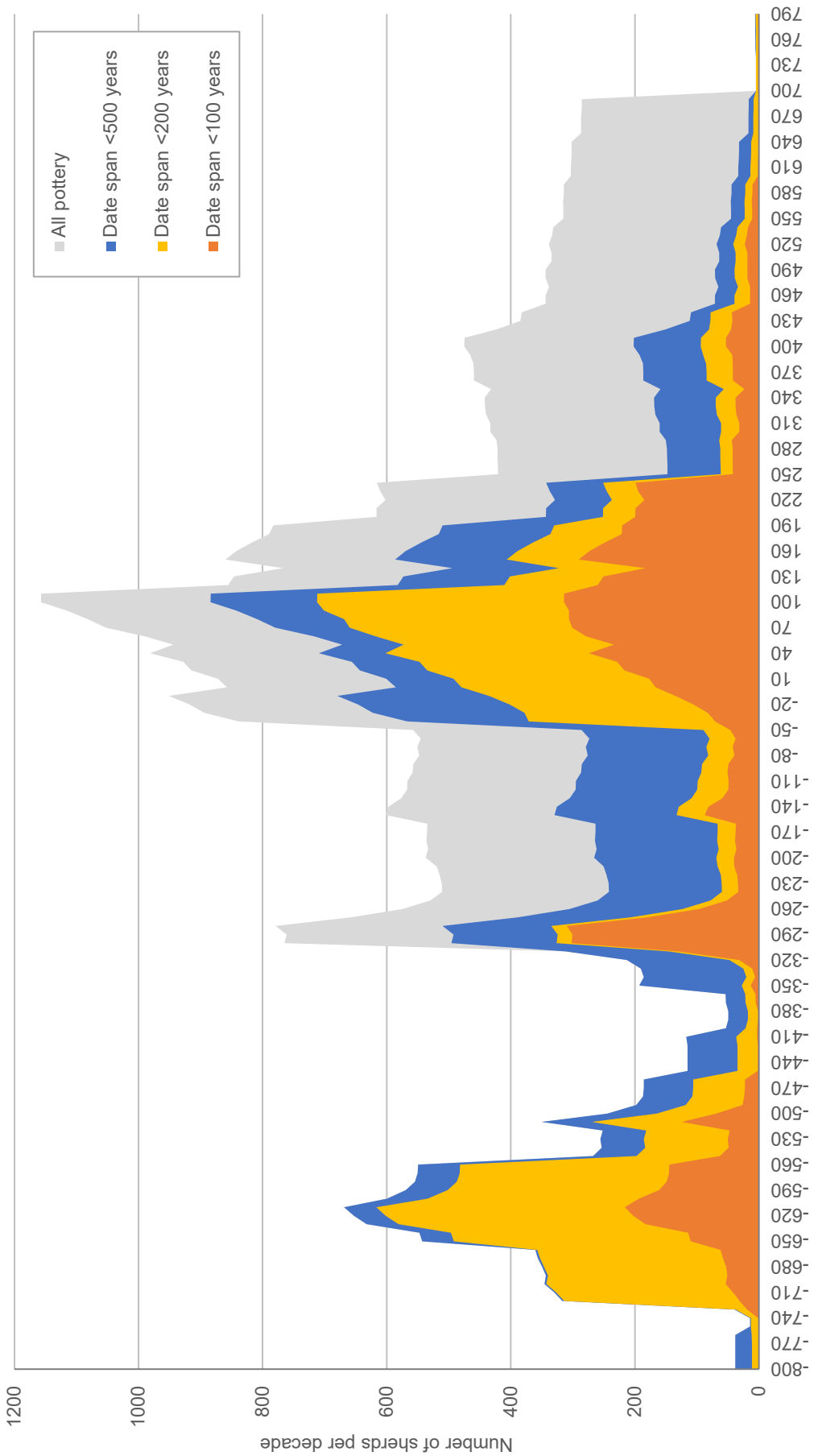


Figure 2.28. Weighted average number of sherds per decade recorded in the Tiber Valley Project database.

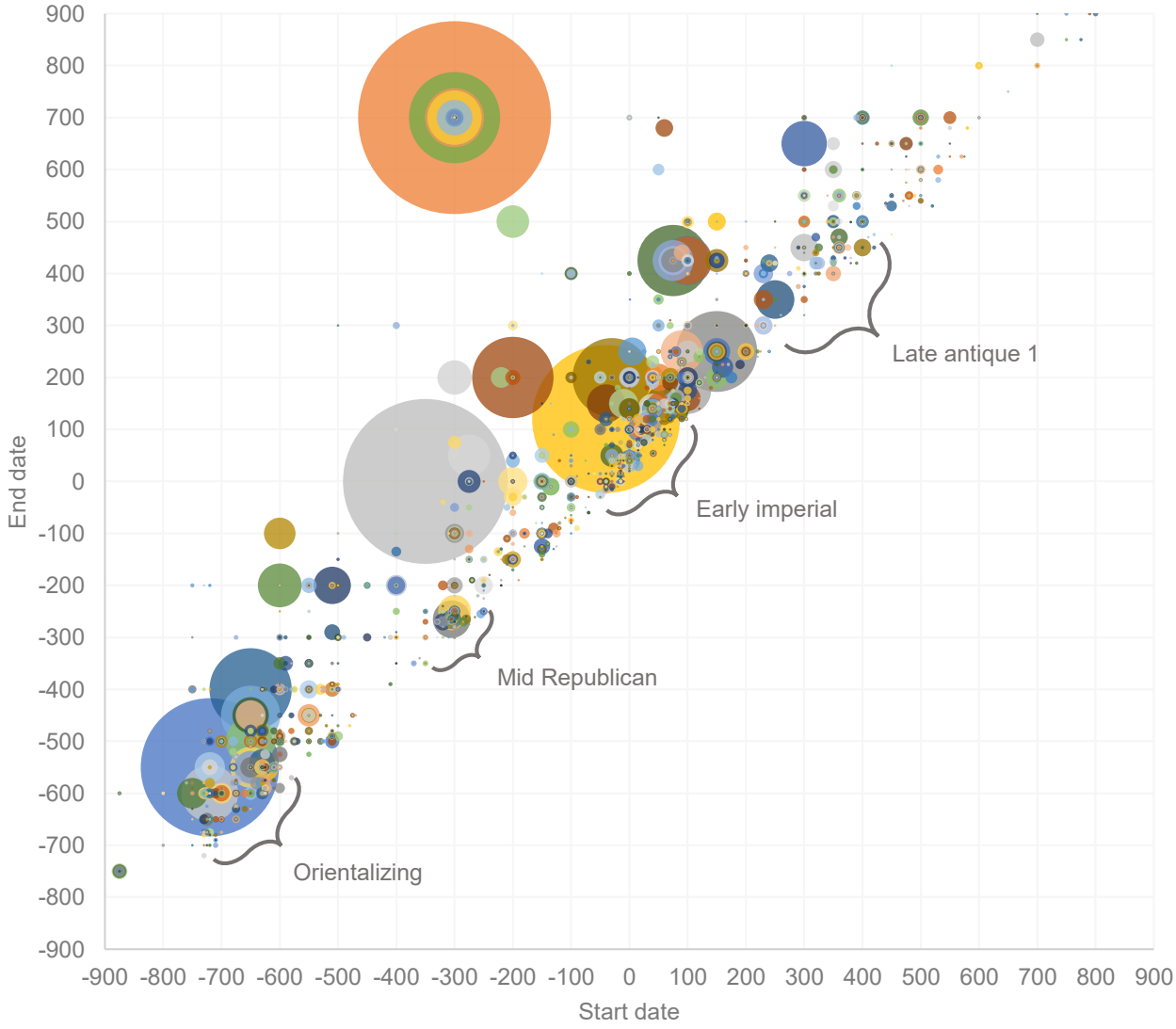


Figure 2.29. Diagnosticity of pottery recorded in the Tiber Valley Project database: form types plotted by start date (x-axis) and end date (y-axis). Symbol size is relative to number of sherds for each form type. Where y = x, the start and end date of a form type are the same; the higher the value of x relative to y, the less diagnostic the form type. (NB due to large quantity, Roman coarse-wares dated 300 BC–AD 300 are excluded).

In an attempt to incorporate as much of the chronological value of the pottery as possible, the Tiber Valley Project has adopted a hierarchical chronological framework, moving from generic to specific periods (Figure 2.30). This utilizes calendar dates to define each period, sometimes involving short overlaps. The results of the material restudy have been used to create an occupation history for each site based on this hierarchical framework. A sherd of undiagnostic black-gloss pottery (350–1 BC) would give dates of Roman and Republican; a black-gloss sherd with *petit estampilles* decoration (mostly *c.* 305–250 BC) would give dates of Roman, Republican and mid-Republican. Similarly, an 'undiagnostic' sherd of Roman coarse-ware would give a generic Roman date (350 BC–AD 700), whilst a Dyson PD 37 would narrow the date to the 100–30 BC, or late Republican 2. The system therefore allows for whatever chronological information is available from any sherd to be used for the dating of the site from which it was collected. Each site with restudied material was automatically dated using a series of database queries. The final occupation history of each site has then been individually assessed and the overall chronological profile of activity amended as appropriate, for example, short 'breaks' in activity were assessed in light of evidence for earlier and later material. The main effect of this review of site dating has been to increase the number of occupations in all periods, especially the Classical period (nonetheless settlement figures for this particular period remain low). The most significant problem has been caused by certain classes of material—all of limited number in the database, though of unusual importance—that do not fit comfortably into this hierarchical chronology approach, for example, internal slip ware, which extends across the Etruscan / Roman transition. Clearly it would not make sense to

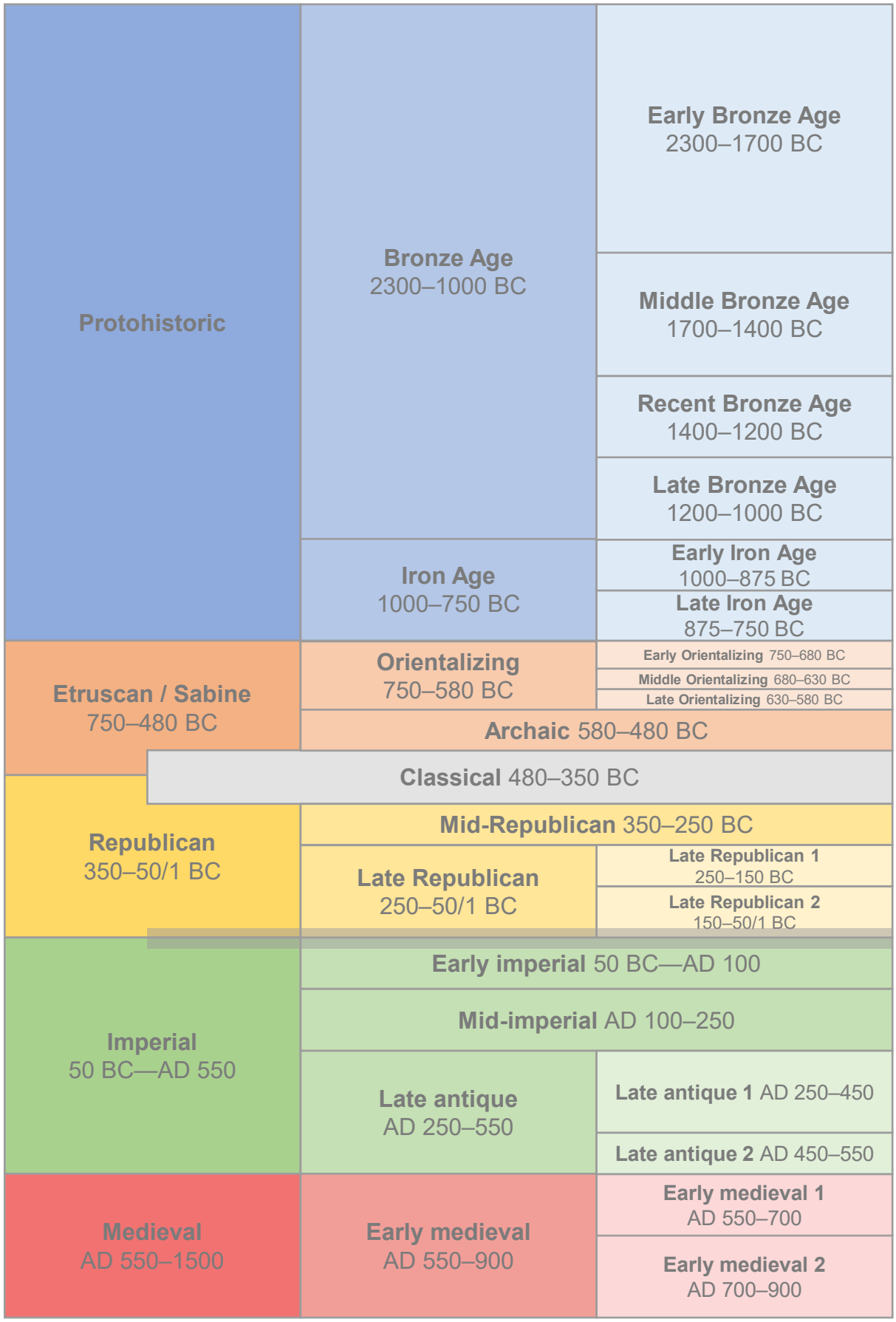


Figure 2.30. Tiber Valley Project: the main chronological periods (centre column), with generic (left) and sub-periods (right); row height relative to period length.

say that a single sherd of internal slip ware indicates that a site was occupied in two separate (and long) periods; in most cases, however, it was straightforward to use the rest of the assemblage from a site to establish whether the internal slip ware related to the end of Etruscan activity or the start of Roman-period activity (or whether there was continuity between them).

As explained above, the Tiber Valley Project has worked on the basis that a single dated sherd falling entirely within the date range of a period provides evidence for activity during that period. But not all sherds were created equal and it is useful to think about the dating of sites in terms of probability, that is, what is the probability that any or all periods of occupation will be recognized on the basis of the assemblage available from any individual site? Or, put another way, how confident are we that a site was *not* occupied in any specific period? Obviously, if we have ten successive chronological periods then we require at least ten precisely datable artefacts in order to identify occupation in each period with certainty; it is impossible for a site with an assemblage of only five artefacts to demonstrate full continuity. As well as sample size, another issue is that not all material is datable, or datable with the same level of confidence. In fact, usually only a minority of sherds from a site provide useful chronological information. Hence, although in theory, we would require three sherds to date all three sub-periods of the Republican period (mid-Republican; late Republican 1; late Republican 2), in reality we would require many more. This is because only around 20 per cent of black-gloss sherds can be dated more precisely than the full span of the Republican period, from 350–50/1 BC. Probability therefore suggests that we would have to find at least 15 black-gloss sherds in order to be confident of finding a sherd from each of the three periods. A third and closely related consideration increases the necessary sample size still further. The overall black-gloss pottery assemblage collected by the South Etruria Survey demonstrates clear variation in the amount of this pottery in circulation over time (indeed, this is one of the great strengths of a regional ceramic signature based on survey data);[216] in particular, the majority of closely datable sherds (approximately 80%) relate to the mid-Republican period. Probability therefore suggests that even if we do find three diagnostic sherds in our sample of 15, these are more likely to relate to the mid-Republican rather than the late Republican 1 and 2. We therefore need a still larger number of sherds in order to have confidence that we can reliably recognize all three Republican sub-periods or, conversely, to be confident that a site was *not* occupied in any one of them.[217] Although discussed here in relation to black-gloss ware and the Republican period, the same issues relate to many other classes of pottery and periods.

How we choose to divide up time into archaeological periods affects how much chronological value can be extracted from ceramic material. Sliced too thinly and much of the less-diagnostic ceramic material is rendered redundant; this approach allows patterns and trends to be more easily identified, but these are based on only a small sub-set of the data and may simply be the result of stochastic variation. Conversely, lumped together, we risk including so much generically dated material that finer-scale patterns are smoothed over by the bulk of less diagnostic material, especially the significant block of material that can be dated no closer than 300 BC and AD 700. The Tiber Valley Project's approach has been to seek a balance between the two. In particular, by using a hierarchical approach to dating, it is possible to maintain some role for the less well-dated sites in statistical analysis and the narratives built on them. As a result, we might argue against the use of any single set of definitive numbers of sites per period, as traditionally presented by regional surveys; instead we might talk about the numbers of sites at different scales or resolutions of analysis and with different levels of probability. Indeed, this is inherent in the figures published by recent surveys that have attempted to narrow their chronological resolution.[218] As such, the charts of site numbers featured in the following chapters make use of various levels of dating precision in order to show the effects of different ways of defining periods on the numbers of sites.

Another issue with a bearing on the choice of period length concerns the integration of legacy data. The majority of survey sites published by other surveys in the middle Tiber valley do not provide the level of detail (e.g. pottery form types) required to assign these sites to the most chronologically specific sub-phases possible for many of the South Etruria Survey sites. As a result, most legacy data sites can therefore be assigned only to more generic periods. It is also likely that legacy datasets tend to be skewed towards certain periods and that they therefore distort the overall chronological distribution of sites. Usually, for example, they recognize more Roman than Etruscan sites, and more imperial than Republican. In other words, just as legacy datasets introduce unevenness into the spatial dimension, they can also introduce bias into aggregate settlement trends over time. This means that different questions may require different selections of data in order to generate meaningful answers. It is also important to recall that spatial and temporal factors can interact

[216] Fentress and Perkins 1988; Fentress *et al.* 2004.

[217] See Witcher 2008a; Di Giuseppe 2012a; see section 3.3.

[218] The Albegna Valley Survey, for example, presents certain and uncertain site numbers for each period, where (un)certainty indicates the likelihood of activity (rather than the type of activity) Cambi 1999; Perkins 1999.

to create further complexity. It is inherently difficult, for example, to identify continuity in the results of the Ager Faliscus Survey as the quantities of material are relatively much less than in areas such the Ager Veientanus; this may give a false impression about the differing levels of settlement stability or instability in these two areas.[219]

Finally, it is useful to draw all these different strands together in order to demonstrate the effects of these issues on the overall chronological profile and historical development of settlement in the middle Tiber valley. Figure 2.31a shows the numbers of villas, farms and scatters in the Tiber Valley Project database relating to each period; this demonstrates an initial peak in the Orientalizing and Archaic periods, a sharp decline in the Classical period, and then steady growth from the mid-Republican to early and mid-imperial periods, before declining again through the late antique and early medieval periods. Figure 2.31b again shows the numbers of villas, farms and scatters dated to each period, but this time only those sites that have restudied South Etruria Survey material (i.e. it excludes legacy data sites and those South Etruria Survey sites without restudied material). Obviously, the total number of sites is reduced, but importantly the overall profiles of these charts remain the same: broadly, the Etruscan periods are high, the Classical low, and steady growth from the Republican period to an early imperial peak, and a late antique decline. Finally, the next chart (Figure 2.31c) shows the same three categories again, but this time using only examples that have 25 or more sherds of restudied pottery. Here, the total number of sites drops significantly, particularly for scatters, as would be expected, but again, the overall chronological profile remains basically the same.

An alternative way of visualising these data is to show the trends for the same three types of record (all database records; those with restudied pottery; those with >25 sherds of restudied pottery) in relation to scatters (Figure 2.32a), farms (Figure 2.32b) and villas (Figure 2.32c). Again, for both the villas and the farms, it is clear that the effect of reducing the size of the dataset by imposing ever-higher data-quality thresholds reduces the amplitude but does not fundamentally change the trends; the effect on scatters is more pronounced, but this is to be expected—scatters with more than 25 sherds that have not been interpreted as some sort of settlement site are rare. Finally, Figure 2.33 shows the percentage change in the numbers of records between each successive period based, again, on all database records, those with restudied pottery, and those with more than 25 sherds of restudied pottery; this reinforces the patterns shown in relation to scatters, farms and villas above, demonstrating that legacy data, without restudied material, have a tendency to exaggerate trends. The most probable explanation for this patterning is that the settlement histories of legacy data sites are more reliant on only a few generic pottery classes and therefore the activity documented at any individual site is more likely to be discontinuous compared to sites with restudied material, where better and more systematic knowledge of the pottery allows for previously undocumented periods of activity to be identified. Collectively, these charts permit some confidence in the chronological value of the overall database; clearly legacy data sites exaggerate the basic trends and the high threshold of 25 or more sherds depresses them, but these are ultimately changes in the amplitude of the same basic trends.

2.5 History of studies and and project methodologies: summary

In his synthesis of the South Etruria survey, Tim Potter reflected honestly on many of the shortcomings of the data collected over the two decades of fieldwork. Yet, he concluded, these problems 'dwindle in importance when compared with the most telling statistic: the enormous size of the overall sample'.[220] With this argument, appealing to the value of Big Data *avantre la lettre*, Potter was both correct and incorrect. A large dataset may overcome many individual issues—poor visibility in field X because field Y will compensate. But the quantity of records alone does not mitigate systemic issues within a dataset, for example, a bias towards larger sites or the inability to recognize particular categories of pottery. Moreover, a database containing the results of fieldwork undertaken over more than half a century, using evolving methods and technologies to answer ever-changing research questions, will inevitably contain many unsystematic biases too: better knowledge of ceramic typologies will render earlier surveys chronologically imprecise, and more intensive sampling strategies will find higher densities of sites than did older surveys. Through the first comprehensive, systematic evaluation of the South Etruria Survey, facilitated by the Tiber Valley Project's restudy of all the available material and documentary archives, this chapter suggests that it is not so much the size of the South Etruria Survey dataset that defines its importance, as the quality of the original work—a function both of its timing and the surveyors' expertise and organization. Despite the centrality of its results to a wide range of historical debates and narratives, the South Etruria Survey has, on occasion, been unfairly characterized as a less-than-scholarly undertaking, a weekend hobby rather than a fully articulated research project. A key aim of this chapter has been to demonstrate otherwise.[221] In the form of the Tiber

[219] Potter 1978.

[220] Potter 1979: esp. 10–18, and in each of the period-based chapters.

[221] See also Potter and Stoddart 2001; Smith 2018.

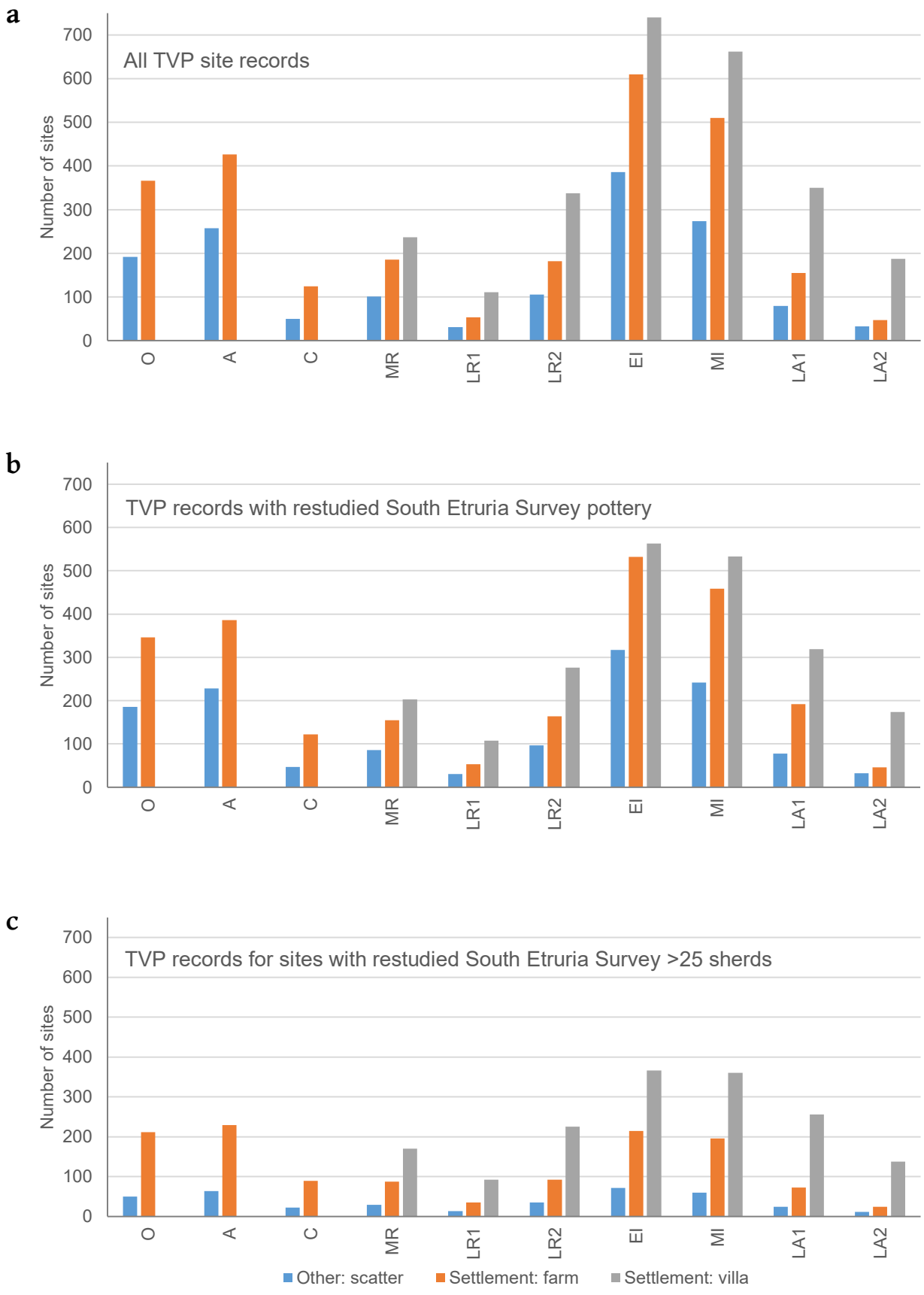


Figure 2.31a-c. Numbers of villas, farms and scatters by period; a) all Tiber Valley Project database records; b) those with restudied pottery; c) those with >25 sherds of restudied pottery.

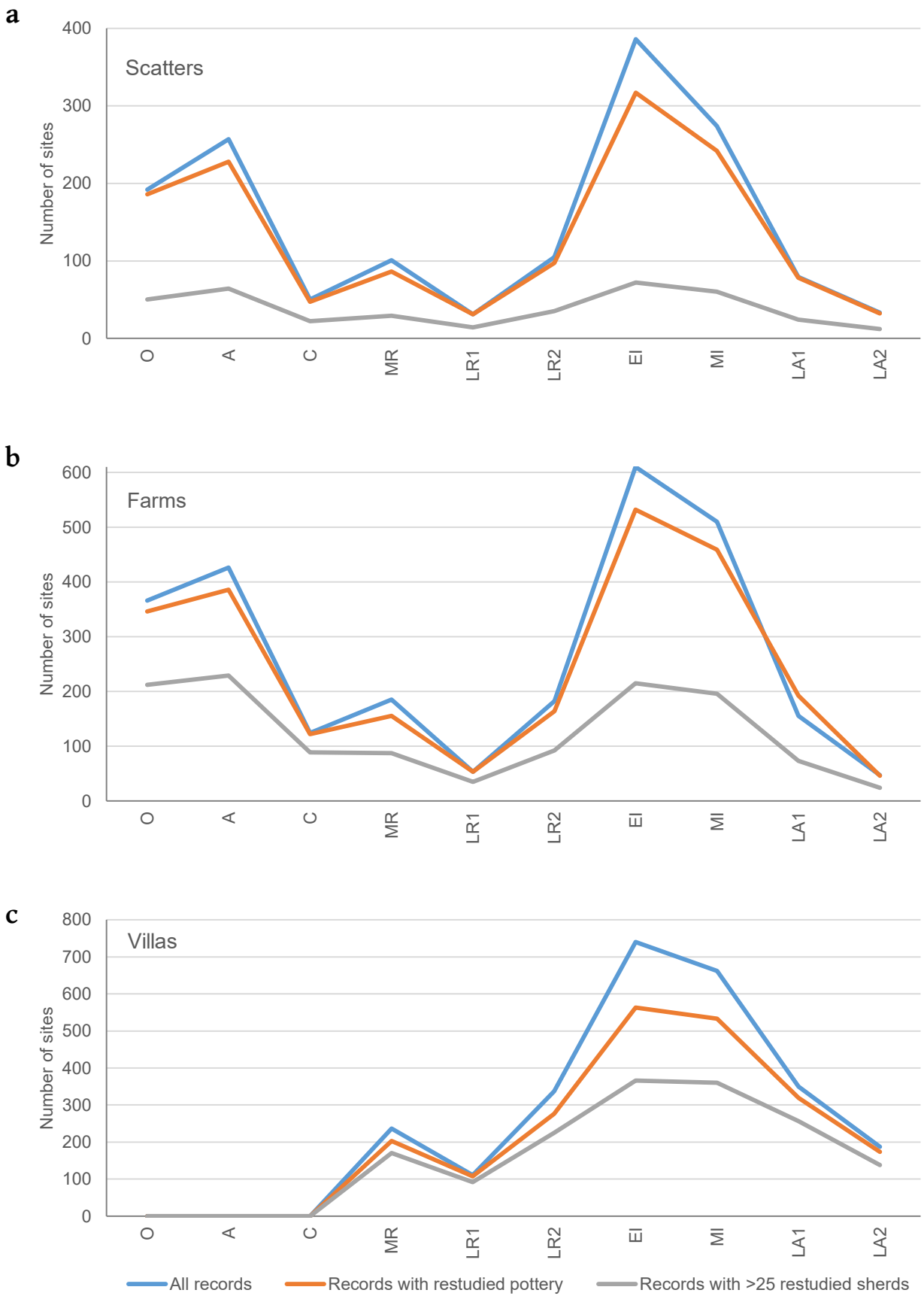


Figure 2.32a-c. Effects of different data quality thresholds (all database records; those with restudied pottery; those with >25 sherds of restudied pottery) on a) scatters; b) farms; c) villas.

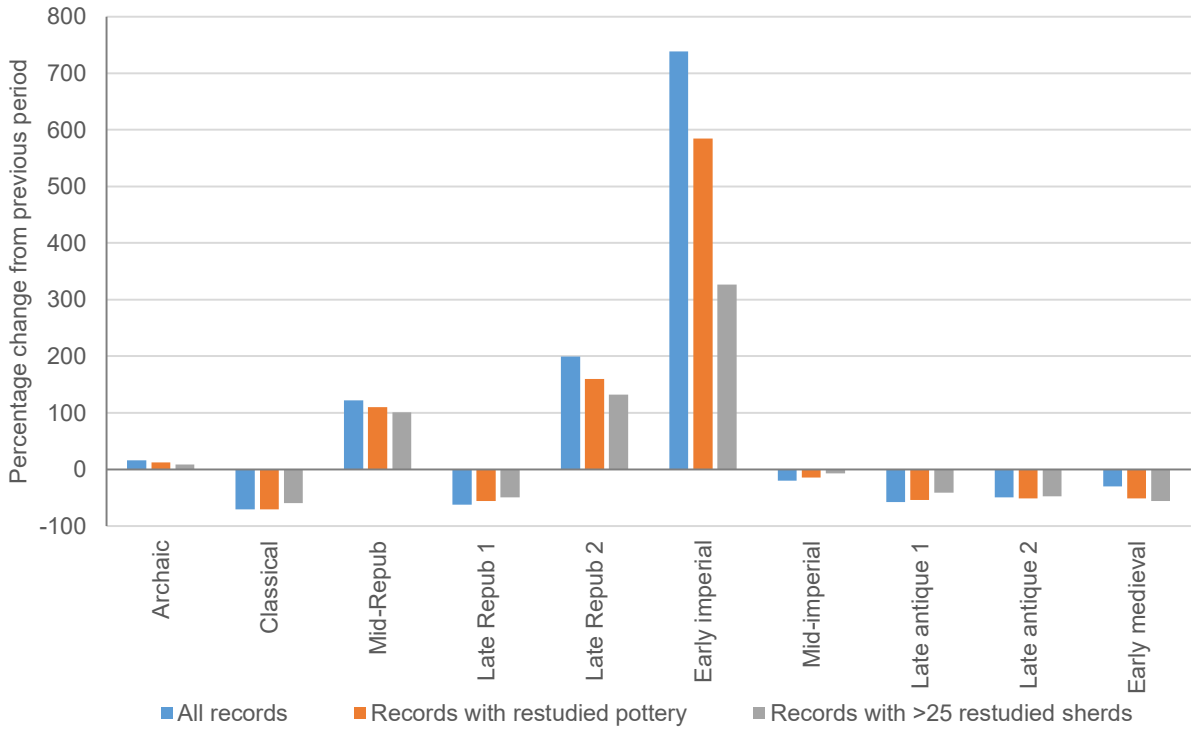


Figure 2.33. Percentage change in the numbers of records between each successive period: all database records, those with restudied pottery, and those with >25 sherds of restudied pottery (Archaic figure is relative to the Orientalizing period; Classical figure is relative to the Archaic, etc.).

Valley Project database, the results of the South Etruria Survey will now be able to contribute to existing and new historical debates with even greater confidence.

2.6 Overview of settlement trends in the middle Tiber valley

Chapters 3 to 7 provide detailed presentations and discussion of the Tiber Valley Project data, organized in chronological order from the Bronze Age through to the early medieval period, encompassing the two millennia from *c.* 1000 BC to AD 1000. Given the large number of charts presented, both in the current chapter and in those that follow, each visualising different specific subsets of the data, this final section provides a consolidated overview of the long-term settlement trends. Figure 2.34 summarizes the total number of records in the database for every period and sub-period, distinguishing between settlement sites (those with residential functions) and all other site types, ranging from tombs to kilns, and bridges to churches. This chart shows not only change in the number of database records over time, but also the variation in the proportions of settlement vs. non-settlement sites between periods; for example, the latter are especially high in the Archaic and the early imperial periods. Figure 2.35, like all the subsequent charts in this section, then focuses down on settlement sites, excluding all of the other varied types of non-residential site. This chart, again like those that follow, also omits a number of sub-periods from the Bronze Age through to the Orientalizing period, to focus on a core set of chronological divisions. The rising and falling numbers of settlement sites shown here underpin the narrative presented in the following five chapters. Figure 2.35 also visualizes those settlement sites that can be dated only to generic periods (e.g. Republican or late Republican) to demonstrate the additional sites that are excluded from many of the following discussions, but which must be kept in mind—most especially for those periods where these generically dated sites represent a substantial number in comparison to the more closely dated sites. This provides an impression of how the long-term trends in the numbers of settlement sites are affected by the division of time into longer or shorter blocks. Figure 2.36 relates these settlement numbers to the pottery dating evidence that underpins the chronology by plotting the weighted average number of sherds deposited per decade. This shows how the numbers of settlement sites and quantities of material culture vary broadly in line with one another, although with some variation in the amplitude of trends.

The final set of charts summarize the transitions between each consecutive pair of periods in relation to: the overall percentage change in the number of settlement sites between periods (Figure 2.37); the percentage of sites abandoned at the end of each

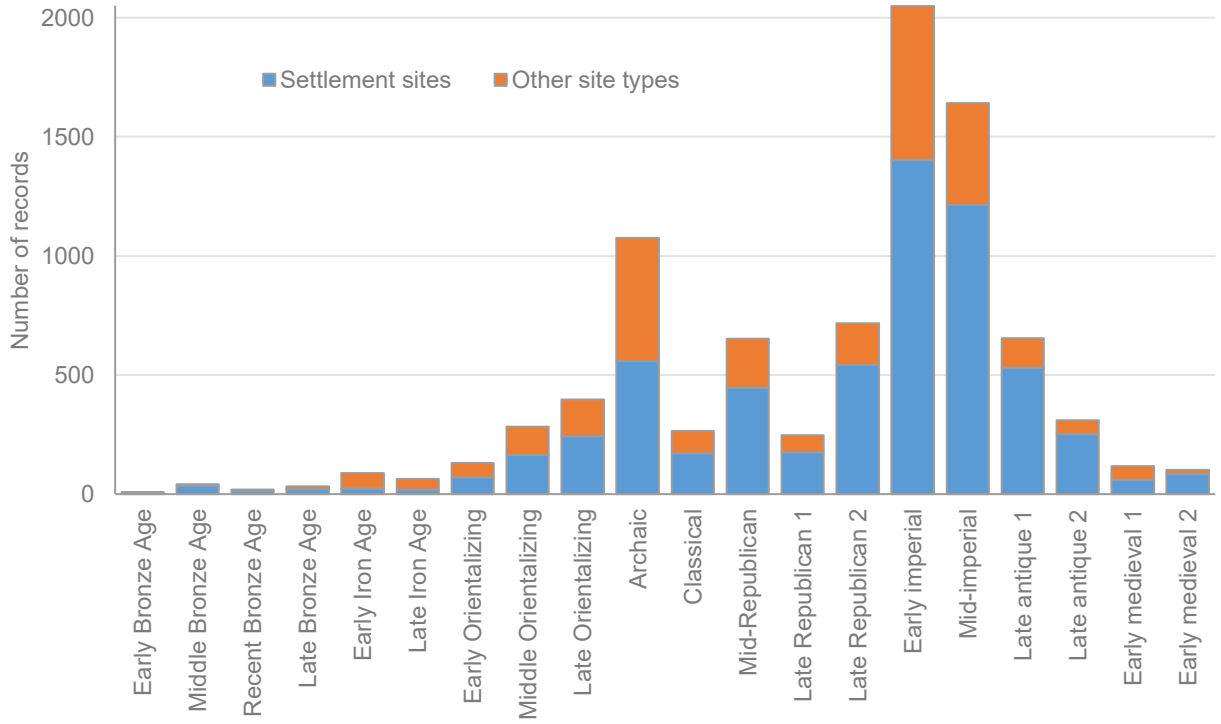


Figure 2.34. Numbers of Tiber Valley Project database records by period, showing the numbers of settlement sites versus all other types of site (e.g. funerary, infrastructure, etc.)

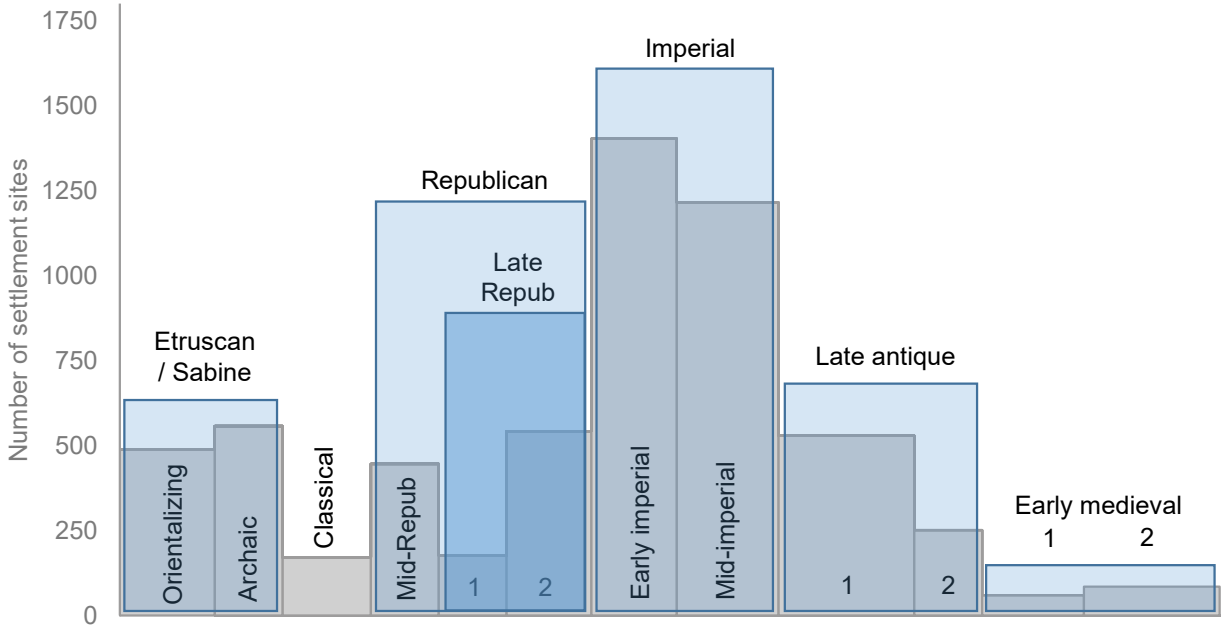


Figure 2.35. Numbers of settlement sites for each main period (grey) recorded in the Tiber Valley Project database, alongside the numbers of settlement sites recorded for generic periods (blue).

period (Figure 2.38); the percentage of sites continuing in occupation from the previous period (Figure 2.39); and the percentage of newly founded sites in each period (Figure 2.40). Collectively, these charts provide additional perspectives on the simple measure of changing numbers of settlement sites (Figure 2.35), by differentiating between periods of consolidation and growth (e.g. between the late Republican 2 and early imperial periods) and more radical moments of settlement dislocation, with large-scale settlement abandonment and the establishment of a new and more extensive network of sites (e.g. at the transition

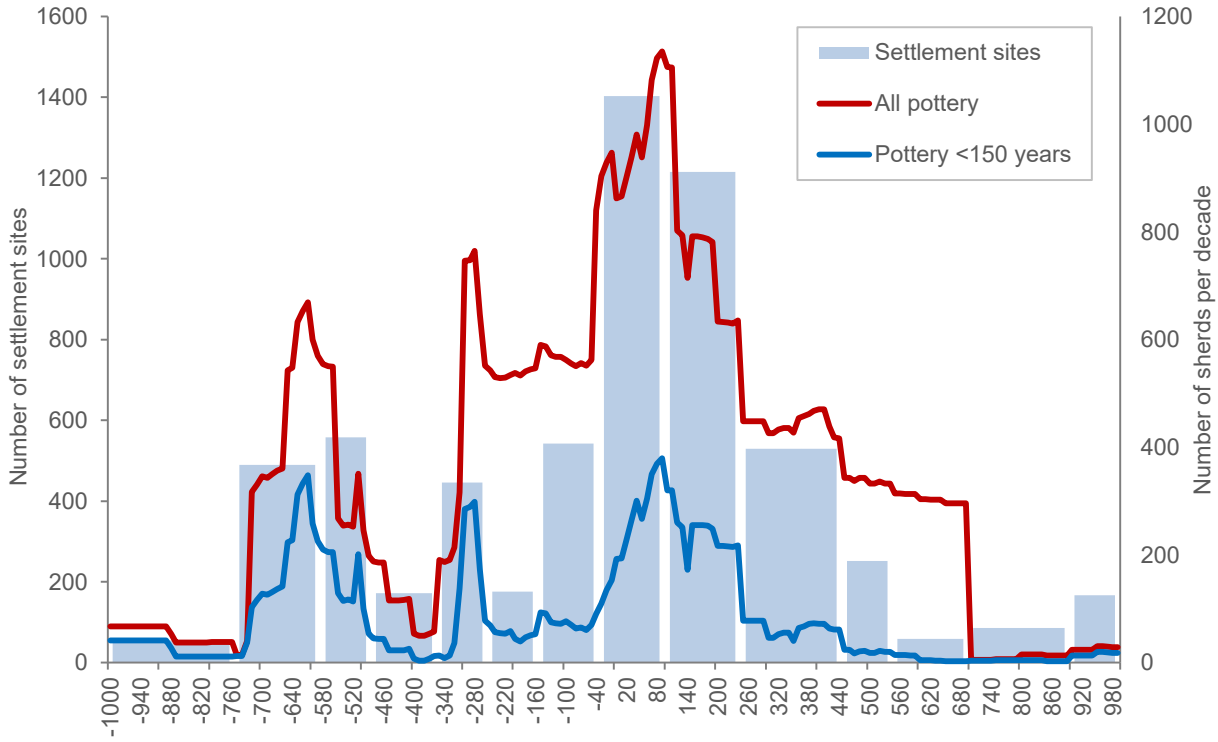


Figure 2.36. Weighted average number of sherds per decade versus number of settlement sites recorded in the Tiber Valley Project database.

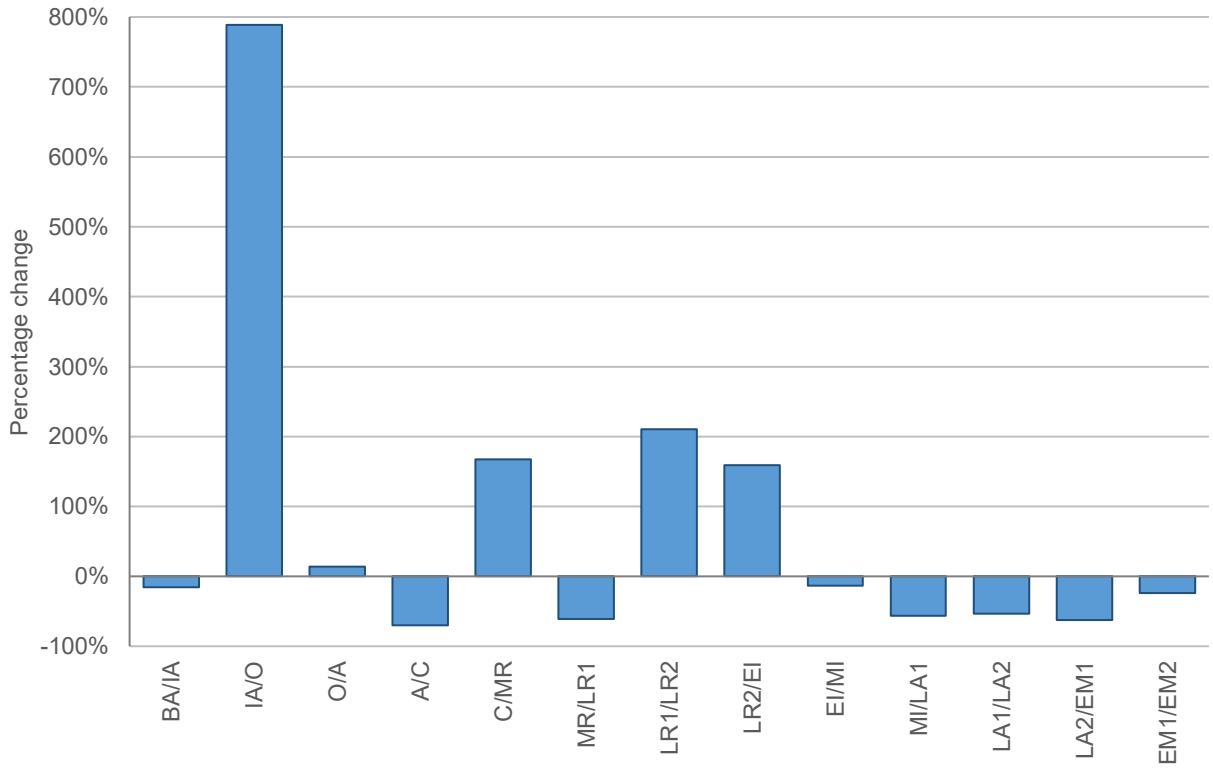


Figure 2.37. Percentage change in the numbers of settlement sites recorded in Tiber Valley Project database between consecutive chronological periods.

from the Classical to the mid-Republican period). The following chapters address all of these issues and more in greater detail with reference to each chronological period.

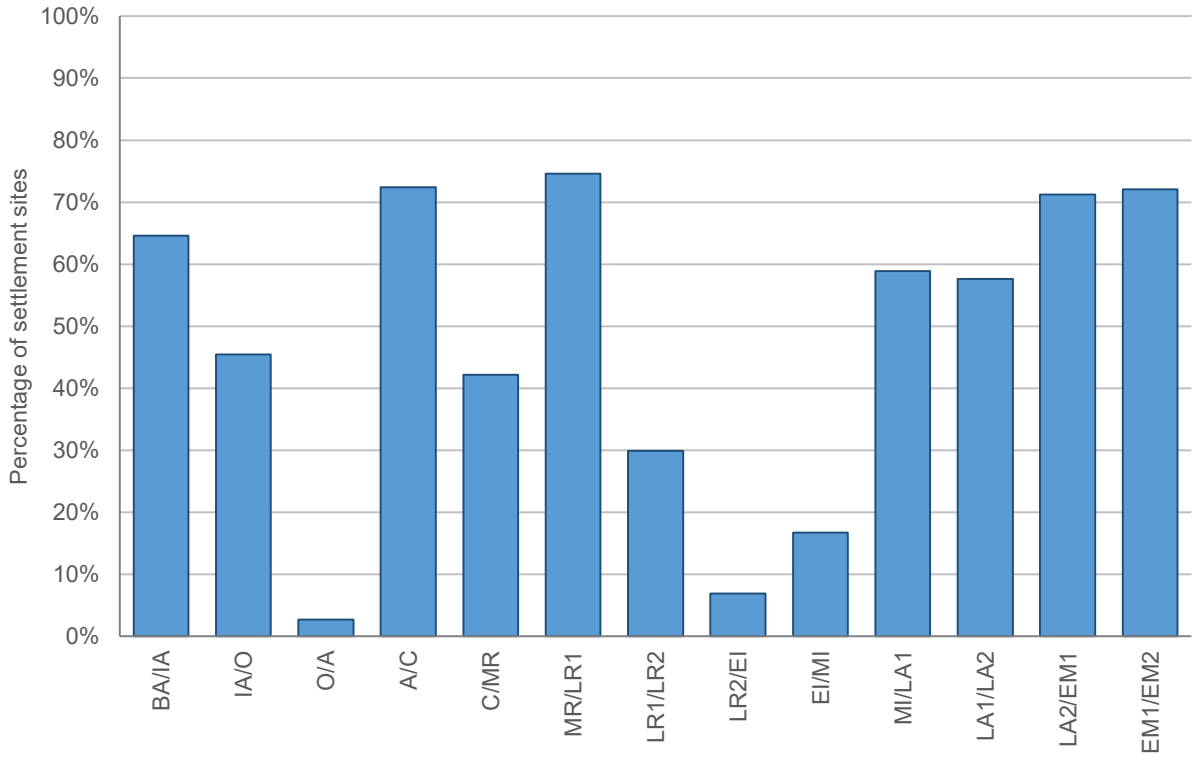


Figure 2.38. Percentages of settlement sites recorded in Tiber Valley Project database as abandoned at the transition between consecutive chronological periods.

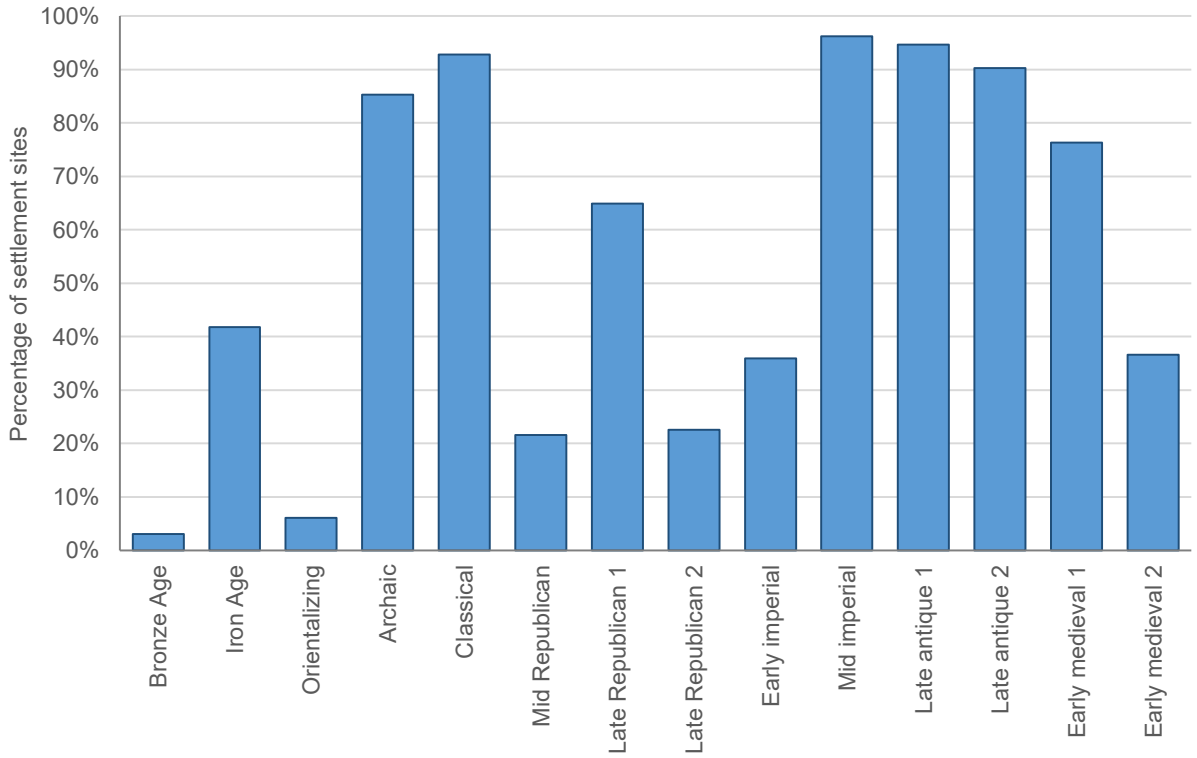


Figure 2.39. Percentages of settlement sites recorded in Tiber Valley Project database as continuing in occupation from the previous chronological period.

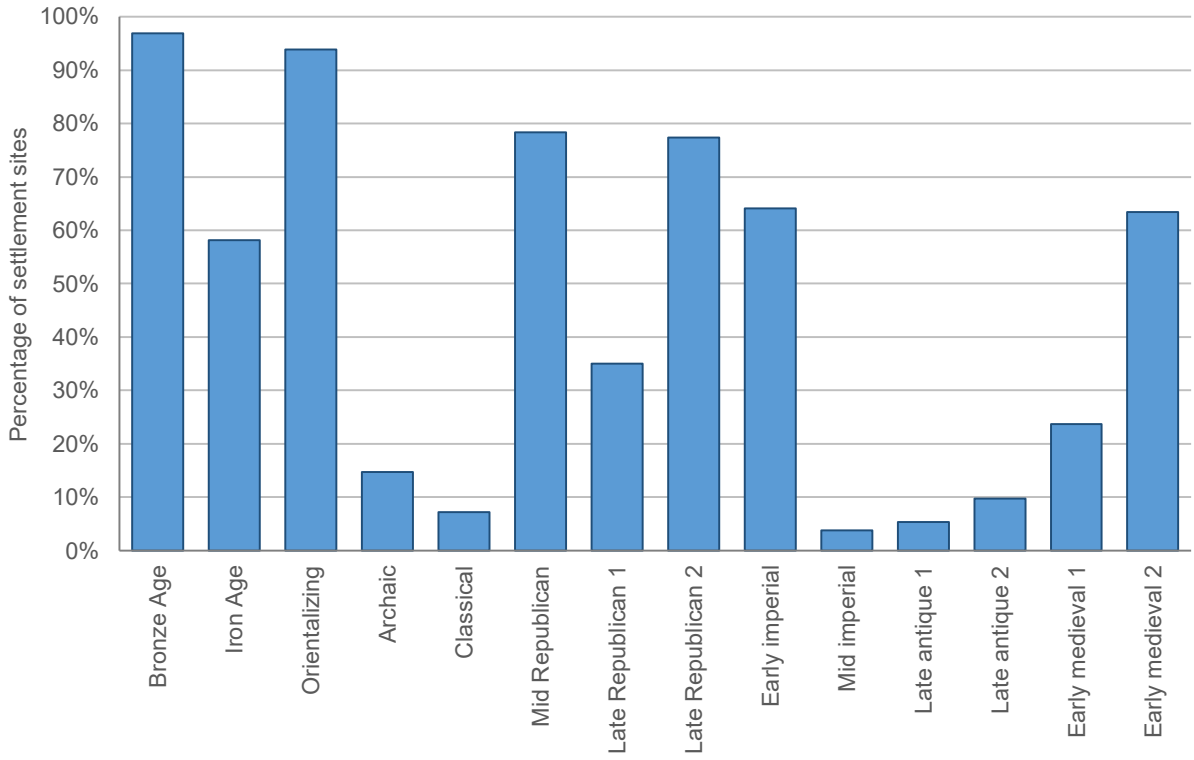


Figure 2.40. Percentages of settlement sites recorded in Tiber Valley Project database as newly founded in each of the main chronological periods.

Chapter 3

The protohistoric to late Republican landscapes of the middle Tiber valley

Helga Di Giuseppe*

In the late second millennium BC, the Bronze Age activity on the site of the later city of Rome was no different to that from dozens of other sites across the territory of modern-day Lazio. One thousand years later, Rome was one of the largest cities of the ancient world and the centre of a Mediterranean empire. This chapter traces the development of the middle Tiber valley through the late second and first millennium BC, alongside the emergence of the city of Rome, from the Late Bronze Age to the end of the Roman Republic. During this period, the numbers of sites grew exponentially, with the emergence of large urban centres and, later, the dispersal of small rural settlements (Figure 3.1).[222]

3.1 From the Bronze Age to the Iron Age

3.1.1 Overview of the thirteenth to eighth centuries BC

In recent years, numerous specialist studies have examined the complexity of local and regional protohistoric Italic societies. Although it has often been noted that the available data are inadequate and not uniform, this has not prevented the development of general syntheses for the entire peninsula, which in some cases compare large but very diverse regional areas.[222] Notwithstanding the scarcity of available data from the South Etruria Survey (only around 20 sites for

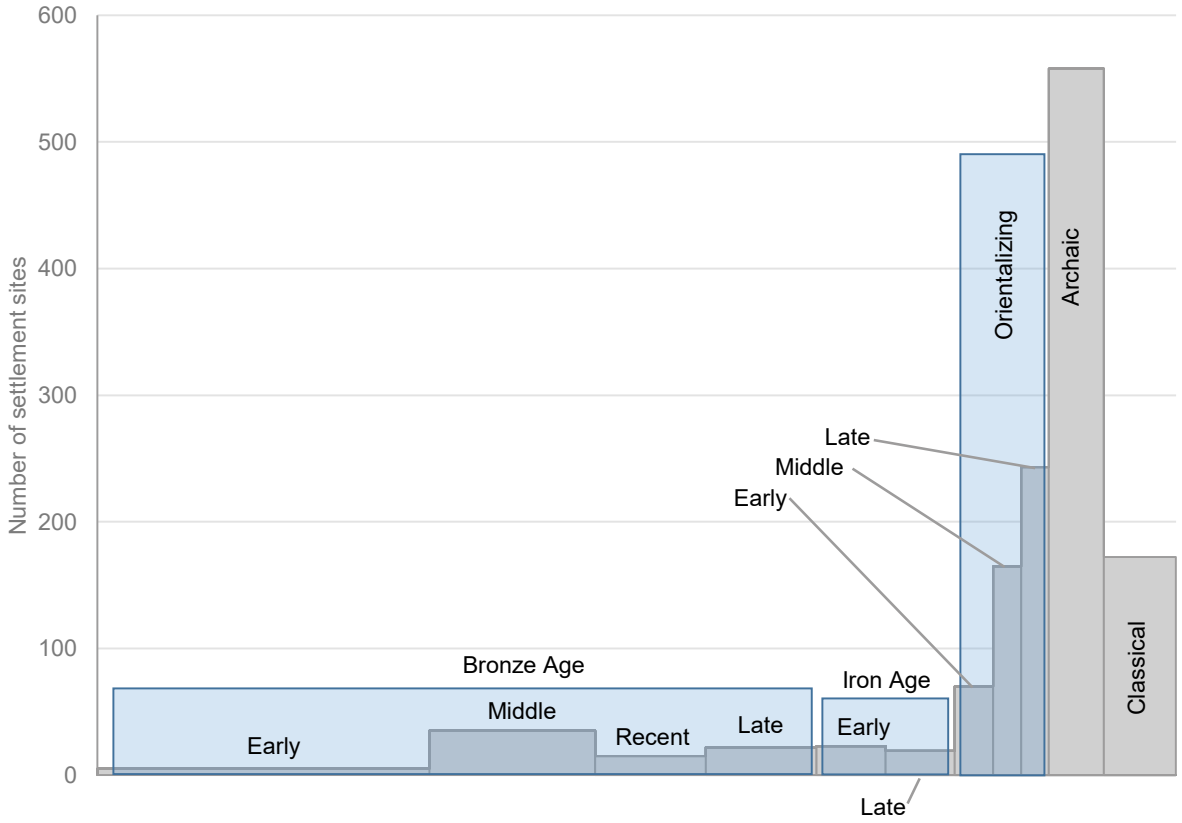


Figure 3.1. Numbers of settlement sites recorded in Tiber Valley Project database for the Early Bronze Age to the Classical periods (2300–350 BC), showing numbers of sites dated to specific and generic periods.

*This chapter was completed and submitted to the British School at Rome in July 2011 and does not therefore reference publications after that date. I am especially grateful to Sally Cann for her translation work.

[222] Peroni 1996; Guidi 2000b; Pacciarelli 2000.

the Bronze Age), Tim Potter attempted such a synthesis. This also made use of data from the excavations at Luni sul Mignone and Narce, the latter being his only excavation in South Etruria, in an attempt to formulate a chronological sequence that he himself considered far from reliable for this period.[223]

Yet the problems of methodology highlighted by Potter and the suggestions he put forward, not only regarding the nature of the settlements, but also dietary habits, and the social and organizational aspects of the populations in these areas, have stimulated subsequent studies. In fact, the middle Tiber valley remains a privileged observatory for the period between the Bronze and Iron Ages. Its proximity to Rome has stimulated a proliferation of excavations, surveys and thematic studies that have led to more precise chronologies and a better understanding of settlement dynamics in the area. Following Potter's synthesis (1979: 40–5), many other teams have continued to work on the middle Tiber valley, re-visiting the South Etruria Survey sites and exploring new areas. They have constantly updated the topographical data and increasingly refined interpretative syntheses. Examples include the projects of di Gennaro in the South Etruria area, at Fidenae, Crustumerium and surroundings; Guidi in the Galantina area; Firmani in the Sabina Tiberina; Pacciarelli in the South Etruria area, with particular attention on the Acquafredda settlement; Cifani and Stoddart in the Faliscan area; Verga in the Ager Foronovanus; and more recently Schiappelli, who, together with di Gennaro, carried out a restudy of the protohistoric material from the South Etruria Survey.[224]

Before proceeding with the presentation of the results of the Tiber Valley Project, it must be said that one of the main problems faced by the project from a methodological point of view was the definition of settlement types. This was made particularly difficult by the lack of meaningful parameters, such as the size of find scatters. Overall, the protohistoric period has been treated using the same criteria as used for other periods. However, the smaller amount of available archaeological evidence, often due to continued occupation that has obliterated or diminished earlier evidence, has required that these criteria be adjusted where necessary. For example, one or two fragments of protohistoric material were sufficient to identify a settlement in the case of contexts with long periods of continuous occupation; and where there was no evidence of later occupation simple find scatters were taken to indicate a settlement site.

Table 3.1. Dating terminology used for the Bronze and Iron Ages (based on Pacciarelli 1996).

Period	Dates
Early Bronze Age	2300–1700 BC
Middle Bronze Age	1700–1350 BC
Recent Bronze Age	1350–1200 BC
Late Bronze Age	1200–1000 BC
Early Iron Age (I Ferro 1)	1000–875 BC
Late Iron Age (I Ferro 2)	875–750 BC

The re-examination of the South Etruria Survey, together with the bibliographical research for both sides of the Tiber, has led to the identification of approximately 325 sites of Protohistoric date, around 110 of which can be classified as settlement sites. The settlement numbers are shown in Figure 3.1. The dating terminology used is that proposed by Pacciarelli, and is summarized in Table 3.1.[225]

3.1.2 The Bronze Age

The preliminary stages of the emergence and development of urban centres in the middle Tiber valley must be sought in the Middle and Late Bronze Age (Figure 3.2), when numerous villages with relatively stable occupation were scattered across the landscape. Of medium size (5–6 ha), they were situated mainly on hill slopes, close to watercourses, or on high ground that was naturally or artificially defended.[226] The documented settlements show common characteristics throughout the middle Tiber valley, on both sides of the river, including Rome. The first evidence of permanent settlements in the Italian peninsula dates to the Middle Bronze Age. At Rome, for example, the Capitoline Hill was occupied; its high ground is naturally defended, and the slopes reached down to the Tiber, which

[223] Potter 1979; 1976a (Narce). Doubts over chronology, Potter 1979: 41.

[224] For di Gennaro's work in the South Etruria area, see di Gennaro 1979; 1982; 1988; 2000; di Gennaro and Guidi 2000; di Gennaro, Schiappelli and Amoroso 2004; Belardelli *et al.* 2007; di Gennaro and Barbaro 2008; di Gennaro *et al.* 2008; di Gennaro and Guidi 2009. For Guidi's work in the Galantina area: Guidi 1986: Gabrielli, Guidi and Santoro 2003; Candelato, Guidi and Santoro 2004; Guidi, Santoro and Agneni 2004; Guidi, Santoro and Rioda 2008. For the work of Filippi: Filippi 1979; 1990; Filippi and Pacciarelli 1991. For Firmani's work in the Sabina Tiberina: Firmani 1979; 1985. For Fugazzola Delpino's work: Fugazzola Delpino 1982. On Pacciarelli's work in the South Etruria area with particular attention to Acquafredda: Pacciarelli 1991; 1995; 2000; 2009; 2010; Damiani and Pacciarelli 2006. For Cifani's work in the Faliscan area, see Cifani 2003; 2012; 2013; and for that of Stoddart: Edwards, Malone and Stoddart 1995; Harrison *et al.* 2004; Ceccarelli and Stoddart 2007; Cifani, Opitz and Stoddart 2007; Stoddart 2004–7; Fulminante and Stoddart 2010; Redhouse and Stoddart 2011, Fulminante and Stoddart 2013. For the work of Verga on the Ager Foronovanus: Verga 2006; and for that of Schiappelli: Schiappelli 2003; 2008a, 2008b.

[225] Pacciarelli 1996.

[226] For such villages, see di Gennaro 1979; Pacciarelli 1991: 166; 1995: 72; di Gennaro 2000; di Gennaro and Guidi 2000: 104–5; Guidi 2000a: 97; Pacciarelli 2000: 88–9.

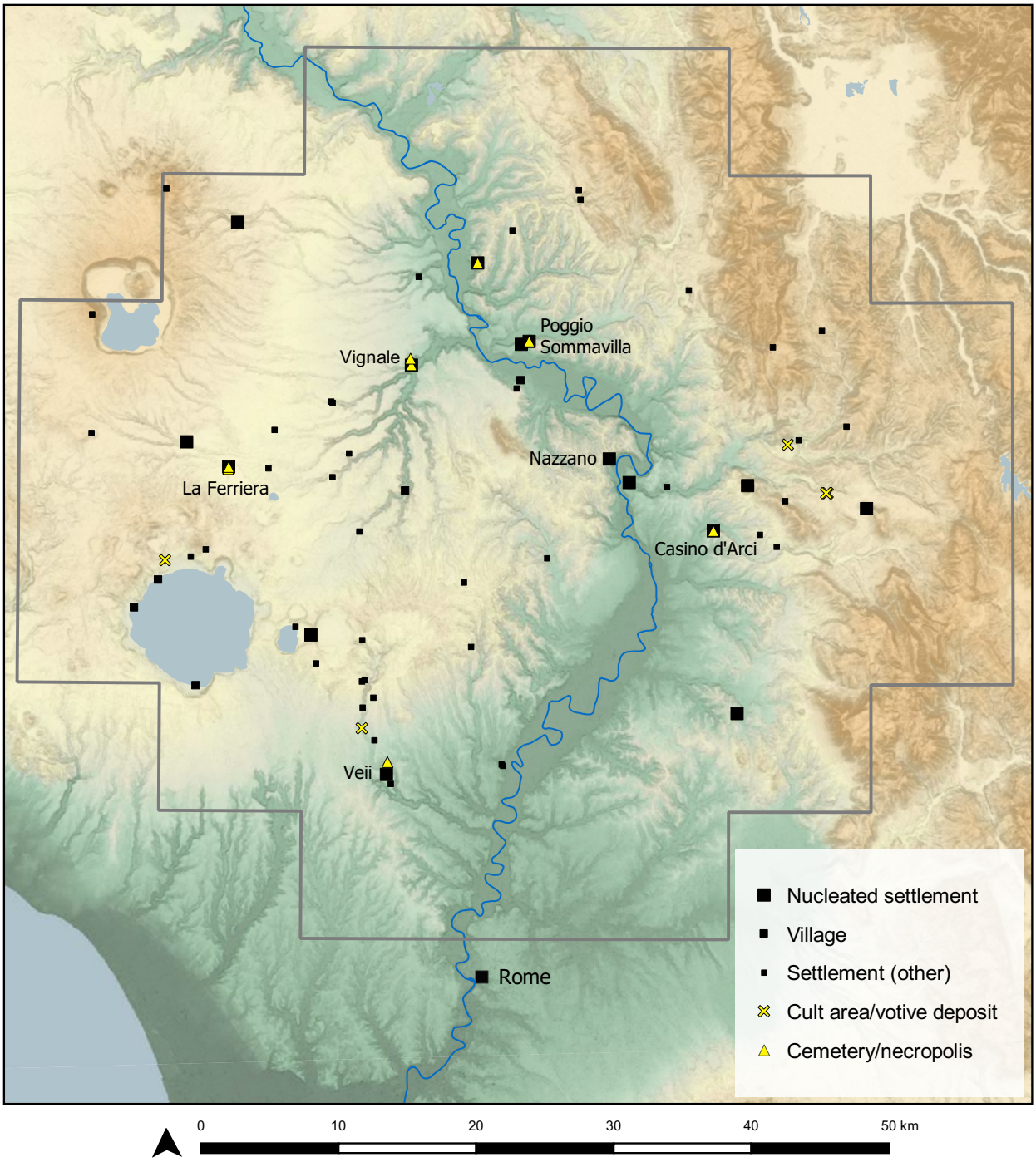


Figure 3.2. Tiber Valley Project settlement sites in the Bronze Age (2300–1000 BC).

provided water and food supplies.[227] In this phase, the river was yet to become a barrier or border between different ethnic groups—Etruscans, Latins, Faliscans and Sabines—as it became in a later period, but rather attracted groups of people who settled along its banks in a cultural 'continuum'.[228]

In the Sabina, the Bronze Age settlements are located on hills overlooking the Tiber, at the confluence of rivers, or on high ground further inland and facing the Apennine areas which were reached by the transhumance routes.[229] As in Rome, these choices reconciled the requirements to live in healthy places, away from marshes, to be able to defend oneself, and to have easy access to water sources.

[227] Carandini 1997: 113–14.
[228] Colonna 1986a; Carandini 1997: 118.
[229] Angle 1979; Angle, Gianni and Guidi 1982; 1995.

Table 3.2. Bronze Age sites in the Sabina Tiberina (based on data from Pacciarelli 2000: 88, fig. 46).

Site	Type of site	MB1–2	MB3	RB	FB
Vignanello	Small defended site	■			
Le Cese	Small defended site	■			
Moje Santa Cristina	Undefended site	■	■		
Moje di Castellano	Undefended site	■	■		
Morricone	Undefended site	■	■		
Vignale	Undefended site	■	■		
Tancia	Undefended site	■	■		
Morrone	Undefended site	■	■		
Grotta Rocco di Prospero	Natural cave	■	■		
Grotta di Battifratta	Natural cave	■	■		
Grotta Scura	Natural cave	■	■		
San Salvatore	Undefended site		■		
Fosso della Banditella	Undefended site ?		■		
Caprignano	Small defended site	■	■	■	
Molino Linguessa	?			■	
Cures Sabini	Undefended site?			■	
Poggio Sommavilla	Small defended site		■		■
Monte San Martino	Large defended site			■	■
Monte Calvo	Large defended site				■
Magliano	Large defended site				■
I Colli	Open site				■
Casale Tosti	Open site				■

The undefended sites of Moje di Santa Cristina, Moje di Castellano, Morricone, Vignale, Tancia, Morrone and San Salvatore can be dated to the Middle Bronze Age. These settlements are situated at passes, on natural terraces without defences, and on hill slopes close to watercourses and springs. The smaller sites of Vignanello, Caprignano, Le Cese and Poggio Sommavilla also date to this period, and they are situated on hills and plateaux characterized by sheer slopes and torrents below, and thus are considered to be defended (Table 3.2). In this phase, a series of caves is also documented (Battifratta and Grotta Scura), probably used for funerary or cult purposes.

A recent restudy of the available documentation suggests the possibility that in the Sabina Tiberina area (here also referred to as the left bank of the Tiber), small open sites survived longer than in South Etruria (the right bank of the Tiber). Pacciarelli thought that there may have been some delay in the beginning of the transfer of settlement to upland positions in the Sabina Tiberina area.[230] This occurred during the transition between the Middle Bronze Age and Recent Bronze Age along the entire left bank of the Tiber and in contrast to developments on the right bank.[231] The methodological problem that makes this reconstruction difficult is that the scatters of material, especially those attributed to hillslope sites, do not always represent primary depositions, but rather are often the result of hill-wash from sites originally situated in more elevated positions, invalidating any attempt to interpret the data.[232]

Figure 3.1 shows a growth in settlement numbers for the Middle Bronze Age—almost all new foundations—followed by a decrease in the Recent Bronze Age, corresponding with the gradual decrease in the numbers of small open sites.

[230] Pacciarelli 2000.
[231] di Gennaro and Guidi 2009: 430.
[232] Pacciarelli 2000: 88–9.

On the right side of the Tiber, following the Tiber Valley Project's restudy of the material, a better understanding of Bronze Age pottery has made it possible to attribute many more South Etruria Survey sites (approximately double) to this chronological horizon than was possible in an earlier phase of the history of these studies (20 sites).[233]

As in the Sabina, in the Middle Bronze Age Etruria Tiberina saw a growth in the number of scattered settlements, almost all of them new foundations. The subsequent decline in the Recent Bronze Age, which is also seen in other areas, corresponds, we now think, to the gradual decrease in the number of small open sites and the concentration on and selection of certain settlements.[234] Di Gennaro admits that such a decline may be due as much to the more lacunose knowledge of this period, given the lack of a specific study, and the fact that the evidence comes primarily from survey, as to any historical reasons. Moreover, the large Final Bronze Age settlements may have obliterated the Recent Bronze Age occupation that had been present. However, it is clear that in South Etruria during the Recent Bronze Age the settlements on high ground were, for the first time, numerically greater than the smaller scattered settlements in lower areas.[235]

The interior of South Etruria is characterized in this phase by typologies of settlement that were far more varied with respect to those of Sabina Tiberina, partly because of a greater diversification of the geo-morphological landscape. For example, Monte Sant'Angelo belongs to the category of lakeside settlements that develop a lake-based economy complementing the agricultural and stock-raising economies.[236] Following a phase of sparse and scattered occupation of the territory on the slopes and valley floor typical of the Middle Bronze Age, the settlement was artificially fortified.[237] The site's position, topographical context and continuity of occupation into the Iron Age distinguish it from the discontinuous occupation that characterized the rest of Etruria from the Bronze to the Iron Ages.[238] Similar examples of lakeside settlements are known from the lake beds of Lake Baccano and Lake Bracciano, in the localities of Vicarello and Vigna Grande.[239] On the latter site, materials dating to the Early Iron Age suggest some continuity of occupation.[240]

The Final Bronze Age (Figure 3.1) was characterized by a further increase in the number of settlements, most of them new foundations, and it is possible to see a change in the choice of settlement locations. This is the point at which the first occupation of large sites is documented, such as Monte San Martino, Monte Calvo, Magliano, I Colli, Fontanelle and Casale Tosti,[241] all on the left bank of the Tiber, and Vallerano, Vignale, Torre Stroppa, Nepi-il Pizzo, Monte Sant'Angelo, Narce, Sutri, Veii and Isola Farnese on the right bank.[242] All are situated on isolated outcrops, with steep slopes, located at strategic points for controlling the routes into the interior and what we imagine to be their increasingly large territories. Continuity with preceding phases can be seen in the settlements of Vignale, Nepi-il Pizzo and Narce, where the Middle Bronze Age is also attested, and with further research it may be possible to demonstrate that 'each of the major Final Bronze Age centres situated on high ground could correspond to another Recent Bronze Age settlement', and further that:

> 'the slow advance of knowledge of the territorial situation in south Etruria, makes it possible to recognize a Recent Bronze Age settlement system deeply rooted in the territory and characterized by the stability of the major centres. The main systemic transformation during this period affected the small centres, whose tendency to decrease in number is for the moment easier to prove through comparison with preceding phases than on the basis of their chronological attribution to different phases within the Recent Bronze Age'.[243]

The archaeological evidence for the Final Bronze Age from the sites on high ground, identified on the right bank of the Tiber both by the South Etruria Survey and other investigations, is almost always constituted by a few scattered fragments.[244] This is the case for Veii, where tall vertical handles with hollow and solid horns are also documented at Campetti, Macchia Grande and Piazza d'Armi in the Early Iron Age, but we still do not have certain evidence of permanent occupation on the plateau.[245] There is more evidence from Narce of

[233] Potter 1979: 41.
[234] Pacciarelli 1991; cf. Schiappelli 2008a.
[235] di Gennaro 2004: 201, 205–6; 2000: 102.
[236] Pacciarelli 1991: 208.
[237] Cozza and Pasqui 1894.
[238] Pacciarelli 1986: 275.
[239] For examples at Lake Baccano, see Pacciarelli 1986: 275; for Lake Bracciano: Fugazzola Delpino 1982; Pacciarelli 1986; Giacobelli 1991: 29; Virgili 1994: 188–91.
[240] Iaia and Mandolesi 1993: 29.
[241] For sites on the left bank of the Tiber, see Angle 1979; Firmani 1979; Cardarelli *et al.* 1980; Angle, Gianni and Guidi 1982; Filippi and Leggio 1982; Firmani 1985; Santoro 1988; Filippi 1990; Filippi and Pacciarelli 1991: 16, 47; Angle, Gianni and Guidi, 1992, 1995. See note 212 above; Santoro and Zarattini 1995; Belardelli and Pascucci 1996; Santoro 1997; Pacciarelli 2000: 87–39; Guidi and Santoro 2004.
[242] For sites on the right bank of the Tiber, see Potter 1976a; Potter 1979: 43–6; di Gennaro and Passoni 1998: 135, fig. 3; di Gennaro *et al.* 2002: 32–41; Rajala 2003; 2004; Babbi 2005; Rajala 2005a, 2005b; Rajala 2006; di Gennaro *et al.* 2008.
[243] di Gennaro 2004: 207.
[244] Vignale, Monte Sant'Elia, Narce, Sutri and Veii: Potter 1976a; Potter 1979: 43–6; di Gennaro and Passoni 1998: 135, fig. 3.
[245] For the material from Veii, see Delpino and Fugazzola Delpino 1980: 180; Bartoloni 1983; Pacciarelli 1991: 175; Bartoloni, Berardinetti and Drago 1994: 1–4; Bartoloni *et al.* 2001; Bartoloni 2004. See also: Schiappelli 2012: 329.

permanent occupation on its slopes, even if this is not corroborated by tomb evidence.[246] Recent excavations at Isola Farnese have brought to light a settlement that confirms Bronze Age occupation on the high part of the small plateau.[247] This discovery further confirmed the type of settlement in use during the Final Bronze Age: oval huts partially delimited by stones, partially rock-cut with walls of plant material. Inside, fine- and coarse-ware pottery, loom weights, cooking stands and querns attest the typical domestic activities of working raw materials, food preparation and weaving. Similar structures are known in the Sabina at the site of ancient Cures, where they remained in use at least until the end of the seventh century, when the first dwellings with stone footings and clay walls were built.[248]

3.1.3. Social characterization

The Final Bronze Age is recognized as a moment of great change within indigenous communities, leading gradually to complex social organizations. The archaeological evidence for this process has been found within cremation burials. The presence of helmets as lids on biconical jars suggests, for example, the recognition of the warrior's role within the community. Tools such as spindle-whorls and loom weights for working animal and plant fibres in female tombs were the expression of specific abilities, the prerogative of a few individuals. The possibility of accumulating high-status goods in storerooms and the diversification of the shape and size of the dwellings equally represent clear signs of social distinctions.[249] The more widely spread oval and rectangular huts documented at Isola Farnese, Cures Sabini, Monte Morra, Veii and Tarquinia contrast with the rare cases at Luni sul Mignone and Monte Rovello, where there are large elongated structures—long-houses—characterized by long occupation, and thought to be elite dwellings.[250] The group of long-houses at Tarquinia has been interpreted as indicative of a settlement organization in which groups of families, perhaps related, lived on the same plot of land, under the authority of a single head of the family.[251]

3.1.4 The Iron Age and the birth of proto-urban centres

The archaeological evidence for the period between the Middle Bronze Age and the Early Iron Age (tenth to ninth centuries BC) reveals the relatively sudden abandonment of village communities, and the development of a phenomenon described by Iaia and Mandolesi as 'concentration of settlements on defended areas',[252] which led to the large proto-urban centres of the Early Iron Age (Figure 3.3).[253] Among the possible causes cited for such aggregations are an increase in population together with new influxes of population. This made it necessary to defend territories in order to sustain their exploitation, and this would have been impossible without communal organization. The introduction of advanced agricultural technologies would have made increased demands on the population in terms of leadership, internal tensions and competition between communities. These factors, combined with the subsequent move to defensive positions from which to control the territory, road and river access routes may also have contributed to the rise of large centres.[254] As well as social and demographic aspects, the role of climate change must also be mentioned. The rise in the level of lakes and increase in rainfall, which generated the sudden abandonment of Bronze Age lakeside settlements, must have pushed the inhabitants of villages on valley floors to choose healthier and better-protected positions.[255]

The phenomenon of the birth of the town has involved scholars in a heated debate. This has focused mainly on the large settlements of Orvieto, Bisenzio, Vulci, Tarquinia, Caere and Veii in South Etruria, and Gabii, Crustumerium, Fidenae, Lavinium, Ardea and Antium in *Latium vetus*.[256] The principal points of the discussion in the archaeological literature revolve around two schools of thought.[257] The first, which we might call 'continuist', argues for the idea of a preliminary organization of the plateaux founded on a system of separate villages, which merged through synoecism in the final phase of the Bronze Age.[258] The second, which we might describe as 'revolutionary', proposes that the plateaux were occupied during a single moment, in the final phase of the Bronze Age, following significant social conflicts between groups headed by competing elites.[259]

Both theories are based on a few localized excavations and mainly on surface surveys, which show a 'leopard-spot' distribution of materials. This means that scatters of material are surrounded by larger areas where finds are absent. This pattern can be found at Veii, Caere, Tarquinia and Vulci.[260] Based on this evidence, scholars have imagined groups of huts interspersed with areas

246 Cifani 2003: 102.
247 Bartoloni *et al.* 2001: 5–7.
248 Guidi *et al.* 1996.
249 Pacciarelli 1991: 193–7; di Gennaro and Guidi 2000: 105.
250 For Isola Farnese, see Bartoloni *et al.* 2001; Babbi 2005. For Cures Sabini: Guidi *et al.* 1996. For Monte Morra: Angle, Gianni and Guidi 1995: 84. For Veii: Ward-Perkins 1961: 22. For Tarquinia: Pacciarelli 2000: 168–70, fig. 102. For Luni sul Mignone and Monte Rovello: Perkins and Attolini 1992; Torelli 1998 [2001]: 68–9; Terrenato 2001.
251 Pacciarelli 2000: 170; Leighton 2004.
252 Iaia and Mandolesi 1993: 17; translated from the Italian.
253 For the large proto-urban centres of the Iron Age, see di Gennaro 1982; 1986; 2000; Guidi 2000b.
254 di Gennaro and Guidi 2009: 429–30.
255 Carancini 1986; Tamburini 1995: 14–16.
256 Pacciarelli 2000: 125, fig. 69.
257 See Guidi 2000b; Pacciarelli 2000; D'Agostino 2005.
258 Ward-Perkins 1961; Colonna 1988b; Guidi 1991–2; Bietti Sestieri 1997.
259 Peroni 1989; Pacciarelli 1994; Carandini 1997.
260 Guaitoli 1981; Pacciarelli 2000: 166–7, figs 100–1.

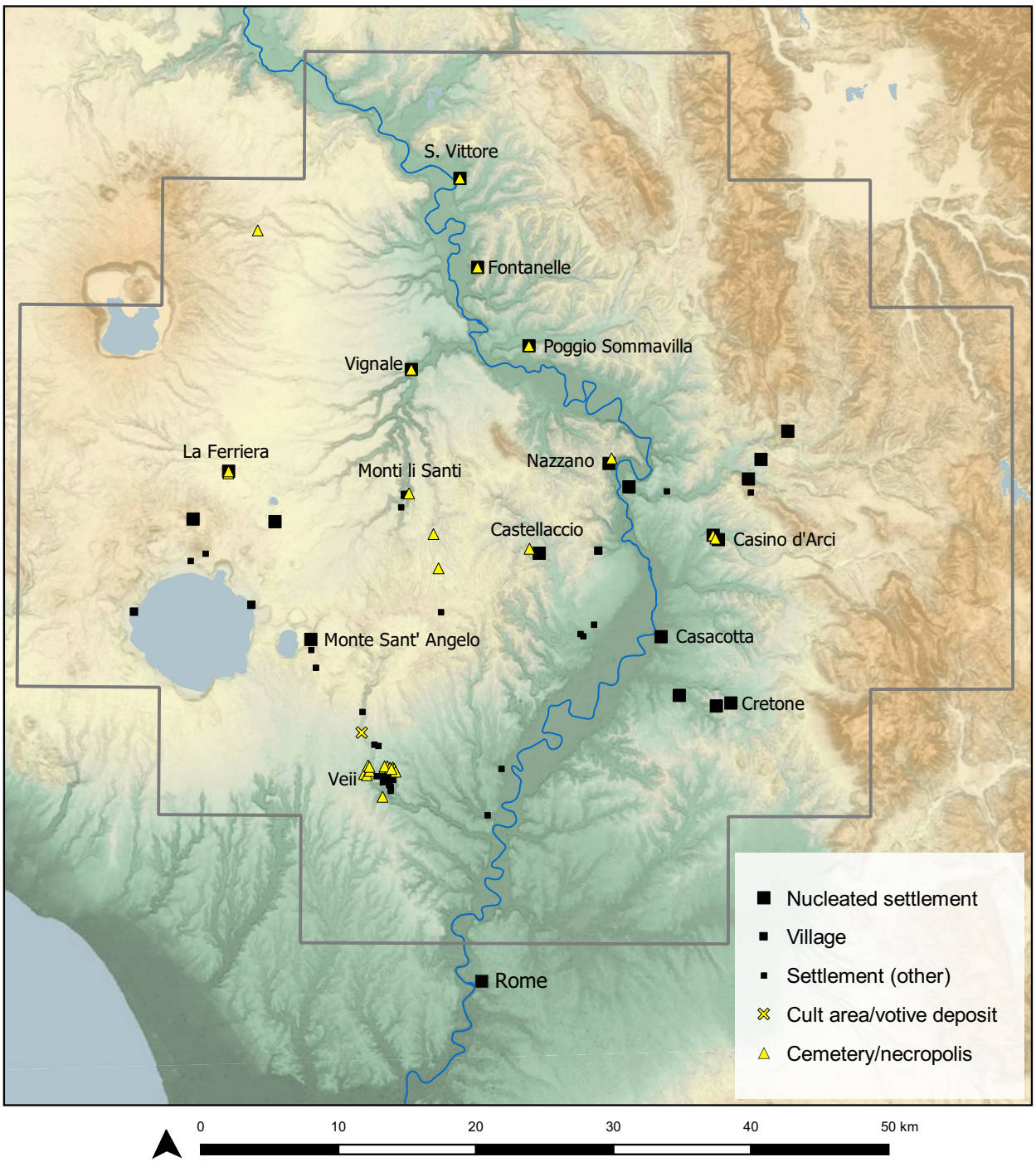


Figure 3.3. Tiber Valley Project settlement sites in the Iron Age (1000–750 BC).

used for stock-raising and agriculture. In other words, the choice of large plateaux was dictated by the necessity of making mixed use of the space. According to some scholars this could be linked to the first distributions of land to the heads of families, which the sources claim to have taken place at Rome in the eighth century BC,[261] though we have no reliable evidence for this.

The available documentation is still insufficient to be able to prove either model.[262] Pacciarelli has suggested that the aggregations on plateaux represent the initial phase of a process, completely different from that of village organization, in which various groups do not yet have a co-ordinated political organization and which may be considered to have been concluded only in a later period. di Gennaro and Guidi have suggested an organization of the plateaux in this first development

[261] The scholars who have proposed this include: Colonna 1986b: 388; Peroni 1989; Pacciarelli 1991: 199; di Gennaro 2000; Guidi 2000a: 90.

[262] di Gennaro and Guidi 2000: 111.

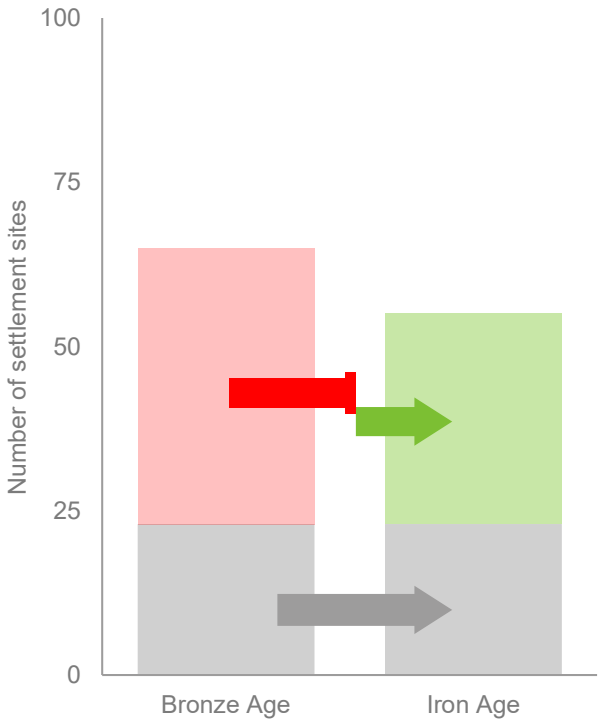


Figure 3.4. Numbers of settlement sites abandoned (pink), continuing (grey) and newly founded (green) at the transition from the Bronze Age to the Iron Age.

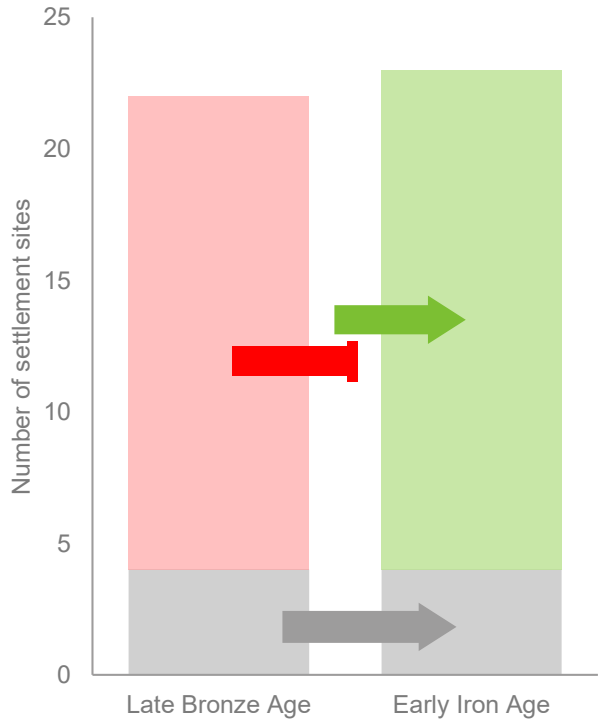


Figure 3.5. Numbers of settlement sites abandoned (pink), continuing (grey) and newly founded (green) at the transition from the Late Bronze Age to the Early Iron Age.

phase in sectors, with separate village groups each with their own head, the heads coming together to form a local council. It was only in the eighth century BC that the figure of a single head or king of the whole community emerged, a member of the aristocratic elite, whose power was based on land ownership. The much-discussed phenomenon of the inheritance of status in this regard would also have been attested by the reoccupation, in the Orientalizing period, of Final Bronze Age settlements, which, it is suggested, were the residences of the ancestors of the aristocratic class.[263] We recall that in the final phase of the Bronze Age, groups representing different sorts of elite seem to emerge and this is supported by evidence from the Final Bronze Age necropoleis in South Etruria. In fact, in some tombs the presence of distinctive grave-goods attests to the emergence of individuals belonging to a military elite. The evidence comprises complex armaments, stone boxes, pointed lids on biconical urns seen as symbolical representations of helmets, hut-urns, gold and glass-paste ornaments, all interpreted as signs of prestige and power in the sphere of non-egalitarian societies.[264] Again, in an infant burial dating to the very end of the Final Bronze Age, found at Guidonia in Sabina, the richness of the tomb group has been taken as symbolic of the inheritance of status, and further confirmation of the existence of strong social differentiation within the different central Italic communities.[265]

Returning to the Tiber Valley Project, we have seen that the data, although scarce, provides a relatively homogeneous picture for both sides of the Tiber until the Bronze Age, but the situation begins to diverge in the Iron Age.

Figure 3.4 shows the transition from the Bronze Age to the Iron Age based on all settlement sites (i.e. excluding cemeteries, etc.) from these two very broad periods. Figure 3.5 refines the picture by focusing on settlement sites dated to the Late Bronze Age and the Early Iron Age. Figure 3.6 shows the percentages of continuing versus new sites, differentiating between Etruria and Sabina.

The transition from the Late Bronze Age to the Early Iron Age demonstrates a small overall increase in the number of settlement sites; however, the modest change in the totals disguises very high levels of abandonment and new foundation, with a similar picture on both sides of the Tiber. The transition from the Early Iron Age to Late Iron Age demonstrates a modest decline in overall numbers but, again, only a minority of sites continued in occupation, with large numbers abandoned and new

[263] Pacciarelli 2000; di Gennaro and Guidi 2000: 108; Capogrossi Colognesi 1988.
[264] Pacciarelli 1991: 197–200; 2000: 202–12.
[265] Guidi 2000a: 88; Pacciarelli 2000: 216. For a critical discussion on the meaning of status indicators in tombs in Etruria, see Riva 2010: 72–107.

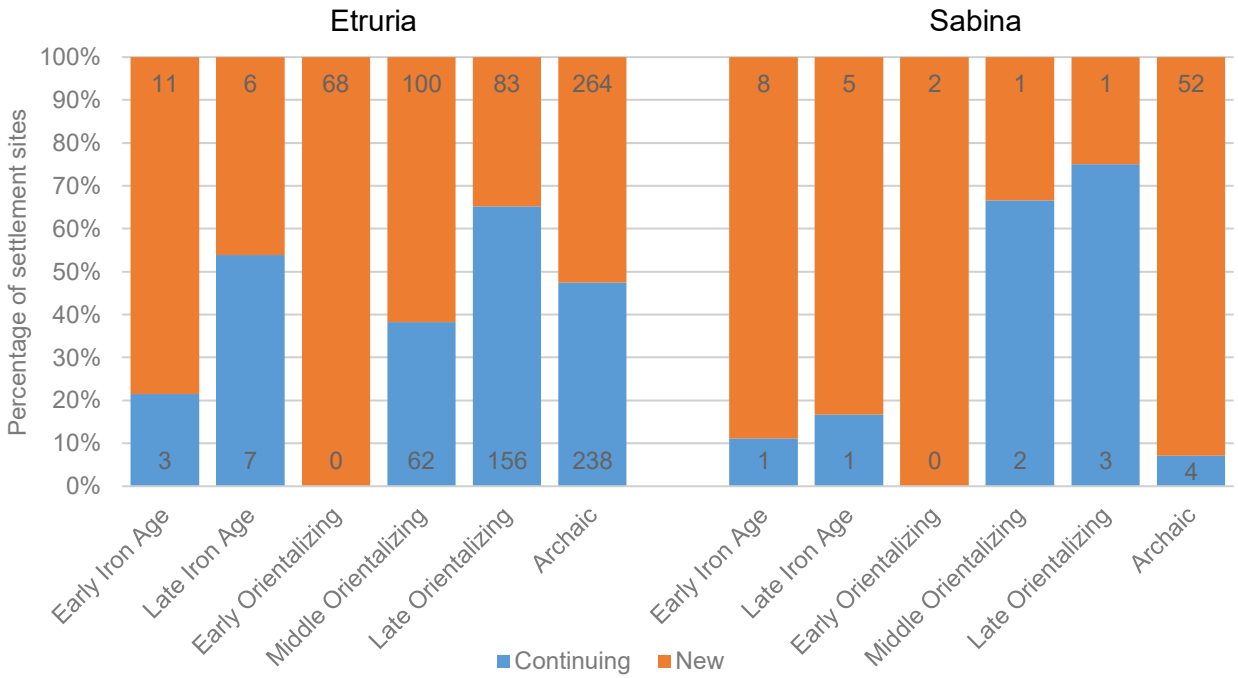


Figure 3.6. Percentages of continuing versus new sites from the Iron Age to the Archaic period (750–580 BC): South Etruria versus Sabina.

sites founded (Figure 3.7). Continuity, however, is more marked in South Etruria than in Sabina. Despite the scarcity of evidence, it seems likely that, as argued by Guidi, it was in this phase, slightly later than in South Etruria, that the concentration of population on a few centres on elevated sites provided the impetus for proto-urban centres in the Sabina.[266] In this case, it was important to understand how far the available data reflect different histories in the two areas or simply different investigative methodologies. The analysis of the data from the Galantina Survey, undertaken by Guidi, Santoro and the BSR, has provided evidence to confirm these preliminary models and therefore the two different histories for the Sabine and Etruscan areas.[267]

The Iron Age settlements are represented mainly by sites with long continuity of occupation, all attested by small amounts of material scattered over the surface of plateaux or on their slopes, such as at Poggio Sommavilla, Fontanelle, Magliano Sabina, Veii, Narce, Nepi, Sutri-La Ferriera, Vignale and Monte Lombrica, some of which were destined to be the sites of future towns in the middle Tiber valley.[268] In South Etruria, at least six large centres developed, including Veii, Cerveteri, Tarquinia, Bisenzio and Volsinii, organized on plateaux of 90–175 ha, which contained the populations that during the Bronze Age were distributed in village communities. The smaller centres tended to disappear

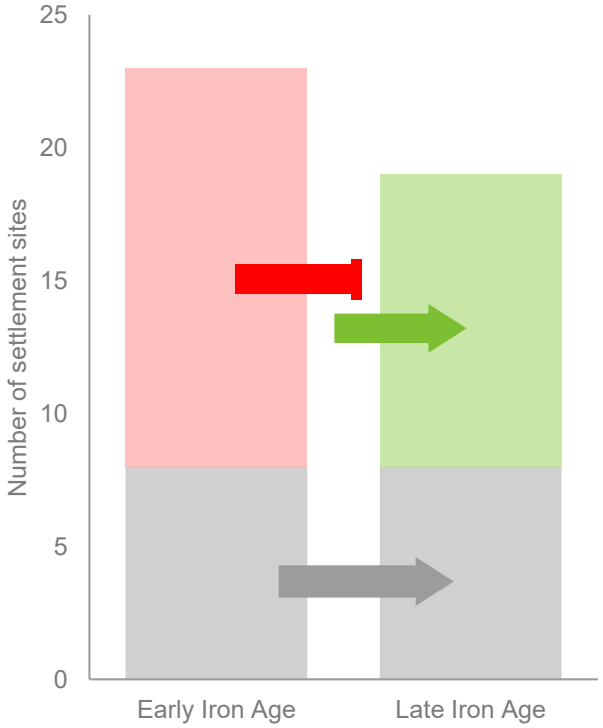


Figure 3.7. Numbers of settlement sites abandoned (pink), continuing (grey) and newly founded (green) at the transition from the Early Iron Age to the Late Iron Age.

or to be absorbed into the territories controlled by the larger ones, as in the case of the settlement of Monte Sant'Angelo-Martignano, which was occupied between the Final Bronze Age and the Early Iron Age.[269]

[266] Guidi 2000a: 86; Guidi and Santoro 2003: 181.
[267] Candelato, Guidi and Santoro 2004; Agneni *et al.* 2005.
[268] Iaia and Mandolesi 1993: 29–32.
[269] Pacciarelli 1991: 168.

There is less settlement evidence for the Sabina in this period than for South Etruria, but it is of some significance as regards the area's general morphology. These sites are Campo del Pozzo, Poggio Sommavilla, San Vittore di Otricoli, Cretone, Montelibretti, Mompeo, Farfa and Puzzaroli.[270] In the case of Campo del Pozzo and Poggio Sommavilla, the settlement development, in a similar way to that on the right bank of the Tiber during the Final Bronze Age, began on the plateau slopes and along the ridges where access to water supplies and the main communication networks was easier. At Poggio Sommavilla, the settlement was organized into small groups between which were spaces for stock-raising and crops. The dwellings were housed in cuts in the terrain below the hill summit and date to the beginning of the eighth century BC.[271] Although there have been no large-scale excavations in the Sabina, the available evidence suggests that there was similar spatial organization on both sides of the Tiber.

The Late Iron Age saw population growth in South Etruria, attested by an increase in burials and new expansion. This led to the foundation of new settlements which increasingly took on the aspect of city-states at the centre of organized territories.[272] At the same time, the process of the formation of the first urban centres also becomes visible in other areas of central Italy, such as the Sabina Tiberina, even though somewhat later with respect to the proto-urban centres of the middle Tyrrhenian area. In fact, it is only in the final phase of the Iron Age (seventh century BC) that a significant population is attested in the Sabina, characterized by easily identifiable settlement hierarchies, situated in strategic positions.[273] The choice of position was influenced by the terrain's morphology, in this area especially the watercourses, which seems to divide settlement territories.

The centres of Eretum, Cures Sabini, Cretone, Colle Lupo, Montelibretti, Mompeo, Campo del Pozzo, Poggio Sommavilla, Magliano and San Vittore di Otricoli seem to be related to each other within a hierarchical system. Some of these have been assumed to be satellite settlements controlling the territorial borders close to the communications network of the main centres.[274] On this argument, naturally or artificially defendable plateaux would have been chosen for these sites, often organized in hill systems, such as we see at Rome, Veii or Cures. Their average size was about 1 to 5 ha, therefore much smaller than those documented on the Tiber's right bank in the immediately preceding phase. There is more similarity in terms of the choice of sites where the most important centres grew up. Cures is set back from the Tiber, as were the most important centres on the right bank such as Veii, Capena and Falerii, all of which controlled large territories. Cures would take on proto-urban characteristics in the eighth century BC, reaching a size of 20 to 30 ha.[275]

The impression remains that the different situations that emerged on the two sides of the Tiber are indicative of different cultural approaches to the forms of territorial occupation. South Etruria seems to develop settlements that tend to be of a permanent nature,[276] while in the Sabina there is greater mobility, as seen in the frequent changes of settlement site.

To sum up, based on the new evidence from surveys, the reinterpretation of the material from the South Etruria Survey, the proliferation of new excavations and, above all, a more detailed consideration of the data, we should differentiate the birth of the proto-urban sites on the two sides of the Tiber as the same phenomenon but with different timings and causes. The aggregation of populations on large plateaux took place in South Etruria and in *Latium vetus* in association with the depopulation of the countryside and inland settlements. Already in the later phase of the Early Iron Age, a new process of 're-colonization' of the territory had begun. In contrast, in the Sabina the birth of proto-urban centres was not a spontaneous phenomenon; rather it was brought about by the developments in South Etruria and *Latium vetus* that spread, or imposed their models, and this explains the slower adoption of aggregation in larger settlements.[277]

3.2 The Orientalizing and Archaic: late eighth to early fifth centuries BC

From the Orientalizing period onwards, the emergence of an elite class based on land ownership, already recognizable in the final phase of the Bronze Age, becomes even more visible,[278] and provided the necessary stimulus for the development of consolidated organized communal action.[279] This section will focus on the development of territories structured around a few large settlements and which included numerous smaller centres with precise functions. The need to control borders and roads required substantial transformations in the landscape. This will be analysed

[270] For details of these sites, see Filippi 1979; Muzzioli 1980: 120, n. 131; Filippi and Pacciarelli 1991: 58–68; Santoro and Zarattini 1995; Santoro 1996; Guidi and Santoro 2003: 180–1.
[271] Santoro and Zarattini 1995; Santoro 1996; Guidi and Santoro 2003: 184–5.
[272] Guidi 2000b: 201.
[273] Guidi 2000a: 86.
[274] Guidi 2000a; Guidi, Santoro and Agneni 2004.
[275] Guidi 2000b: 207; Guidi and Santoro 2003: 181.
[276] On this subject, see di Gennaro 2000: 96.
[277] di Gennaro and Guidi 2009: 442.
[278] Bedini 1985: 62.
[279] For the organization of territory and landscape, see Naso, Rendeli and Zifferero 1989; De Santis 1991; Rendeli 1991; Cifani and Munzi 1995; Zifferero 1995; Cristofani 1997.

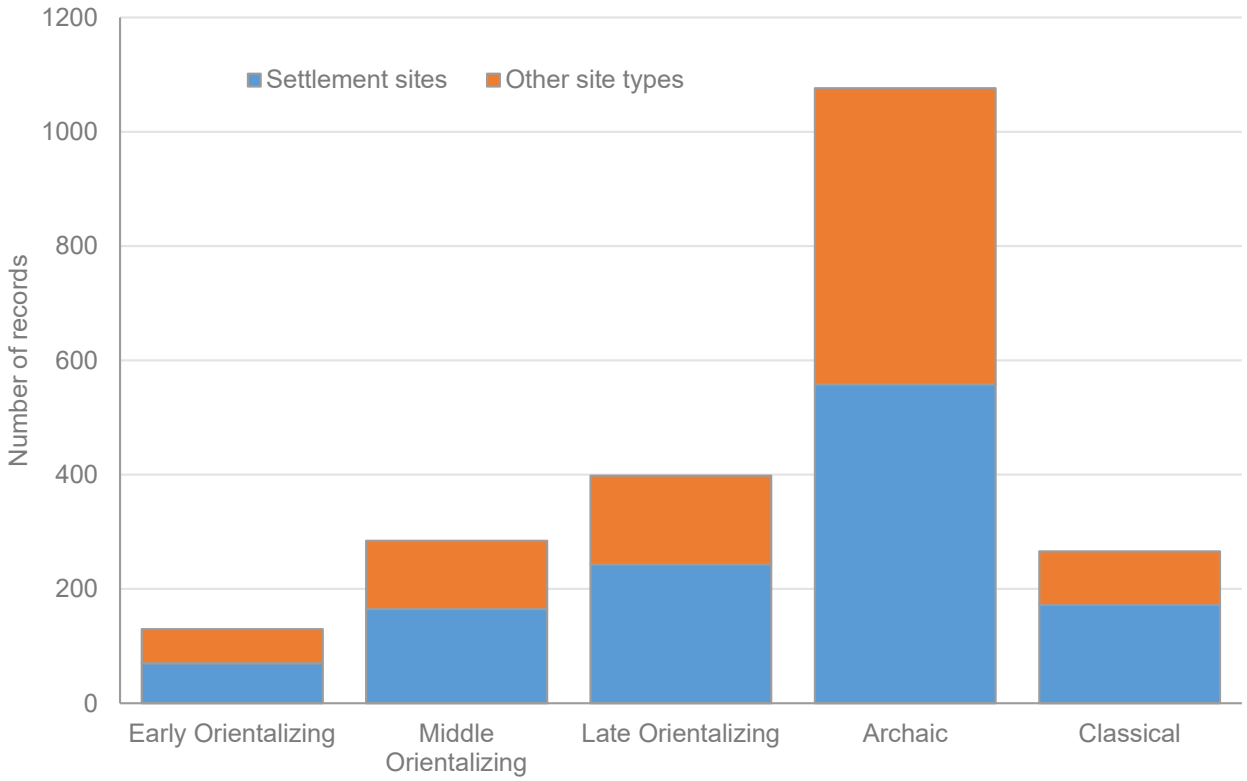


Figure 3.8. Numbers of settlements versus non-settlement (e.g. funerary sites) in the Orientalizing (Early, Middle, Late), Archaic and Classical periods (750–580 BC).

on the basis of the restudy of the South Etruria Survey and many other research projects.

While looking at the results, it is necessary to remember that certain specific strategies were used during the processing of the South Etruria Survey data. The chronological divisions (Figure 3.8) are different from those usually adopted for surveys, where single centuries or groups of centuries are considered from beginning to end. In our case, we have used periods of about 100 years (but not always) with cut-off points that take the absolute chronologies of the materials into consideration. In this way, we think that we have exploited the full potential of the available data, highlighting the presences and absences and avoiding some of the methodological problems that often arise when quantitative analyses are applied to surveys. In fact, it is evident that when one organizes material into one or two century blocks—and that is the usual choice in the absence of clear chronological data—some trends are lost sight of, whilst phenomena relating to specific periods are attributed to much wider chronological spans. This can alter the historical interpretation and above all cause us to miss absences that are historical indicators of primary importance (see section 2.4.2).[280] The chronological units used are shown in Table 3.3.

[280] See, for example, the treatment of the survey data by Cifani (2002: figs 2–9; 2009: 316–17, fig. 2) and by Fentress (2002a: 62), where two centuries are compared with four centuries.

Table 3.3. Chronological divisions of the Orientalizing and Archaic periods used by the Tiber Valley Project.

Period	Dates
Early Orientalizing	750–680 BC
Middle Orientalizing	680–630 BC
Late Orientalizing	630–580 BC
Archaic	580–480 BC

3.2.1 Settlement centres and structured territories in the seventh and sixth centuries BC

Between the Orientalizing and Archaic periods, Veii, Narce, Falerii Veteres, Capena, Cures Sabini and Eretum are the major centres in the middle Tiber valley, as attested by the size of the plateaux they occupied, the length of their occupation, the size and richness of their necropoleis, the number of settlements in their vicinity, and the record they left in the ancient sources, compared to many other smaller centres that were completely ignored by later writers (Figure 3.9).

From a topographical point of view, some of these centres (such as Veii, Narce and Falerii Veteres) are characterized by a rocky spur connected to a large plateau. The earliest settlements, which would later extend onto the plateau, were concentrated on spurs

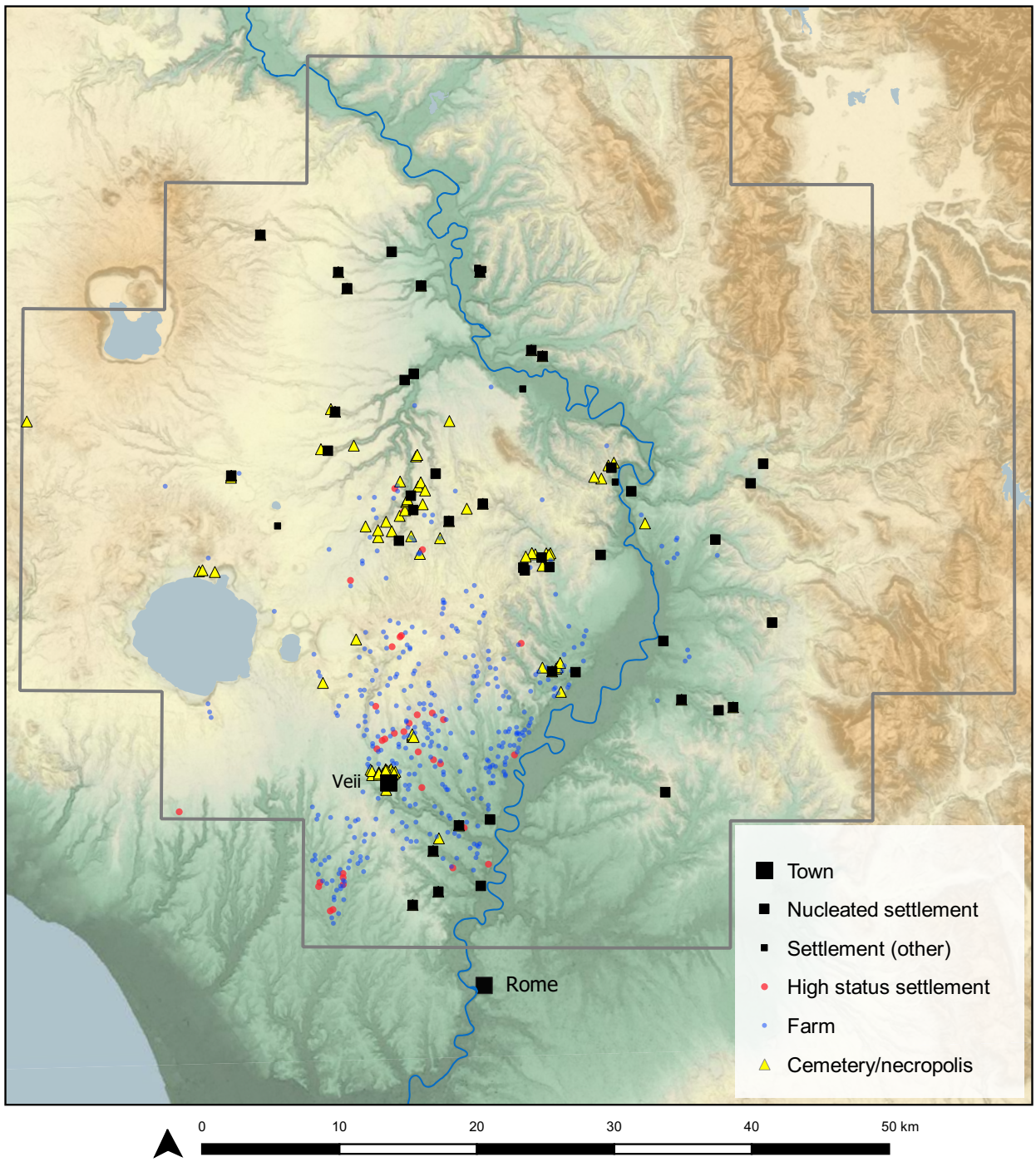


Figure 3.9. Tiber Valley Project settlement sites in the Orientalizing period (750–580 BC).

that were often artificially cut. The presence of walls gave them the function of an acropolis or defensive bastion. Excavations and geophysical surveys have revealed an urban layout with streets and channels crossing at right angles to create regular blocks at Piazza d'Armi, Narce and Vignale.[281] On the other side of the Tiber, Cures Sabini and Eretum reached between 18 and 30 ha in size.[282] Although Cures cannot be compared in any way to the large centres of 150–200 ha in South Etruria (Veii, Tarquinia, Caere), it must have had a certain importance. In fact, it is significant that stories around figures such as Attus Clausus, Titus Tatius and Numa Pompilius grew up to illustrate the closeness between Cures and Rome.[283] The importance of Eretum

[281] For Piazza d'Armi, see Guaitoli 1981; Colonna 1986b: pl. IX; Bartoloni 2001: 29–31; Bartoloni 2004; Bartoloni, Acconcia and Kortenaar 2005: 81–2; Piro 2005. For Narce: Camilli 1993: 18. For Vignale: Moscati 1983; Keay 2001; Millett and Keay 2001; Keay *et al.* 2004; Carlucci *et al.* 2007.

[282] Ogilvie 1965; Guidi *et al.* 1996; Guidi and Santoro 2003.

[283] Muzzioli 1980: 30–1, nn.168–75.

also arose from its position on a frontier between the Romans and Sabines.[284]

New information about town organization, in particular at Veii, has emerged from the restudy of the South Etruria Survey material. The wealth of material collected on the plateau by Ward-Perkins and his team has made it possible to reconstruct the town's transformations from its origins until its abandonment.[285] For the Orientalizing and Archaic periods, production and cult areas have been identified that were in some cases unknown previously, and in other cases correspond with recently excavated sacred areas.[286] The area of Comunità is of particular interest. Repeatedly visited by Ward-Perkins, who saw kiln remains there, and by Guaitoli and Peña, it has produced evidence for pottery production dating from the second half of the seventh century BC onwards. The evidence consists of kiln wasters of Etrusco-Corinthian, banded Etruscan, and bucchero pottery and led to the suggestion that this may have been a site for the production of pottery. Confirmation of this hypothesis came from Colonna's discovery of an organized artisans' quarter, with circular and rectangular kilns housed in service rooms and warehouses, which specialized in the production of table-wares from the end of the seventh century BC onwards.[287]

With the beginning of the Orientalizing period, social differentiation becomes particularly visible in the choice of tomb type. This differed between the north of the plateau (chamber tombs with *dromos*) and the south-west (chamber tombs with a short entranceway). The tumuli in the Veii area (Monte Tondo, Grotta Gramiccia, Oliveto Grande, Monte Aguzzo, Vaccareccia, Monte Oliviero and the tumulus on the Via Veientana), the greatest expression of the aristocratic classes, seems to be a phenomenon of the Late Orientalizing period only.[288] The tumuli stand close to main roads, at a certain distance from the town and in prominent places. For this reason, they have been interpreted as markers of land ownership on the part of aristocratic groups who were often in competition with each other.[289]

Population development in this area is strictly linked to the contemporaneous creation of cuniculi in the territory to the north and north-east of Veii, where a 25 km network has been identified following the same south-eastern direction of the open valleys which lead to the Tiber. Their construction seems to be the result of an intervention on the part of the central authorities, aimed at facilitating the full exploitation of the territory through the careful control of water.[290] Dated by Ward-Perkins to before the fourth century BC, most scholars still consider them to be of fifth-century date.[291] An even earlier date, supported by the restudy of the South Etruria Survey,[292] would tie in better with the abnormal population growth that has been documented throughout South Etruria in the sixth century BC, as we shall see below. The increase in population would have required more cultivable land, and this would have been made possible by the cuniculi network used for the local water control.

Veii must have controlled an extensive territory during the first phase of its history, when its population was particularly numerous. It is recorded by Dionysius of Halicarnassus as reaching as far as the sea, where Veii held the monopoly on salt production.[293] However, a sequence of historical events reduced its territory: the salt-pans, the right bank of the Tiber and the *septem pagi* (a series of *oppida* into which the territory was organized) were soon ceded following a series of wars against the Romans between the Romulean period (753–716 BC) and the regal period (715–509 BC) according to the much discussed written tradition.[294] From this moment onwards, Veii's borders can be reconstructed (hypothetically) as follows.

The Tiber traditionally is considered the territory's eastern border, forming an important watershed between the Sabine, Etruscan and Latin cultures. The south-western border, shared with the Careretans, can reasonably be considered to be the river Arron, the ancient *Aruns*.[295] To the north, the Sabatini and Cimini Hills, with the *invisa atque horrenda* Cimina forest, must have represented a real barrier.[296] The Acqua Traversa, tributary of the Tiber, has been identified recently as the southern border, following the discovery of a series of fortified sites.[297] Furthermore, thanks to excavations and surveys, several settlements have shown characteristics that might suggest that they had the specific function of controlling the main river

[284] Mancini 1910: 1386–7; Muzzioli 1985.
[285] For the first topographical synthesis, see Ward-Perkins 1961. For a new synthesis following the South Etruria Survey restudy: Cascino, Di Giuseppe and Patterson 2012: 336–59.
[286] Bartoloni 2001; Fusco 2001; Bartoloni 2004; Colonna 2004.
[287] Guaitoli 1981; Peña 1988: 284–304; Cascino 2008 for kiln wasters; Ambrosini *et al.* 2009: 68, Belelli Marchesini and Cascino 2012 for the artisans' quarter.
[288] Ward-Perkins 1961.
[289] Zifferero 1991.
[290] For the control of water resources, see Judson and Kahane 1963: 87; Kahane, Murray-Threipland and Ward-Perkins 1968: 71; Potter 1985: 97–101; in relation water resources and the image of Achelous: Di Giuseppe 2010a.
[291] Cristofani 1986: 80; Potter 1985: 100.
[292] Marta Solinas *pers. comm.*, based on her restudy of the South Etruria Survey material linked to the cuniculi and hydraulic finds at Veii.
[293] Dion. Hal. *Ant. Rom.* 3.6, 1; Bartoloni 1986: 106–7; Colonna 1986a: 93–4; Delpino 1987: 26; Camporeale 1997.
[294] Dion. Hal. *Ant Rom.* 2.56, 3; 3.23–6; 3.41, 1–4; Plut. *Rom* 27. 2; Livy 1.27, 3–11; 1.33, 9; Pliny *Nat. Hist.* 31.41, 89.
[295] Potter 1985: 69; De Santis 1997; Tartara 1999: 8.
[296] Livy 9, 367, 1; Potter 1991: 174.
[297] Carbonara, Messineo and Pellegrino 1996; De Santis 1997.

valleys leading from Veii, which could have constituted dangerous routes as they approached the town.[298] These settlements were situated on tufaceous low rises, defended by artificial ditches and supplied with water from wells and cuniculi. The sites are Monte delle Grotte and Inviolatella along the Fontaniletto torrent, Monte San Michele along the Valchetta torrent and Prima Porta on the Monte Olivero torrent.[299] They are part of an extensive system of fortified sites occupied from the mid-seventh century onwards that were probably created for the agricultural exploitation of the territory and perhaps in order to accommodate the excess population resulting from internal migrations. The function of these fortified settlements, perhaps not by chance, came to the fore from the fifth century BC onwards, when the Romans' progressive advance must have made it necessary to fortify the settlements protecting the borders. The case of the *gens Fabia* who, in 477 BC, established a garrison against the Veientines on a hill called Cremera, offers a significant potential case-study.[300]

If the model of the border settlement prevails in the Ager Veientanus, settlement organization took different forms in the Ager Faliscus and Curensis. In the Faliscan territory, of which Falerii was the most significant centre, the model in the southern area was of a satellite-type organization, with settlements situated at regular distances on high ground, arranged in a semicircle around the more important centres, probably in order to provide outlets for the growing population.[301] The northern area, in contrast, has small elevated sites situated both close to and further back from the Tiber and its tributaries, presumably with the intention of controlling and exploiting these routes of potential penetration.[302]

In the Sabina the satellite model is more difficult to find, perhaps because the preceding settlement strategies continued to prevail. Instead, this area presents settlement characteristics that are much closer to those in the northern Ager Faliscus. According to Santoro's interpretation,[303] this model was initially influenced by the need to control the valleys crossed by the transhumance routes joining the right and left banks of the Tiber.[304]

All of these territories, on the right and left banks of the Tiber, were characterized by settlement growth from the Orientalizing to Archaic periods, with a gradual increase in evidence for continuity. However, in contrast, in the territory of Capena there was a greater increase in the number of new foundations following the Late Orientalizing period, doubling in the Archaic period, as if the settlement development had been a more sudden process. In the Sabina, despite the scarcity of quantitative data, there is also evidence for an increase in settlement numbers between the Orientalizing and Archaic periods, followed by a decrease in the Classical period.

However, in the light of a more intensive survey, and above all the altered conditions of the terrain, it seems possible to reduce this contrast between the two banks of the Tiber. In 2000, the BSR carried out a control survey over a sample area of about 3 km^2 on the Montopoli di Sabina map.[305] The survey recorded 16 sites datable to

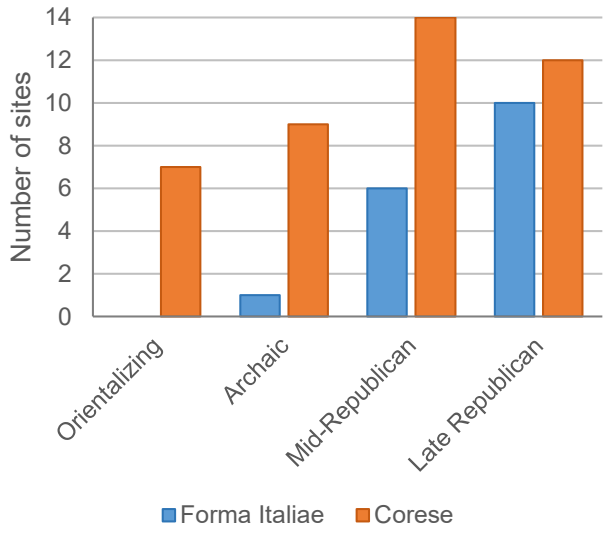


Figure 3.10. Numbers of sites, from the Orientalizing to the Republican period, identified by the Forma Italiae Cures survey (Muzzioli 1980) and during resurvey by the Corese Survey.

[298] The tomb typologies and grave-goods attest they were part of the Veientine sphere of influence: Colonna 1986a: 93; Carbonara, Messineo and Pellegrino 1996; De Santis 1997: 102.

[299] Carbonara, Messineo and Pellegrino 1996.

[300] Dion. Hal. *Ant. Rom.* 9.14–16; Livy 5.1; Ampolo 1987; Richard 1990; Carbonara, Messineo and Pellegrino 1996: 17. There is greater difficulty in identifying the northern borders of the Ager Veientanus, as discussed by Cifani 2005.

[301] This is the case of Mazzano Romano, Pizzo Primara, Monte Cinghiale, Santa Maria, perhaps Calcata around Narce-Monte Li Santi; Monte Aquila, Monte Perazzeto and Monte Cornazzano around Capena; Isola (Tenuta Franca), Castel Sant'Elia and Castellaccio around Nepi; Colle Sant'Agata and Castel Foiano around Falerii Veteres: Fiorelli 1879; Frederiksen and Ward-Perkins 1957: 82–4; Jones 1963a: 133–4; Gamurrini *et al.* 1972: 163, 167–9, 178, nn. 17, 105, 110, 120, 122, 137; Potter 1979: 63; Tomassetti 1979b: 361–2; Colonna 1990b: 137; Messineo and Carbonara 1993: 115, n. 60; Mazzi and Cotroneo 1995: nn. 11–12, 21; Cifani and Munzi 1995: 388–90; Cati 1996; Grispigni 1997; Cifani 2005: 153.

[302] Examples are the sites of Monte Lombrica and Macchia Frullanio on the Fosso della Caduta, Carbognano on the Fosso delle Sorcelle, Grotta Porciosa and Corchiano on the Rio Fratta, and Gallese and Vignanello overlooking the Fosso di Rustico.

[303] Santoro 1986: 111–12, 122.

[304] The idea is suggested by the fact that the Sabine settlements were always positioned in pairs along the Tiber's tributaries: one in an advanced position towards the Tiber and the other further back from it. This is the case with Antemnae and La Rustica, Eretum and Cretone, Passo Corese and Montelibretti, Campo del Pozzo and Farfa, Poggio Sommavilla and Monte Le Palme: Santoro and Zarattini 1995; Santoro 1996; Verga 2002; Guidi and Santoro 2003; Amoroso 2010.

[305] Di Giuseppe *et al.* 2002.

between the Orientalizing (seven) and Archaic (nine) periods, 15 more than those known from Muzzioli's earlier Forma Italiae investigations (Figure 3.10). This greater intensity of the territorial occupation, of which the repeated surveys give a sense, has recently been confirmed by the large-scale excavations undertaken by the Superintendency in the areas gravitating around the extensive pre-Roman road network linking Cures with the Tiber and the inner areas.[306]

If we now consider the overall picture that has emerged on both sides of the Tiber, beginning with the scatters of material interpreted reasonably reliably as settlements, that is, areas of permanent occupation, we can see that in the Orientalizing period there is a substantial increase in numbers in comparison with the preceding Iron Age (Figure 3.11). There is also a notable difference between the Tiber's right and left bank (Figure 3.12). While in South Etruria a gradual increase in scattered settlements can be seen from the beginning of the ninth to the first half of the eighth centuries BC, reaching its height in the sixth century BC (Archaic, 580–480 BC phase), in the Sabina there is a decrease that almost imperceptibly reverses between the Middle Orientalizing period (680–630 BC) and Late Orientalizing period (630–580 BC). This reverse becomes fully evident only in the sixth century BC, when the same explosion in settlement numbers which was earlier seen in South Etruria also occurs here. Nowadays, the Orientalizing *facies* in Sabina is sufficiently known for urban centres, so that the scarce presence of indicators among the survey material collected in rural contexts may indeed be significant. In fact, the slow increase in the upturn of occupation in the Sabine territory could be the result of the continued and intensified concentration of settlement in a few upland places, at a time when the process of repopulating the territory in South Etruria had already been underway for some time. However, it must be said that the Galantina Survey is also revealing evidence, although very scarce, for settlements in the territory.[307]

Let us now look at quantitative relationships between the settlements that continue to be occupied from the previous period and those that are new foundations (Figure 3.6). In South Etruria, there is a gradual increase in evidence for continuity, perhaps a sign of greater stability and improvement in construction techniques. Even the new foundations gradually increase from the Early Orientalizing period to the Archaic period, with an apparent small decrease in the Late Orientalizing period. The scarce data from the Sabina is more difficult to interpret due to its being from a statistical point of view not very representative. However, there is a clear growth in settlement numbers during the

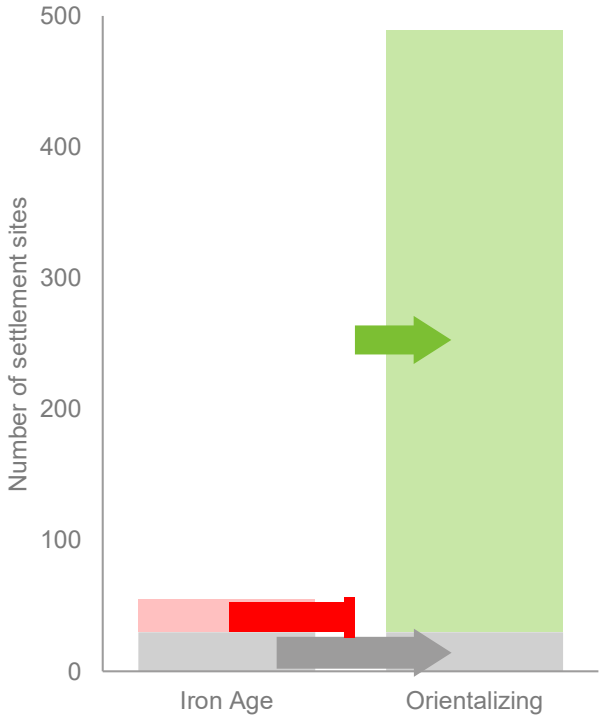


Figure 3.11. Numbers of settlement sites abandoned (pink), continuing (grey) and newly founded (green) at the transition from the Iron Age to the Orientalizing period.

Archaic period, most of which were new foundations, a phenomenon that appears much more sudden than what is documented on the other bank and clearly linked to a radical change in settlement type.

Therefore, on both sides of the Tiber in the sixth century BC there was a true settlement explosion in the territory, defined in some cases as a 'demographic explosion'.[308] In fact, we have no evidence to prove that the growth in settlement occupation corresponds to an increase of population, but it is highly probable, given the number of new settlements. It is interesting to note that in general the settlement evidence from this period represents more than the double that of previous periods (Figure 3.8).[309] For other areas scholars have suggested that such a settlement density was in some way related to the military reforms which according

[306] Alvino 2011.
[307] Agneni *et al.* 2005: 997–8.
[308] The concept of 'demographic explosion' was applied by Potter 1979 to the population growth in the first millennium BC and in particular that of the seventh to sixth centuries BC compared to the tenth to eighth centuries BC; Potter 1985: 86–8.
[309] The sixth century BC is recognized everywhere in South Etruria and Latium as a period of settlement increase: see, for example: Quilici and Quilici Gigli, 1980: 285–94 (Crustumerium); Camilli 1993 (Narce); Coccia *et al.* 1985: 522 (Monti della Tolfa–Valle del Mignone); Quilici and Quilici Gigli, 1986: 388–98 (Fidenae); Naso, Rendeli and Zifferero 1989; De Santis 1991: 97–101; Enei 1992: 76; Quilici and Quilici Gigli 1993: 473–7 (Ficulea); Tartara 1999 (Ager Caeretanus and southern Ager Veientanus); Carafa 2000 [2002]; Enei 2001: 58–62; Carafa 2004: 50; Agneni *et al.* 2005: 999 (Galantina Survey); Capanna and Carafa 2009: fig. 12; Cifani 2009: 316 (Rome's northern *suburbium*); Tol 2012: 366–9 (territories of Satricum and Antium). On the economic increase at Rome and around in the sixth century BC, see Capogrossi Colognesi 2009: 50–60.

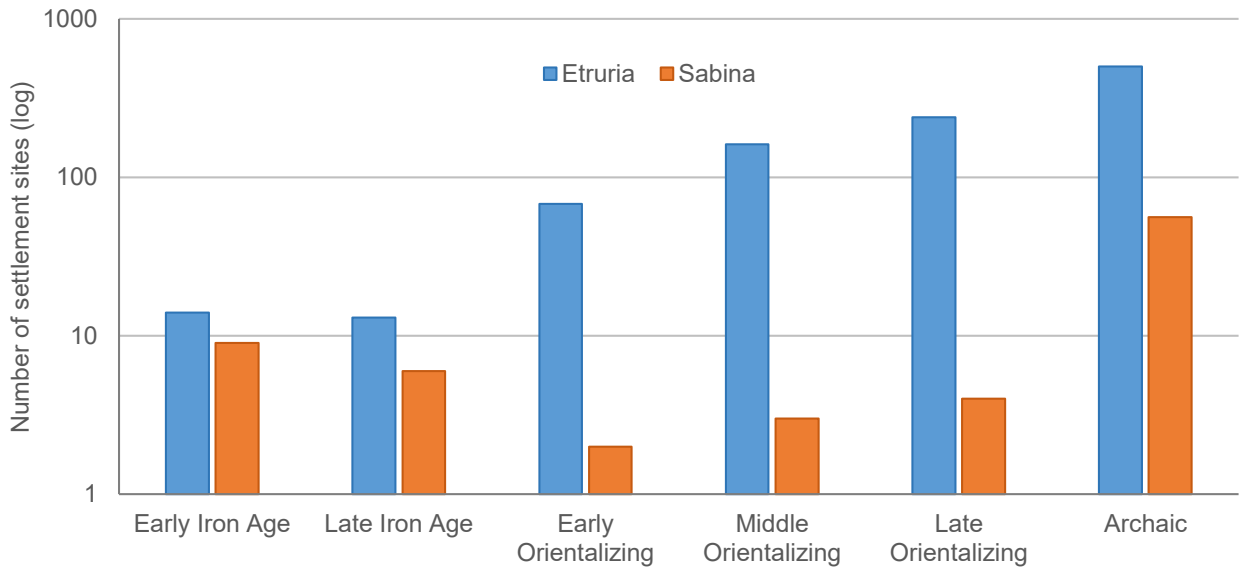


Figure 3.12. Numbers of settlement sites recorded in Tiber Valley Project database for the Orientalizing to Archaic periods (750–580 BC): South Etruria versus Sabina (log scale).

to tradition Servius Tullius carried out in the Ager Romanus. These have been thought to have created a large class of small landholders, and landholding defined a citizen's status and their role in the army.[310] That is, it is possible that following these reforms, a vast programme of land distribution was undertaken in other areas bordering the Ager Romanus. Furthermore, we must not forget the literary tradition, often considered unreliable but recently reappraised, regarding the size of the male population in Rome under Servius Tullius in comparison with the following period, in which a sharp decline is noted.[311] The sixth century was also the period when the monumentalization of the urban centres took place and, above all, the construction of the great hydraulic installations that made land reclamation possible throughout the Italic area.[312]

In this phase, we must imagine a territory organized into small settlement groups, *vici*, scattered single buildings and cult sites (Figure 3.13). Some scholars believe that in at least some cases the small upland settlements, otherwise known as *oppida* and *castella*, often dating back to the Bronze Age, and the growth of rural settlements were linked to a sort of 'internal colonization' (Figure 3.14). This was necessary for distributing the excess population; it created the opportunity for individual grants to members of the growing urban population, it increased economic activity in the hinterland and supported defence by territorial markers and a larger army.[313] On the other hand, the more open sites are identified as probable *vici*, made up of small settlement groups with associated tombs.[314]

As regards the typology of settlement, unfortunately we have no excavated structures of Archaic date in this area, now that the structure at Casale Pian Roseto has been reinterpreted as a cult site rather than a farm.[315] The lack of available documentation regarding parameters of material density and survey area dimensions, which could give an idea of settlement size, widens this gap in the information. We can only imagine, based on the frequent association of materials with tiles and blocks of tufa that, at least in the Archaic period, the countryside was populated with solid structures. Based on what has been seen in the Ager Caeretanus, for example, these would have been made up of quadrangular, rectangular or oval huts (*c.* 16–50 m^2), with one or two rooms, beaten earth or wooden floors, walls constructed of tufo with perishable materials above, and roofed with *tegulae* and *imbrices*.[316] However, it cannot be excluded that even scatters without tiles represent evidence of permanent settlements, perhaps more modest and roofed with wooden tiles.[317] Such settlements must represent the homes of peasants and shepherds, described as *casae*

[310] For discussion of this, see Livy 1.46.1, 47; Quilici 1974b; Ampolo 1988: 225; Colonna 1990a; Quilici and Quilici Gigli 1993: 469; Fraschetti 1994–5; Cornell 1995: 325–7; Capogrossi Colognesi 2009: 71–2.
[311] Coarelli 1988: 318–29; Lo Cascio 2000: 28.
[312] Cifani 2008: 307–23; Di Giuseppe 2010a: 87.
[313] Colonna 1990a; Rendeli 1993; Cifani 2003: 182; Carafa 2004: 52.
[314] This is the case for Tenuta Franca, occupied from the mid-seventh to the fourth centuries BC: Cifani 1994; 2003: 95.
[315] Torelli 1998 [2001].
[316] Cifani 1998: 53. Modest dwellings of this sort have been identified in various localities in the *suburbium* of Rome, for example in the territory of Fidenae, Barbina *et al.* 2009: 341; and in the Ager Veientanus (area of Castel di Guido), Rossi and Iorio 2009: 563–4.
[317] According to Cornelius Nepos (fr. 31 (Malcovati) = Pliny *Nat. Hist.* 16.19.36) Rome was covered with wooden *scandulae* (tiles) until the time of Pyrrhus; Colonna 1988a: 311, n. 98.

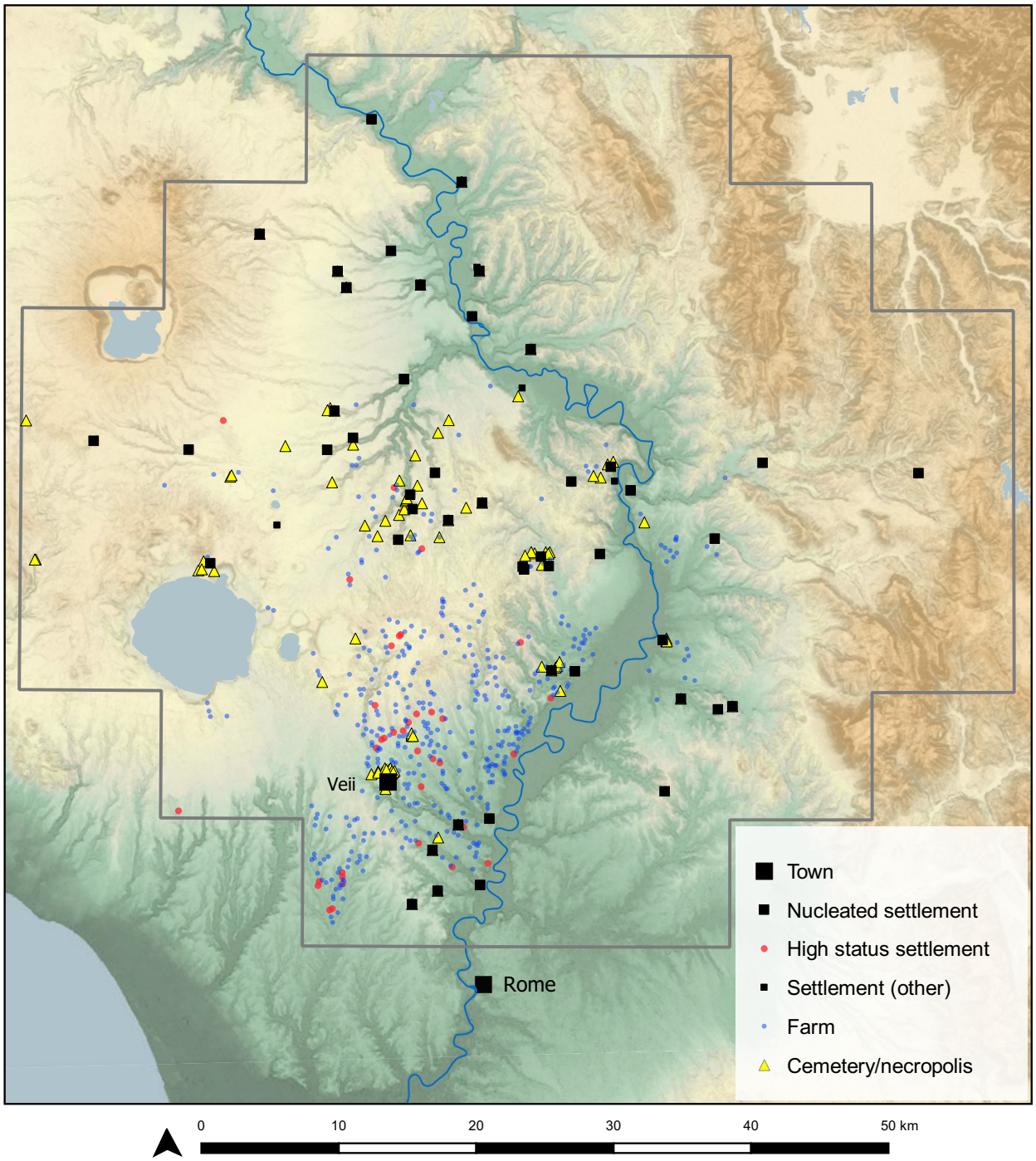


Figure 3.13. Tiber Valley Project settlement sites in the Archaic period (580–480 BC).

and *tuguria* by the sources in various episodes from the fifth and fourth centuries BC.[318]

About 481 scatters of material interpretable as Archaic settlements were identified by the South Etruria Survey, of which 428 also have an Orientalizing phase. The scatters included coarse-ware pottery and *tegulae*, and are situated mainly on high ground, on spurs delimited by rivers. The sites were rarely isolated and often organized into groups of two, three or more settlements.

The exploitation of natural resources within each territory must have occurred through the impetus of the elite classes. Their landholdings, as we have seen, at least in the Orientalizing period, seem to have been marked by the presence of tumuli, situated at a certain distance from the town and within a single

[318] Livy 3.13.10; 3.26.9; 5.53.8.

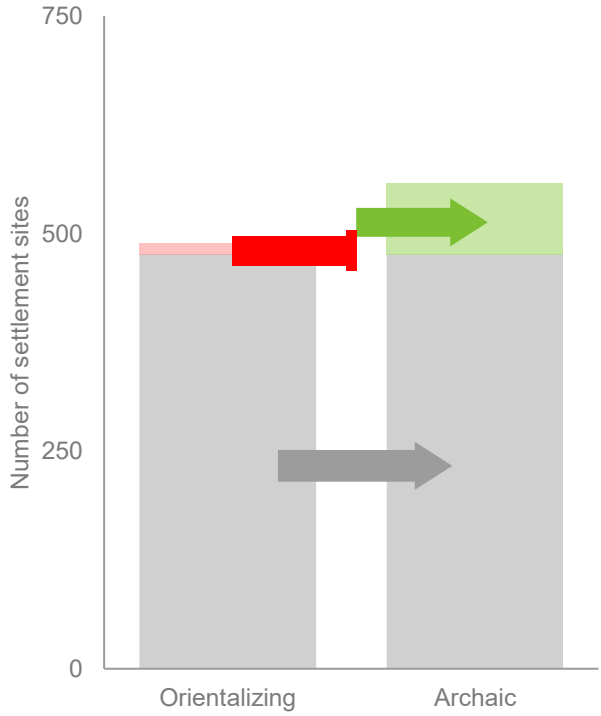


Figure 3.14. Numbers of settlement sites abandoned (pink), continuing (grey) and newly founded (green) at the transition from the Orientalizing to the Archaic period.

hydrographic basin/catchment area.[319] In the Ager Veientanus fine-wares and ritual vessel forms have been found along the gorges of Valchetta, Pantanicci, Monte Aguzzo, Perazzeta and Monte Oliviero. Situated in each of these catchment areas, in an anticlockwise direction, are the tumuli of Oliveto Grande, Grotta Gramiccia, Monte Tondo, Monte Aguzzo, Vaccareccia, Monte Oliviero and the tumulus on the Via Veientana.

The Tiber Valley Project uses the term 'high-status settlement' to define areas containing architectural elements, Attic pottery, ceremonial banqueting forms in bucchero, Etruscan banded ware, and miniature vessels. In other words, the presence of high-quality materials distinguishes these areas from others (the majority) which, by contrast, produced only coarse-wares and tiles, and where small modest dwellings have been identified. It is possible to imagine the existence of tombs, cult sites, still little known in the Ager Veientanus, and perhaps aristocratic residences in the high-status settlements. Although the association of the tumuli with the buildings of their respective owners remains uncertain, it may be suggested that the extensive scatters of materials (*c.* 1 ha) documented by the surveys containing high-quality materials are indicators of aristocratic palaces. These could have housed single families or a number of family groups, and included space for owners and slaves.[320]

[319] Zifferero 1991: fig. 11.
[320] De Santis 1991.

Table 3.4. Earlier occupation histories of sites recorded in the Tiber Valley Project database as late Republican-period villas.

Orientalizing	*Archaic*	*Classical*	*Mid- Republican*	*Late Republican*	*Total*	*Percentage*	*Cumulative percentage*
					230	47%	47%
					95	19%	66%
					55	11%	77%
					39	8%	85%
					29	6%	91%
					11	2%	93%
					11	2%	96%
					7	1%	97%
					6	1%	98%
					3	1%	99%
					2	0%	99%
					2	0%	100%
					1	0%	100%
					1	0%	100%
139	159	50	196	492	**492**	**100%**	

About 15 similar conglomerations have been identified in the area north of Veii, and there are several examples situated along the Tiber, south and south-west of Veii itself.[321] Clearly, we cannot exclude the possibility that the areas containing high-quality materials may represent tombs or *sacellae*, especially in isolated areas.

Examples of elite residences of Archaic and late Archaic date are provided by a series of dwellings excavated outside our area, built with tufo footings, probably clay walls and tiled roofs, covering an ample surface area (between 100–700 m^2). These include the structures at Acqua Acetosa Laurentina, Torrino (II phase), Grottarossa and the Auditorium in the first phase, in the *suburbium* of Rome, Acquarossa in the Viterbo area and Montetosto in the area of Caere, situated close to tumuli.[322] Similar complexes, in the past mistaken for

[321] Pantan del Grano, south of Veii, is a possible example of an aristocratic settlement suggested on the basis of a small necropolis of four tombs with grave-goods datable to between the mid-seventh and sixth centuries BC: Cardarelli *et al.* 1984: De Santis 1991; 1997: 101–2. See also Quarto della Vipera, Prati Madonna, Monte la Vignola, Riserva della Casa and Santa Rufina: Cifani 2005: 152; and the Vulci area: Carandini *et al.* 2002: 71.
[322] For Acqua Acetosa Laurentina, see Bedini 1990: 172–3; Cifani 2002: 251–2, fig. 12. For Torrino: Bedini 1984: 84; Cifani 2002: 251, fig. 11.

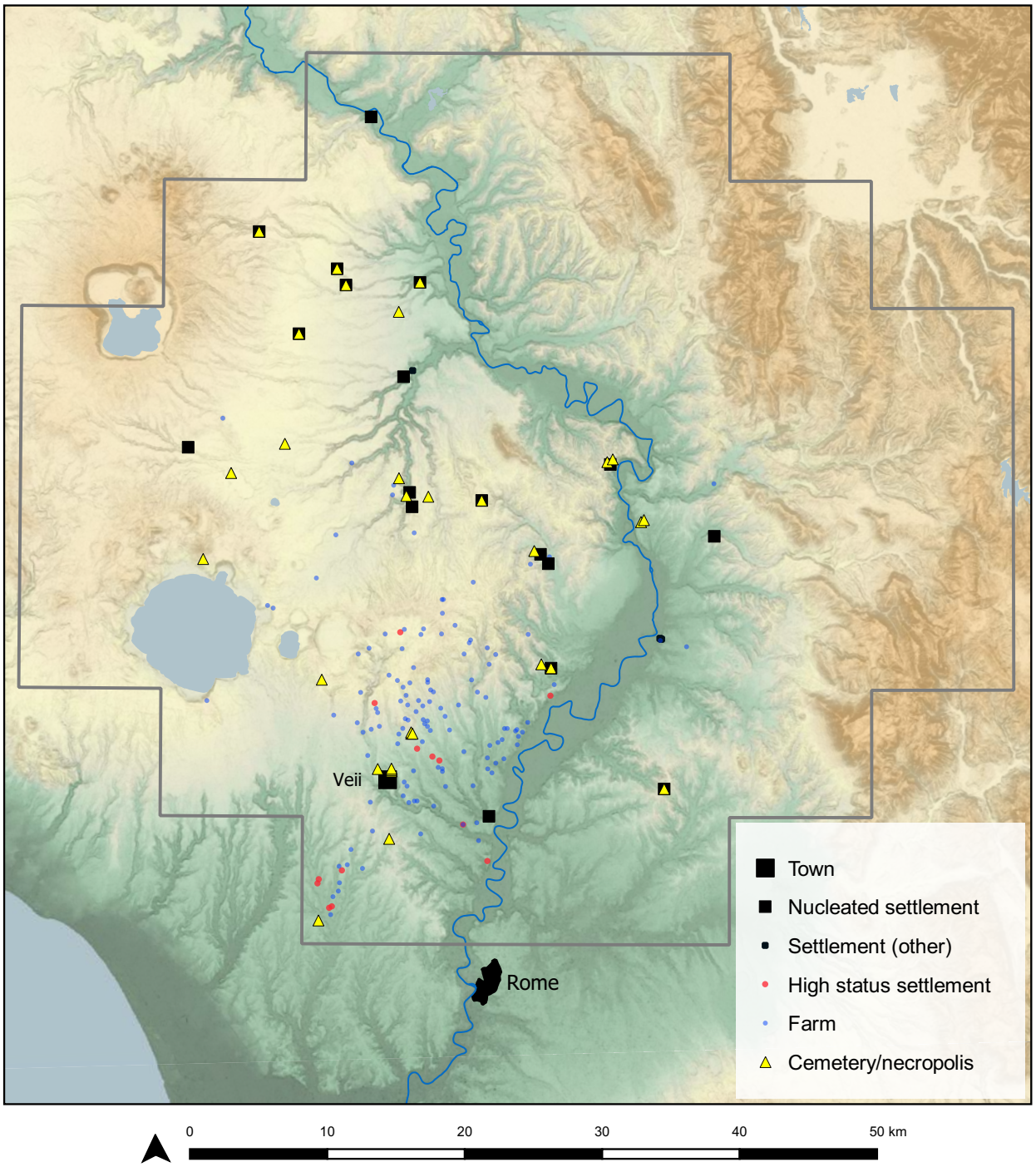


Figure 3.15. Tiber Valley Project settlement sites in the Classical period (480–350 BC).

sanctuaries due to finds of architectural terracottas, are now recognized as palaces (*regiae* or *anaktora*), residences for the elite classes who controlled the surrounding territory and probably the free men and *clientes* who lived there.[323] The addition of sacred elements, such as altars and *sacellae*, to these residences and the practice of the worship of ancestors, justifies the presence of architectural terracottas and imported pottery of votive form and value.

There must have been many elite residences in the South Etruria Survey area. A large percentage of the

For Grottarossa: Cifani 1998: 53–4; 2002: 252; Terrenato and Becker 2009. For the Auditorium: Carandini *et al.* 1997; Cifani 1998, 54; Ricci and Terrenato 1998; Terrenato 2001; Cifani 2002: 252, fig. 14; D'Alessio 2004; Di Giuseppe 2005a; Carandini, D'Alessio and Di Giuseppe 2006. For Acquarossa: Menichetti 1988: 120, fig. 43. For Montetosto: Colonna 1985a.

[323] Torelli 1985: 21–32; De Albentiis 1998: 33; Ricci and Terrenato 1998: 47.

sites that can be reasonably interpreted as villas in the late Republican and early imperial period, have material of Orientalizing and Archaic date, probably demonstrating that sites with elite origins continued to be elite until becoming mid- and late Republican villas (Table 3.4).[324]

3.2.2 The decline of the landscape in the fifth century BC

During the fifth century BC, this very connected and apparently flourishing landscape goes into reverse when a general settlement breakdown, both urban and rural, occurred. This is very clear in the results of the restudy of the South Etruria Survey material (Figure 3.15).[325] Potter and other scholars had described the period between the Orientalizing and Archaic periods (seventh to sixth centuries BC) from the perspective of continuity, that is, as an age of settlement growth.[326] Although it was conceded that in the fifth century BC important and dramatic historical events had resulted in the construction of defensive town walls, there was no recognition of the signs of interruption in territorial occupation, which on the contrary seemed to be showing signs of settlement stability. Therefore, from this moment scholars registered a rapid and continuous growth that reached a peak in the early imperial period.

Following the South Etruria Survey restudy, it is possible to reconstruct a profoundly different picture (Figure 3.16). There is a sharp decline in settlement numbers on both sides of the Tiber in the period between the beginning of the fifth century and the first half of the fourth century BC (Classical phase), to be more specific, the second half of the fifth century and the first half of the fourth century BC. Only just over one-quarter of the sites from the preceding Archaic period continued in this phase, while the others are abandoned. As regards the material culture, there was a strong reduction in the use of pottery vessels and in their quality (Figure 3.17). Bucchero ware declined in quality and the repertory of vessel forms became impoverished; there was a notable decline in imported pottery classes; red impasto became rarer; in other words, the ceramic repertoire was poorer and less open to the external world in comparison with that of the preceding and subsequent periods.

The very high rate of abandonment is found across the middle Tiber valley: on both sides of the Tiber, the majority of settlement sites went out of occupation.

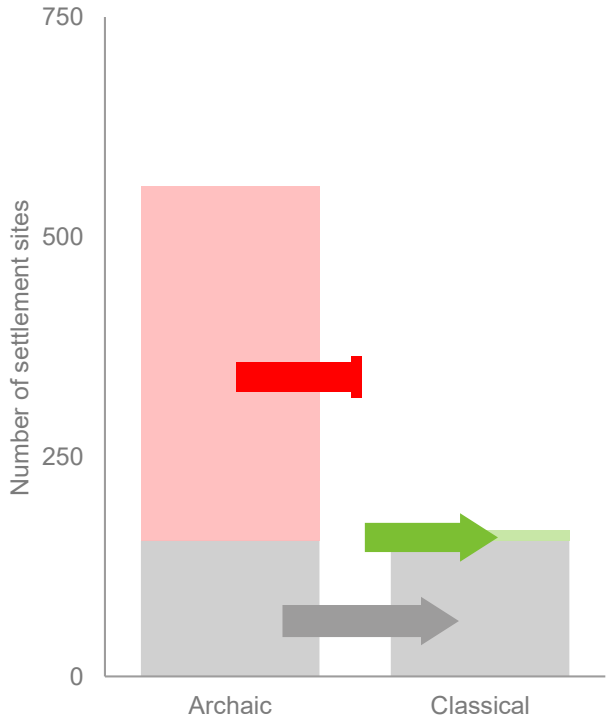


Figure 3.16. Numbers of settlement sites abandoned (pink), continuing (grey) and newly founded (green) at the transition from the Archaic to the Classical period.

With the exception of the Ager Faliscus and, to a much lesser degree, the Ager Veientanus, almost no new foundations are recorded in the territories of the middle Tiber valley. However, the sites that did continue, and especially those very few new foundations, must be seen as particularly important settlements able to survive a period of great depression.

The 'settlement vacuum' in this time-period could partly be filled by imagining that sites occupied in the Archaic and mid-Republican periods continued to be occupied until the fifth century. In this case, the lack of ceramic indicators could be attributed to a defect in the chronology of the finds or, more likely, an impoverishment of the material culture linked to historical-social causes. That is, there may have been a greater use of coarse-ware pottery, which stayed in use for longer periods, and a decline in the use of fine-wares. The stratigraphy at the Auditorium villa, for example, did not show any clear signs of abandonment. This may depend on the radical restructuring that the building underwent between the end of the fourth and the third centuries BC, which could have obliterated any traces of abandonment. However, the severe decline in ceramic material between the mid-fifth and mid-fourth centuries BC (Figure 3.17) encourages us to think that even if the site was not completely abandoned, the level of its occupation certainly diminished.

In the fifth century BC, there was a general impoverishment in painting, architecture and craft

[324] Di Giuseppe 2005a: 4, fig. 2; Di Giuseppe and Patterson 2009: 25, fig. 9.
[325] For a comparison between Potter's interpretation of the fifth-century BC data and what emerged from the restudy undertaken as part of the Tiber Valley Project, see Patterson, Di Giuseppe and Witcher 2004a: 5–13; Di Giuseppe 2005b.
[326] See Potter 1979: tables 2 and 3.

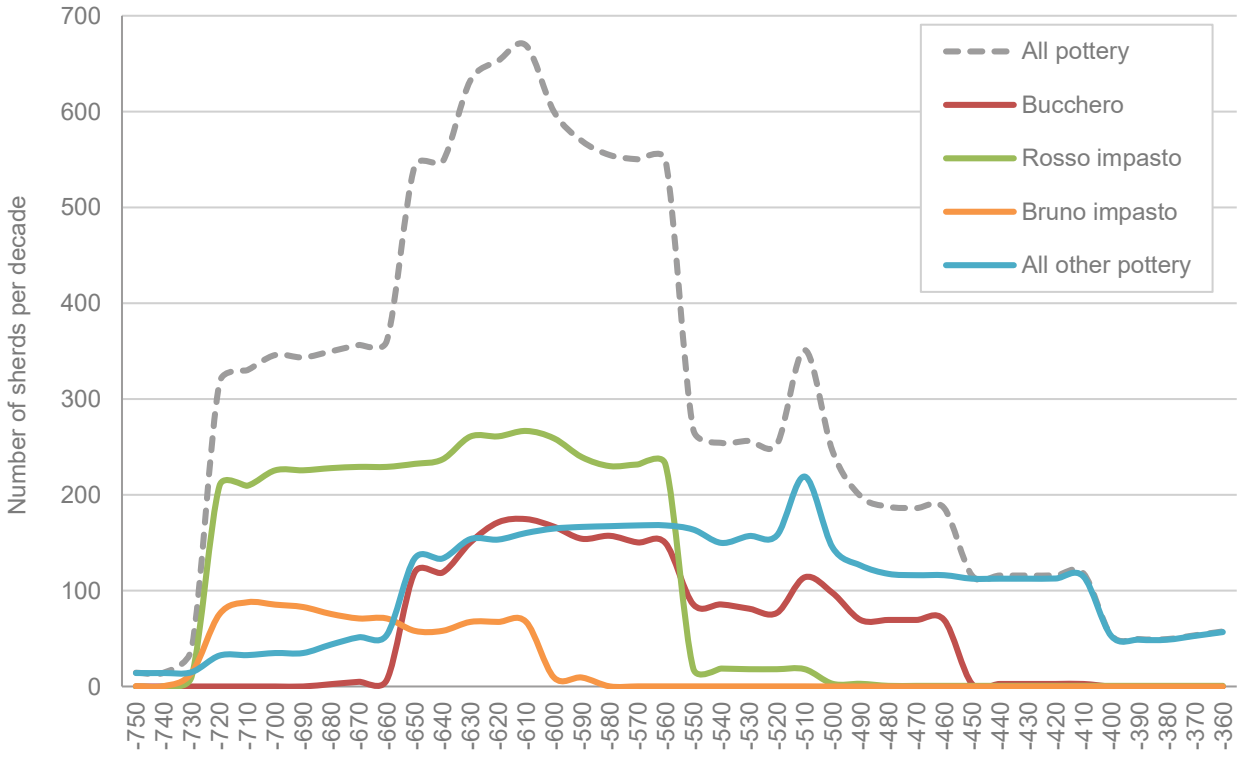


Figure 3.17. Weighted average numbers of sherds per decade collected by the South Etruria Survey: 750 to 350 BC.

working.[327] The towns show signs of contraction, the grave-goods are no longer rich as in the previous phases and even the rural settlements, as we have seen, show a notable decline, or at least cease to be visible to archaeologists. It is difficult to identify the causes behind this decline and we should look for more than one reason. Among the possible indicators of this 'dark age', as it has been defined, are the restrictions imposed by the laws of the Twelve Tables against the ostentation of luxury, a series of famines that devastated Latium (recorded in 492, 440, 433 and 411 BC), the possible concentration of property in the hands of the patricians, which took place at the beginning of the Republic to the detriment of small landholders, and the impetus of Rome's expansionism coinciding with the flare-up of the patrician–plebs conflict and with the pressing need for land distribution.[328] Even the possibility of enslaving an individual for debts (*nexum*), a process which seems to have been only partially resolved by the *Lex Poetelia Papiria* of 326 BC,[329] could have played a substantial part in the concentration of population in a few rural conglomerates under aristocratic control and in the drastic reduction in the number of small landowners who had been more fortunate in the sixth century BC.[330] We should also note the fact that the information we have from the census and the Roman annalistic tradition at Rome suggest a population decline in the fifth century BC compared to population numbers in the period of Servius Tullius, a decline that may underpin the picture that emerged from the restudy of the South Etruria Survey and other surveys undertaken in the Tiber valley.[331]

The same situation can be seen in neighbouring areas that have been surveyed more recently. The cases of Narce in the Ager Faliscus re-examined by the Gruppo Archeologico Romano (GAR), Monti della Tolfa–Valle del Mignone, the Ager Caeretanus, the southern Ager Veientanus, Fidenae, Crustumerium, the Ager Curensis and Ficulea show settlement development that began during the seventh century BC, reached its height in the

[327] For examples and discussion of this impoverishment, see Quilici 1974b; Quilici and Quilici Gigli 1980: 285–4; Cristofani 1986: 145; Quilici and Quilici Gigli 1986: 388–98; Colonna 1990a; Quilici and Quilici Gigli 1993: 473–7. For other surveys with results showing a heavily depopulated panorama in the fifth and part of the fourth centuries BC, see Rendeli 1993: 219; Patterson, Di Giuseppe and Witcher 2004a: 7, n. 8, 11. For a historical overview of Rome in the fifth century BC: Gabba 2005; for an alternative proposal for the fifth-century crisis in the Roman *suburbium*: Carafa 2004: 53–5.

[328] Twelve Tables: Colonna 1977: 155–65; 1988b: 493; 1990a: 9–11. Famines: Liverani 1984; Garnsey 1988: 164–81. Land ownership Cornell 1995: 325–7; Carandini 2009; Cifani 2009: 314. Land distribution: Cornell 1995: 256–7; Capogrossi Colognesi 2009: 93–4.

[329] Cornell 1995: 280–3; Capogrossi Colognesi 2009: 91 for *nexum*; Gabba 1990a: 10; Cornell 1995: 462; Rosenstein 2004: 77 for legal remedies.

[330] The first building on the Auditorium site (550/500 BC) has been interpreted in this sense. Between the end of the sixth and beginning of the fifth centuries BC it was transformed into a villa and provided with a second building, perhaps the slaves' quarters: Carandini *et al.* 1997: 11–118; Carafa 2004: 52; D'Alessio 2004: 227–8; Carandini 2006: 581–3.

[331] Census figures: Coarelli 1988: 318, n. 3; Lo Cascio 2000: 28.

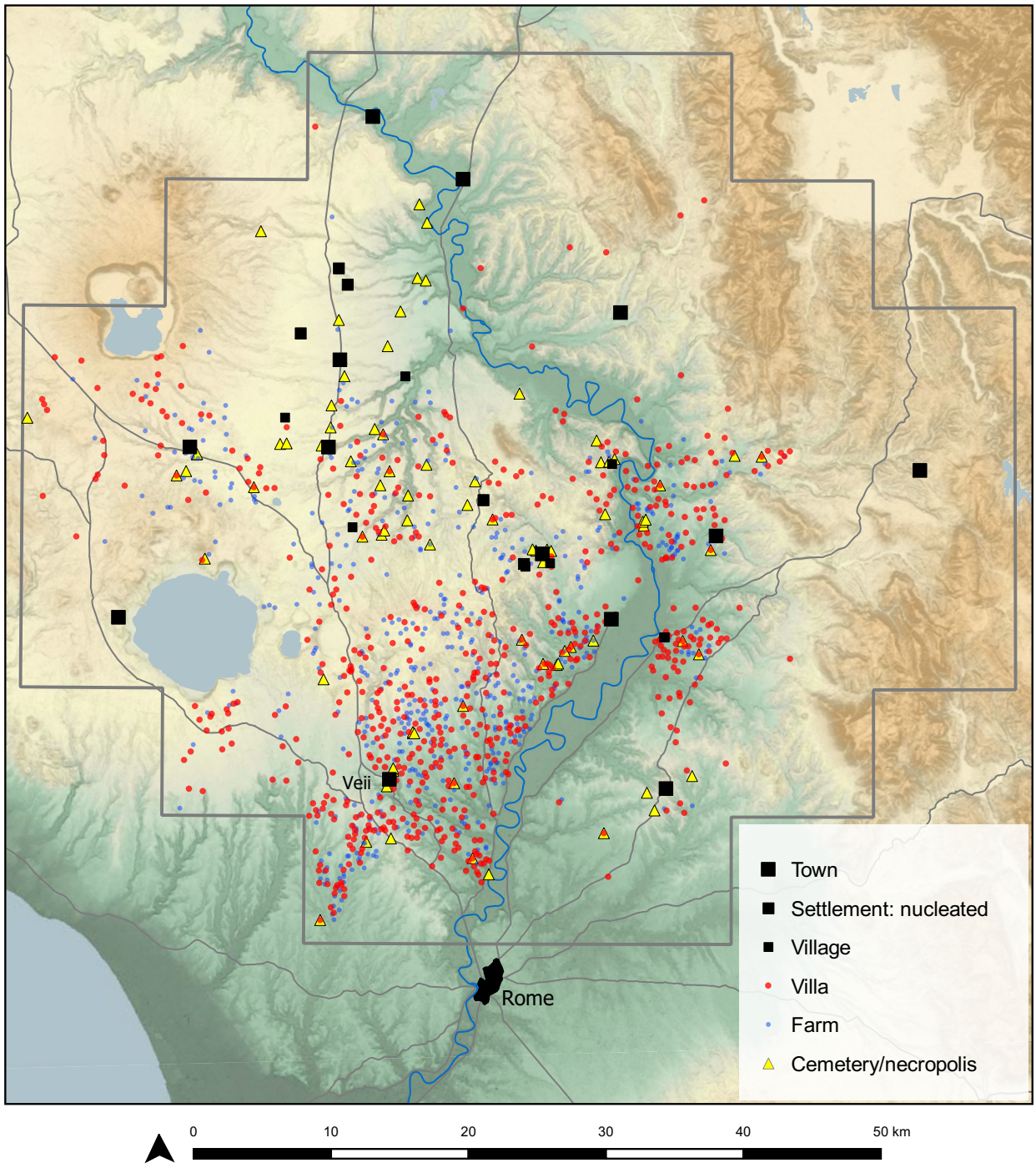


Figure 3.18. Tiber Valley Project settlement sites in the Republican period (350–50/1 BC).

sixth century BC and then declined during the fifth and fourth centuries BC.[332]

However, rural landscapes in close proximity to each other can reveal different stories. A very different picture has emerged from the results of surveys undertaken in Rome's northern *suburbium* by Rome's 'La Sapienza' University. The data show a gradual and uninterrupted growth in settlement numbers from the ninth century BC until the first century AD.[333] If confirmed, this would give a new understanding of the landscape of the middle Tiber valley, including Rome. The area of the *suburbium*

[332] For Narce, see Camilli 1993. For the Monti della Tolfa–Valle del Mignone: Coccia *et al.* 1985: 522. For the Ager Caeretanus: Naso, Rendeli and Zifferero 1989; Enei 1992: 76; Enei 1993. For the southern Ager Veientanus: De Santis 1991: 97–101. For Fidenae: Quilici and Quilici Gigli 1986: 382–3; Barbina *et al.* 2009: figs 9–10. For Crustumerium: Quilici and Quilici Gigli 1980: 281–5. For the Ager Curensis: Muzzioli 1980: 33–7. For Ficulea: Quilici and Quilici Gigli 1993: 464–9. See also Di Giuseppe 2018: 63–70.

[333] Carafa 2000 [2002]; Carafa 2004: fig. 6; Carandini 2009.

would become a sort of privileged island, untouched by any of the significant transformations that seem to have affected other areas. Also in the territories of Satricum and Antium, in southern Latium, an increase of rural settlement is noted in this period, despite the fact that in previous surveys a decline of settlements and pottery consumption was recognized in the post-Archaic period (500–350 BC) and the town of Satricum appears to contract.[334] These themes will be taken up and developed in the following section, dedicated to the Republican landscape, which we date from the mid-fourth century BC.

3.3 The mid- and late Republican landscape (*c.* 350–50/1 BC)

The restudy by the South Etruria Survey has revealed a completely different picture of the Republican period to Potter's well-known 1979 reconstruction in *The changing landscape of South Etruria*, which has fuelled so many debates. In most surveys, the Republican era (about four centuries) is treated as a single period, ignoring the internal divisions between the middle and late Republic, when radical military, political, social and economic transformations occurred.[335] There is no doubt that these choices were heavily influenced by Potter's book *The changing landscape*, but during the restudy, it was important for us to avoid preconceived models and start afresh from the archaeological data.[336] Figure 3.18 therefore shows all Republican-period settlement as a single 350-year block of time; the following sections describe how this broad periodization can be broken down to given a more nuanced picture of change within the Republican period.

Table 3.5. Chronological divisions of the Republican period based on the South Etruria Survey pottery and used by the Tiber Valley Project.

Period	Dates
Classical/early Republican	480–350 BC
Mid-Republican	350–250 BC
Late Republican 1	250–150 BC
Late Republican 2	150–50/1 BC
Early imperial	50 BC–AD 100
Generic Republican	350–50/1 BC
Generic late Republican	250–50/1 BC

Advances in pottery studies, linked to the recent publication of several excavations, have made it possible to improve the chronologies of Republican

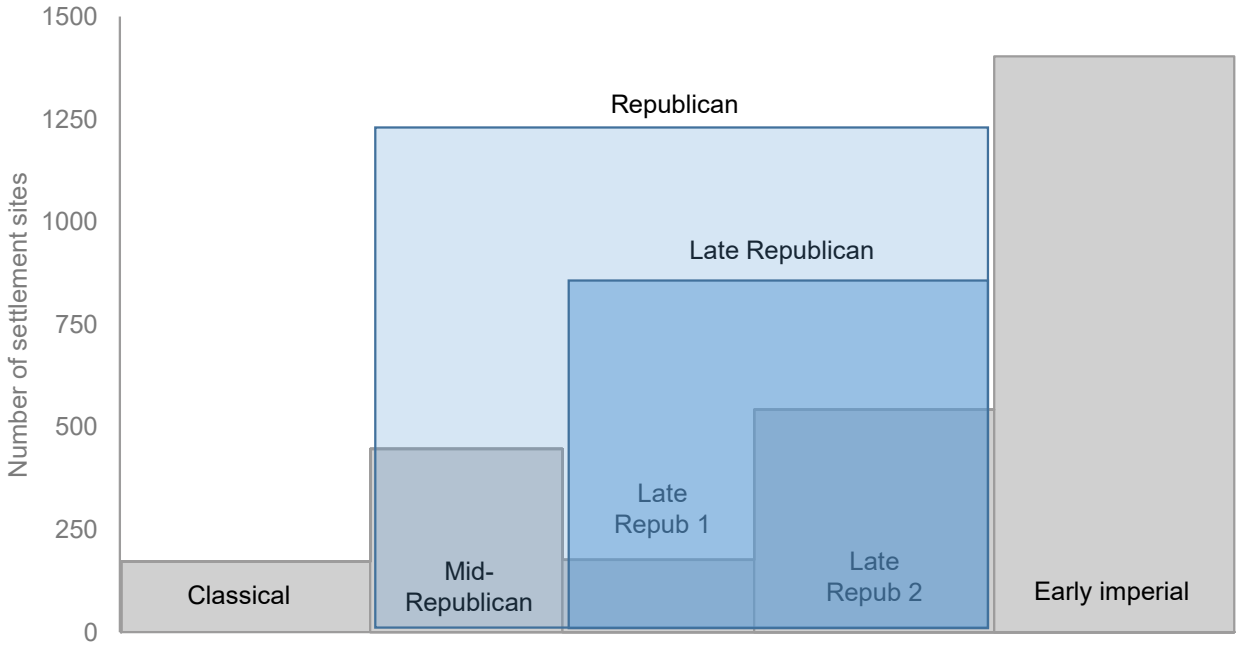


Figure 3.19. Numbers of settlement sites recorded in Tiber Valley Project database for the Classical to the early imperial period, showing numbers of sites dated to specific and generic periods.

[334] The change of perspective in this survey is based 'on a recent increase in the knowledge of the material culture of this period (mainly tile fabrics)', Tol 2012: 369–70; see n. 522 for bibliography relating to the previous survey). The dating of tiles remains inexact.

[335] In archaeological publications, the sixth to fifth centuries often are compared with the fourth to first centuries BC. See, for example: Potter 1979; Enei 2001; Tartara 1999; Cifani 2009: fig. 2.

[336] Patterson, Di Giuseppe and Witcher 2004a.

fine-wares and coarse-wares, and therefore to create distribution maps sub-divided into shorter spans of time. Based on the chronology of the majority of the pottery, the generic Republican period within the Tiber Valley Project has been conceived as shown in Table 3.5. The numbers of settlement sites in each of these sub-phases of the Republican period are shown in Figure 3.19, including generically dated sites.

The South Etruria Survey restudy has revealed a discontinuous and erratic history throughout the entire Republican period on both sides of the Tiber. Different areas show varying patterns of settlement distribution. As seen in the preceding section, the settlement boom in both towns and in the broader territories during the Archaic period was followed by a heavy decline in occupation on both sides of the Tiber into the fourth century BC, a phenomenon that began in the second half of the fifth century. There was settlement growth within the first half of the third century, followed by a new and substantial decline between the second half of the third century and the first half of the second century BC. There was a real reversal of this trend only at the end of the second century BC, when the middle Tiber valley saw renewed settlement growth. Site density was at its height in the Augustan period, the only time when settlement development was greater than in the sixth century BC (see section 2.6).

The results from more recent surveys, undertaken by other institutions using current, more accurate, methods, and with greater knowledge of the ceramic material, provide a valid tool allowing us to test the reliability of our proposed reconstructions for the various landscapes.

3.3.1 Historical outline of the Republican period

Between the fourth and third centuries BC, Rome extended its territory into the entire Tiber valley, gradually conquering Veii (396 BC), Capena (395 BC), Nepi, Sutri (*c.* 390 BC), Narce, Falerii Veteres (241 BC), and Cures Sabini (291 BC) in a series of military campaigns for which there are references in the literary sources.[337] The motivations behind these conquests and the methods employed differed in each case. Towns such as Veii, Capena and Falerii Veteres were taken because they were considered important and powerful rivals, controlling large territories suitable for land distribution to the Roman plebs. In the Capena territory, four new *tribus* (*Arnensis*, *Sabatina*, *Stellatina*, *Tromentina*) were created.[338] The subjugation of Nepi and Sutri was justified by their strategic positions along the natural communication route between the Faliscan centres and the towns of interior Etruria.[339] Rome's control of these vital positions meant that it could contain the power of Veii (Livy 5.19.7) and the Faliscans on the one hand, and that of important centres on the Tyrrhenian coast, such as Tarquinia, on the other.

As regards the juridical status of the towns, in 386 BC Nepi and Sutri were considered *sociae urbes* (allied towns), and shortly afterwards, in 383 or 373, Nepi became a Latin colony with the probable transfer of new colonists into the territory.[340] There is some doubt about the initial juridical status of Falerii Novi. According to Salmon, it was an allied town, while Di Stefano Manzella suggested that it may have been a Latin colony, prior to acquiring municipal status.[341] This condition would have forced the town to provide Rome with locally conscripted auxiliary troops, in the same manner as all the Latin colonies. Rome's dominion was only officially accepted in 297, when ambassadors from Nepi, Sutri and Falerii sued for peace in the name of the Faliscan populations.[342]

Although the sources tell of massacres, destruction, fires, the deportation and enslavement of Etruscans,[343] it is very difficult to find archaeological traces of such events. A town such as Veii, for example, known to have been heavily penalized by Rome's intervention and currently the object of intense excavations,[344] presents few traces of fires or destruction. Clearly, this is another case in which the town was conquered through a policy of creating alliances with the local aristocratic families, without which the Romans would not have succeeded in their intent. A typical example is that of the *Tolonii* of Veii, descendants of the *gens Tulumnie* who had given the town a king in the fifth century BC.[345] The memory of this family was still alive in the mid-Republican period, attested by the votive inscriptions on small jugs found in the sanctuary of Portonaccio and Veii-Campetti, probably indicating that they had sided with the Romans and had maintained a certain importance in the town.[346] The same goes for Falerii Veteres, whose pro-Roman families known from 389 BC onwards, the *Cotena*, the *Hirmii*, the *Protacii*, the *Tertinii* and the *Spurilii*, having refused to back the war against Rome, obtained Roman citizenship and probably new residences at Falerii Novi, where they continued to be attested in the epigraphy.[347]

[337] Hubaux 1958; Harris 1971; Potter 1991; Gabba *et al.* 1999: 55–9.
[338] Cassola 1988: 456.
[339] Diod. Sic. 14.117; Livy 6.9.3; Morselli 1980: 13.
[340] Livy 6.9.12; 6.21.4–5; Vell. Pat. 1.14.2; Lib. Col. 1.217.
[341] Salmon 1982: 172–4; Di Stefano Manzella 1990.
[342] Livy 10.14.2–3; Shotter 1976.
[343] Livy 6.4.2.
[344] Bartoloni 2009; Cascino, Di Giuseppe and Patterson 2012.
[345] *TLE* 38, 36; *ILLRP* 237 = *CIL Imagines* 104; Briquel 1991; Torelli 1999.
[346] *ILLRP* 64, 237; Torelli 1982; Comella and Stefani 1990; Ambrosini 2001.
[347] Di Stefano Manzella 1990.

Despite losing power over their territories, the towns of the Tiber valley must have maintained a certain autonomy in terms of decision-making. In fact, in 209 BC, the equilibrium created between Rome and the Faliscan towns once again deteriorated, when twelve of them, including Nepi and Sutri, refused to send the necessary aid for the war against Carthage.[348]

In contrast, the sources for the Sabine area mostly mention the organization of the territory rather than the towns, perhaps a sign that a balance between Rome and the local aristocrats was achieved through more peaceful means than on the west bank of the Tiber. Although smaller centres such as Magliano Sabina, Poggio Sommavilla, Eretum and Campo del Pozzo[349] have produced archaeological evidence of continuous occupation in the Republican period, they have left no traces in the literary sources.

3.3.2 Continuity and transformation: the urban landscape of the Republican period

Following Rome's expansion of its power, the *pagus-vicus* organization in the middle Tiber valley appeared to remain unchanged, and in some areas, such as the Sabina, it remained so until the medieval period. The landscape was still fundamentally dominated by two settlement types. The first is constituted by large centres such as Veii, Capena, Cures and Falerii Novi (30–190 ha). Veii was already an exception in the Etruscan period. The second type is smaller settlements (1–8 ha) denominated *vici*, *castella* and *oppida*, examples being Gallese, Carbognano, Grotta Porciosa, Corchiano, Poggio Sommavilla and Otricoli.[350] What probably changed in this period was the function of such settlements, which were no longer orientated towards the larger centres but rather towards the city of Rome.

Once deprived of their territories, which were now being used by Roman politicians to placate the plebs' need for land, what functions did the surviving centres continue to have? Most of these Archaic-period centres continued in occupation until the Republican period. The small centres that had been established with the function of forming a frontier against Rome's advance, such as those identified south of the Ager Veientanus[351] and the satellite types that grew up around the more important centres, tend to disappear.[352] Despite previous claims,[353] after the decline and abandonment of many Faliscan and Etruscan towns following the Roman conquest, there was in fact no corresponding dispersion of the inhabitants in the countryside through the creation of new farms, but rather a steady depopulation reflected in the numerical data that emerged from the South Etruria Survey. On the contrary, the settlements along the Tiber's banks and its tributaries continued to be occupied, exploiting the navigability and easy contacts with Rome.[354] Almost nothing is known of their urban fabric, except for a little information about the remains of curtain walls, doubtfully dated to between the fifth and fourth centuries BC, and cult buildings. The defensive systems of centres such as Veii, Campo del Pozzo, Otricoli, Nepi, the hill of Pizzo Piede at Narce, Grotta Porciosa and Corchiano attest the necessity of protecting the northern front of the Ager Romanus from the Gauls, who in 390 BC had sacked Rome, which forced the reconstruction of the city's defences. Faced with the lack of more specific evidence, it cannot be excluded that in the fourth century a number of these fortified centres were uninhabited and that they had been set up simply in order to house the scarce population scattered throughout the territory or the military garrisons sent from Rome when needed.[355] In this regard, we might recall that, in 329 BC, a maniple of Roman soldiers was sent to the almost deserted plateau of Veii in order to organize the resistance against the Gauls.[356]

Let us now look at some of the centres examined by South Etruria Survey. As these were surveys, particular attention will be paid to the collected material and in particular the black-gloss ware, the main dating evidence for the Republican period.[357] Observation of this pottery's 'behaviour' in the various centres and its contextualization in the light of other finds will help us to identify common trends and differences, and therefore to address the problems linked not only to production, consumption and the social status of those who used it, but also the questions regarding population. We will also see how the middle Tiber valley fits into the debate as to whether or not there was a crisis in the second century BC.

[348] Livy 27.9.7; 29.15.5; De Sanctis 1916; Toynbee 1965; Harris 1971; Potter 1979; Diano 1989; Cornell 1996.

[349] For Magliano Sabina, see Santoro 1997. For Poggio Sommavilla: Santoro and Zarattini 1995. For Eretum: Ogilvie 1965. For Campo del Pozzo: Filippi 1979; Muzzioli 1980: 120, n. 131, fig. 198; Reggiani 1980; Filippi 1979; Quilici Gigli 1986.

[350] Livy 10.11.6; 12.8; 46.11; Frederiksen 1971: 342; Frederiksen 1976; Gabba 1987: 111.

[351] This includes Colle Sant'Agata, Acquatraversa, Monte San Michele and Volusia: Carbonara, Messineo and Pellegrino 1996; De Santis 1997.

[352] This is the case for Monte Sant'Elia, Ponte Nepesino, Valle Larga, Bel Monte, Torre Busson, Monte Lombrica, Castel D'Ischia and Mazzano Romano.

[353] Potter 1979; Marcone 1997: 115.

[354] This is the case for Nazzano, Farfa, Eretum, Campo del Pozzo, Magliano Sabina, Poggio Sommavilla, Corchiano, Grotte Colonna and Fontanile di Vaccherecia.

[355] Gabba 1987: 114; 1994: 68.

[356] Livy 8.20.4–5; Hubaux 1958.

[357] In order to assess the use of black-gloss ware in these centres we use the weighted average, a statistical application particularly suitable for survey material: Fentress and Perkins 1988; Terrenato and Ricci 1998; Trément 2000; Fentress *et al.* 2004; Di Giuseppe 2012a: 11–12; see section 2.4.2.

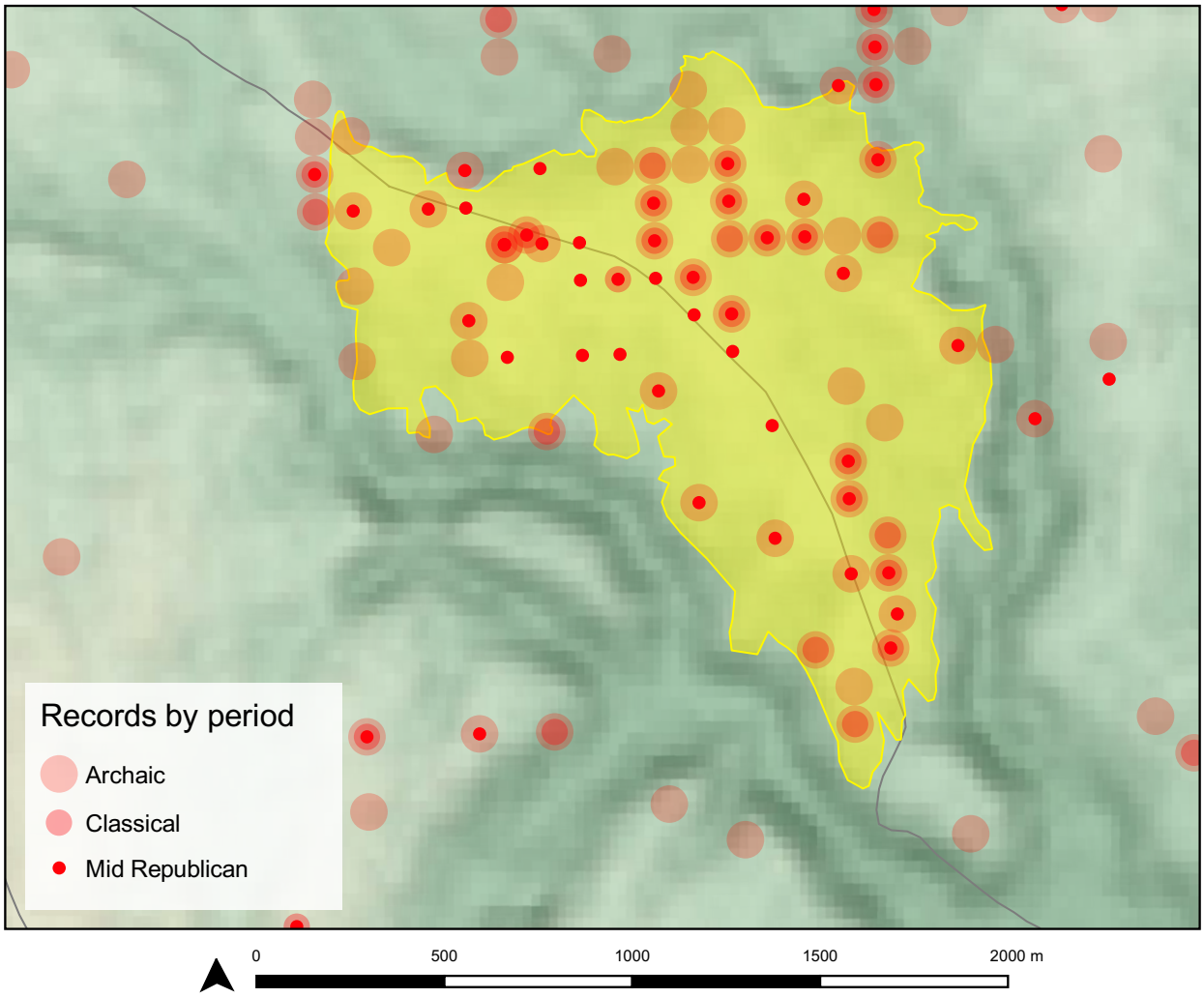


Figure 3.20. Findspots with Archaic, Classical and/or mid-Republican-period material at Veii.

Veii constitutes the main observatory for the study of the pre-Roman towns in the Tiber valley which survived the Roman conquest.[358] After 396 BC, Veii lost its political and administrative functions within the territory, but kept the strong sacred connotation that had also characterized its earlier phases. The restudy of the material revealed a substantial decline in occupation in the fourth century BC (Figure 3.20). The finds for this period were concentrated in the areas of Comunità and Macchiagrande, and in cult contexts.

The fourth century, above all the first half, is a difficult period to identify through material culture,[359] so the decline in occupation could be more apparent than real. But it must be admitted that a series of factors may have caused the depopulation of the plateau. The aftermath of the famines documented towards the end of the fifth century BC, the descent of the Gauls, Rome's advance and consequent massacre of the Etruscans after the capture of Veii described in the literary sources, all may have severely reduced the population.[360] Occupation of the town once again began to increase between the end of the fourth and first half of the third centuries BC (with a similar increase noted also in the territory), when cult and production activities were reorganized.

The distribution of the evidence of cult and production sites collected by the BSR team and ongoing excavations show that, following their settlement here after the conquest, the Roman plebs maintained the functional areas of the Etruscan town.[361] The cult sites situated close to the town gates continued in use until at least the second century BC,[362] while within the town,

[358] For the British surveys on the plateau at Veii, see Cascino, Di Giuseppe and Patterson 2012.
[359] On the fourth-century material culture, see Di Giuseppe 2010b.
[360] Liverani 1984; Marcone 1997: 114; Livy 5.21.1–8; 5.22.1.
[361] Torelli 1999.
[362] Porta Caere, the Formello Gate and the North-east Gate represent clear cases of cult sites that grew up in the Etruscan period; the evidence regarding the North-west Gate and the Vaccherecia postern is less certain: Ward-Perkins 1961: 3–20. For the same phenomenon at Vulci, Tarquinia, Cortona, Caere, Orvieto, Bolsena, Perugia and Arezzo, see Colonna 1985b: 67. For Gubbio: Ancillotti and Cerri 1996. For Cosa: Colonna 1985b: 67. For Falerii Novi: Colonna 1985b: 67. For a wider view, see Coarelli 1983: 114–15; Colonna 1985b: 68.

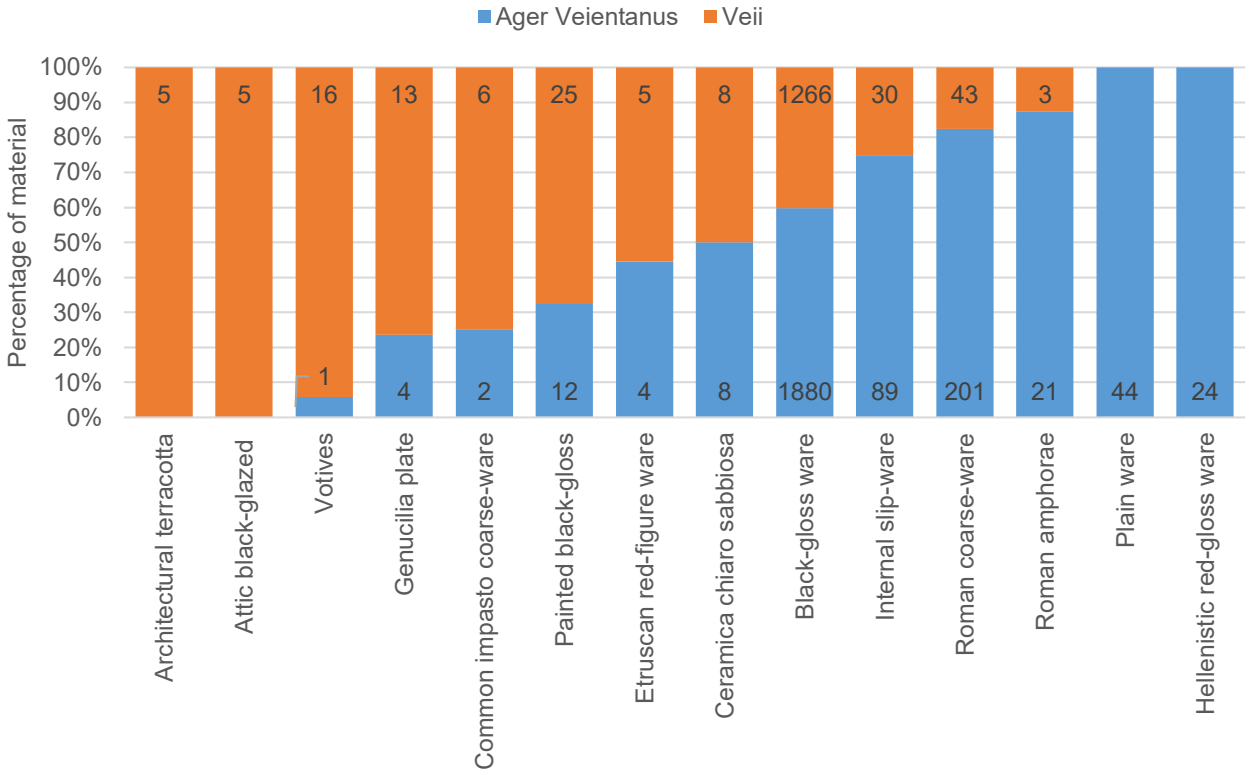


Figure 3.21. Percentages of material of Republican date at Veii and in the Ager Veientanus survey area.

cult indicators seem to follow a processional route involving the two main roads crossing the plateau and meeting each other at its centre in the locality of Macchiagrande. The votives collected attest to health cults concentrated on the hill of Comunità, considered the town's *arx*,[363] where the artisans' quarter, active in the Etruscan period, must have continued to function.[364]

There is also evidence for the revival of craftworking activity at Campetti, along the main road crossing the town from north to south, where kiln spacers and large quantities of wasters from black-gloss ware and probably internal slip ware datable to between the end of the fourth and the beginning of the third centuries BC were found. The direct association and close proximity of such artefacts to *ex votos* suggests a link between the cult site and the artisans' quarter.[365]

The town's aristocratic and sacred aspects in the mid-Republican era are also attested by the relationship between the pottery classes and shapes present on the plateau of Veii and those in the surrounding area in this period (Figure 3.21). Compared to its territory, Veii registers a prevalence of fine-wares over coarse-wares, and vessel forms making up services such as those used in ceremonial banqueting and funerary rituals. These are not present in the *ager*, where, on the contrary, wooden services and more common wares may have been predominant.[366]

In the second century BC, as in its territory, there also seems to have been a renewed decline in occupation at Veii that continued until the Augustan era.[367] We also see a drastic decline in the consumption of pottery (Figure 3.22).[368] The archaeological evidence is represented by traces of *domus* built into the urban fabric, such as those at Comunità, Macchiagrande and Campetti, and by the sanctuaries of Campetti and Porta Caere that were still in use.[369] In this period, occupation was concentrated in the north-eastern part of the plateau close to what would become the forum of the Municipium Augustum Veiens.[370] A passage in Propertius (4.10.27–30) attests that, during the late Republican and early Augustan periods, the area enclosed within the walls had a rural appearance.

[363] Torelli 1982. The well-known Lanciani hoard was found here; Lanciani 1889, now published by Bartoloni and Benedettini 2011.
[364] For black- and red-gloss pottery wasters and kiln spacers dating to the mid-Republican period, see Peña 1988; Di Giuseppe 2012a: 63; Di Giuseppe 2012b: 217; Di Giuseppe 2012d: 253–4.
[365] For evidence of such a link, see Di Giuseppe 2002; Patterson *et al.* 2003; 2004; Cascino and Di Sarcina 2008: 571–2; Di Giuseppe 2008a; Di Giuseppe 2012a: 63–4; Di Giuseppe 2012c: 214–15; Di Giuseppe 2012d: 254.
[366] Di Giuseppe, Bousquet and Zampini 2008.
[367] Patterson *et al.* 2004; Di Giuseppe 2012e: 363.
[368] Di Giuseppe 2005c: 48, fig. 8; 2012a: 131, fig. 122.
[369] Belelli Marchesini 2001; D'Alessio 2001.
[370] Liverani 1984.

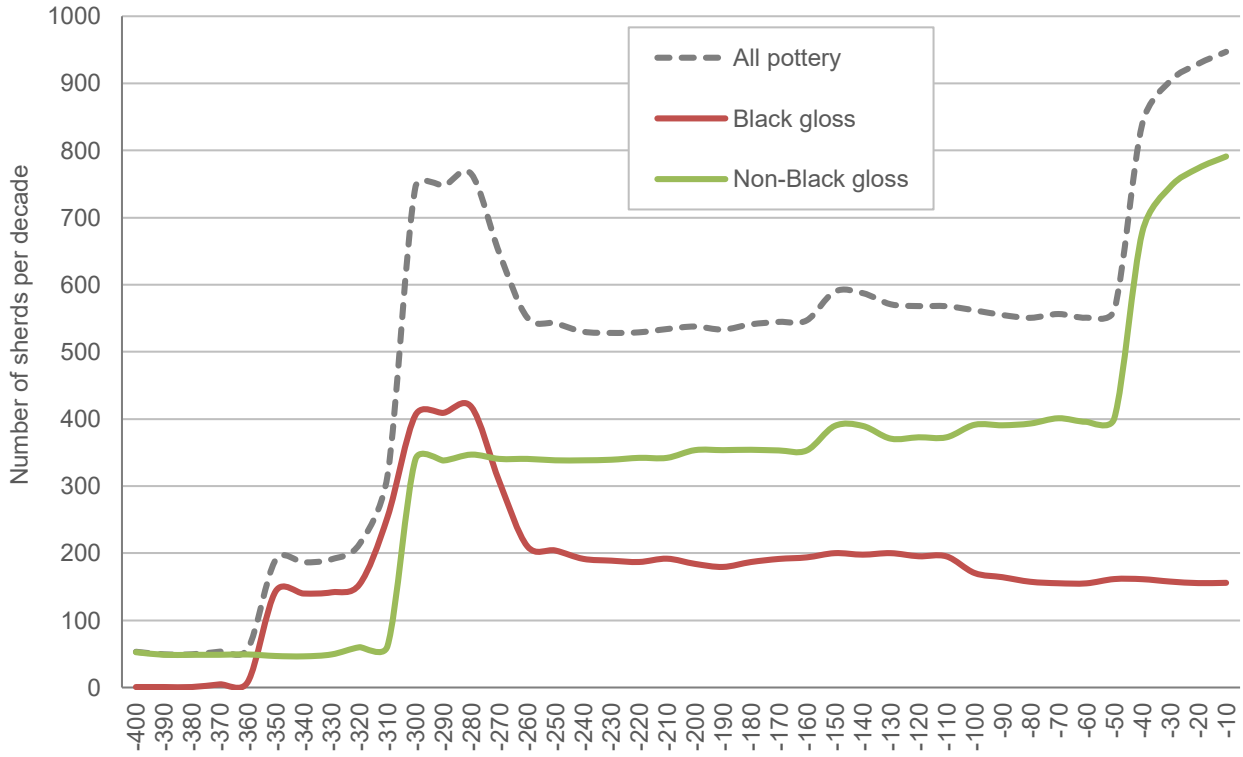


Figure 3.22. Weighted average numbers of sherds per decade collected by the South Etruria Survey: 400 to 1 BC.

At Capena, the extensive surveys show the same phenomena of settlement contraction in the fourth century, with revival in the second half of the fourth century and the gradual concentration of settlement towards the central part of the plateau, close to what would become the forum (Figure 3.23).[371] Here, too, the archaeological evidence for the Republican period mainly relates to cult buildings situated close to the town gates and along the main road. Jones made a particularly interesting find, yet to be fully published, close to the southern town gate, which revealed a phenomenon that seems typical of the Capena/Faliscan and Latium areas in general, that is the different behaviour of the cult sites compared to the rest of the settlements and territory. This was visible at Capena in the discovery of a large concentration of pottery, black-gloss ware in particular, of the third and second centuries BC, situated along one of the inner roads which branched off from the road leading to Lucus Feroniae, Nazzano and Fiano, entered the town, and headed towards the forum area (Castellaccio). The finds included miniature vessels, *Heraklesschalen paterae*, and red-figure and Attic pottery from the previous period, which, together with their topographical position, seems sufficient evidence to suggest that this was a cult site. The proposal is supported by the identification on the site of votive materials, and of another area of finds outside the walls, also thought to have a cult significance.[372] The weighted average of the black-gloss ware (Figure 3.23) shows particularly significant occupation in the third century and from the mid-second century BC onwards, once again attesting to the continuation of the sacred and perhaps economic functions of the settlements at a time when the rest of the urban area seems to have undergone a considerable reduction in size. An analogous result emerged from the study of materials found by the Gruppo Archeologico Romano (GAR) in the area of Castellaccio that was recently re-examined.[373] This site was probably also a sacred area in the second century BC and flourished whilst the rest of the territory seems to be in decline.

In cult areas at Falerii Veteres and Falerii Novi, processional routes are marked by temples that relate to the external and internal town gates and the inner road system. In the first half of the third century BC, Falerii Veteres presents a series of sanctuaries such as Scasato, situated in the south-eastern part of the town close to the walls. Following the town's destruction, it remained in use until the first century BC and was equipped with workshops for the production of black-gloss ware dating to the end of the fourth to first decades of the third centuries BC.[374] Other suburban sanctuaries remained in use until the third century or

[371] Camilli *et al.* 1995; Mazzi and Cotroneo 1995; for the geophysical surveys undertaken on the plateau, see Keay, Millett and Strutt 2006.

[372] Jones 1963a: 139–40; Mazzi and Cotroneo 1995: 42, fig. 12; 56.

[373] Roth 2006: 138; 2007: 152–75.

[374] Pasqui 1903; Patterson *et al.* 2003; De Lucia Brolli 2006; Di Giuseppe 2012a: 65–6.

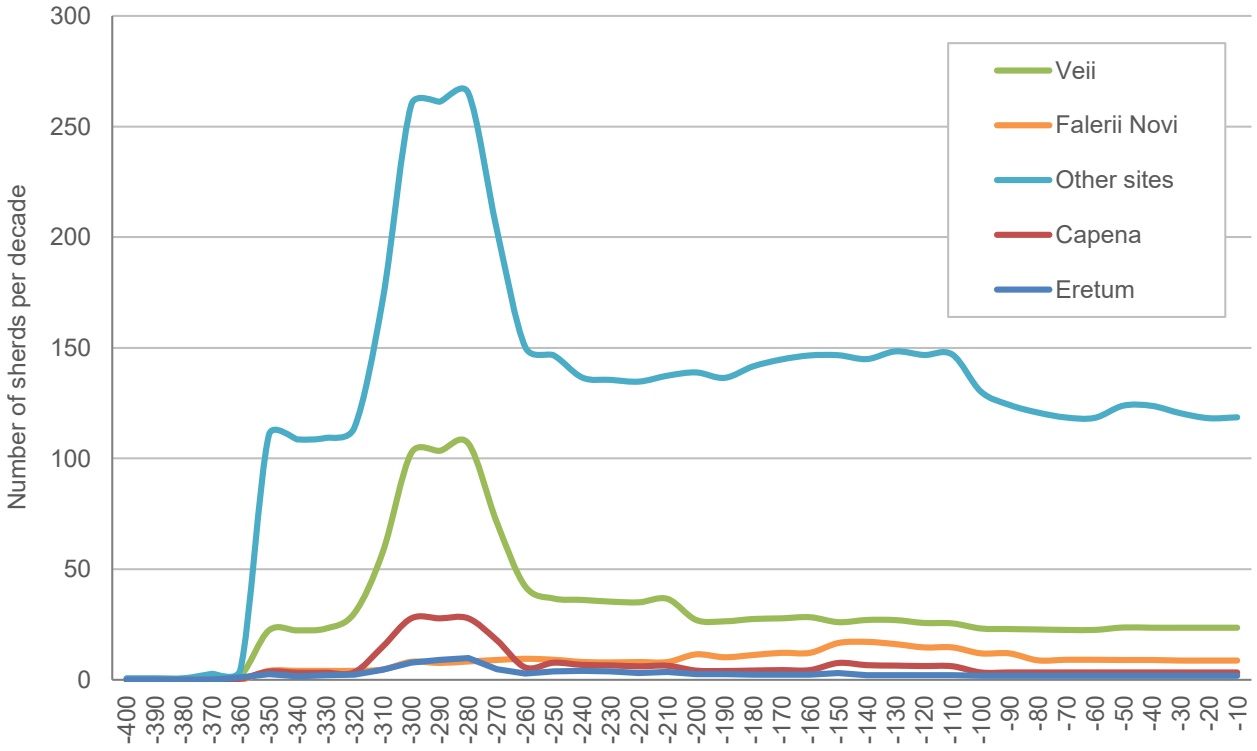


Figure 3.23. Weighted average numbers of black-gloss sherds per decade collected by the South Etruria Survey and select centres in the middle Tiber Valley: Veii, Capena, Eretum and Falerii Novi.

even the Augustan era (Ovid *Am.* 3, 13), such as those of Sassi Caduti, Celle and Juno Curitis with the function of emporia.[375] The occupation at Vignale, once an integral part of the town of Falerii Veteres, dating to between the first century BC and the fourth century AD and documented by survey, also provides an example of the continuing use of cult sites and the progressive ruralization of these centres.[376]

Although a new foundation with an urban layout typical of the third century BC, Falerii Novi is of particular interest as it presents strong elements of continuity with the Etruscan and Faliscan tradition.[377] One example of this is the processional route marked by temples situated by the west gate and along the route around the inside of the north wall.[378] The available material from the South Etruria Survey comes from several points close to the town walls, which are thought to be cult sites. Between 1956 and 1957, Ward-Perkins's team documented a dump of material outside the town walls west of the Porta Romana. The dump was characterized by ritual vessel forms, such as kraters similar to those produced at Malacena, black-gloss *pyxides*, *kylikes* and *lekanes* of second-century BC date, typical of votive deposits.[379] The data, although scant, indicate that occupation in the area was particularly intense during the second half of the second century BC (Figure 3.23), consistent with what we have documented for the votive dump at Capena.[380]

In Latium, too, cult activity continued in towns which were otherwise in decline in the second century BC.[381] On the other bank of the Tiber, at Cures Sabini, the reorganization of the settlement and the progressive contraction of the urban area amounts to about 20 per cent with respect to that occupied from the protohistoric period until the third century BC. This contraction is dated to between the end of the third and the second centuries BC, and definitively completed between the late Republican and Augustan period.[382] According to Muzzioli, the causes of the urban contraction should be sought in the repercussions of the Punic wars, in economic factors and natural disasters, such as the earthquakes mentioned in the sources that provoked the collapse of many of the town's buildings in 174 BC (Livy 31.12.6).

Eretum, a very ancient town, also declined in importance in the Republican period, so that it came to be simply defined as a *kome* (village) by Strabo (5.3.1) and *vicus* by Valerius Maximus in the imperial period. The

375 De Lucia Brolli 1991: 28–41.
376 Moscati 1983; Camilli and Noviello 1989.
377 Keay *et al.* 2000; Cifani 2013.
378 Keay *et al.* 2000; Millett and Keay 2001.
379 Ward-Perkins 1959b.
380 See Keay *et al.* 2000: 73, fig. 50.
381 Liverani 1984: 44–5; for the case of Satricum, see Tol 2012: 372.
382 Muzzioli 1980; 1985.

distribution of the black-gloss ware collected by Ogilvie on the south-western side of the town and restudied as part of the project seems to suggest, as seen in other towns, an intensification of occupation until the first half of the third century BC, followed by a decline that continued until the Augustan era (Figure 3.23).[383]

The other settlements in the middle Tiber valley, situated on both sides of the river, otherwise known from the sources as *oppida* and *castella*, preserve traces of mid-Republican occupation, but their characteristics are unclear, due to the lack of large-scale excavations.[384] It is not known whether they were occupied or rather had kept only some of their functions, for example, those relating to cult activity as is the case at Narce.[385] A number of towns were occupied by *villae rusticae* and a few continued to develop until the imperial period: Ocriculum, Lucus Feroniae and Trebula Mutuesca,[386] precisely by virtue of their mainly cult origins, centred around sanctuaries dedicated to Feronia and Silvanus.

3.3.3 The rural landscape of the Republican period

Let us now look at the development of the territories around the important Etruscan, Faliscan and Sabine towns to see how far their 'behaviour' resembles or differs from that of the urban centres.

After the Roman conquest, the situation in the countryside also changed. There is much more widespread evidence of the fifth- and fourth-century BC devastations and subsequent new land allocations consequent on the gradual spread of land occupation by new Roman citizens and allottees. The evidence will be discussed in terms of the various *agri*, the term indicating sections of territory that in the pre-Roman phase were probably controlled by the larger urban centres. The identification of their boundaries is even more difficult in the phase following the Roman conquest, when the urban centres lost what little political power they had. For this reason, purely conventional choices have been made, that have little to do with the concept of ancient territoriality, and instead relate to the single surveys undertaken in these areas between the 1950s and 1990s. The number of settlements identified by the individual projects is large enough to represent a sufficiently indicative sample. Furthermore, the possibility of comparing the different surveys undertaken in the same areas has rendered our interpretations more reliable.

The previous section on urban landscapes stopped at the fourth century BC, when a decline in occupation was noted, which began in the mid-fifth century BC and continued until at least the middle of the following century. Despite the foundation of four new tribes (Livy 6.5.8), the allocation of new land to Roman citizens and to those among the people of Veii, Fidenae and Capena who had gone over to Rome's side following the conquest of Veii (Livy 6.4.4), we cannot gain any idea of the extent of these new occupations from the South Etruria Survey data. It is possible that this may be caused by the poverty of the non-elite material culture of the period, mainly constituted by coarse-ware pottery or wooden vessels, which makes the sites 'invisible'. It is equally possible that the new owners were settled with very limited means and in small houses built with perishable materials—the *casae* and *tuguria* (Livy 5.53) described by the sources, which only survived for a few generations, and examples of which are known in the Ager Veientanus, in the Roman *suburbium* and Latium.[387] Some scholars hold that the Ager Veientanus remained largely unallotted as *ager publicus populi romani*.[388] For those areas which were distributed from 393 BC the grant of seven *iugera* of land (just under 2 ha), typical of the mid-Republican period,[389] had been thought to have been only just sufficient for a family's survival. On the other hand, if it was exploited well, and supplemented by the use of common land,[390] and if we believe that seven *iugera* of land were given not only to the *pater familias* but also to all the free men in the same family (Livy 5.30.8), the grant may have been more realistic, but still implies a limited capacity for surplus.

The Ager Veientanus occupied a very large section of territory, being defined on the north by the Sabatini Hills, on the east by the Tiber, on the west by Lake Bracciano and on the south by a series of small fortified plateaux. The existence of a single large urban centre within such a protected environment must have stimulated dense occupation of the surrounding countryside, in a phase of centralized structuring and control of the territory and a general devastation when the land was taken and control passed to Rome. The territory of Veii—among the most densely populated

[383] Ogilvie 1965.

[384] Among these Nazzano, perhaps ancient Saeperna: Jones 1963a: 107–8; Muzzioli, D'Atri and Sforzini 1986; Gazzetti 1992: 75–7; Nepi: Frederiksen and Ward-Perkins 1957; Gamurrini *et al.* 1972: 161–2, 177–8; De Lucia Brolli 1991: 44–7; Edwards, Malone and Stoddart 1995; Narce: Potter 1976a: 161; Campo del Pozzo: Filippi 1979; Muzzioli 1980: 119, n.129; Poggio Sommavilla: Santoro and Zarattini 1995; and Magliano Sabina: Santoro 1997.

[385] For evidence, see Potter 1976a; De Lucia Brolli 1990; De Lucia Brolli 1991: 18–28; Camilli 1993; De Lucia Brolli 2017.

[386] For Otricoli, see Pietrangeli 1978: 26–9. For Lucus Feroniae and Trebula Mutuesca: *CIL* IX 4882 = 12/2, 627 = *ILS* 21a = *ILLRP*, 327; Guattani 1830; Torelli 1963; Coarelli 1966a; Coarelli 1966b; Leoni 1970; Pietrangeli 1976; Coarelli 1982; Alvino 1995; Reggiani 1997; Alvino 1999.

[387] Bedini 1984; Di Matteo 2005; Jolivet *et al.* 2009.

[388] For examples of these views, see Frank 1933: 23; Toynbee 1965: 164–5; De Martino 1979: 25–7. For a comment on this, see Liverani 1984: 39.

[389] Marcone 1997: 111.

[390] An example is Spurius Ligustinus who, in 171 BC, was married with eight children and lived in the Sabina from the fruits of only one *iugerum* of land (Livy 42.34): Gabba 1982a: 110; Marcone 1997: 111; Rosenstein 2004: 74–5.

in the Archaic period—demonstrates low levels of continuity into the mid-Republican period. Only one in five Archaic settlement sites continued in occupation through the Classical into the mid-Republican period; another 18 per cent were occupied in both the Archaic and mid-Republican with a break in the Classical. These were probably the wealthiest and most important sites which remained in the hands of the Etruscans who had sided with Rome, or sites expropriated and then redistributed to the new Roman citizens. The vast majority of sites occupied in the mid-Republican period in the Ager Veientanus are new foundations (just one-third have Classical-period activity). This may indicate that most of the land taken from the Etruscan owners remained *ager publicus*, a suggestion supported by many scholars in the past.[391] The existence of *ager publicus* in this area is proposed in a *senatusconsultum* of 210 BC, which ordered the deportation of Capuans who had gone over to Hannibal's side in the territory of Veii, Sutri and Nepi (Livy 26.34.6–7).

In the Ager Capenas, the impact of Romanization appears to have been less devastating, in the sense that although there was a decline in the Classical/early Republican and mid-Republican periods, about half of the pre-Roman sites survived. Moving further north, towards the Ager Faliscus, settlements become even sparser, not so much as a result of the conquest, but because this settlement pattern had formed in the pre-Roman period and continued thereafter. The territories of Sutrium, Nepi and Falerii, which in the Archaic period already showed scarce occupation, continued to remain so, or to be scaled down even more, even after the arrival of the Romans. The reliability of such data is attested by the fact that all of the surveys, including the most recent ones, such as those of the Forma Italiae and Regione Lazio, produce an image of an almost desolate landscape, where settlements are very rare.

A similar situation is registered for the Sabina Tiberina, both in the territory of Cures and Eretum, where the low settlement density of the Archaic period does not change much in the mid-Republican era. This picture must be linked also to the geography of the places, above all the settlement layout determined by it in preceding phases. Both the Faliscan area, and the Sabina were characterized by a more difficult topography marked by deep valleys, steep hills and other rocky spurs formed at the confluence of two rivers that made communications difficult and provided few suitable spaces for settlement. Scarce occupation is not surprising. It is not by chance that the system of *vici* and *castella* developed precisely in these areas, and survived until the medieval period, discouraging the widespread occupation of the countryside.[392]

Settlement visibility again increases between the end of the fourth and the first half of the third century BC (Figure 3.24). This was probably due to a period of greater political, economic and social stability, which in turn was perhaps associated with population growth. This may have led to an increase in consumption, which we see in the establishment of numerous urban workshops which made pottery that was now accessible to a wider section of society.[393] Black-gloss ware from the first half of the third century BC is among the most widely attested of the fine-wares in all areas, and this seems to reflect a substantial development when we consider that in the phase preceding the Roman conquest, bucchero had been distributed over a much smaller territory.[394]

Across the middle Tiber valley, large numbers of new sites were occupied for the first time compared with those that continue from the Classical/early Republican period (Figure 3.25); sites that continue in occupation constitute just a small percentage of those abandoned at the end of the Classical period or newly founded in the mid-Republican period.[395] In the Ager Sutrinus all mid-Republican sites are new foundations, which is not surprising if one considers that it was not until the mid-third century BC that the territory was partially freed of the Cimina forest in order to create more arable land.[396] In such a picture, especially for the Sabina, it may be possible to recognize the phenomenon of widespread occupation of the territory, which reached its height after the Roman conquest, when viritane and quaestorian land allocations were made.

It should also be stressed that within the Ager Veientanus, the largest number of new sites is found south of Veii where fewer Archaic sites survive.[397] It is possible to imagine that the allocations to new landowners were greater in areas that were free of settlement, since they had previously been occupied only by Etruscan border sites which were definitively abandoned at this point. This strip of territory was the most exposed to the Roman advance and consequently

[391] Frank 1933: 23; Toynbee 1965: 164–5; De Martino 1979: 25–7. On *ager publicus*, see Roselaar 2009.

[392] Livy 10.12.8; 46.11; 11.6; Frederiksen 1971: 342.

[393] Patterson *et al.* 2003; Di Giuseppe 2005c; 2008a; 2012a: 62–71.

[394] Di Giuseppe, Bousquet and Zampini 2008.

[395] Much depends on how the data are treated and what we want to emphasize. If, for example, we consider the continuity of mid-Republican settlements (350–250 BC) compared to the Archaic period (580–480 BC), rather than the immediately preceding Classical phase (480–350 BC), the continuity index seems to be very high: this procedure was followed by Kahane, Murray-Threipland and Ward-Perkins 1968: 145–56 and by Liverani 1984: 38. However, in our case the aim is to highlight the void that emerges in the fifth and part of the fourth centuries BC.

[396] Morselli 1980: 14–15, n. 46.

[397] The area south of Veii corresponds to an unpublished survey called the 'Via Veientana'.

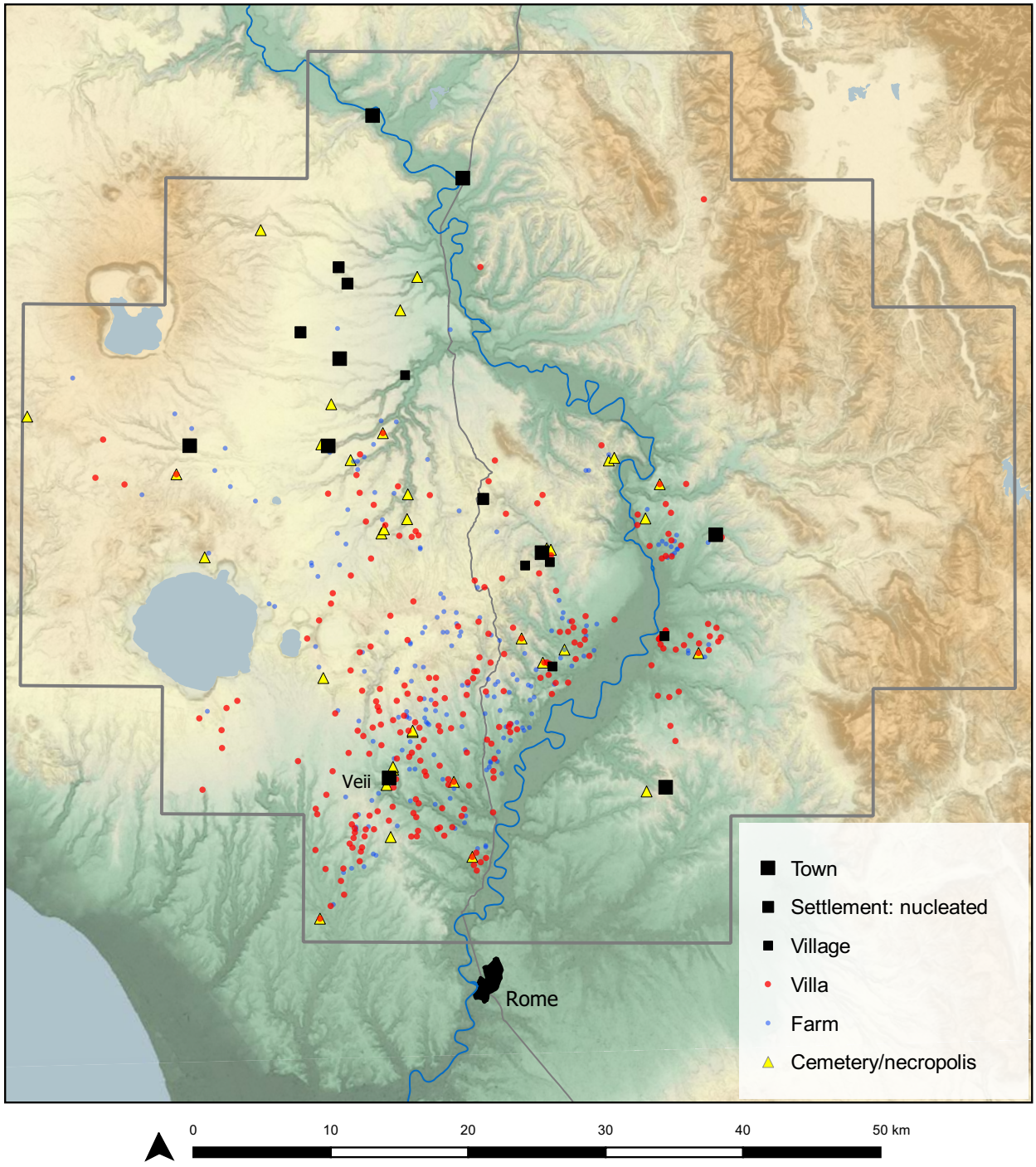


Figure 3.24. Tiber Valley Project settlement sites in the mid-Republican period (350–250 BC).

was protected from the fifth century BC onwards by a series of small fortified centres such as Prima Porta, Colle Sant'Agata, Marmo Nuovo and Acquafredda,[398] which lost their function after the Roman conquest.

The results of the South Etruria Survey for this period are quite similar to those from a sample area of the Galantina project, on the eastern bank of the Tiber, north of the Farfa river.[399] In both areas, the settlement 'explosion' of the Archaic period (580–480 BC) was followed by a brisk decline between 480 and 350 BC, but in the area of the Galantina survey, it appears to be much more dramatic in that there is no settlement evidence at all. When the detailed study of the Archaic pottery is completed, part of the material may perhaps

[398] De Santis 1997.

[399] Gabrielli, Guidi and Santoro 2003; Candelato, Guidi and Santoro 2004; Guidi, Santoro and Agneni 2004; Agneni *et al.* 2005; Guidi, Santoro and Rioda 2008.

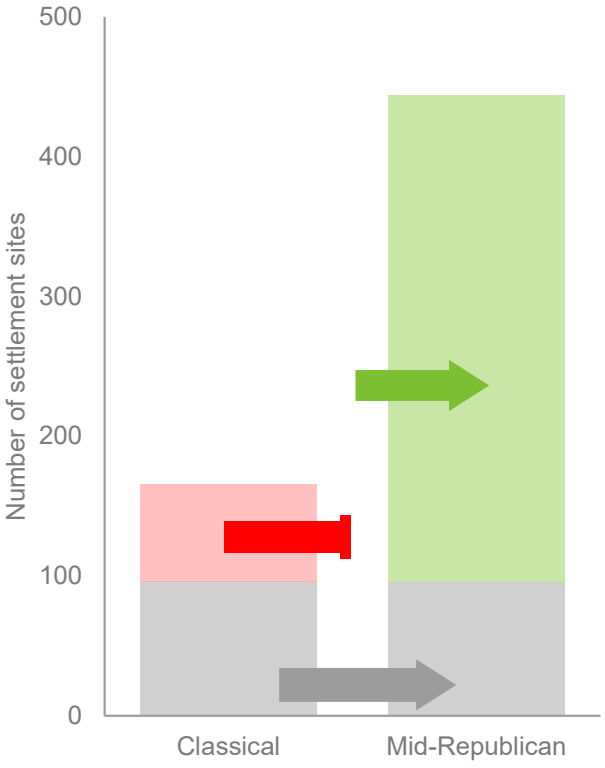


Figure 3.25. Numbers of settlement sites abandoned (pink), continuing (grey) and newly founded (green) at the transition from the Classical to the mid-Republican period.

'repopulate' the fourth century BC,[400] and the results will appear differently. However, the fact remains that the latter period is scarcely visible in the areas in question, probably for the same general reasons as those suggested for South Etruria. Apart from this, the picture seems similar in both zones, except that the Galantina area shows more intense and sudden settlement development between 150 and 50/1 BC (late Republican 2), whereas in the South Etruria Survey, real development is only registered between 50 BC and AD 100 (early imperial). Compared to the phase of general decline between 250 and 150 BC, which will be discussed below, between 150 and 50/1 BC settlements were eight times more numerous in the Galantina survey area and only three times more numerous in South Etruria.

We see a different pattern in the part of the Sabina closest to the Galantina survey, that is the zone that falls within the municipality of Passo Corese between the Torrente Ponticchio to the west, the Torrente Corese to the east, via della Casa dei Preti to the north and the Passo Corese state road to the south (a sample area of *c.* 3 km^2). This was surveyed by the BSR in 2000.[401]

The area forms part of the IGM map of Montopoli di Sabina surveyed by Muzzioli in the 1970s as part of the Forma Italiae project.[402] Here, the relationship between Archaic and mid-Republican sites is the opposite of what we have seen so far, showing occupation growth in the Archaic and mid-Republican periods (Figure 3.10). The literary sources, which describe in detail the particular history of this area, may give us a clue as to why this is the case.

Following the Roman conquest of the Sabina in 290 BC, the Sabine population was granted *civitas sine suffragio*, and later, in 268 BC, they obtained the *civitas optimo iure.*[403] According to Fabius Pictor, the Romans experienced wealth for the first time when they conquered the Sabines, probably referring to the fact that the territory was rich in unexploited land.[404] We know from the *agrimensores* that on this side of the Tiber after the conquest of M' Curius Dentatus the conquered territory was in part left to the Sabines, in part assigned to veterans and in part destined to become *ager publicus.*[405] Moreover, part of the latter was declared *ager quaestorius*, that is saleable state land (*venditio quaestoria*: in reality this was perpetual and hereditary ownership, in the form of emphyteusis, but not transferable by the beneficiaries who were held to pay rent (*vectigal*)).[406] In relation to the *ager quaestorius*, the attribution of lots of 50 *iugera* (squares of 20 × 20 *actus*), about seven times larger than the seven *iugera* allotted in the Ager Veientanus, has significant implications. Those who secured the land in this part of the Sabina must have had available capital, as attested by the dispute between the senators, who wanted to take possession of these lands, and M' Curius Dentatus, who, on the contrary, did not wish to allot any more than seven *iugera.*[407] Muzzioli has identified and reconstructed the network, which may have formed the *ager quaestorius* in the area around Cures Sabini and our survey results seem to support her hypothesis.[408] In the area we surveyed, many of the quadrants making up the *ager quaestorius* grid reconstructed by Muzzioli that had remained empty when she undertook her survey, due to visibility problems, produced evidence for mid-Republican settlement.[409] This may suggest the occupation of each lot of 50 *iugera* of identified terrain.

The agrarian division of the *ager quaestorius* is generated by the natural boundaries of the hillcrests, along

[400] The pre-Roman material from the Galantina survey is at present being studied by Alessandro Guidi and Paola Santoro, the Roman and late antique material by Alessandra Bousquet, Sabrina Zampini and the author, the medieval material by Luisa Agneni and Helen Patterson. For some preliminary results, see Agneni *et al.* 2005.
[401] Di Giuseppe *et al.* 2002.
[402] Muzzioli 1980.
[403] Muzzioli 1980: 38.
[404] *FGrHist*, 809 F 27 = Strabo 5.3.1; Gabba 1988: 19; 1989; 1990a: 14.
[405] Sicul. Flacc. *de Cond. Agr.* p. 136, 15–19 Lach. = p. 100, 8–13 Th.; *Libri Magonis et Vegoiae*, p. 149, 17–19 Lach.
[406] Gabba 1988: 19; 1990a: 13; Muzzioli 1975; 1980: 38–9; 1985: 48; Hermon 2001: 192–3; Roselaar 2009: 284–7.
[407] Forni 1953; Muzzioli 1975; 1980: 38–9; Gabba 1982a: 116; Dench 1996.
[408] Di Giuseppe *et al.* 2002: 114–18, 122–5.
[409] Di Giuseppe *et al.* 2002: 115, fig. 8.

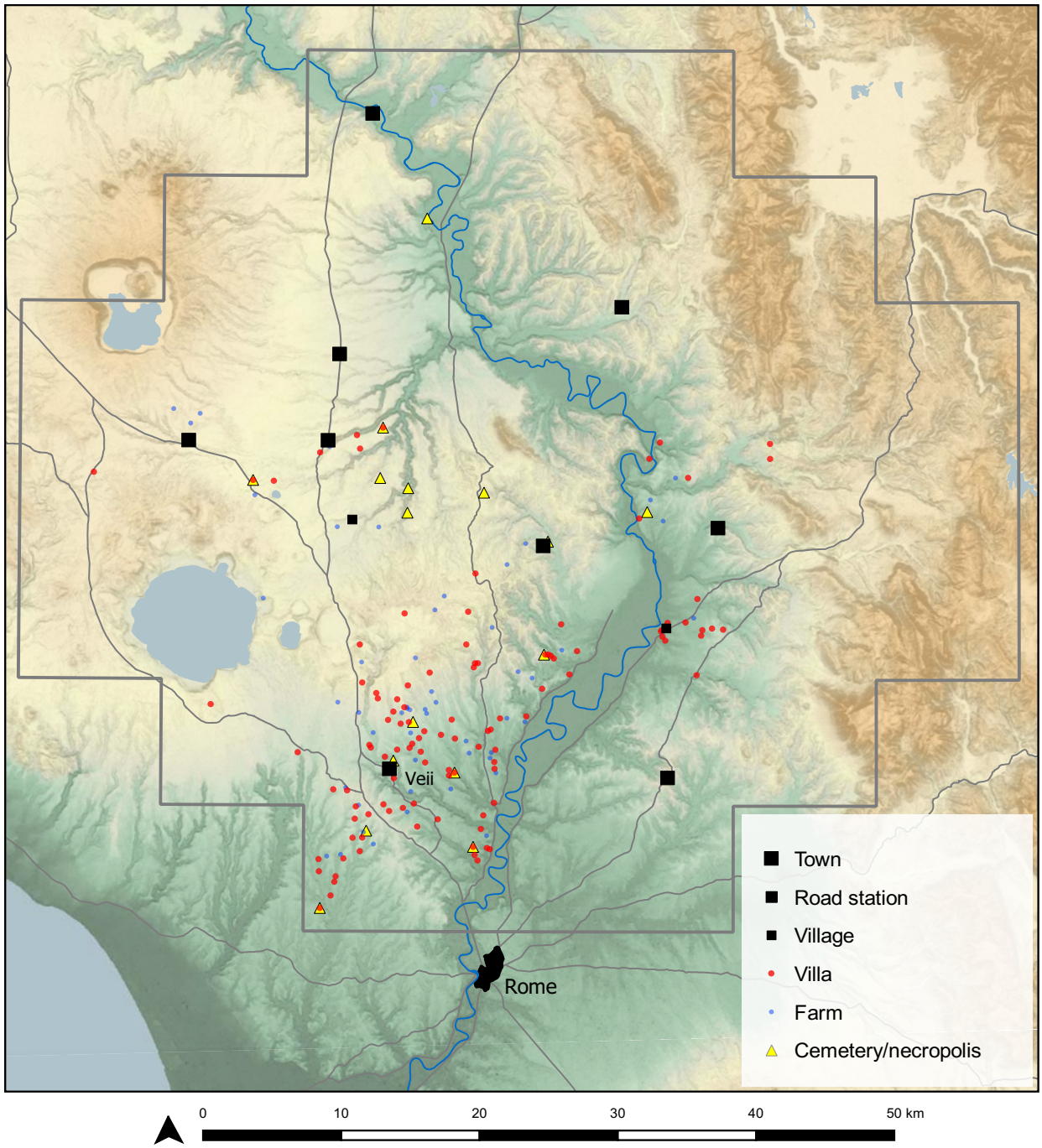


Figure 3.26. Tiber Valley Project settlement sites in the late Republican 1 period (250–150 BC).

which run roads which were in use from pre-Roman times. The use of the pre-Roman roads for the agrarian division, and the fact that a good percentage of pre-Roman sites inside this land division survived the Roman conquest and allocation of land, have important implications. As Gabba put it, the impression one gets is that the *ager quaestorius* is a sort of land registration.[410] In other words, it could be a juridical formula, which on the one hand sanctioned a form of pre-existing organization and on the other allowed the Roman state to boost its coffers, allowing use of the land in return for payment of a *vectigal* that excluded its sale. Some questions regarding the viritane allocations remain unanswered.[411] The completion of the detailed study of the materials from the Galantina project and the Farfa

[410] Gabba 1984.

[411] The intense archaeological research recently undertaken by the Soprintendenza per i Beni Archeologici del Lazio in an area destined for warehouse construction, shows human activity in the area from the prehistoric to medieval periods, although the fragmentary nature of the information still makes it impossible to answer all the questions raised by the results of the survey. For a synthesis of the finds, see Alvino 2011.

Survey, just to the north, will certainly provide useful answers.[412]

From the second half of the third century to the first half of the second century BC there is evidence of a period of general uncertainty (Figure 3.26), also visible in the rest of Latium. The towns seem to contract further, some sanctuaries are abandoned temporarily,[413] the urban production centres, known in the preceding phase at Veii, Capena, Narce, Falerii Veteres and Lucus Feroniae, which had supplied black-gloss ware to the entire Tiber valley, were now in disuse and do not seem to have been replaced by new workshops. The result was a sharp decline in consumption visible in the weighted average number of sherds per decade noted above.[414]

A drastic decrease in settlement numbers in the rural context is striking; in particular, those we have defined as farms, more modest settlements compared to villas, and from which construction materials and pottery were collected. Many sites from the preceding period (350–250 BC) were definitively or temporarily abandoned, a lower percentage continued to be occupied, and only a small number were new foundations (Figure 3.27). The Ager Faliscus is an exception. Here, there seems to be an equal number of sites that continue and new foundations. In this case, it is also still not completely clear whether this situation is linked to an impoverishment of the material culture, which makes most sites invisible, a decrease in population or a set of factors that together lead to a period of general depression.[415]

The depopulation of the area, or simply its impoverishment, may be explained by a number of reasons, all of which have been extensively discussed in the archaeological literature. In this period the population was lower than before the Second Punic War, due to war casualties. Moreover, factors that must have contributed to the overall picture include the political, social and economic transformations that followed the Second Punic War,[416] Rome's expansionist campaigns towards northern Italy and the East,[417] the large-scale and continuous recruitment of the agricultural class,[418] the gradual collapse of urban and production structures in the valley, heavy migration of the population towards the city of Rome,[419] and the policies carried out by Rome

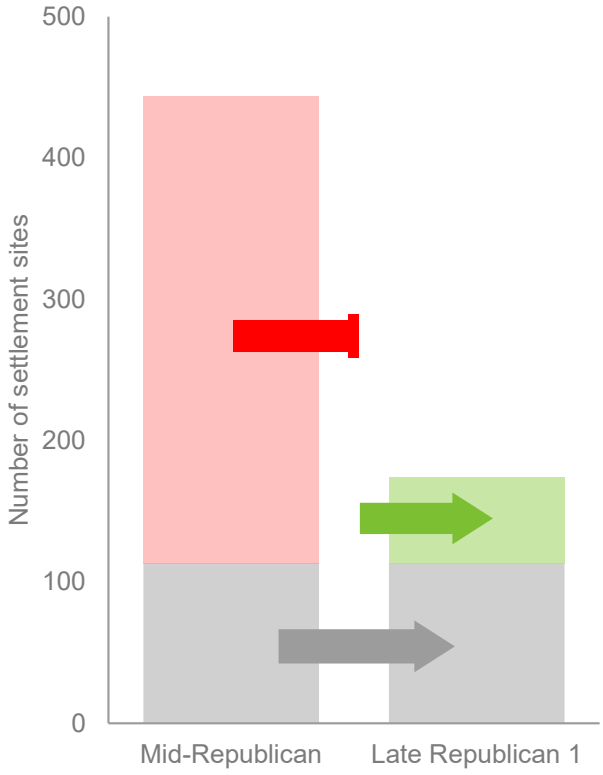


Figure 3.27. Numbers of settlement sites abandoned (pink), continuing (grey) and newly founded (green) at the transition from the mid-Republican to the late Republican 1 period.

at the same time that large number of people searching for better agricultural land from central Italy moved to the periphery through the establishment of colonies in northern and southern Italy.[420]

The over-riding explanation can be traced back to the known crisis of small landholders in the second century BC. The ancient authors narrate that in the phase following the Second Punic War, the rich profited from the situation to further extend their landholdings, expropriating the land of the small landholders who were absent due to the military campaigns and the long periods of military service, and occupying portions of the *ager publicus*, whose exploitation was at the base of the peasants' survival.[421] These factors in the crisis,

412 Moreland 1986, 1987; 2005; 2008.
413 Liverani 1984: 44–5; Di Giuseppe 2012e.
414 Patterson *et al.* 2003; Di Giuseppe 2005c; 2008a; 2012a: 78–82, 130–2.
415 Patterson, Di Giuseppe and Witcher 2004: 13–17.
416 Carandini 1981; Frederiksen 1981; Clemente 1990: 88–90.
417 Gabba 1990a, 1990b.
418 Vast numbers of soldiers were recruited within a 50 km radius of Rome (Livy 25.5.5–9): Liverani 1984: 46; Coarelli 1988: 34. For arguments against the war being the main cause of the impoverishment of the peasant class in this period, see Rosenstein 2004.
419 Livy 28.11.8–9, 39.3.4–6; 41.8.6–12; 41.9.9–12; 42.10.3 narrates how in 206 BC fear over Hannibal's arrival caused a concentration of the population in Rome, such that the senate gave the order to send all those who had transferred to the city back to their places of origin. The flight from the countryside and the Latin colonies was, for some scholars, the basis of the revival in building activity and of a series of agricultural and social reforms: Hopkins 1978; Gabba 1989; Morel 1989: 494–99; Gabba 1994: 63–5; Lo Cascio 1999a: n.1.
420 For population trends and people mobility in the Republican period, see Coarelli 1988; Bintliff and Sbonias 1999; Cambi 1999; Lo Cascio 1999a; Lo Cascio 2000: 27–37; Lo Cascio 2001a, 2001b; De Ligt 2004; Scheidel 2004; De Ligt and Northwood 2008.
421 Gabba 1982b; Nicolet 1984: 50–2. On both sides of the Tiber the existence of *ager publicus* is certain in some cases, in others only supposed. For *ager publicus* in Sabina Tiberina, see Muzzioli 1980: 39; and in Etruria: Harris 1971: 95, 106, 204; Gabba 1989: 199–200; Cambi 2004: 76–7, fig. 1. In this regard, we should recall the prudent position of Harris, who, based on the absence of finds of Gracchan *cippi*, seeks to scale down the existence of *ager publicus*, at least for Etruria, and therefore the nature of the land distribution by the

mainly known from Appian (*Bell.Civ* 1.7) and Plutarch (*Tib. Gracchus* 8) evolved in 133 BC into the 'attempt', soon to fail, to implement the Gracchan reform aimed at restoring the smallholdings.[422]

Let us now look at the relationship between villas and farms that emerges from the reinterpretation of settlement patterns undertaken during the Tiber Valley Project, setting out again an experiment previously published elsewhere.[423] We can see that in this phase (250–150 BC) both villas and farms decline in number, but there is a greater decrease in farms compared to previous periods: 70 per cent for villas but 82 per cent for farms. It is interesting to note in this regard the different trend noted in the material from the South Etruria Survey in regard to amphorae, which increase from 200 BC, when the sites decline.[424] This is due to the wide development of Greco-Italic amphorae between the third and mid-second centuries BC, and their increase, in contrast to the settlement decline, could be a significant indicator of the concentration of land in the hands of a few landholders with a great capacity to cultivate or, rather, store wine. In other words, this picture could in some ways mirror a situation similar to that which is said to have stimulated the Gracchan reform.

It was only in the early imperial period that the number of smallholdings once again increased at a faster pace than villas (see section 4.5). This period then may be defined as breaking with the past, and can be broadly dated to between the second half to the end of the third century and the first half of the second century BC. It is within this phase that the conditions seem to be generated for the full and widespread development of the villas, although the concept of villa, or *hortus*, was perhaps known since the fifth century BC[425] and there are substantial archaeological examples both in the fifth and, above all, third centuries BC with the emergence of the Catonian villa.[426]

Among the contributory factors that may have led to this situation, the epidemics that afflicted the area in this period may have been influential, as they must have decimated the population. Epidemics are recorded in 208, 205, 187 and from 182 to 180 BC both in towns and the countryside.[427] There was a severe famine and epidemic in 165 and again in 142 BC,[428] and these epidemics inevitably take us back to questions of demography, which must be taken into consideration in order to evaluate the picture that has emerged. It is also significant that the decline or otherwise in population numbers between the third century BC and the Augustan era has been strongly debated among scholars, from the time of Beloch's reconstruction.[429] He believed there was a dramatic decline in the free population, which other scholars have since both supported and denied.[430] When the preliminary results of the restudy of the South Etruria Survey material were presented, many urged caution with regard to modifying the curves formulated by Potter, as it was thought that in antiquity sudden falls in population could not be reversed very rapidly unless through external interventions.[431]

It is a fact that the crisis in the Tiber landscape was not sudden, neither was it resolved in a short time. If we consider the entire Republican period (Figure 3.19), we see a gradual decline in settlement numbers with a brief revival in the first half of the third century BC. It is necessary to look at the Augustan era in order to see a landscape as rich as that of the Archaic period. Therefore, the revival was very slow, and probably influenced by a series of external factors—for example, the wars to conquer the East which brought great riches to Italy, and a substantial work force that did not have

agrarian commission that operated between 133 and 120 BC: Harris 1971: 205, n.1. However, the attestations of Gracchan allocations or centuriation in the Ager Tarquiniese (Nicolet 1984: 57) may suggest that the absence of *cippi* is simply a lacuna in the research. In any case, the lack of finds of Gracchan *cippi* does not in itself negate the existence of *ager publicus* and its occupation by rich 'expansionists;' rather it could highlight the existence and with it the strong interest of the senatorial classes, who made it particularly difficult, and finally thwarted the putting into practice of the Gracchan reform (App. *B. Civ.* 1.27; Nicolet 1984: 58). On the hypothesis that the impoverished landscape of the free peasants and populated by slave farmers and herdsmen described by Tiberius Gracchus during his journey towards Spain (Plut. *Tib. Gracchus* 8) was in fact a coastal landscape, closer to Rome, such as that of Tarquinia and Caere, see Carandini 1985: 145–6.

422 Gabba 1974; 1982a, 1982b; 1988; 1989; 1990b; Roselaar 2009: 291–9.

423 Di Giuseppe 2005a; Di Giuseppe and Patterson 2009: 24, figs 9–10.

424 Fontana 2008: fig. 2.

425 Augustan era references to early villas can be found throughout Livy (2.23.5, 2.26.3, 2.62.4, 2.63.2, 4.49.2, 5.12.5, 5.26.4, 7.30.15, 7.39.14, 7.42.4, 10.11.6); more relevant is the presentation of the villa in comedy. For discussion of literary sources, see Di Giuseppe 2005a: 7.

426 On the villa and its beginning in central Italy, see Carandini 1981; Celuzza and Regoli 1982; Carandini 1988; 1989; Torelli 1990; Carandini *et al.* 1997; Terrenato 2001; Carandini *et al.* 2002: 145–6; Volpe 2004: 455–7; Di Giuseppe 2005a; Carandini 2006; Carandini, D'Alessio and Di Giuseppe 2006; Marzano 2007; Terrenato and Becker 2009; de Nardis 2009; Rosafio 2009; Becker and Terrenato 2012; Volpe 2012. Terrenato's denial that the third-century BC Auditorium villa has the character of a Catonian villa should not be accepted (Terrenato 2012). He does not take into consideration the number of amphorae and *dolia* of local production, which are indirect indicators of wine and oil storage, wasters of *impasto chiaro sabbioso* basins (sandy wares, a type of cream coarse-ware in use between Archaic and mid-Republican periods) and of black-gloss wares, which are indicators of the presence of a kiln in the proximity of the villa and the large number of basins for the working of wheat and barley, which are indicators of agriculture activities and which all together fit well with a Catonian villa. On the Auditorium villa's material culture, see my texts in Carandini, D'Alessio and Di Giuseppe 2006: 201–11, 375–402, 501–10, and above all Table 110 with the reconstruction of vessel equipments of the third-century BC villa; Di Giuseppe 2009.

427 Livy 38.44.7; 40.29.2.

428 Frederiksen 1981: 274; Garnsey 1988: 192.

429 Beloch 1886.

430 Pro: Toynbee 1965: 438–75; Brunt 1971: 113–20. Against: Lo Cascio 1994; 1999a, 1999b: 166–71; 2000: 31–33; 2001a, 2001b. For a synthesis of this debate and the extensive bibliography, see Lo Cascio 1999a: 162–63; Scheidel 2004; Kron 2005; De Ligt and Northwood 2008; Di Giuseppe and Patterson 2009; Launaro 2011: 25–50.

431 For these arguments, see Zanini 2009: 64.

to be paid for. Moreover, the data must be presented without a priori positions being taken, and bringing together various different, often complex, sources of evidence. The fact that settlement decline coincides with the decline in pottery consumption is a strong sign of a demographic decline.

It is true that it was perhaps simply economic impoverishment that led to the use of wooden containers, but it is also true that research in cemeteries shows a lower number of deaths in the second century BC than that registered for the third century BC. The reading of this data is extremely complex. A census of the tombs of Republican date in the suburbs of Rome revealed only 64 tombs (compared to 5000 of imperial date), a very low number with little statistical value. However, the numerical difference between the third and the second–first century BC is marked—80 per cent of these belong to the third century BC, 20 per cent to the sixth–fifth, and only one per cent to the second–first centuries BC.[432] Although these data may seem remarkable, one mitigating factor may the number of deaths of free citizens far from their lands on military campaigns. Emigration from Latium to the new colonies, together with the use of the cremation rite (which leaves fewer traces than inhumation burial) from the second century BC onwards, also contribute to the picture.

The historical and archaeological evidence of the second century BC have been widely discussed by modern historiography, both in order to deny the existence of a crisis and to affirm it.[433] In particular, the South Etruria Survey and the evidence from the Ager Veientanus have been used to deny the existence of the second-century BC agrarian crisis, and the affirmation of slave production and the *latifundia*.[434] Among the motives given for this denial, we should mention the close co-existence of farms and villas that is supposed to represent proof of the continuation of smallholdings.[435] However, the reasoning behind this was based on flawed chronologies of the materials, on the supposed conservatism of the black-gloss forms, which has not been demonstrated,[436] and on phase maps relating to periods that are too broad to allow a correct evaluation of the second-century BC phenomenon. Furthermore, the distribution of the artefacts within the territory tells us nothing about the status of the property, that is, whether it attests to the presence of small private holdings or simply farms whose land was part of larger properties.[437]

Surprisingly the tendency to stress continuity which has been typical of British scholars still re-emerges today, even in the face of the archaeological evidence and despite the results of the South Etruria Survey restudy. Witcher, for example, after having admitted the existence of several crises in the Tiber landscape,[438] has recently denied the validity of the South Etruria Survey data for an analysis of the second-century BC crisis and preferred to see continuity. He affirms that the data collected were insufficient and the results obtained were exactly those to be expected when a period such as that between 250 and 150 BC has less diagnostic material than the preceding and following periods.[439] However, Morel's monumental 1994 work on Campanian ceramics, and archaeological experience, clearly show us that the diagnostic materials in this phase are known and present in areas of the South Etruria Survey, where there is occupation, as shown in the case of Capena, Falerii Novi and many others cited above. The phase between 250 and 150 BC is not evidently a period with less diagnostic material. It is precisely the absence of materials that constitutes an interesting historical phenomenon worthy in itself of analysis as an indicator of some form of negative change within the area (impoverishment of the material culture, frequency of cremation burials without grave-goods, population decline, for example), which must have been far more dramatic than we imagine, if we still have even the slightest perception of it today.

Rathbone has also resisted the interpretation of decline. In an attempt to provide interpretative solutions for the South Etruria Survey, he denies the decrease in consumption and therefore in settlement numbers, suggesting the possibility that pottery was replaced by glass, which, as is known, was not used in the Italic area until the early Augustan period when it was, however, still a rare commodity.[440] And Launaro, who has published a volume on rural settlements of Roman Italy to demonstrate the growth of population between 200 BC and AD 100, endorses Witcher's more recent position.[441] For example, Launaro, after the analysis

[432] Caldarini *et al.* 2009.

[433] For denial of the crisis, see Frederiksen 1971; Potter 1979: 115; Garnsey 1980; Skydsgaard 1980; Potter 1987. Among the most authoritative scholars who have stressed the changes in the second century BC are Gabba 1982b; 1989; 1990b and Carandini 1979: 128–37, 140–71, 185–234. For these arguments within a framework of continuity and break down, see La Penna 1981: 289. These topics have been widely treated in various regional contexts in the contributions collected by Giardino and Schiavone 1981 and by Lo Cascio and Storchi Marino 2001.

[434] For a discussion of the reasoning behind this interpretation of the Tiber landscape in the second century BC by the BSR, see Patterson, Di Giuseppe and Witcher 2004: 13–17.

[435] Frederiksen 1971; Potter 1979.

[436] For a discussion of the way in which the black-gloss ware from the South Etruria Survey has been treated, see Di Giuseppe 2005c; 2008a: 909; 2012a: 147.

[437] These arguments were taken up by La Penna 1970–1 and Gabba 1982a: 112. On the development of the relationship between villas and farms legible in survey data, see Di Giuseppe 2005a.

[438] Patterson, Di Giuseppe and Witcher 2004a.

[439] Witcher 2008a: 274–80, 299; Goodchild and Witcher 2009. On the attempt to fit the archaeological data from survey datable between 200 BC to AD 100 to the demographic debate, see Launaro 2011.

[440] Rathbone 2008: 324-8; Saguì 2010.

[441] Launaro 2011.

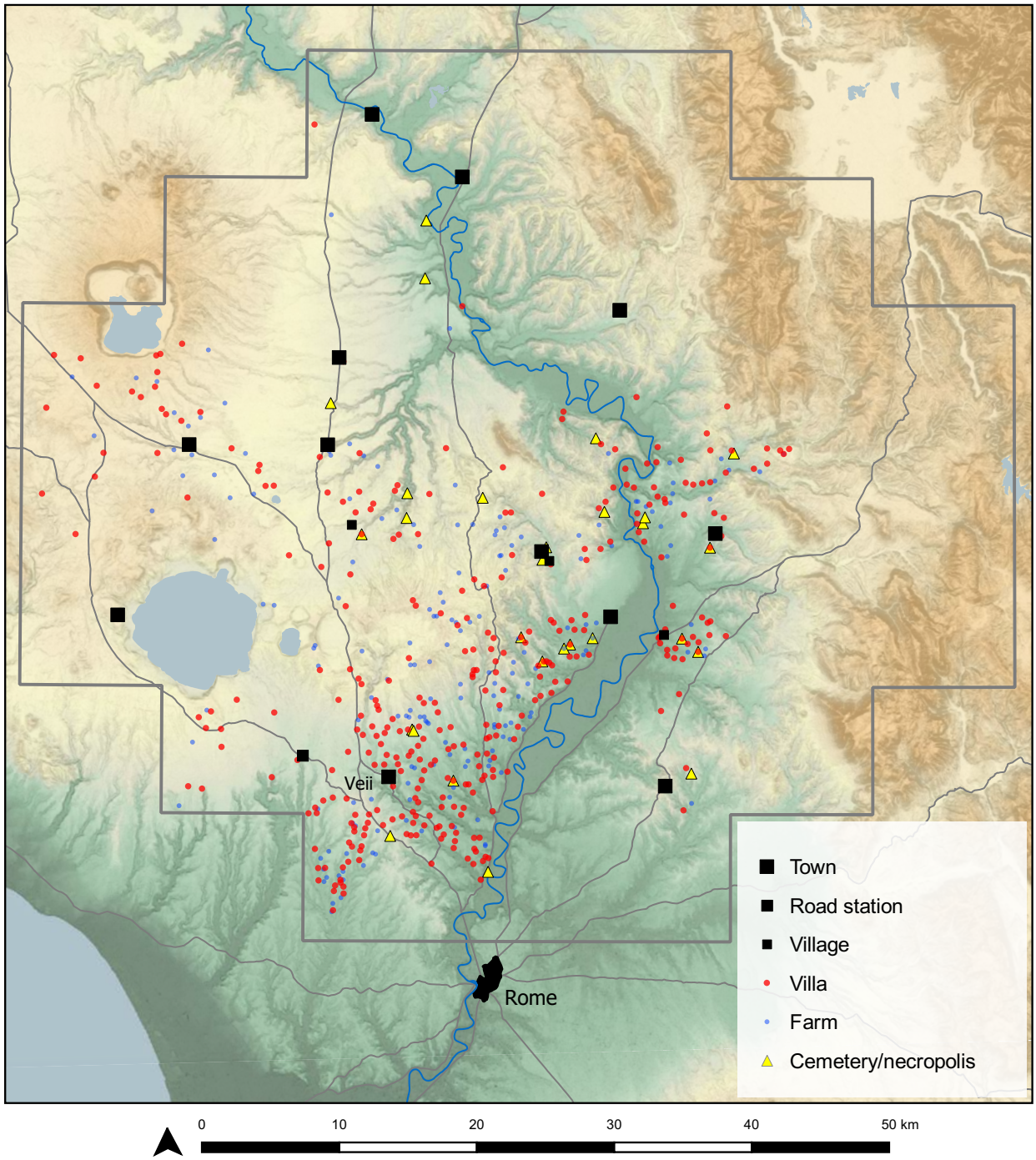


Figure 3.28. Tiber Valley Project settlement sites in the late Republican 2 period (150–50/1 BC).

on villas/farms distribution in 27 published surveys throughout Italy, concludes that 'central Etruria is characterized by some demographic stagnation harbouring significant negative peaks'.[442] In contrast, according to his reconstruction, southern Etruria is characterized by a general increase in the rural free population, but he ignores the results obtained through a similar survey, undertaken by the present author (with a different approach to farms/villas of the South Etruria Survey, Forma Italiae, Regione Lazio surveys and so on), published in 2005), which arrives at different conclusions.[443] Further, the main limit of Launaro's approach is that the period under consideration in his research (200–50 BC against 50 BC–AD 100) is so large, that it is highly possible that the decline of the first half of the second century BC, seen in the South Etruria

[442] Launaro 2011: 159.

[443] Di Giuseppe 2005a: figs 7A–C and 8; Di Giuseppe and Patterson 2009. Cf. Carandini 2009: fig. 14, in which the relationship between farms and villas is treated on a long chronological period.

Survey, is hidden by the most important increase of settlement observed from the second half of second century BC until the early imperial period, and also seen in South Etruria Survey data.

Another survey in which the method used in the treatment of the data influences the final results is that in the territories around Satricum and Antium. Here the late Republican period (200–50 BC) shows an increase in the overall number of sites compared to the preceding period, but the author of the survey admits that this is caused exclusively by the uncertain sites, that means the sites datable with undiagnostic sherds. As Tol admits, if 'the majority of the undiagnostic black glazed ware fragments is of mid-Republican and not of late Republican date [as decided by the author in the phase of the survey interpretation], this period could actually see a rather substantial decrease in settlement'.[444] This is another case in which the final results depend on how the data are treated.

The restudied South Etruria Survey data tell a story of discontinuity that it would be useful to test through further archaeological investigations. The decline in settlement numbers from the second half of the third century BC onwards can also be verified, at least from the survey data, in other areas of South Etruria, the Sabina and *Latium Vetus*,[445] and in this sense the reinterpretation of published and unpublished data from the numerous investigations undertaken by the BSR on both side of the Tiber seems to provide support for a picture of severe impoverishment. This phenomenon also involves other regions of the Italic peninsula or parts of regions—actually those most involved in the Second Punic War, as seen in the sample of results from surveys shown below (Table 3.6).[446]

From the second half of the second century BC, there began an intense reoccupation of the rural landscape lasting through to the end of the Republican period (indeed, well beyond, into the first century AD). That this was the most 'flourishing' period for the middle Tiber valley, after the Archaic period, is once again attested by the relationship between continuity, new foundations and abandonment in the diverse *agri* (Figures 3.28 and 3.29). Everywhere the number of new foundations is very high, in particular in the territories of Sutri and Cures, perhaps signs that these areas still had land available for new settlements. On the contrary, the Ager Faliscus, Veientanus and Capenas are the areas

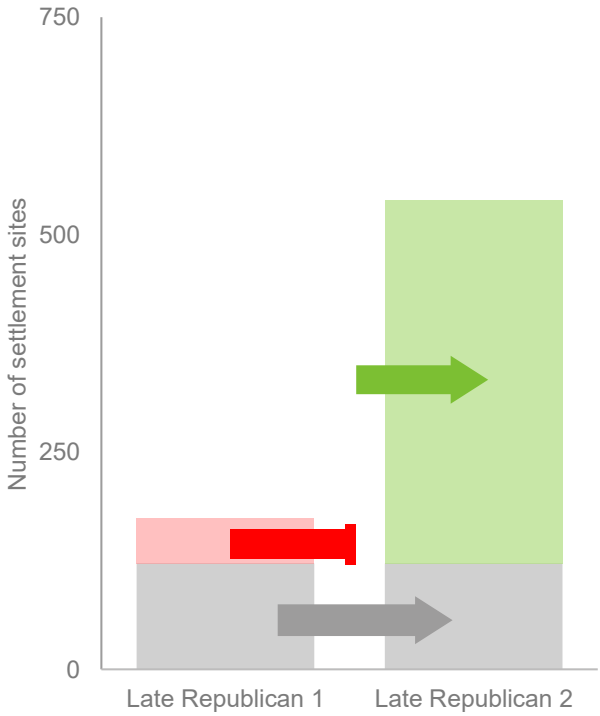


Figure 3.29. Numbers of settlement sites abandoned (pink), continuing (grey) and newly founded (green) at the transition from the late Republican 1 to the late Republican 2 period.

that show the most evidence for continuity alongside the new foundations. It is clear that in these areas, permanent occupation in settlements of a certain architectural importance had begun some time before, and the long continuity of many settlements, despite occasional decline, is the clearest sign of this. Lastly, in all cases the number of abandoned sites is very low.[447]

It is difficult to know if this new situation is strictly the consequence of the Gracchan reforms, given the simultaneous increase of both villas and farms precisely in the period following the Gracchan activities. But it is a fact that illustrious families, even from the Piceno area and Apulia,[448] now invested substantial capital in the construction of new buildings which, as well as a *pars rustica*, also had a *pars urbana*. This is particularly visible in the survey finds in terms of the distribution of luxury Italian and imported marbles widely attested in the South Etruria Survey and by the excavated evidence and the reports from the numerous villas in South Etruria and in the Sabina.[449]

3.4 Conclusions

This picture of the towns and countryside has identified some crucial themes regarding the organization of the Republican landscape on both sides of the Tiber.

[444] Tol 2012: 373.

[445] Among the archaeologists who have highlighted the signs of break down in the second century BC are Liverani (1984), author of an undergraduate thesis on the Ager Veientanus. The same evidence is seen at Crustumerium: Quilici and Quilici Gigli 1980: 294; at Ficulea: Quilici and Quilici Gigli 1993: 481–2; at Fidenae: Quilici and Quilici Gigli 1986: 402, 404; and at Torrimpietra: Tartara 1999: 36.

[446] For Basilicata in particular, see Di Giuseppe 2010b. See also Di Giuseppe 2018: 138–141.

[447] For conditions in the Ager Faliscus and Capenas, see also Cambi 2004: 81–3.

[448] Papi 2000.

[449] Boenzi *et al.* 1996; Sternini 2004; Marzano 2007.

Settlement history in this area in the Republican period turns out to be anything but homogeneous and linear, both in terms of geography and chronology.

Previous analyses indicated a high percentage of site survival from the Archaic to Republican phases.[450] However, the South Etruria Survey data were distorted by the conviction that black-gloss ware was datable only generically to the Republican period. Settlement survival was calculated on the basis of the sites containing Etruscan materials and those containing black-gloss ware in general, without taking into account the chronological differences within this period, and the ways in which uncertain fragments are treated in this type of calculation.

On the contrary, the restudy by the South Etruria Survey, integrated with information collected by the Forma Italiae, Regione Lazio surveys and other projects in the various historical *agri*, has produced different results. The quantitative data show the changing vicissitudes of settlements in the Tiber valley area, which it would be misleading to attribute only to problems of methodology and collection.

As we have seen, following the settlement boom of the Archaic period there was a slow decline with brief attempts at revival, which were, however, curtailed by at least two moments of 'crisis': in the second half of the fourth/first half of the fifth century BC and the second half of the third/first half of the second century BC. These seemingly depressed periods alternated with revivals in occupation in the first half of the third century BC, which did not, however, reach the levels of the Archaic and Augustan periods, when there was once again widespread exploitation and settlement of the territory.

It is obvious that with landscapes undergoing transformations, the functions of the urban centres that were still in some way occupied or frequented also changed greatly. The set-up of the pre-Roman phase changed radically as the towns, deprived of their political role, seem to keep only their sacred and productive functions and, simply because of this, to continue to represent centralizing foci for the surrounding districts. The systematic presence of kilns in their proximity attests that the sanctuaries were still points of reference, also in economic terms, within the territorial context.[451] The presence of productive structures near a sanctuary presupposes their ownership and therefore the possession of lands that produced the necessary raw materials (clay and timber), a fact that indicates that still in the mid-Republican period, sanctuaries were among the main landowners in antiquity and maintained the temple economy.[452] Religion seems to represent the main link that in this phase continues to unite the town with its former territory, attracting and promoting social and economic movement.

The temple economy system should also probably be linked with the behaviour of black-gloss ware in this geographical area. In fact, in all analysed cases, both urban and rural, a sharp decline in the quantity of black-gloss ware from the second half of the third century BC has been noted, and it becomes more marked in the second and first centuries BC. This pattern was also supported by the stratigraphic sequence at the Auditorium villa, where, despite the occupation continuity from the Republican to imperial period, there is a notable drop in the quantity of black-gloss ware and other pottery in general.[453] The Civitucola deposit at Capena and the dump outside the southern gate of Falerii Novi represent the only cases available to us in which the trend is reversed. These sites may both have been sanctuaries which continued in use while the territory was deserted. It is precisely this diversity that leads to the suggestion that the fall in black-gloss ware is not only linked to productive factors (because where there is occupation, black-gloss pottery is also present), but hides phenomena of quite another nature linked to consumption and therefore to population levels.

It is important not to make the error of confusing the question of settlement with that of production, which only concerns pottery classes. Both Potter and Liverani, who made the most recent wide-ranging reconstructions of the middle Tiber valley in the Republican period, recognized the sharp decrease in black-gloss ware, automatically associating it with settlement decline, which Potter found inexplicable and Liverani acceptable. Potter, following Frederiksen's proposal made in a paper delivered at a conference held at Pontignano in 1969 on 'Roma e l'Italia fra i Gracchi e Silla', considered a 'massive depopulation of South Etruria in the final two centuries of the Republic' to be unthinkable and for this reason, also taking up a position we may define as 'ideological', preferred to think that the black-gloss ware in this area was conservative and therefore not very useful for correct dating.[454] In contrast, for Liverani the decrease in the presence of black-gloss ware in this area was associated with a contraction of the number and wealth of the

[450] Potter 1979: 108–9.
[451] Di Giuseppe 2012a: 78–84.
[452] Di Giuseppe 2012a: 82–4.
[453] Di Giuseppe 2009: fig. 2; 2012a: 130–7.
[454] Potter 1979: 109–10; Frederiksen 1971. For the interpretative reconstructions of the landscape made by the BSR and the state of pottery studies, see Di Giuseppe and Patterson 2009: 12–26. For a wide examination of black-gloss ware 'behaviour' in relation to various local histories in Italy, see Di Giuseppe 2012a.

Table 3.6. The second-century BC crisis on the basis of select surveys in Italy (see Di Giuseppe 2018: table 6).

No.	Survey	Settlement collapse between the mid-third and mid-second centuries BC		Bibliography
		Y/N	Observations	
Tuscany				
1	Albegna valley/*Ager Cosanus*	N		Dyson 1978: 259; Attolini *et al* 1991; Perkins 1999; Cambi 1999; Cambi 2002a: 140–1; Celuzza 2002: 113
2	Chiarore and Tafone valleys	N		Cambi 2002b: 159
3	Capalbio and Fosso Radicata valleys	N		Regoli 2002: 160
4	D'Oro valley and hinterland of Orbetello	N		Celuzza 2002
5	Doganella, Magliano, Heba and lower Albegna valley	N		Walker 2002: 171
6	Elsa-Elsarella valley	N		Perkins 2002: 124
7	Scasano and middle Albegna valley	N		Attolini 2002: 174
8	Saturnia	N		Fentress 2002b: 176
9	Cecina/Ager Volaterranus	N		Terrenato 1998: 96; Pasquinucci and Menchelli 1999: 123–30
10	Roselle	N		Citter 1996
11	Pecora and Alma valleys	N		Cucini 1985: 288
12	Luni	N	Territory occupied from 177 BC	Ward-Perkins *et al.* 1986
Lazio				
13	Ager Vulcenses	N		Gazzetti 2002: 349
14	Castro	N		Toiati 2002: 354–5
15	Rieti	N	Wide chronological division	Coccia and Mattingly 1995: 115
16	Blera	?	Not stated if there is a crisis	Quilici Gigli 1976
17	Tuscania	?	Not stated if there is a crisis	Quilici Gigli 1970
18		N	Wide chronological division	Rasmussen 1991: 109–10
19	Ager Tarquinensis et Vulcensis	Y	Not stated if there is a crisis, but 82 sites in 3rd century and 32 sites in second century BC	Corsi 1998: 236 and 238
20	Caere	N		Enei 2001: 64–5
21	Civitella Cesi	N		Hemphill 2000: 137
22	South Etruria	Y		Patterson, Di Giuseppe and Witcher 2004; Di Giuseppe 2005a, 2005b, 2005c, 2008b, 2012a
23	Ager Faliscus	?		Camilli *et al.* 1995: 399
24	Sutrium	?		Morselli 1980: 16
25	Corese (Ager Curensis)	Y		Muzzioli 1980 re-elaborated in Di Giuseppe 2005a: fig. 7
26	Ager Foronovanus	?	Not stated if there is a crisis	Verga 2006
27	Capenas (Ager Capenas)	Y		Mazzi and Cotroneo 1995 re-elaborated in Di Giuseppe 2005a: fig. 7
28	Ager Capenas	N		Camilli and Vitali Rosati 1995: 404, fig. 1

Table 3.6 continued. The second-century BC crisis on the basis of select surveys in Italy.

No.	Survey	Settlement collapse between the mid-third and mid-second centuries BC		Bibliography
		Y/N	Observations	
29	Galantina	Y		Guidi *et al.* 2005: 1004, fig. 16; Guidi, Santoro and Rioda 2008
30	Farfa (*Ager Curensis*)	N		Moreland 2005: 932, fig. 3
31	Crustumerium	Y		Quilici and Quilici Gigli 1980: 294
32	Vicus Matrini	Y		Andreussi 1977 re-elaborated in Di Giuseppe 2005a: fig. 7
33	Ficulea	Y		Quilici and Quilici Gigli 1993: 481–2
34	Fidenae	Y		Quilici and Quilici Gigli 1986: 402, 404; Barbina *et al.* 2009
35	Monterotondo	Y		Comments from Rita Turchetti, whom I thank
36	Torrimpietra	Y		Tartara 1999: 36
37	North and southeast *suburbium* of Rome	N		Carafa 2004: 54, fig. 6; Carandini D'Alessio and Di Giuseppe 2006: 239; Capanna and Carafa 2009: 28, figs 2–3: Carandini 2009: fig. 2
38	Arco del Mignone	N		Maffei 1990: 167
39	Tusculum	N		Valenti 2003: 55
40	Tibur	N		Mari 1991: 31; Mari 2005
41	Collatia	N		Quilici 1974: 35–8
42	Regione Pontina; Satricum and Antium	N		Attema and de Haas 2005: 6–8, figs 6–7; Tol 2012: 371–3
Marche				
43	Potentia Valley	?	Unclear that there is a crisis	Vermeulen 2005
44	South Picenum	?	Unclear that there is a crisis	Pasquinucci, Ciuccarelli and Menchelli 2005
45	The upper Esino valley	N	Wide chronological division	Pearce, Pretzler and Riva 2005: 1021
Abruzzo				
46	Cicolano	?	Unclear that there is a crisis	Barker and Grant 1991
Molise				
47	Biferno Valley	Y		Barker 2001: 202–33
48	San Vincenzo al Volturno	?	Unclear that there is a crisis	Bowes, Francis and Hodges 2006
49	Iuvanum survey	N		Bradley 2005: 1028
Campania				
50	Northern Campania	N		Arthur 1991; Vallat 2001: 588
51	Morcone area	Y		La Rocca and Rescigno 2010: 302–3
Basilicata				
52	San Giovanni di Ruoti	Y		Roberto, Plambeck and Small 1985; Roberto and Small 1994: 20
53	Ager Buxentinus	Y		Gualtieri and de Polignac 1991: 197; Fracchia 2001: 61
54	Sinni valley	Y		Quilici and Quilici Gigli 2001a: 109, 192; 2001b: 215–16; 2001c: 82, 198; 2002: 143, 215

Table 3.6 continued. The second-century BC crisis on the basis of select surveys in Italy.

No.	Survey	Settlement collapse between the mid-third and mid-second centuries BC		Bibliography
		Y/N	Observations	
55	Ager Grumentinus	N		Cifani, Fusco and Munzi 2000: 446–8; De Vincenzo 2003: 59
56	Torre di Satriano area	Y		Di Lieto 2011: 51–2
57	The *chora* of Metaponto	Y		Carter 2011a ; 2011b ; 2011: C1a
58	Metapontum and Herakleia	Y		D'Annibale 1983; Carter 1994: 182; Carter and D'Annibale 1985; De Siena 1992: 121; De Siena and Giardino 2001: 139–40; Crawford 2003: 25; Giardino 2003: 188–9, note 40; De Siena 2005: 458
Puglia				
59	Ager Brundisinus	Y		Burgers 2001: 262
60	Ager Venusinus	Y		Marchi 2004: 137
61	Vaste	Y		Compatangelo-Soussignan 2001: 291
62	Celone Valley – Ager Aecanus	N	Wide chronological division: Period I=end fourth century–end Republic; Period II=Augustan–first century AD; Period III=second–third centuries Ad	Volpe 2001: 345; De Fino and Romano 2001: 71
63	Ofantine Valley	Y	With some exceptions	Goffredo 2011: 125–6, fig. 9
64	Basentello survey	Y		Small 2001: 44; 2002a; 2002c: 83–4
Sicily				
65		Y		Sangineto 2001: 203
66		Y		Coarelli 1980: 373–5; Bejor 1983: 367–8

settlements.[455] The global restudy of all the ceramic material and consequently the possibility of dating even those classes long considered non-diagnostic allows us to overturn Frederiksen and Potter's position. In all areas we analysed, there was a gradual increase in the number of mid-Republican settlements, followed by a sharp decline in the second half of the third to second centuries BC. Liverani's view that the impoverishment of still occupied settlements is reflected in the very limited availability of black-gloss ware appears correct therefore, but demands explanation.

Obviously, the results presented here cannot be considered definitive. A wider reflection based on comparison and the crosschecking of several categories of source material may shed more light on these themes. The survey data, for example, which are now abundant and coherent, at least in the middle Tiber valley and other parts of the *suburbium*,[456] should be compared with the evidence from Republican-period cemeteries, the data from which is currently insufficient for a full evaluation. Such work will be an important future area for research.

[455] Liverani 1984: 42–4.

[456] Capanna and Carafa 2009: figs 2–3. Carandini admits that if there was some crisis in this area, it was less important than in the middle Tiber valley: Carandini 2009: 309, figs 2, 14, 17.

Chapter 4

The early and mid-imperial landscapes of the middle Tiber valley (*c.* 50 BC–AD 250)

Robert Witcher

The Palace is spreading and swallowing Rome!
Let us all flee to Veii and make it our home.
Yet the Palace is growing so damnably fast
That it threatens to gobble up Veii at last.
Suet. *Nero* 39 (translated by Robert Graves)

4.1 Introduction

The transition from Republic to Principate was a time of both radical change and deep-rooted continuity. The city of Rome, the middle Tiber valley, and the wider empire, experienced a revolution that affected all aspects of political, social, cultural and economic life. But beneath the new marble-veneered surface of the imperial period were elements of strong continuity from the Republican past. The paradox of continuity and change, tradition and revolution, runs through this chapter. At Rome, the rise of autocracy notwithstanding, the period from *c.* 50 BC to AD 250 is often perceived as a cultural and economic 'high point'. During these three centuries, the middle Tiber valley also experienced great change and, in many ways, it is the material remains of this particular period that dominate modern perceptions of the region, from paved roads and monumental tombs to inscriptions and mosaics. As at Rome itself, therefore, the imperial period in the middle Tiber valley has been seen as time of fruition, the inevitable culmination of four centuries of 'Romanization' from the fall of Veii to the rise of Augustus. The evidence from the South Etruria Survey has been long incorporated into this narrative framework and, indeed, lent significant support to it. As discussed below, however, the biological (birth, maturity and death) and astronomical (rise, apogee and decline) metaphors, that underlie much of this thinking exert strong influence on the interpretation of the imperial period and its relative significance in the context of the Republican and late antique periods. Hence, if the Augustan revolution is 'the perfect revolution, which in changing everything changes also the perception of what is normal and traditional, and so erases its own revolutionary status',[457] then it is important to look carefully at the evidence for continuity and change to discern what was truly new and what was established in earlier periods.

At the heart of this chapter are the evolving social, political and economic relationships between the communities of the middle Tiber valley and the imperial metropolis of Rome. This involves consideration of the consolidation of the area as the hinterland of the city of Rome, supplying agricultural produce, raw materials and manufactured goods. But more broadly it also seeks to characterize the creation of a 'suburban' society—neither completely urban nor rural, neither metropolitan nor provincial—expressed through the adoption of new types of material culture and cultural practices. In particular, the rise of dynastic power at Rome turbocharged social relations in the middle Tiber valley, increasing competition between individuals, families and communities for power, status and resources. The result was the physical transformation of urban and rural landscapes through new types of competitive consumption and display, and a proliferation of social identities—old and new, revived and invented. Hence, as part of the hinterland of Rome, the middle Tiber valley supplied the City with a variety of agricultural and manufactured goods; in return, Rome provided privileged access to new types of material culture, models of behaviour and, ultimately, proximity to power.

This chapter focuses on the middle Tiber valley during the first 300 years of the imperial period (Figure 4.1), divided here into two sub-periods: early imperial (*c.* 50 BC–AD 100) and mid-imperial (*c.* AD 100–250). These chronological divisions are broadly defined by changes in diagnostic fine-wares that approximately correlate with major historical phases. Hence, the start date of the early imperial period is defined by the shift from black-gloss ware to *terra sigillata italica* during the mid-first century BC. Alongside various *terra sigillata* imitations and other new coarse-wares and amphorae,

[457] Wallace-Hadrill 2008: 258.

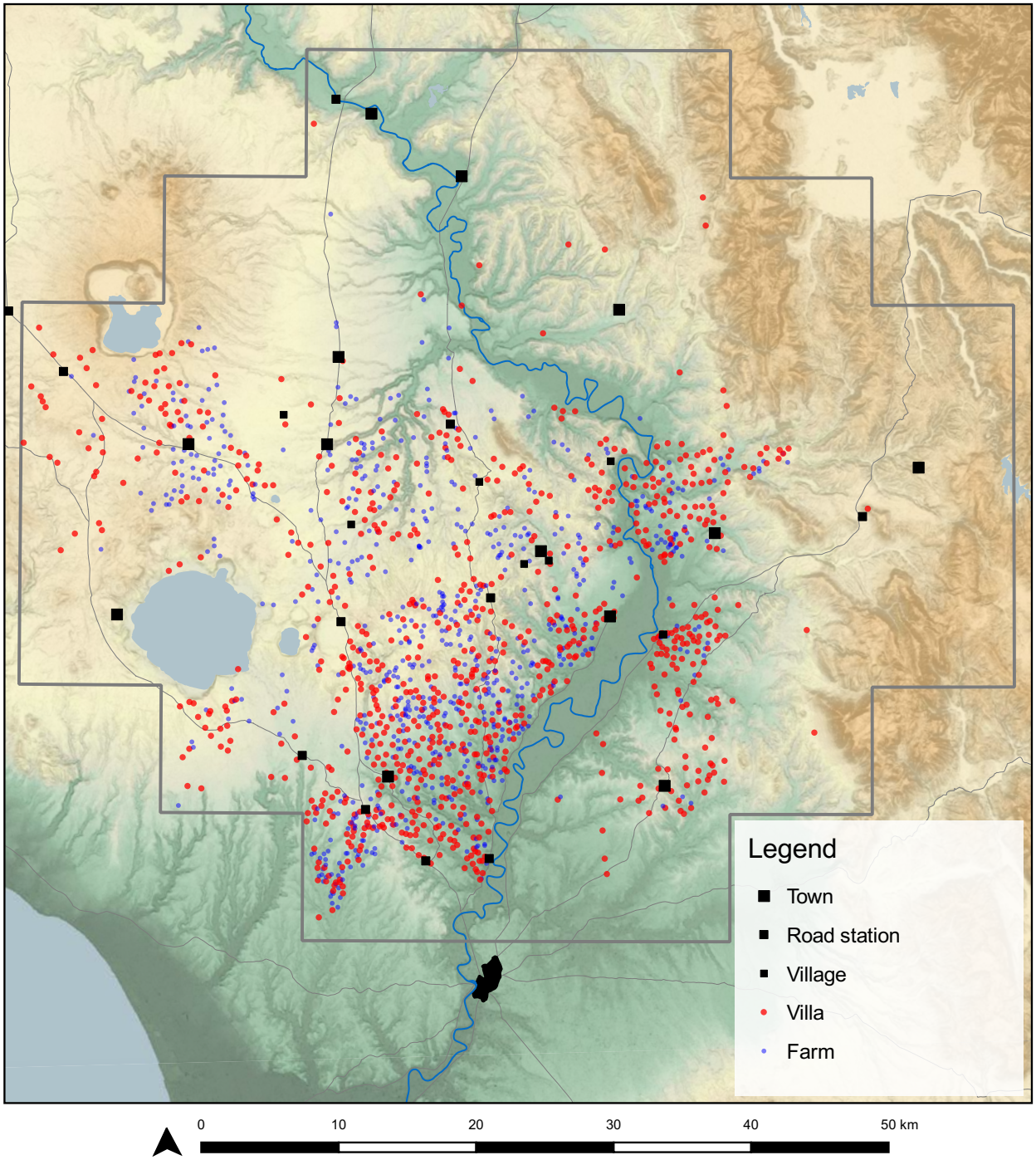


Figure 4.1. Tiber Valley Project settlement sites during the imperial period (50 BC–AD 250).

terra sigillata italica led the fine-ware market through to *c.* AD 100 when a new red fine-ware appeared and quickly became dominant. African red slip wares were imported for several centuries, continuing into late antiquity, but the earliest and most abundant forms, between *c.* 100 and 250 provide the basis for the definition of the mid-imperial period used here.[458] The end date, in the mid-third century AD also coincides with a number of major social, economic and political shifts at Rome and across the wider Roman world.[459]

The chapter is organized thematically and divided into eight main parts. Section 4.2 establishes the environmental, historical and historiographical contexts of the imperial landscape. The next section (4.3) provides a discussion of the material evidence

[458] Black-gloss pottery, Di Giuseppe 2012a; Morel 1981; Roth 2007; *terra sigillata italica*, Ettlinger *et al.* 1990; Kenrick 2000; African red slip, Hayes 1972.

[459] See Chapter 5.

and the overarching settlement trends. Sections 4.4 and 4.5 deal with the evidence for the urban and rural landscapes respectively. Section 4.6 focuses on people in the landscape, including questions of demography and the socio-economic status of the valley's population. The following section (4.7) deals with the 'resourceful landscape', examining economy, agricultural production and exchange and section 4.8 deals with the competitive landscape, considering the ways in which consumption and display were deployed as part of increasingly intense social competition. Finally, section 4.9 specifically addresses the mid-imperial period and the chapter concludes with a short summary and evaluation (4.10).

In discussion of rural settlement, particular attention is focused on previously unpublished components of the South Etruria Survey, including work in the eastern Ager Veientanus, the Ager Faliscus and the Grottarossa area. The insights provided by targeted resurvey such as the Corese and Nepi projects will also be emphasized alongside the data from a number of excavated sites such as Mola di Monte Gelato and the Villa of the Auditorium, as well as surface scatters which have been subject to intensive investigation.

As in the other period-based chapters (3 and 5–7), key themes include demography, economy, agricultural production, and social organization. These will contribute to an evaluation of the imperial landscape that recognizes not only the powerful effects of the nearby metropolis, but also explores the diversity of developments experienced within the northern hinterland of the city. In particular, it examines the notion of a *città-territorio*[460] or 'a great dispersed city of which Rome is only the nucleus'.[461] If we distinguish urban from rural on the basis of population density or the ratio of buildings to open space, then there was a clear difference between Rome and the northern *suburbium*. If, however, the division of urban and rural is measured by consumption or by social and economic connectivity, these areas blur into a single 'extended metropolis'.[462]

4.2 Contexts

4.2.1 The historical context

The mid-first century BC was a time of unprecedented political instability and military conflict. Rome had descended into a series of civil wars that spread out from the city's streets to encompass large swathes of the Mediterranean. Yet within a couple of decades, Augustus had seized control of the state and ushered in a period of order and stability—the *pax romana*—that would last largely uninterrupted for over 200 years. Hence, in the middle Tiber valley, the period discussed in this chapter began with war but was characterized by peace. With the cessation of military conflict in the area at the conclusion of the civil wars, the textual sources shift focus from narrative histories, such as that of Livy, to a more varied collection of poems, natural histories and geographies (e.g. Ovid, Pliny the Elder, Strabo). A significant increase in the 'epigraphic habit' during the imperial period also provides additional insight into social and political life. Drawing on this material, this section sketches an overarching historical framework for the period from *c.* 50 BC to AD 250.

The cities of Etruria had a long-standing tendency to back the losing sides in Rome's internal political conflicts; for example, many leading Etruscan families had positioned themselves against both Sulla and Caesar who later emerged as the winners in the power struggles of the early and mid-first century BC respectively. As a result, there was some military action in the middle Tiber valley during the mid-first century BC, including a siege at Sutrium (Appian *Bell.Civ.* 5.31) and, possibly, Veii.[463] Daily life may have been disrupted not only by direct military action, but also by the loss of labour as men were recruited into the armies of Rome's competing generals for deployment all around the Mediterranean. Longer term, however, it was the confiscation of land and its redistribution to veterans, including the foundation of colonies, which had a more lasting impact on the area than the immediate effects of military campaigns.

Texts, as well as epigraphic finds, make clear that a number of veteran settlement schemes were planned and implemented in the middle Tiber valley during the Triumviral and Augustan periods. Most obvious was the creation of a veteran colony at the sanctuary site of Lucus Feroniae: Colonia Iulia Felix Lucoferonensium. There were also schemes at Falerii Novi, Sutrium and perhaps Veii, as well as *ad viritem* settlements. These schemes brought an influx of new families to the middle Tiber valley and heavy emphasis has been placed by scholars on their impact, disrupting existing social, economic and political organization and contributing to the significant developments of the early imperial period. Yet the textual and epigraphic evidence for much of this colonial activity is fragmentary and very difficult to interpret,[464] especially when set alongside the clearer and more abundant epigraphic evidence for the importance of freedmen in the development of local towns (section 4.4). The scale and impact of the Triumviral and Augustan veteran settlements are

[460] Quilici 1974a.
[461] Purcell 1987: 36. See also Morley 1996: 38 on 'Greater Rome' (encompassing the area up to 5 km from the city)
[462] Witcher 2005.
[463] Jones 1963b.
[464] Keppie 1983.

far less certain than much of the scholarly discussion suggests (section 4.6.2).

The arrival of new social groups and changing landownership are key themes for the early imperial period. As well as veteran settlement, the epigraphic evidence indicates the acquisition of property by members of wealthy families from other parts of Italy, especially Latium and Picenum, as well as by the imperial family and imperial freedmen.[465] Although some of the old Etruscan families are also attested epigraphically, the numbers that can be traced back at any individual town are limited; if they remained, their presence is largely invisible,[466] reinforcing the sense of a significant change in the social order.

The context for these changes is provided by significant social and economic developments at Rome, including the city's rapid population growth and the monopolization of power by the emperor. As Rome's population grew, perhaps to as much as one million, the city required ever-larger quantities of food, building materials and other supplies. For simple geographical reasons, the middle Tiber valley was well placed to supply this demand, particularly for perishable foods and for bulky, low-value goods.[467] This demand presented new opportunities for suppliers, but also created pressures. For example, large markets meant that producers could specialize, but greater competition for land meant that property prices increased. Combined with increasing population, these developments led to a growing imbalance of land and labour, with significant implications for socio-economic relations.[468]

Simultaneously, the monopolization of power by Augustus and his successors reduced the traditional opportunities at Rome for competition between senatorial families through civic benefaction, such as the construction of urban monuments. The emperor and the imperial family now dominated the cityscape, pushing competition between other aristocrats out to the urban periphery and the countryside beyond, taking the form of grand villas and mausolea, and the patronage of suburban towns with monuments and *sportula*. Hence, just as pressure on land to produce agricultural supplies increased, the wealthy were looking to the same land for new non-productive purposes. Moreover, the monopolization of power in the figure of the emperor not only pushed Rome's senators out of the city into the *suburbium*, but also drew in politically ambitious Italian and provincial families eager to be close to the centre of imperial power. As a result, land in the middle valley (and elsewhere in the *suburbium*) was increasingly owned by wealthy senatorial families from areas such as Cisalpina and the Spanish provinces. At the same time, the emperor and imperial family did not confine their patronage to Rome. Their presence was felt across the suburban landscape and far beyond. Augustus and Livia, for example, both brought estates in the middle Tiber valley to the property portfolio of the imperial family (e.g. at Prima Porta / Ad Gallinas Albas); these holdings were then greatly expanded over time with additional estates, often confiscated from wealthy families who had fallen foul of the regime.[469] The emperor also acted as civic benefactor for towns across the area. This patronage was often brokered by the many imperial officials and imperial freedmen who established themselves as a wealthy and influential group in the economic and social fabric of the region.[470] At Falerii Novi, for example, the freedman and *Augustales* C. Iulius Caesaris Isochrysus promoted Augustus as *pater patriae et municipi* (*CIL* XI 3083 = *ILS* 5373). These initiatives both integrated the freedmen into their newly adopted civic communities, and integrated the emperor into the social and economic fabric of the middle Tiber valley.

Finally, having made the case that the development of middle Tiber valley during the imperial period can only be understood with reference to the neighbouring metropolis, it is important to remember that imperial Rome lay at the heart of a Mediterranean empire. This wider Roman world offered expanding opportunities for the export of produce (section 4.7), as well as the import of utilitarian and luxury goods (section 4.8). It also tied the valley's communities into increasingly complex social and economic networks over which they had ever less influence.[471] While this connectivity and interdependence applied to every region of the empire, the fortunes of the middle Tiber valley were more closely tied to those of Rome than most.

With the odd exception, such as the military confrontation between Vitellius and Vespasian (Tac. *Hist.* 3.78–79), the first two centuries AD were a time of unusual peace and security for Italy and the middle Tiber valley. They were also a time of unprecedented social and economic transformation driven by the intensification of connections and interdependence with Rome.

In summary, Rome's new political structure concentrated wealthy families—Roman, Italian and provincial—in the city's immediate territory and the burgeoning population of the metropolis created unprecedented demand bringing new opportunities

[465] Andermahr 1998.
[466] Papi 2000: 11–12.
[467] Morley 1996.
[468] De Neeve 1984: 76-109; Duncan-Jones 1982; Maiuro 2012.
[469] E.g. at Fidenae and Saxa Rubra; Andermahr 1998.
[470] For *apparitores* see Purcell 1983.
[471] On the 'globalization' of Roman rural landscapes, Witcher 2017.

and pressures. Drawing on textual and epigraphic sources, this section has outlined the historical context as a framework for the discussion of the archaeological evidence presented in sections 4.3 to 4.9. The remainder of this section sets out two further contextual frameworks for the imperial period: an overview of previous studies of the imperial-period landscape of the middle Tiber valley (4.2.2) and a summary of evidence for the environment and environmental change (4.2.3).

4.2.2 Earlier studies of the imperial landscape

Three key themes have shaped scholarly accounts of the middle Tiber valley in the imperial period: the nature of the region's relationship with the city of Rome (the idea of a hinterland), the completion of an extended period of cultural change (Romanization), and the notion of a cultural and economic 'peak' or 'Golden Age'. This section reviews these themes to emphasize how they have evolved with the discovery of new evidence and how, in turn, they have shaped evaluations of that evidence.

The high density of imperial-period settlement mapped across the middle Tiber valley and the fundamental interconnectedness of its population with that of the city of Rome seem obvious and indisputable. But pre-nineteenth-century scholars, influenced by the thinly populated, unproductive and malarial Roman Campagna of their own day, portrayed a very different landscape. The imperial city was supplied by the provinces and the immediate territory of Rome was thought to be economically and demographically moribund. Starting with the work of topographers in the late nineteenth century, increasing evidence for settlement and agricultural production was documented across the region (section 2.1.2). Ashby, for example, argued that the Roman-period landscape had been densely settled and exploited thanks to extensive infrastructural works to make the unhealthy malarial territory habitable, and that it was the breakdown of this system that had created the deserted landscape of the medieval and early modern eras.[472] Ashby's legacy was taken up by scholars such as Giuseppe Lugli and the Italian School of Topographical Studies and, later, another Director of the British School, John Ward-Perkins in the form of the South Etruria Survey.[473] The results of Ward-Perkins's survey provided the basis for the next transformation in ideas about the scale and complexity of rural settlement in this area and its connectivity with the city of Rome. Most of the individual South Etruria Survey reports make some reference to the supply of agricultural products to Rome.[474] The city, however, was assigned only a very minor presence in Potter's 1979 synthesis of the South Etruria Survey. In many ways, *The changing landscape of South Etruria* presents a self-contained regional landscape history in which Rome might equally have been 10, 100 or 1000 kilometres distant.[475] Potter's (n.d.) unpublished report on the Southern Ager Faliscus Survey (written in the 1970s) captures this idea:

> Even as recently as the early 1970s there were many villagers in Mazzano Romano who claimed never to have visited Rome, a factor that we need to bear in mind when interpreting the settlement patterns and the economy of earlier landscapes. It is perhaps too easy to regard this region simply as part of Rome's *territorium*; in reality, the relationship between the city and this area of South Etruria is much more complex, especially when measured in terms of local marketing systems.

Of course, whether in AD 70 or 1970, a person did not need to have visited Rome in order to have lived in a community whose entire social and economic organization was deeply shaped by proximity to the city. Writing more than 20 years later about his excavations at the Mola di Monte Gelato villa, one of the sites he had previously discovered during the Ager Faliscus Survey, Potter's ideas had clearly evolved, placing a much greater degree of emphasis on contact and economic exchange between Rome, the villa and the wider middle Tiber valley.[476]

Potter's evolution of thinking reflects broader shifts during the 1990s in understanding of ancient urbanism and economy, best exemplified by Morley's 1996 book *Metropolis and hinterland*. Drawing on economic theories to interpret the textual and archaeological evidence, including the results of the South Etruria Survey, Morley firmly established the importance of approaching the city and its territory as a single integrated unit. In contrast to Potter's *The changing landscape of South Etruria*, Morley's account stressed that the evidence for settlement, population and economic activity around Rome could only be understood in the light of the area's proximity to the largest metropolis of the ancient Mediterranean, that is, conceptualized as a hinterland.[477]

Morley's account provided a welcome attempt to formalize the study of Roman landscapes such as South Etruria through a holistic and systematic approach. Unsurprisingly, its publication in 1996 was influential on the early thinking of the Tiber Valley Project, which launched just two years later. A very different approach

[472] E.g. Ashby 1902: 135
[473] Lugli 1962; Smith 2018.
[474] E.g. Jones 1963a: 105, 146; Kahane, Murray-Threipland and Ward-Perkins 1968.
[475] See review by Crawford 1980.
[476] Potter and King 1997.
[477] Morley 1996.

to the concept of hinterland, which also influenced the project's thinking, comes from Horden and Purcell's paradigm-shifting book *The Corrupting Sea*:

> If the dynamics of the extended hinterland ... could be considered in detail, rather than by overview, what at first appeared a grand system, operating as if by some careful plan, would be revealed as a huge accumulation of very local phenomena.[478]

In other words, the characterization of hinterlands as coherent systems, structured by general economic laws such those associated with von Thünen, supplying food and other goods efficiently in response to urban demand, does not acknowledge the complexity experienced on the ground. The coherence of Rome's hinterland was an emergent property contingent on the decisions and actions of a large and diverse range of groups and individuals. Indeed, it is important to emphasize that such hinterlands were inhabited and constituted by people not abstract economic processes. It was the social relationships between landowners, peasants, potters and merchants—and their counterparts at Rome—that brought the hinterland into being. A good example of the interaction of the social and economic in the creation of the hinterland is Erdkamp's work on the grain trade.[479] His account draws attention to the ways in which different social groups were able to identify and respond to urban demand for grain: aristocratic landowners, entrepreneurial middling farmers, and peasants all had different socio-economic strategies and therefore responded in quite different ways to Rome's grain market. All of these many factors—prices, information, different social and economic agents and their actions—came together to create 'the hinterland'.

Ideas about the relationship between Rome and its territory have therefore evolved significantly over the past 150 years, from unpopulated and unproductive to the social and economic foundation of the city. In recent years, strong emphasis has fallen on the concept of an economic hinterland, but increasing and complementary attention is now focused on social and cultural aspects of this relationship. Cultural change in the Roman period was not a core theme for the South Etruria Survey and the notion of Romanization (then well established in studies of provincial landscapes) was not a strong component of the original work. This may have been partly because of the impression that much of the rural landscape was not impacted by the dazzling cultural developments at Rome itself. Frederiksen and Ward-Perkins, for example, envisaged that for much of the rural population in the Ager Faliscus, there was remarkably little change as a result of the construction of roads, colonies and villas, perhaps reflecting a wider anthropological notion of the unchanging Mediterranean peasant.[480] The term Romanization appears just once in the 200-plus page report on the Ager Veientanus Survey;[481] instead of cultural change, the authors' discussion of the territory's connections with Rome focuses on economy and politics. In contrast, a decade later, Potter made more extensive use of the term Romanization in his synthesis of the South Etruria Survey; as this is usually in the context of the arrival of people, such as colonists, veterans, freedmen or incoming landowners, there is an implicit suggestion that cultural change was largely imported to and imposed upon the area by the arrival of new groups rather than adopted and adapted by existing communities. In the years since the publication of *The changing landscape of South Etruria*, Romanization has been applied with increasing frequency in the context of the South Etruria Survey area,[482] but concurrently critique of the concept has developed, focusing on its unwarranted assumptions of cultural homogenization, its colonialist associations and the inadequacy of its explanatory power.[483] Narratives of the Romanization of Italy, including Etruria, often work on the basis of a gradual and inevitable loss of diversity (languages, material cultures, identities) and its replacement with a standard 'Roman' way of life. Indeed, it has been argued that the South Etruria Survey evidence was integral to development of the idea that Romanization was associated with a distinct set of phenomena such as black-gloss pottery, or the dispersal of settlement.[484]

In reality, however, as in other areas of Italy and the wider empire, the cultural changes of the late Republican and early imperial periods did not lead to a process of homogenization whereby the inhabitants of Veii, Forum Novum and Sutrium shed their local differences to adopt a uniform Roman model. Despite an increasingly shared material culture and the arrival of many incomers to the area, pre-existing identities did not simply vanish. Indeed, with Augustus's rise to power, there were new opportunities, and incentives, to use novel types of material culture and social practices to reassert existing identities and to create new ones.[485] Such developments are all the more significant in the imperial landscape of the middle Tiber valley because these developments were not restricted to urban populations as they were in many other parts of the empire, but also encompassed rural populations; indeed, materially, the rural landscape was arguably more radically transformed at this time than the urban.

[478] Hordern and Purcell 2000: 121.
[479] Erdkamp 2005.
[480] Frederiksen and Ward-Perkins 1957: 183; see Braudel 1972; Horden and Purcell 2000; Witcher 2007.
[481] Kahane, Murray-Threipland and Ward-Perkins 1968.
[482] Also for Roman Italy more generally; e.g. Keay and Terrenato 2001.
[483] For summaries, see Hingley 2005; Mattingly 2011.
[484] Terrenato 2001.
[485] Bispham 2007; J.R. Patterson 2006; Witcher 2006b.

But it was the towns of the middle valley that were central to these changes, reinventing themselves, not as places of population, but rather as foci of display and collective identity. Few, if any, however, of these changes came about because individuals, families and communities simply wanted to 'become Roman'; rather, Rome's cultural and political revolution offered powerful new ideas and material culture through which to achieve varied social and cultural aims.[486]

Hinterland and Romanization are two of the key themes which have dominated the interpretation of the imperial landscape of the middle Tiber valley. A third, and closely related, theme concerns the ways in which the imperial landscape has been understood in relation to earlier and later periods. Thanks in no small part to the success of the South Etruria Survey, the imperial landscape is widely understood as a 'peak', both in terms of settlement numbers and economy, and, more subjectively, in terms of cultural achievement: this was the 'high point' towards which the Republican landscape was logically developing and away from which late antiquity would inevitably decline. While this narrative provides a compelling framework around which to build a long-term settlement history—as indeed Potter did—it has implications both for the understanding of the imperial period itself, as well as the preceding and subsequent periods. Treating imperial Rome as a period of cultural climax, for example, implicitly renders late antique Rome as degenerate; rather than explained, the developments of the late antiquity are presented as inevitable decline.[487] In this context, Moreland has argued that the peak in early imperial settlement numbers in the middle Tiber valley is such that it has distorted expectations about, and interpretation of, other periods.[488] Such observations about the imperial period demand a new approach. It is not the lower numbers of Republican and late antique sites that needs to be explained, but rather the abundance of early imperial sites. Emphasising the distinct nature of the archaeological record of the imperial period, compared to what came before and after, is one of the central themes of the present chapter.

In contrast to long-term narratives of rise and fall, other scholars have emphasized a broad dichotomy between the Republican and imperial periods: the former characterized by disruption (conquest, colonization), and the latter by stability (*pax romana*); the Republican landscape was populated by small farms, the imperial landscape by prosperous villas.[489] As very general characterizations these may be valid, but the Republican origins of villas, and the survival of small farms through into late antiquity, question the value of pushing dichotomies such as these too far (indeed, the contrast of unstable Republic versus stable Principate as an ancient literary trope). Instead, it is important to understand each period—Republican, imperial and late antique—on its own terms before it is compared to earlier and later periods. An important reason for this is that the archaeological record of each of these periods is very different and they are therefore not always directly comparable. In the case of the early imperial period, there is an abundance and diversity of material culture against which the more modest quantities from the Republican and late antique periods pale; set within the ideological framework provided by Augustan authors, there is a tendency to accept uncritically the impression of a significant cultural and economic transformation—the *pax romana*, Romanization, a Golden Age, a cultural revolution.[490] There was undoubtedly significant change—the challenge is to assess these developments without the baggage of such models, many of which are derived from ancient authors or powerful literary metaphors. Each of these themes, hinterland, Romanization and the Golden Age, and their varied influence on the interpretation of the Tiber Valley Project database are picked up throughout the chapter.

4.2.3 The environment in the imperial period

In the southern part of the study area, at the point where the Tiber, the Via Flaminia and the Via Tiberina converge, is the site of Ad Gallinas Albas, or the so-called Villa of Livia at Prima Porta. This elaborate architectural complex is best known as the findspot of the Prima Porta Augustus and a well-preserved wall painting from an underground *triclinium* now on display in the Palazzo Massimo. The latter depicts a garden scene, a carefully contrived vision of the natural world and a reminder that by imperial times, Rome had mastered not only the peoples of the Mediterranean, but Nature itself. Yet the physical environment of the middle Tiber valley was neither as static nor as easily controlled as this famous representation implies.

This section presents an overview of the environment of the middle Tiber valley during the imperial period putting particular emphasis on the evidence for change. The Mediterranean landscape is always changing,[491] but there are suggestions that the pace of that change increased during the imperial period. These changes, whether naturally occurring, the result of human agency, or a combination of both, must be factored into the analysis of settlement, infrastructure and economy. By the imperial period, much of the area had been actively exploited by urban societies for the best

[486] Wallace-Hadrill 2008.
[487] Giardina 2007; Wickham 2005.
[488] Moreland 2008.
[489] E.g. Accardo *et al.* 2007; Cambi 2004.
[490] Wallace-Hadrill 2008.
[491] Walsh 2014.

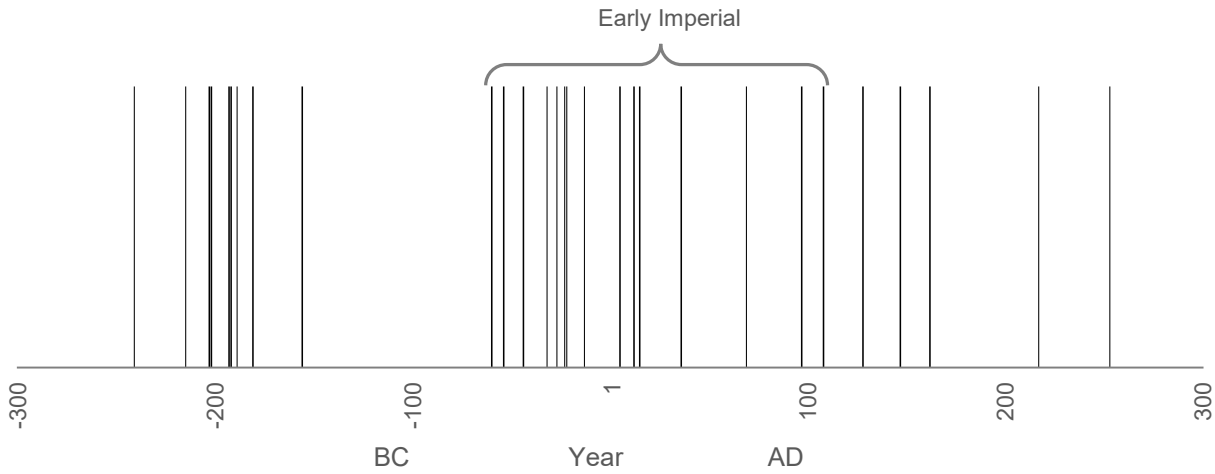


Figure 4.2. Recorded flood frequency at Rome from 300 BC–AD 300 (based on Aldrete 2007: table 1.1).

part of a millennium, profoundly altering its physical character, both deliberately and unintentionally; a form of 'niche construction'.[492]

A series of studies indicates a general shift in the wider Mediterranean climate during the later first millennium BC and first couple of centuries AD.[493] These use different proxies ranging from vegetation modelling and foraminifera extracted from sea-bed cores through to the Greenland ice cores.[494] Palynological studies have been particularly important.[495] Most (though not all) point to a general warming of climate and slightly wetter conditions that were favourable to the expansion of agriculture and human settlement.

One of the most significant environmental developments of the early and mid-imperial periods in the middle Tiber valley was the acceleration of soil erosion and deposition. Geomorphological and archaeological studies demonstrate that rivers began to down-cut within their valleys, replacing meandering watercourses with more deeply incised rivers.[496] At the same time, both the amount of soil washed from hills (colluvium) into river systems and the amount of soil deposited downstream (alluvium) increased significantly.[497] Early imperial-date structures at Fosso della Crescenza, near Veii, for example, were buried beneath deep alluvial deposits,[498] and excavation of a nearby Roman road at Veii demonstrates a sequence of paved surfaces separated by thick layers of alluvium.[499] In both cases, the flooding occurred during the imperial period. Of course, low-lying sites had always been vulnerable to flooding, as identified at the Villa of the Auditorium, just north of Rome where repeated flood events on the river plain are documented through the second half of the first millennium BC.[500] What changed in the imperial period was the scale of erosion and deposition, as well as the frequency of flooding.

The responses to flooding in the middle Tiber valley varied. As noted above, at Veii, one buried road was simply restored by laying a new paved surface on top of each alluvial deposit. Elsewhere, new routes were established; for example, flooding problems with a low-lying section of road linking the Via Flaminia and the Via Tiberina seem to have led to the opening of a new, but longer, alternative route that avoided the need to cross any wet valley bottoms.[501]

Meanwhile at the city of Rome, the written sources suggest an increase in flood events during the imperial period (Figure 4.2). Though this may simply reflect the better and more abundant textual evidence of the period, Aldrete has noted that building on the Campus Martius (i.e. the Tiber floodplain) at this time may both have increased the probability of floods and exacerbated their impact, with the consequence that they were more likely to be documented.[502] The more active erosional and depositional regime in the middle Tiber valley is likely to have contributed to these urban floods. Still further downstream, at the mouth of the Tiber, there is more evidence for the increase in erosion and deposition around this period; geomorphological and environmental studies clearly document the progradation of the Tiber delta farther out to sea, a result of larger quantities of sediment being brought down from the valley.[503]

[492] Laland and O'Brien 2010.
[493] Cheyette 2014 for overview.
[494] Reale and Dirmeyer 2000; Reale and Shukla 2000; Piva *et al.* 2008.
[495] E.g. Magri and Sadori 1999; Lippi *et al.* 2007.
[496] Potter 1976a, 1976b.
[497] Benvenuti *et al.* 2006; Brown and Ellis 1995.
[498] Fentress *et al.* 1983: 62.
[499] Stefani 1935: 361–5; Ward-Perkins 1961: 11, fig. 3.
[500] Carandini, D'Alessio and Di Giuseppe 2006: 15.
[501] Jones 1962: 157.
[502] Aldrete 2007.
[503] Bellotti *et al.* 2007; Rendell, Claridge and Clark 2007.

If the effects of these changes are well documented through geomorphological studies, the precise cause or causes of this accelerated erosion and deposition are less clear. The density of settlement reached during the imperial period were unmatched in this region until the late nineteenth/early twentieth centuries (see section 2.1.3). If the dispersal of rural settlement can be taken as an index of the intensity of land use, the imperial-period landscape was subject to unprecedented levels of exploitation. Direct palynological evidence for such an intensification of agricultural activity is currently lacking. Although the region's volcanic lakes have been well sampled for pollen, few have produced results relating to the Holocene era, and even fewer of relevance for imperial times. In this respect, there is little more data available today from this area than in the 1970s, when a pollen core from Lago di Monterosi was interpreted as providing evidence for a rapid phase of deforestation during the Republican period,[504] with the sharp increase in settlement numbers during the subsequent early imperial period taken to indicate the completion of large-scale clearance connected with agriculture.[505] In the absence of new evidence from within the study area, we can turn to environmental studies near the mouth of the Tiber, where recent pollen analysis at Stagno di Maccarese indicates elevated levels of cereals, *Juglans* and *Olea* suggesting the intensification of the cultivation of food crops in the early imperial period.[506]

Literary sources provide a number of other clues about the changing environmental character of the valley during this period. The foundation of the veteran colony at Lucus Feroniae during the late first century BC, for example, seems to have involved the felling of trees (Front. *Controversiae agrorum* 2). More generally, Pliny the Elder (*NH* 16.15) notes that beech trees that had grown in the Tiber valley in the fourth century BC were considered to be a mountain species by the first century AD.[507] Such a change could be explained by a warming climate (with beech replaced by more heat-tolerant species), but also by felling for timber or firewood, or in order to open up more agricultural land.

Deforestation and intensification of agriculture are common causes of erosion. The soft volcanic geology of much of southern Etruria is likely to have been particularly affected in this way. It is noticeable, however, that the construction of terraces to stabilize and retain ploughsoil appears to have been rarely undertaken in this area, especially when contrasted with the extensive use of terracing in the limestone landscape of the Sabina and, further afield, the Monti Lepini to the south of Rome.[508] This absence of terracing may be explained by the ability to create new and fertile ploughsoil by cutting into the soft tufo rock; this may have been an effective agricultural strategy by which farmers replaced soil but will have contributed to increased flooding of lower ground downstream. Combined with other archaeological evidence (section 4.7), it is clear that there was a significant intensification of agricultural production during the imperial period and some connection between this activity and the increase in erosion and deposition is likely. As noted above, changes in general climate may also have played a role through the input of more water and energy into the hydrological system at this time.

One consequence of the increased flooding of both urban and rural landscapes would have been greater quantities of stagnant surface water. This would have provided ideal breeding conditions for the *Anopheles* mosquito—the vector for *Plasmodium falciparum*, or human malaria. In this context, the much-discussed identification of malaria from skeletal material from a late-antique infant cemetery from a villa at Poggio Gramignano (Lugnano in Teverina) may be significant.[509] Certainly the presence of malaria during the Roman period was taken for granted by nineteenth- and early twentieth-century scholars.[510] Alongside the eradication of the disease during the mid-twentieth century, however, malaria all but disappeared from historical and archaeological accounts as well. More recently, drawing on the Poggio Gramignano evidence, Sallares has restated the case for malaria as a powerful demographic force on the population of Roman Italy.[511] In particular, he suggests it was exacerbated by infrastructure projects such as road building and (partially successful) drainage schemes that created ideal mosquito habitat in the form of stagnant water. He also draws attention to the importance of immunity acquired during childhood, and the devastating effects for immigrants—slave or free—who lacked such resistance. As discussed below, the imperial period is notable for the scale of human mobility and immigration around Roman Italy generally and at Rome and in the *suburbium* in particular. Drawing together these strands, if malaria was present at Rome and in the middle Tiber valley, the density of population and the constant arrival of those without acquired immunity, combined with more suitable habitat for the *Anopheles* mosquito, would have significant demographic and health implications.

[504] Hutchinson and Cowgill 1970; Potter 1979: 23–4, though on the basis of settlement and modelling data, Rajala 2016: 43 argues the landscape had, in fact, been largely opened up long before the Republican period; see also Kelly and Huntley 1991 on pollen from Lago di Martignano, and Magri and Sadori 1999 for Lago di Vico.

[505] E.g. Marcone 1997: 278; Meiggs 1982.

[506] Di Rita, Celant and Magri 2010.

[507] Today they grow at approximately 1000 m above sea level in the Apennines, Reale and Dirmeyer 2000: 167.

[508] Quilici 1995.

[509] Soren and Soren 1999.

[510] Ashby 1927: 19 is just one example.

[511] Sallares 2002: 235–61; see also Gowland and Garnsey 2010; Killgrove and Montgomery 2016.

Another hydrological change of the early empire concerns the rapid and dramatic shifts in the shorelines of Lakes Bracciano and Martignano.[512] During the late Republican and Augustan periods, a series of substantial and wealthy villas were constructed around the shores of the lakes (section 4.5.1). Augustus also commissioned a new aqueduct, the Aqua Alsietina, to bring water from Lake Martignano to Rome. Subsequently, some time during the first century AD, the water levels of the lakes changed: Lake Martignano dropped dramatically by approximately 29 m leaving the *emissario* (outlet) for the Aqua Alsietina high above the water line, requiring engineers to cut new tunnels to restore the flow of water. Conversely, the level of Lake Bracciano rose by several metres, drowning several of the shorefront villas; many of these properties had only recently been constructed and some were quickly re-built a short distance further back from the new shoreline.[513] How these changes were perceived and rationalized at the time is unknown, but the lake shores clearly remained desirable places for the wealthy to build their monumental villas.

Collectively, a range of evidence suggests that the physical environment of the imperial period experienced significant changes—some natural, some anthropogenic, and many a combination of the two in a complex web of human-environment relations. The opportunities for agricultural production may have been improved by general climate amelioration, though increased population and intensification of cultivation may have contributed to soil erosion, flooding and even disease regimes, requiring maintenance, mitigation and further investments in infrastructure. Coming after almost 1000 years of exploitation by urban societies, this was part of a long-established process of niche construction. The environment is never a static backdrop against which human history is played out and the significant—and in some cases rapid—changes of the imperial period highlight the ways in which population and environment shape and respond to each other. In many respects, the idealized landscape portrayed on the walls of the Villa of Livia at Prima Porta stands in contrast to the more dynamic and less easily controllable reality; indeed, fittingly, it may have been an earthquake in 17 BC which put an end to use of this part of the villa helping to preserve its frescoed walls for posterity.[514]

This section has introduced the historical background, scholarly debates and environmental evidence that form the framework for the interpretation of the archaeological evidence for the middle Tiber valley during the imperial period. The following section (4.3) details the contents of the project database and sections 4.4 and 4.5 explore the evidence of the urban and rural landscapes respectively.

4.3 Imperial-period material culture and settlement sites

4.3.1 Pottery

The project database contains information on thousands of sites and tens of thousands of artefacts. This section provides an overview of the database contents relating to the early and mid-imperial periods. It also includes discussion of a number of methodological issues that are of specific relevance to the analysis and interpretation of these particular periods (for generic methodological issues, see Chapter 2).

At the core of any Mediterranean survey is the pottery and other material culture collected mainly from the surface of agricultural fields. This material is used to identify, date and characterize sites and other human activities. This section starts with an introduction to the main categories of ceramics and material culture of the early and mid-imperial periods and an evaluation of how they are used to date activity at individual sites and how the latter are aggregated as settlement trends at a range of scales from local to regional.

The early and mid-imperial periods as defined here (*c.* 50 BC–AD 250) encompass 300 years. This represents only 15 per cent of the 2000-year time span covered by the project, yet the majority of all the datable artefacts collected by the South Etruria Survey—and those recorded by other surveys in the region—derive from these three centuries. Moreover, there is not only more evidence from this period compared with others, but it is also more varied. Whereas, for example, dating for the Republican period relies heavily on one particular class of pottery (black-gloss ware), dating imperial-period activity can draw on a much wider range of diagnostic pottery classes including *terra sigillata*, thin-walled wares, Dressel 2-4 amphorae and, subsequently, African red slip, African cooking wares and a range of late amphora types. In addition to ceramic vessels, a number of new types of material culture became widespread across the region during the early imperial period, including blown-glass vessels and marble wall veneers and new building techniques were introduced including *opus reticulatum* and brick-faced concrete. The latter is associated with an upsurge in the production and, especially, the stamping of tile and brick. There is also an increase in the frequency of datable honorific and funerary inscriptions during these centuries. As a result, the early and mid-imperial periods are marked by a significant quantitative and qualitative shift in the visibility of material culture making these the best documented of any centuries

[512] See Mazza *et al.* 2015 for recent changes in Bracciano's water levels.
[513] Accardo *et al.* 2007: 83–9; see also Puglisi and Savi Scarponi 2011.
[514] De Franceschini 2005: 43 for summary. For evidence of a second-century AD earthquake in Abruzzo see Ceccaroni *et al.* 2009.

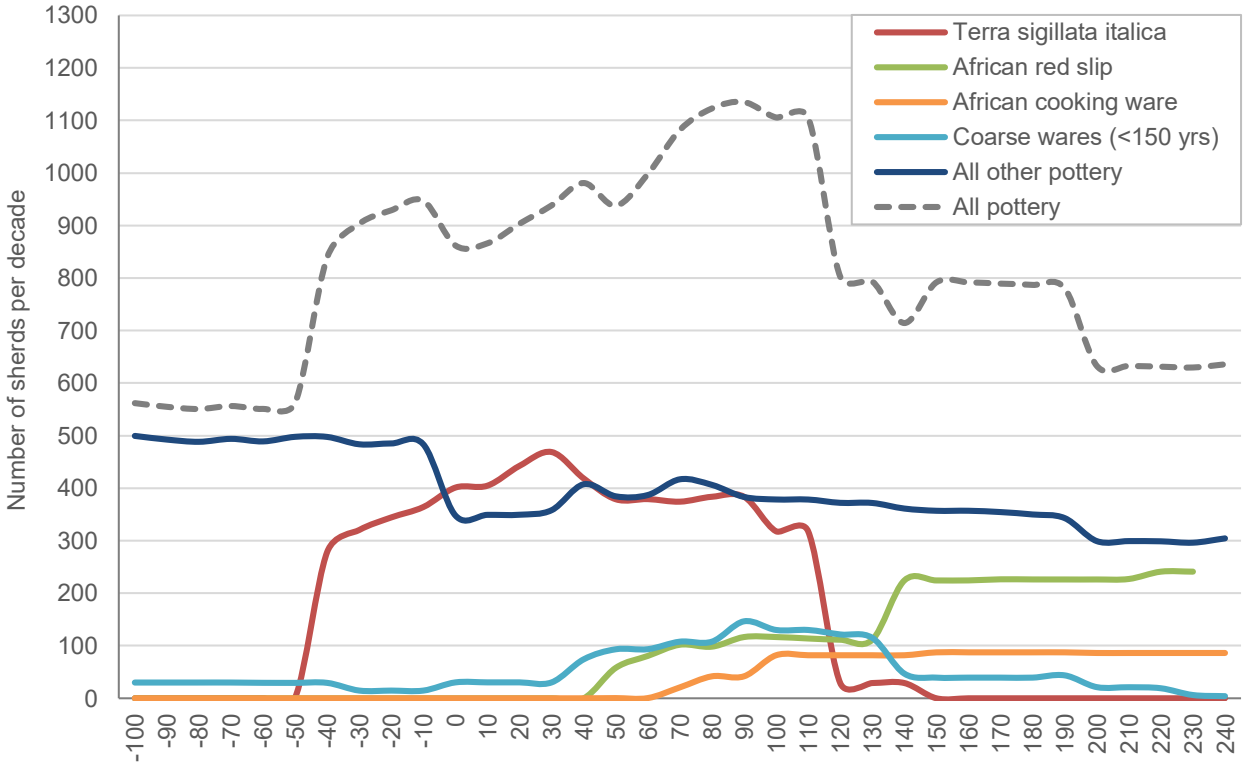


Figure 4.3. Weighted average numbers of sherds per decade (100 BC–AD 250) collected by the South Etruria Survey: all pottery, plus select classes.

between 1000 BC and AD 1000. The story told by that evidence is unequivocal. The early and mid-imperial periods witnessed unprecedented levels of settlement, population and economic activity. As already discussed, however, the quantity and quality of evidence from this period also introduces some problems of its own, for example, issues of comparability with earlier and later periods.

At the core of the project database are the results of the restudy of the pottery collected by the South Etruria Survey; as discussed in section 2.2.1, this collection was neither a full nor systematic sample of the material identified during fieldwork and the resulting figures must therefore be used with caution. Nonetheless, the increase in the quantities of pottery for the imperial period is striking. Figure 4.3 uses the weighted average (or *media ponderata*) method to show the changing quantities of some of the key diagnostic ceramic classes over time. Most notable is the decisive role played by *terra sigillata italica* in increasing the visibility of sites during the early imperial period. Here it should be emphasized that although the absolute quantities of Republican black-gloss (n=7084) sherds exceed those of *terra sigillata italica* (n=6068), the latter ware was produced, consumed and deposited at twice the rate (approximately 400 sherds per decade compared with 200 black-gloss sherds per decade; cf. Figure 3.22). In this context, it is notable that where full and systematic collections from surface scatters have been made, the difference between the quantities of Republican and imperial material is often large: Corese site 29 (TVP-ID 12602/12603) produced three black-gloss sherds and 26 sherds of *terra sigillata italica*, while fieldwork at the villa at S Sebastiano near Foglia produced 18 black-gloss pottery sherds and 809 sherds of *terra sigillata italica*.[515] Such numbers from individual sites cannot be extrapolated to the database as a whole, but they do support the firm impression that the collection strategy of the South Etruria Survey may have systematically *under*-represented the quantity of imperial-period ceramics and that the scale of the increase in the amounts of material culture in circulation may have been even more significant (see Figure 2.36). One possibility is that by collecting sherds in order to establish an overall chronology for each site (i.e. one sherd for each period rather than a proportional sample), the collection method may have recovered a much smaller percentage of the imperial-period material. Moreover, as noted above, the increase in the circulation of diagnostic fine-wares was accompanied by the appearance of other new types of a pottery and material culture, which both diversify and enhance still further the archaeological visibility of the imperial period (see also sections 2.2.1 and 2.4.1).

[515] Sternini 2004; Verga 2004: 142; not in TVP database.

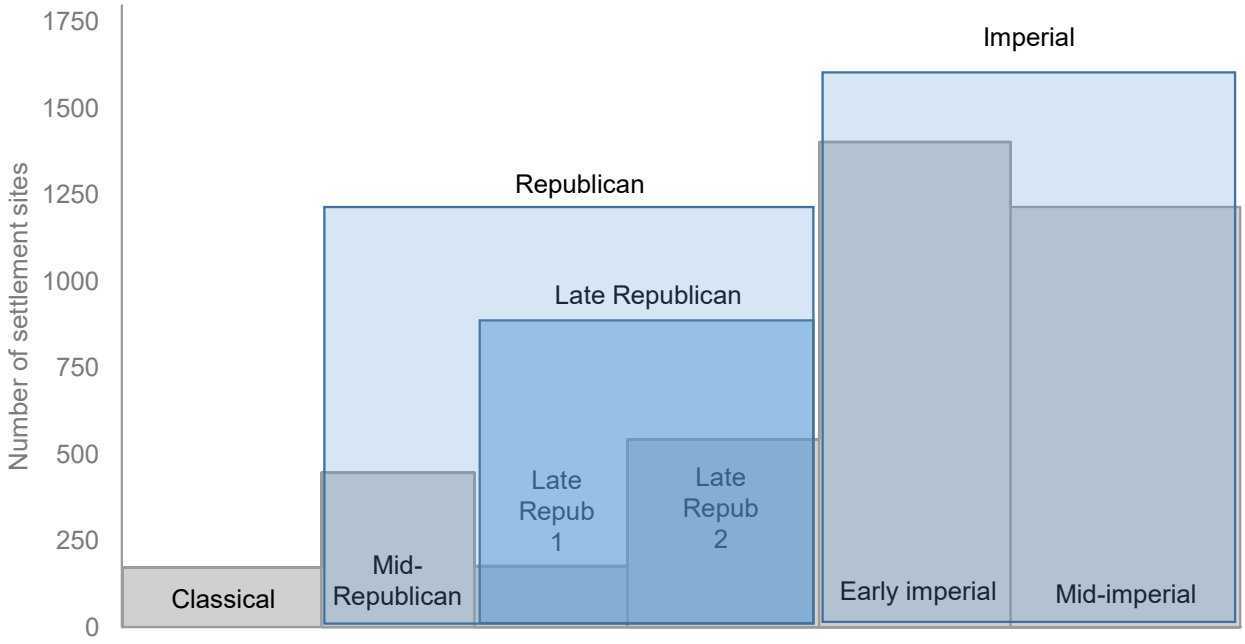


Figure 4.4. Numbers of early and mid-imperial period settlement sites, in relation to sites of earlier and generic periods.

4.3.2 Sites

The full restudy of all the South Etruria Survey pottery provides the basis for the first systematic dating of the South Etruria Survey sites (see section 2.2.1). Figure 4.4 shows the resulting numbers of South Etruria settlement sites for the early and mid-imperial periods, plus the numbers for the preceding periods for context. 'Settlement site' is used specifically to indicate sites with residential functions (e.g. farm or villa) and therefore excludes general scatters and all types of funerary, production and infrastructure sites without residential function. For important context, the chart also shows the numbers of generically dated settlement sites, that is, sites that cannot be dated to specific sub-periods. These figures indicate that the percentage of generic settlement sites is much less for the imperial period—far more sites can be confidently dated compared to the Republican period—though there are still around 200 settlement sites that cannot be assigned to either the early or mid-imperial period (representing the equivalent of an additional 15% on the early imperial-period total): in the following discussion, it is important to recall that these sites could have been occupied in either or both imperial periods. Assuming that the inability to date these sites is not the result of an inadequate sample of material for any individual site (e.g. poor visibility; not yet deep ploughed), the absence of closely dated ceramics may be a reflection of the socio-economic status or cultural preferences of the inhabitants.

The impact of including or excluding these generically dated imperial-period sites is simply to increase or depress modestly the overall number of the early and mid-imperial settlement sites; a clear peak in overall early and mid-imperial numbers is maintained. The inclusion or exclusion of the much larger numbers of generic Republican sites, however, has a more profound impact. This affects not only the reconstruction of Republican settlement figures (see section 3.3), but also—of central importance here—how we understand the transition between the Republican and the imperial periods: an imperial-period peak in settlement numbers is unquestionable, but from what baseline should the growth to that peak be measured? In *The changing landscape of South Etruria*, Potter argued that although the quantities of black-gloss pottery in circulation probably varied through the course of the Republican period, because local ceramic form types could not be reliably dated using typologies based on productions from other parts of Italy, the material was therefore used to define a single, long Republican period (350–50/1 BC).[516] The Tiber Valley Project restudy of the black-gloss pottery has now facilitated the division of this material into mid-Republican (350–250 BC) and late Republican (250–50/1 BC), with the latter itself, subdivided into late Republican 1 (250–150 BC) and late Republican 2 (150–50/1 BC). As discussed in section 3.3, this allows new insights into shifting settlement and economy within the Republican period. In relation to the early imperial period, the question is whether the peak in settlement numbers should be measured against the Republican, late Republican or late Republican 2 settlement figures. Figure 4.4 demonstrates the significant effect on our understanding of early imperial growth of the answer to this question.

[516] Potter 1979: 95–6.

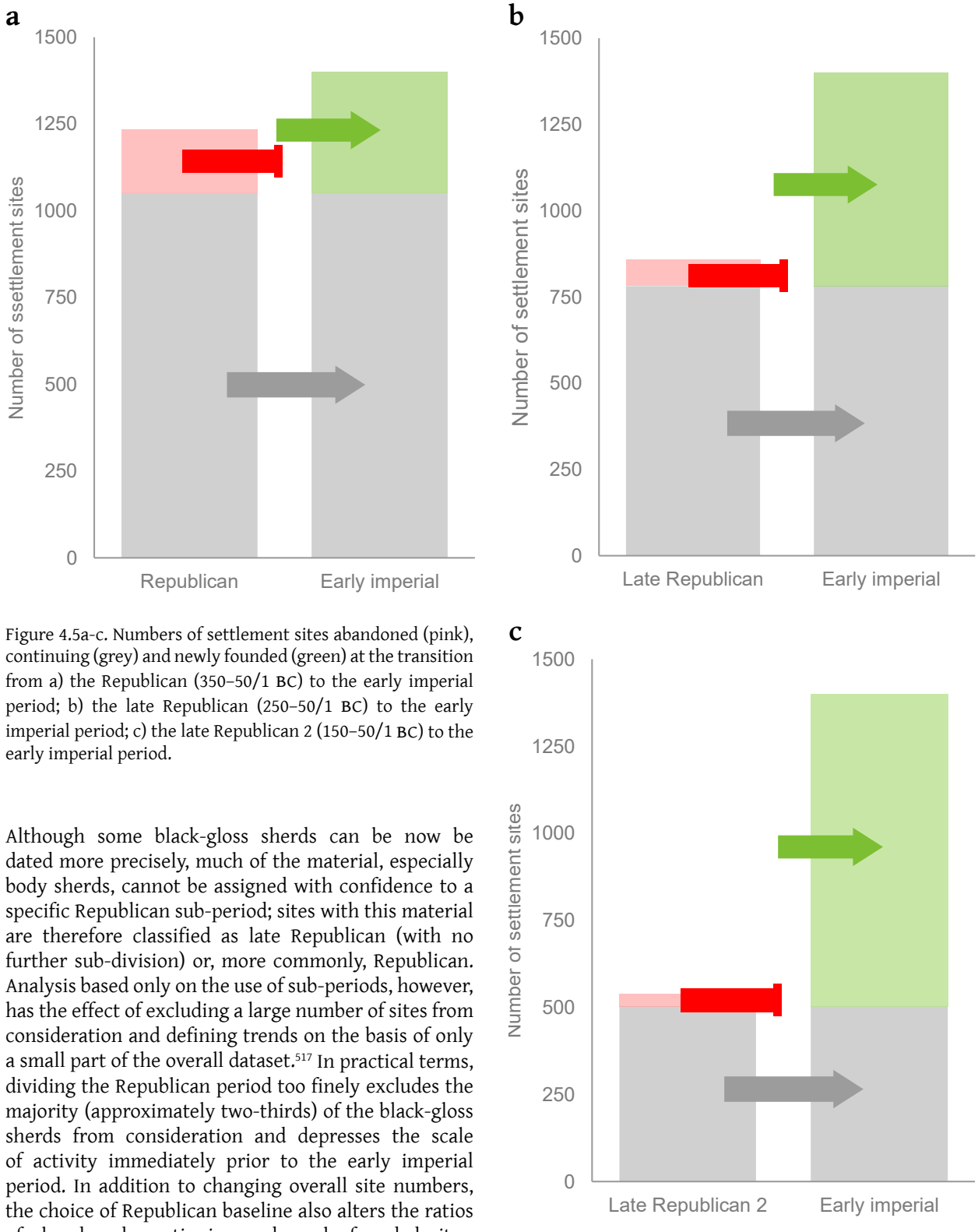


Figure 4.5a-c. Numbers of settlement sites abandoned (pink), continuing (grey) and newly founded (green) at the transition from a) the Republican (350–50/1 BC) to the early imperial period; b) the late Republican (250–50/1 BC) to the early imperial period; c) the late Republican 2 (150–50/1 BC) to the early imperial period.

Although some black-gloss sherds can be now be dated more precisely, much of the material, especially body sherds, cannot be assigned with confidence to a specific Republican sub-period; sites with this material are therefore classified as late Republican (with no further sub-division) or, more commonly, Republican. Analysis based only on the use of sub-periods, however, has the effect of excluding a large number of sites from consideration and defining trends on the basis of only a small part of the overall dataset.[517] In practical terms, dividing the Republican period too finely excludes the majority (approximately two-thirds) of the black-gloss sherds from consideration and depresses the scale of activity immediately prior to the early imperial period. In addition to changing overall site numbers, the choice of Republican baseline also alters the ratios of abandoned, continuing and newly founded sites; Figure 4.5a-c shows the different settlement numbers and dynamics that result from assuming a Republican, a late Republican or a late Republican 2 baseline. Figure 4.5a follows Potter's approach of treating the Republican period as a single, undifferentiated span of time (350–50/1 BC); this greatly increases the number of Republican sites in consideration and consequently minimises the scale of growth required to reach the early imperial total—a modest 13 per cent increase. In contrast, Figure 4.5c shows how using only those sites

[517] For further consideration, see Witcher 2008a; for the same problem south of Rome, see De Haas, Tol and Attema 2011.

securely dated to the late Republican 2 (150–50/1 BC) significantly decreases the baseline number of sites from which settlement must expand to reach the early imperial total, requiring an increase of 159 per cent. Figure 4.5b navigates a middle route between these two positions by using sites dated to the late Republican period (250–50/1 BC) as the baseline. As the quantity of black-gloss sherds dated to this period is more than double that of late Republican 2 period, there is much more material available for dating purposes and it is therefore possible to recognize activity at many more sites. In turn, this raises the baseline from which early imperial settlement numbers must grow, requiring an increase in settlement numbers of 64 per cent. This is the preferred method of interpreting the figures used in the rest of this chapter. As discussed below, a 64 per cent increase in settlement is still a very substantial expansion, but far lower than the extraordinary growth required if the late Republican 2 baseline were used. This approach does still leave a substantial group of sites that cannot be dated more precisely than Republican (350–50/1 BC)—the equivalent of just over one-third of the late Republican total—but it has the benefit of avoiding the excessive data redundancy caused by further sub-division (late Republican 2), the effect which is almost certainly to depress artificially the baseline for early imperial settlement growth.

To sum up, the restudy of the South Etruria Survey pottery permits greater confidence in the dating of settlement activity, but the new levels of precision that are possible require choices to be made about how best to group the material to give a balance between data redundancy and the identification of meaningful patterns. This issue is particularly relevant to the Republican material with significant implications for evaluation of the scale of settlement expansion in the early imperial period under discussion here. The solution adopted is to compare the number of early imperial-period sites with the figures for the late Republican period (250–50/1 BC).

4.3.3 Legacy data

So far, discussion has focused on the results of the pottery restudy for the (re)dating of the South Etruria Survey sites. The project database, however, also contains the results of a number of other surveys and excavations. These legacy data extend the geographical coverage but also introduce general issues of comparability, and again there are some specific issues that relate to the imperial-period evidence. As explained in section 2.4.2, the dating of sites in the project database is based on the presence of one or more period-specific indicators; these might include pottery (*terra sigillata* or early forms of African red slip, for example) or a wide variety of other new categories of material culture that first appeared in the imperial period, such as stamped tile, marble wall veneers and tufo blocks for *opus reticulatum* construction. This simple method has been used to date sites of all periods, but the abundance and diversity of the more diagnostic material culture of the early and mid-imperial periods makes sites of this date much easier to identify in comparison with those of earlier and later periods.

This relative ease of recognition is a bonus when incorporating legacy data since imperial-period sites are likely to be well- and reliably represented regardless of specific methodological differences. In contrast with other periods, for example, recognition of imperial-period activity is less dependent on the specialist restudy of ceramics. Distribution maps of imperial-period settlement are therefore likely to be more comprehensive than those for earlier and later periods. Yet, as a result of the combination of under-representation of Republican-period settlement (above) and the relative over-representation of imperial-period settlement due to the integration of legacy data, the relative scale of growth between the two periods is likely to be somewhat exaggerated.

Figure 4.6a shows the percentage change in the numbers of records at each transition between the late Republican and mid-imperial periods, differentiating between the records of South Etruria Survey sites with restudied pottery and all other legacy data sites. This indicates that although the trends for both groups move in the same directions, the legacy data exaggerate the scale of change. Figures 4.6b-d show the percentage change between periods for scatters, farms and villas respectively. The notable percentage increase in relation to early imperial scatters documented by legacy surveys reflects the abundance of material culture in circulation during this period and a consequent caution on the part of surveyors towards interpreting every findspot as a site. Conversely, usage of the category 'farm' (or equivalent) is relatively rare in legacy datasets (the Forma Italiae series, for example, generally differentiate between 'Villa and 'area di frammenti fittili'), leading to less pronounced percentage change from the late Republican period when compared to the trend of the restudied South Etruria Survey sites; this may also reflect the ability of the restudy to identify coarse-wares of late Republican date unrecognized by legacy surveys. Finally, the inclusion of villas documented only by legacy data leads to a slight exaggeration of the percentage increase in comparison with the restudied South Etruria Survey sites; much more dramatic, however, is the significant increase in the numbers of late Republican villas recognized by legacy surveys. Collectively, these results indicate that the inclusion of legacy data introduces some unevenness into the overall database, but also

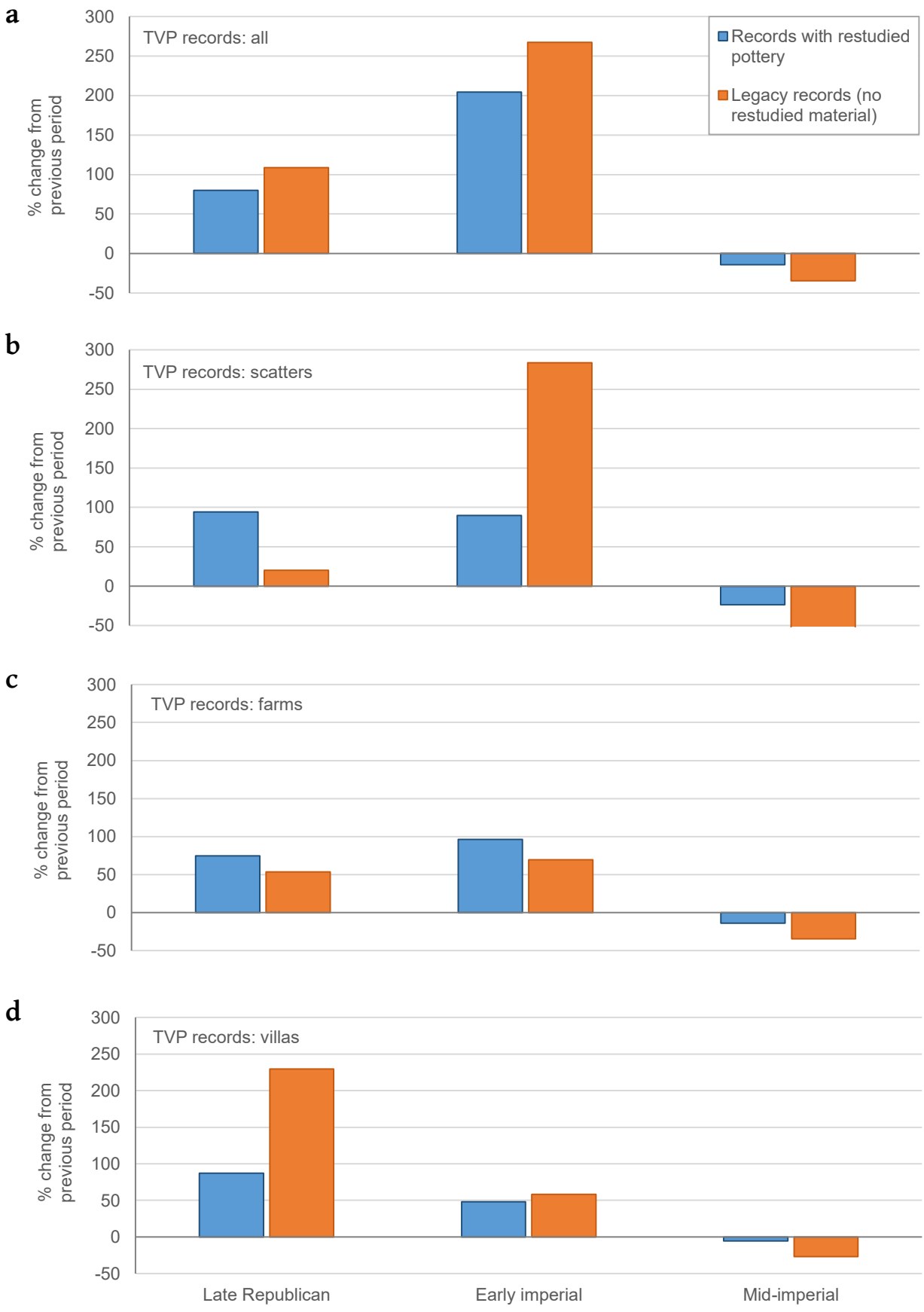


Figure 4.6a-d. Numbers of sites from the late Republican to the mid-imperial period (250 BC–AD 250) based on database records with restudied material versus legacy data: a) all database records; b) scatters; c) farms; d) villas.

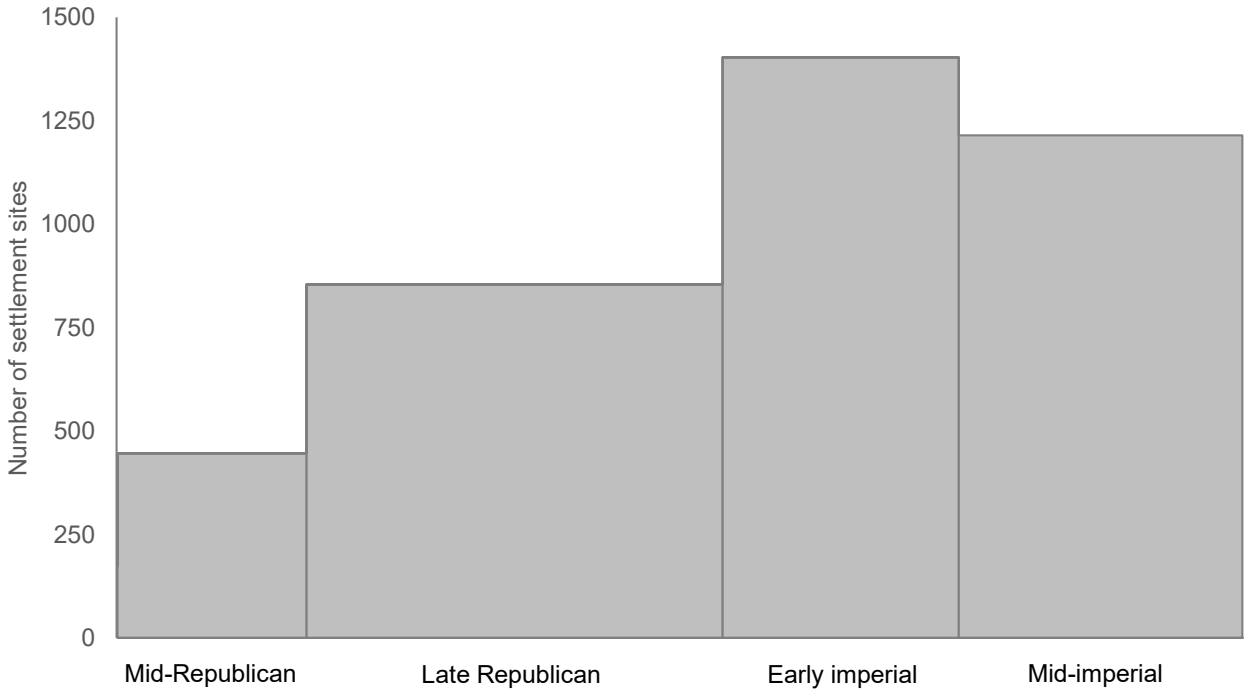


Figure 4.7. Numbers of early and mid-imperial-period settlement sites, with Republican sites divided into mid- and late Republican periods.

that these issues relate predominantly to the smallest sites and scatters rather than the main settlement categories of farm and villas. The integration of legacy data therefore complements and expands the coverage of the imperial period without compromising the overall chronological value of the better-studied South Etruria Survey sites.

4.3.4 The Republican to imperial transition

The above discussion has examined aspects of methodology with significant implications for the interpretation of the early and mid-imperial periods. The intention has been to demonstrate that simple counts of site numbers conceal complex methodological issues and that choices and compromises must be made to facilitate the interpretations that follow. Based on this discussion and the solutions adopted above, Figure 4.7 presents the final settlement site numbers for the early and mid-imperial periods that underpin the rest of this chapter, contextualized with the figures for the preceding and subsequent periods. The chart includes all settlement sites from the project database and assumes a division of the Republican period into mid- and late Republican, without further sub-division of the latter. The column widths shown in Figure 4.7 are proportional to the duration of each period.

Finally in this section, we turn from discussion of the total number of sites across the whole study area to consider briefly some of the underlying variability. Table 4.1 presents the numbers and percentages of settlement sites abandoned, continuing in occupation or newly founded at the transition from the late Republican to the early imperial periods. Figures are provided for a range of different data sources, site types and geographical areas in order to emphasize both overarching trends and specific details for further discussion.

Across the study area as whole, there is a 64 per cent increase in the number of settlement sites between the late Republican and early imperial periods. The vast majority of late Republican settlement sites continued in occupation in the early imperial period. Overall nine out of ten sites remained in occupation, with a slightly higher rate for villas than for farms (96 and 85 per cent respectively); in most sub-regions of the middle Tiber valley the rate of continuity is 90 per cent or higher, though falls to 76 per cent in the territory of Sutrium. These extremely high levels of continuity emphasize the deep historical roots of the imperial-period settlement pattern in the preceding Republican landscape. Yet, in the early imperial period, hundreds of new sites were also founded such that, even though nearly all late Republican settlement sites continued in occupation, they formed little more than half (55%) of the early imperial total. If the continuity of occupation between the late Republican and early imperial periods is both remarkably high and broadly consistent across different geographical areas and site types, the rates at which new sites were founded are more variable. The overall 65 per cent increase in settlement numbers conceals significant differences.

Table 4.1. Numbers and percentages of late Republican and early imperial-period settlement sites and rates of abandonment, continuity and foundation.

	Abandoned	Continuing	New	Total/% diff	% abandoned	% continuing	% new
Late Republican: all settlement				854			
Transition	*77*	*777*		*64%*	*9%*	*91%*	
Early imperial: all settlement		777	626	1403		55%	45%
Late Republican: farms				317			
Transition	*46*	*271*		*92%*	*15%*	*85%*	
Early imperial: farms		271	339	610		44%	56%
Late Republican: villas				492			
Transition	*18*	*474*		*50%*	*4%*	*96%*	
Early imperial: villas		474	266	740		64%	36%
Late Republican: Ager Veientanus				245			
Transition	*13*	*232*		*72%*	*5%*	*95%*	
Early imperial: Ager Veientanus		232	190	422		55%	45%
Late Republican: Ager Faliscus				66			
Transition	*7*	*59*		*126%*	*11%*	*89%*	
Early imperial: Ager Faliscus		59	90	149		40%	60%
Late Republican: Ager Capenas				79			
Transition	*6*	*73*		*38%*	*8%*	*92%*	
Early imperial: Ager Capenas		73	36	109		67%	33%
Late Republican: Eretum				44			
Transition	*4*	*40*		*48%*	*9%*	*91%*	
Early imperial: Eretum		40	25	65		62%	38%
Late Republican: Sutri				29			
Transition	*7*	*22*		*148%*	*24%*	*76%*	
Early imperial: Sutri		22	50	72		31%	69%

Villas, for example, demonstrate a 50 per cent increase in numbers, while farms demonstrate almost double in number, with a 92 per cent increase. The territory around Sutrium experienced an increase of almost 150 per cent, perhaps to be explained by the relatively low density of late Republican settlement in the area, allowing more room for growth, though a higher than average percentage of late Republican sites was also abandoned in this territory, perhaps suggesting a different underlying dynamic. Elsewhere, the already densely occupied territory to the north-east and east of Veii experienced a 72 per cent increase in settlement numbers; the resulting settlement density of the Ager Veientanus is a whole order of magnitude higher than the settlement density around Sutrium. The areas with smallest increases in settlement numbers are the Ager Capenas and the territory of Eretum at 38 and 48 per cent increases respectively, though it must be stressed that, in absolute terms, such growth in site numbers is still historically high.

In longer historical perspective, the transition from late Republican to early imperial period was rapid and the scale of growth unprecedented, but it is important to remember that this significant expansion of settlement did not take place overnight. In reality, the early imperial landscape emerged from its late Republican predecessor over several decades; section 4.6.2 explores the possible explanations for this substantial increase in the numbers and types of sites.

4.3.5 The spatial dimension

Alongside the chronological trends outlined above, this section concludes with examples of the spatial dimensions of imperial-period settlement at the scale of the middle Tiber valley as a whole, as well as through a series of illustrative sub- or micro-regions. Again, examples of period-specific methodological issues are flagged in order to prepare for the interpretive sections that follow.

Figure 4.8 shows the spatial structure of the process of settlement abandonment and foundation at the late Republican to early imperial transition in the northern Ager Veientanus, southern Ager Faliscus and the eastern Ager Sutrinus. The map makes clear that the strong continuity not only of individual sites, but also their wider geographical distribution. Abandoned sites are nearly all compensated by the nearby foundation of new ones; just a few concentrations of newly founded sites indicate pockets of land that appear to have been opened up for settlement and agricultural exploitation for the first time (most obviously around Sutrium).

As discussed above, it is likely that early imperial settlement is disproportionately well represented in legacy datasets when compared with settlement of early and later periods; this has implications not only in terms of the chronological trends but also plays out spatially, especially as a result of the integration of legacy data. Figure 4.9 for example, shows the distributions of sites dated specifically to the early imperial period and generically to the imperial period around Nomentum and Eretum. The cluster of early imperial sites around Eretum might easily be taken to indicate that the centre served as a vibrant market centre; in contrast, the thinner early imperial settlement distribution around Nomentum might suggest a weaker central place function. In fact, the reverse is more likely to have been the case. The Eretum Survey collected large amounts of pottery from surface scatters.[518] As part of the wider South Etruria Survey, this material has been restudied for the Tiber Valley Project providing a systematic and up-to-date chronological basis for the redating of these sites. In contrast, no detailed pottery analysis or restudy is available for the Forma Italiae survey of the area around Nomentum;[519] instead, here, site dating must rely on the structural remains and generic ceramic classes documented in the original publication and hence not updated for 50 years. As a result, most sites around Nomentum are datable only to the generic imperial period and a map showing only sites specifically dated to the early imperial period would give the impression that this hinterland was thinly settled during the first century AD. Resurvey of this area, and more specifically the collection of pottery as the basis for site dating, would likely show that many known sites—perhaps even the majority—were indeed occupied during the early imperial period.[520]

On the western side of the study area, the integration of the Forma Italiae volumes for Sutrium and Vicus Matrini demonstrate a different legacy data issue. Figure 4.10 shows the distribution of settlement, with a higher density in the area covered by both the Forma Italiae and South Etruria Surveys. The distribution of the villas, however, is much more uniform than that of farms. This suggests that villas were reliably recognized by both surveys, but that the South Etruria Survey was also able to document a series of smaller sites ('Farms'), further down the settlement hierarchy. The implication is that more intensive survey in the areas covered only by the Forma Italiae survey would 'fill in' some of gaps between the known villas with a series of farm sites.[521]

Two final examples pick up on the potential effects of resurvey. Even though imperial-period sites are comparatively easy to identify and are therefore well

[518] Ogilvie 1965.
[519] Pala 1976.
[520] For resurvey work in the area south of Nomentum at Crustumerium, see Seubers and Tol 2016.
[521] Though, half a century after the *Forma Italiae* fieldwork, the preservation of surface sites is likely to have deteriorated; for similar resurvey work in the área of Cores, see Di Giuseppe *et al.* 2002.

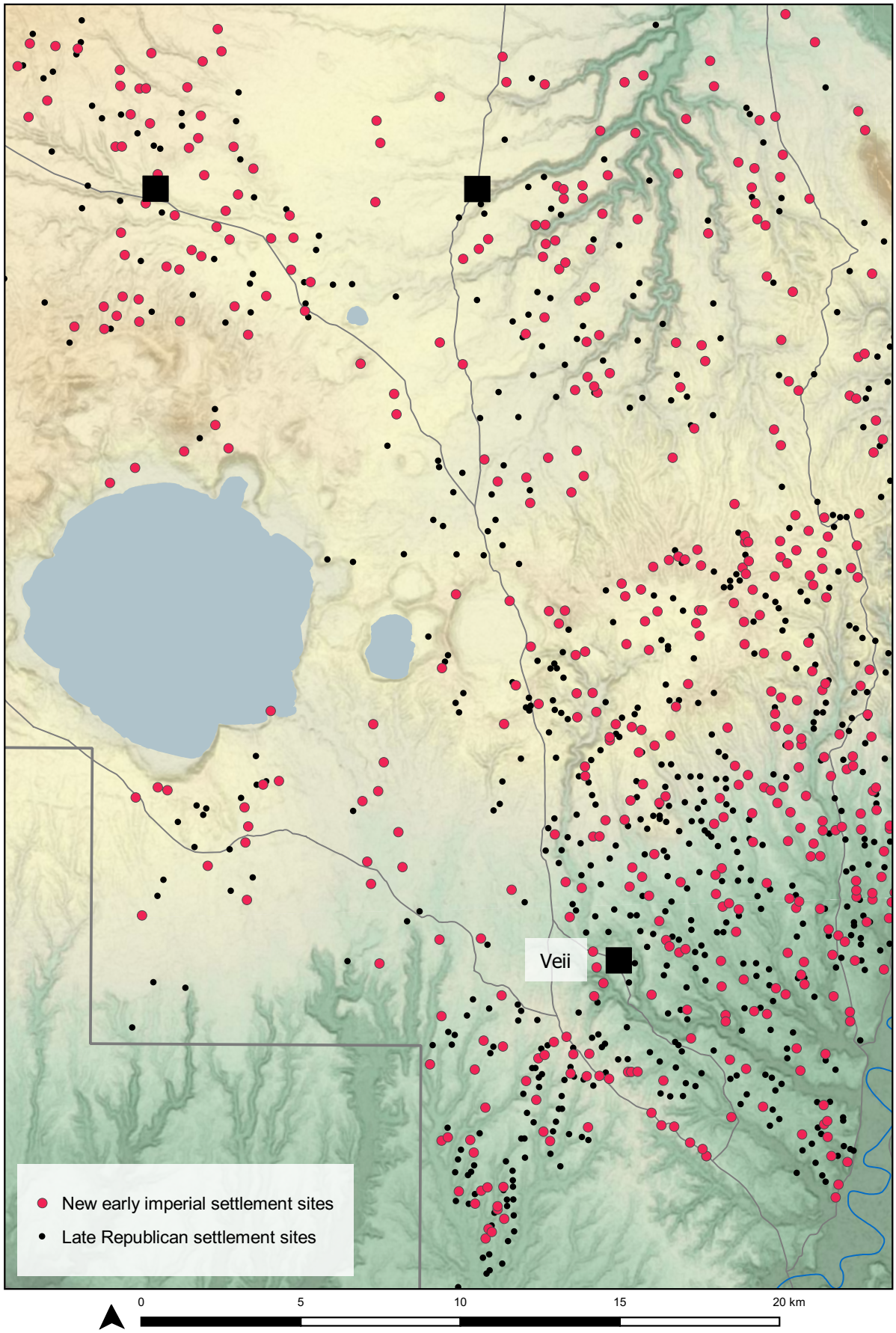


Figure 4.8. Distribution of newly founded early imperial (50 BC–AD 100) settlement sites in relation to late Republican (250–50/1 BC) settlement sites in the western Ager Veientanus, southern Ager Faliscus and Ager Sutrinus.

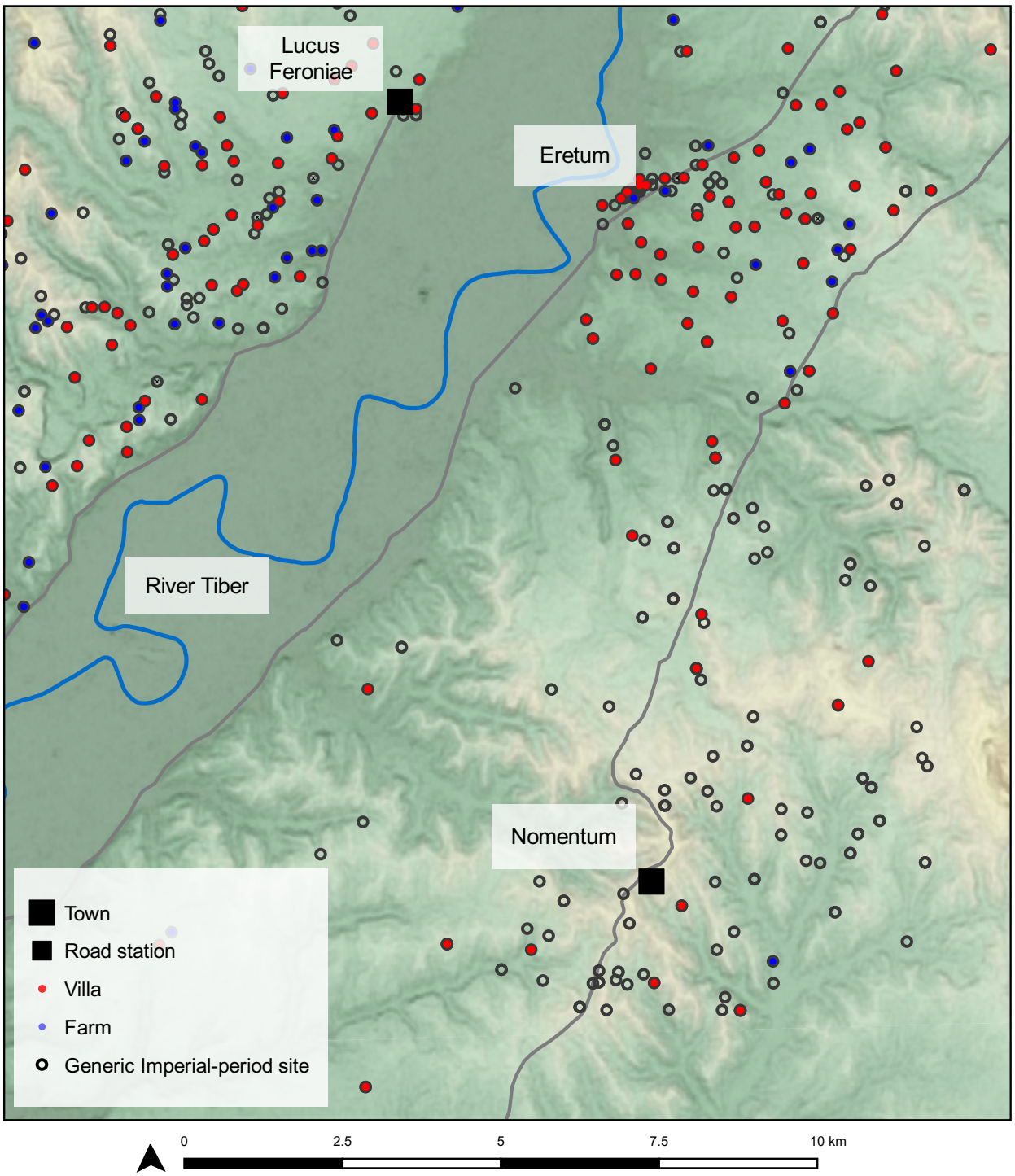


Figure 4.9. Distribution of early imperial (50 BC–AD 100) settlement sites around Eretum and Nomentum: villas (red circles) and farms (blue circles); plus settlement sites of generic imperial (50 BC–AD 250) date (black circles with no red or blue fill).

represented in legacy data, resurvey work almost always identifies more imperial-period sites than previously documented. This has been demonstrated by the examples of the Corese Survey, re-walking parts of the Forma Italiae for Cures Sabini and the Gruppo Archeologico Romano (GAR) survey revisiting parts of the South Etruria Survey at Nepi (section 2.1.4). Figure 2.8, for example, shows the distributions of settlement sites of early imperial date recognized by the Tim Potter's Southern Ager Faliscus survey and by the later GAR survey of the Nepi map sheet, demonstrating the increased densities and wider distributions of sites that might be expected in other areas if they were subjected to further investigation.

Summing up, this section has provided an introduction to the evidence for the imperial period in the project database. It has outlined the main categories of diagnostic material and explored some of the period-

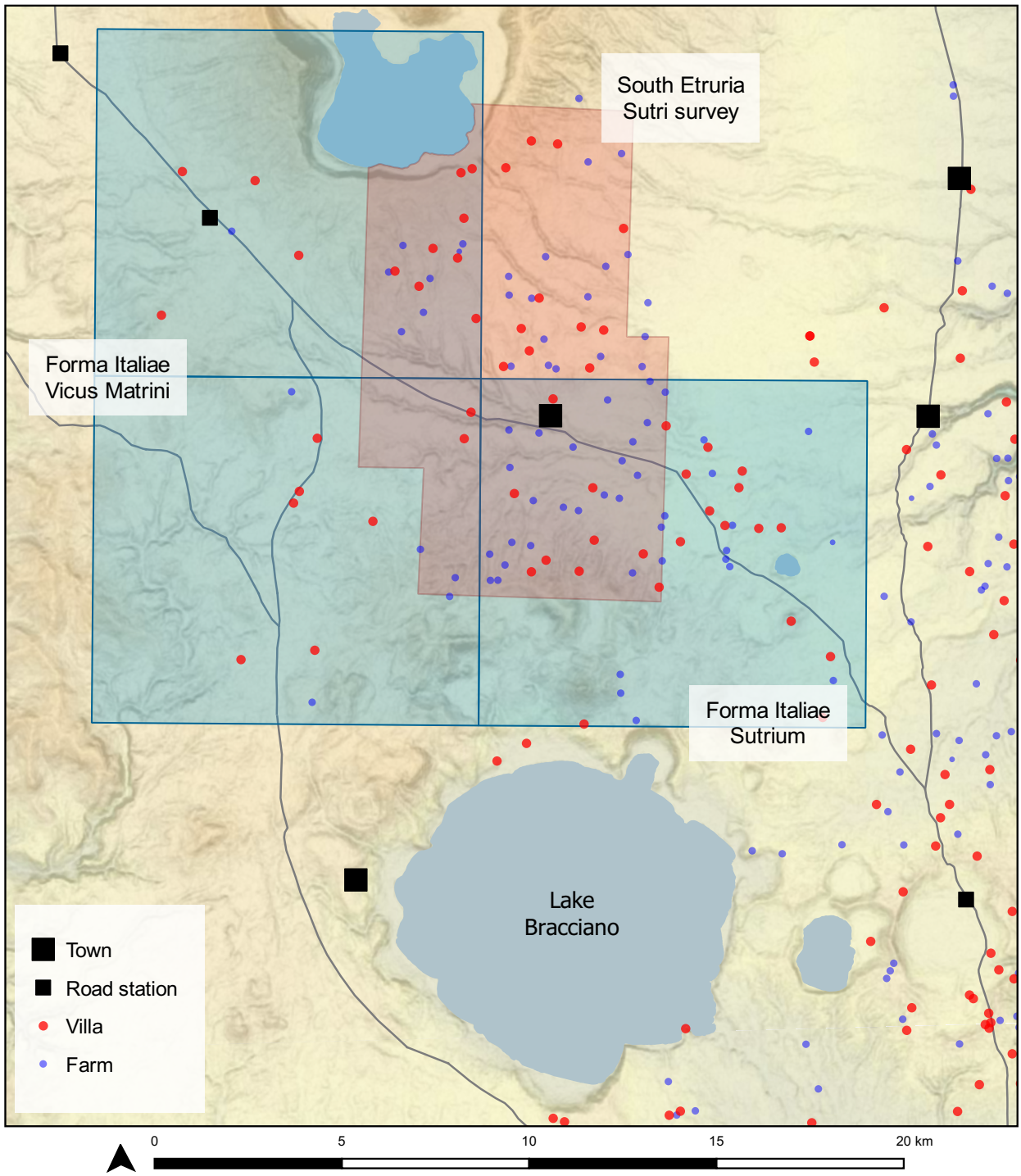


Figure 4.10. Distribution of early imperial-period farms and villas around Sutrium and Vicus Matrini in relation to the South Etruria and Forma Italiae survey areas.

specific methodological issues in using this evidence to date settlement sites both individually and collectively. Summary statistics for the overall numbers of early imperial settlement sites have been presented, and particular attention has been placed on the late Republican evidence as a vital interpretive context. Aspects of settlement dynamics—abandonment, continuity and foundation—and spatial variability have also been introduced. Together, this gives a generalized framework for the more detailed discussion and interpretation presented in sections 4.4 to 4.9, incorporating additional evidence from excavations and relating the material to specific historical and interpretive themes. Section 4.4 considers urban landscapes and explores developments at towns and other central places; section 4.5 turns to the wider landscape and considers the range of rural site types and the regional variation in their distributions.

4.4 The urban landscape

In the early and mid-imperial period, the *suburbium* of Rome was one of the most densely urbanized areas of Roman Italy and, indeed, the Roman world.[522] By the time of Augustus, southern Etruria in particular had a history of urbanism stretching back for the best part of a millennium and many towns in this area had been inhabited continuously through the Archaic and Republican periods. Although some of these older centres had fallen out of use by the first century BC, several new urban centres and especially road stations came into existence at this time. But regardless of their diverse histories and their size, between 50 BC to AD 250, all of these central places experienced significant change in their physical forms and their social and economic fortunes.

To the west of the Tiber, the main centres were Veii, Sutrium, Nepet, Forum Clodii, Falerii Novi and Capena; to the east, Nomentum, Cures Sabini, Trebula Mutuesca and Forum Novum; and along the course of the Tiber itself were Horta, Ocriculum and Lucus Feroniae (Figure 4.11). Although most of centres could trace their origins back to Archaic times (section 3.2.1), their individual histories, cultural contexts and physical forms were varied. Interspersed between these larger centres were a number of smaller or minor centres that demonstrate even greater variability; these include road stations such as Ad Baccanas (Baccano) and Forum Cassii (Santa Maria di Forcassi), and village-like nucleations of activity at sites such as Seperna (Nazzano) and Corchiano.

The early imperial-period towns of the wider *suburbium* have long been considered as 'failures' or, at the very least, less than successful.[523] Indeed, this perception can be traced back to Augustan-period authors such as Strabo who noted the much-reduced size and even abandonment of ancient urban centres in this area.[524] Certainly the limited archaeological and epigraphic evidence for urban activity at Eretum and Fidenae indicates that these centres were largely abandoned by the first century BC and remained so through the imperial period;[525] notably both were located on the Tiber and their abandonment may indicate a shift in the role played by the river (e.g. from a 'frontier' in the Archaic period to communications 'corridor' by the Republic). There is also clear evidence for the reduction in size of other centres including Veii, Capena and Cures during the late Republican period. At the same time, however, field survey clearly demonstrates a contemporaneous increase—and in most cases, a significant increase—in the numbers of rural sites across the territories of all these towns, including those which were abandoned or reduced in size. Early on, the results of the South Etruria Survey were taken to indicate a fundamental shift in the balance between urban and rural life.[526] As well as the rising numbers of rural sites and the reduced size of urban centres, this shift can also be seen in the changing patterns of pottery consumption. Comparison of the quantities of pottery collected by the South Etruria Survey from Veii and the Ager Veientanus demonstrates a change in the fortunes of town and country (Figure 4.12). At the very least, this represents a major increase in the market involvement of rural populations relative to their urban cousins; it may even indicate some physical relocation or dispersal of urban population to the surrounding territory.

One important explanation for this relative decline in urban fortunes concerns the incorporation of these towns and their territories into the wider hinterland of the city of Rome. The social and economic functions of these communities were undermined by the central market of Rome and the new opportunities for social advancement in the metropolis.[527] Drawing on the epigraphic evidence, Purcell has characterized some of these early imperial-period towns as 'ambigue città', dependent for their survival not on the services they offered to their surrounding rural populations, but on the patronage of the emperor.[528] Despite their economic and demographic decline, these towns were sustained for their symbolic value to the regime on account of their earlier significance in the history of Rome as narrated by authors such as Livy. Veii epitomizes this debate. The Augustan poet Propertius (4.10.23) offers a vision of the bucolic desolation of Rome's former rival that has deeply influenced modern scholars: based on their survey of the city, the South Etruria surveyors thought Augustan Veii an 'anachronism'.[529] Forty years later, reflecting on the restudy of the same material, scholars have still detected a 'ring of truth' in Propertius's words.[530] But how appropriate is this characterization of urban failure—both at Veii, and more generally, across the middle Tiber valley of the early imperial period?

In reality, there is plenty of evidence for not only 'life in towns' but also for active town life. Indeed, the archaeological signatures of most of these towns are dominated by monuments constructed during the early empire, including fora, theatres, amphitheatres, temples and baths. Veii may have been an 'anachronism' but its early imperial townscape was transformed

[522] De Ligt 2012; Hanson 2016; Mattingly and Witcher 2004; Sewell and Witcher 2015; Hanson 2016.
[523] See Morley 1996: 178–9.
[524] J.R. Patterson 2004: 68.
[525] Ogilvie 1965; Quilici and Quilici Gigli 1986.
[526] Kahane, Murray-Threipland and Ward-Perkins 1968: 151; Potter 1979.
[527] Morley 1996.
[528] Purcell 1998.
[529] Kahane, Murray-Threipland and Ward-Perkins 1968: 151.
[530] Fontana and Patterson 2012: 366.

Figure 4.11. Towns and road stations in the middle Tiber Valley during the early imperial period (50 BC–AD 100).

through the construction of new suite of monumental public buildings.[531] Similar construction schemes were initiated at the other early imperial-period centres, regardless of whether they were large or small, long-established, newly founded or re-occupied, including Ad Baccanas, Forum Novum and Seperna.[532] If the basic architectural vocabulary of all these urban centres was similar, however, the players were diverse: old Etruscan families, immigrant families from other Italian regions and the provinces, army veterans and (imperial) freedmen.[533] What united this eclectic group was the use of civic benefaction to advance their social and political ambitions both within local centres and—through close proximity to Rome—with the emperor himself.[534]

[531] Cascino, Fusco and Smith 2015; Papi 2000.
[532] Johnson, Keay and Millett 2004; Gaffney, Patterson and Roberts 2004a, 2004b; Resini and de Maria 2002.
[533] Papi 2000; Purcell 1983.
[534] J.R. Patterson 2006.

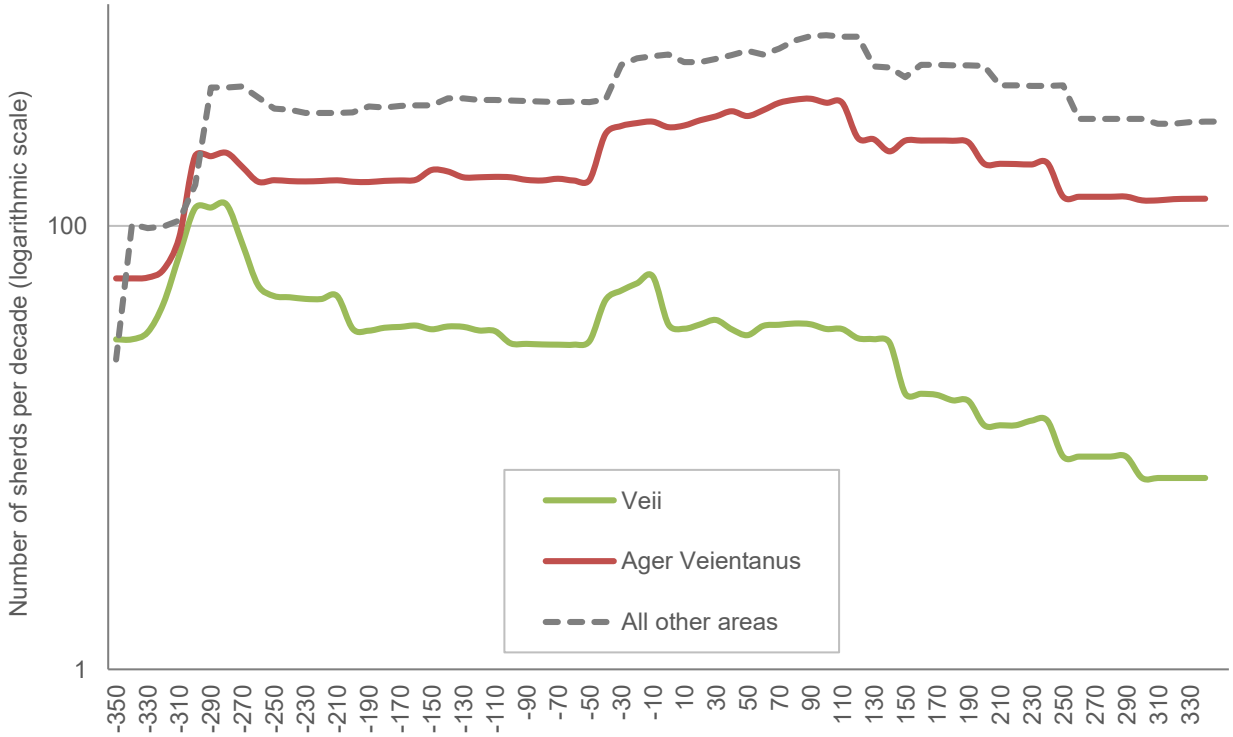


Figure 4.12. Weighted average numbers of sherds per decade collected by the South Etruria Survey, 350 BC to AD 350: quantities of material from Veii, the Ager Veientanus, and the remainder of the South Etruria Survey material (log scale).

The urban centres of the early empire in the middle Tiber valley are, in fact, best characterized by the evidence for substantial investment in monumental architecture, and epigraphic commemoration, often in the context of a reduction in physical size of each urban centre and a significant rise in the prosperity and population of their surrounding rural territory. This combination of developments was not restricted to the middle Tiber valley; for example, recent work at Gabii (10 km east of Rome) and Interamna Lirenas (120 km south of Rome) has documented a similar coupling of monumentalization with a contraction in urban extent.[535]

Across the western empire, the early imperial period was also a time of urban transformation (though more generally associated with an expansion rather than reduction of the size of towns).[536] In constructing monuments and public buildings such as temples, theatres and amphitheatres, the communities of the middle Tiber valley drew on widely shared architectural and cultural ideas. Across the empire, municipal elites sought to demonstrate and enhance their social and political status through civic patronage or benefaction. The construction of public buildings in the latest architectural styles allowed the wealthy families of each urban community to compete amongst themselves, and for towns to compete with their neighbours. The result was the widespread convergence in the practice of the monumentalization of the urban centres across the western empire. But though they shared many architectural features, towns remained highly diverse in their forms; similarly, although civic benefaction drove urban munificence, this shared elite strategy did not eliminate diverse local identities (i.e. it was not the culmination of the long process of Romanization) but, on the contrary, was used to maintain them and even to create new ones.

This tension between uniformity and diversity is well illustrated in the early imperial urban landscape of the middle Tiber valley (Table 4.2). The centres of Falerii Novi and Forum Novum, for example, located just 30 km apart, share such standard public buildings as fora, basilicas, temples, amphitheatres and funerary monuments, and their respective elites were keen to commemorate these generous donations through the erection of public inscriptions. But otherwise, these towns differ to such an extent—in size (approximately 31 vs. 4 ha), layout and population—that scholars have sometimes found Forum Novum impossible to classify as a town at all (e.g. it is 'best interpreted as an administrative, religious and political centre rather than as an urban centre').[537] This raises questions about the criteria used to define towns and whether

[535] Bellini, Launaro and Millett 2014; Opitz, Mogetta and Terrenato 2017.
[536] Laurence, Esmonde Cleary and Sears 2011; Hanson 2016.
[537] Gaffney, Patterson and Roberts 2004a: 247; for Falerii Novi, Keay *et al.* 2000.

Table 4.2. Towns of the middle Tiber valley: size, status and key monuments (Aug = Augustan; JC = Julio-Claudian).

Town	Size (ha)	Status Late Republican / early imperial	Forum	Basilica	Theatre	Amphitheatre	Baths	Aqueduct	Temple (deity)
Falerii Novi	31	Gracchan colony; municipium	C3BC	C1AD	JC	JC	X	X	incl. Isis (C2AD); Juno Curitis (C2AD); Capitolium
Lucus Feroniae	25	(?Caesarian) colony	X	X		JC	X	X	Feronia
Veii	20	Augustan municipium; Trajanic colony	X		JC		X		X
Ocriculum	14	municipium	?	?	Aug	JC	C2AD	X	incl. Imperial Cult
Nepet	12	municipium				X			
Nomentum	12	municipium	X						
Horta	8	municipium					X		
Sutrium	7	municipium	X			X	X		Mithraeum
Capena	6	municipium	X				X		?Ceres (Repub); Imperial cult (Aug)
Cures Sabini	6	Sullan & Caesarian colony; municipium	X		X		X		X
Forum Novum	4	municipium	X	X		X	JC	JC	X
Trebula Mutuesca	?	municipium				C2AD	C2AD		Feronia
Forum Clodii	?	praefectura; ?municipium							

these should emphasize physical attributes, such as size and presence or absence of specific buildings, or, alternatively, their social and economic functions.

Though each town made use of shared architectural forms and practices to achieve generally shared aims—that is, the acquisition, maintenance and furthering of social power—the motivations for the monumentalization of individual towns demonstrate great diversity. Keay, for example, has compared the historical development of Falerii Veteres with Falerii Novi, and Capena with Lucus Feroniae, to draw attention to the local variety of urban development in the middle Tiber valley.[538] The building and monumentalization undertaken at each town was shaped by its historical origins, its relationship with Rome and by the urban trajectories of nearby towns. Keay argues that the populations of each of these centres actively used the urban landscape for specific purposes attempting to maintain or reinvent local traditions and identities within the wider imperial context.[539]

The reduction in the size of many towns, combined with an expansion of their monumental centres, meant that public buildings occupied a larger proportion of the urban landscape than ever before; indeed, Forum Novum was little more than a cluster of monumental buildings and tombs with very limited space for residential areas at all. This shift of form and focus supports the suggestion that towns were increasingly integral to the growing importance of display and social competition across all aspects of early and mid-imperial life (section 4.8). But how was this boom in urban building funded? Expenditure on monuments need not be a direct indicator of economic or demographic strength (in the same way that the cessation of such expenditure during the third century AD need not indicate the reverse). Indeed, the arrival in the towns of the middle Tiber valley of new families from around Italy and the provinces and their enthusiasm for construction, may indicate that some of the wealth invested in—or consumed by—the construction of these monumental centres was not generated locally from agriculture or manufacturing, but rather came from sources far beyond the valley itself. Civic benefactors, including the emperor, held estates across Italy and the empire and may well have generated their wealth in the

[538] Keay 2010.
[539] Keay and Millett 2016; Wallace-Hadrill 2008.

provinces, and the consumed it, conspicuously, in the *suburbium*. In other words, the monumentalization of the urban landscape of the middle Tiber valley may say more about the area's proximity to Rome and its value as a place for elite display and competition, funded by wealth generated elsewhere, than it does about the local economy and civic vitality.

In contrast, the development of smaller centres may be a better indicator of local economic activity. For example, road stations drew their income through the provision of services for passing traffic—people, animals and goods *en route* to and from Rome. Some of these road stations may also have developed to fill 'gaps' in the pre-Roman and Republican urban network, providing market functions.[540] During Etruscan times, for example, there were few secondary centres in the Ager Veientanus; the territory was dominated by the primary city of Veii (section 3.2.1). By the late Republican period, however, the significant reduction in the city's size and pre-eminence is likely to have deprived large stretches of territory of urban services such as marketing; at the same time, rural populations were increasing in number and demand for 'urban'-style goods and services such as bathing and entertainment were growing. With no existing secondary centres to take on the role, new centres may have emerged (Figure 4.13). The huge territory between Veii and Nepi is one such area and it was mid-way between these two urban centres (around 12 km from each) that the road station of Ad Baccanas developed on the Via Cassia (TVP-ID 10271).[541] The buildings uncovered here, including baths, a small forum-like structure and storehouses, suggest the road station may also have provided central-place services for the surrounding agricultural territory as well as providing services for passing traffic. Similarly, the road stations at Caeriae and Aquaviva may have also developed at approximately mid-way between the established larger towns to provide central-place functions as well as servicing road traffic.

In summary, the urban centres of the imperial-period landscape demonstrate great diversity. Whilst a few old-established centres ceased to be 'urban' by this period (e.g. Eretum and Fidenae), most continued in occupation, though many contracted in size, and presumably population (e.g. Veii and Capena). In addition, a number of abandoned small Archaic centres came back into occupation (e.g. Seperna) and a series of road stations developed on the consular road network, at least some of which may have provided central place functions such as markets for surrounding populations (e.g. Ad Baccanas). Despite this diversity, all these centres experienced some form of monumentalization through the construction of public buildings. The identities and specific ambitions of their benefactors, as recorded on inscriptions, varied but the broader context was the same—the expression of loyalty to the new imperial regime and the promotion of local and civic identities. Given all this activity, it would seem perverse to continue to characterize the towns of the early empire as 'failures'. Rather, the functions of these towns changed, with less emphasis on population, production and exchange and more attention focused on their symbolic significance as arenas for competitive display.

4.4.1 Urban types

Perceptions of urbanism in the middle Tiber valley during the imperial period have been strongly influenced by the evidence from two towns: Veii and Falerii Novi. Insofar as any site can claim to be representative of wider trends, neither of these towns can make a strong case: during the Etruscan period, Veii was by far the largest urban centre within the middle Tiber valley (approximately 190 ha).[542] The early size and importance of Etruscan Veii has strongly conditioned the characterization of its subsequent Roman incarnation; by comparison, Veii in the early empire was small and undistinguished. Similarly, the orthogonal plan of Falerii Novi is striking but quite exceptional in the middle Tiber valley;[543] not only were most towns not planned on grids, but the layouts of most were strongly conditioned by the particular topographies of their sites (e.g. Nepet) and/or by pre-existing layouts (e.g. Veii).[544] Even the veteran colony at Lucus Feroniae appears to have been planned around the pre-existing sanctuary and road junction, more like a road station than the orthogonal layout of Falerii Novi or the colonial settlements of similar date elsewhere in Italy.[545]

This section provides an overview of the evidence for the urban centres of the middle Tiber valley, emphasising the variety of forms and functions to be found during the imperial period. It groups the sites into broad categories for discussion: larger towns, smaller towns and minor centres, port sites, and road stations and villages. In addition, several other sites that do neatly fit this typology are also discussed.

4.4.2 Larger towns

By Augustan times, once-mighty Veii—one of the largest of the Etruscan cities—could not even claim to be the

[540] Witcher 2017.
[541] Johnson, Keay and Millett 2004.
[542] Cascino, Di Giuseppe and Patterson 2012.
[543] Keay *et al.* 2000.
[544] Campana 2019: 31 notes the 'extraordinarily lengthy existence' of the road system at Veii, persisting for well over half a millennium, with no attempt to align any of the key buildings added during the Roman period.
[545] See in general Keay and Millett 2016.

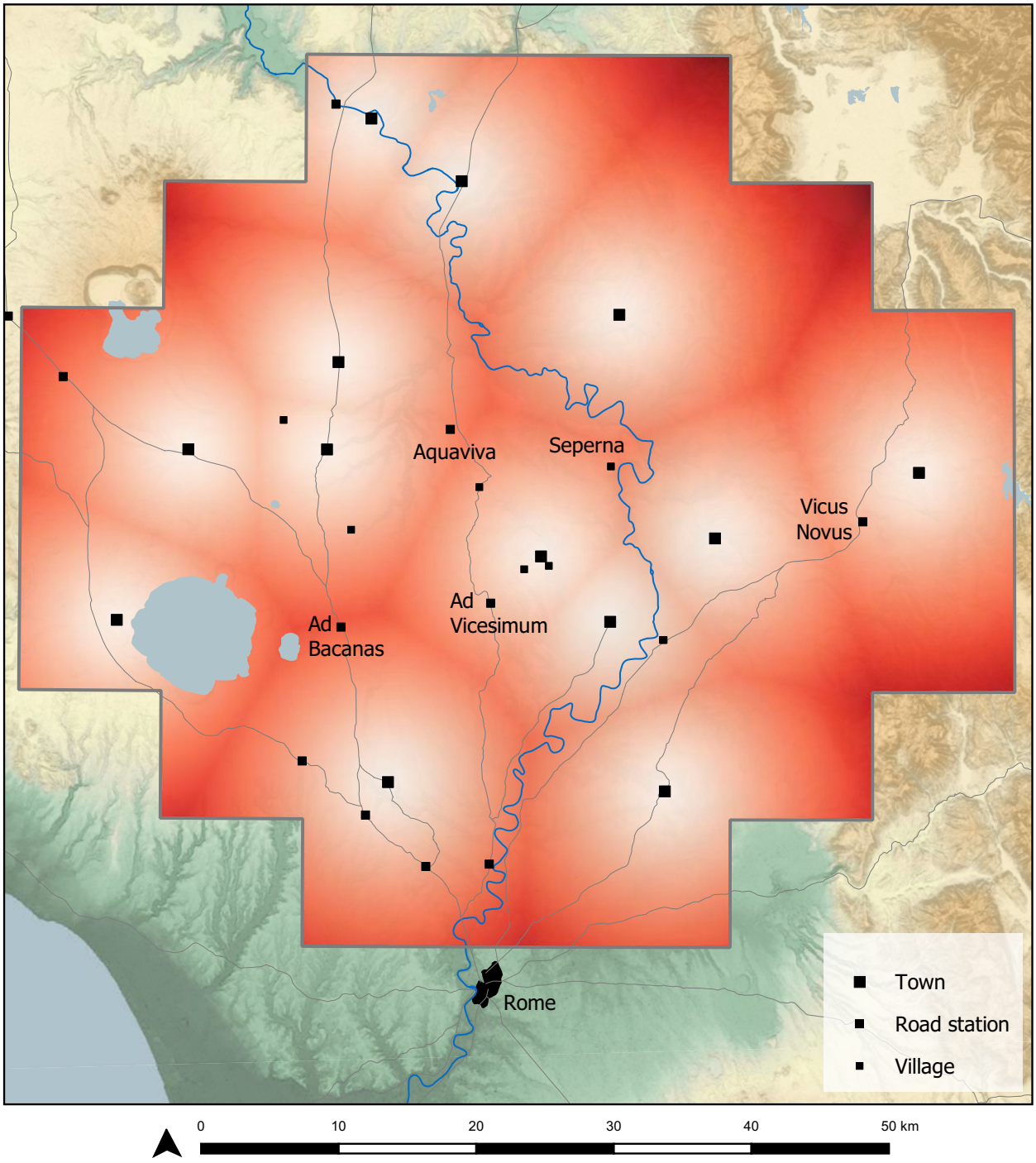


Figure 4.13. Distance from early imperial-period towns in the middle Tiber valley (darker red indicates areas that are more distant from towns) and the location of road stations.

largest urban centre in the middle Tiber valley (see Falerii Novi, below). Nonetheless the site looms large in both the historical imagination and the scholarly literature. Not least, Veii was an early focus of attention for the South Etruria surveyors, conducting surface collections across the plateau occupied by the Etruscan city. It was this work that established the diminished size of the Roman settlement.[546] Recent excavations have shed new light on Veii including its early imperial phase. Perhaps connected with the grant of municipal status—Municipium Augustum Veiens—in 27 BC, the centre of the site at Macchiagrande was redeveloped. The slope of the site was cut back and a four-sided porticoed piazza (80 × 40 m), probably a forum, was laid out.[547] To the immediate north of this new structure, activity continued at a large pre-existing *domus* dating

[546] Cascino, Di Giuseppe and Patterson 2012; Liverani 1987; Ward-Perkins 1961.

[547] D'Alessio 2015.

to the second century BC, but the structure appears to have assumed a more agricultural function during the early empire, including the installation of a millstone.[548] Such divergent developments—grand civic display and the shift from residential to productive functions—on adjacent plots in the centre of the town emphasize the complexity of urbanism at this time, and perhaps particularly so at a long-occupied site such as Veii that was reinventing itself for the new social and economic realities of the early empire.[549]

Elsewhere on the plateau, excavations at Campetti along the dorsal road that crossed the site have identified residential structures in *opus reticulatum* as well as funerary monuments. The buildings indicate a resident population still constructing houses in the early imperial period, but the presence of tombs confirm the evidence of Ward-Perkins's survey for the reduced size of the Roman *municipium* (with the tombs indicating the legal boundary of the urban centre).[550] Also at Campetti, on the edge of the plateau and therefore well beyond the limits of the Roman town, was a massive redevelopment of an earlier sanctuary complex (TVP-ID 01241). This new monumental structure, again in *opus reticulatum*, extended for some 10,000 m^2 over two artificial terraces. The richly decorated structures provided facilities for bathing in thermal spring waters and probably hosted a Hercules cult.[551] Developments such as these may have been intended to serve the rural inhabitants of the Ager Veientanus no less than the urban residents of the *municipium* and point to the wider idea of the repurposing of towns in the early imperial period as centres for display rather than population, and of cultural and religious significance, rather than economic functions (section 4.8).

Each urban centre of the middle Tiber valley offers its own unique story, but only some of that variety can be highlighted here, emphasising examples that speak to the overall argument for towns as places of display and competition rather than population and production.

The largest town of the middle Tiber valley in the early imperial period was Falerii Novi at 31 ha. A complete geophysical plan of the site now documents the town's original third-century BC gridded layout and the organization of its public and residential buildings; a number of gaps in the distribution of structures may indicate that the area within the town walls was not completely developed (Figure 4.14).[552] Alongside the geophysical plan, surface finds provide evidence for the spatial distribution of activity but an incomplete understanding of any chronological development and, especially, whether imperial-period activity focused down on a smaller area within the Republican walls as at Veii. There was, however, much civic munificence during this period including the construction of a theatre and an amphitheatre, alongside the pre-existing forum, temples and other Republican buildings. There is also a large collection of inscriptions recording a range of magistracies, including the *duumviri*, and the names of various families.[553] One of the most active of these families during the Augustan period were the *Noni Asprenates*, related to the *Volusii* (below, Lucus Feroniae), and part of what Syme labelled the 'Augustan aristocracy'.[554] Through such connections, the community of Falerii Novi was able to attract attention and investment, demonstrating both the town's loyalty to Rome and its status amongst competing local municipal rivals.

The establishment of a colony at Lucus Feroniae—Colonia Iulia Felix Lucoferonensium—some time in the first half of the first century BC, between Sulla and Caesar, grafted a community of veteran soldiers onto an ancient sanctuary site beside the Tiber. The resulting urban centre was very different, both in its small size and in its layout, from other Triumviral or Augustan colonies in Italy. Nonetheless, its excellent preservation and rich epigraphic record make it a particularly valuable case study. The colony was inserted into the centre of the sanctuary to Feronia, with an elongated forum (111 × 23 m) aligned parallel to and directly alongside the pre-existing late second-century BC temple. Although the latter may never have been completed and fallen into disuse, the structure was still respected. Even so, the new and much smaller temple constructed, in the forum, by the first colonists was dedicated not to Feronia but to Salus Frugifera.[555] The community's strong social connections with Rome are epitomized by the *Volusii*, a well-known senatorial family from Rome who were active patrons of the colony. Between AD 14 and 20, for example, L. Volusius Saturninus (and his son of the same name) added a Temple to the Divine Augustus to the forum.[556] Indeed, this family appears to have dominated life at the colony, not only through the donation of public buildings, but also through the construction of an elaborate villa just outside the town centre (section 4.5.1).

[548] Capanna and Fatucci 2015.
[549] For recent geophysical survey of the Veii plateau as part of the Emptyscapes project, see Campana 2018: 108–112, and fig. 5.16 in particular. Campana 2019: 31 confirms the significant contraction in the size of the Roman settlement at Veii, as evidenced by both surface materials and sub-surface anomalies. The latter (see plate 3) include areas tentatively identified as vineyards immediately to the south-east of Roman centre, suggesting the development of agricultural activity within the perimeter of the earlier Archaic walls.
[550] Jaia and Cella 2015.
[551] Fusco 2015.
[552] Keay *et al.* 2000; cf. the plan available to Potter 1979: fig. 28. See also Hay *et al.* 2010 for extramural geophysical survey and Millett *et al.* in press for new georadar work.
[553] Papi 2000.
[554] Syme 1986.
[555] Tagliente, Ghini and Caretta 2016.
[556] Di Stefano Manzella 1982.

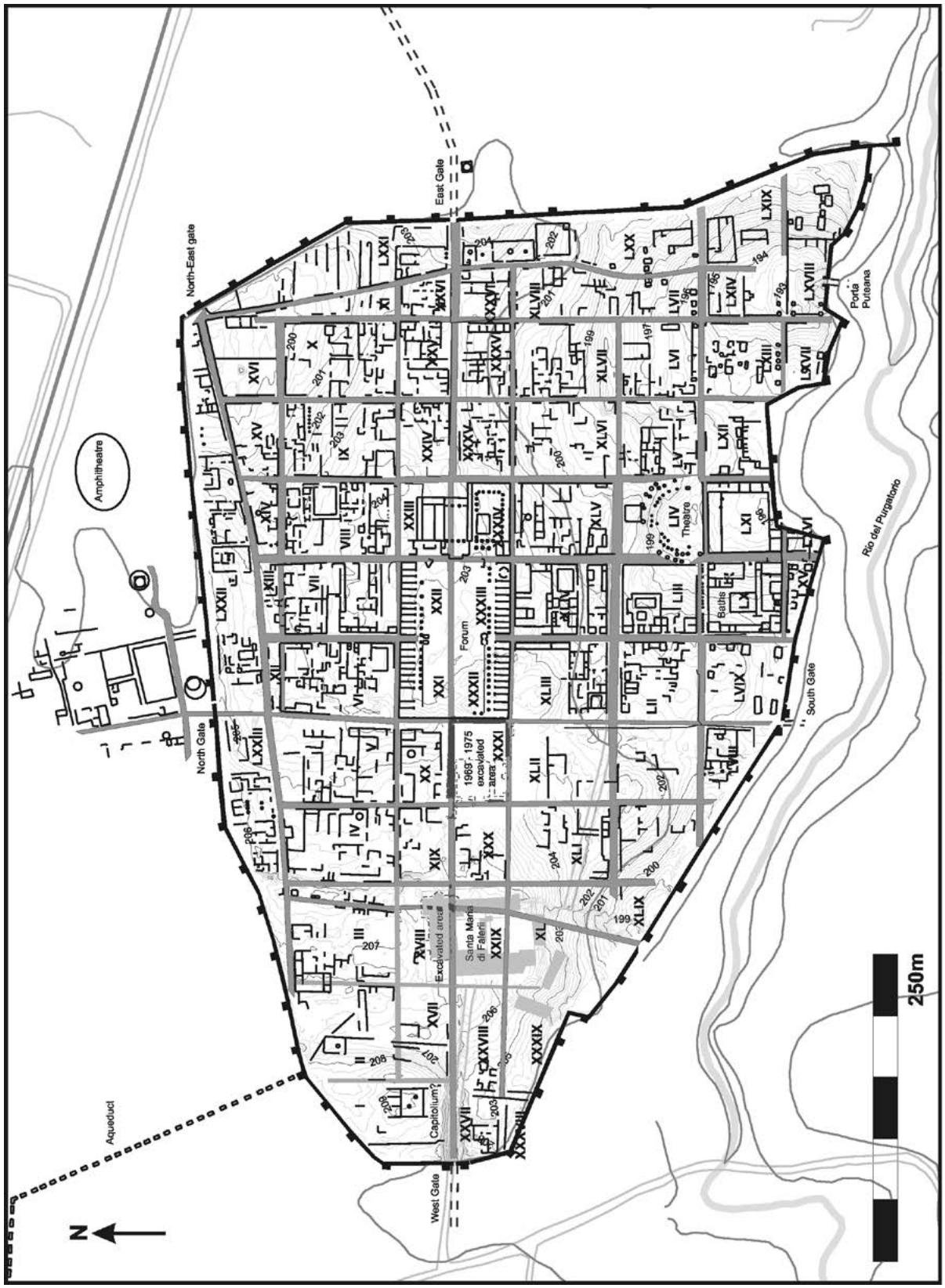


Figure 4.14. Plan of Falerii Novi based on magnetometry survey (with permission of M. Millett).

4.4.3 Smaller towns and centres

On the basis of size, Falerii Novi, Veii and Lucus Feroniae were the largest three urban communities in the middle valley. Ocriculum, discussed along with other port settlements below, was probably not far behind in size. The remaining urban centres were 10 ha or smaller, forming an even more diverse group than the larger towns.

Little is known of urban developments at Sutrium and Nepet; not coincidentally, whereas today Veii, Falerii Novi and Lucus Feroniae are 'green field' sites, Sutrium and Nepet are concealed beneath medieval and modern towns. Both centres had received colonies of Roman citizens in 383 BC and both later achieved municipal status; Sutrium also received a settlement of Triumviral veterans in 41 BC. Archaeological evidence for the early imperial phases of these sites is limited, but investigations at Nepi indicate flourishing activity and suggest that the town grew in size during the first centuries BC and AD, expanding beyond its walls.[557] Such expansion, if borne out by more extensive investigation, would clearly contrast with the early imperial-period reduction in size documented at many of the other towns in the middle Tiber valley.

Another long-established urban community of pre-Roman origins was the small town of Capena. Like Sutrium and Nepet, it was situated on an elevated defensible site, in this case a steep-sided ridge between the Via Flaminia and the Tiber. During the first centuries BC/AD, the fortunes of the settlement became closely connected with the newly founded veteran colony at nearby Lucus Feroniae. But whereas the latter expanded to around 25 ha, Capena contracted in size by around one-third to just 6 ha. Keay has suggested that, while Lucus Feroniae benefitted from patronage and building activity, early imperial Capena did not, experiencing instead a process of 'non-development'.[558] This, however, might be overstating the difference between the two sites. Even though Capena shrank in size, it has produced a good collection of inscriptions commemorating acts of euergetism and its citizens clearly maintained a civic identity and sought to demonstrate their loyalty to the imperial regime as at other urban sites.[559] Instead, it seems to be the small size of Capena—roughly the same as Sutrium, Cures and Horta—that presents the most difficulty for a more optimistic assessment of its imperial phase. In this context, Keay has suggested that the majority of the Capena's civic community may have dispersed to live in the surrounding countryside, only coming together at the town site for festivals.[560] A similar situation may have developed at Veii (section 4.4.2) and Forum Novum (below), reinforcing the idea of towns of the early imperial-period as symbolic rather than population centres.

The small centre at Forum Clodii (TVP-ID 00055) presents a very different history. Founded in the second century BC as part of Roman reorganization of the territory between Veii and Caere (Cerveteri), it appears to have gone on to achieve municipal status—the presence of *duoviri* (*CIL* XI 3303, 3304, 3305, 3312), an *ordo* (*CIL* XI 3310) and *decuriones* (*CIL* XI 3303) are attested. Inscriptions also record the presence of the senator and patron C. Clodius Vestalis (*CIL* XI 3310a-3311), probably of an old Etruscan aristocratic family from Caere who maintained links to the latter as well as to Rome; it is possible that this reflects the multi-generational patronage of the settlement by the same family down from its foundations. The urban organization and social networks at Forum Clodii were therefore similar to those of other towns in the middle Tiber valley, but despite the rich epigraphic evidence for civic activity during the imperial period, the site is poorly known archaeologically. Regardless, it was not a large urban centre; indeed, rather than a town, Accardo *et al.* suggest that it might be better interpreted as a 'reference point' for the surrounding territory, comparing it to the road station at Ad Baccanas (section 4.4.5).[561] Given, its likely municipal status, Forum Novum (section 4.4.3) might be a better comparison. Either way, the idea of a reference point resonates with the symbolic definition of early imperial-period urbanism advanced above.

What about urban communities to the east of the Tiber in the Sabina? During the Archaic period, the Tiber had marked a broad (though not impermeable) division between the early urban tradition of southern Etruria and the non-urban populations of the Apennine foothills to the east. The exceptions were in the south. There was some debate in antiquity as to whether Nomentum, on the east bank set back from the Tiber, was a Sabine or Latin town, either way the centre continued in occupation into the imperial period, perhaps reaching some 12 ha in extent.[562] As at Nepet and Sutrium, relatively little is known about the organization of the town due to the extant medieval and modern settlement on top of the site, though it was originally walled and a number of structures have been identified through excavation including baths and the forum, the latter up to 50 × 100 m in extent.

Further north, set back from Tiber on the Fosso Corese, was Cures Sabini. A centre of some significance in the

[557] di Gennaro *et al.* 2008; di Gennaro *et al.* 2002: 71.
[558] Keay 2010: 39
[559] Papi 2000; J.R. Patterson 2004.
[560] Keay 2010: 39.
[561] Accardo *et al.* 2007: 62–3.
[562] Pala 1976.

Archaic period, by the first century BC it had shrunk considerably in size. A survey of the 1970s suggested a reduction to just one-fifth of its earlier extent; a recent resurvey of the site cautiously suggests a less dramatic contraction but, nonetheless, during the imperial period, activity was concentrated in the town's monumental centre.[563] As at other urban centres, epigraphic evidence indicates an active municipal community with, for example, *quattuorviri* (*CIL* IX, 4968) and an *ordo* (*CIL* IX, 4962). Building and restoration projects included work on the forum and temples, and a new baths complex was constructed in *opus mixtum* at the end of first century BC or start of the first century AD.

Further north-east along the Via Salaria from Cures, some way into the Apennine foothills, was the *municipium* of Trebula Mutuesca (Monteleone Sabino). The site started life as a *vicus* alongside an important sanctuary to Feronia as early as the fourth century BC (cf. Lucus Feroniae, above). It was only during the Augustan period, however, that Trebula became a *municipium* and began to develop an urban infrastructure with, for example, the construction of a forum. Nonetheless, its main period of growth was not until the late first century and first half of the second century AD with the construction of public buildings including a large brick amphitheatre and a thermal baths complex.[564] In this development, the involvement of wealthy families such as the *Laberii* and the *Bruttii Praesentes* was crucial. Mirroring the situation at Lucus Feroniae a century earlier (above), these families moved back and forth between Rome and Trebula (Gaius Bruttius Praesens was consul in AD 153 and 180), both sponsoring public works at the *municipium* and constructing lavish villas nearby (TVP-ID 10128; section 4.5.1). Sewell suggests that the site might have covered 20 ha, though occupation may not have been continuous across this area, with structures dispersed across three hills around a central valley.[565]

The other urban centre of the Sabina was Forum Novum. If Nomentum, Cures and Trebula all had roots extending back to the fourth century BC or earlier, the *municipium* of Forum Novum was a late development, established in the late second or early first century BC in an area with no earlier history of urban settlement. The site quickly developed a full suite of public buildings and amenities including a forum, basilica, temples, amphitheatre and aqueduct.[566] Yet the town never grew beyond a few hectares in size and can have had only a tiny resident population. Parallels can be found across the wider Apennine region to the east and south-east; for example, Amiternum in northern Abruzzo is of similar foundation date and size and similarly dominated by its monumental public buildings.[567] But, as suggested above, the simultaneous contraction and monumentalization of several pre-existing centres in the middle Tiber valley, may have led to a similar situation in southern Etruria as well. Like Capena and Forum Clodii, Forum Novum might have acted as a focal point rather than as a residential base. Rural populations may have periodically gathered at the site on market days or for festivals and games. Such centres might be thought of as 'periodic' towns, with fixed infrastructures but only temporarily resident populations.

In addition to small towns, there was also some small-scale activity at former urban sites. As noted above, both Eretum and Fidenae seem to have been abandoned by late Republican or early imperial times. The Archaic ridge-top centre at Eretum appears to have shifted down onto a flatter site during the Republican period, covering an area of approximately 17 ha. By the early empire, however, this concentration of activity was replaced by a series of separate foci, probably wealthy villas located immediately outside the old Archaic and Republican centres.[568] A very similar situation seems to have played out at Fidenae, where the sizeable Archaic centre (approximately 45 ha) appears to have been abandoned by the early empire, to be replaced by a series of separate villas.[569] These former urban sites may have offered building materials for easy recycling, but for the most part the villas were constructed using new techniques. There can be little certainty, but the construction of villas at former urban centres such as these may have sought consciously to connect to their pasts and to enhance social prestige. There was particularly strong interest in antiquarianism during the Augustan period; it would seem unlikely that the rich histories of these Archaic centres were overlooked by the builders and owners of these new villas.[570]

Despite their historical and physical diversity, the smaller early imperial centres of the middle Tiber valley reflect the trends detected at the larger centres, with a strong emphasis on display through monumental construction and epigraphic commemoration, and some concern for maintaining established cults. Even more so than for the larger sites, housing a large resident population seems to have been of less significance than a new role serving as focal points for dispersed rural communities.

563 Muzzioli 1980; Cavalieri 2017.
564 Alvino 2008: 890–2.
565 Sewell 2016.
566 Gaffney, Patterson and Roberts 2004a, 2004b.
567 Heinzelmann, Jordan and Murer 2010.
568 Ogilvie 1965.
569 Quilici and Quilici Gigli 1986.
570 Witcher 2006a.

4.4.4 Port sites

Most of the urban centres of the middle Tiber valley were located on or close to the major consular roads. A small number, however, were also located on navigable rivers as well as roads, and developed additional port functions. The largest and most important of these port towns was Ocriculum (Otricoli), strategically located below of the confluence of the Tiber and the Nera. The earliest centre was located on high ground, set back from the river, but by the sixth-century BC, a settlement developed next to the Tiber. By the late Republican period, however, most activity had moved to the lower site, close to the river and the bridging point of the Via Flaminia.[571] Through control of both the substantial river trade downstream to Rome, and of one of the major land routes between Rome and northern Italy, Ocriculum grew in importance. The port handled agricultural produce from the wider territory, including the Nera valley, as well as timber from the upper Tiber Valley, and presumably a range of other products such as fine-wares,[572] millstones[573] and wine (in Spello amphorae) (section 4.7.1). In serving a significant economic function, early imperial-period Ocriculum may have been unusual compared with other centres in the middle Tiber valley such as Veii. The urban landscape of Ocriculum, however, was as concerned with monumental display and social competition as any other in the region, with richly decorated public buildings including substantial temples and a theatre.

Around 15 km further upstream, set on a hill high above the Tiber, another old Archaic centre, Horta (Orte) appears to have played an important role in the production and export of pottery, brick and tile from the surrounding region, which is rich in clay deposits. The pre-existing settlement was redeveloped during the Augustan period with the construction of a forum and possible Capitolium and Augusteum, but there is no evidence for an increase in the physical extent of the site (approximately 8 ha); not least, the Etruscan and Republican-period cemetery at Le Piane remained in use, blocking the only direction on the restricted hilltop site in which expansion from the original core could have taken place.[574]

Just a few kilometres further upstream from Horta, where the Via Amerina crossed the Tiber, a small port facility was established at Castellum Amerinum (Seripola). Ceramic evidence here extends back to the fifth and fourth centuries BC, with structures along the Via Amerina documented from third century BC. In contrast with the lack of expansion at Horta, Castellum Amerinum grew significantly during the early imperial period, especially the late first and early second centuries AD.[575] As at Ocriculum, it may have been the intersection between road and river that was the crucial stimulus to development. The port-cum-road station offered storage facilities facing the river and probable taverns, but also boasted several substantial 'public' buildings including a bath-house (served by an aqueduct and cisterns) and epigraphic evidence indicates a number of cults including Serapis and Cybele; a large platform next to the river may have been the podium for a temple. The onomastic evidence for families such as the *Spurilii*, suggests that the port may have been linked not to Horta (3 km downstream) but rather to Ameria (Amelia) in Umbria, 12 km up the Rio Grande.[576] Despite its imperial-period prosperity and architectural ambitions, Castellum Amerinum never challenged Horta's municipal status, and remained a *vicus*.

Another further 30 km north along the Tiber, at the confluence with the Paglia river, just 6 km from the old Etruscan centre of Velzna (Orvieto), a port facility developed at Pagliano during the first century BC.[577] The site bears strong similarities to Castellum Amerinum but is distinguished by the discovery of significant numbers of leucitic millstones suggesting a key role of the port was to facilitate their export. The millstones were quarried near Velzna (section 4.7.3) and transported downstream via the port, achieving a wide distribution across Italy.[578]

The colony of Lucus Feroniae has already been discussed above, as one of the larger urban centres of the middle Tiber valley; it also had nearby port facilities. At Baciletti, 4 km the north of the colony, *opus reticulatum* structures observed during road construction in the 1960s were suggested to have been part of a river port; subsequent excavations at the proprietà D'Egidio have also identified extensive structures in this area (TVP-ID 12164).[579] This site is directly opposite the confluence of the Corese river with the Tiber and the likely location of the Portus Curensis, known from an inscription (*AE* 1958, 0269). It is therefore likely that there were port facilities on both sides of the Tiber at this point serving some of the many villas along this stretch of the river, as well as the towns of Cures and Lucus Feroniae. The presence of facilities on both banks is also a reminder that ports could act as crossing points—vital when it is remembered that there appears to have been no bridge across the Tiber for more than 70 km between

[571] Hay, Keay and Millett 2013: 141.
[572] E.g. from Scoppieto, Bergamini 2007.
[573] E.g. via the river Paglia, Antonelli, Nappi and Lazerini 2001; McCallum 2010.
[574] Del Lungo 2006: 7–9
[575] De Lucia Brolli and Suaria 2006: 144; Johnson, Keay and Millett 2004.
[576] De Lucia Brolli and Suaria 2006: 145.
[577] Bruschetti 2008; Gualtieri and Mattioli 2012.
[578] Peacock 1986; Antonelli, Nappi and Lazzarini 2001; McCallum 2010.
[579] Stanco 1994.

the Pons Milvius, just north of Rome, and Ocriculum on the border of Umbria. There are a number of other likely locations for such 'ferries', often close to the confluences of smaller rivers with the Tiber such as at Campo del Pozzo just above the confluence of the Farfa river with the Tiber.[580] Such crossing points may also have been closely spaced, for example, with a likely ferry at Ponticchio, just 3 km north of the Portus Curensis, suggested by the presence of structures close to the river (TVP-ID 10157). In addition, a number of villas had their own private quays or moles (section 4.5.1) and, of course, it should not be forgotten that Rome itself was also a river port, with extensive infrastructure, including warehousing on the north side of the city for handling goods brought downriver from the middle and upper Tiber Valley.[581]

Finally, away from the Tiber, it has been suggested that the substantial *opus reticulatum* structures at Angularium (Anguillara Sabazia) on the southern shore of Lake Bracciano are the remains of a villa-*vicus* complex with port facilities (TVP-ID 00014).[582] If correct, the facility presumably handled the transport of produce down the Arrone river, which flowed from Lake Bracciano to the coast, with cargoes then perhaps moving via Ostia up the Tiber to Rome.[583]

4.4.5 Road stations and villages

During the late Republican and early imperial periods, a number of road stations came into occupation along the main consular roads around Rome including in the middle Tiber valley; all appear to have reached their greatest extent during the first century AD.[584] Some of these road stations had significant suites of public buildings (e.g. Ad Baccanas) even though most of these sites remained small in size. Some road stations appear to have straggled loosely along the roadside, lacking any central focus (e.g. Forum Cassii, Aquaviva);[585] others were closely associated with large villas such as Vicus Novus (TVP-ID 10634) and the extremely wealthy Villa of the Bruttii Praesentes at Monte Calvo (TVP-ID 10128).[586] Indeed, there are indications at Aquaviva that the nearby villa site developed some control over activities at the adjacent road station.[587] The suggestion, above, that some road stations may have developed to provide central services for agricultural territories raises the question of who may have been involved—municipal elites from towns such as Veii keen to capture a new source of income, or newly arrived entrepreneurs perhaps based at these small centres, or even rural collectives.

In terms of size, form and function, road stations therefore form a diverse group. In practical terms, some of the larger and more complex road stations, such Ad Baccanas, may have overlapped in size and functions with small urban centres such as Forum Novum, differing only in formal status. Some of the dispersed 'polyfocal' road stations, such as Forum Cassii, would be difficult to differentiate from clusters of farms were it not for the naming of such sites in itineraries and inscriptions.

A final group for consideration are a series of small population centres, usually located on isolated promontories and outcrops, dispersed across the Ager Capenas and Ager Faliscus, and originating in the Archaic period (section 3.2.1). During the Republican period, most of these small centres, such as Narce (Ponte del Ponte) and Corchiano, were abandoned.[588] Subsequently, however, during the early imperial period, some appear to have been reoccupied, such as Riano, Rignano and Fiano Romano. Cambi refers to these centres as 'villaggi', noting that they were more than simple aggregations of peasants or colonists—epigraphic evidence indicates that they had juridical status (e.g. *pagus*, *vicus*) and were 'quasi urbano' in terms of population and function.[589] Most of these sites, however, lie beneath extant medieval and modern towns—testimony to the shared preference of pre-Roman and medieval centres for defensible sites—and evidence is largely limited to epigraphic sources. Nonetheless, these inscriptions point, in particular, to the role of imperial freedmen in sponsoring building activity at these small centres.[590] One of the better-known sites is Seperna (Nazzano), with a large number of inscriptions indicating the presence of officials[591] and structural remains, including a possible circular temple dedicated to one of the goddesses attested at the site—Diana, Magna Mater or Bona Dea. The precise nature of this settlement during the imperial period, however, is disputed.[592]

[580] See Holland and Holland 1950 for the benefits of these locations for small boats. For such 'ferries' in the Archaic period, see Quilici Gigli 1986.
[581] Malmberg 2015.
[582] Accardo *et al.* 2007: 79–81; 159–162; 166–7 though the plan of structures at UT47, fig. 10, is speculative.
[583] Mazza *et al.* 2015: 371 note the dramatic decline in outflow from the lake since the 1970s, such that the Arrone is now dry for its first 2 km.
[584] See Johnson, Keay and Millett 2004: 95–6; for similar developments to the south and east of the City, see Tol *et al.* 2014 and Potter, Walker and Reynolds 1999 respectively. For roads stations generally, Corsi 2000; Basso and Zanini 2016.
[585] Johnson, Keay and Millett 2004; Potter, Walker and Reynolds 1999.
[586] Alvino 2008: 895; Bazzucchi and Lezzi 2006; Reggiani 1980.
[587] Potter, Walker and Reynolds 1999.
[588] Potter 1979: 100.
[589] Cambi 2004.
[590] Cambi 2004: 88.
[591] Cambi 2004: tab. 11.
[592] Potter 1979: 116 accepts the cautious review of Jones 1963: 109 of the significance of *CIL* XI 3867–3870 regarding the interpretation of a *civitas Sepernatium* in relation to a *pagus* or *vicus* at the site of modern Nazzano; *CIL* XI 3871 refers to *decuriones* and *seviri* indicating municipal organization; D'Atri Muzzioli and Sforzini, 2002: 101,

The lack of archaeological evidence for these small centres presents a problem; for without a fuller understanding of them, it is difficult to reconstruct settlement hierarchies and territorial organization in parts of the middle Tiber valley. How many were there? What role did they play? And how do they compare in size and form to the other small centres of the region? One conclusion is clear, however. In terms of population, they made only a small contribution to the overall total, paling in significance compared to the much larger aggregate populations of towns, and especially, villas and farms (section 4.6.1).

4.4.6 Urban summary

In *The changing landscape of South Etruria,* Potter suggested that, with only seven towns in an area of 2000 km^2, southern Etruria was thinly urbanized.[593] Compared with Northern Etruria and many other Italian regions, however, this area is one of the most densely urbanized in the western empire.[594] Nonetheless, it was perhaps as a function of this density that these towns were also comparatively small. De Ligt classifies Italian towns as large (>40 ha), medium (20–40 ha) and small (<20 ha).[595] In the middle Tiber valley, this would mean there were no large towns, three medium-sized towns (Falerii Novi, Lucus Feroniae and Veii) and the rest classified as small. This lack of larger urban centres contrasts with other Italian regions; in Picenum, large towns average 47.5 ha, Umbria 50.0 ha, Cisalpina 59.8 ha, Apulia 66.0 ha and Campania 87.5 ha. The middle Tiber valley was therefore densely urbanized but the towns were very small. This situation is to be explained by the area's proximity to the ultimate city: Rome. Urban demand from the metropolis turbo-charged the rural economy (section 4.7) at the same time as it undermined the political independence and economic functions of these suburban towns. The effect was a levelling out of the settlement hierarchy, with larger centres contracting in size and new small centres emerging in the gaps between them. But as emphasized throughout this section, physical size and resident population are not the only measures of urban vitality. As the demographic balance shifted from town to country, urban centres reinvented themselves as places for competition, through the display of civic benefaction and monumental construction, but also as places of cooperation, as focal points for services and collective activities such as festivals, games and bathing for the inhabitants of the surrounding rural districts. It is these rural landscapes that form the subject of the next section.

4.5 The rural landscape

The defining achievement of the South Etruria Survey was to document and draw attention to the hitherto unsuspected density and diversity of rural settlement in the territory north of Rome. The material collected for the imperial period was particularly impressive: thousands of artefact scatters and structures were systematically investigated providing a completely new appreciation of the complexity of rural organization to complement the better-studied urban and funerary evidence.

This section focuses on the evidence for that rural landscape, focusing in particular on settlement. The overall trends in settlement numbers and some of the general issues around their interpretation have been discussed above (section 4.3). This section introduces the different types of rural sites and their distributions; the subsequent three sections draw out the significance of the rural landscape—alongside the urban evidence—in terms of people (especially, their number and identities; section 4.6), production (including pottery and farming, sections 4.7.1 and 4.7.2), and consumption (including imported goods; section 4.8).

In his synthesis of the South Etruria Survey, Potter noted that the imperial period is the only period for which the evidence for rural sites can be organized with some confidence into a hierarchy. The South Etruria surveyors tended to label individual findspots as 'scatters', 'sites', 'buildings' and 'villas'.[596] When discussing general settlement patterns, however, a stronger dichotomy between 'farms' and 'villas' becomes apparent, most obviously in Potter's account. Other surveys of the area, including the Forma Italiae, also work with a general distinction between (small) 'aree di frammenti fittili' and (large, wealthy) 'villas'. The latter category therefore appears in almost every archaeological site classification scheme, even though 'villa' is a much-discussed and problematic concept.[597] How then were the South Etruria Survey sites, as well as other legacy datasets, originally categorized and how has this changed as a result of Tiber Valley Project? Some general aspects of site classification are discussed in section 2.2.2; some attention is also devoted to the issue here given that, as noted by Potter above, this is the only period for which there is sufficient quantity and variety of material culture to attempt a categorization of rural sites into any sort of hierarchy.

however, argue against the use of *CIL* XI 3939 for the suggestion that the site was an autonomous political centre; for a recent argument in favour of an imperial-period municipal centre, see Slavich 2015.

593 Potter 1979: 116.

594 Hanson 2016; Mattingly and Witcher 2004.

595 De Ligt 2012.

596 E.g. Kahane, Murray-Threipland and Ward-Perkins 1968.

597 Witcher 2012 on classification of Roman rural sites across Italy; Becker and Terrenato 2012 on Republican villas; Marzano 2007 on imperial-period villas.

Table 4.3. Roman site types (based on Potter 1979: 122–23; Potter unpub: 11–12; Kahane, Murray-Threipland and Ward-Perkins 1968. 154–6).

Site type	***Criteria***
Criteria used to distinguish villa from farmhouse (Kahane, Threipland & Ward-Perkins 1968: 154-6)	
Villa	Location alongside a large cistern or mausoleum Bath-building (as evidenced through flue tiles, etc.) Access by means of a paved approach-road (diverticulum) Patterned (and not just coloured) wall-plaster Glass (rather than grey or white stone) tesserae Opus sectile or any substantial quantity of marble veneer Statuary or of carved architectural elements in tufo or travertine Substantial use of marble building elements Use of window glass or of considerable amounts of domestic glass
Site classification (Potter n.d., based on the Kahane, Murray-Threipland and Ward-Perkins 1968: 154-6; see also Potter 1975)	
D) Hut, capanna	Tile and sherd scatter, including dolia and ordinary glass
C) Farm	Tile and sherd scatter, with masonry blocks of tufo or travertine and/or building rubble, ordinary glass, basalt and limestone tesserae, Italian marble, *opus spicatum* bricks.
B) Villa	Above, with painted wall plaster, a cistern, imported marbles, window glass, fine [vessel] glass
A) Large villa	Above, with multi-coloured wall plaster, masonry and stucco architectural fragments, glass tesserae, inscriptions, column drums and paved diverticulum leading to the site
Site classification (Potter 1979: 122-3)	
Shack, hut, outbuilding, ploughed-out or poorly preserved remains of more substantial site	Small scatters of tile and pottery, rarely covering more than a few hundred square metres
Small farm	Small farms are larger, averaging 1000-1400m^2 (equivalent to 30 × 30 to 40 × 40m) and rarely exceeding 2000m^2. A nucleus of material featuring large quantities of building rubble (tufa blocks, *opus spicatum*, black and white *tesserae* and even painted wall plaster and a few fragments of white Italian marble) as well as tile and pottery.
Villa	Scatters of material, averaging 3500m^2 (or 60 × 60m) frequently including indicators of luxury such as hypocaust tiles, column drums and other architectural pieces, multi-coloured painted wall plaster, a variety of veneers (mostly from the East Mediterranean), stucco, complex mosaics and glass *tesserae;* cisterns were also common

To rationalize and compare the results of the individual South Etruria Surveys, Potter developed a simple classification scheme, building squarely on the criteria set down in the earlier Ager Veientanus report (Table 4.3). This scheme has been influential on the work of many subsequent surveys.[598] Potter identified four site categories, differentiating between large villas (A) and villas (B) using the presence of multi-coloured wall plaster, stone and stucco architectural fragments, column drums, glass tesserae and inscriptions to distinguish the former from the latter. By the time of the publication of *The changing landscape of South Etruria*, however, Potter had combined these two categories into one: 'villa'. This change may reflect Potter's growing concerns about the robustness of classification; for example, how were very large but materially poor sites to be categorized? (The concept of imperial-period villages received little attention; instead Potter suggested that plough damage might explain such large, but materially undistinguished sites.) Or, conversely, how were small but very wealthy sites to be categorized (again, Potter saw methodological issues here: perhaps only part of a larger complex had

[598] E.g. Biferno valley, Liri valley; Barker, Hodges and Clark 1995; Hayes and Martini 1994; see Witcher 2012 for overview.

been identified). A confounding factor was that, until Potter's own survey of the Southern Ager Faliscus, the South Etruria surveyors did not regularly quantify the size of scatters, though they often noted whether these were large, medium or small. Such doubts and limitations notwithstanding, Potter argued for 'distinct and well-defined differences of rank between these sites'.[599]

The Tiber Valley Project database follows Potter's later position in not differentiating between villas and large villas, but as his original attempt to differentiate between them suggests, it must be recognized that this category encompasses significant variety. What about his other categories: farm and hut? The latter seems an improbably humble concept for the types of scatters that Potter describes, especially when it is noted that his definition is presented with reference to a photograph of a twentieth-century shepherd's hut—noticeably showing a thatched, not tiled, roof.[600] In the project database, most of these sites have been categorized either as 'Scatters' or 'Farm (uncertain)'. Notably, Potter largely excluded the sites in his hut category from any significant further consideration; they do not appear, for example, in counts of site numbers or on his maps.[601] In practice, this means that much of his discussion was based on a basic hierarchy of farms and villas.

Rathbone has argued that such a farm-villa dichotomy is an unhelpful reductive classification derived from a simplistic reading of the historical texts and used to impose order on the archaeological record.[602] This dichotomy presents a particular problem in the middle Tiber valley during the imperial period because most of the material used to differentiate villas from farms (e.g. marble wall veneers, window glass) is comparatively abundant and accessible compared with most other Italian regions; across inland northern Etruria, for example, the presence of imported marble at a rural site could be far more readily accepted as indicative of villa status.[603] In the middle Tiber valley, and across the wider *suburbium*, it is clear that early imperial-period settlement sites present a spectrum rather than two distinct categories. Given the incomplete and unsystematic nature of the South Etruria Survey evidence, however, attempting to define further sub-categories and to assign sites to them would be unwise. Moreover, an examination of legacy data from a number of Italian surveys has found that, despite the varied and inconsistent approaches to site classification adopted by individual surveys, a general underlying dichotomy between villas and farms—or wealthy and less wealthy rural sites—is widely recognized.[604] This supports the validity of a reasonably robust, if locally defined, differentiation of larger, wealthy sites and smaller, less wealthy sites.

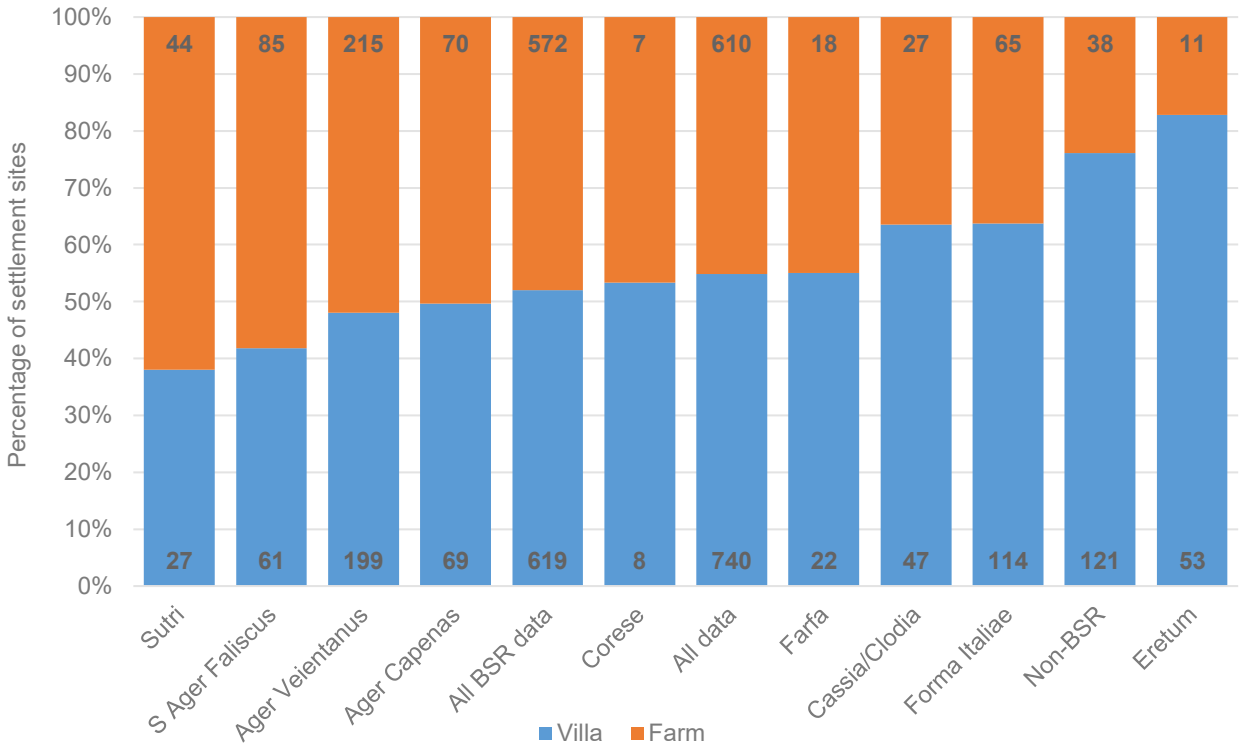


Figure 4.15. Ratios of early imperial-period farms and villas grouped by select surveys and groups of surveys.

[599] Potter 1979: 122.
[600] Potter 1979: 122 and plate IIIb.
[601] E.g. Potter 1979: fig. 35.
[602] Rathbone 2008.
[603] Witcher 2006b.
[604] Witcher 2012.

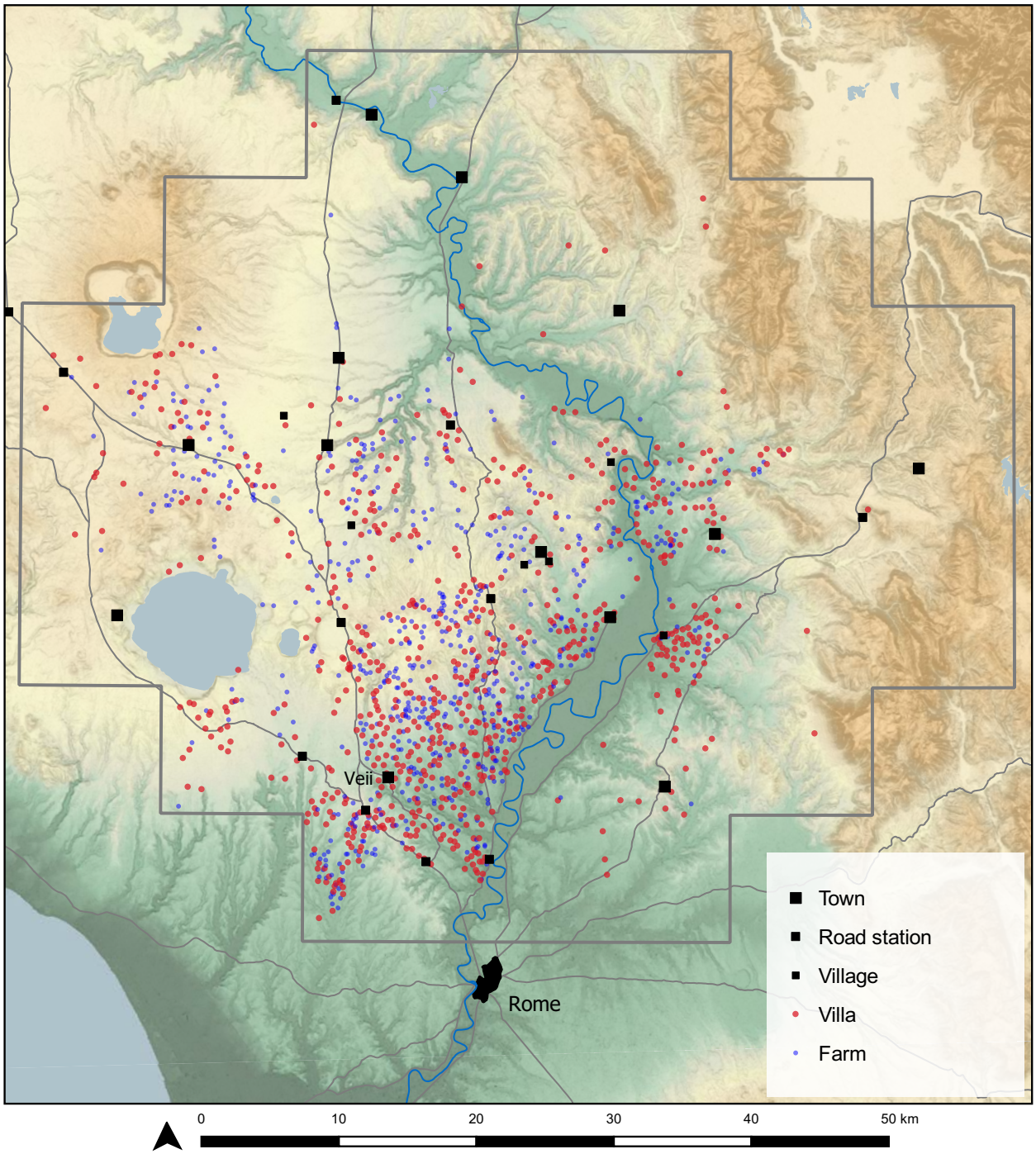


Figure 4.16. Tiber Valley Project settlement sites in the early imperial period (50 BC–AD 100).

As part of the Tiber Valley Project, all data for each site in the middle Tiber valley were collated and assessed, and settlement sites classified as either 'Farm' or 'Villa' giving particular consideration to any interpretation provided by the original surveyors and to the evidence of scatter size (where known), range of pottery types and the presence of building materials such as column drums, marble wall veneers and window glass. The presence and type of nearby sites was also taken into consideration. Levels of certainty or doubt about the assignment of sites to either of these categories was indicated using a certain/uncertain tag for each record.

Figure 4.15 shows the ratio of early imperial-period farms and villas as documented by different component surveys, or groups of surveys, within the database. This demonstrates significant variability, ranging from approximately two farms to each villa (Sutrium survey) through to an overall average of approximately one to one, to four villas to each farm (Eretum Survey). It is improbable that any single variable can explain these

differences, which likely combine multiple factors including distance from Rome and survey intensity. Generally, however, legacy data demonstrate a higher ratio of villas to farms, as might be expected. The very high ratio identified by the Eretum Survey appears to be anomalous, especially when compared to the nearby, and more intensive, Corese and Farfa Survey results; the latter results suggest that the application of more intensive survey around Eretum might find additional farm sites between the villas.

Figure 4.16 shows the overall distribution of early imperial-period settlement in the middle Tiber valley. As with all other periods, activity is clearly concentrated in the more thoroughly surveyed southern part of the study area, and with more sites in Etruria than Sabina (see section 2.4.1 for general issues of how to read to read these distribution maps). Referring to the Ager Veientanus during this period, Kahane, Murray-Threipland and Ward-Perkins suggested that settlement had reached 'saturation point', implying not simply a peak in the density of settlement, but that it had also reached the maximum possible density.[605] As discussed in section 2.1.4, however, resurvey work now makes clear that the early imperial landscape was even more densely occupied than the South Etruria surveyors believed. Nonetheless, the density shown in Figure 4.16, especially at this valley-wide scale, makes it easy to understand why the surveyors reached the conclusions they did.

A series of larger-scale maps of selected sub-regions allows more of the detail, including non-settlement sites, to be visualized, in order to comprehend more fully the complexity of the early imperial-period rural landscape (Figures 4.17 and 4.18).

The following sections examine the evidence from survey and excavation for villas, farms and rural infrastructure; there is also an examination of some examples of 'micro-patterning' in order to emphasize the local variability subsumed within the regional-scale analysis.

4.5.1 Villas

The villa is often seen as *the* defining feature of the Roman landscape, both generally and of imperial-period Italy in particular. As noted in section 4.2.2, in the middle Tiber valley, it has been common to contrast the 'colonial small farm landscape' of the Republican period with the 'villa landscape' of the early empire. Such a dichotomy is perhaps valid at the most general level, stressing the rapid spread of a significant number of wealthy villa sites during the first century BC, but it otherwise obscures much of the detail; not only did some suburban villas have long 'prehistories' stretching back to the mid-first millennium BC,[606] but small farm sites grew (rather than declined) in numerical importance in the early imperial period and persisted into the mid-imperial.

This sub-section examines the evidence for villas during the imperial period; the following sub-section (4.5.2) considers farms. Figure 4.15 (above) shows that approximately half of all imperial-period settlement sites in the project database are classified as villas. As noted above, however, the category 'villa' as used here, encompasses huge variety: the largest were sprawling rural palaces, the smallest were compact but well-appointed *pieds-à-terre*; in between were sites of diverse size, form and function. The following draws out some of this variety through a discussion of examples of different types of early imperial-period villas from the study area.

One of the key sites in the debate about the early origins of the villa—the Villa of the Auditorium—lies immediately to the south of the study area, close to the Milvian Bridge in the northern suburbs of Rome. First occupied during the Archaic period, over five centuries later, by the early imperial period, this villa had undergone at least four major phases of redevelopment.[607] Despite its early social and economic pre-eminence, by the time of Augustus it was simply one of many villas dotting the suburban landscape. At that time, the villa's construction technique, *opus quadratum*, may either have marked the site as an ancient aristocratic complex of great prestige or, alternatively, as rather old fashioned when compared with newer villas constructed using more up-to-date techniques and materials. Another villa with early imperial-period activity demonstrating a particularly long history of occupation is the complex at Monte delle Grotte (Grottarossa) at few kilometres to the north of the Auditorium site (TVP-ID 12471).[608]

These rare, exceptionally early, and very long-lived villas aside, approximately ten per cent of villas with early imperial activity were first occupied during the mid-Republican period, around 25 per cent first occupied at some point in the late Republican period, and about 50 per cent newly founded during the early imperial period; the remainder have a variety of occupational histories, with 'gaps' that may or may not derive from the small samples of material collected; many have produced Archaic material but just two per cent of sites demonstrate good evidence for continuous occupation from the Archaic to early imperial period (Table 4.4). Some of the sites first occupied during the mid-Republican period may have been high-status

[605] Kahane, Murray-Threipland and Ward-Perkins 1968: 10.

[606] Becker 2006; Volpe 2012; see section 3.2.1.

[607] Carandini, D'Alessio and Di Giuseppe 2006.

[608] Becker 2006; see also Becker and Terrenato 2012.

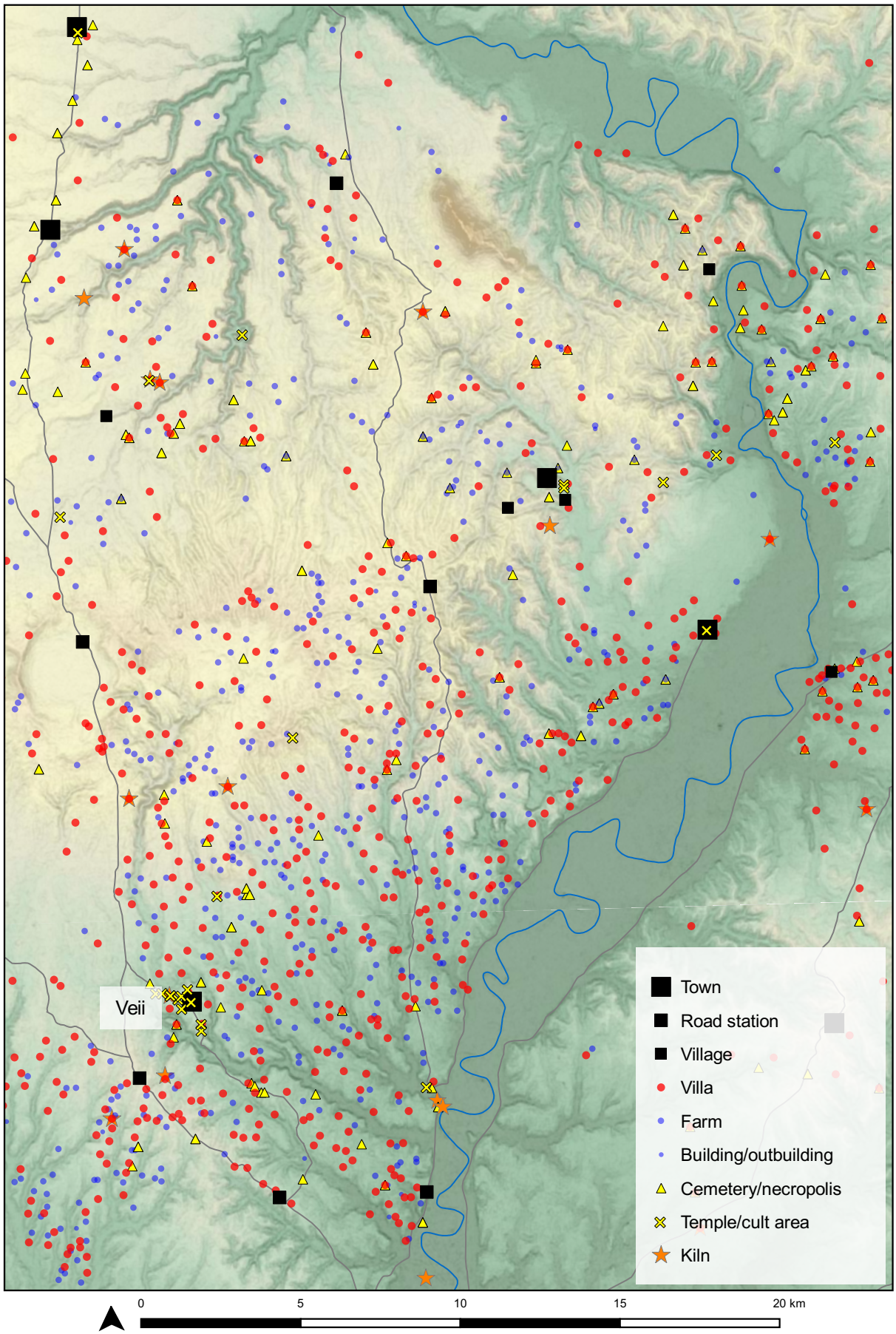


Figure 4.17. Early imperial-period sites in the eastern Ager Veientanus, Ager Capenas and southern Ager Faliscus (50 BC–AD 100).

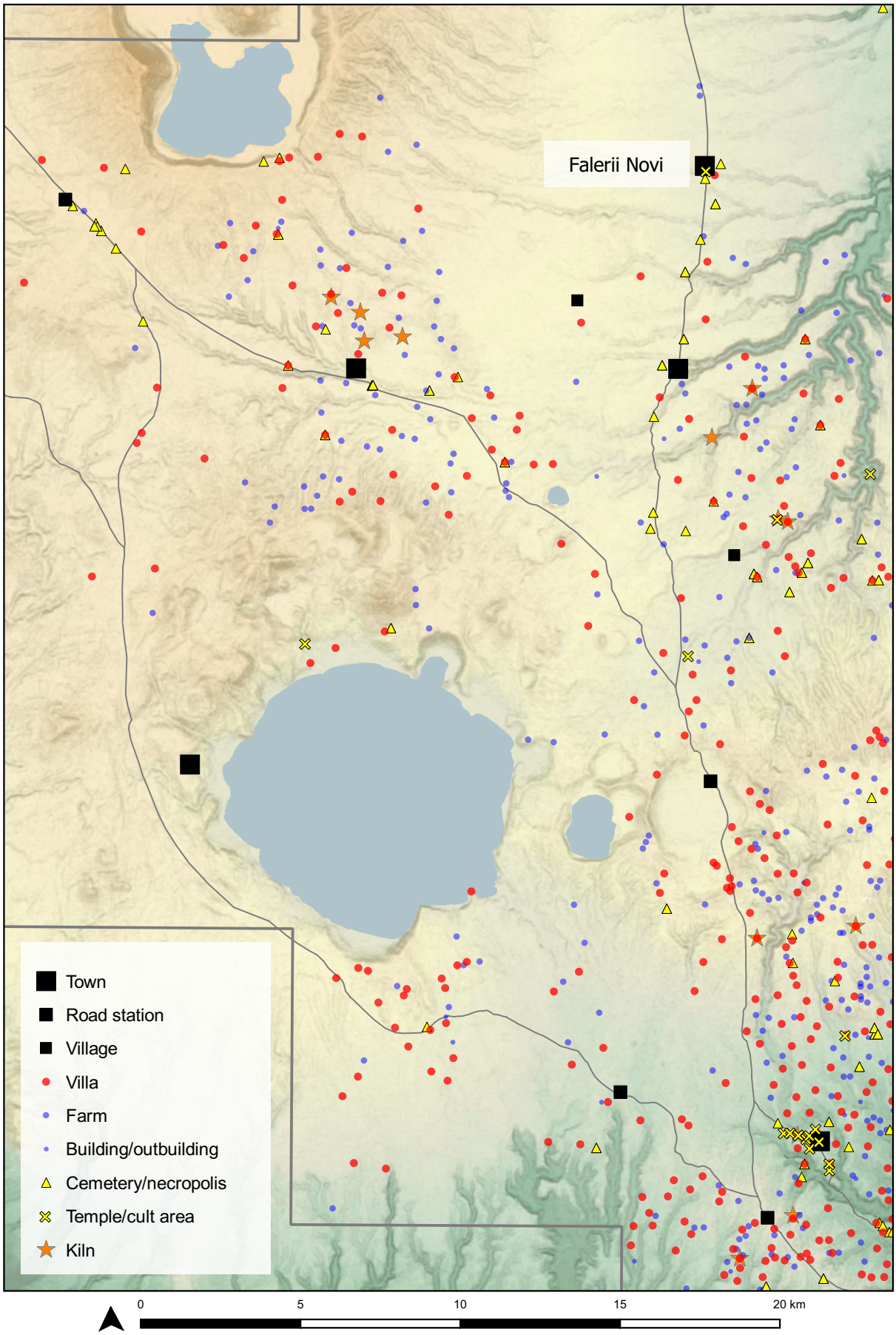


Figure 4.18. Early imperial-period sites in western Ager Veientanus, Ager Sutrinus and southern Ager Faliscus (50 BC–AD 100).

Table 4.4. Early imperial-period villas: pre-imperial occupation histories.

Archaic	Classical	Mid-Republican	Late Republican 1	Late Republican 2	Early imperial	Total	Percentage	Cumulative percentage
						270	36%	36%
						131	18%	54%
						49	7%	61%
						38	5%	66%
						36	5%	71%
						32	4%	75%
						30	4%	79%
79%						21	3%	82%
						18	2%	84%
						17	2%	87%
						17	2%	89%
						16	2%	91%
						10	1%	93%
						9	1%	94%
						8	1%	95%
						7	1%	96%
						6	1%	97%
						5	1%	97%
						4	1%	98%
						4	1%	98%
						4	1%	99%
						3	0%	99%
						2	0%	100%
						1	0%	100%
						1	0%	100%
						1	0%	100%
195	57	223	107	327	740	**740**	**100%**	

First occupied	Total	%	Cumulative percentage
Archaic	195	26%	26%
Classical	2	0%	27%
Mid-Republican	115	16%	42%
Late Republican 1	26	4%	46%
Late Republican 2	131	18%	63%
Early imperial	271	37%	100%
	740	**100%**	

settlements from the beginning, but others (perhaps most) began life as 'farms' and were subsequently expanded and embellished—transformed into villas—as wealth and new models of social display spread into and across the rural landscape. Identifying the point at which any individual site transitioned from farm to villa is difficult, and more or less impossible to establish on the basis of surface survey data alone. Not least, the bulk of the evidence used by surveyors to differentiate farms from villas—e.g. painted plaster, marble wall veneers, mosaics (Table 4.3)—is of imperial date, making the identification of villa status during the Republican period problematic. For example, what principally differentiated the early phases of the Villa of the Auditorium from contemporaneous sites was not so much distinctive categories of material culture as architectural scale and complexity.

Regardless of exactly when they achieved 'villa' status, from the mid-first century BC, these pre-existing sites were transformed through the use of new building materials such as marble wall veneers and construction techniques such as *opus reticulatum*. At the same time, a large group of *ex novo* villas were founded at sites with no evidence for settlement activity during the previous couple of centuries. These sites were able to make the fullest use of new construction techniques and decorative schemes. But, whether first founded in 300 BC or 30 BC, the owners of all of these villas subscribed to a new shared model of social display through luxury rural residence.

Villas were constructed across the middle Tiber valley, though there was some variation in their distribution and density; most obviously, there were more villas closer to Rome and closer to the Tiber. This can be seen both in terms of absolute numbers and ratios (compared to farms). Some of the largest and wealthiest complexes also concentrate in the areas closest to Rome (e.g. Villa of Livia at Prima Porta, TVP-ID 00541), though there are examples of substantial and well-appointed villas from all corners of the study area, and far beyond. Nowhere in the middle Tiber valley was truly remote from Rome; senators and aspiring local *decuriones* could build grand country houses in any locality, but clearly greater impact was to be achieved by building closer to Rome or at prominent locations along the Tiber or the consular roads. Higher densities of villas in such locations could be taken to indicate economic motivations, providing proximity and good access to the Rome market; equally, the concentration of villas in these areas might reflect social and political ambitions, offering access to the centre of power at Rome and the opportunity to display wealth and taste to rivals and clients.[609] In practice, it may be impossible to differentiate between such social and economic concerns—or *otium* and *negotium*—as they were not mutually exclusive.[610]

At the top end of the villa scale were sites such as the Villa of the Volusii (TVP-ID 10269). This complex developed during the late Republican period directly next to the colony at Lucus Feroniae (section 4.4.2). The original villa may have been built by the *Volusii* family; if not, the villa soon passed into their possession. The site was expanded substantially in the Augustan period, including the addition of a large peristyle surrounded by more than 20 small rooms which the excavators interpreted as an accommodation block for agricultural slaves.[611] Although this specific example is often cited in the literature as an *ergastulum* (slave barracks), there is much debate about this identification.[612] The scale of the early imperial villa complex (180 × 120 m), its proximity to the centre of Lucus Feroniae, and the presence of monumental inscriptions in the so-called *lararium*, duplicating those in the town centre, combine to suggest that the villa may have served some public or municipal function, perhaps for markets (*nundinae*) or as an inn.[613] The size, location and form of the villa bring into question any simple opposition between public and private. The presence of large villas in close proximity to other urban centres—for example, at Veii and Cures—may point to situations where individual families began not simply to participate in municipal life, but to dominate it (see also Forum Novum, below).

A series of other villas is known from the territory of Lucus Feroniae, mostly as a result of excavation in advance of development. The land around the colony was centuriated and at least two, possibly three, land division schemes have been identified.[614] Villas in this area may have been owned by wealthy colonial families and were well located to exploit their proximity to the Tiber and the port facilities of Lucus Feroniae. Examples include the Villa 'della Standa' founded during the second century BC and constructed in limestone *opus incertum* and already with evidence for some luxury such as a *cocciopesto* floor decorated with marble lozenges and, perhaps of early first-century BC date, wine- and oil-press facilities. A major restructuring of the residential part of the villa was undertaken *c.* 40–30 BC including the addition of a richly decorated bath-house and paved courtyard, extending the complex to over 30 × 30 m (TVP-ID 10161).[615] A very similar history is documented at the Plini-Gigliotti/Nocioni villa where a late second/early first-century BC villa

[609] Lafon 2001.

[610] For useful summaries of indicators of luxury and production at a selection of sites around the suburbium, including the some in the middle Tiber valley, see De Franceschini 2005.

[611] Sgubini Moretti 1998.

[612] For summary, see Marzano 2007: 139–144.

[613] De Franceschini 2005: 284; Marzano 2007: 146.

[614] Gazzetti 2016: 145–6.

[615] Gazzetti 1992; Marzano 2007: 369–70.

in *opus incertum* was significantly expanded using *opus reticulatum* during the Augustan period.[616] Another villa, at Baciletti (TVP-ID 10158),[617] has a less certain chronology but its two main phases may mirror those of the other villas in this area. An initial complex of 40 × 30 m, probably of first-century BC date, was equipped with oil processing facilities and a doliarum for storage; there was also a tile kiln; during a second phase, the structures were extended to cover 50 × 30 m, with the press removed and a large barn constructed. Another villa, recently excavated (2009–2011) at Scorano, was also founded in the late Republican period, complete with a monumental fountain, though the complex was not further expanded until the second century AD.[618] All of these villas, including the Villa of the Volusii, therefore started off at broadly the same date and with broadly similar forms; while all of them continued to expand, however, the Villa of the Volusii clearly moved into a league of its own.

A different developmental history is documented at Monte Canino, close to the Via Tiberina south-west of Lucus Feroniae. Here, old excavations revealed a site that began life as a large Republican farmhouse constructed of tufo blocks, before being replaced, in the early imperial period, with a substantial villa complex measuring 70 × 70 m.[619] This new structure was built in *opus reticulatum* and richly decorated with marble veneers (TVP-ID 00959). Compared with the villas discussed here, Monte Canino may have started rather earlier and undergone a more radical reconfiguration. Finally, still in the vicinity of Lucus Feroniae, it is worth noting that not all early imperial villas developed from Republican-period sites; for example, a villa at Prato La Corte, was founded *ex novo* during the mid-first century BC, with a main block of 60 × 50 m including a peristyle and an associated production area with several lime-kilns (TVP-ID 10270).[620] Collectively, these villa sites suggest an area intensively exploited during the late Republican period, but still with significant scope for new settlement and agricultural exploitation in the early imperial period as well as the transformation of existing sites using new architectural styles and decorative schemes.

As well as looking at a geographical group of villas, such as those around Lucus Feroniae, it is also useful to consider villas according to different attributes shared by sites across the middle Tiber valley. Terraced villas are found in both Etruria and the Sabina. A series of substantial terraced sites are documented in the limestone hills of the Sabina Tiberina including a large (100 × 90 m) terrace supporting a wealthy villa with cisterns at Caravilla near Bocchignano (TVP-ID 12449) and the nearby so-called 'Bagni di Lucilla' (TVP-ID 10125), the latter's terraced platforms extending to over 8000 m^2. Also in this area, at the foot of Monte Elci, in the Valle di Fontanelle to north of the Via Salaria, a 70 × 70 m terraced platform for a villa was constructed in limestone *opus polygonale*, possibly during the second half of the second century BC with occupation continuing into the imperial period.[621] Further south, near Palombara Sabina, recent excavations (2009–2013) have revealed an elaborate architectural complex, with porticoes, and an exedra, garden and bath-house, at Formelluccio south of Palombara Sabina; the residential buildings sit on an enormous terrace, 76 m long and 4 m high, built of *quasi opus reticulatum*—here rendered in limestone not tufo—indicating construction around the mid-first century BC (TVP-ID 10126).[622]

Similar substantial terraced villas are found to the west of the Tiber in Etruria as well. On the southern slopes of Monte Soratte, are the remains of a massive (approximately 175 × 75 m) terraced villa complex at Giardino.[623] Surface finds indicate construction and occupation during the first and second centuries AD. A bath-house and mosaics on the top terrace suggest this was the residential focus of the complex. Below were two further terraces enclosing an area of 1.2 ha and incorporating cisterns with a minimum capacity of 1000 m^3, probably intended for irrigation in the specialist production of fruit, flowers and vegetables for market.[624] Another smaller, though still substantial, villa at nearby Belvedere (TVP-ID 02608), featured richly decorated residential buildings and a bath-house on a 71 × 84 m terraced platform, projected out from the ridgetop. Other terraced villas are found across the study area including the substantial site at Prati San Martino south-east of Sutrium, with a platform in *opus reticulatum* and *opus listata* constructed during the first or second centuries AD (TVP-ID 03085),[625] and the monumental terracing employed at the Villa of Livia at Prima Porta (TVP-ID 00541).[626] Such terracing was used to extend the area available for the construction of buildings, and could house cisterns and storage space, but they were also clearly intended to monumentalize and project the prestige of these villa sites.

There were also terraced villas located directly along the course of Tiber. Perhaps the most superbly located is the Torrita Tiberina villa (TVP-ID 01905), set on the end of the ridge that projects onto the Tiber floodplain causing the river to form a loop below Nazzano. Constructed in *opus incertum* with *opus reticulatum*

616 Marzano 2007: 370–1; not in TVP database.
617 Tron 1986
618 Divizia and Giacummo 2016: 152; not in TVP database.
619 Pallottino 1937.
620 Fontana 1995; Marzano 2007: 366–7.
621 Quilici 1995; not in TVP database.
622 Mari 2012; 2013.
623 Jones 1962.
624 Wilson 2008b: 743–5.
625 Gilkes, Martin and Matheus 2000.
626 Calci and Messineo 1984; De Franceschini 2005: 27–45.

additions, the villa spilled down the end of the ridge and would have been highly visible to passing river traffic, as well as offering its wealthy residents striking views over the surrounding landscape. Other terraced villas above the river are found at Horta, and just above the confluence of the Tiber and the Nera, at Piscinale, where an existing villa was extensively developed during the imperial period with two large terraces in *opus reticulatum*.[627] Still further upstream, at Poggio Gramignano (near Lugnano in Teverina), a villa was constructed on a series of terraces down the hillside during the second half of the first century BC, probably 20–10 BC.[628] Excavation has revealed parts of both the *pars urbana* (including a vaulted *oecus*, or reception room) and the *pars rustica* including storerooms and servant/slave accommodation. The complex as a whole may have covered approximately 2000 m^2. Sometime around the end of the first century AD, or the start of the second, the vaulted ceiling of the *oecus* collapsed as a result of the instability of the hillside and parts of the complex were repurposed for more functional uses.

Terraced villas on the ridges and higher ground overlooking the river were well positioned for display; some other villas along the river, however, were located low down close to the water. For example, on the opposite bank from the Torrita Tiberina villa, barely raised above the floodplain, was a villa (TVP-ID 10770) in the middle of the Piano di Nazzano; further north, a rich and substantial villa complex at Ponti Novi (Colle Manno) near Magliano Sabina was constructed during the first century BC on a low fluvial terrace just above the floodplain.[629] A short distance away, near modern Foglia at Porto S. Agata, Sternini reports a villa constructed in *opus reticulatum* with a river quay in *opus quadratum*, a reminder of the productive as well as display functions of these villas and their use of the river to export goods to Rome.[630]

Most, but not all the villas described so far, had their roots in the Republican period. As noted above, however, around half of early imperial-period villas appear to have been new foundations. A number of such sites have been excavated in the study area.[631] In the southern Ager Faliscus, the Monte Gelato villa, identified by the South Etruria Survey and subsequently excavated, was an *ex novo* Augustan-period foundation. The main building was planned and constructed to standard units (the Roman foot) with an impressive exterior façade, an internal courtyard and rooms decorated with mosaic floors, painted wall plaster and marble statuary. Observing the parallels to a villa described in Varro's agricultural treatise, the excavators observed 'it is almost as though Monte Gelato was an 'off-the-peg' villa, based upon a reading of Varro'.[632] What sort of person might commission such a villa? The purchase of land and construction materials, and the employment of an architect and labourers clearly indicates access to substantial resources. A fragmentary tomb monument of the *Valerii* recovered during the excavations at Monte Gelato may document the identity of the villa's founder—C. Valerius Faustus—a *magister* of the *Augustales* of Veii and a *mercator bovarius* (cattle merchant). Potter and King suggest Faustus was 'precisely the sort of *nouveau riche* who would have wished to construct for himself an elegant country residence'.[633] If Faustus was the villa's original owner, it may point to the source of wealth that paid for the villa's construction and more broadly to the social aspirations of the entrepreneurial inhabitants of the middle Tiber valley during the early imperial period. Another villa that appears to have been laid out to an off-the-peg plan using standard units, has been excavated near Cottanello in the Sabina (TVP-ID 10131). A dolium stamp from the site suggests the owners may have been the *Aurelii Cottae*.[634] Here, however, the Julio-Claudian-period villa buildings were preceded by earlier activity at the site, perhaps extending back to the third century BC.

The villa immediately next to the *municipium* of Forum Novum was another new foundation with, as at Monte Gelato, no earlier activity attested at the site. Here, geophysical survey has recovered the complete plan of a villa of approximately 70 × 60 m with a central courtyard of around 20 × 20 m.[635] Subsequent excavation indicates that construction began in the mid-first century BC when a platform was laid out and foundations dug. There is, however, no evidence for occupation levels such as floors from this earliest phase and the excavators have suggested that the villa may not have been completed as originally planned. Instead, during the final quarter of the first century AD, a small number of rooms appear to have been occupied in just one part of the complex with evidence of more sustained activity, including a fountain and fishpond. Coarelli argues that the villa can be attributed to P. Faianius Plebieus, named in *CIL* IX 4786 = *ILS* 5767 as one of the *municipium's* principal benefactors.[636] P. Faianius is suggested to have been a local landowner and, due to the presence of transhumance route in the area, a stock farmer (cf. with the cattle merchant, C. Valerius, above). As at Monte Gelato, the decision to build a villa from scratch, rather than adapting existing structures,

[627] Aureli 2006: 127; not in TVP database
[628] Soren and Soren 1999; not in TVP database
[629] Colosi and Costantini 2004; not in TVP database
[630] Sternini 2004; Marzano 2007: 397; not in TVP database
[631] In addition to those villas discussed below, another likely example is the 'building' excavated close to the 'Tomba di Nerone' on the Via Cassia, where the mosaic floors appear to have been an original feature of the building constructed *c.* AD 20–30, Ward-Perkins 1959a.
[632] Potter and King 1997.
[633] Potter and King 1997: 202–4, 421.
[634] Sternini 2000.
[635] Gaffney, Patterson and Roberts 2004a.
[636] Coarelli 2005.

may reflect the recent acquisition and development of an estate and/or the appeal of constructing a planned architectural complex. The financial costs involved, however, were likely to have been substantial and the precarious social and political environment could easily blow off course the plans of ambitious families.

A specific subcategory of Roman villa is the *villa marittima*, or seaside villa. Clearly, with no coastline, there were no seafront villas in the middle Tiber valley; there were, however, villas located around the shores of Lakes Martignano and Bracciano that may be bracketed in the same category.[637] Their structures are characterized by comparatively long, narrow forms—maximising their waterfront facades with views over the lakes, with an emphasis on residential rather than productive functions.[638] Some of these villas are of exceptional size and may have served additional public functions. For example, the Villa Domiziana (TVP-ID 12138) extended to approximately 5000 m^2, with evidence for both for production and bathing facilities. Some of these lakeside villas, as already discussed in section 4.2.3, were partially submerged by Lake Bracciano's rising water levels not long after their construction during the first century BC; they were rebuilt, in equally grand style, further back from the new shoreline.

One 'villa' with few direct comparisons either within or beyond the middle Tiber valley is the Villa Claudia (TVP-ID 3817). Excavations in 1934 revealed a large symmetrical architectural complex focused on an elaborate elliptical structure, 87 m in length, decorated with 42 niches.[639] The site has recently been reinterpreted by Thomas who suggests that the villa was located to draw water from the Aqua Alsietina (or Augusta), using the aqueduct to supply fountains and waterfalls for extravagant water displays; notably, however, the site also coincides with the location of a natural hot spring, so an association with water may have predated the aqueduct. Regardless, Thomas speculates that the site may have represented a 'small-scale version of the imperial pool (Stagnum) created in 2 BC for the emperor Augustus's recreation of sea-battles (Naumachia Augusti) in the modern district of Trastevere, which was the eventual destination of the aqueduct'.[640] Thomas also uses fragmentary epigraphic evidence potentially to associate the Villa Claudia with the powerful *Cornelii* family and, even more tentatively, with a possible *curator aquarum* (water commissioner) at Rome. Whatever the precise significance of this complex, it acts as a reminder of the powerful social, symbolic and even physical links between the villas of the middle Tiber valley and the city of Rome.

The most powerful of these links are articulated through villas owned by the emperor and his immediate family all around the *suburbium* of Rome, as well as across Italy and the provinces. Within the middle Tiber valley, the most prominent of these is the Villa of Livia at Prima Porta (TVP-ID 00541), but others include the Villa of Lucius Verus at Acquatraversa and a villa linked to Septimius Severus near Baccano (TVP-ID 00098).[641] The vast majority of the villa sites in the middle Tiber valley, however, were smaller, less opulent and—significantly—remain unexcavated; they are known only through scatters of surface material and occasional fragmentary structures. It is therefore worth zooming in on a single surface scatter to illustrate a more typical 'villa' within the Tiber Valley Project dataset. An example is a site to the south-east of Eretum (TVP-ID 02392), a substantial and long-lived villa, twice visited by the South Etruria surveyors. The surveys documented a large nucleus of building materials, pottery and glass vessels; separated from it, and approximately 50 m to the east, was a second small nucleus, with human bones and many fine-wares, probably an associated cemetery. Despite the great care taken to document the size of the *opus spicatum* flooring bricks (10 × 5 × 2 cm), there is no indication of the size of scatters. The site is simply described as a 'large' villa. Only the last of the South Etruria sub-surveys, Potter's work in the Ager Faliscus, systematically recorded scatter size, though intriguingly one of the earliest surveys—at Sutrium—offered dimensions for some villas sites, presumably because they were so strikingly large: 100 × 80 m (TVP-ID 03073), 70 × 50 m (TVP-ID 00382) and 70 × 40 m (TVP-ID 02701).

A more recently investigated example of a villa known only from field survey is Corese site 29.1/2 (TVP-ID 12602/12603).[642] Here, survey work conducted in 2000 in an area originally fieldwalked in the 1970s located a previously undocumented scatter extending across an area of around 125 × 125 m, set just above the Tiber floodplain (Figure 4.19). Although badly damaged by cultivation, the scatter was still surprisingly well-defined in relation to the much lower and discontinuous densities of material in the surroundings fields. Within this scatter were two noticeable concentrations. The first, approximately 25 × 20 m produced large amounts of brick and tile, amphorae and coarse-wares; the presence of sherds of dolia and the absence of marble veneers or mosaic tesserae suggest this may have been the *pars rustica* of the villa complex. The second

[637] Lafon 2001.
[638] Accardo *et al.* 2007; Cordiano *et al.* 2011.
[639] Vighi 1940.
[640] Thomas 2012. The springs next to western shore of Lake Bracciano which fed the Aqua Traiana, were also graced with symbolic architecture, a 'grotto-shrine' marking the aqueduct's source, Taylor *et al.* 2010.
[641] Prima Porta (TVP-ID 00541); Acquatraversa (Caserta 2015; not in TVP database); villa near Baccano linked to Septimius Severus (TVP-ID 00098). For discussion of imperial property in Italy, see Maiuro 2012. For recent excavations at Villa Magna, Fentress *et al.* 2016.
[642] Di Giuseppe *et al.* 2002: 142–3.

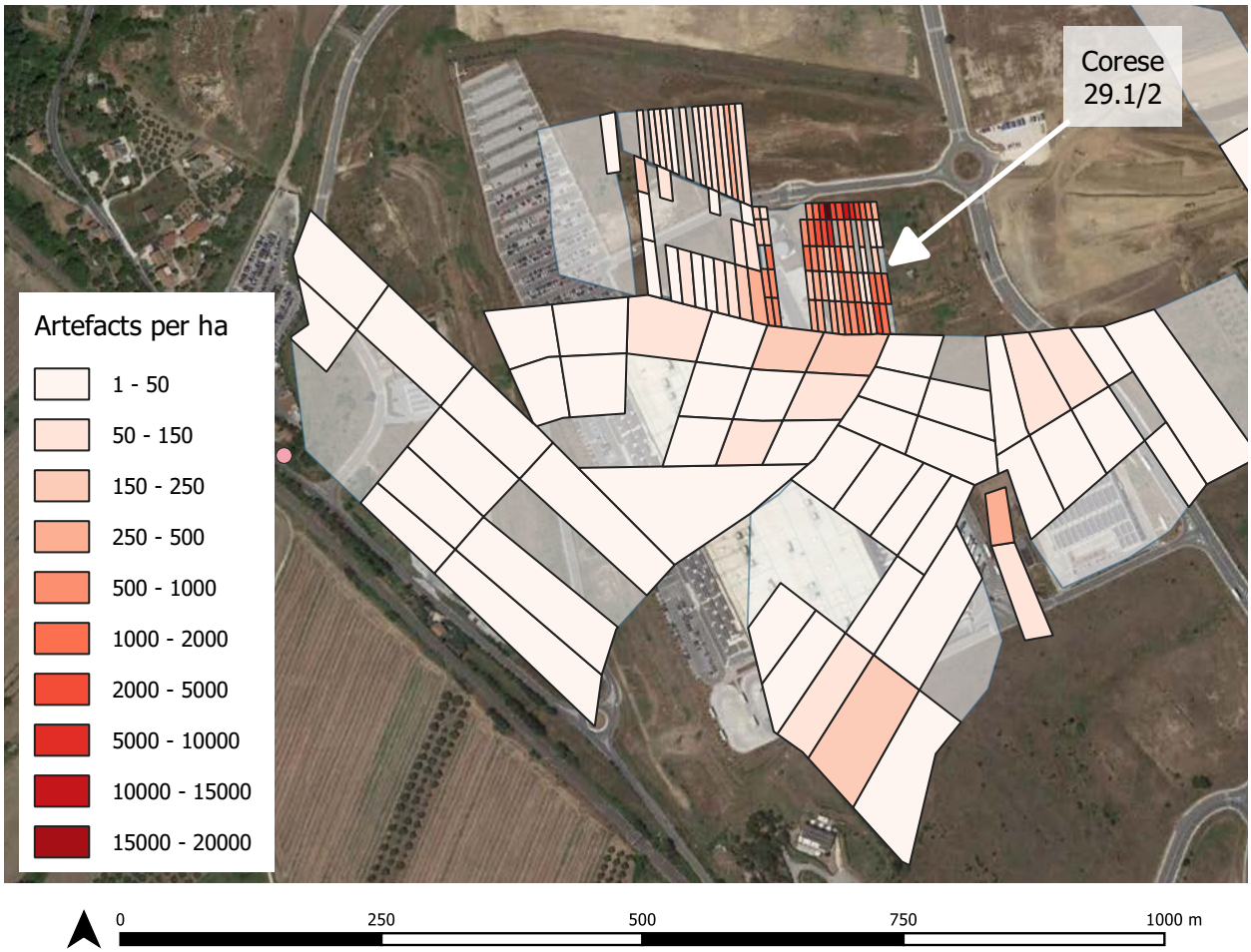


Figure 4.19. Density of artefacts (equivalent per ha) collected by the Corese Survey in the vicinity of villa site 29.1/2.

concentration, set slightly higher up, was larger (50 × 40 m) though the overall density of material was lower. The density of fine-wares from this second concentration of material is modestly higher than at the first scatter, but the range of pottery and other indicators of luxury is broader, including fragments of glass, plaster, a lamp, marble wall veneers and mosaic tesserae; this probably represents the villa's *pars urbana*. The pottery indicates both areas were in contemporaneous use (from the late Republic well into late antiquity). A piece of flue-tile and *pilae* bricks suggest the presence of a hypocaust, perhaps for a bath-house. About 150 m to the north-west, a small scatter of predominantly brick and tile may represent an outbuilding related to the villa. To the east, south and west, large scatters interpreted as villas have been located, none more than 500 m from Corese 29.1/2 (the situation to the north is less clear as a result of quarrying). Assuming these other villa sites were all independent, Corese 29.1/2 may have controlled an immediate estate of around 20 ha (80 *iugera*); it may also have had access to land on the nearby floodplain, though perhaps not as a single contiguous estate. This villa site was first discovered in 2000, but was subsequently built over as part of a major development project. It is therefore a reminder both of the possibility of finding new sites, even in well-surveyed landscapes, and the continuing threat to the archaeological record from development in the hinterland of modern Rome. The great detail documented—including the spatial distribution of artefacts, their density and the relationship with neighbouring sites—gives a sense of what we lack for many of the South Etruria and other legacy survey sites.

An increasing number of villa sites, first recognized as surface scatters, are now being excavated in advance of development or other changes in land use. Near the Archaic centre of Crustumerium, for example, on the southern edge of the study area, exploratory trenches have investigated several scatters with mixed results (see section 2.1.4). One site to the south of Crustumerium demonstrates long-term activity from the Classical and mid-Republican through to the early and mid-imperial periods. Beneath the large, dense surface scatter, excavation has revealed evidence for activity extending across approximately 900 m^2.[643] A site dating back to the Classical and mid-Republican period was completely remodelled during the late Republican/

[643] di Napoli 2016: 42–49.

early imperial period with a suite of rooms with *opus reticulatum* walls and *opus caementicium* floors and further extended, presumably during the second century AD, with a more luxurious series of residential rooms and a possible bath-suite. Excavation is not complete, but the site demonstrates both the survival of buried structures beneath surface scatters and provides a model for the sort of developmental sequence that might lie behind some of the multi-period assemblages collected during survey.

As noted earlier, rural settlement of the imperial period in the middle Tiber valley should be understood to be spread across a spectrum rather than neatly divided into farms and villas. The latter category in particular encompasses great variety in form and scale. Collectively, these villas indicate large numbers of people investing, or consuming, significant resources in rural properties both for agricultural production and, for display and competition, bringing an urban or metropolitan style of living into the countryside. Traditionally, the areas to the south and east of Rome have tended to dominate discussion of villas in the *suburbium*. This may be because these areas feature prominently in the letters of Cicero; many of his friends (and enemies) lived in the area between the Alban Hills and Tibur (Tivoli). Consequently, discussion of the area north of the city has been neglected. More generally, the presence of the Tiber, as a privileged means of moving goods, has focused attention on production rather than consumption. As the villas discussed above indicate, however, this was a landscape which offered opportunities for both *otium* and *negotium*.

4.5.2 Farms

Villas dominated the landscape of the early imperial period, socially and economically, yet small, modest rural sites not only continued to exist but increased in number compared with the late Republican period. Moreover, as noted above, the results of targeted intensive resurvey work suggest that farms and other small rural sites are likely to be underrepresented in legacy datasets (see also section 2.4.2). Currently the numbers of imperial-period farms and villas are approximately equal in the project database (a ratio of one to one); were the whole valley subject to intensive resurvey such as at that undertaken at Corese and Nepi, not only would the overall settlement density increase, but it is likely that the relative balance of villas and farms would shift decisively towards the latter.

Compared to villas, farms and other small rural sites have attracted far less archaeological attention. Although recent initiatives have begun to address this imbalance (most obviously, the Roman Peasant Project in the area of Grosseto),[644] the classic excavation within the middle Tiber valley remains the small Roman site first discovered during the South Etruria Survey at Monte Forco (TVP-ID 03442) in the Ager Capenas.[645]

Excavation beneath the survey scatter revealed an 11 × 5 m *opus reticulatum* building constructed during the second half of the first century BC; it appears to have gone out of active use around a century later, though was maintained, perhaps as a barn.[646] Potter considers the site an 'unpretentious ... smallholding' indicative of 'the more common classes of rural building .... Much of the population must have lived in small farms such as these'.[647] Despite the importance of Monte Forco as a 'type-site' (it has been regularly cited in discussions about Roman farms well beyond the Tiber valley), the interpretation of the structure as a farmhouse, and the socio-economic status of its inhabitants remain the subject of debate.[648] Certainly its small size, lack of evidence for portable material culture, and the close proximity of similar sites along the Monte Forco ridge, suggest its modest status. One possibility, linked to the solid architecture of the site and its *ex novo* foundation at the same time as a series of similar small farms, may be that is was part of a state-sponsored veteran settlement scheme. Assuming the sites along the ridge were independent, each would have controlled only a tiny estate of around 2.5 ha (10 *iugera*), barely sufficient to sustain a small family.[649] Indeed, perhaps it was this inability to sustain its inhabitants that led to the abandonment of the site and its conversion into a barn as part of a larger estate. Other sites that might be compared with Monte Forco include the small *opus reticulatum* structure, 6.70 × 6.35 m, at Monte Cuculo (TVP-ID 02583).

Another group of 'farms' or small rural sites that has been subject to excavation lies at Vallelunga in the Valle Grassa in the southern Ager Faliscus. Development of the motor-racing track in the early 1970s and early 2000s led to the excavation of at least two structures.[650] During the Republican period, a series of modest buildings of stone blocks and timber stood next to an unpaved road. Although it was only a minor route, the road was carefully engineered, crossing a cuniculated valley and running through a long cutting, indicating a significant investment in communications. At some point, perhaps in the early imperial period, the old road was carefully levelled and paved with *selce* (basalt) blocks, though the existing roadside structures remained in occupation. Notably, the road and the associated buildings were located at the bottom of a hillslope not, as common elsewhere in the region,

644 Ghisleni *et al.* 2011; Vaccaro *et al.* 2013.

645 Jones 1963a.

646 Jones 1963a: 147–57.

647 Potter 1979: 123–5.

648 Cambi 2004; Rathbone 2008.

649 Jones 1963a: 147; see above Chapter 3.3.3.

650 Potter and King 1997: 13; www.vallelunga.it

on the ridge top; this location meant that the road was prone to soil washing down onto its surface—a fact that explains the good preservation of the road after its final abandonment. Despite the considerable investment in infrastructure at Vallelunga, none of the excavated structures indicates high-status settlement, though a number of villas lie to the north and east. The structures may represent a farm, or possibly, even part of hamlet or small village.

The investigation of more 'farm' sites of all dates, including the imperial period, is a research priority and the opportunities for such work are increasing with the growth of developer-led excavations. For example, the extensive industrial and infrastructural development around Lucus Feroniae of the past 20 years has led to the discovery a series of small rural sites (see above). Excavations south of the colony at S Marta have revealed a number of structures along the line of the Via Tiberina, on the very edge of the terrace above the Tiber flood plain; finds include a residential structure with storage facilities, drains, and a mausoleum constructed in *opus reticulatum*, as well as a number of other burials and lime-kilns.[651] Nonetheless, the number of excavated (and published) farm sites from the middle Tiber valley remains small. As a result, and even more so than for villas, the 'typical' early imperial-period farm site from this area is known primarily through surface scatters of artefacts and building materials. These might include sherds of *terra sigillata* and thin-walled fine-wares and, in greater abundance, plain and cooking-wares for the preparation and serving of food. Roof tile was near ubiquitous at sites across this region, with a long-established tradition dating back centuries, and used on sites across the settlement hierarchy; other typical building materials might include small tufo blocks or river cobbles used for foundations. Additional categories of material include sherds of amphorae and dolia. Scatters of material typically extend across areas up to 2000 m^2, a figure likely to reflect substantial 'smearing' of material from smaller well-defined core areas as a result of disturbance by ploughing and surface erosion. In contrast, survey work immediately following the initial ploughing up of archaeological deposits was able to identify discrete and very dense concentrations of material and even patches of darker soils marking the location of recently disturbed archaeological stratigraphy (e.g. TVP-ID 02182).

Ultimately, however, the classification of scatters as 'farms' continues to rely to a large extent on an 'anti-definition', for all of these types of pottery and building materials are also found on villa sites; farms are simply sites, usually smaller, that lack evidence for the key categories of material culture (e.g. window glass) and structural components (e.g. column drums) that trigger the application or merit the more substantial label of 'villa'. Nonetheless, the broad distinction between farm and villa still holds some analytical value, pointing to broad differences in social and economic status.

4.5.3 Rural infrastructure

As well as the residential and production sites that dotted the middle Tiber valley, the rural landscape was structured by roads and a variety of other infrastructure such as dams, aqueducts, road cuttings and drainage schemes. The basic consular road system was developed during the late third and early second century BC (section 3.3), often repurposing long-established routes; for example, recent work on the Via Flaminia at Sacrofano has identified Archaic-period activity beneath the third-century BC road surface.[652] The road system, however, continued to develop, including both the renewal of infrastructure and the construction of new routes. The date at which roads were first paved with hard-wearing *selce* slabs is unclear but it is likely to have varied, even along the courses of individual roads. Several excavations point to a date as late as the first century AD for a number of roads;[653] these were paved with sources of *selce* including the quarries on Monte Maggiore and Monte Aguzzo in the northern Ager Veientanus (section 4.7). Excavations have exposed substantial stretches of the main roads of the area—the Amerina, Cassia/Clodia, Flaminia, Tiberina and Salaria. Many of these roads are 4–5 m wide, such as the Via Flaminia close to Rome or the road between Nomentum and Eretum;[654] somewhat more distant from the city on the north-western edge of the study area near Forum Cassii, recent work on the Via Cassia at Vetralla has identified a very narrow paved surface, just 2.5 m wide, with possible passing spaces;[655] perhaps the bulk of traffic was expected to be moving in the same direction, for example, on a seasonal basis. Existing routes were also improved, for example, with new bridges, most obviously as part of Augustus's restoration of the Via Flaminia including nearly all of its bridges (Aug. *RG* 20.5).

Hundreds of kilometres of roads through the middle Tiber valley were paved with *selce* by the early imperial period, but not every road was paved in this way—even including some routes between major centres. For example, there is no evidence that the old Etruscan route linking the colonies of Sutrium and Nepet was ever paved; nor was the route from Sutrium to Falerii

[651] Savi Scarponi 2013.

[652] Iannaccone 2014.

[653] Black, Browning and Laurence 2008: 726; Laurence 1999. Recent excavation of a limestone-paved stretch of the road between Nomentum and Eretum at Tor Mancina indicates that the surface was laid during the late first century BC, Paoli and Sgrulloni 2013: 12.

[654] E.g. Via Flaminia approximately 4.5 m at Grottarossa, Messineo 1991: 120; Nomentum-Ertum road, approximately 3.9 m at Tor Mancina, Paoli and Sgrulloni 2013.

[655] Scapaticci 2011.

Novi.[656] The absence of paving on cross-country routes to Sutrium is even more striking given the existence of several long, paved *diverticula* leading from villa sites to the town including one which runs directly for 2 km from Sutrium to a large villa at S Giovanni a Pollo (TVP-ID 02954), featuring substantial cuttings (up to 200 m in length and 8 m in depth) to maintain its course and gradient.[657] Another paved *diverticulum* left Sutrium and headed 1.5 km to (just beyond) a large villa at Castellaccio (TVP-ID 03011) and, around 3 km further south, yet another paved *diverticulum* struck off the Via Cassia running 300 m to a villa at Prati San Martino (TVP-ID 03085).[658] *Diverticula* such as these were a particular feature of the early imperial landscape, forming part of a growing network of secondary public and private roads that opened up every ridge and river valley of the area and connected the sites along them to the consular roads. Although well attested in the Sutrium area, they were constructed across the middle Tiber valley; for example, on the eastern side of the study area, a recently excavated *diverticulum* connected the villa at S Lucia (Palombara Sabina) with a public road heading for the Via Salaria; although not paved, the 2.75 m-wide road was carefully engineered with substantial terrace walls.[659]

Some rural infrastructure, such as the S Lucia road, entailed elaborate engineering such as cuttings, terraces and bridges. Near Sacrofano, a small stone bridge was built on a country road constructed to connect a villa estate (or perhaps group of estates) to Veii; an inscription, repeated on the keystones of both sides, records: *T. Humanius / Stabilo fecit / in privato / transientibus*.[660] Clearly the road and the bridge were a substantial investment worthy of commemoration, but who was the intended audience—fellow landowners, appreciative tenants, potential clients, muleteers *en route* to Veii—and how were they intended to see the keystones?

The management of water was a key motivation for investment in rural infrastructure. Soil erosion and flooding appear to have worsened during the imperial period (section 4.2.3) and actions were taken to mitigate the effects, such as paving road surfaces or re-routing roads liable to flooding. The economic pressures to exploit limited land, however, meant that sometimes risks were simply accepted; the repaving of roads at successively higher levels, for example, suggests that routes were deemed necessary even if vulnerable to periodic, catastrophic flooding (e.g. Podere Sant Angelo and Vallelunga seem to have been paved after the mid-first century AD).[661] Quite a few of the valleys to the north-east of Veii had been cuniculated centuries earlier, running flashy streams (i.e. water courses prone to rapid changes in discharge due to rain) into underground tunnels to eliminate surface erosion. The farmers of the imperial period continued to benefit from these infrastructural investments. Excess water on hillslopes and low-lying land, however, had to be managed with drainage ditches and channels, for example, alongside the Via Salaria, presumably intended to protect fields at Crustumerium.[662]

Excessive water was potentially damaging and had to be efficiently removed, but water remained a precious resource. The construction of large cisterns at villas across the area indicates investment in the management of water supplies, probably for irrigation (as well as bathing and domestic use).[663] Aqueducts were also constructed to supply towns in the valley. As their populations were smaller than in earlier periods (section 4.4), such provision indicates the adoption of new practices demanding greater water supplies, such as bathing and monumental display. All the aqueducts which fed into Rome during the Republican period drew water from the mountains to the south-east of the city; during the imperial period, however, two new aqueducts were built that drew water from the north of the city within the study area. The Aqua Alsietina (or Augusta), built *c.* 2 BC, tapped water from Lake Martignano; the Aqua Traiana, built *c.* AD 109, conducted water from the west side of Lake Bracciano, around its northern shore, and then south to Rome. In contrast to the aqueducts south-east of the city, these two northern aqueducts were predominantly subterranean and therefore lacked elevated structural elements. Nonetheless, they required careful engineering and maintenance and may have been (legally) tapped along their routes into Rome (most obviously at the Villa Claudia, see section 4.5.1), for irrigation and/or bathing and display.

In comparison, the aqueducts that served the urban communities of the middle valley were modest in scale. For example, at Lucus Feroniae, two dam and aqueduct systems were constructed to supply water to the north and south sides of the town. One of these, the Aqua Augusta was presumably constructed in the early imperial period and later supplemented by the second system. Both aqueducts drew water from dams on the Fosso Grammiccia constructed of stone blocks with waterproof concrete.[664] Other aqueducts for urban supply are known at Falerii Novi and Forum Novum. In addition, several villa sites have produced evidence for channelled or piped water supply; an

656 Duncan 1958: 86–7.
657 Duncan 1958: 88–9.
658 Gilkes Martin and Matheus 2000: 371.
659 Mari 2012.
660 Guzzo 1970; Kahane, Murray-Threipland and Ward-Perkins 1968: 87.
661 Kahane, Murray-Threipland and Ward-Perkins 1968: 127.
662 Di Napoli 2016; Egidi 2009; Quilici 1995; Wilson 2008b: 759.
663 See below and Wilson 2008b.
664 Jones 1962: 197–201.

inscription (*CIL* XI 3003a, b) from just outside the study area on the Via Cassia details how Mummius Niger Valerius Vegetus constructed an aqueduct to his estate, requiring senatorial permission, the purchase of land and negotiations with the owners of the 11 properties through which it passed in less than six miles.[665] The latter presumably entailed the use of legal arrangements, or *servitudes*, for regulating access to water. Water became an important consideration shaping relations between not only neighbouring rural estates but also between rural, suburban and urban communities.[666]

Finally, a number of rural spa or bath complexes developed at natural spring sites around the middle Tiber valley during the imperial period. Indeed, central western Italy more widely demonstrates a particular concentration of Roman-period spas exploiting thermal and mineral waters for bathing, medicinal and often cult purposes.[667] The most impressive of these was the extensive complex at the sulphur springs at Vicarello on the northern shore of Lake Bracciano. The site of a pre-existing cult focus attested by votive deposits was extended in the early imperial period with a large (approximately 1 ha), brick complex focused around a water feature at Aquae Apollinares (Novae).[668] Closer to the lake shore, but associated with the nymphaeum, was a huge terraced platform in *opus latericium* extending over 2 ha with a 120 m frontage overlooking the lake. Accardo *et al.* argue that this latter complex (the so-called Villa Domiziana) was an imperial residence constructed by Domitian. Together the whole complex extended over 3 ha. Following the emperor's assassination (AD 96) the site may have been repurposed with a public function, and votive deposits resumed at the original cult site (TVP-ID 12138).[669] Other monumental spas and healing cults include Campetti (Veii) (section 4.4.2); a sulphur water bath complex (the so-called Terme dei Gracchi, probably Aquae Nepesinae) is known from Ponte Nepesino near Nepi (TVP-ID 03604);[670] and another mineral spring bath complex of the early imperial period, the so-called 'Bagni della Regina' was constructed at Valchetta, immediately south-east of Veii (TVP-ID 03139),[671] here with indications of later modification for the heating of the water.

By the imperial period, the landscape of the middle Tiber valley had been subject to modification for centuries. There was at this moment, however, clear investment in rural infrastructure, in order to extend and upgrade existing schemes, such as the road network, and to attend to new challenges and demands, such as flood protection and urban water supply.

4.5.4 Micro-regional patterning in the imperial-period landscape

The overview of regional settlement numbers and trends presented in section 4.3 shows that nearly all areas of the middle Tiber valley during the early imperial period share the same overarching trends: increasing site numbers and greater range and quantities of material culture. Within this general picture, however, there is some variability that merits comment, valuable evidence for the local phenomena on which the wider concept of hinterland was constructed.[672] Broadly speaking, these are differences of degree rather than kind but some discussion of this variability also responds to the criticism that Potter's *The changing landscape of South Etruria* gave too little attention to the diversity of settlement and land use within the valley. Some of the variability found within the project database can clearly be explained with reference to the uneven coverage of legacy data (sections 2.4.1 and 2.4.2); other patterning can be more confidently interpreted as local diversity in ancient settlement form, history and organization.

If Potter did not put strong emphasis on localized diversity, he and the other South Etruria surveyors were certainly sensitive to this issue and made nuanced observations weighing possible explanations including post-depositional disturbance with interpretations about socio-economic variability in the past. It is worth quoting at length one example from an early survey that suggests that this awareness was integral from the very beginning of the South Etruria Survey:

> Much of this plateau and of the next plateau to the south-east of Casale l'Umiltà, has been brought back into cultivation within recent years, but widespread search after the autumn ploughing has failed to yield traces of the smaller Roman farmsteads that are so conspicuous a feature of many parts of the Ager Faliscus. On the other hand, where the grassland and scrub are still intact many of the rocky outcrops are scarred with the traces of ancient ploughing, showing that this is land that was once cultivated, but has since lost much of its ancient topsoil. This evidence is in striking contrast with that presented by the adjoining Filissano estate, immediately to the south-east, where despite continuous occupation throughout the Middle Ages, the remains of Roman settlement are abundant. Either this country was in the hands of a few large proprietors, or else, as seems perhaps more likely in this particular case,

[665] Marzano 2007: 170; Wilson 2008b: 756–7.
[666] Bannon 2009.
[667] Donahue 2014.
[668] Accardo *et al.* 2007: 213–7.
[669] Accardo *et al.* 2007: 100-108; figs 18 and 21; Hodges 1995; Virgili 1988.
[670] Francocci 2006: 51.
[671] Jones 1960.
[672] Horden and Purcell 2000: 121.

> the small holdings were held by persons who for the most part preferred to live in Nepi itself, or in the neighbouring villages, rather than in isolated farmsteads.[673]

In other words, the surveyors were sensitive to multiple phases of post-Roman cultivation, to the nucleation and dispersal of settlement in relation to land ownership, and the complexity of interpreting evidence of absence. Relatively little of this detailed reflection is explicitly featured in the final published reports; partly due to the localized nuances involved, little of it is suited to generalization, let alone quantification. It is also worth remembering that, without the survey notebooks, especially for the unpublished areas, we lack an enormous amount of the first-hand insight of the original surveyors. But as the quoted example suggests, the surveyors were certainly aware of these complex considerations and we should have more confidence in their interpretations as a consequence.

The restudy of the South Etruria ceramics allows another approach to the identification of micro-areas. The triangle-shaped survey area between the Via Flaminia and the Tiber, the Eastern Ager Veientanus Survey, for example, provides interesting evidence of micro-patterning. It is worth focusing on this area for several reasons, including the relatively large number of sherds collected and available for restudy and the area's proximity to Rome, the Via Flaminia and Tiber. Most importantly, the survey is one of larger component parts of the South Etruria Survey that has never been published in detail, though the general results were incorporated into Potter's *The changing landscape of South Etruria*.

Here we focus on two small areas to reveal some of the local, fine-grained detail. Within the Eastern Ager Veientanus Survey block, I Costaroni and Monte Perazzo form two topographically distinct areas, of two and one square kilometre respectively, bounded to the east by the Tiber floodplain and to the west and north by the Valle Pianaperina (Figure 4.20). During the late Republican period, I Costaroni was divided between three long-established sites. By the early imperial period, each of these sites had developed into a villa, though the two overlooking the Tiber were architecturally more substantial with particularly rich decoration (TVP-ID 00965, 00670, 00938, the latter associated with possible farm also with earlier material, TVP-ID 00937). Alongside these pre-existing sites, a new villa was founded (TVP-ID 00672, with a probable associated farm site with some earlier material, TVP-ID 00936). A similar situation played out on Monte Perazzo, where an existing late Republican villa (TVP-ID 00665) on the south side of the hill was supplemented by a new villa on the north side (TVP-ID 00668). As a result, by the early imperial period, these two areas were occupied by relatively evenly spaced sites, predominantly villas, some of which stretched back to Archaic times, others apparently newly founded. Assuming territory was evenly divided between the sites, each villa would have controlled an estate of around 50 ha/200 *iugera* (excluding any land in the valley bottoms). By the mid-imperial period, the two farms sites appear to have gone out of use leaving the territory dominated by six villa sites. This small area therefore broadly mirrors wider trends of continuity though the landscape here was completely dominated by villas; notably, this area is also unusual because the density of early imperial-period settlement is actually lower than that for the Archaic Period—in most areas of the middle Tiber valley, the imperial-period figure is significantly higher. This situation might be explained by the limited number of farm sites of early imperial date interspersed between the villas, though may also be a function of the extraordinary density of Archaic activity attested on the hills and terraces along the Tiber.

Five kilometres further south, also on the low hills overlooking the Tiber, is a small area, stretching from Valle Lunga through Il Pascolaro to the Valle Cianca and Ponte Altieri (Figure 4.21). Again, the area was densely occupied in the Archaic Period, with at least 20 settlements plus various funerary sites and scatters. By mid-Republican times, settlement was reduced to fewer than half of this number and strongly concentrated in the northern part of the area, leaving the south (Il Pascolaro and Vallelunga) apparently unoccupied. Settlement encroached south again during the late Republican period, and two villas were constructed at the southern tip of the area (TVP-ID 00597 and 12502) just 200 m apart, but otherwise there was still an area stretching 2.5 km to the north with no late Republican settlement. Then during the early imperial period, a series of new farms and villas resettled this 'empty' area, though the villas were comparatively small (e.g. compared to those at I Costaroni and Monte Perazzo), and notably the hills immediately next to the Tiber, which had been densely settled in the Archaic period, remained unoccupied in the early imperial period. If land were divided equally between these villas, the result would be properties of 45 ha/175 *iugera*, though here the villas were less evenly distributed than at I Costaroni and Monte Perazzo, and were interspersed with a roughly equal number of farms.

As these two examples demonstrate, local settlement patterns are broadly in line with the regional trends, but there are some local differences. In neither of these areas did early imperial-period site numbers exceed those of the Archaic period. The first area was dominated

[673] Frederiksen and Ward-Perkins 1957: 88.

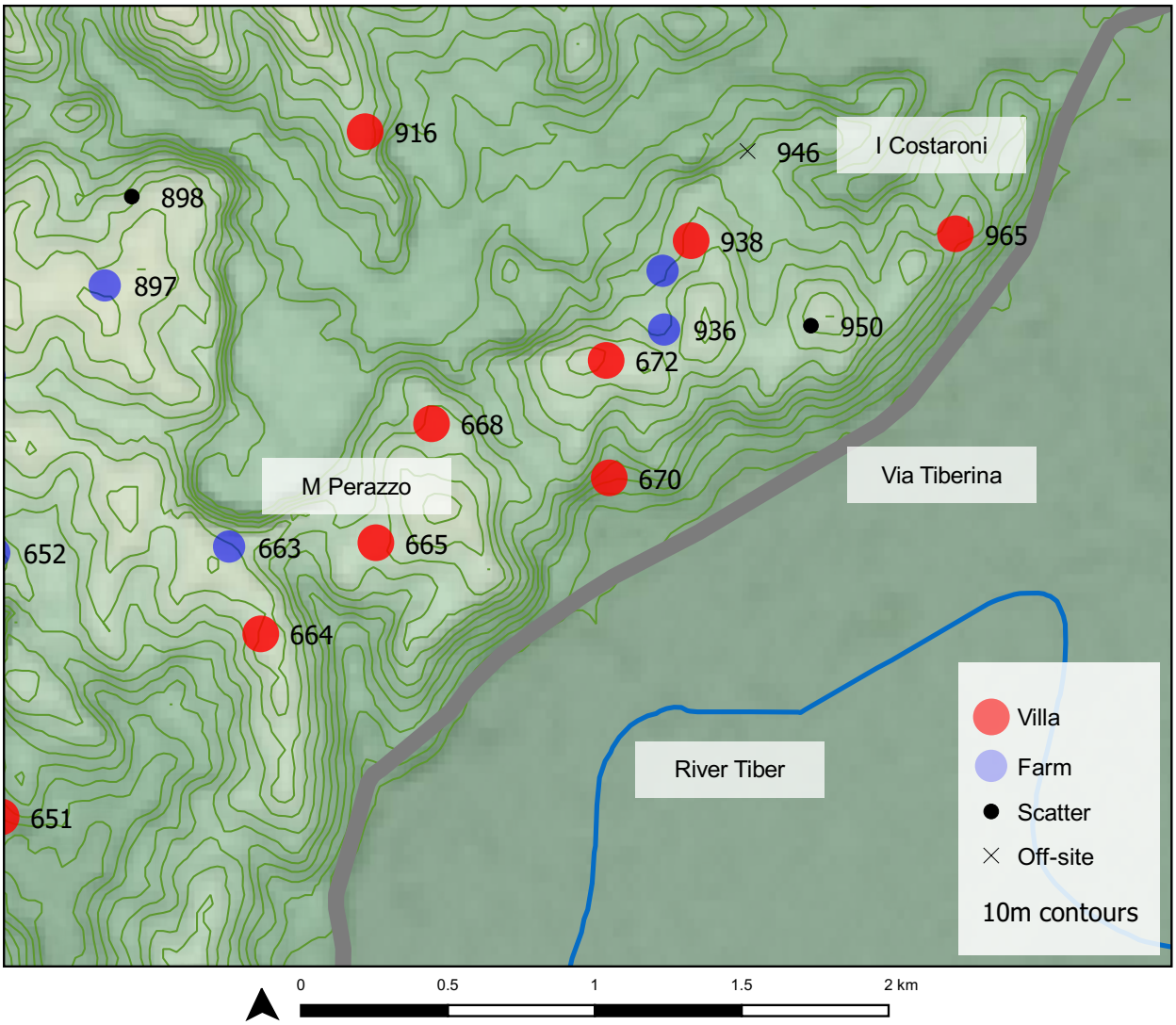


Figure 4.20. Early imperial-period sites at I Costaroni and Monte Perazzo, in the eastern Ager Veientanus (50 BC–AD 100).

by long-established sites; here the main change was in the scale and luxury of individual villas; the second area demonstrates a more profound break with the Archaic past, leaving one area (of approximately 2 km^2) devoid of settlement for several centuries. The early imperial-period sites that reoccupied this area were a mixture of farms and villas, and the latter never reached the size and complexity of the villas that had developed from pre-existing sites in the first area.

Further north from the Eastern Ager Veientanus Survey area, and to the west of the Via Flaminia is an area of around 20 km^2 on Monte Caminetto between the rivers Canneto and Mole (Figure 4.22). This area has a notable concentration of villas (7) compared to farms (2) and, perhaps significantly, there is very little evidence for preceding Republican settlement in this area.[674] There is no obvious reason why the survey should have failed to recover Republican material if it existed; indeed, the surveyors commented on the surprising lack of such material in this area, though not on its potential significance.[675] Assuming this absence reflects a genuine lack of activity, the early imperial-period settlement pattern, and the dominance of villas, is cast in a new light. Instead of the consolidation of existing settlement, with the addition of new sites, as found in most other parts of the middle Tiber valley, this area looks more as if it was subject to a systematic opening up of the landscape and the distribution of land between seven modest and similarly sized villas, without any interspersed and potentially dependent farms.

Finally, one example of localized or micro-patterning that was flagged up by the South Etruria surveyors now looks less convincing. It was suggested that the results from the survey at Grottarossa pointed to an unusual reduction in the numbers of sites between the

[674] Witcher 2008c.

[675] Kahane, Murray-Threipland and Ward-Perkins 1968: 127.

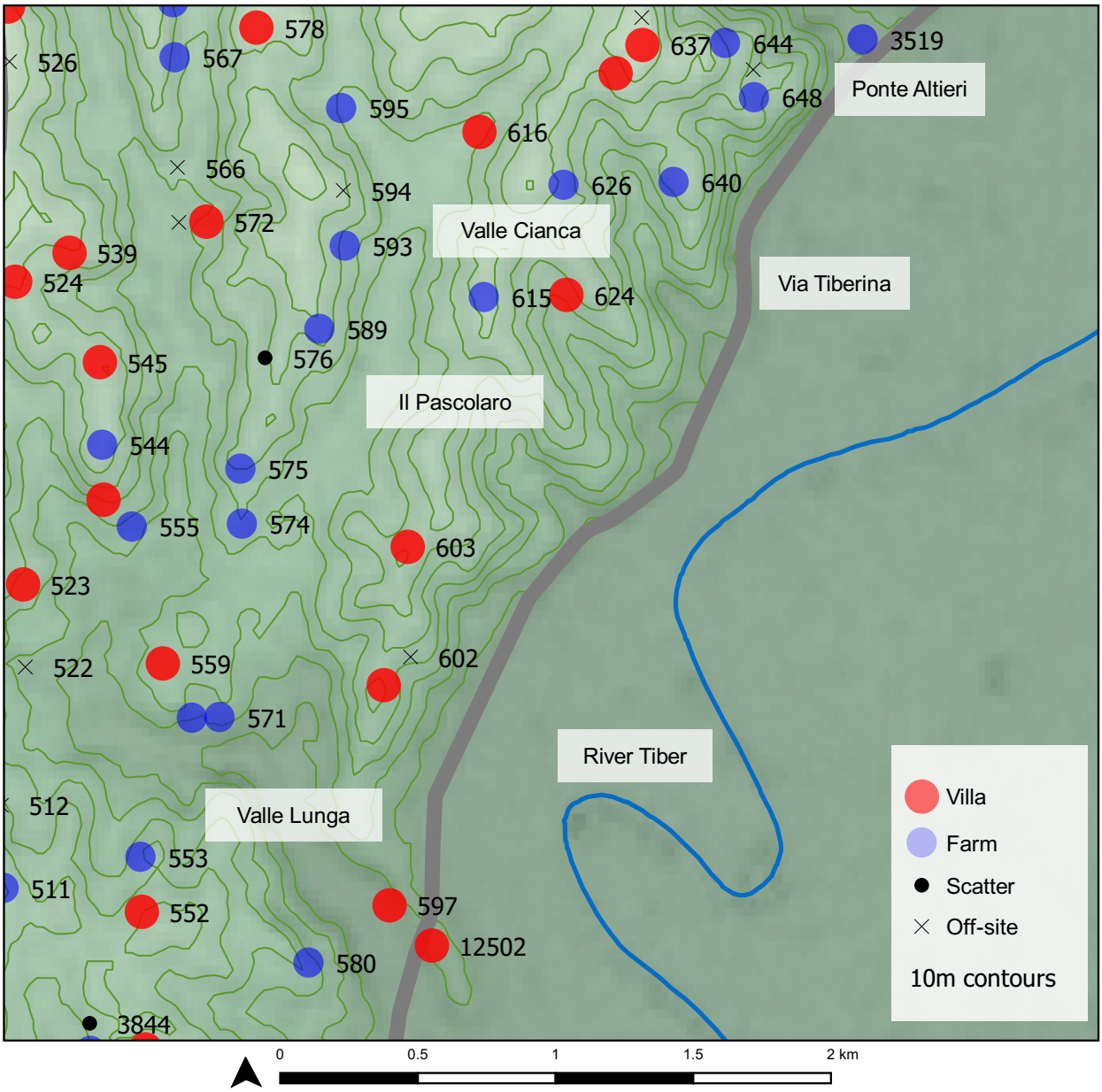


Figure 4.21. Early imperial-period sites in the area between Valle Lunga via Il Pascolaro to Valle Ciaca and Ponte Altieri, in the eastern Ager Veientanus (50 BC–AD 100).

Republican and imperial periods and that this might reflect a process of estate agglomeration, with smaller farms absorbed into larger estates. The Grottarossa Survey of the area stretching between Veii and the Tiber, bounded by the Crescenza and Valchetta rivers was never published, but a preliminary interpretation of the results mentioned by Barri Jones in one of the Ager Capenas reports, has been repeated by a number of other scholars.[676] The restudy of the material collected by this survey, and redating of the sites, however, clearly documents that here, as across the middle Tiber valley as a whole, there was an *increase* in the numbers of sites between the late Republican and early imperial periods. Indeed, the Grottarossa area was particularly densely settled in the early imperial period (Figure 4.23). The concentration of land into fewer hands did not necessarily involve the building up of contiguous estates that were then worked from fewer, larger estate centres—especially if rented to tenants (section 4.6). Arguably, the early imperial landscape was not characterized by estate agglomeration but, on the contrary, by the fragmentation of large properties into smaller farms for rental.

[676] Jones 1963a: 146; followed by e.g. Garnsey 1979: n.73

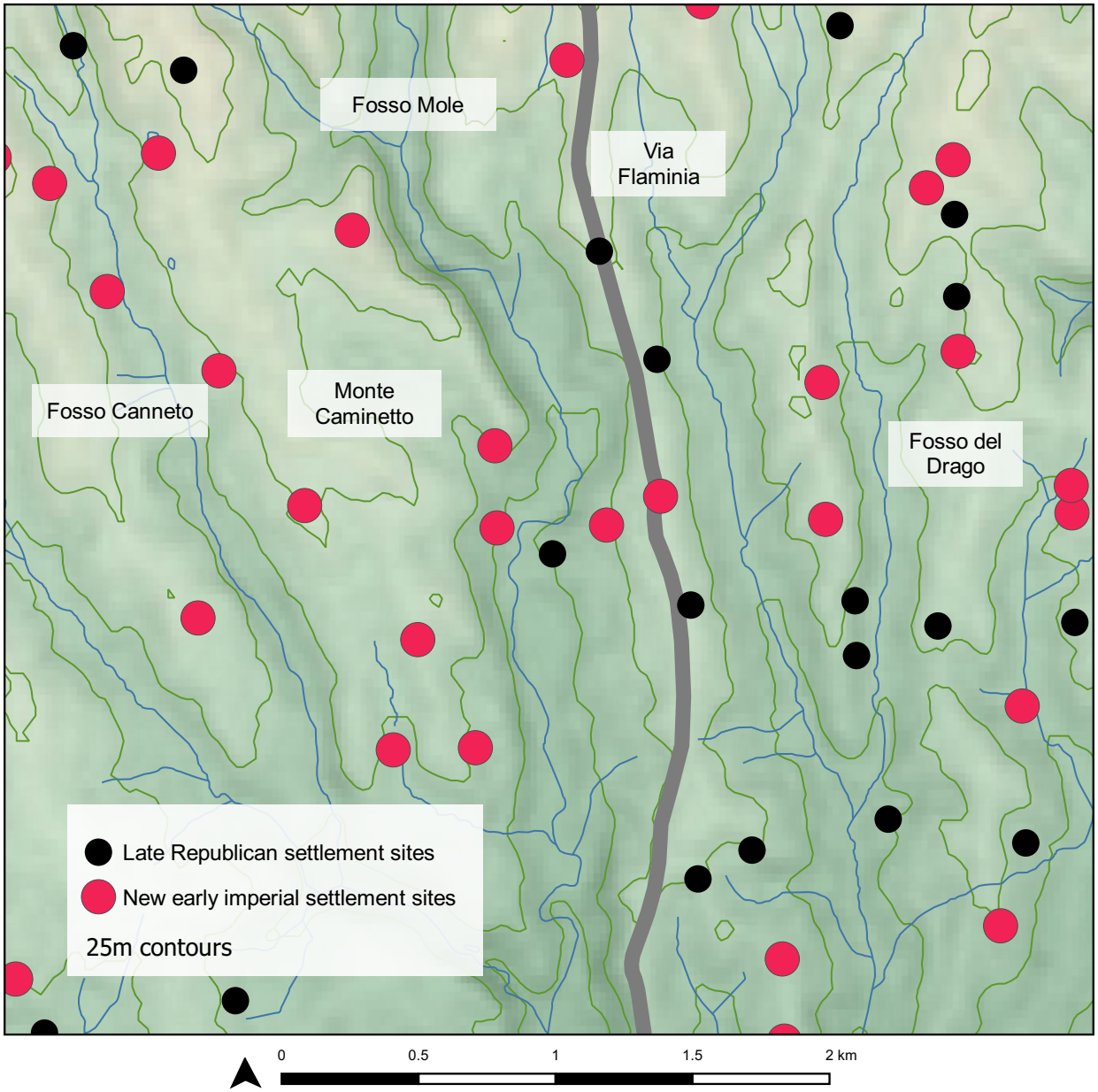


Figure 4.22. Early imperial-period sites around Monte Caminetto in the eastern Ager Veientanus, adjacent to the Via Flaminia, which was previously very thinly unoccupied (50 BC–AD 100).

4.5.5 Intra-regional comparisons

In contrast to micro-regional patterning, it is also useful to cast an eye on the wider picture, looking at how the middle Tiber valley compares with Roman Italy generally. To what extent do the trends and developments of this region reflect or differ from those documented across central and southern Italy during the imperial period? Across Etruria, it is clear that proximity to Rome had a significant effect on settlement patterns, with site numbers increasing notably in the middle Tiber valley and along the coast, but static or even falling across inland areas of northern Etruria.[677] To the south and east of Rome, similarly divergent settlement trends can be observed, broadly zoned into concentric bands: expanding close to Rome,[678] broadly static further away from Rome,[679] and declining significantly in southern Italy, for example, the Salento and around Metapontum.[680] Still other areas demonstrate overall stability of numbers but these aggregate figures disguise significant shifts in the locations of individual sites between late Republican and early imperial periods.[681] Within this broader

[677] Witcher 2006b.

[678] Antium: De Haas, Tol and Attema 2011.

[679] E.g. northern Campania, Rieti Basin, the Biferno valley, Arthur 1991; Coccia and Mattingly 1992; Barker, Hodges and Clark 1995.

[680] Burgers 1998; Carter and Prieto 2011.

[681] E.g. Liri valley, Hayes and Martini 1994; see J.R. Patterson 2006 for an overview identifying decline as the defining characteristic; cf. Launaro 2011.

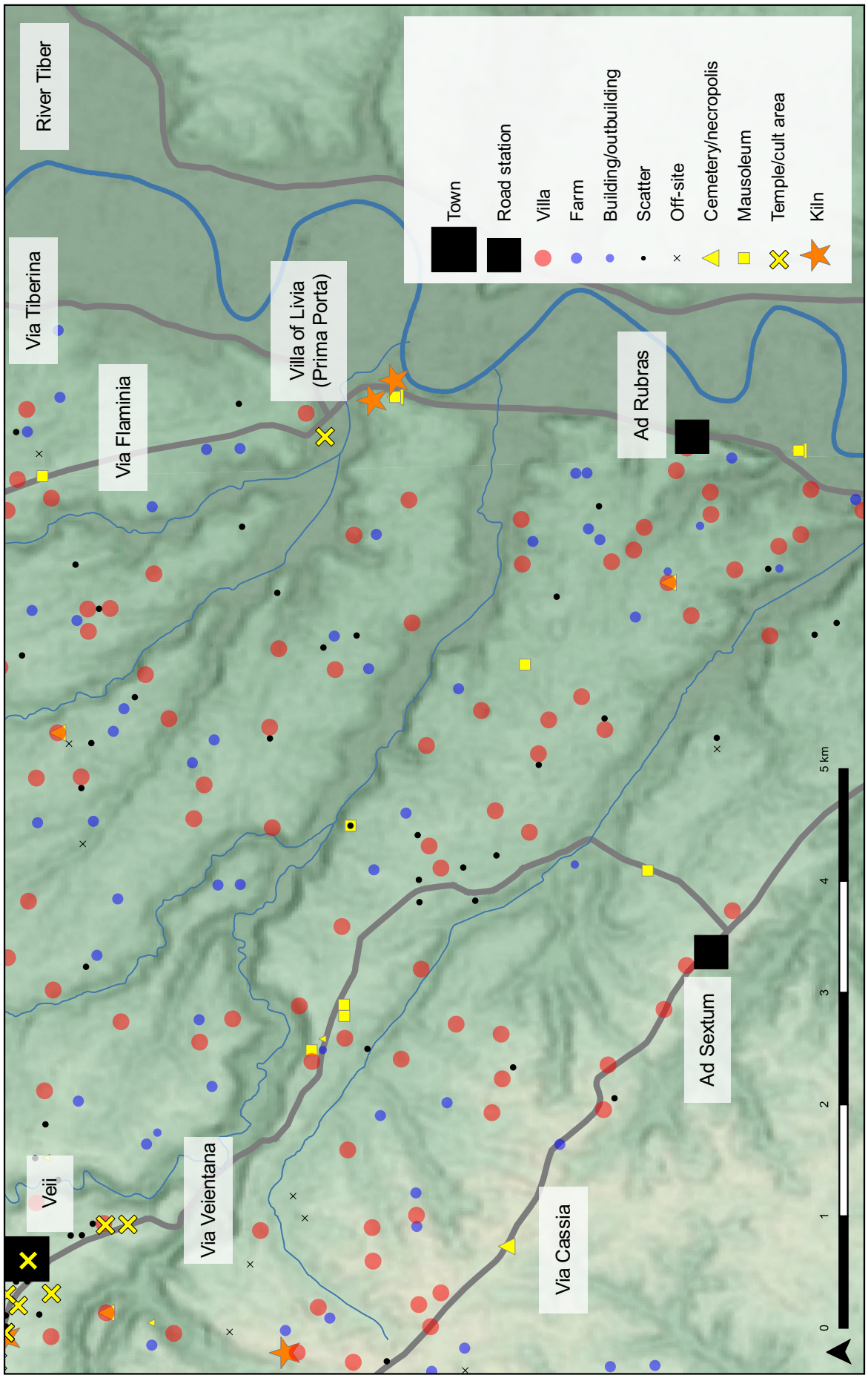


Figure 4.23. Early imperial-period sites in the Grottarossa and Via Veientana survey areas, between Veii and the Tiber (50 BC–AD 100).

perspective, a couple of observations can be made about rural settlement in early imperial-period Italy. First, the area around Rome is characterized by settlement expansion (especially the numbers of farm sites) and very high settlement density; in contrast, many other Italian regions are marked by static or falling settlement numbers. Second, sites in the immediate *suburbium*, including the middle Tiber valley, also had access to a much wider range of manufactured and imported goods (e.g. fine-wares, glass vessels, marble wall veneers) compared with most other rural Italian populations. The early imperial-period *suburbium* offered a distinctive type of life for its many and diverse inhabitants. It is these people who are the subject of the next section.

4.6 People in the landscape

The previous sections have focused on sites and settlement processes. The present section shifts attention to the inhabitants of these towns, villas and farms—both their numbers and identities—and considers the ways in which social relations were defined through the urban and rural landscapes of the early and mid-imperial periods. A key theme is mobility, both in terms of physical movement (migration) and social status. Much of this mobility focused on the city of Rome as a destination for migrants and as a means of social promotion.[682] Imperial-period towns became nodes in a 'network of career paths'—the lower classes into the *ordo*, the *decuriones* into the equestrian and senatorial classes.[683] Local municipal elites needed wealth and prestige, largely drawn from land ownership, in order to compete for local civic status and to demonstrate loyalty to the emperor through urban munificence. There was always a danger, however, that success at Rome—especially when a town lay within a short distance of the city—would distract the interest and resources of a town's elite away from their local communities. Broad civic participation was therefore vital to maintain local municipal vitality and to attract fresh blood into and up through the system. For example, economic and social viability was ensured by the adlection of free landowners and the sons of freedmen into a local *ordo* or the appointment of civic patrons from other cities. Alongside the local *ordo*, other parallel institutions grew in status and significance, such as various *collegia* and officials for the imperial cult, strengthening local civic infrastructure.

As well as social mobility, there is also both direct and circumstantial evidence for the significance of migration of individuals and families into the middle Tiber valley, and from the valley to Rome itself. Some of this movement was temporary, such as the seasonal migration of labourers between regions, most famously recorded in the context of Vespasian's great-grandfather, who as a contractor, organized the annual summer migration of Umbrian workers to the Sabina to assist with the harvest (Suet. *Vesp*. 1). Others, however, put down more permanent roots in the middle valley, including branches of wealthy Italian and provincial families documented epigraphically.[684] For example, Cn. Pullius Pollio, of a well-known family from the Brundisium area of southern Italy, may have arrived at Forum Clodii in the Augustan period (*CIL* XI 7553). But immigration is likely to have extended beyond those with the epigraphic habit. The significant rise in the number of rural sites during the imperial period is not easily explained as a simple process of local urban-rural migration or even sustained natural population growth of a few per cent per annum. Immigration is highly likely to have played a role here. The contrast between the rising rural settlement numbers in the middle Tiber valley and the static or declining numbers in other parts of Italy may even, for example, point to the migration of people between Italian regions.

Some of these migrants will have been passing through the middle Tiber valley *en route* to Rome itself,[685] temporarily based in suburban towns, but others will have stayed in the region in order to make lives as labourers, potters or builders. Others are likely to have been brought to the region as slaves. Such a growing population within a landscape of finite resources—and especially finite land—may explain the particular intensity of competition and social display in the *suburbium*, as well as the development of new socio-economic categories such as tenant (see section 4.6.2).

4.6.1 Population

In any pre-industrial agricultural society, population is a key resource. In the ancient world, actual or perceived reductions of population (*oliganthropia*) gave cause for concern. Not least, agricultural productivity was heavily dependent upon a healthy rural population to work the fields. It is therefore no surprise that a number of recent publications have sought to use regional survey data to reconstruct population figures across Italy and the ancient Mediterranean,[686] with particular attention to the imperial-period population in the *suburbium* of Rome.[687] There is a number of reasons why this particular time and place have proved attractive for demographic reconstruction: a wealth

[682] E.g. De Ligt and Tacoma 2016; Noy 2000.
[683] J.R. Patterson 2006: 188.
[684] Etruria, Papi 2000; Sabina, Sternini 2000.
[685] See Morley 1996 on step migration.
[686] E.g. Fentress 2009; Launaro 2011; Mattingly 2011; Wilson 2008a.
[687] E.g. De Haas, Tol and Attema 2011. The recent interest in the use of survey data from the *suburbium* for demographic reconstruction has a long history; Ashby 1902: 137 referred specifically to his intention to use his topographical work to establish 'relative density of population' and its variable distribution across the territory.

of field survey data documenting a highly dispersed settlement pattern, abundant and varied material culture with plenty of imported goods exchanged through a dense urban network, and good stratigraphic excavations allowing artefact types to be assigned to short chronological spans;[688] in short, for modelling ancient populations, the imperial-period *suburbium* is as good as it gets. There are, nonetheless, significant problems that must still be addressed. Indeed, some scholars are critical of any attempt to utilize survey data for such purposes.[689] Nonetheless, given the favourable conditions outlined above, and the centrality of the *suburbium* in such studies—and the South Etruria Survey data in particular—it is useful to review the evidence here.

First, some words of caution. The aim of demographic modelling is not to establish a precise and accurate figure for the number of individuals living within a defined region at a specific point in time. Archaeological data cannot be treated in the same way as historical census figures (and census figures themselves are the subject of disputed interpretations).[690] Modelling does not produce definitive answers, but instead aims to establish ball-park figures that can assist the interpretation of other archaeological evidence. Such models are particularly valuable because they demand assumptions are made explicit, allowing the coherence of arguments to be assessed. Most importantly, modelling is an iterative process. Models are the means not the outcome of research; they can, and must, be continually refined as new data become available.

Second, compared to other regions and other periods—including the Republican and late antique periods in the middle Tiber valley itself—the imperial-period settlement of this area presents one of the best opportunities for demographic reconstruction from any historical period or place in the western Mediterranean. But this is not to say that such a study of the imperial population of the middle Tiber valley is without problems. For example, this period might present a greater risk of double-counting caused by the increased mobility of people and the possibility that some individuals and families owned multiple properties, for example a townhouse and one (or more) country estates. Nonetheless, these concerns pale compared to the challenges for demographic reconstruction presented by the much less complete evidence for settlement of the pre- and post-imperial periods. In other words, the imperial-period data are not perfect, but if the method does not work for this period and place, it is unlikely to work anywhere else. Notably, the less abundant and lower visibility of Republican and late antique material culture means that it is unwise to extend this methodology, without modification, to these periods in order to reconstruct long-term population numbers.[691]

The most widely used method for reconstructing populations from Mediterranean survey data is to assign standard populations to different site types (e.g. five persons per farm) and to multiply these figures by the number of known sites.[692] But whereas some of these exercises have been able to draw on surveys based on systematic 20 per cent samples of the landscape (e.g. Albegna valley), a particular problem in the *suburbium* is that the database comprises a collection of diverse legacy surveys—none based on systematic random transect samples—conducted over more than a century. Consequently coverage across the middle Tiber valley is very uneven, with some areas repeatedly and/or intensively surveyed, other areas subject to little or no systematic survey,[693] and others which are not conducive to surface survey at all (section 2.2.3).[694] Moreover, where areas have been subject to more intensive repeat survey, the results indicate that earlier surveys may have missed significant numbers of sites, in some cases even large villa sites.[695] Such results are even more significant because it is likely that decades of ploughing have significantly depleted the numbers of surface scatters.[696]

All of these issues complicate attempts to model population by using the total number of known sites identified in the middle Tiber valley. Multiplying these figures by standard populations is likely to underestimate population significantly. Whilst these issues are a problem for demographic modelling generally, they are particularly so for the middle Tiber valley study area because of the necessary reliance on multiple legacy datasets.[697] To address the unevenness of survey coverage in the *suburbium*, a previous published study using survey data to model the population of the *suburbium* as a whole modified the widely used methodology by estimating and extrapolating standard site densities per square kilometre on the basis of an evaluation of the available evidence, with particular emphasis placed on the results of surveys of higher intensity. These figures were then multiplied by standard populations (e.g. 25 per villa) to establish the total rural population. Urban populations were calculated similarly by categorising towns as large

688 Witcher 2005.
689 E.g. Scheidel 2008, with response by Witcher 2008a.
690 Launaro 2011; De Ligt 2012; Hin 2013.
691 See Witcher 2011 for discussion of the implications.
692 See for example Fentress 2009.
693 E.g. wooded or grassed areas.
694 It is worth noting the possibilities of LiDAR survey in such landscapes, e.g. Cifani, Opitz and Stoddart 2007.
695 E.g. Di Giuseppe *et al.* 2002; Patterson, Di Giuseppe and Witcher 2004b.
696 For an example see King 1993 on Campagnano di Roma.
697 Launaro 2011 circumvents this issue by using a single survey per region, assuming each to be representative.

or small (as precise spatial extents are not always available) and assigning standard populations. In total, the population of the *suburbium* (defined as <50 km from Rome) was calculated as approximately 325,000 (the equivalent of some 60 persons/km^2) with an additional 385,000 for the wider *suburbium* (the area between 50 and 100 km from Rome; the equivalent of 42 persons/km^2).[698]

These earlier calculations were intended to establish orders of magnitude and to provide a basis for assessing the scale of economic activity and the relationship between urban and rural populations. Notably, the calculated figure of around 60 persons/km^2, was double the previous highest estimate of the suburban population, and six times higher than Beloch's estimate which reflected nineteenth-century ideas about the thinly populated and unproductive Roman Campagna.[699] The calculated total figure of several hundred thousand has been subsequently accepted by a number of scholars.[700] Combined with the population of the city of Rome (approximately 0.7 to 1 m)—a total of 1 to 1.3 million people lived either at or within 50 km of Rome, representing 14 to 18.5 per cent of an Italian population of 7 million concentrated in just 5 per cent of the peninsula.[701] There is certainly some possibility of double-counting, for example, senators and other wealthy individuals based at Rome owning one or more suburban properties. It is unlikely, however, that any such double counting concerns more than a small social group and that villas are unlikely to have been left completely vacant between visits (i.e. a *vilicus* plus domestic staff and labourers were still present even if the owner was not). Regardless, even if estimates of numbers of inhabitants per site were revised moderately down, the densities still well exceed those of more recent historical periods.[702] Such high levels of population have implications for understanding the relationship between metropolis and hinterland in terms of issues such as political power, social organization, and the production, exchange and consumption of material culture.

The middle Tiber valley study area considered here forms only part of Rome's *suburbium* as considered in the previous demographic modelling work. The Tiber Valley Project data therefore offer the opportunity to examine the northern hinterland of Rome in greater detail and to refine further the methodology developed elsewhere.[703] It is important also to note that the Tiber Valley Project study area extends across the boundary of the two broad zones—less than and more than 50 km from Rome—used in the previous study and the results are therefore not directly comparable. The current survey area covers approximately 3500 km^2, of which around 500 km^2 is unsuited to settlement (lakes, high mountains, etc.). The following discussion begins at the top of the settlement hierarchy and works down to the smaller rural sites.

In the previous study, towns were categorized as large or small and assigned populations of 5000 and 1500 respectively, somewhat less than the widely cited average Italian figure estimated by Brunt (approximately 7800), on the basis that urban centres in the *suburbium* are generally smaller than in areas such as Umbria and northern Italy.[704] Certainly, the towns of the middle Tiber valley are smaller than many of those to the south and east of Rome such as Praeneste and Antium and lower estimates are therefore appropriate.[705] Recent fieldwork conducted by Simon Keay, Martin Millett and colleagues as part of the Roman Towns Project has established for the first time or redefined the extent of some of these urban centres and offered estimates of their populations. Table 4.5 provides details of the size of urban centres in hectares and the calculated populations based on an average density of 110 persons per hectare; this gives the six largest towns of the middle Tiber valley an average population of 2000 inhabitants, less than half the figures used in the previous study. The populations of the smaller towns and road stations are much less easy to estimate, as the physical extent of several centres remains unclear and some may been quite dispersed. The average population for small towns is therefore revised down compared with the previous study, from 1500 to 700 and for road stations from 200 to 100. These were small urban centres by any standard, though it is important to bear in mind that some, possibly the majority, of their citizens were likely to have been based in the surrounding territories.

698 Witcher 2005.

699 Blanton 2004: Appendix 1; Beloch 1886: 402–3.

700 E.g. Dyson 2010: 327.

701 Another reason for recent interest in the use of survey data for demographic modelling relates to the intractable debate based on historical census figures about whether the population of Augustan Italy was 7 million (low) or 14 million (high). This debate lies beyond the remit of the current chapter, but the *suburbium* and the South Etruria Survey data, are of central relevance. For general discussion see papers in De Ligt and Northwood 2008, especially Scheidel 2008, as well as Launaro 2011 and Hin 2013. De Ligt 2012 provides dedicated consideration of the *suburbium*, including the middle Tiber valley, drawing on Witcher 2005; 2006a and 2008a. See also Witcher 2011.

702 Lo Cascio and Malanima 2005.

703 Witcher 2005, 2008a, 2011.

704 Brunt 1971; Witcher 2005; see also De Ligt 2012; Hanson 2016. The urban popularions used here are somewhat lower than those implied in Hanson and Ortman 2017; see also Chapter 8.

705 The division between large and small towns, and road stations, is necessarily arbitrary (on site classification in general, see Witcher 2012). There may be grounds for promoting 'small' towns such as Nepet and relegating 'large' towns such as Veii. In aggregate, however, such adjustments should not significantly affect the overall figures due to the very high rural population. Similar questions of classification relate to sites such as Seperna and Villa Domiziana, but these do not impact of the overall distribution of population.

Table 4.5. Size (ha) and estimated populations of towns and road stations in the middle Tiber valley.

Larger towns	**Size (ha)**	**Population**	**Density per km2**
Falerii Novi	31	3100	100
Lucus Feroniae	25	2500	100
Veii	20	2000	100
Ocriculum	14	1680	120
Nepet	12	1440	120
Nomentum	12	1440	120
Average	**19**	**2000**	**110**
Small towns			
Horta	8	960	120
Sutrium	7	840	120
Capena	6	720	120
Cures Sabini	6	720	120
Forum Novum	4	240	60
Trebula Mutuesca	?	?	?
Forum Clodii	?	?	?
Average	**~6**	**~700**	**~100**
Careiae	5		
Ad Baccanas	2		
Aquaviva	2		
Castellum Amerinum	2		
Ad Nonas	?		
Ad Sextum	?		
Ad Vicesimum	?		
Forum Cassii	?		
Vicus Matrini	?		
Vicus Novus	?		
Average	**0–5**	**~100**	

Villages or *vici* in Roman Italy have only recently begun to receive fuller attention and it is possible, even probable, that this type of site has been neglected in the middle Tiber valley. The South Etruria surveyors did not recognize this category of site but arguably some of the dense clusters of farms and villas might be better interpreted as villages, for example, in the vicinity of Monte Aguzzo (though replacing several small farms with a village would have limited implications in demographic terms). Similarly, as discussed in section 4.4.3, it is possible that there are minor nucleated centres hidden beneath medieval and modern towns.[706]

From the perspective of demographic reconstruction, however, this issue is less significant; allowing for one hypothetical village of 100 inhabitants per 100 km^2 would give 30 villages and a total population of 3000 across the study area, a figure dwarfed by the probable populations of other site types.

By far the most numerous site types are farms and villas. These are also the site types that are most likely to have been incompletely and unevenly mapped by different surveys.[707] The standard population estimates for the villas used here are slightly lower than previous estimates on the basis that villas in the northern half of the *suburbium* are, on the whole, more modest than those to the south of Rome (hence reduced from 25 to 20); farm populations remain at eight per site.[708] It is likely that the recovery rates of farms and villas varied across the individual South Etruria Surveys, being higher in areas subject to sustained attention and lower in areas of more peripheral interest. The issue of completeness was not directly addressed by Ward-Perkins; he was certainly aware that sites could be concealed from survey by any number of issues though Jones was the only South Etruria Surveyor to hazard an actual figure, suggesting a recovery rate 'as low as 66%' in the Ager Capenas, but noting that the recovery conditions in this area were not as good as in the Ager Veientanus.[709] Resurvey work demonstrates that recovery rates vary by period, but that even for easy-to-spot imperial-period sites, 66 per cent or higher is likely to be an overestimate. Resurvey near Cures Sabini, for example, was able to double the number of early imperial-period sites previously documented by the Forma Italiae survey.[710] Although such resurvey work inevitably covers much smaller areas than the original surveys, extrapolating these results gives a standard settlement density per square kilometre of one villa and two farms.[711] As discussion in the previous section (4.5.4) has made clear, there was great variability in settlement patterns and numbers across the middle Tiber valley, and two farms and one villa per square kilometre is likely to be an underestimate for areas closer to Rome and the Tiber, and an overestimate for more distant territories. The figure is intended as an average.

The resulting model of calculated population density is 38 persons per square kilometre, rather lower than the 60 persons per square kilometre from the previous study (Table 4.6; Figure 4.24). This partly is a result of

[706] Cambi 2004.

[707] Witcher 2011.

[708] Witcher 2005.

[709] Jones 1962.

[710] Compare Muzzioli 1980 and Di Giuseppe *et al.* 2002; for further discussion of recovery rates, see section 2.2.3

[711] cf. Potter 1979: 123 comment based on the original South Etruria Survey results of the 'considerable density of rich villas—one for every two square kilometres'.

Table 4.6. Population estimates for the early imperial period (50 BC–AD 100) in the middle Tiber valley.

	Farm	Villa	Village	Road station	Small town	Large town	Total	Density km2
Est. no. of sites	6000	3000	30	10	7	6	9053	3
Min. pop. per site	5	15	50	50	500	1000		
Min pop. total	30000	45000	1500	500	3500	6000	86500	29
Max. pop. per site	15	50	200	250	1500	5000		
Max. pop. total	90000	150000	6000	2500	10500	30000	289000	96
MTV pop. est. per site	**8**	**15**	**100**	**100**	**700**	**2000**		
MTV pop. total	**48000**	**45000**	**3000**	**1000**	**4900**	**12000**	**113900**	**38**

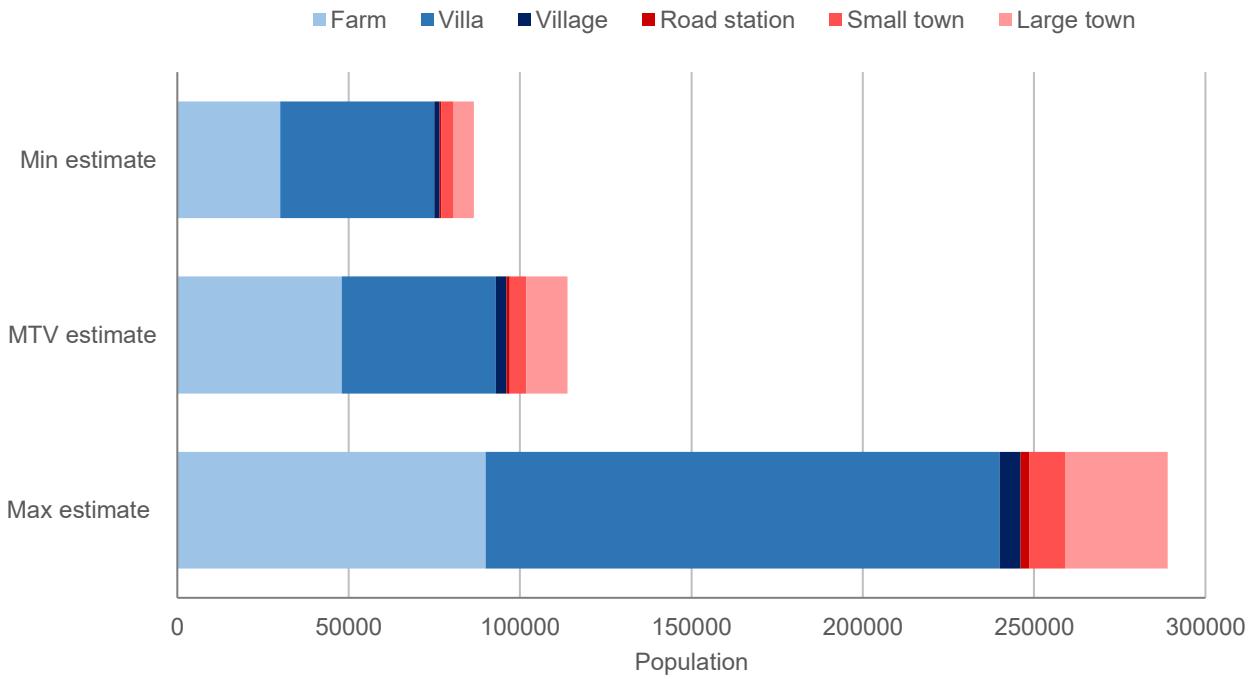


Figure 4.24. Early imperial-period population estimates for the middle Tiber Valley.

lowering villa populations, but mostly a reflection of smaller numbers of people at towns and road stations, for which much better estimates of size are now available, and, in particular, the influence of the large site of Ostia (with an estimated population of 30,000) on the calculated total for the wider *suburbium*. The figure for the middle Tiber valley, nonetheless, remains high by comparison with other contemporaneous Italian landscapes. The urbanization rate (i.e. the percentage of the population based in road stations and towns) is approximately 16 per cent, again, somewhat lower than the wider *suburbium* figure of 21 per cent (or 30 per cent if Ostia is included), though in both cases it should be recalled that these figures omit the population of Rome itself. The population density of the middle Tiber valley was therefore lower than that to the immediate south and east of the city, and the population was less urbanized overall. The region and its large population were, nonetheless, integral to the social, economic and political structures of the Rome.[712]

4.6.2 Status and identity

It has been argued above that there was substantial immigration into the middle Tiber valley during the early and mid-imperial periods. This included army veterans as colonists, imperial freedmen, and wealthy families from other parts of Italy (e.g. the *Herennii* from

[712] On the 'extended metropolis', Witcher 2005.

Picenum to Veii) and people from provinces all around the Mediterranean. The identity of some of these groups is relatively easy to trace via their epigraphic signatures,[713] what about the wider population? The demographic estimates above indicate how many people might have lived in the middle Tiber valley, but who were they? Is it possible to go beyond counting and to differentiate the social and/or economic status of these rural populations? As with the process of quantification discussed above, caution is needed, but the exercise demands consideration, firstly because the variety of site types, from palatial villa complexes to single-room farmhouses suggests people of diverse status lived in Rome's northern hinterland and, secondly, because a number of scholars have attempted to infer such status from the archaeological evidence. Critics of field survey have long stressed the method's inability to identify the social status of inhabitants of individual sites. Of course, survey was never designed to address such questions, so the accusation is baseless. Archaeologists, however, may have underestimated their ability to use survey data to attend to issues of social identity at a regional scale.[714]

The key trend in this regard is the significant increase in the number of small sites during the early imperial period. Potter, for example, suggested that changes in the numbers and distributions of sites identified by the South Etruria Survey may relate to historically attested settlement schemes; de Ligt makes the more explicit assumption that rising early imperial settlement numbers in South Etruria can be interpreted as the result of Triumviral and Augustan veteran settlements.[715] There are, however, issues with such an interpretation. First, looking across Italy more widely, there is no consistent correlation between areas of historically attested colonization and increased site numbers.[716] Moreover, whereas the trend toward increased settlement numbers is almost universal around the early imperial-period *suburbium*, veteran settlement was certainly not—that is, we cannot use specific settlement schemes to explain a general increase in site numbers. Specific historical events do not explain the general increase in site numbers in this area.

Second, army veterans are unlikely to have consistently and rapidly established large farms or villas found around the middle Tiber valley. There has been long debate about whether or not veterans were likely to succeed as farmers; some clearly did and others did not. In the context of the middle Tiber valley, however, the evidence of the Monte Forco farmstead is potentially significant. Keppie, who takes a positive view of the 'veteran as agriculturalist', argues that a land grant of 25 *iugera* was ample to sustain a family. But if we accept the interpretation of Monte Forco as a veteran farm with an estate of no more than 10 *iugera* the debate looks different.[717] Such an estate would barely feed a small family, and certainly not allow any significant surplus for market with which to accumulate significant wealth. The redistribution of land to veterans may have created new landowners, but in many cases they were simply replacing existing populations; in other words, such schemes need not have led to an increase in overall settlement and population. Crucially, most veterans' wealth was tied to a small plot of land. With the political importance of land ownership more or less eclipsed by the end of the Republic (in terms of military service and political enfranchisement), the temptation to release the capital by selling the plot on the buoyant property market must have been strong. In sum, there is a number of reasons for caution about correlating the general increase in early imperial-period site numbers with historically attested veteran settlement—some sites might be explained in this way, but not all.

How else might increasing settlement numbers be explained? One possibility is partible inheritance, with families dividing estates and descendants founding new (neighbouring) farms.[718] Such inheritance practices could explain some fragmentation of smallholder properties, but the average distance between farms argues against this explanation—at least for those sites that are archaeologically visible. It is also worth recalling that partition on inheritance could also be countered by access to land via marriage, that is, the (re)creation of larger estates as a counter force.

Nagle offers another possible approach to relate settlement patterns to social and economic organization, building on a comparison of the different historical trajectories of Veii and Eretum and their surrounding territories.[719] By the imperial period, Strabo (5.3.1) indicates that Eretum had been reduced to little more than a village, a characterization that fits with the limited material of early imperial date known from the site. Nagle argues that the contrast between the vibrant early imperial-period centre of Veii and 'non-centre' at Eretum may reflect a fundamental difference in the social status of the rural populations in the surrounding territories. Whilst civic benefaction and epigraphic commemoration at Veii suggests elite competition aimed at an audience of free citizens (i.e.

[713] Papi 2000.
[714] Witcher 2006b.
[715] Potter 1979: 17; De Ligt 2007; Dyson 1992: 92; di Gennaro *et al.* 2004: 148; Mills and Rajala 2011: 153. Interestingly, both Kahane, Murray-Threipland and Ward-Perkins 1968: 148 and Liverani 1984: n.10 link the evidence of the unpublished Grottarossa survey to a planned settlement scheme.
[716] Pelgrom 2008.
[717] Keppie 1983; Jones 1963a: 147; see also Chapter 3.3.3.
[718] Rosenstein 2004: 168.
[719] Nagle 1979: 434–5.

seeking political support), the corresponding absence of activity at Eretum may reflect the lack of a viable or significant class of free citizens—possibly a landscape dominated by slave estates. With no prestige or political clients to be gained by local public display, there was no need to act as patrons to the old urban centre.[720] Such an interpretation would complement the broader notion of Roman towns as primarily political and symbolic, with important but secondary economic significance. Nagle's model is attractive and may be further supported by the observation that there are significant differences in not only the ratios of villas to farms, but also the overall settlement densities (which are lower in the Ager Eretanus).

Scholars have long stressed the concentration of property ownership into ever fewer hands during the imperial period, including the possessions of the emperor himself (*res Caesaris*).[721] This is often connected with a shift from smallholder farms to elite villas, with peasants pushed from the land, and their estates absorbed into larger estates. The widely cited archaeological example of this process has been the Grottarossa Survey, though as discussed above (section 4.5.4), the Tiber Valley Project restudy no longer supports this interpretation. Instead, the results from Grottarossa, and from the middle Tiber valley as a whole, not only support the idea of small farm sites successfully holding out against elite monopolization of land but also their ability to access new land to boot. Indeed, there seems to be a paradox: just as land prices were increasing and the pressures on land were greater than ever before, there was an increase in the numbers of *small* sites. How did the inhabitants of these modest settlements manage not only to hang onto their *existing* land, when demand was soaring due to rising population, let alone gain access to *more* land?

The results of a GIS study of agricultural production in part of the Ager Veientanus further adds to this apparent paradox: it suggests that the small farms that were newly founded during the early imperial period were not pushed on to marginal land by big landowners but rather were located on *better* agricultural land than newly founded villas.[722] All of this is a long way from the traditional narrative, derived from the literary texts, of greedy landowners forcing noble peasants from their ancestral farms. It is, however, unlikely that independent smallholders were successfully holding their own. One explanation for this situation is the large-scale transformation of peasants into tenants. The persistence and growth in numbers of small farmers during the imperial period suggests a substantial shift in the balance of land and labour. Put simply, more people were competing for access to a fixed amount of land (most areas having long been settled by this date). This situation allowed large estate owners to demand rent from small farmers in exchange for access to land for farming.[723] The resulting tenants were more integrated into markets, directly or via their landlords, producing greater surplus to cover their rent. Successful tenants may have benefited from the patronage of their landlord,[724] joining the upwardly mobile as a middling class, competing for status with metropolitan styles of consumption (see section 4.8).

Such an interpretation differs from that advanced by Potter;[725] he envisaged the increase in imperial-period settlement numbers, and richer material culture, as evidence for the long-term social and economic advancement of independent smallholders descended from, and working the original allotments of, Roman colonists. In contrast, the tenancy model outlined above suggests that the spread of small farms resulted from the conversion of independent smallholders into dependent labour. Far from retaining a modest ancestral property and using it to accumulate wealth across several generations (Potter's interpretation), this model argues that elites exploited the growing imbalance of land and labour to extract rent, reducing independent smallholders to tenants. Such a model need not apply in every part of the middle Tiber alley; indeed, it is likely that the specific micro-patterning in each locality might reflect different social and economic developments (see discussion of Nagle above). But, as an overarching explanation for the increase in the numbers of small rural sites during the early imperial period, the model offers a clear alternative to the tenacious and enterprising smallholder model advanced by the South Etruria surveyors. The imperial-period landscape was not simply an intensification of what had gone before, noble peasants working generation after generation to improve their families' social and economic lot; the early imperial-period landscape was not the same as the Republican landscape with more sites and greater luxury. Rather, the settlement evidence for the early imperial-period landscape suggests a more radical shift in demographic base and in the social and economic status of its inhabitants. In particular, a new middling class of tenant farmers may have emerged—able to pay rent to farm and, if successful, willing to participate in the new social and cultural world around them. Underlying these shifts in social status therefore was competition for, and control of, economic resources, especially land. The next section turns to the exploitation of these landscape resources.

[720] See also Brunt 1971: 353.
[721] Maiuro 2012.
[722] Goodchild and Witcher 2009: 215.
[723] Witcher 2006b.
[724] Garnsey and Woolf 1989.
[725] Potter 1979: 134.

4.7 A landscape of resources

In recent years, archaeological evidence has been instrumental in the deconstruction of the notion of the 'consumer city': the idea that towns existed parasitically on their surrounding territories.[726] There is now clear evidence that urban centres across Italy played a significant role in the manufacture of ceramic, textile, leather and metal products. The evidence for such activities at the urban sites of the middle Tiber valley is, however, limited, perhaps reflecting an excavation bias towards monumental structures rather than suburban production areas. There certainly are indications of urban production, such as possible metalworking at Castellum Amerinum,[727] but the evidence for manufacturing in the imperial period currently comes overwhelmingly from rural locations. This section reviews the evidence for a range of such economic activities, from the extraction of raw materials and processing to the manufacture of goods. It starts, however, with the evidence for the basic production activity of any pre-industrial society: agriculture.

4.7.1. Agricultural production

The Roman Campagna was long thought to have been an unproductive wasteland.[728] The desolate uncultivated landscapes depicted by eighteenth- and nineteenth-century artists was projected back to the Roman period leading to the idea that ancient Rome was an urban island in an otherwise very thinly occupied region, its needs supplied by overseas provinces, not the fields of the *suburbium*. The dense distribution of Roman settlement documented by archaeologists during the twentieth century completely transformed this picture: the landscapes of Etruria and Latium were, in fact, densely occupied with sites of every size and status. The South Etruria surveyors recognized the significance of this evidence in relation to the massive demand for agricultural and other produce at Rome, though they did not put great emphasis on this supply role.[729] Potter's 1979 synthesis similarly acknowledged the production and export of agricultural surplus to Rome, though its significance to his narrative was limited; he suggested the only other export was *selce* blocks for paving; brick and pottery production, he believed, was intended for local consumption only. In contrast, at about the same time that Potter was writing, Marxist scholars were developing an approach to villa archaeology that drew on the emerging results from the excavations at Settefinestre and survey of the Ager Cosanus on the coast of Etruria. Celuzza and Regoli integrated these results with those of the South Etruria Survey to advance a model of socio-economic organization in the Ager Veientanus, arguing that the southern part was dominated by 'classic' slave estates of around 300 *iugera* centred on villas, whilst the northern areas were rented out to tenant farmers.[730]

In the 1990s, Morley collated and synthesized the evidence for the effects of Roman market demand on the *suburbium* using a range of economic models to consider the relationship between demand, transport costs, distance from market, and prices.[731] Metropolis and hinterland were now firmly locked together in a demand-supply relationship, producing a full range of agricultural and manufactured products for the Rome market. Subsequently a greater emphasis on the economic aspects of Rome's relationship with its hinterland has become the dominant interpretative framework,[732] and it is particularly pertinent to the imperial period in terms of the scale and range of demand by the Rome market and its effects on agricultural production in the hinterland. Importantly, demand did not simply increase, growing proportionately with the city's population, but also changed in character as provincial supplies of staple foodstuffs permitted some suburban producers to specialize.

One of the strengths of Morley's approach is consideration of the mechanisms through which urban demand and rural supply were connected, for example, demand had to be significant and reliable enough for some farmers to risk changing their inherently risk-averse behaviour.[733] But alongside these formal models of demand and supply, it is important to remember the many other social and cultural processes in play. For example, just as economic demand on land for agricultural production was increasing, so too other non-productive pressures on the use of land were increasing, for example, the general switch from cremation to inhumation and enhanced investment in funerary commemoration required more space, often in areas well located for production (e.g. along roads, close to Rome, etc.). Residential villas also expanded in size at this time, privileging display over production, best evidenced at Centocelle, in the south-eastern suburbs of Rome, where excavation clearly shows imperial-period villa complexes encroaching over Republican-period vineyards;[734] even though market demand from early imperial Rome must have been higher than ever, at Centocelle land was taken out of cultivation and turned over to residential use. A reduction in agricultural output and an increase in the consumption of wealth suggests that social and economic priorities were changing. Such developments need not, however,

[726] Bowman and Wilson 2009.
[727] De Lucia Brolli and Suaria 2006: 137.
[728] See Dyson 2010.
[729] E.g. Kahane, Murray-Threipland and Ward-Perkins 1968: 151.
[730] Celuzza and Regoli 1982.
[731] Morley 1996.
[732] E.g. J.R. Patterson 2006: 63; De Sena 2005.
[733] Morley 1996: 59; explored further by Erdkamp 2005.
[734] Gioia and Volpe 2004; Volpe 2007.

be considered economically irrational. In particular, major investment in the security of Rome's provincial food supply infrastructure during the first and second centuries AD may have stabilized the regional grain market with the effect that producers could risk more specialized agriculture and manufacture with less extensive land requirements.[735] Equally, landowners with provincial estates (perhaps now more profitable due to improved supply networks) may have devoted more space on their suburban estates to 'non-productive' activities, using wealth from provincial estates to pay for architectural improvements and greater displays of consumption in proximity to Rome.

Archaeological studies of Roman agriculture are strongly conditioned by the nature of the surviving evidence; most obviously, the production and transportation of grain generates little archaeologically visible material culture compared to the infrastructure for the processing, storage and packaging needed for large-scale wine and olive oil production. The evidence from the middle Tiber valley is no different in this general regard, and in the absence of good archaeobotanical studies, little can be said directly and specifically about the cultivation of grain in the middle Tiber valley.[736]

The evidence for oil and wine production is more significant and presses are found in modest numbers across the study area (De Sena 2005 lists sites with presses across the *suburbium* as a whole). It should be noted, however, that few presses can be closely dated; nor is such equipment vital for the production of oil and wine, rather they are indicative of specialization of, and investment in, production. The South Etruria Survey identified a reasonable number of presses, though analysis is complicated by the lack of precision in the terminology applied to presses (for oil/wine) and querns/millstones (for grinding grain). The other key categories of evidence for oil and wine production are amphorae and amphora production sites. Amphorae were intended primarily for maritime rather than land transport; it is therefore only to be expected that local wine and oil production in the middle Tiber valley would not have been shipped to Rome using these heavy clay vessels and that, consequently, there is limited evidence for local amphora production in the middle Tiber valley. Arthur has suggested that the ring-footed Type P105 amphora (similar to the Ostia II) may have been produced at or near Mola di Monte Gelato[737] and a single misfired sherd has been tentatively used to suggest production at a villa (TVP-ID 02342) near Eretum[738] (the recent discovery of a possible Republican-period production site for Greco-Italic/Dr.1 amphorae at a villa site at S. Sebastiano near Magliano Sabina should also be noted).[739] The lack of amphora production, however, is all the more notable when compared to the significant number of kiln sites producing brick, tile and domestic pottery across the area (see section 4.7.2). The presence of amphorae on rural sites in the middle Tiber valley therefore provides good evidence for the importation of agricultural goods, but tells us little about the scale and organization of local production.

Wine and oil produced in the immediate territory of the city were presumably transported to market in skins and other perishable containers without the need for heavy amphorae intended for maritime shipping. The absence of a local amphora production industry therefore says nothing about the scale of wine and oil production in this area.[740] In contrast to the middle Tiber valley, however, there is good evidence for the production of amphorae in the upper valley in Umbria; for example, recent excavations at Montelabate, north of Perugia, has identified three kilns producing the so-called Spello-type amphora.[741] These distinctive flat-bottomed wine amphorae were intended for transport by river—the Tiber—and are found at Rome and Ostia, significantly increasing in quantity in the mid-imperial period.[742]

Vine trenches are another indicator of wine production; these were excavated to promote root growth and are well known from the descriptions of Cato (*Agr*. 1) and Columella (*Rust*. 3.12.6, 11.2.28). Examples are known from the middle Tiber valley at, for example, Santa Cornelia in the Ager Veientanus.[743] Extensive open-area excavation at Centocelle (see above), has identified multiple systems of parallel trenches of rectangular profile, approximately 85–90 cm wide, spaced around 10 m apart. In some areas, new trenches were cut at 90 degrees, presumably when the vineyards were replanted. The spacing between the trenches is wide (especially compared with Columella's recommendation of 4–10 feet (1.2–3 m), though he wrote some centuries later). This wide row-spacing points to intercultivation (It. *coltura promiscua*) with vines interspersed with other crops such as cereals or beans. This method of mixed cultivation diversifies the farmer's produce and reduces the risk associated with specialising in a single crop, though the overall returns are often reduced. Hence, these villas and farms may have specialized in producing wine (or even table grapes) for the market at Rome, but the farmers were arguably not maximising profit at the expense of basic self-sufficiency, despite their proximity to the Rome market. It is likely that only the most commercially orientated, capital-

[735] E.g. facilities at Portus, Keay *et al.* 2005; warehousing at Rome, Rickman 1971.
[736] For the potential, see Bowes *et al.* 2017; Heinrich 2017
[737] Potter and King 1999: 299–305.
[738] Patterson *et al.* 2003.
[739] Verga *et al.* 2015.
[740] De Sena 2005; Volpe 2007.
[741] Ceccarelli *et al.* 2016; Ceccarelli 2017 and see below Chapter 5.
[742] Panella 1989.
[743] Christie and Daniels 1991.

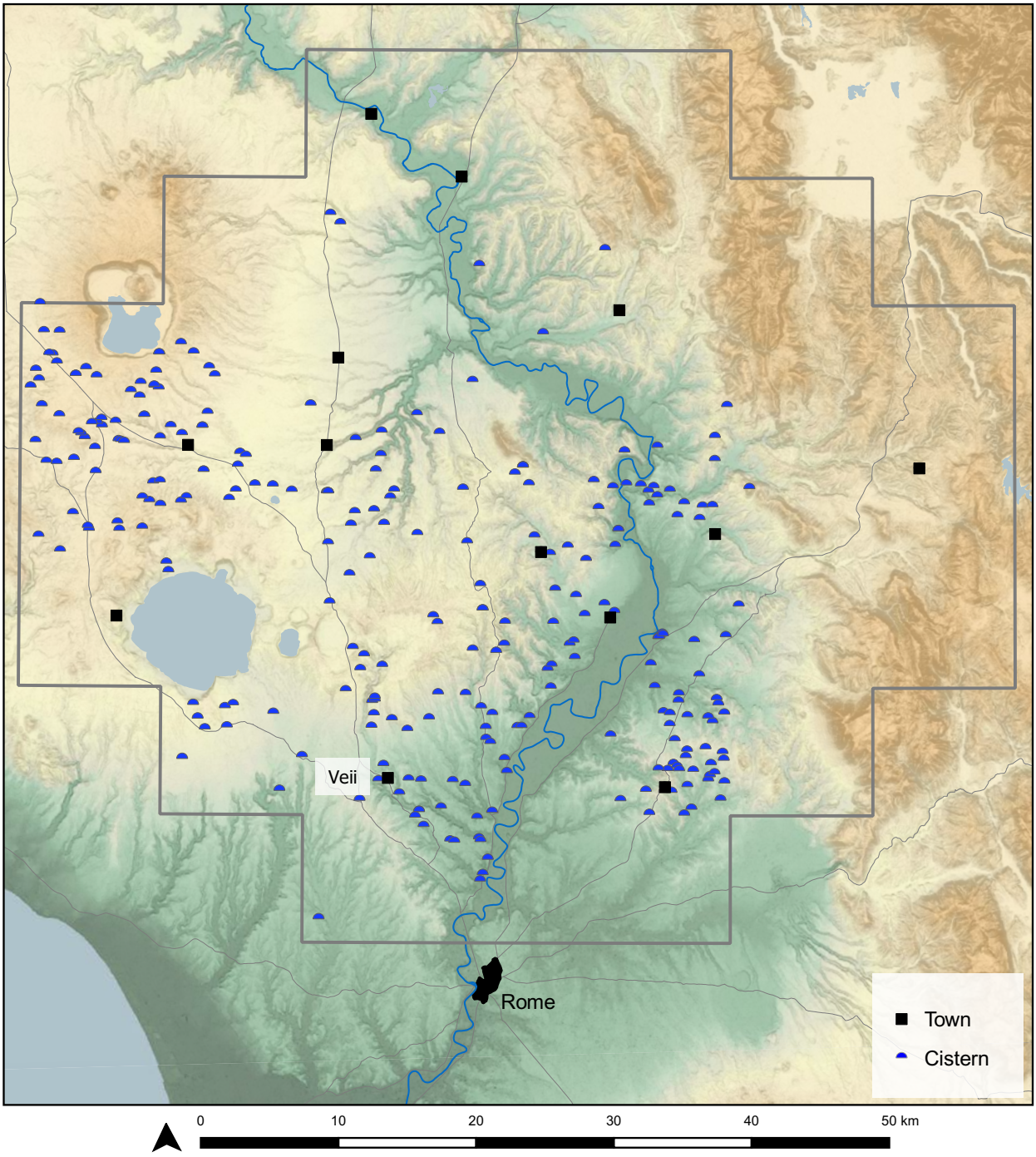


Figure 4.25. Distribution of cisterns at imperial-period sites in the middle Tiber Valley.

intensive estates will have specialized in a single crop, or monoculture; most farmers will have hedged their bets with a mix of crops and animals to mitigate the risks of both the Mediterranean climate and total reliance on the market.[744]

In addition to the staple products of cereals, wine and oil, all well suited to storage and long-distance transport, the proximity of the middle Tiber valley to the Rome market meant it could also supply a range of perishable produce such as fruit and vegetables, as well as other organic goods such as reeds, firewood and resin. These have left little archaeological trace but their production is comparatively well attested, by texts and inscriptions, in the *suburbium*.[745] Some of these products will have involved significant specialization with investment in, for example, irrigation. Across the middle Tiber valley, large numbers of water cisterns,

[744] Erdkamp 2005

[745] Morley 1996.

some of substantial dimensions, were constructed during the imperial period (mostly dated on the basis of construction technique) (Figure 4.25). Their size, location and the fact that many were not covered over, and hence open to the sky, points to their use for the irrigation of vegetables, flowers and fruit trees.[746]

As well as agriculture, animal husbandry played an important role in the rural economy of the middle Tiber valley. The zooarchaeological evidence is still limited to a small number of sites,[747] though the epigraphic evidence compensates to some extent. The latter points, in particular, to the northern part of the study area with investment in the creation of meadows in the Ager Faliscus through the construction of dams and cuniculi.[748] Also from this area, the *mercator bovarius* and possible owner of the villa at Mola di Monte Gelato indicates the importance of animal husbandry here (section 4.5.1). Meanwhile, across the valley in the Sabina, a series of huge terraces associated with the villa in the Valle di Fontanelle on the steep lower (limestone) slopes of Monte Elci may have been partly intended to create pasture land.[749]

A particular type of production that characterized the *suburbium* was *pastio villatica*, the raising of small birds and animals as delicacies for the gourmet market (Varro *Rust.* 3.3–5). The small bones of such creatures are easily missed during excavation, so their presence is likely to be significantly underestimated. Nonetheless, careful sampling has identified the bones of songbirds such as thrushes and other species raised for market including the dormouse,[750] as well *gliraria*, the terracotta jars for fattening these animals. By definition, however, such products were restricted to a small and wealthy section of society, and production was highly specialized and capital intensive. There was also clearly an element of display to such production in the same way that fish-farming, well attested at villas along the coast of Latium and Campania, must also have been used to signal status.[751] In the middle Tiber valley, small fishponds are known from the villas at Monte Gelato and Forum Novum, though neither is likely to have produced for the market.

Partly inspired by Morley's approach, a number of scholars have attempted to model and quantify the productive capacity of the *suburbium*. De Sena, for example, has modelled wine and oil production in this area to quantify the scale of production and to assess its relative contribution to the supply of Rome. He makes the assumption that the extent of specialized vine and olive cultivation in the Roman period was the same as it is today, accounting for the higher productivity of modern farming, by reducing total production in line with Cato's figures for lower Roman yields. The resulting figures suggest that the *suburbium* might have produced and supplied as much as one-third of Rome's demand for wine and one-quarter of its oil.[752] As noted above, because amphorae were not used to transport wine and oil short distances overland, the scale of this supply role may well have been significantly underestimated.

A different approach to assessing the agricultural potential, specifically focused on the middle Tiber valley, has been advanced by Goodchild using multi-criteria GIS modelling to combine variables such as slope, aspect, geology, and archaeological settlement distributions, with details of sowing rates and crop yields drawn from agricultural writers such as Cato and Varro.[753] The resulting models illuminate a variety of issues; for example, that the very low yield rates often assumed (4:1) for Roman agriculture were unsustainable, and that small estates (<12 *iugera*/3 ha) could not support their workforce unless production was intensified beyond cereal monoculture or labour was sold to other farmers to supplement income. Goodchild concludes that intercropping (with one-quarter fallow) was the most likely regime in operation in the middle Tiber valley in the early imperial period and that such production could have supported the equivalent of over 150 persons per square kilometre—in other words, after the local population had been fed (perhaps 38 persons per square kilometre (see section 4.6.1), a significant surplus was still available for market at Rome. Such models do not provide definitive answers, but they do help to constrain and inform interpretation of the archaeological evidence, in this case, reinforcing growing recognition of the important role played by the middle Tiber valley in the food supply of Rome.

4.7.2 Ceramic and brick/tile production

The transition from the late Republic to the early empire roughly coincides with a change in the dominant archaeological fossil guides—from black-gloss ware to *terra sigillata italica*. This simple colour change from black to red, however, conceals a substantial reorganization of the production and consumption of fine-wares. The dominance of Arretium and Pisae in northern Etruria in our understanding of fine-ware production during the early imperial period has sometimes led to an underestimation of the role played by other regional

[746] Wilson 2008a: 735 identifies 26 examples from the middle Tiber valley with capacities over 200 m^3, far beyond what would have been needed for domestic consumption.
[747] For an overview, see Mackinnon 2004.
[748] *CIL* XI 7505; see Cambi 2004; Quilici Gigli 1989.
[749] Quilici 1995.
[750] *Glis glis*; Varro *Rust.* 3.15; Monte Gelato; Potter and King 1997; also Bruttii Praesentes: Bazzucchi 2009.
[751] Marzano 2013; Marzano and Brizzi 2009; Van Oyen 2015 has labelled this as 'conspicuous production.'
[752] Morley 1996; De Sena 2005.
[753] Goodchild 2008, 2013; Goodchild and Witcher 2009.

and local producers. This is certainly the case in the middle Tiber valley. The South Etruria surveyors believed that much of the *terra sigillata* in this area came from Arretium (e.g. Potter n.d. suggested some 60 per cent of *terra sigillata* in the Ager Faliscus). It has become clear, however, that whilst *terra sigillata* from Arretium continued to arrive in the area throughout the first century AD,[754] the majority of *terra sigillata* in use was locally produced within the valley itself.[755] Yet the context in which this local production took place, and the involvement of and/or competition with the North Etrurian workshops, is less clear. Certainly, proximity to the continually expanding market at Rome, easily accessible clay sources, and good transport links must have favoured the expansion of production in the middle Tiber valley. Despite these advantages however, the industry never rivalled the production at Arretium and Pisae on the Mediterranean market. For although the *terra sigillata* of middle Tiber valley potteries can be found in small quantities around the Mediterranean,[756] its principal market was regional: the metropolitan and suburban populations at and around Rome.[757]

Most of the known kiln sites in the middle Tiber valley of Republican date produced black-gloss pottery (i.e. fine-ware) and were located at urban centres such as Capena and Veii (see section 3.3.2); more specifically, production may have been associated with sanctuaries, at Veii, Narce, Lucus Feroniae, Falerii Veteres and Falerii Novi. Nearly all of these sites were active in the fourth and third centuries BC, with negligible evidence for production during the second and early first centuries BC.[758] The situation changed significantly from the mid-first century BC onwards with a sharp increase in the number of known and suspected production sites, almost exclusively in rural locations (though recent excavations at Veii have found unstratified kiln waste at Macchiagrande, close to the imperial-period forum).[759] The most recent gazetteer compiled by Olcese lists 22 known or suspected tile and pottery production sites of early and mid-imperial-period date within the study area; most commenced production during the first century BC or first century AD.[760] Kiln structures have been confirmed at around one-third of the sites; production is suspected at the other sites on the basis of over-fired pottery and tile, wasters and kiln furniture, and most of these on the basis of surface survey only (Table 4.7). The discovery of misfired sherds of colour-coated and coarse-wares during excavations at the Mola di Monte Gelato villa (TVP-ID 02000) is an additional site to those catalogued by Olcese. The majority of imperial-period kiln sites are closely associated with villas, though a few appear to have been large-scale, stand-alone industrial facilities (e.g. Prima Porta/La Celsa, TVP-ID 2688 and 12519). Almost half of the sites produced tile, some exclusively and some alongside the production of plain- and coarse-wares. The sites vary greatly in extent and duration of production, with some perhaps designed to supply the construction of individual building projects and others geared to market production; some produced for several centuries and others for a matter of decades or even less.

These kiln sites are broadly distributed in a wide corridor along the Tiber with particular concentrations in the areas just north of Rome and close to the Umbrian border; there is also a notable group of sites extending west from the Tiber towards Sutrium (Figure 4.26). The Tiber clearly provided an important transport route, especially for heavy tile (see below); good sources of clay are also located along its course. Another potentially relevant factor is the availability of firewood for kiln fuel, especially for the sites closest to Rome, such as La Celsa (below), though here supply of wood from upriver may have been a possibility. Further north along the Tiber, outside the study area, were a number of other important production centres including Mugnano in Teverina and, in Umbria, Scoppieto.[761] The relocation of production sites to rural locations, often distant from urban centres, and their growth in number is a reminder that pottery, brick and tile production during the Roman period were usually integrated into the agricultural calendar, making use of the seasonal nature of farming and the availability of labour and resources. In the middle Tiber valley, however, it is at least possible that the scale of demand from Rome and across the *suburbium* meant that pottery production during the imperial period could have become a more specialized, full-time activity.

One of the best-known production sites is the complex at Prima Porta/La Celsa (TVP-ID 02688 and 12519) which sat on the edge of Tiber floodplain close to the junction of the Via Flaminia and the Via Tiberina and which formed part of a concentration of kiln sites on either side of the river.[762] The site produced *terra sigillata*, thin-walled wares, plain wares and coarse-wares. The project database includes the restudy of material collected by the South Etruria Survey from this complex, with 271 sherds of which around 20 per cent are over-fired in some form. The *terra sigillata*, all undecorated, was produced during the second half of the first century AD

[754] Olcese 2004: 295.
[755] Patterson *et al.* 2003; Bousquet, Felici and Zampini 2008. Klynne 2002: 109 notes that 63 per cent of *terra sigillata* from the Villa of Livia at Prima Porta have stamps of Central Italian potters.
[756] E.g. Crete, Baldwin Bowsky 2016.
[757] Klynne 2002: 113; Olcese 2004; Patterson *et al.* 2003: 165.
[758] Note that Olcese 2012: 197 follows Patterson *et al.* 2003: footnote 24 identifying a misfired sherd of black-gloss pottery from TVP-ID 02864/SES-ID 905824; this site is not, as suggested, Potter, Walker and Reynolds 1999: 214, site K16 but TVP-ID 02684/SES-ID 921499.
[759] D'Alessio 2015: 32.
[760] Olcese 2012; Potter and King 1997: 320 for Mola di Monte Gelato.
[761] Bergamini 2007; Gasperoni 2006.
[762] Messineo 1991; Olcese 2012.

Table 4.7. Kiln sites in the middle Tiber valley (based on Olcese 2012).

TVP-ID	Site	Olcese code	Date	Evidence	Products
923	Capena (Strada per Morlupo)	L001	C2BC-early imperial	Structures (kilns); kiln waste	Coarse-wares
10158	Fiano Romano (Baciletti)	L005	C1BC-C6AD	Kiln waste	Brick/tile
1227	Formello (Casale del Pino)	L055	Mid C1BC-C3AD	Spacers; waste	Coarse-wares; brick/tile
1175	Formello (Torre La Merluzza)	L182	Mid C1BC-C1AD	Waster; kiln waste	
2042	Mazzano Romano (TP A32B)	n/a	C1-2AD	Wasters	Coarse-wares; brick/tile
2010	Mazzano Romano (Valle l'Abate)	L062	End of C1-2AD	Wasters	Thin-walled wares; coarse-wares; brick/tile
11593	Monterotondo (Turchetti #18)	L007	Late Repub-C3AD	Waste	
12498	Nepi (Casale La Massa)	L176	n/a	Waste	Thin-walled wares?
2001	Nepi (San Biagio)	L075	C1BC-C4AD	Wasters	Coarse-wares
See 2489	Rignano Flaminio (Pietrolo, M Petrolo)	L189	n/a	Structures (kilns, basin, cisterns)	
12506	Roma (Casale Ghella)	L092	C1BC-late antique	Structures (kiln), waste	Tile
12540	Roma (Ippodromo di Tor di Quinto)	L100	Early imperial	Structure (kilns)	
1758	Roma (La Storta, Tenuta del Forno)	L171	C1BC-C4AD	Structures (?kilns), waste	Coarse-wares
12519	Roma (Prima Porta, La Celsa)	L002	C1-2AD	Structures (kilns, cistern, drains, working floors); waste	*Terra sigillata*; thin-walled wares, coarsewares; lamps; amphorae
2688	Roma (Prima Porta, La Celsa, 926527)	n/a	C1-2AD	Wasters	*Terra sigillata*; coarse-wares; unguentaria
12184	Roma (S Alessandro)	L107	C1-4AD	Structures (kilns, basin, brick floor)	Coarse-wares; brick/tile?
226	Sacrofano (M Zuccherino)	L177	End C1BC-C3AD	Waster	Coarse-wares
2709	Sutri (Duncan 704828)	L125	C1AD	Structure (kiln?); waste	Brick/tile
2992	Sutri (Duncan 714814)	L126	C1BC-C1AD	Waste	Brick/tile
3022	Sutri (Fonte Vivola)	L123	AD 50-150	Waste	Thin-walled wares; coarse-wares; brick/tile
2727	Sutri (M della Guardia)	L124	AD 40-70	Structures (kiln), waste	Thin-walled wares; coarse-wares
11849	Vasanello (Cesurli)	L153	30 BC-AD 15	Structures (drain), spacers, mould, waste	*Terra sigillata*; thin-walled wares, coarse-wares; lamps
12495	Vasanello (Poggio del Capitano)	L154	C1BC-C3AD	Waste	Coarse-wares
12496	Vasanello (Poggio Pelato)	L155	Late C1AD	Waste	Coarse-wares
12497	Vasanello (San Marco)	L156	C1-3AD	Waste	Coarse-wares

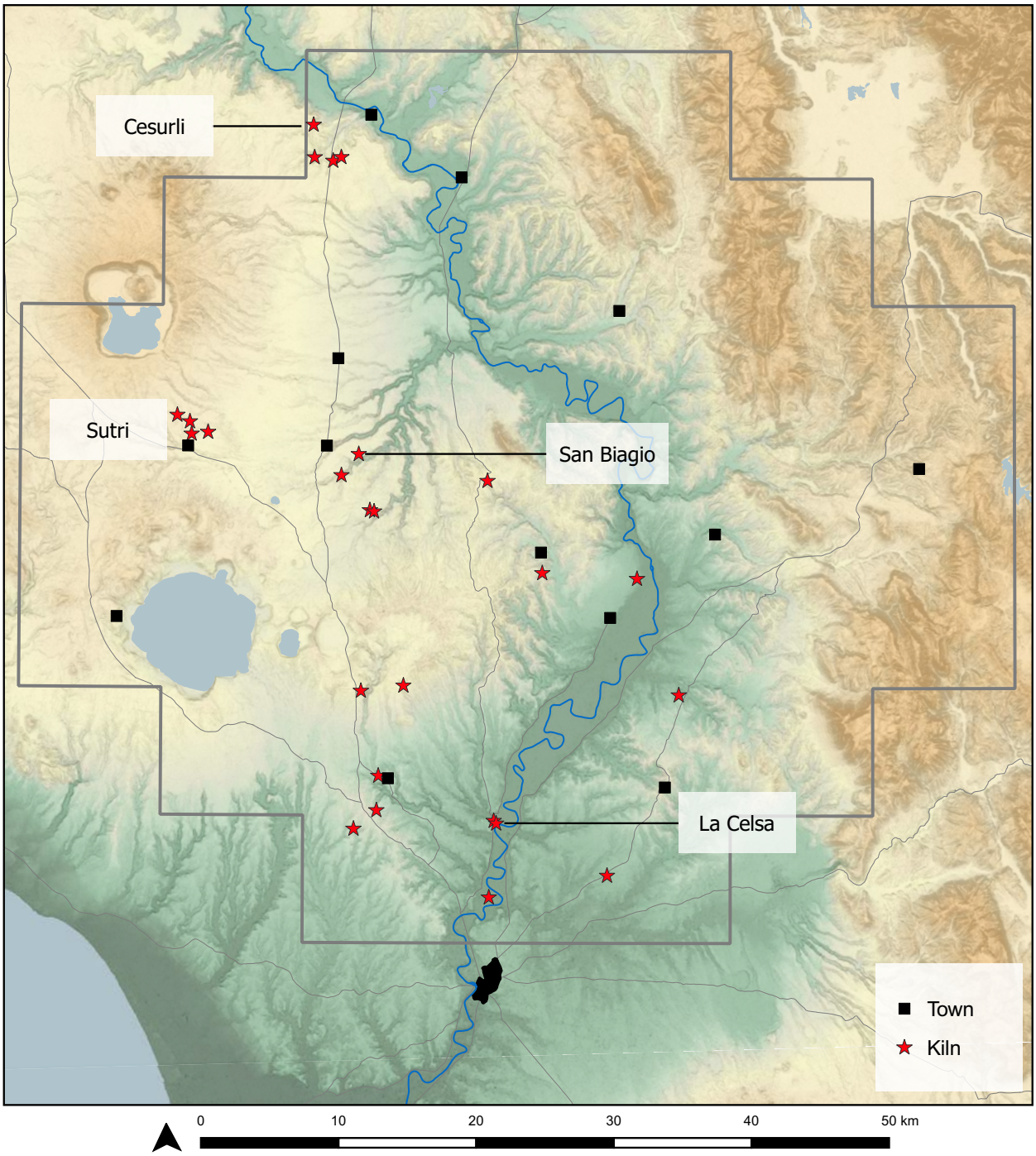


Figure 4.26. Distribution of early imperial-period kilns in the middle Tiber Valley (50 BC–AD 100).

with a relatively limited repertoire of forms including plates (*Consp.* 3.2) and cups (*Consp.* 33, 36.4 and 37.5)—all well attested at Rome.[763] Recent work has also identified a late Republican/early imperial-period specialized production of black-gloss/grey fabric platters from La Celsa.[764] Such activity points to an industrial complex of specialized production, separate from the agricultural cycle.

The other known *terra sigillata* production site in the study area is at Cesurli (TVP-ID 11849), near Vasanello, in the northern Ager Faliscus. The site has been investigated by surface survey and excavation, revealing the production of both plain and decorated *terra sigillata*, as well as thin-walled wares, lamps and coarse-wares. Production activity continued for around half a century, from *c.* 30 BC to AD 15.[765] Three nearby sites, Poggio del Capitano (TVP-ID 12495), Poggio Pelato

[763] Bousquet, Felici and Zampini 2008; Patterson *et al.* 2003.
[764] Carrara 2012.
[765] Bousquet, Felici and Zampini 2008.

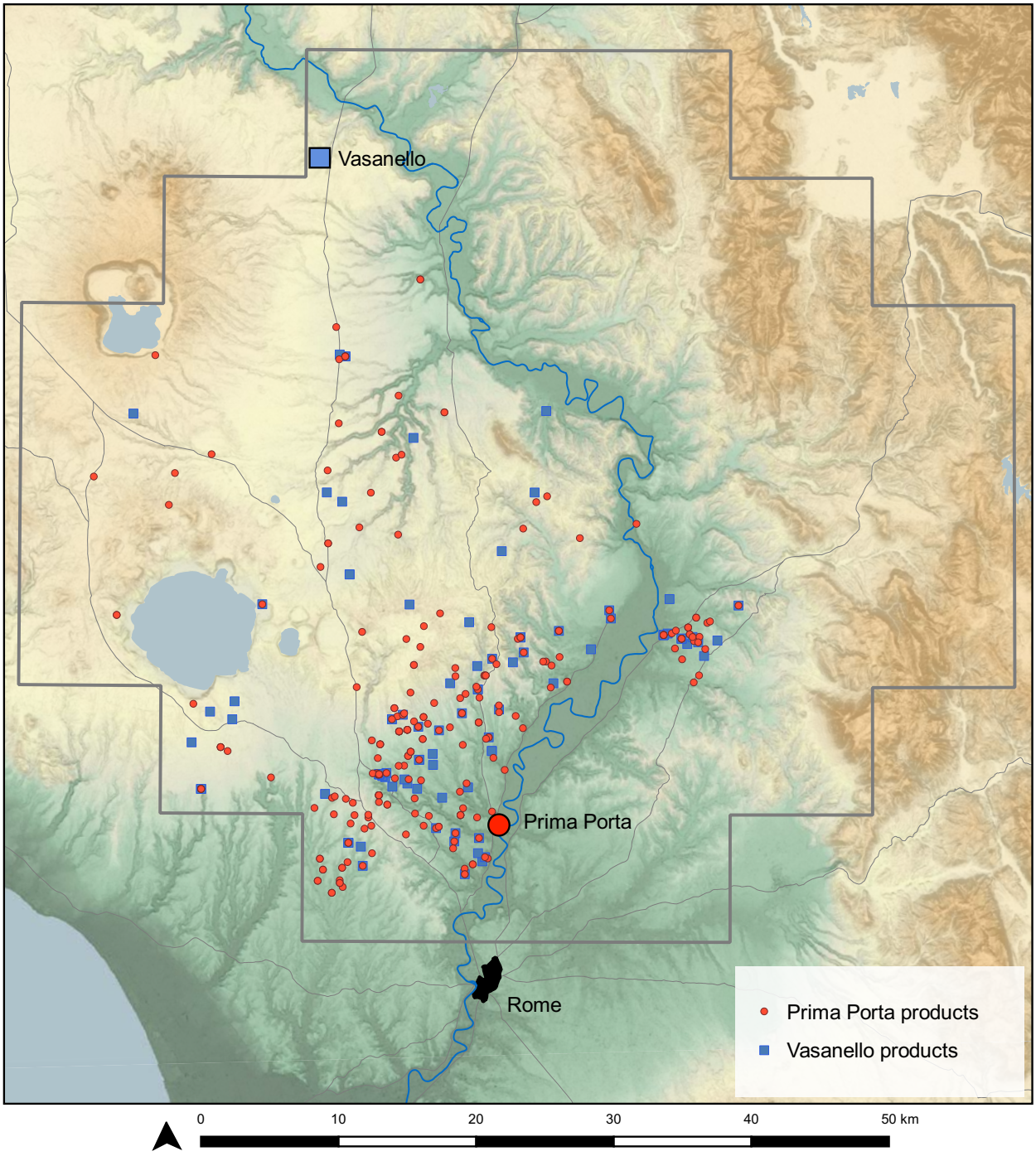


Figure 4.27. Distribution of *terra sigillata italica* pottery from production centres at Prima Porta and Vasanello

(TVP-ID 12496) and San Marco (TVP-ID 12497), provide evidence for the production of coarse-wares during the subsequent Flavian, Trajanic and possibly later periods,[766] though there is not as yet any indication for the production of *terra sigillata*. The group as a whole suggests a strong concentration of pottery production in this area throughout the early imperial period.

The stamping of *terra sigillata* at Cesurli (Vasanello) suggests that the owner of this enterprise was Ancharius of the *gens Ancharia* (ANC stamp), a local family attested at Horta back in the fourth and third centuries BC.[767] Some of the potters' names and decorative motifs derive directly from the established workshops at Arretium in northern Etruria, possibly indicating an attempt to imitate the success of the Arretine workshops or perhaps more likely the setting up of a branch workshop

[766] Olcese 2012: 243–50.

[767] Del Lungo 2006:10.

in the Tiber valley.[768] The *terra sigillata* produced at Vasanello has been recorded at Rome, presumably shipped via the Tiber, but also across Latium, Umbria and northern Italy and, in smaller quantities, at sites in Switzerland, Spain and North Africa.[769] Comparison of the products from Vasanello in the southern part of the study area and the kilns at Prima Porta in the south indicates several form types distinct to repertoires of each; the distributions of the these products within the middle Tiber valley demonstrate some spatial overlap with, notably, Prima Porta ceramics moving north as well Vasanello pottery moving south (Figure 4.27).

Terra sigillata was also produced further north along the Tiber at Scoppieto in Umbria, a well-investigated site that demonstrates some similarities with Cesurli.[770] The site at Scoppieto has produced evidence of agricultural and possibly cult activity, including kilns, producing pottery as early as the end of the fourth century BC. The character of the site changed significantly during the Augustan period when it became a specialized kiln site producing a range of coarse-wares, lamps and, especially, *terra sigillata*; it also produced tiles, though the absence of stamps may suggest that these were for use on-site only. As well as kilns and various tanks, excavation has identified the individual potters' workstations, with the travertine bases to support each potter's wheel aligned with windows for light. Again, it appears that the Arretium workshops of northern Etruria may have been involved in setting up the Scoppieto site; XRF analysis of a mould from the site traces the clay to the Arretium area. Pottery production continued into the Trajanic period, much later than at Cesurli, when the site reverted to a primarily agricultural function. The excavators have connected the cessation of production at the site with the earliest imports of African red slip pottery and hence competition from provincial producers.[771] Like the potters at Cesurli, the producers at Scoppieto will have used the Tiber to distribute their products downriver to Rome and Ostia. Much closer to these markets, however, the short distance from the La Celsa kilns to Rome (approximately 15 km) raises the question of whether this workshop's products were transported to the city by road rather than by river.

Both La Celsa and Vasanello also produced other wares alongside *terra sigillata*. A series of kilns across the study area produced coarse-wares, plain table-wares, thin-walled and colour-coated wares and lamps. Key sites for the production of plain table-wares and kitchen wares are La Celsa and San Biagio (TVP-ID 02001); a kiln near Formello may have produced only for the associated site (Casale del Pino; TVP-ID 01227).[772] The coarse-wares produced demonstrate variation in specific form types, but overall, attest to the strong standardization of ceramic forms that characterizes the early and mid-imperial periods across central Italy. As with locally produced *terra sigillata*, many of the coarse-ware forms from Prima Porta and San Biagio are attested at Rome indicating the strong influence of the urban market on the organization of these workshops.[773] Without chemical discrimination of fabric type, it is impossible to differentiate much of this output, though a few specific form types are believed to be unique to individual kiln sites. Even though such maps can only currently be produced for a few forms, they are sufficient to show that the workshops did not have unique catchment areas, with products found widely across the valley with overlapping distributions. A possible production site has also been suggested in the vicinity of the villa at Mola di Monte Gelato where excavations have identified a number of misfired colour-coated and coarse-ware sherds.[774] The excavators suggest that these fall within the central Italian *koiné*, attested across the middle Tiber valley and at Rome and Ostia, but with some variations that indicate production may have been intended for a very local market, or even just for the site itself.

A number of other pottery kiln sites are known across the area including around Sutrium (TVP-ID 02727 and 03022) and the area immediately north of Rome including La Storta / Tenuta del Forno (TVP-ID 01758) and S Alessandro (TVP-ID 12184). New pottery production sites continue to be discovered; for example, excavation in advance of development at Pietrolo, close to the Via Flaminia on the Monte Petrolo ridge north of modern Rignano Flaminio, has identified an extensive workshop area including a series of kilns.[775] In addition to the pottery production sites in the middle Tiber valley, Rome was served by a number of kilns in the immediate vicinity of the city, including on the Janiculum (Gianicolo) Hill.[776]

In addition to pottery production sites, the Tiber valley hosted dozens of brickyards. Filippi, Gasperoni and Stanco list 87 *figlinae*, attested by over 1700 different brickstamps, located along the Tiber between Todi in the upper valley and Rome; Graham considers specifically those in the middle Tiber valley.[777] Survey and excavation have identified at least 13 *figlinae*, in the middle Tiber valley (Table 4.7). Several of these sites also produced pottery and there is likely to be have

[768] Klynne 2002; Olcese 2004: 280.
[769] Olcese 2004: 282.
[770] Bergamini 2007.
[771] Bergamini 2007; with evidence for workstations at p. 66 and clay sources at p. 64. Market competition at p. 60; for similar arguments in relation to Pompeian red slip ware/Internal red slip cookware, see Peña 1999.
[772] Bousquet, Felici and Zampini 2008: 641.
[773] Bousquet, Felici and Zampini 2008: 642–3; Patterson *et al.* 2003: 168.
[774] Potter and King 1997: 320.
[775] Manigrasso n.d.
[776] Olcese 2012: 183, 186–8.
[777] Filippi, Gasperoni and Stanco 2008; Graham 2006.

been a close connection between the pottery and brick industries; for example, the *gens Ancharia* appears to have been involved not only with production of pottery at Vasanello (above) but also the manufacture of bricks at nearby Horta.[778] As with pottery kilns, there is great variation in the scale and duration of production and the levels of investigation. Some production sites, such as the at Cesarina villa (TVP-ID 02414) east of Eretum have been identified on the basis of surface scatters of tile wasters (in this example, stamped by Q. Sulpicius Sabinus); others are known though excavation including Baciletti (TVP-ID 10158) near Lucus Feroniae and, closer to Rome, Casale Ghella (TVP-ID 12506), Ospedaletto Annunziata (TVP-ID 01858) and S Alessandro (TVP-ID 12184).

Just to the north of the study area near Mugnano in Teverina is a concentration of kilns sites producing brick, tile, dolia, mortaria and coarse-wares. Investigations at two of these sites, Rota Rio and S. Liberato, have identified large numbers of brickstamps indicating that these production facilities were owned, at least during Vespasian's reign, by the senatorial *Domitii* family;[779] the *figlinae* subsequently passed into the possession of the future emperor Marcus Aurelius. The site at Rota Rio has been tentatively identified as the *figlinae Caninianae*.[780] Stamps also attest the involvement of the family's freedmen. The tile production at these sites was varied, producing a range of specialist forms. The proximity of sites such as these to the Tiber facilitated the export of products downriver to Rome and Ostia and, occasionally, further afield.[781]

Some of the complexity of brick supply within the middle Tiber valley is becoming increasingly apparent. Previous assumptions have come under question, for example, the idea that brickstamps were unique to individual *figlinae* or that heavy (stamped) brick was transported by river and therefore always moved downstream.[782] Brickstamps from the Mugnano *figlinae* of the *gens Domitii*, for example, were used in the construction of the so-called Villa Domiziana on Lake Bracciano, approximately 30 km across country by road from the presumed kiln site.[783] The Tiber may also have been used to transport some goods upstream. The presence of small numbers of Dressel 20 oil amphorae at villas and towns along the river, and marbles columns in Umbria may indicate some cargoes moving upriver.[784]

The evidence for pottery production in the early and mid-imperial period is extensive and, perhaps because of its wider chronological significance, inevitably dominates the archaeologist's attention. As well as clays, however, the middle Tiber valley, also provided a wide range of other raw materials.

4.7.3 Extraction

The middle Tiber valley is well provisioned with a range of natural resources, not least because of its varied geology. Across the wider hinterland of Rome, none of the principal categories of materials—tufo, travertine, *selce* (leucitic basalt), pozzolana or clays—is unique to the valley, indeed the areas south and east of Rome arguably provide more extensive and accessible deposits of pozzolana and *selce* than those available in the middle Tiber valley; the ability to transport materials to Rome by river, however, may have conferred some advantage on the latter.

The quarrying of building stone, principally tufo, goes back into the first half of the first millennium BC, but expanded considerably during the Republican period, both for monumental architectural projects at the towns and sanctuaries across the valley and also for construction at Rome itself.[785] Quarries are notoriously difficult to date and, although the *Carta Storica Archeologica Monumentale e Paesistica del Suburbio e dell'Agro Romano* indicates significant numbers of quarry sites across the area, their periods of use are in most cases unknown. Municipal architectural complexes may have sought out particular types of tufo from different areas for specific technical properties or reputations, but private projects are likely to have made use of smaller, local quarries.[786]

Changes in construction techniques, linked with new technologies and evolving models of socio-economic organization, as well as changing architectural fashions, must have significantly reshaped the extraction and supply of materials to Rome and around the valley. These changes gathered pace from the first century BC with the development of *opus reticulatum* construction and then brick-faced concrete. Within the valley, attention presumably shifted from quarrying tufo (for large *opus quadratum* blocks and then small *tufelli* for *opus reticulatum*) to clay and pozzolana for brick and concrete production.

Volcanic materials were widely available across the territory of Rome and pozzolana was a key constituent of Roman concrete. The precise properties of pozzolana vary greatly according to the volcanic events that

[778] Olcese 2004: 288.
[779] Scardozzi 2015.
[780] For summary, see Olcese 2012: 231–2.
[781] DeLaine 2002; Gliozzo 2013 for the presence of Tiber Valley brick on the coast of Etruria at Cosa.
[782] See e.g. Bruun 2005; Gliozzo 2007; Graham 2006.
[783] Accardo *et al.* 2007: 105–6.
[784] Ponti Novi: Colosi and Cosantini 2004: 149; Ocriculum: Hay, Keay and Millett 2013; marble: Bergamini 2007.
[785] Cifani 2008.
[786] Jackson *et al.* 2005; the imperial-period baths at Valchetta appear to have used tufo from an adjacent site, Jones 1960: 57.

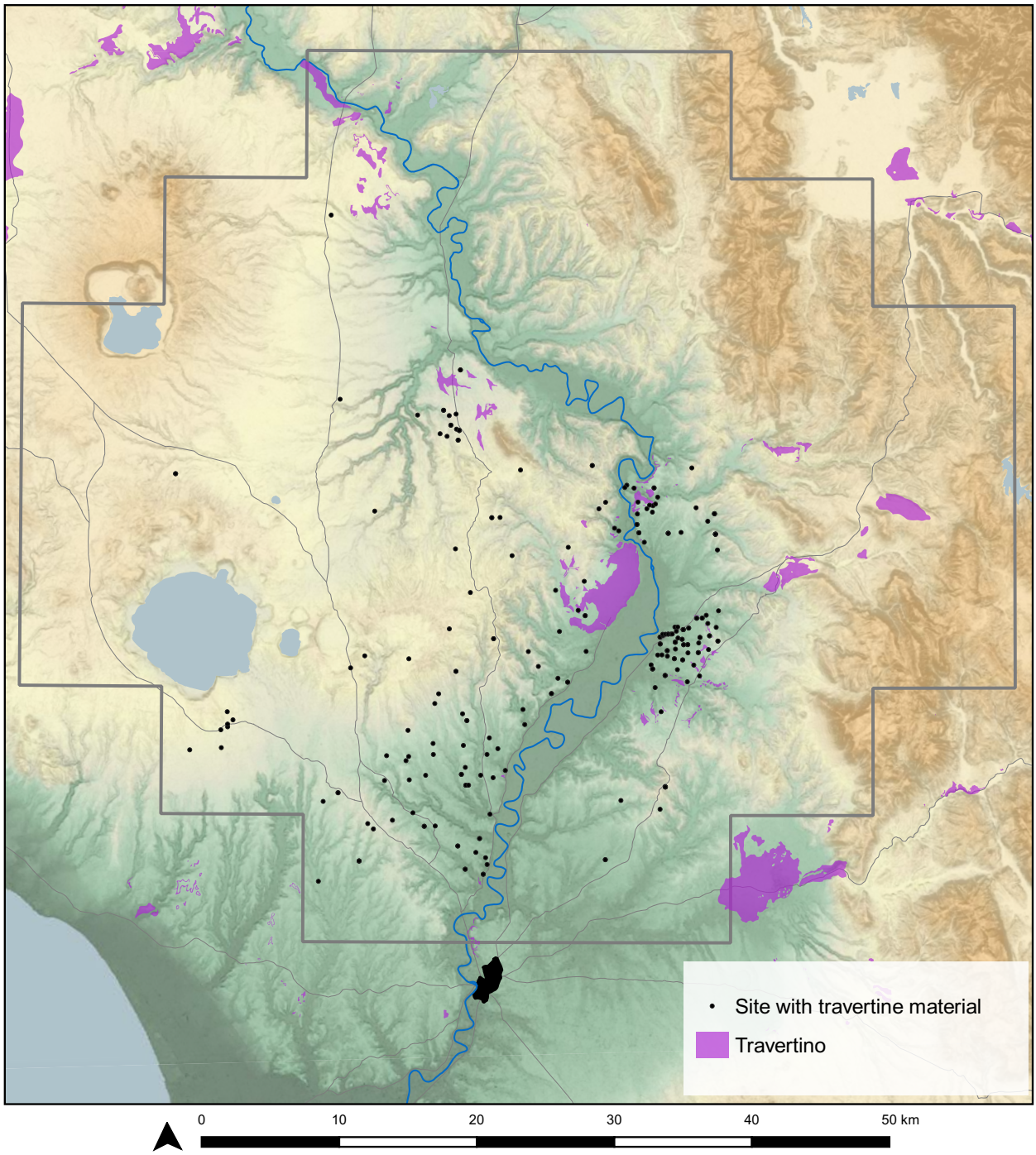


Figure 4.28. Distribution of early and mid-imperial-period sites with travertine construction materials in relation to the main sources of travertine in the middle Tiber Valley (50 BC–AD 250).

created them and thus individual deposits must have differed significantly in demand. Roman writers were aware of some these different types, though recent studies of the pozzolanas used for mortars at Sutrium, the Villa of Livia at Prima Porta and at Rome indicate that local sources were used in each case.[787]

As well as pozzolana, concrete construction required lime. A number of imperial-period lime-kilns have been identified, concentrating at sites around Lucus Feroniae. These include a villa at Prato La Corte (TVP-ID 10270), and, recently discovered, at a site directly next to the Via Tiberina where a kiln was associated with the construction of a substantial imperial-period residential building.[788] The concentration of imperial-period lime-kilns in the Lucus Feroniae area reflects the local availability of travertine as a raw material for lime production; late and post-Roman lime-kilns are more widely distributed, such

[787] D'Ambrosio *et al.* 2015; Marra *et al.* 2015.

[788] Fontana 1995; Marzano 2007: 366–7; Savi Scarponi 2013: kiln 1.

as the probable fourth-century AD example, further west, at Mola di Monte Gelato,[789] as they are associated with the burning of (imported) white marble taken from earlier buildings (see section 5.3.4.2). The use of travertine as a building stone in its own right also became more popular at Rome during the early imperial period; the area around Lucus Feroniae may have met some of this demand, though Rome's main supply was quarried around Tibur (Tivoli) and shipped via the Aniene river and then the Tiber downstream to the city.

Limestone was another key building material, sourced primarily from the Sabina and used for construction and even for road paving (e.g. on the realigned Via Salaria at Eretum as well as for *diverticula*[790]). The South Etruria Survey recorded building blocks and architectural elements such as columns and capitals made of limestone, tufo and travertine and the distributions of these different materials very broadly map onto local geologies. Sites with travertine building blocks, for example, cluster around Eretum and Lucus Feroniae suggesting the stone was quarried and used in the vicinity of its primary sources (Figure 4.28).

In contrast, the distribution of *selce* at survey sites is rather wider and may reflect its preferential (although not exclusive) use for paving roads and working surfaces, as well as for producing black mosaic tesserae (Figure 4.29). *Selce* was sourced from major quarries at Monte Maggiore and Monte Aguzzo in the northern Ager Veientanus (other smaller outcrops were possibly also worked further north and west). Generally, Roman stone quarries were located on private property and were integrated with, and secondary to, agricultural use of land.[791] At Rome, the presence of a *Procurator ad silices* and a *Procurator silicum viarum sacrae urbis* during the second century AD may point to direct state control of the basalt supply for paving in the city, and perhaps for the consular roads of the *suburbium*.[792] Paved *diverticula* connected both Monte Maggiore and Monte Aguzzo to the Via Flaminia to the east;[793] further roads then linked to the Tiber, perhaps for transport downstream to Rome, though it should be noted that much of the *selce* used to pave Rome's streets was sourced from south of the city. As well as consular roads, *selce* was also widely used to pave the streets of suburban towns, *diverticula* and working floors at agricultural installations.

It has long been assumed, given the cost and inconvenience of transport, that roads would have been paved using *selce* extracted from the nearest available source. Petrological and geochemical analysis of quarry sources and paving slabs on the Via Amerina and Via Flaminia, however, reveals a more complex situation. Not only are local sources of *selce* sometimes overlooked, with some slabs being transported from alternative sources up to 40 km distant, but both roads were also supplied with *selce* from multiple sources.[794] Clearly the cost of transporting heavy goods was not always the primary determinant of quarry source and, just as with brickstamps (section 4.7.2), there is evidence that a number of additional or alternative considerations were involved in the production/extraction of materials and their distribution, perhaps reflecting legal or contractual complexities.

A short distance to the north of the study area, near Orvieto, another type of leucitic lava was extracted from the Santa Trinità quarries for the production of millstones.[795] These millstones achieved a relatively wide distribution within and beyond Italy and were transported via the Paglia river and the Tiber to Rome and onwards via Ostia/Portus for export; millstones from this quarry have been found at Pompeii as well as Carthage. Millstones, presumably awaiting export, have also been discovered at the Paligano river port.[796]

As well as exporting stone, one of the defining features of sites of the imperial period in the middle Tiber valley was the importation of white and coloured marble from Italy and across the Mediterranean (section 4.8). Small amounts of coloured stones for ornamental use were also extracted from quarries in the middle Tiber valley though the market appears to have been very limited. These local coloured stones include Cottanello antico (*breccia rosata*), a pink to red-brown breccia veined with white, that was extracted at Monte Sterpeto near Cottanello. The recently investigated quarry site was apparently controlled by a nearby villa (TVP-ID 10131) where extensive use was made of the stone for veneers and columns.[797] Cottanello antico is also found at the nearest urban centre, Forum Novum, and material collected by the South Etruria Survey identifies its use at a small number of other rural sites.[798] The source of *giallo tigrato*, also from the Sabina, may have been controlled by the Villa of Bruttii Praesentes near Vicus Novus (TVP-ID 10128); a column drum of this stone has recently been found at the villa.[799] The large amounts of white and, subsequently, coloured marble imported via Rome during the imperial period quickly took over and expanded this market, though for a few villas, control of a local quarry appears to have retained some prestige value.[800]

[789] Potter and King 1997: 67–71.
[790] E.g. Ogilive 1965: 76; Paoli and Sgrulloni 2013.
[791] Black, Browning and Laurence 2008: 710–1.
[792] Laurence 2004: 288.
[793] Kahane, Murray-Threipland and Ward-Perkins 1968: 124, 159.
[794] Black, Browning and Laurence 2008: 722–5; see also now a larger study by Worthing *et al.* 2017.
[795] McCallum 2010: 89–90.
[796] Bruschetti 2008: 337.
[797] Pensabene *et al.* 2015; Sfameni, Pensabene and Gasparini 2014.
[798] Clarke 2008: 692; Clarke 2012.
[799] Alvino 2008: 895.
[800] Clarke 2008; Fant 1993; Pensabene 2002.

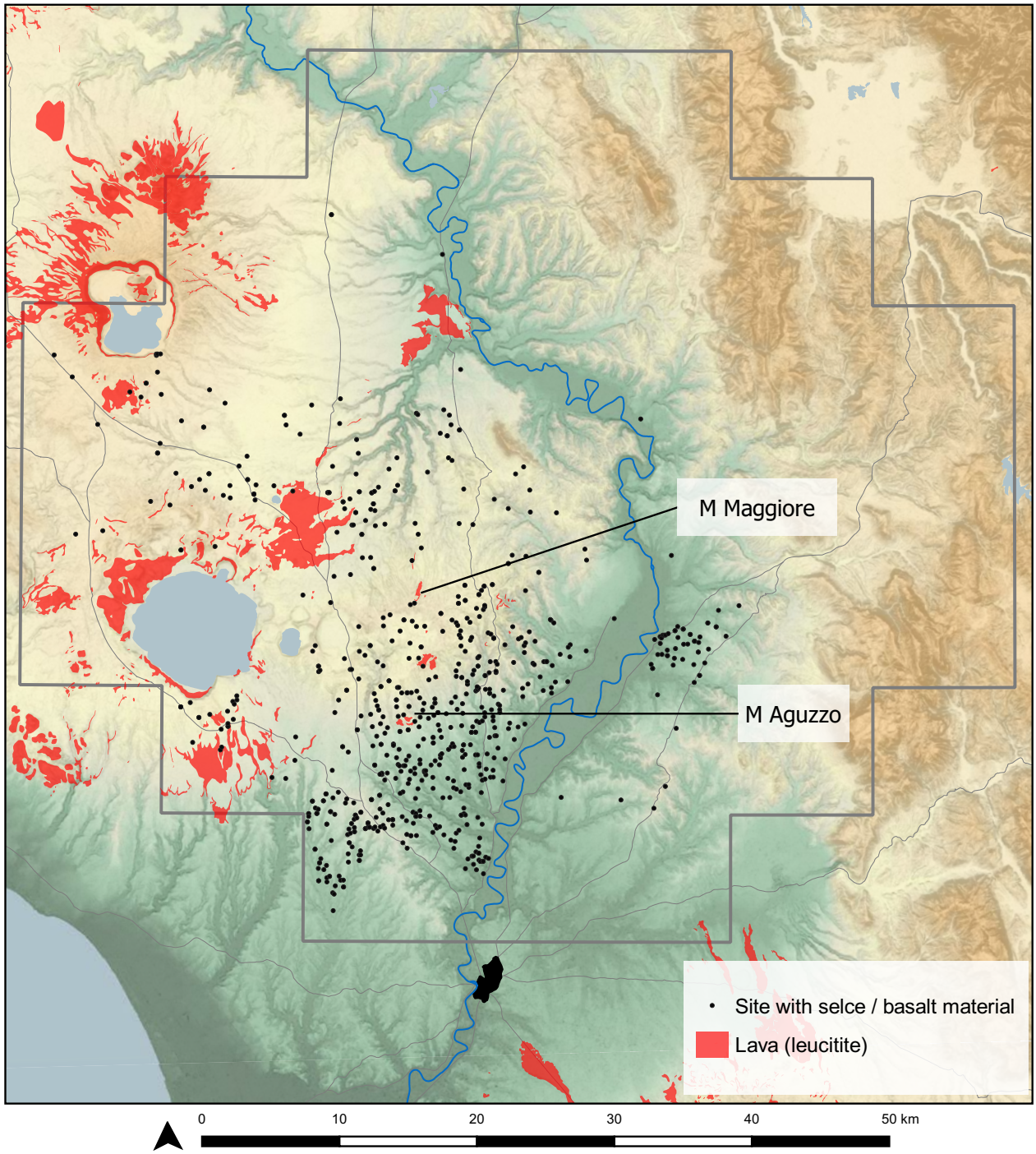


Figure 4.29. Distribution of early and mid-imperial-period sites with *selce* or basalt materials in relation to main sources of leucitic lavas in the middle Tiber Valley (50 BC–AD 250).

4.7.4 Other production

In addition to pottery and brick production and various extraction activities, there was also likely to have been a diverse range of craft working and manufacturing. The evidence, however, is thin and uneven, and the scale of organization difficult to discern. Textile production is attested by the presence of loom weights, mainly from villa sites, though the numbers are small, especially when compared to rural settlement in southern Italy. It is possible that textile production was focused at urban sites or close to urban markets; an excavated textile workshop close to the Milvian Bridge and the Villa of the Auditorium may be a case in point.[801] The presence of Cannabaceae pollen at Lakes Albano and Nemi south of Rome suggests the cultivation and processing ('retting') of hemp/flax for textile production.[802] Although there is no evidence in the study area from Lakes Bracciano and Martignano, similar processing for

[801] Piramonte and Ricci 2009.
[802] Mercuri, Accorsi and Bandini Mazzanti 2002.

linen production might well be expected and would be amenable to testing with palynological work.

Construction timber was probably a scarce resource in the middle Tiber valley by the imperial period and therefore sourced largely from the upper valley in the Bocca Trabaria and floated down the Tiber (section 4.2.3). Firewood could have been produced more easily, especially through management of trees on steep hillsides unsuited to cultivation; the likely scale of fuel required both within the valley and at Rome itself must have been enormous and the supply of firewood is likely to have played a significant role in economic activity.[803] Indeed, the organization of supply of wood may have been as significant in scale and complexity as that for food.

4.7.5 Summary

Summing up the resourceful landscape, several themes emerge. Firstly, while manufacturing is now well attested at Roman towns across western empire,[804] it remains to be seen whether the imperial-period towns of the *suburbium* were also places of production or, perhaps as a result of their proximity to Rome and the presence of so much rural manufacturing, they may have had a lesser role in manufacturing than elsewhere. In contrast, the rural landscape was intensively exploited for agricultural and other productive purposes. Here, recent studies have used various techniques to model the potential scale of economic activity; more important still, they have been able to demonstrate the organizational complexity of activities with indications that some defy 'rational' economic assumptions, for example, the use of quarries that are more distant than the closest available resource. Developer-led archaeological investigations are now revealing more examples of rural production, especially pottery kilns that feed into more nuanced understanding of the manufacture and distribution of goods. Many of these goods were shipped, carted or carried by boat, mule or human, to Rome and recent studies have emphasized the centrality of the metropolitan market in shaping the scale and organization of this area's economy.[805]

Goods moving south from and through the valley to Rome will have either travelled by road, heading over the Pons Milvius, or were shipped down the Tiber and unloaded at harbour facilities in the northern part of the city between the Pons Milvius and Tor di Nona opposite Castel Sant'Angelo. Malmberg has recently drawn attention to differences in the harbour infrastructure on the northern and southern sides of the city that may point to differences in the types of vessels and goods involved.[806] At Tor di Nona, for example, a 50 m-long mole extending at an oblique angle into the river allowing small boats to dock in safety on its downstream side; the use of concrete foundations suggests that the structure was constructed some time from the mid-first century BC onwards to service the boats arriving from the middle Tiber valley.

The investment in such infrastructure both at Rome and across the middle Tiber valley during the early and mid-imperial period attests a clear increase in the scale of economic activity and intertwining of metropolis and hinterland. The relative importance of the middle Tiber valley to Rome at this date, however, is less clear. With a wider Mediterranean hinterland, new supplies of grain, oil and wine, and vastly improved infrastructure at Ostia/Portus, early and mid-imperial Rome was relatively less dependent than ever on its immediate territory for supply. Paradoxically, as demand from Rome peaked, and the middle Tiber valley was definitively transformed into the city's hinterland, the population of Rome may have drawn a smaller proportion of its supplies than ever from the local region. With the loss of provincial supplies, the economic importance of the area to Rome significantly increased during the late antique and early medieval periods, precisely at the same time as the archaeological evidence for settlement and economic activity in the valley sharply declined (see section 5.3.2). In other words, the early and mid-imperial spikes in the numbers of sites and the amounts of material culture in circulation should not be taken as direct proxies for the economic centrality of this area to Rome. Instead, the nature of the relationship between metropolis and hinterland shifted from the economic to the social and cultural realms. What most defined the middle Tiber valley during the imperial period was not production but competitive consumption. This is the theme of next section.

4.8 The competitive landscape

Narratives of the Roman countryside are often focused on questions of agricultural production: what did it produce? How much? How was it organized? Who did it feed? In this context, it is useful to recall that much of the imperial-period material culture collected from the surface of fields and used to map settlement activity—drinking cups, cooking pots, glass vessels, marble wall veneers and mosaic tesserae—is primarily indicative of consumption rather than (agricultural) production.[807] The abundance and diversity of such material at imperial-period rural sites in the *suburbium* is particularly significant in comparison with many other areas of Italy and, indeed, the western empire more generally.

[803] Meiggs 1982; Veal 2014 on supply and demand of wood at Pompeii.
[804] Pompeii still looms large: Flohr 2013; Flohr and Wilson 2017; Wilson and Flohr 2016.
[805] Morley 1996.
[806] Malmberg 2015: 195–6.
[807] Witcher 2006b.

4.8.1 Material culture

The previous section dealt with the evidence for production in the middle Tiber valley; this section turns to the other half of the equation—consumption. In particular, the intention is to emphasize that the area was not simply a producer-region, that supplied the insatiable demand of the Roman market. The population of the middle Tiber valley came to constitute, in size and tastes, a large and sophisticated market for agricultural and manufactured goods in its own right. In particular, this consumption is considered from the perspective of social competition.

It has already been argued above that towns developed as arenas for competitive social display (section 4.4); in other words, places for the highly visible consumption of wealth. Individuals, families and whole communities engaged in new or enhanced ways of projecting their social identities, both maintaining existing identities and creating new ones. The urban landscape became a medium for this competition, with the construction of monumental buildings, the provision of public amenities, the sponsorship of games, religious dedications on behalf of the community, the provision of banquets and the construction of elegant residential houses. In this way, newly arrived people, including freedmen, could integrate into existing communities, aspiring individuals and families could use money and connections to improve their status, and the wealthiest could create pathways to power at Rome itself. But competition was not restricted to the urban landscape, the rural landscape was also drawn in, from monumental palatial villas down to modest farm sites. This involved both the adoption of new construction techniques, such as *opus reticulatum* and brick-faced concrete, and the use of marble wall veneers, flooring and other indicators of taste, wealth and aspiration. The white and coloured marble collected by the South Etruria Survey is a particularly valuable record of the spread of a completely new marker of social status (quite different in scale from the small Republican-period market for local stone, see section 4.7.3). Over 1300 pieces of marble from nearly 350 sites were collected by the survey, the vast majority of which are veneers for floors and walls including *opus sectile* tiles.[808] During the first two centuries AD, white Carrara marble from the quarries at Luna, northern Italy, dominated supply to Rome, shifting to white Proconnesian marble from Marmara during the Severan period. Both of these types are found at urban and rural sites across the middle Tiber valley. In addition to white marbles, coloured stone was also recovered in large numbers as part of the South Etruria Survey including *giallo antico, Africano, porfido rosso, portasanta, pavonazzetto* and *cipollino*. As with the white marbles, the importation of these coloured stones from around the Roman world into the study region fed off Rome's supply network; without the massive state-driven demand for marble in the city, these ornamental stones would have been much less accessible to the suburban populations in the middle Tiber valley.[809]

As with pottery, it is clear that the South Etruria surveyors did not attempt to collect a systematic sample reflective of the variable abundance of different marble types on each site (see section 2.2.1). Rather, the aim was to collect a representative piece of each different marble type. One effect of this strategy may have been to exaggerate the relative importance of coloured compared with white marbles, though the overall diversity and abundance of coloured stone remains unusual for a Roman rural landscape. Another effect of this sampling strategy is to make it difficult, on the basis of the marble finds alone, to differentiate between modest sites making only limited use of marble and wealthy sites using large amounts. Undoubtedly, however, these ornamental stones, and especially white marble, were employed on an unusually wide spectrum of rural sites when compared to other regions; it was not so much the use of marble on a middle Tiber valley site that signals its status, as its use in large amounts.[810] The South Etruria Survey sampling strategy has therefore reduced an important dimension of difference within the dataset. Nonetheless, Ward-Perkins's personal interest in stone and marbles meant that special attention was paid to this category of material culture providing an unusually comprehensive archive of ornamental stone from a rural landscape, evidencing the inter-connectivity with urban supply routed from around the Roman world.[811] In addition to marble veneers, the surveyors collected hundreds of individual mosaic tesserae, made of (black) *selce* and (white) limestone.

Stone—marbles, basalts and to a lesser extent limestone—are hard wearing and therefore relatively resilient when moved from stratigraphic context into the ploughzone. Other categories of finds, however, are more friable. The ability of the South Etruria surveyors to collect material from many sites immediately or soon after they had first been ploughed therefore permitted the recovery of a variety of objects that are often poorly represented on surface sites today. Pieces of wall plaster (some painted) and stucco decoration, fragments of window and vessel glass, *pasta vitrea* mosaic tesserae, pieces of mosaic floor with tesserae still in matrix and fragments of lamps all point to the refinement of some of these rural sites and their access to supply markets. Distributions maps of window glass

[808] Clarke 2008, 2012.

[809] Fant 1993; De Nuccio and Ungaro 2002.

[810] Clarke 2008: 698.

[811] Dodge and Ward-Perkins 1992.

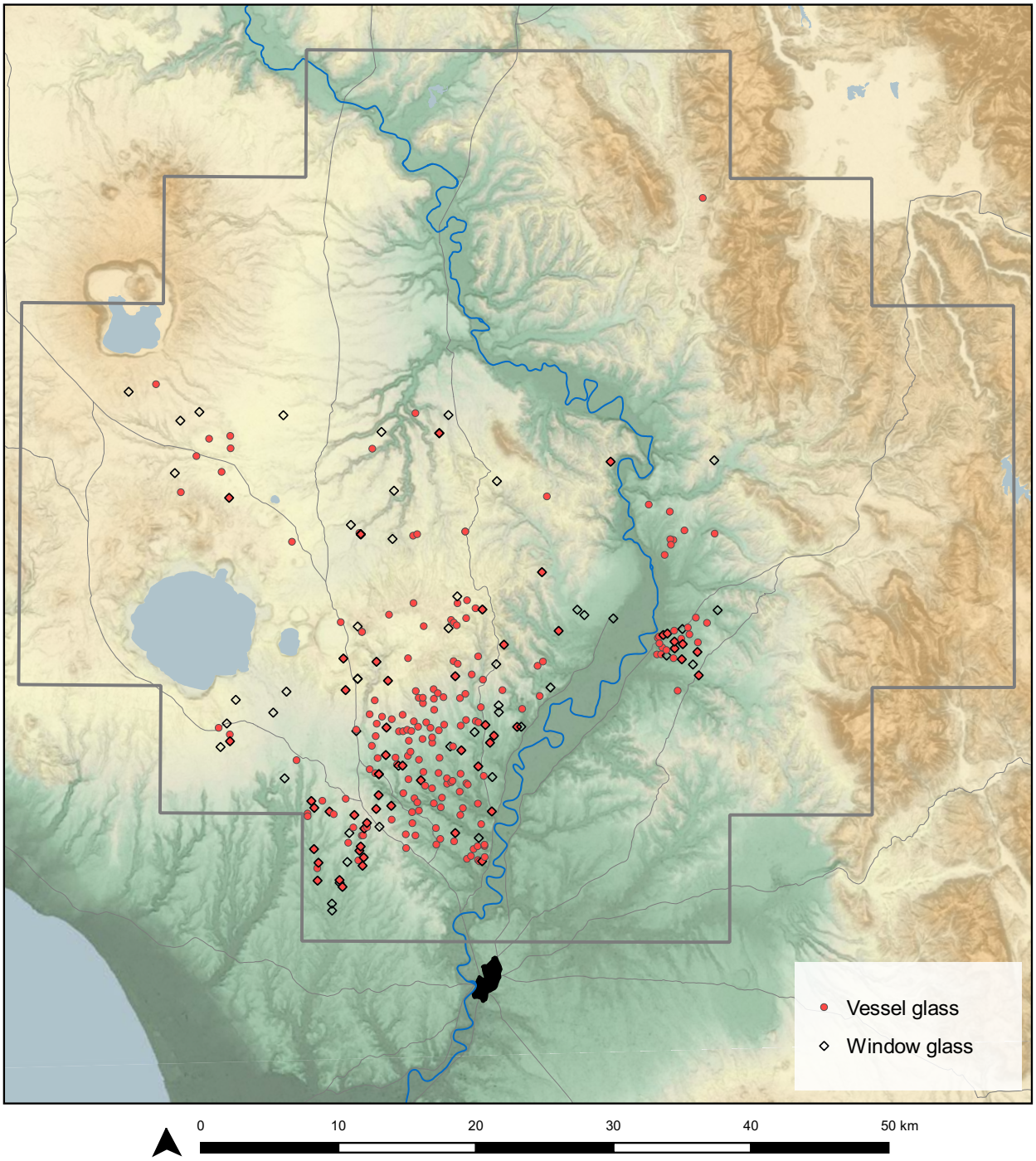


Figure 4.30. Distribution of vessel glass and window glass collected by the South Etruria Survey from early and mid-imperial-period sites in the middle Tiber Valley (50 BC–AD 250).

and glass vessels (Figure 4.30), mosaic tesserae (Figure 4.31) and white and coloured marbles (Figure 4.32) from survey sites across the middle Tiber valley demonstrate the degree to which these indicators of wealth and status had spread into the hinterland and down the settlement hierarchy.

In addition to the unusual abundance of these predominantly structural indicators of social and economic status in the rural landscape, ceramics also play an important part in documenting the increasing integration of population with markets and social practices via the use of pottery vessels, or their contents, for the display of social status. The main diagnostic fine-wares for the early and mid-imperial periods—*terra sigillata italica* and, subsequently, African red slip—are found across Italy and their use in the middle Tiber valley is therefore not unusual in this regard. There is a question, however, about whether the area made greater use of these wares compared to

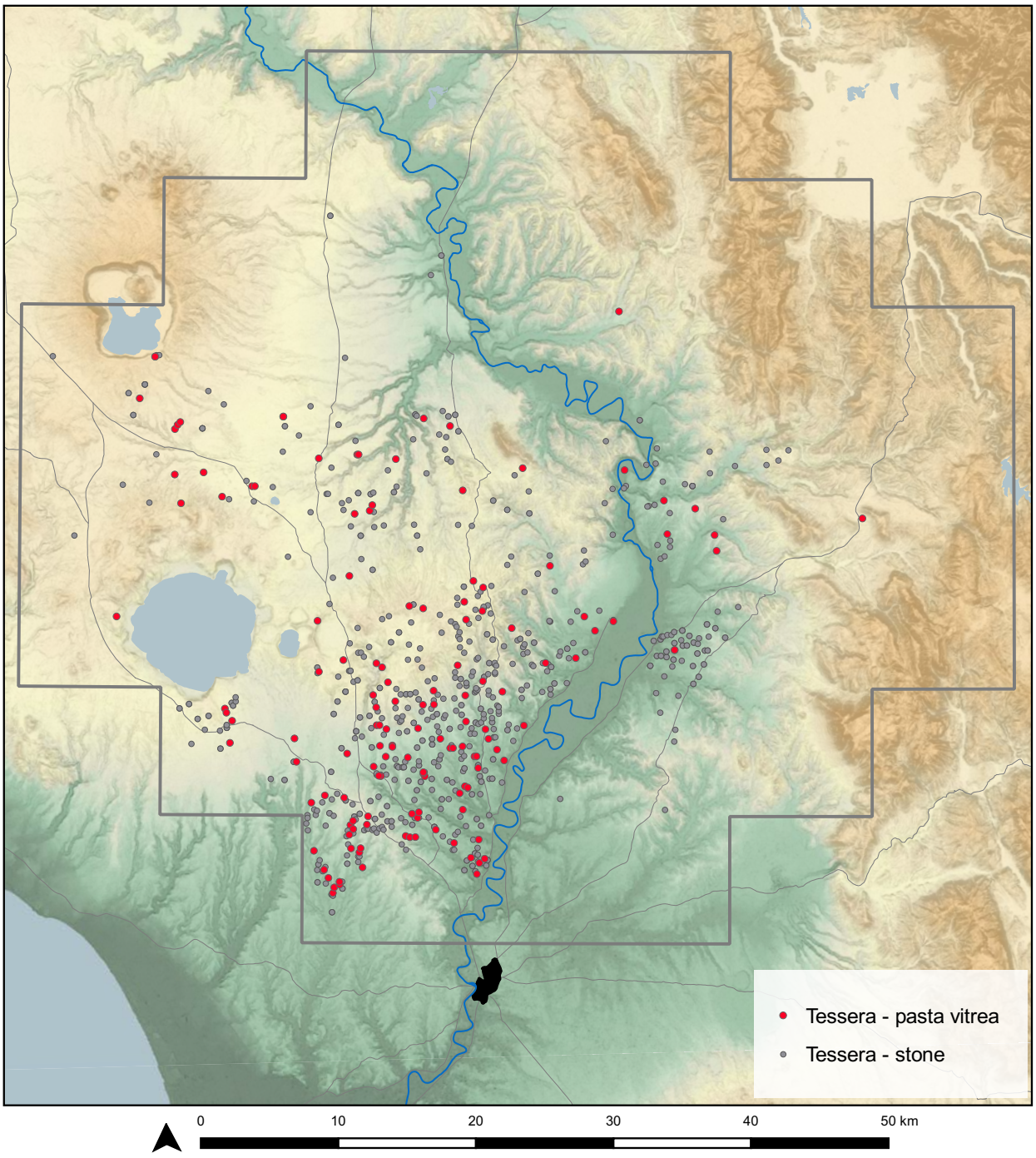


Figure 4.31. Distribution of stone and *pasta vitrea* mosaic tesserae from early and mid-imperial-period sites in the middle Tiber Valley (50 BC–AD 250).

other parts of Italy, because of the local production of *terra sigillata* to supply the city and because of access to imported African red slip via proximity to the Rome market; there are also questions around variability in their consumption in different parts of the valley and at different types of site. Around 8 per cent of the total restudied South Etruria Survey pottery is *terra sigillata* (6068 of around 75,000 sherds; Table 4.8). Given that the complete assemblage represents more than two millennia of activity, yet *terra sigillata* circulated for only around a century and a half, this is a considerable proportion. As discussed in section 2.2.1, however, the South Etruria Survey did not operate a systematic sampling and collection strategy. Was there a bias towards the collection of fine-wares that gives a false impression of the relative scale of fine-ware consumption in this period? One approach to this question is to compare the South Etruria Survey pottery with other more systematically sampled material from within the study area. Although much smaller in scale, and therefore more sensitive to local variability, such assemblages may indicate whether, and to what

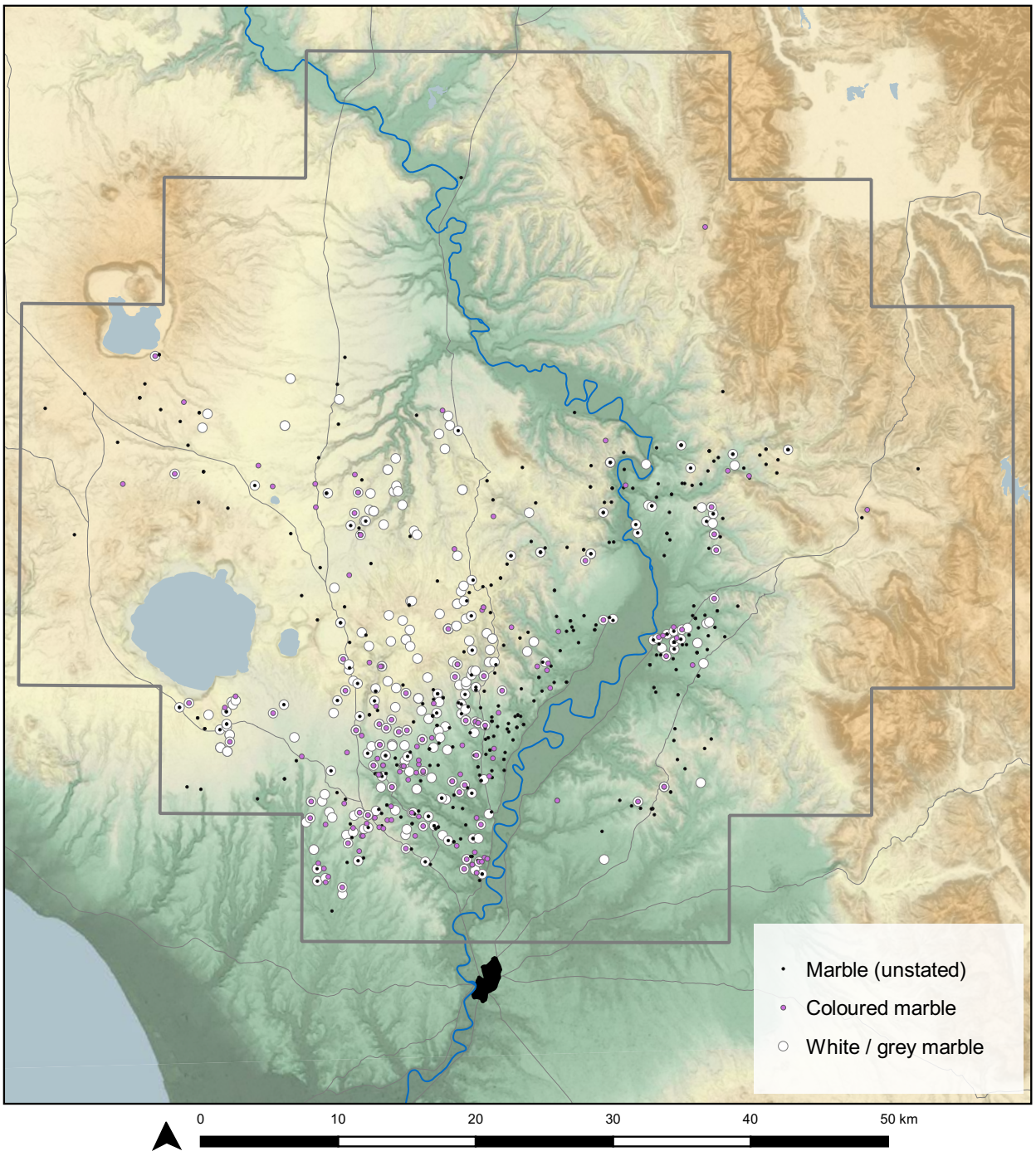


Figure 4.32. Distribution of marbles at early and mid-imperial-period sites in the middle Tiber Valley (50 BC–AD 250).

degree, fine-wares are over-represented in the South Etruria Survey dataset. The Corese Survey, for instance, collected a systematic 20 per cent sample of all surface material. The results demonstrate that fine-wares account for around 10 per cent of the total assemblage, far lower than the 26.4 per cent identified by the South Etruria Survey. This might be taken to suggest that fine-wares are significantly over-represented in the South Etruria Survey material as a result of a less intensive, more selective sampling strategy. At the same time, the Nepi Survey, which used sampling and collection strategies similar to the Corese Survey identified a much lower percentage of fine-wares—just 2.9 per cent.[812] Although the Nepi surveyors briefly consider the potential effects of different collection strategies, they conclude that there was a marked difference in access to, and consumption of, fine-wares between the northern and southern parts of the middle Tiber

[812] Di Giuseppe *et al.* 2002; the Nepi survey used a grab-sampling strategy but involved much higher intensity of coverage than the South Etruria Survey; Mills and Rajala 2011.

Table 4.8. Quantities of selected classes of pottery in the middle Tiber valley from the imperial (50 BC–AD 250), early imperial (50 BC–AD 100) and mid-imperial (AD 100–250) periods.

	Imperial	**Early imperial**	**Mid-imperial**
Pottery class	*50 BC-AD 250*	*50 BC-AD 100*	*AD 100–250*
African cooking-ware	189	0	156
African red slip ware	2871	25	1588
Colour coated ware	55	26	14
Eastern *sigillat*a	48	6	4
Plain ware	403	152	36
Pompeian red slip ware	23	14	0
Roman amphorae	221	15	7
Roman coarse-ware	2192	187	85
Roman lamp	52	10	12
Terra sigillata italica	6068	1406	0
Terra sigillata South Gaulish	48	46	0
Thin-walled ware	1217	29	26
Unguentaria	40	23	0
Totals	**13427**	**1939**	**1928**

valley.[813] The Corese figures, however, suggest some caution about this interpretation; the Corese area, next to the Tiber, was within easier reach of Rome than Nepi but, fine-wares even here comprised only 10 per cent of the overall assemblage, much lower than the South Etruria Survey figure.

In practice, what this comparison suggests is that fine-wares only ever made up a small percentage of all the pottery consumed—even if, at around 10 per cent, it was still high compared to provincial, and even many other Italian, landscapes. Finally, it is worth noting that *terra sigillata* and African red slip are just two of the many different classes of pottery consumed in the middle Tiber valley during the early and mid-imperial periods. Their prominence in the archaeological literature is a reflection of their importance as chronological markers, but other categories of table-wares could be equally or even more abundant. This is also confirmed through excavated assemblages. At the Mola di Monte Gelato villa, for example, colour-coated wares were far more numerous than *terra sigillata*, some even directly imitating standard *terra sigillata* forms (e.g. *Consp*. 34). This might suggest a lack of access to *terra sigillata*, though as the setting up of an on-site kiln to produce imitations points to the presence of significant resources and access to skilled labour, any lack of access likely points to issues of supply rather than lack of demand. Perhaps instead such local production suggests that the source of the pottery was less significant for the user than the fact that it could be used to demonstrate awareness of the latest tastes and fashions.

It was noted in section 4.7.1 that amphorae are not a good indicator of agricultural production in the *suburbium*; instead, their presence provides better insight into the importation and consumption of foodstuffs. A total of just under 3500 Roman amphora sherds were collected by the South Etruria Survey, of which 1933 allow for the identification of provenance. Just under half (45%) of these sherds are of Italian origins and just over half (55%) are imported from elsewhere. Of the Italian amphorae, approximately 50 per cent came from Tyrrhenian Italy, including small numbers from Sicily and Calabria and 45 per cent are from central Italy, with the remainder from the Adriatic. Of the imported amphorae, around 70 per cent are from Africa and around 17 per cent from the East Mediterranean, with the remainder from Spain and Gaul.

Within these figures, chronological trends are obscured by the large numbers of generically dated amphorae. If the latter (defined here as a date range of more than three centuries) are excluded from the calculations, then a clear peak in the numbers of Roman amphorae in circulation is evident during the early and mid-imperial periods (Figure 4.33). Excluding the generically dated material also makes it possible to discern a general shift in the provenance of amphorae from Tyrhennian Italy during the Republican period to central Italy in the imperial period, with Africa and the East Mediterranean growing in importance through into late antiquity.

These general trends are similar to those documented at Rome, Ostia and Portus, where a shift from amphorae to (archaeologically invisible) wooden barrels may explain at least some of the decline in the Italian supplies. More noteworthy, however, is the dominance of Italian amphorae in the early and mid-imperial periods. Although supplies of foodstuffs and other goods flowed into the middle Tiber valley from around the Roman world, the supply of amphorae-borne goods was predominantly from Italy—and increasingly from central Italy rather than regions such as Campania. Indeed, as amphorae were predominantly intended for long-distance maritime transport (the flat-bottomed Spello amphora is an exception), it is likely that the

[813] Mills and Rajala 2011: 167 contrast their 2.9 per cent with a quoted figure of 39.7 per cent for the restudied South Etruria Survey material; the actual figure is 26.4 per cent.

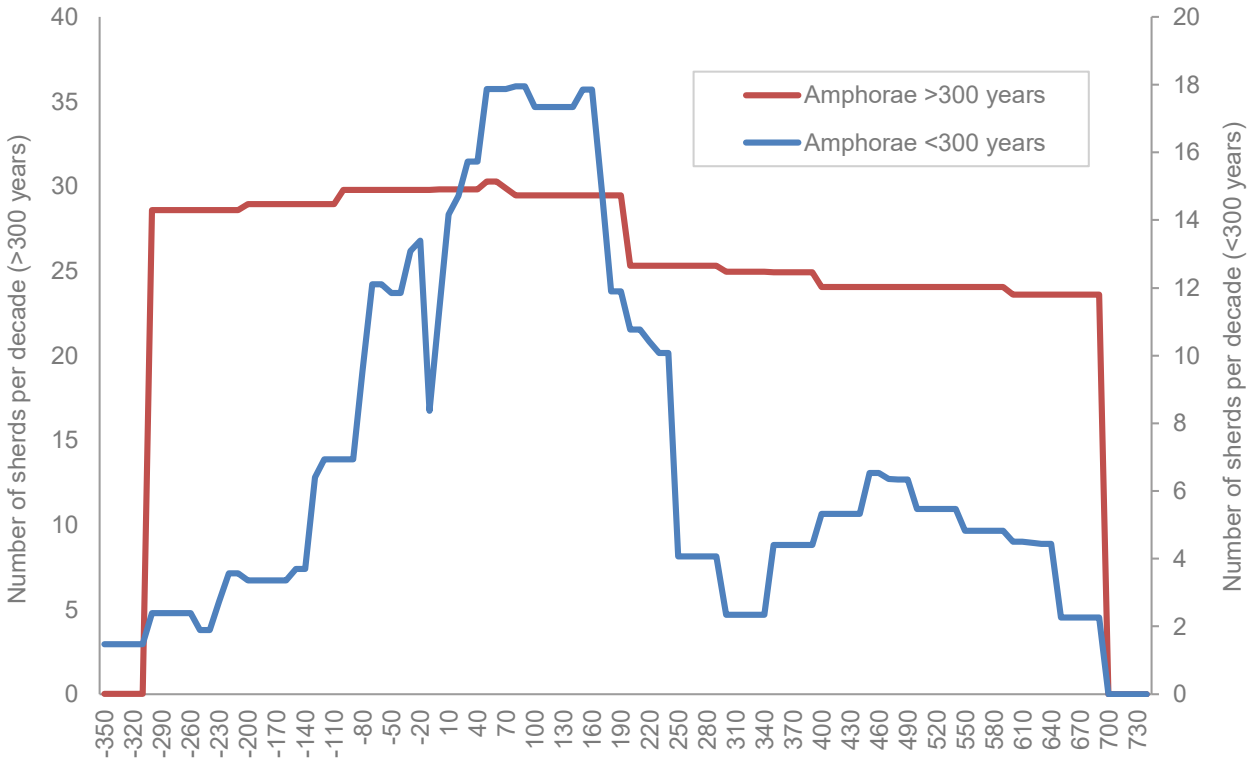


Figure 4.33. Weighted average numbers of amphora sherds per decade collected by the South Etruria Survey (350 BC–AD 700).

ceramic record underrepresents Italian and especially local supply to the region, which would increase still further the dominance of Italian supplies. Focusing narrowly on the amphora sherds securely datable to imperial period (50 BC–AD 250), well over half are of the Spello-type from central Italy (115 of 197).

Alongside wine, fish sauce and small amounts of olive oil imported in amphorae played a growing role. As with marble (above), these imports likely piggy-backed on the substantial imports intended to supply the city of Rome. A comparison of the South Etruria Survey amphorae with a sample of amphorae from Portus demonstrates strong similarities suggesting that Rome sat at the centre of single integrated economic zone offering the population of the middle Tiber valley special, though not unique, access to these commodities.[814]

The 3500 amphora sherds identified by the restudy of the South Etruria Survey constitutes approximately 4.5 per cent of the total number of pottery sherds collected. In contrast, the more intensive Corese Survey, which collected all surface materials rather than sampling, identified 910 amphora sherds representing just under 27 per cent of the overall total (and, of the approximately 52,000 sherds recovered during the recent excavations at Portus, just under half were from amphorae[815]). It is already clear from the comparison of the South Etruria Survey records with the restudied material that Roman amphorae are significantly underrepresented in the dataset (section 2.2.1). Comparison with the results from Corese appears to corroborate this observation, although it is also important to note that the percentage of amphora sherds from the Nepi Survey is much more similar to the South Etruria Survey figure than to that from the Corese Survey. The discrepancy between the figures for Nepi and Corese is perhaps to be explained both by the greater accessibility of the latter area to Rome, via the Tiber, and the greater density of villas in this part of the valley.

4.8.2 Funerary landscapes

From the high life to the end of life. Death and burial provided another important medium for competitive display and the funerary monuments of the late Republican and early imperial periods are particularly prominent in the middle Tiber valley (Figure 4.34). Funerary practice during this period demonstrated greater emphasis on display and commemoration, with a shift towards cremation—both more costly in terms of resources and offering more opportunity for elaboration of ceremony—and monumentalization of burial places through larger plots, more substantial tomb architecture and the erection of inscriptions. Most strikingly, the allocation of larger amounts of land for cemeteries and burial plots took place against the backdrop of rising land prices. These changes are

[814] Fontana 2008: 667.
[815] Keay *et al.* 2015.

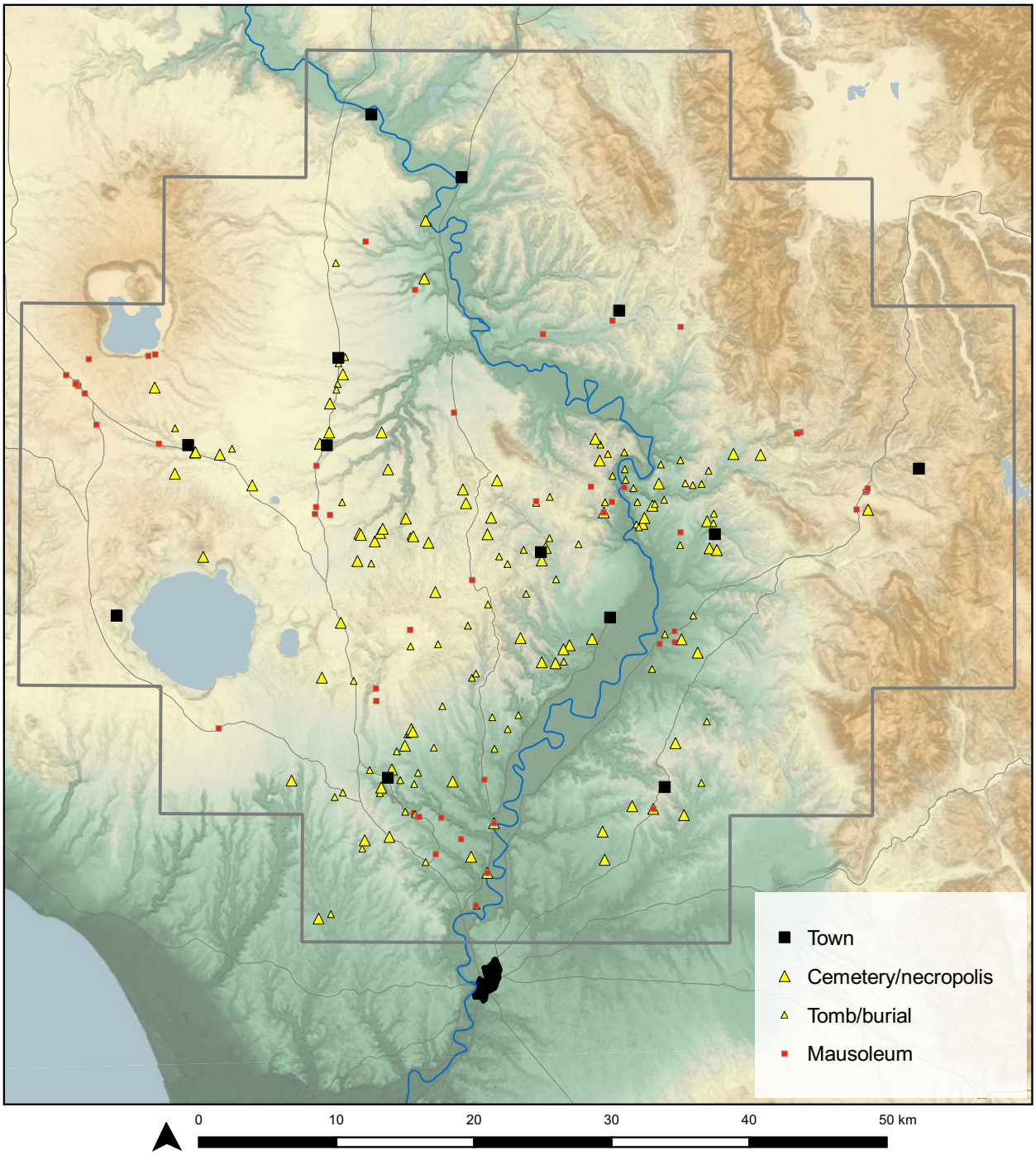


Figure 4.34. Early imperial-period funerary sites in the middle Tiber valley (50 BC–AD 100).

inevitably most visible among the elite, but can also be detected amongst the wider population. The elite were greatly influenced by Augustus's mausoleum, with imitations lining the Via Flaminia outside Rome as well as around suburban towns such as Falerii Novi.[816] Over time, there was a gradual shift away from Rome as the focus for senatorial tomb monuments, with a growing preference for more modest mausolea at suburban towns or along the roadside of private villa estates. The latter seems, in part, to have been intended to create lasting associations between specific families and their properties.[817] This practice is all the more notable because of the rapid turnover of property ownership at this time; the success of the strategy may be glimpsed through the survival of praedial names, derived from these property owners, in modern toponyms (*-ano*).

[816] Eisner 1986.

[817] Bodel 1997: 12; Fentress *et al.* 1983: 98 note, for example, how several villas on the Via Veientana seemed to be paired with mausolea.

A recently excavated site on the road between Nomentum and Eretum gives a more detailed sense of one of these imperial-period roadside cemeteries. At around the time the road was first paved, during the first century BC or first century AD, a group of burials and funerary monuments was established immediately next to the carriageway: a rectangular funerary enclosure with four burials including a substantial stone-built tomb, and, a short distance to the north, a 7 m-diameter circular concrete structure and a square (4.6 × 4.9 m) concrete foundation on either side of the road represent two substantial funerary monuments. In a second phase of activity, in the second and third centuries, a series of burials (*tombe alla cappuccina*) were added within and around the funerary enclosure.[818] The complex as whole illustrates the close connection between roads and cemeteries; as liminal spaces that bridged the public and private spheres, such locations permitted the visible display of private status. These cemeteries also attracted a mix of social statuses and created meaningful places that would continue to attract burial over the subsequent centuries.

The previous example represents the foundation of a new landscape focus in the early imperial period, marked by new forms of architecture and ritual. A more traditional form of funerary practice, especially across south Etruria, was the rock-cut tomb—either carved into the soft tufo cliff faces or excavated underground. This was a characteristic form that dated back to the Archaic period and earlier; it also continued through into the imperial period, with both newly rock-cut tombs and the reuse of existing funerary complexes. Such tombs were particularly concentrated along roads where they could maximize their audiences such as along the Via Amerina south of Falerii Novi or the Via Flaminia north of Rome.[819]

In general, greater attention has been paid to the architecture of tombs and their associated grave goods than to their spatial distribution. A notable consideration here is that during the imperial period, as in some earlier periods, the choice of ceramic vessels for inclusion with burials closely tracks those in wider ceramic usage. This is particularly significant in the context of the classification and interpretation of surface scatters. Unless concentrations of human bone are present, a ploughed cemetery of tile-lined tombs might look very similar to a 'farm' site. It is possible that the South Etruria Survey may have classified some funerary sites as residential sites, underestimating the dispersal of cemeteries in the landscape, though bone and other organic material may have been more visible to the South Etruria surveyors as the deposits were then freshly disturbed (e.g. TVP-ID 02071, 02235, 03584).

Compared to studies of funerary architecture and grave goods, human bioarchaeological studies at Rome and in the *suburbium* have been relatively limited.[820] Recent development work in the immediate suburbs of modern Rome, however, has identified a number of substantial cemeteries of imperial date;[821] the full bioarchaeological study of these sites promises in due course to revolutionize understanding of life and death in the suburban landscape.[822] Meanwhile, what is most striking is that although the imperial-period population was more dispersed across the landscape than ever before, many chose to be buried in larger funerary communities, where there would be one final opportunity for a display of status and wealth within a wider social group.

4.8.3 Summary

The early imperial period was an era of increased migration and enhanced mobility fuelled by high levels of consumption and competitive display. It has been conventional to see the early imperial period as an era of stability, prosperity, and opportunity, not least as a result of the success of the South Etruria Survey. It is, however, possible to question whether the evidence really does support an interpretation of an unalloyed Golden Age of prosperity borne of the *pax romana*, market demand and social integration.

The consumption of wealth—whether in the form of urban monuments, villas or simply the latest forms of *terra sigillata*—is to be understood in the context of social competition within the new imperial regime. This change in consumption occurred across the western empire, but was particularly developed in the *suburbium*. Many individuals, families and urban communities were able to achieve new access to patronage or power, but success must always have been tempered by the knowledge that such privileges could be suddenly and disastrously withdrawn. Similarly, the increased consumption of 'fashionable' metropolitan goods, especially amongst rural communities, certainly indicates access to, and use of, a wider variety of material culture than in previous generations; but to what extent does this material culture indicate increased wealth rather than a necessary integration with, and dependence on, markets? It is generally assumed that participation in the market economy was facilitated (or inhibited) by wealth and cultural choice. Involvement with these markets, however, may have been increasingly difficult to avoid due to the complexity of the imperial system. For example, tenancy will have required

[818] Paoli and Sgrulloni 2013.
[819] Caretta *et al.* 1995; Cerasuolo and Pulcinelli 2005; Messineo 1991.
[820] See Manzi, Santandrea and Passarello 1997 for an exception.
[821] E.g. Minozzi *et al.* 2012.
[822] Catalano, Minozzi and Pantano 2001; Buccellato, Catalano and Musco 2008; Killgrove 2017; Killgrove and Montgomery 2016.

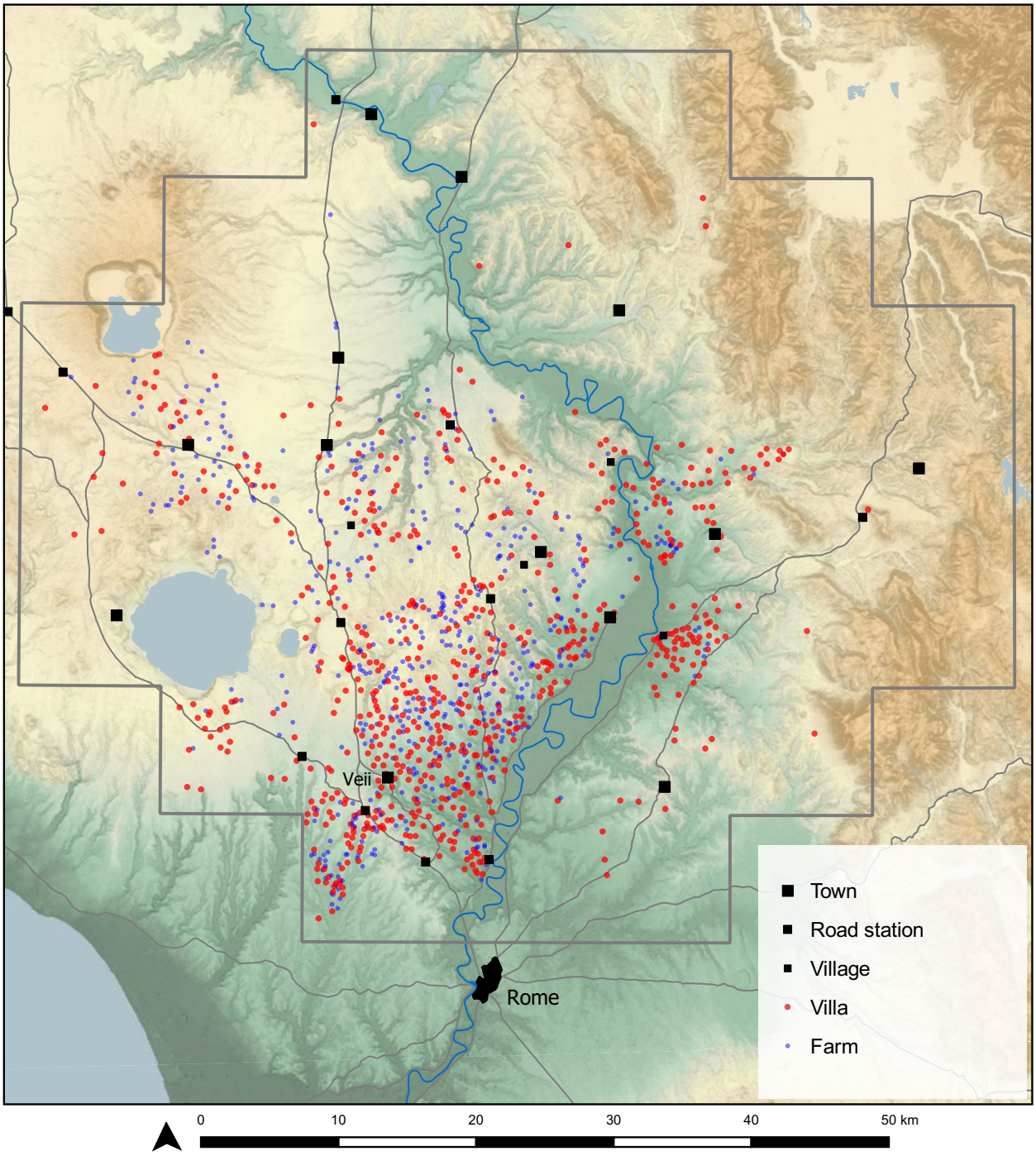


Figure 4.35. Tiber Valley Project settlement sites in the mid-imperial period (AD 100–250).

particularly intensive market involvement which brought access to new forms of material culture. This may, of course, have been very welcome. But it also implicated metropolitan material culture in social relations—keeping up with the *Quintilii* became a social necessity.

4.9 The mid imperial-period landscape

For the Tiber Valley Project, the mid-imperial period is defined as the years between AD 100 and 250. The start date coincides, roughly, with the shift from *terra sigillata* to African red slip as the key diagnostic fine-ware. Like the early imperial period, however, there are a number of other ceramic classes and form types that can be used to date mid-imperial settlement (Table 4.8). Historically, this was a time of continuing peace and security, at least until the end of the second century AD, though the so-called 'Antonine Plague', probably smallpox, may have brought social and economic disruption; recent attention has focused on the potential effects of the plague on, and its possible visibility in rural settlement

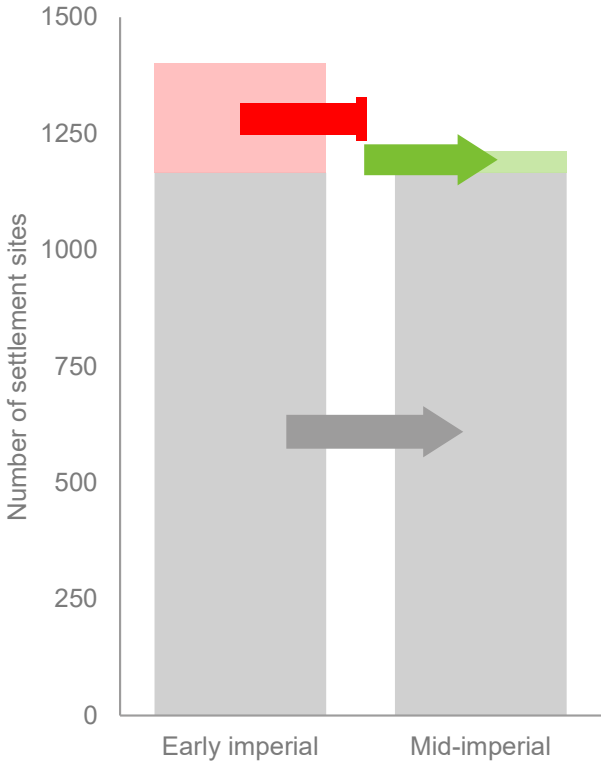


Figure 4.36. Numbers of settlement sites abandoned (pink), continuing (grey) and newly founded (green) at the transition from early imperial to the mid-imperial period.

numbers.[823] In the middle Tiber valley, however, there is only a modest decline in settlement numbers in the mid-imperial period (Figures 4.35 and 4.36); major reduction in sites numbers came only from the mid-third century onwards (see section 5.3.2). Many of the trends that characterized the early imperial period continued; wealthy villa complexes continued to expand and economic and social integration of the area with Rome intensified. There were, however, also changes, with fewer new urban monuments constructed and a more intermittent interest in epigraphic commemoration.[824] The data collected in the project database reflect this continuing tension of continuity and change.

In the towns of the middle Tiber valley, there had been a slowdown in urban construction under Nero and the Flavians, followed by renewed activity, especially the building of bath complexes, under Trajan.[825] Overall, however, more attention was directed towards the repair of existing structures than the building of new ones. A few more distant towns only really began their expansion in early second century AD, most obviously, Trebula Mutuesca partly under the patronage of the Bruttii Praesentes. Yet, generally through the second century AD, it was the emperor who came to dominate acts of patronage, perhaps intending to lead by example or perhaps simply to ensure his visible presence. There are also indications of increasingly direct state involvement in the affairs of the middle Tiber valley, for example, the appointment of *curatores rerum publicarum*.[826] The construction of the Aqua Traiana (AD 109) was driven by the needs of Rome, and especially the supply of water to the Janiculum (later used to power a mill complex during the third century AD);[827] the monumentalization of the aqueduct's source on the western shore of Lake Bracciano may have been connected with the earlier involvement of Domitian at nearby Aquae Apollinares Novae.

Hence, if the countryside had already developed at the expense of local towns during the early imperial period, that trend continued in the mid-imperial period. By the third century, there was much less investment in urban centres but there were signs of growth at small rural centres and imperial estates, such as bathing complexes. Indeed, the signs of change are already visible in the early third century. The recycling of marble inscriptions of first-century AD date at sites such as Veii may indicate the decline of local elite families and their wealth, or reduced incentive to build and commemorate, or the loss of the memory of earlier generations.[828] The transition from the early to mid-imperial period (*c.* AD 100) is characterized by a modest overall decline in settlement numbers of around 17 per cent, with one in six sites abandoned (Figure 4.37). In all areas and site types, however, the vast majority of early imperial-period sites continued to be occupied into the mid-imperial period, reflecting the very high levels of continuity between the late Republican and early imperial periods; the mid-imperial-landscape was squarely based on the settlement structure that emerged two or more centuries earlier. Within the average figure of one in six sites abandoned, however, there is some variation between the sites types and sub-regions. Approximately one in five farms (21%) went out of occupation, but only one in eight (12%) villas.[829] As might be expected, the highest levels of abandonment are registered in relation to sites identified from legacy datasets (33%), but also, less predictably, by the more intensive Farfa Survey (28%) too. There is no clear pattern of abandonment across different survey areas, with the proximate Farfa and Corese Surveys documenting the highest and lowest levels of abandonment respectively (28% vs. 1%). Figure 4.38 shows the distribution of settlement sites abandoned at the transition to the mid-imperial period alongside

[823] Ael. Arist. *Or.* 51.25 on the effects in the *suburbium*; Duncan-Jones 1996; Bruun 2007; Lo Cascio 2012.
[824] Papi 2000.
[825] Papi 2000: 121–154.
[826] Papi 2000: 136–172.
[827] Wilson 2000
[828] Papi 2000: 173–182; see also the second-century AD baths at Leprignano, near Capena, Borsari 1893a.
[829] There is certainly no evidence, *pace* J.R. Patterson 2006: 7, 64, for the continued expansion of settlement during the second century AD in the territories of either Sutrium or Capena.

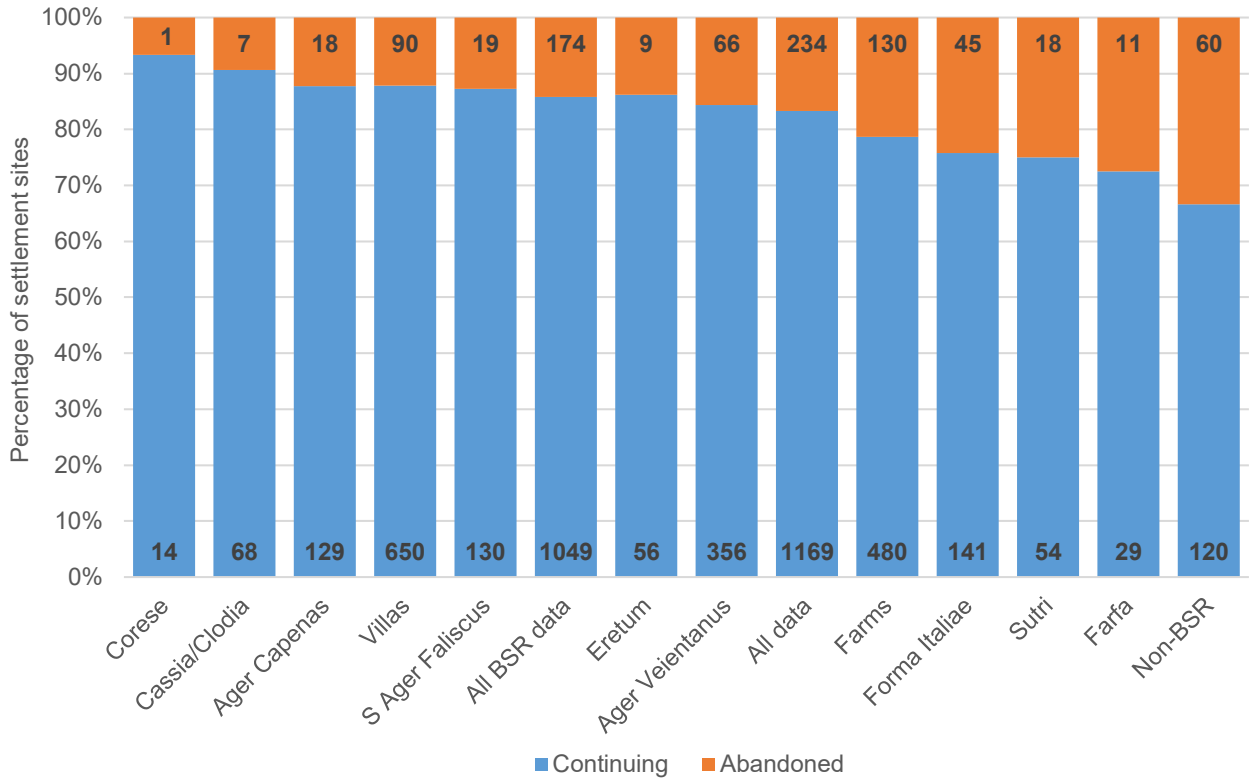


Figure 4.37. Ratios of continuing and abandoned early imperial-period settlement sites at the transition to the mid-imperial period, grouped by select site types, surveys and groups of surveys.

the locations of newly founded settlements. Some local patterning can be discerned, for example with more sites abandoned in the southern Ager Veientanus, more new foundations in the northern Ager Veientanus, and a dearth of new sites in the eastern Ager Veientanus and northern Ager Capenas. Overall, however, across the middle Tiber valley as a whole, the small number of sites that were abandoned are widely distributed, with no significant concentrations to suggest that blocks of land were systematically abandoned (e.g. marginal areas). This situation is best characterized as a process of mid-imperial abatement within the enduring settlement framework first established during the late Republican period. Nonetheless, it is worth stressing that the vast majority of sites remained in occupation, a general trend that is unusual seen in longer historical perspective. Figure 4.39 shows a more detailed view of mid-imperial period settlement and other sites and features in the eastern Ager Veientanus, Ager Capenas and southern Ager Faliscus.

As noted above, although some sites were abandoned, others were newly founded. In sharp contrast with the late Republican to early imperial-period transition, however, the total number of new (or newly reoccupied) sites during the mid-imperial period is small: just 12 villas and 30 farms. In summary, the majority of settlement sites continued in occupation in the mid-imperial period; a small number of sites were newly founded, but these did not fully compensate for the one in six sites abandoned, leading to an overall 13 per cent decrease in settlement numbers. This strong overall continuity mirrors the transition from the late Republican to early imperial period and points to an extended era of settlement stability from at least the first century BC into the second century AD.

On the basis of surface scatters alone, it is difficult to evaluate if and how individual villas or farms changed in appearance during the mid-imperial period. As nearly all continued in occupation from the early imperial period, with few new sites, there is likely to have been a stronger element of architectural continuity than at the transition from the late Republican to early imperial period with its new range of styles and materials.

Two excavations reveal the very different fortunes of villas during the mid-imperial period. The villa at Mola di Monte Gelato, founded during the Augustan period (section 4.5.1), underwent a series of modifications *c.* AD 100–150. These included the blocking of the original entrance, the construction of cisterns, the paving of the approach road, and the building of an elegant temple-tomb. At some point in the late second/early third century, however, the villa was destroyed and abandoned; so abrupt was this event that the excavators were tempted to associate it the purging of one of the emperor Septimius Severus' political enemies. Such an

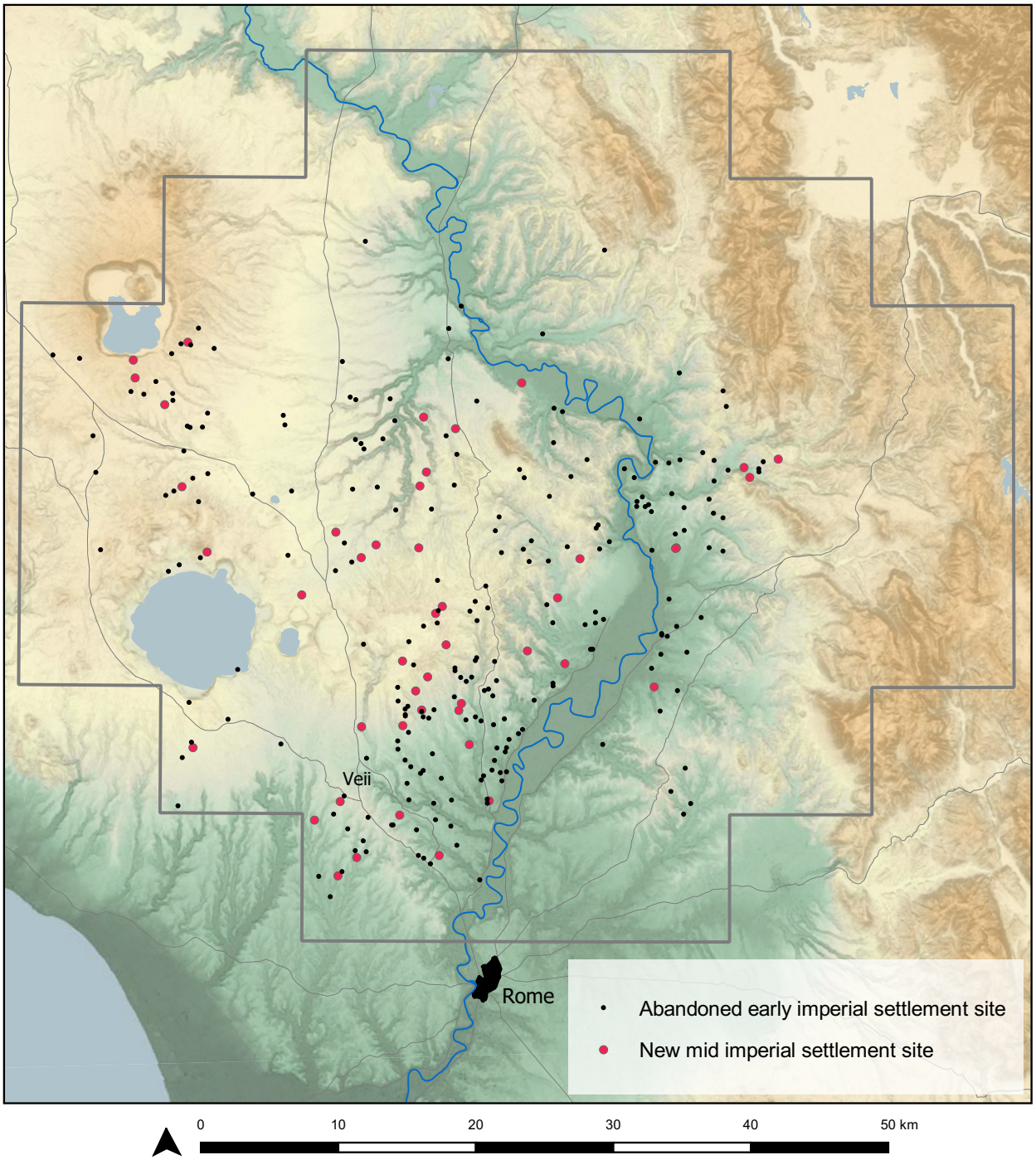


Figure 4.38. Distributions of abandoned early imperial (50 BC–AD 100) and newly founded mid-imperial (AD 100–250) settlement sites.

explanation is almost impossible to verify, but in the context of the close links between the middle Tiber valley and social and political order at Rome, it is entirely plausible.

In contrast, the monumental villa at Muro di San Stefano, near Lake Bracciano has a very different history and form (TVP-ID 02812). During the early imperial period, the site appears to have hosted a modest agricultural complex; then, following a period of abandonment, a monumental brick and concrete building, 22 × 18 m, was constructed.[830] The style of architecture, and the brick stamps included in the structure, date it to *c.* AD 200. The building, which survives to a height of 18 m, was richly decorated with imported coloured marble including *giallo antico*, *rosso antico*, *pavonazzetto* and red porphyry, as well as white marble from multiple quarries. Apart from a nymphaeum with an apse (later incorporated into a church) and an (undated) cistern, deep ploughing

[830] Van de Noort and Whitehouse 2009; Ward-Perkins 1955: 66.

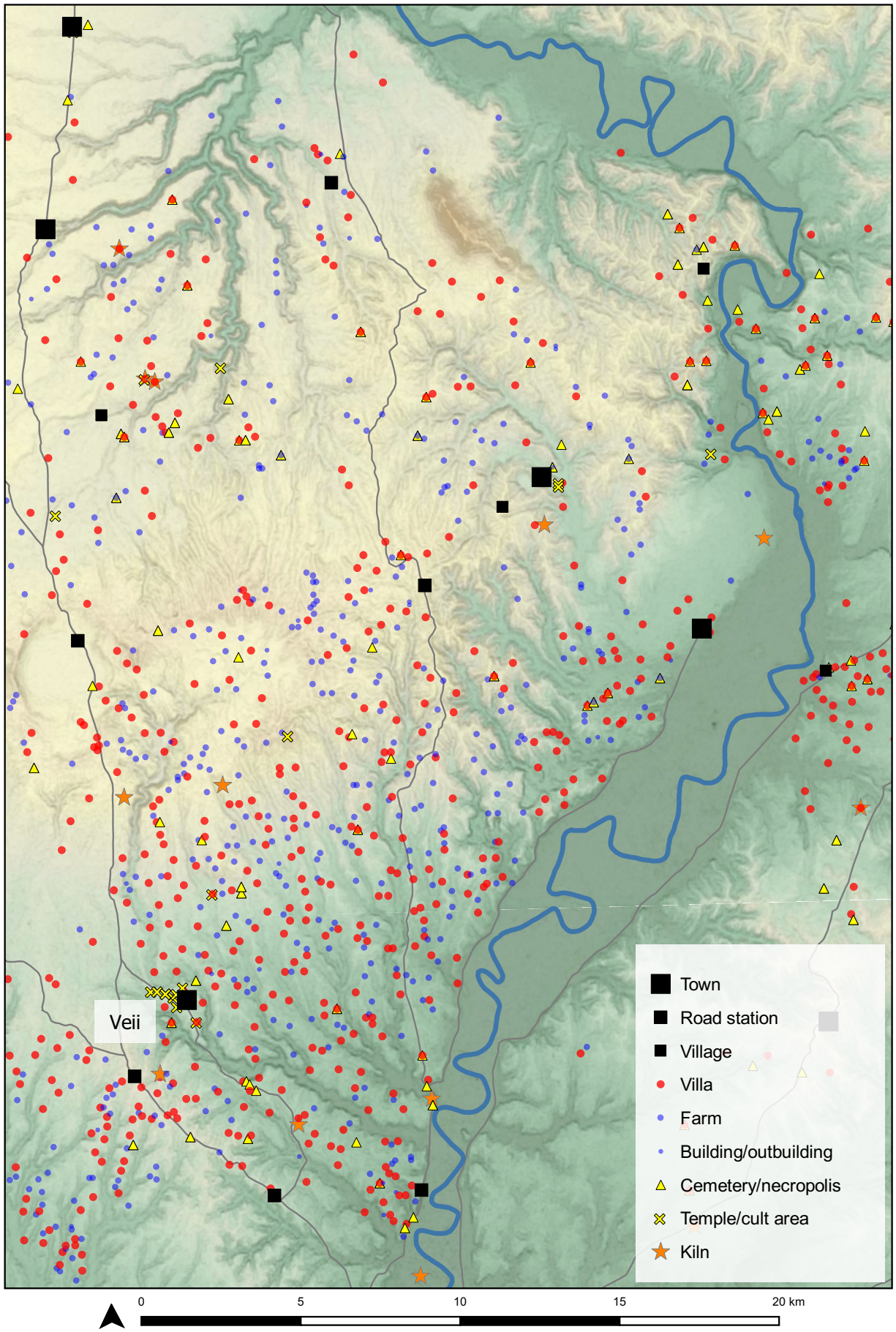


Figure 4.39. Mid-imperial-period sites in the eastern Ager Veientanus, Ager Capenas and southern Ager Faliscus (AD 100–250).

has removed any evidence of other structures at the site leaving what was presumably a central tower of a large complex in splendid isolation. The wealth of the site is extraordinary; the modest earlier occupation and subsequent break in activity followed by a single major phase of construction may suggest that the site was developed following a change of ownership and using wealth that was not derived from the immediate estate. As such, at the same moment that the Monte Gelato villa was abruptly abandoned, Muro di San Stefano was the subject a major investment of wealth. This perhaps lends weight to the idea that very specific, localized explanations might lie behind the general settlement trends.

Much more modest in scale is the small site at Crocicchie on the Via Clodia (TVP-ID 12576).[831] Following deep ploughing, two dense and well-defined concentrations (10 × 6 m, 6 × 4 m) of surface material, including *opus reticulatum* blocks and ceramics, were recorded. These indicate the presence of two structures dating to the first and second centuries AD. Though the site was modest in size, during the third century, the owner added a bath-house (around 9 × 5 m) decorated with a black-and-white dolphin mosaic. Potter argued that the bath-house indicates the prosperity of the estate at this time, though he also observed that such baths were unusual and, given the subsequent abandonment of the site shortly afterwards, suggests that this construction may have been an unwise investment.

The century and a half between AD 100 and 250 represents a period of continuity. Most sites, urban and rural, remained in occupation but the precise nature of activities is less clear. In large part, this is because the transition from early to mid-imperial period was not associated with the same dramatic transformation in material culture that marked the late Republican to early imperial transition. Building activity at urban sites became increasingly sporadic and, by the third century, towns may have lost much of their former significance. In contrast, there was continued investment at wealthy rural settlements and perhaps a suggestion of private estates even competing with towns to provide services such as baths to rural populations. Small farm sites remained an important part of the rural landscape alongside villas, though the precise nature of their social and economic relations is less clear. With the political and economic instability of the mid-third century, the extended and unprecedented period of peace and security enjoyed over the previous three centuries came to an end (Chapter 5).

4.10 The imperial-period landscape: conclusions

This chapter has traced the radical transformation of the physical and human landscape of the middle Tiber valley during the early and mid-imperial periods. Compared with imperial-period landscapes in most other parts of Italy, the density and diversity of settlement and population in this area are unprecedented. The explanation for these quantitative and qualitative differences lies in the evolving social, political and economic relationships between the communities of the Tiber valley and the imperial metropolis. The restructuring of social and political power at Rome—embodied in the figure of the emperor—and the city's burgeoning population coincided with a 'cultural revolution',[832] the effects of which played out in the hinterland as much as in the city itself.

Earlier economic approaches to the concept of hinterland have focused on how the middle Tiber valley was able to supply the imperial city's insatiable demand for produce. But the early imperial *suburbium* did not provide the economic basis on which the city of Rome achieved this revolution, nor was the city even largely sustained by it, for by the late Republican period, Rome had captured an extended hinterland encompassing the whole Mediterranean Basin that could supply its subsistence needs, as well as its growing demand for luxuries. Rather, the imperial-period landscape of the middle Tiber valley was an expression of that revolution and one of the means through which it played out: the growing interest of Roman, Italian and provincial families in this region, the social competition within and between the communities of suburban towns, the development of rural manufacturing and the spread of access to goods that were comparatively rare in other Italian landscapes. All these developments and more were linked to the region's proximity to the largest metropolis in the Roman world and to the presence there of the emperor.

Imperial-period towns in the middle Tiber valley may have been (even) smaller than previously believed, but the monumentalization of these centres reflects a repurposing of their previous functions. Instead of large concentrations of population and economic activity, they became places of display and social competition. As immigrants of all socio-economic statuses moved into the area, the urban landscape became a focus for consolidating communities, old and new. Alongside the transformation of these pre-existing urban centres, new types of settlement came into occupation and new forms of material culture became available with which to eat, drink, work and build. Given these wide-ranging developments, it is all the more striking that a defining characteristic of this period is continuity. Despite all the

[831] Potter and Dunbabin 1979.

[832] Wallace-Hadrill 2008.

social, political, cultural and economic change, the vast majority of pre-existing settlement sites remained in occupation from the late Republican period through to the mid-imperial period, constituting three centuries of stability. Underlying the new imperial-period landscape therefore is the recognizable framework of its Republican predecessor.

At the same time, on a whole series of measures, the relationship between Rome and the middle Tiber valley reached its most intense in the early and mid-imperial periods. During these three centuries, the social, economic and political life of the valley became completely interwoven with that of the metropolis. Even though Rome's relative economic dependence on the agricultural production of the middle valley declined at this time, the relationship was intensified through the effective transformation of the *suburbium* into an extension of the city, a safety valve for the social and political tensions brought about by the rise of Augustus and the consolidation of the empire. In effect, the integration of the *suburbium* transformed the city into a new 'extended metropolis', with significant implications for our understanding of life in the middle Tiber valley and at imperial Rome itself.[833] This physical and political imposition of Rome on its hinterland underlies the satirical graffito, recalled by Suetonius (*Nero* 39; see above p.117), criticising Nero for the way in which his Golden Palace encroached on the city and its inhabitants, and—with hyperbole—even further out into the suburbium. We can now better discern some of the archaeological aspects of this relationship, such as the shared ceramic preferences of metropolitan and suburban populations, and the latter's unusually privileged access to commodities such as glass and imported marble.

Nonetheless, these developments came with costs. The imperial period was not the Golden Age of prosperity that has sometimes been suggested.[834] Without significant economic growth, the competitive consumption of new forms of metropolitan material culture in pursuit of social status and mobility suggests that new opportunities were coupled with new limitations. By comparison with earlier and later periods, the enterprising, ambitious, ruthless or plain lucky could attain social power that had been monopolized by hereditary elites for seven centuries and would be dominated by religious institutions for the subsequent seven centuries.[835] There was opportunity for some, but this came at the expense of others—a zero-sum game.

The pressures that the city of Rome placed on the middle Tiber valley led to ever greater levels of social and economic integration, complexity and dependency. But in the long-term this was unsustainable; it was a brittle structure that locked the region into the wider currents of imperial destiny.[836] Other Italian landscapes such as the Ager Cosanus and coastal northern Campania have been presented as classic examples of 'boom and bust', that is, economic growth and collapse caused by rapid integration into, and then exposure to competition within, the wider imperial economy.[837] The imperial-period *suburbium* is an even more impressive example of such a cycle of growth and retrenchment; the difference, however, is not just in scale or timing (a bigger and more sustained boom), but also in kind. The middle Tiber valley and wider *suburbium* of the imperial-period did not grow and integrate with the city of Rome primarily on economic grounds, but rather on a social, political and cultural basis. Landscapes such as the Ager Cosanus were vulnerable to provincial competition because their growth was based on a commodity—wine—that could be produced in many regions. The *suburbium* offered something that could not be supplied by other landscapes—proximity to Rome, or more precisely, proximity to the emperor. Unsurprisingly, therefore once the emperor moved away from Rome, the *suburbium* lost this monopoly and retrenched. Late antiquity was simply a process of reordering life back into a more sustainable local form following a period of unprecedented cultural, social, political and economic complexity.

[833] Witcher 2005.
[834] Jongman 2007; Hitchner 2005.
[835] Augenti and Terrenato 2000.
[836] Witcher 2017
[837] Arthur 1991; Attolini *et al.* 1991; Witcher 2006b.

Chapter 5

The late antique landscapes of the middle Tiber valley: the mid-third to mid-sixth centuries AD

Helen Patterson*

5.1 General introduction to the late antique and early medieval periods

The problem of continuity between the ancient and the medieval worlds has occupied scholars since the eighteenth century. In the 1960s Italian historians seemed to have definitively answered the question, proposing that the break between late antiquity and the medieval period was determined by the Lombard invasions of Italy in the late sixth century, which not only transformed the political organization of the Italian peninsula, but also led to profound changes in society, settlement and the economic system. The arguments of Giampiero Bognetti, one of the first scholars to attempt to combine archaeological evidence with that of the historical sources, were fundamental to this interpretation.[838] More recently, especially from the late 1980s, with the growing interest of archaeologists in this period and the increasingly vast amount of available data, the relationship between late antiquity and the medieval period is no longer seen as one of contrast and the dramatic substitution of one system with another, but rather as a long period of transformation.[839] The processes behind this disintegration had begun as early as the mid-third century AD, and although there is no doubt that this was a critical period which definitively changed Roman Italy, certainly as regards Byzantine Italy, it is not until the last decades of the seventh century that we seem to see the emergence of new, more simplified, social and economic systems that were consolidated in the first half of the eighth century, marking a sharp discontinuity with the preceding late antique period.[840]

The South Etruria Survey has played an important role in this long debate: the survey was exceptional not only for its approach, but also for the attention given to the post-Roman period, rare at that time. Furthermore, it led to a series of excavations aimed at investigating this elusive period, such as those of the *domuscultae* estate centres of Santa Cornelia, Santa Rufina and the Mola di Monte Gelato, as well as a number of medieval hilltop settlements such as Mazzano Romano, Castel Porciano and Ponte Nepesino. David Whitehouse's study of post-Roman pottery from the area played a major role in these studies.[841] Unfortunately, the new ceramic chronologies he established were not available at the time of the survey, but in the late 1970s they were applied in the restudy of some of the material. The results of the latter were combined by Chris Wickham with a detailed analysis of the documentary evidence from one part of the survey area, providing a further important contribution.[842] The results of the survey and the subsequent excavations are fundamental to earlier and current models regarding these centuries.

As regards past models, the two contrasting visions proposed by many historians and archaeologists regarding settlement and social organization in Italy from AD 400 to 900 were catastrophe and continuity. The 'catastrophists', mainly archaeologists, based their hypotheses largely on the results of the original analysis of the South Etruria Survey which depicted a picture of steady decline in numbers of rural settlements in this area from the third century until the fifth to sixth centuries. After that point, there was virtually no archaeological evidence until the foundation of the *domuscultae* in the late eighth century. Consequently, some archaeologists proposed the virtual abandonment of the rural landscape between the fifth/sixth centuries

* My very warm thanks go to the former director of the British School at Rome, Andrew Wallace-Hadrill and Martin Millett for their enormous support, particular thanks also to Cinzia Filippone for assisting me with the late antique and early medieval data and to Rob Witcher as well as Stephen Kay for their magic with the Tiber valley database. Chris Wickham was kind enough to comment on my original text. I am also grateful to Alessandra Bousquet and Sabrina Zampini who, as well as their own material, studied the pottery of the late antique periods from the South Etruria survey and to Enrico Cirelli for the early medieval and medieval pottery. Thanks also go to Helga di Giuseppe.

[838] For the contribution of Bognetti 1966; 1966–8, see, for example: Delogu 2010: 11–13.

[839] See, for example: Delogu 1994, 2010: 13; Ward-Perkins 1984; Marazzi 1993. This is the first of many references to Paolo Delogu's important volume *Le Origini del Medioevo* (2010) which I draw on heavily in particular for the section on the sixth to seventh centuries and that on the eighth to ninth centuries. Alongside three new chapters this book contains various papers published elsewhere which he has revised and updated (Delogu 1988, 1993, 1998, 2000, 2001, 2009). In this chapter I mainly cite the more recent 2010 publication.

[840] Santangeli Valenzani's discussion of the archaeological results of recent excavations in Rome are of particular importance, as discussed in Chapters 6 to 7. For the evidence and arguments attributing the period of major change to the very end of the seventh century and the first half of the eighth, see also Delogu 2010, especially chapter 2.

[841] E.g. Whitehouse 1965; 1967; 1978; 1980. Gelichi 1997: 65 and Wickham 2001: 39 emphasize the importance of David Whitehouse's work.

[842] Wickham 1978; 1979.

and the late eighth century.[843] The 'continuists', on the other hand, mainly historians, rightly opposed this hypothesis. In effect, both the documentary evidence and the religious and funerary data from this area told a different story.[844]

In recent years these two contrasting visions have been greatly modified, largely due to the increasing number of archaeological projects which have focused on developments in this period. More careful excavation and a better understanding of the ceramics, primarily coarse-wares, have resulted in a wealth of new evidence, and consequently new explanations and new models. Rather than talking in terms of 'crisis' we now speak of 'transformation' and instead of the shift from 'villa to *castello*', we now have 'villa to village',[845] '*vicus* to village',[846] and 'dal villaggio di capanne al castello di pietra'.[847] Nevertheless, the evidence from the South Etruria Survey and the excavations that followed continues to be used to support some current models, as some recent syntheses of late antique and early medieval Italy demonstrate.[848]

The time was therefore ripe for a new study of the South Etruria Survey data, whose original analysis was heavily dependent on fine-wares for the dating and identification of settlement: African red slip ware for the imperial and late Roman period and *ceramica a vetrina pesante* and sparse glazed ware for the early medieval to medieval period.[849] The complete revision of the South Etruria material, in the light of the current ceramic sequences, has greatly refined Tim Potter's original interpretation of the evidence, as he himself foresaw at the time. In particular it has allowed us to identify occupation phases which, on the basis of the earlier ceramic sequences, simply could not be recognized. This has filled in some of the gaps regarding rural settlement and economy during the elusive sixth to ninth centuries. Furthermore, it permits us to integrate these data with those from more recent surveys and excavations on both sides of the Tiber, for example, that of the Farfa Survey and the excavations of Casale San Donato on the east bank, in the Sabina, which provide a further important contribution to the debate. Studies of this period have tended to focus either on the west bank or the east bank of the Tiber, but the analysis of developments throughout the middle Tiber valley is particularly interesting regarding the period following the Lombard invasions, when the river acted as a frontier between the Roman Byzantine territories on the west and the areas that came under Lombard control, a large part of the east bank.

5.2 The problems of the archaeological dataset

5.2.1. Identifying late antique and early medieval settlement

Nonetheless, there are problems with the late antique and early medieval archaeological data, regarding both the nature of the evidence for these centuries and the Tiber Valley Project data more generally. Although the middle Tiber valley, Lazio, and South Etruria in particular have been cited as some of the better studied areas in Italy, this is true only as regards field survey, and even these data often have not been published fully, and there are relatively few published excavations.[850] The late antique and early medieval periods are particularly difficult for field survey. Firstly, the material culture is more ephemeral. The frequent adoption of wooden or mud-brick structures, the smaller quantity of pottery in circulation, primarily coarse-wares, and so on, are all factors that create problems, especially for field survey.[851] A second, related, problem regards the origins of those sites documented from the tenth and eleventh centuries as *castelli*, the other end of our Roman to medieval spectrum. Archaeological work has demonstrated that in some areas of Italy the sites of a number of *castelli* were occupied prior to their first mention in the documents, in some cases as early as the late sixth to seventh centuries.[852] There is clearly a significant risk that survey would not reveal evidence for these earlier (pre-document) phases (if they

[843] Potter 1979; Hodges and Whitehouse 1983.

[844] For a brief synthesis of these constrasting viewpoints, see Patterson, Di Giuseppe and Witcher 2004a: 20–21. For the documentary evidence from South Etruria, see Wickham 1978. For the Sabina, see Toubert 1973; Migliario 1988; Leggio 1989, 1992. For the religious and funerary data, see; Fiocchi Nicolai 1994a, 2004; Fiocchi Nicolai, Bisconti and Mazzoleni 1998.

[845] Francovich and Hodges 2003.

[846] Arthur 2004.

[847] Valenti 1996.

[848] For more recent models proposing a precocious move to village type settlement '*in altura*', see Francovich and Hodges 2003.

[849] The same problem affected all surveys of this period, certainly until the early 1980s. As regards the South Etruria Surveys those of the Ager Capenas and Sutri were carried out before Hayes's fundamental classification of African red slip ware, while precise information came from the Ager Veientanus, the Ager Faliscus and Eretum. Potter himself did not publish the final results of his Ager Faliscus survey, recognizing that future work on the ceramic sequences would probably greatly modify his interpretation of the evidence. Whitehouse's dating of *ceramica a vetrina pesante* and sparse glazed ware was also not available at the time of the survey; only later was the material from a part of the area restudied in the light of his chronology, but still prior to the very refined chronological sequence that we possess today.The ceramic sequences from the excavations of the Crypt Balbi in Rome, published from the mid 1980s onwards, marked a turning point in early medieval ceramic studies.

[850] To cite just some of the main studies, integrating both survey and excavation, which have focused on these periods: the exemplary work of Brogiolo and Gelichi in northern Italy, Brogiolo and Gelichi 1996a, 1996b; Brogiolo and Chavvaría Arnau 2005 (for recent bibliography); that of Riccardo Francovich and his colleagues in Tuscany, for example: Francovich 2002; Cantini 2003; Francovich and Hodges 2003; Valenti 2004; that of Staffa in the Abruzzo, for example, Staffa 2000; and that of Arthur and Volpe in southern Italy, Arthur 2004; Volpe 2005.

[851] E.g. at the Mola di Monte Gelato, none of the occupation phases after the fifth century were represented in the survey material, Patterson 2000.

[852] See, for example: Francovich 2002; Cantini 2003; Francovich and Hodges 2003; Valenti 2004.

existed); not only is the material culture less rich for these periods, but the *castelli* are usually unploughed, often heavily overgrown or still occupied today.[853] Despite our increasing ability to identify early medieval pottery and therefore to infer a population, even on the basis of our new study of the material, the number of settlements with evidence for occupation during the later sixth to ninth centuries remains low. Recent work has demonstrated the importance of excavation for identifying late antique and early medieval occupation. In the case of the South Etruria Survey, the situation is even more problematic given that the survey teams did not always collect the common wares which are our prime source of information certainly regarding the mid-sixth to the late ninth centuries. Furthermore, the common wares were sometimes thrown away given that at the time they could not be identified and dated.[854]

A further problem regarding the identification of sites which is specific to our study area is the poor understanding of eighth- to ninth-century ceramics in the area of the Sabina, on the east bank of the Tiber. Whereas, certainly from the late eighth century, the ceramic types circulating in the Roman Campagna on the west bank were identical to those of Rome, this does not seem to have been the case in the Sabina. For much of this area, ceramics and therefore settlement have not been identified—the exceptions are the southern area of the Sabina Tiberina and a small number of high-status sites. The sparse archaeological evidence for settlement, despite the rich documentary evidence to the contrary, is very probably due to our failure to identify the ceramics.

5.2.2 Defining late antique and medieval settlements

Whereas for the Roman period it is possible to reconstruct a hierarchy of sites from the survey evidence, this is rarely the case for late antique and early medieval settlements: the material is frequently limited to concentrations of pottery that give little indication as to their function. In the case of the Tiber Valley Project this is particularly problematic, given that we are dealing largely with data from earlier surveys, such as the South Etruria Survey, which frequently did not even record the dimensions of the surface scatters.[855] Villas, one of the most characteristic Roman rural settlement types, on the basis of the survey evidence alone can be securely identified only for the mid- to late Republican and above all the early and mid-imperial periods. It is doubtful whether many of the villas in our area that continued to be occupied in late antiquity, and very occasionally into the early middle ages, were still functioning as such (see, for example, Figure 5.1 for the distribution of settlement activity in the late antique period, including numerous 'villas'). As we shall see, the few excavated examples indicate that this was rarely the case. *Vici*, small agricultural villages, also played an important role both in the Roman and late antique periods. Paul Arthur has emphasized the importance of *vici* in certain areas of southern Italy in the late Roman period, proposing that many towns developed into settlements more akin to *vici*. However, as he has noted, the difficulties of identifying a *vicus* from a surface scatter alone are enormous.[856]

As regards early medieval and medieval settlement, fortified centres such as *castelli* and *castra* can for obvious reasons (the visible evidence of the fortifications, the documentary evidence) be identified. Here, following Chris Wickham, the term *castello* will be used to mean a fortified village, but also to denote promontory forts, *castra* and *castella*.[857] Open settlements are more problematic. Ecclesiastical centres such as bishoprics and the martyrial cult centres can be identified; however, as regards the *fundus*, *massa*, *casale*, villa *or curtis*, cited in the medieval texts, the terminology is often ambiguous.[858] The precise meaning of the term *fundus* is particularly unclear: frequently the toponym of a *castello* appears earlier as a *fundus*, suggesting that it was occupied prior to its first mention as a *castello*; however, in late antique land divisions in our area, a *fundus* is a single named territorial unit and not necessarily a specific site.[859]

In brief, with the exceptions mentioned above, it is rarely possible to relate settlements identified by surface survey to the forms of open settlements cited in the medieval documents. Therefore, in this new study of the South Etruria data, in the absence of documentary evidence, when it comes to open sites we have largely had to limit our definitions simply to settlement or, if the evidence is less substantial, occupation or activity. Even here, the small amounts of material recovered are partly due to the smaller quantities of pottery in circulation, problems of visibility, and the fact that in some cases the survey teams only collected fine-wares leaves the interpretation open to doubt. So the collection of one sole fragment of *ceramica a vetrina pesante* of the late eighth to early ninth centuries, for example, very probably signifies the existence of a

[853] For the contrasting results produced by the survey and excavations of the late sixth- to seventh-century foundation of Casale San Donato documented in the tenth century as a *castra* (*Castrum Sancti Donati*), see Patterson 2008; 2010. For the excavations, see Moreland 1993; 2005; 2008; 2010. For the potential of large-scale, systematic excavation for an understanding of the origins and development of *castelli* in southern Tuscany, see in particular the work of Riccardo Francovich and his colleagues, cited above.

[854] My thanks to Bryan Ward-Perkins for this information.

[855] Potter's Ager Faliscus survey was an exception.

[856] Arthur 2004: 104–5.

[857] Wickham 1978: 141.

[858] For the problems regarding *fundus* and *massa* (formed by an enormous group of *fundi*, but it not necessarily an integral property), see Wickham 1978: 141–2, 156–7. For *casale*, villa (often a group of dwellings) and *curtis* (the centre of a manorial estate), see, for example: Francovich and Hodges 2003: 14; Brogiolo and Chavarría Arnau 2005: 3.

[859] Wickham 1978: 142

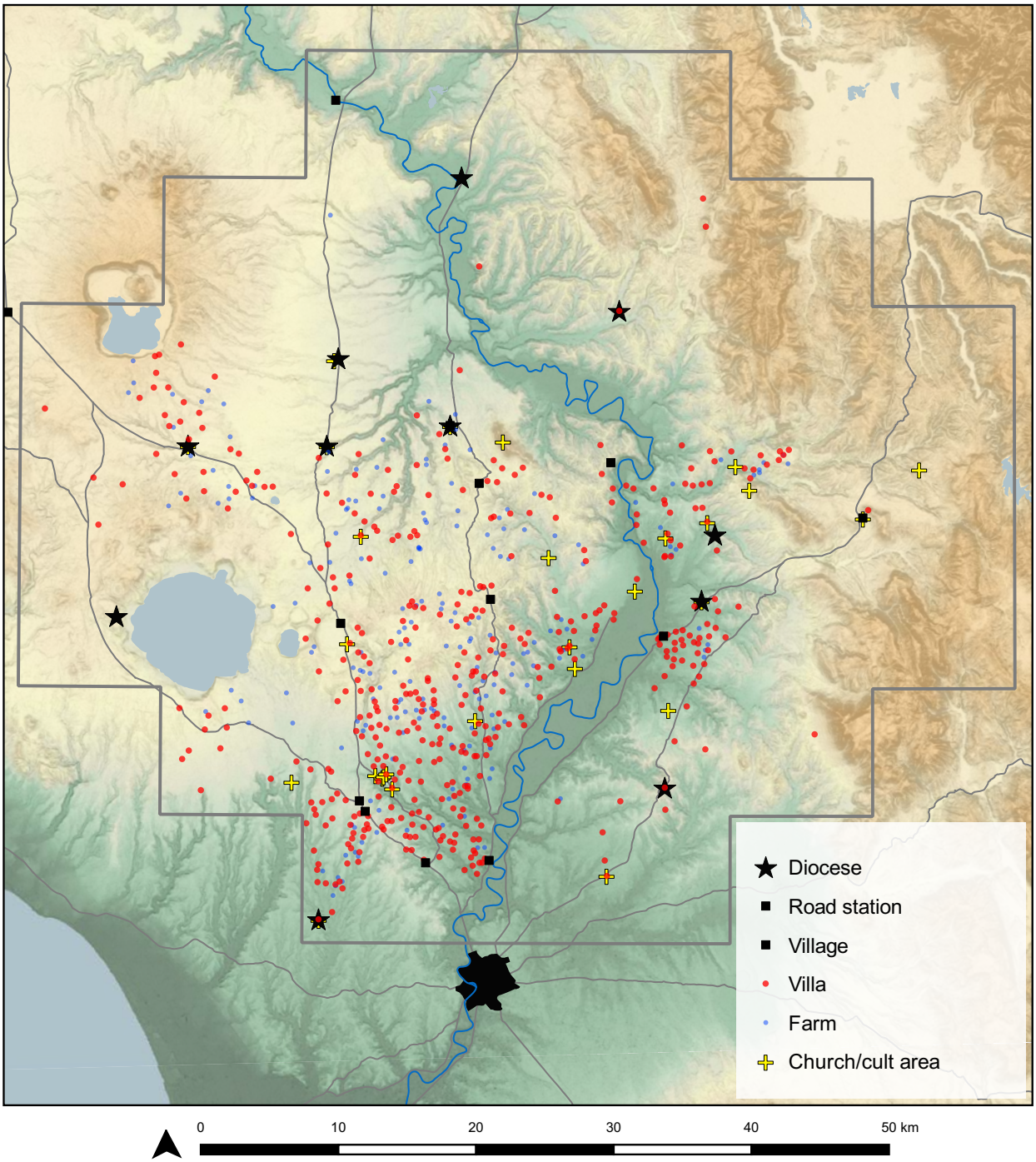


Figure 5.1. Tiber Valley Project settlement sites in the late antique period (AD 250–550).

settlement, given the relative rarity of the earliest productions of this early medieval glazed ware in the countryside and the fact that the survey teams did not always collect the common wares.

5.2.3 Other problems: the Tiber Valley Project data

Some of the general limitations of the South Etruria Survey data are outlined in Chapter 2, but three other issues specifically regard the late antique and early medieval Tiber Valley Project dataset.

Firstly, the very, sometimes excessively, broad chronological phasing chosen for the late antique to medieval phases of the Tiber Valley Project has in some cases masked a more complex picture.[860] This is certainly what emerges from a comparison of the more nuanced pictures shown by the weighted average of the pottery from the South Etruria Survey with the settlement graphs generated by the project database.

[860] In the light of experience, we would have chosen a different phasing for the chronological periods.

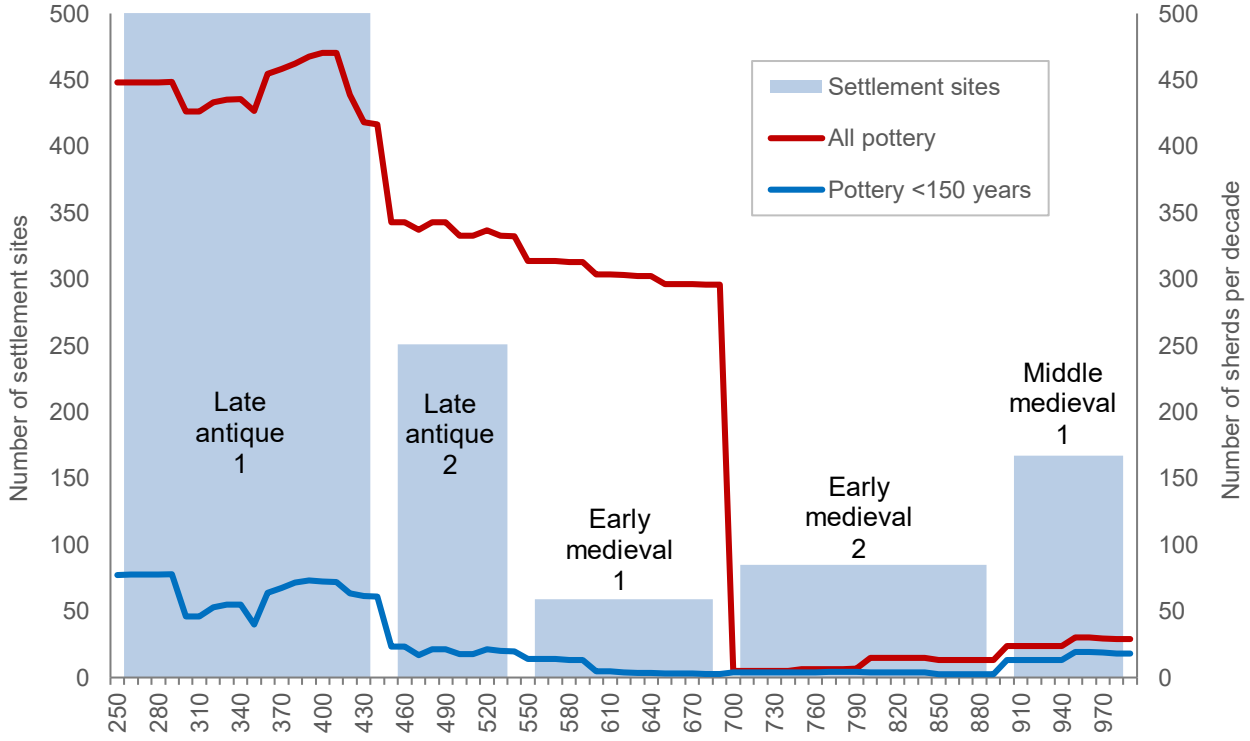


Figure 5.2. Comparison of Tiber Valley Project settlement numbers and weighted average numbers of sherds per decade from the late antique 1 to the middle medieval 1 period.

(Figure 5.2). Clearly we must beware of assuming that the number of pots in circulation is a direct reflection of numbers of people. Nevertheless, it can be argued that the patterns that emerge from the weighted average, although not necessarily indicating a decline or rise in the rural population numbers and settlement, mark moments or periods of significant change and allow us to further refine our analysis of the evidence, especially when viewed in the light of the other archaeological and historical data. We shall see this for example in the evidence for the late fourth to early fifth centuries and for the late seventh to early eighth.

Secondly, during the re-examination of the South Etruria Survey data it emerged that most of the plans of the medieval *castelli* drawn by the team at the time of the survey are now missing, as are a small number of groups of early medieval material recorded as being collected by the survey.

Thirdly, the Tiber Valley Project did not involve a systematic study of the documentary and epigraphic evidence. This lacuna is at least in part compensated for by the work of a number of scholars that has been fundamental to this analysis: in particular Emanuele Papi's study of the epigraphic and monumental evidence for the later Roman period, Chris Wickham's detailed study and analysis of the historical and archaeological data from the South Etruria Survey and his broader more recent studies of Latium in general, Pierre Toubert's magisterial work on Lazio based on the documents of Farfa and Subiaco, Tersilio Leggio's studies of the area of the Sabina, Vincenzo Fiocchi Nicolai's study of the evidence for Christian cult centres and funerary areas in South Etruria and the Sabina, Federico Marazzi's work on the role of the aristocracy and the Church in the area of Lazio, Antonio Sennis's historical synthesis of Lazio, and for Rome, in particular the studies of Paolo Delogu and Chris Wickham.[861]

Despite these considerations, the results of the middle Tiber valley Project permit us to propose new models and explanations for developments in this area during late antiquity and the middle ages. In particular, they highlight some areas, some sites and some issues that are worthy of further study. Fundamental to this is the comparison of our evidence from the 'hinterland' with the situation emerging from recent archaeological work in Rome itself.

5.2.4 The Tiber valley and the supply of Rome

A constant and increasingly serious problem throughout late antiquity and the early middle ages was the provisioning of Rome. The food supply was of particular importance; it was also one of the most traditional elements by which for centuries the political forces at Rome had ensured the consensus, and the control, of the urban population. This factor occupied the attention

[861] The bibliographical references for the authors are given at the relevant points in the text.

of all the ruling bodies; the empire, and increasingly from late antiquity, the new political protagonists, the Church and the leading members of the Roman and local aristocracy. Despite the marked fall in the urban population, from over a million inhabitants in the mid-imperial period to around 20–30,000 in the eighth to ninth centuries, Rome remained the largest city in the Latin West and its needs throughout these centuries were substantial. The area around Rome, and in particular the Tiber valley, had always been important for the supply of the city but, as Rome lost firstly its overseas provinces and later its control of key areas of southern Italy, the ancient capital became increasingly dependent on regional and local production. Some scholars have pointed out the importance of the latter has generally been undervalued, but this is as we shall see an area in which the Tiber valley must have played a major role and is essential to our understanding of the landscape during these centuries.

5.3. Crisis, what crisis? The third to mid-sixth centuries AD

5.3.1 The historical context: the transformation of the classical world

The last decades of the second century were a critical period for Rome.[862] During the third century, Rome and its empire was governed by 28 emperors, eleven of whom ruled for no longer than one or two years. It is not surprising that the result was instability which ultimately gave the opportunity for the 'barbarians' to threaten the empire and its very core, Rome itself. In the late third century AD, following the invasions of the Alemanni, the emperor Aurelian built in great haste new city walls for Rome; in the early fourth, the walls were raised to almost double their height by Maxentius; and, a century later, restored by Honorius.

The third century was a period of general crisis throughout Italy. The towns show clear signs of decline; the occupied areas were increasingly restricted and there appears to have been little imperial or aristocratic investment in the urban structures. In the middle Tiber valley for example, at Veii, even the forum had few signs of urban activity after the mid-third century. From the early third, and probably as early as the late second century, in common with most of the Italian peninsula, there was a marked drop in rural settlement numbers throughout the middle Tiber valley. There were few new settlements, while those that continued to be occupied, primarily the villas, were on the whole very different from their imperial predecessors. Yet the changes that followed this 'crisis' should not be viewed solely negatively. The new forms of settlement which emerged at the beginning of the fourth century in the middle Tiber valley, when there was a slight revival in settlement numbers, may have been different to those of the imperial period, but they do not seem to have been any less vital. The same is true of the economy with which these settlements were inextricably linked.[863] To understand these processes better we need to set them in their context.

The consolidation of Rome's control over the Mediterranean and the establishment of the provinces had had significant implications for the urban market and for the estates, such as those in the Tiber valley, with direct access to it. Enormous quantities of foodstuffs and other goods flowed into Rome from the provinces of North Africa, which took over the role first held by the hinterland of Rome and by the South Gaulish regions. Sicily was also involved in this trade, at least for foodstuffs. Furthermore, not only were the products of the villa estates sold for Rome, but through Rome they now had access to the Mediterranean trade routes.

Vera has highlighted the direct interest of the rich senatorial families in the control and expansion of their great properties both in Italy and overseas, which they increasingly consolidated between the late second and fourth centuries.[864] This had repercussions for their Italian possessions established along the axis which from the area of Rome, through central and southern Italy, extended to Sicily and the African provinces. This is clearly demonstrated by the distribution of the properties of the rich aristocratic Melania the Younger, who had lands in Apulia, Campania and Sicily as well as in Africa Mauretania, Numidia, Hispania and Britannia (*Life of Melania*, 10), and that of the *praefectus urbi* Symmachus at the end of the fourth to early fifth centuries. This is the same axis where we find the greatest concentration of properties of the Church, which, from the early fourth century onwards, was also accumulating a substantial patrimony both in Italy, especially around Rome, and overseas. The description of these properties in the *Liber Pontificalis* from the life of Pope Sylvester (314–335) gives the clearest confirmation of the importance of this geographical axis.

Therefore, at least until the end of the fourth century, the territory around Rome not only supplied foodstuffs for the city, but formed part of a 'Mediterranean *suburbium*' that also received goods circulating within this system, including foodstuffs and fine table-wares from North Africa. The mid-imperial crisis and the great flux of goods now coming from the overseas provinces would have had a negative effect on those regions

[862] Two plagues in Rome from AD 166 for three years and again in AD 189 had decimated the population with heavy repercussions for the economy; Papi 2004: 64.

[863] Marazzi 1998b: 251–333; Sennis 1996: 35.

[864] Vera 1986.

around Rome involved in the long-distance export of goods, but it would not have affected their relationship with the closest market, that of Rome itself.[865]

These developments were accompanied by changes in the agricultural system that had dominated the area around Rome from the late Republic.[866] Whereas previously the rural landscape was populated by *vici, casali* and farms, and coordinated by a smaller number of *praetoria* where the administrators of the *domini* lived, and sometimes the *domini* themselves (villa *pars urbana* and villa *pars rustica*), these landed estates now aggregated in the territory around Rome into properties of greater dimensions; and by the fourth century, as in Sicily and Africa, the *massae fundorum* or *latifundia* are attested. They are first mentioned in the *Life of Sylvester* (*c.* AD 315–35) of the *Liber Pontificalis*, but probably formed earlier, between the late third and fourth centuries. Again, from the *Liber Pontificalis* we know that they existed in the Sabina.[867] The success of this new agricultural model, one of extensive farming, was based above all on the demand from the urban market and the Tiber. However, in common with much of the Italian peninsula, this was accompanied by radical changes in the nature of the settlements and the economic system. The villas at the heart of these estates no longer served the function that they were built for and there is little evidence to suggest that the aristocratic élite resided on their estates.

As we shall see, in the late third century and especially from the early fourth, the state intervened in this territory in a number of ways, interventions that seem to have been dictated primarily by the need to ensure the continuing supply of goods to the city. Similarly, there is evidence to suggest that the aristocratic and ecclesiastical landowners also adapted to the new situation.

Following the two plagues that had devastated Rome in the late second century, the Severans (AD 193–235) had taken measures to revive the economy. As well as major building works in Rome, they invested in the towns to the north of the city and provided support for agriculture, including provisions for the cultivation of deserted lands.[868] However, it was not until the second half of the third century that there were renewed attempts by the emperors, especially Aurelian (AD 270–5), and occasionally the senatorial aristocracy, to revive the decaying urban towns. Over a third of the inscriptions to Aurelian commissioned by the Italian communities come from the Umbrian-Etruscan-Sabine area, found in coastal cities or along the Tiber valley. Papi has suggested that the renewed interest shown by Aurelian (and, to an extent, Gallienus before him) in the urban centres in the area to the north of Rome stemmed from a number of factors which included the significant presence of imperial estates, the importance that the emperors wished to give to their illustrious Italic origins, and the supply of grain to the capital.[869] The investment in towns was limited and had no lasting effect. Even the establishment of bishoprics at many towns from the fourth century onwards seems to have done little to halt their overall decline as centres of urban activity, although the urban population numbers during the fourth and early fifth centuries remained substantial (see section 5.3.7).

Aurelian's interest in the territory and agricultural production was to be followed by later emperors. His reforms involved the extension of the *annona* to include not only grain (now in the form of *panis popularis* rather than *frumentum*) and oil, but also pork (from southern Italy) and wine.[870] They also included agricultural reforms for the territories close to Rome: detailed plans were laid down for the planting of vines on the hills in the coastal area of South Etruria and on uncultivated land volunteered by the owners with provisions for the transport of the wine in casks and tuns by boats.[871]

From the second century, in particular from the late third century, following Diocletian's reorganization of the empire, and throughout late antiquity wealth and property became concentrated in the hands of socially privileged groups, essentially the senators, the civil elites, members of the administrative hierarchy, military persons and, increasingly, the Church. The documentary sources tell us of the great extent of the lands owned by these late antique elites and the sizeable incomes they produced. Notable members of the Roman aristocracy whose names and details of their estates have come down to us include Symmachus, and Melania the Younger, mentioned earlier, and Paolino bishop of Nola and Paolina of Pella, living in the fourth to fifth centuries.[872] Their individual properties did not consist of compact areas of land, but were fragmented and dispersed in one or more provinces of the empire.

Although their wealth and power was based on their income from their estates, both in forms of annual income and also through the sale of products along with the compulsory *annona* supplies from their lands, the Roman aristocracy seemed to live predominantly in the city, despite some literary references to the contrary,

[865] Marazzi 2001a, especially 730–1.
[866] Carandini 1985; Papi 2004: 5.
[867] Marazzi 2001a: 733–4; on the *massa fundorum* see, in particular Vera 1999.
[868] Papi 2004: 64.
[869] For the evidence for and reasons behind interventions by emperors in towns in this area around the middle and second half of the third century, see Papi 2000: 224; 2004: 60–7.
[870] Chastagnol 1950; Panella and Saguì 2001: 763.
[871] Papi 2000: 224–5; 2004: 67.
[872] Olympiodorus Fr. 44 gives details of the large incomes of the rich senatorial families of Rome in the fifth century. For a synthesis, see Brogiolo and Chavarría Arnau 2005: 13–16.

which perhaps owe more to their rhetorical genre. In the late fourth century, Quintus Aurelius Symmachus owned numerous estates throughout central Italy, concentrated in the Lazio-Campania area, as well as in Sicily and Africa, but he was also the owner of three *domus* in Rome and three suburban villas.[873]

In the early years of the fourth century, following the decline in the Severan period, Rome's population greatly increased.[874] With Diocletian (AD 283–305), as Aurelian before him, there was a more conscious attempt to exploit the productivity of the hinterland of Rome, both to carry out his new building activities in Rome and also to ensure the supply of food and other goods to the city. The forced supply of goods, through the *annona* system, was applied to the provinces of North Africa and Sicily. The division of Italy by Diocletian into two administrative areas—the *Annonaria* (northern Italy) and the *Suburbicaria* (central–southern Italy)—was to have a profound effect on the area of the middle Tiber valley. The *Suburbicaria*, under the authority of the *vicarius Romae*, had to ensure the supply of foodstuffs to the capital. The position of *praefectus urbis* was created. Nominated by the emperor, his role involved the administrative control of the city and its surrounding territory for a radius of 100 miles and the organization of provisions for the urban population. Much of the produce of the imperial and aristocratic estates in this area, to which by the early fourth century can be added those of the Church, was now ordered by the State to be sent directly to Rome. For example, the lime that the new administrative district was forced to produce, previously used for building works in the towns in the valley, was sent to Rome to realize the grandiose building programmes that Diocletian and his successors planned for the ancient capital. The lime-kilns identified in the late antique phases of a number of villas are a clear demonstration of this (see section 5.3.4). In fact, new building projects were extremely rare in Roman towns from this period; work was limited largely to the restoration of existing buildings, reusing earlier materials and, increasingly, local stone. The literary sources not only refer to the supply of lime to the capital, but also other building materials such as bricks and tiles, as well as wood. The various brick and tile production centres attested in the middle Tiber valley, from Diocletian until Constantine, appear to have been (at least largely) under imperial control,[875] while timber from the Apennines and Mons Ciminus was transported down the Tiber to Rome.[876]

Alongside these goods, we know of a wide range of foodstuffs produced for the capital. Etruria and the Sabina were known for their agricultural richness: activities included stock-breeding, the cultivation of plant products, fruit and vegetables, the production of olive oil and wine. However, the literary evidence suggests that grain was the major export to the capital from the lands to the north and east of Rome.[877]

Unfortunately, regarding the supply of these products to the city there is virtually no archaeological data, largely because we are heavily dependent on the evidence of amphorae, in our case, the so-called Spello-type amphorae produced in the area of the Tiber valley for the transport of wine and probably oil. The Spello-type amphorae are attested in Rome during the first to mid-third centuries, although just as with all the amphorae used for the transport of goods from territories close to the city or linked by river to the latter they represent a very small proportion of the total recovered. By far the majority of the transport amphorae, as discussed below, represent medium- and long-distance trade primarily from the overseas provinces. Nevertheless, from the late third century, there is a marked fall in the percentage of Italian and provincial wine amphorae attested at Rome compared to those used to transport other goods,[878] and the Spello-type amphorae cease to arrive in the city at this period (see section 5.3.10.5). This is not to say that the area of the Tiber valley no longer supplied Rome with wine. Aurelian's proposed reforms included the free distribution of wine—although whether this was achieved is not clear—and his reform was implemented by later emperors who made wine available at a reduced cost.[879] However wooden containers were now used for the transport to the capital of wine and at least in part of other foodstuffs from territories close to the city or linked by the Tiber such as Etruria, the Sabina and Umbria, as the literary and epigraphic sources. Aurelian's edict regarding fiscal wine actually refers to the transport of wine in casks. These, of course, do not survive in the archaeological record (see section 5.3.10.5).[880]

The attention paid to roads and communication systems in general in the suburbican lands of Tuscia et Umbria and Flaminia et Picenum in the early fourth century suggests that supplies to the city were a priority for the emperors.[881] During these years all the roads leading to Rome were improved, with the exception of the Via Aurelia, probably already unusable because of

[873] De Francesco 2004: 12–15.
[874] Lo Cascio 2001a.
[875] All the *figlinae* attested by brick stamps in Rome are found within the radius of 100 miles from Rome, and thus under the jurisdiction of the urban prefect; Steinby 1986: 157, n.151).
[876] On the supply of wood to Rome from this area, see Diosono 2008a, 2008b.
[877] Papi 2004: 77–9; Morley 1996.
[878] Panella and Saguì 2001: 772.
[879] Panella 1999: 202; Papi 2004: 67–8.
[880] Panella and Saguì 2001: 772–3. On the diffusion of wooden casks in Italy, see Panella and Tchernia 1994: 159–60. The only other central Italian amphorae is the Empoli type which continues to arrive in Rome until the early fifth century.
[881] Papi 2000; 2004.

encroaching marshland. Roughly contemporary with this, there was a slight increase in rural settlement numbers and in particular from the mid-fourth century the restoration of some road stations, and the renovation or restructuring of villas along or close to the major roads often involved in commercial and manufacturing activities, as well as possibly providing services to travellers (see respectively sections 5.3.4 and 5.3.5).

A major protagonist in the late antique landscape was the Church. Some of the most evident signs of rural activity from the early fourth century, after the official adoption by Constantine I of the Christian religion, are the churches built for the *cura animarum* of the rural population. These are often on or within the Roman villas. We also see martyrial cult centres and cemeteries along the principal roads leading to the city, as well as the bishoprics established in the declining Roman towns.[882] From the fifth century there are the first documentary references to the foundation of churches by the local and Roman aristocracy and donations of land to the Church. The maintenance of the roads and associated services would have been essential also to meet the demands of the increasing number of pilgrims to the martyrial cult centres (see section 5.3.8).

However, the interests of the Church were not purely pastoral. During the fourth century the pope became the head of a rich organization with extensive lands in the Italian peninsula and overseas. Like those of the State and the senatorial aristocracy, these were concentrated in Sicily and North Africa. From this period onwards, the popes attempted to construct a territorial dominion based, at least in the beginning, on a series of landed estates. In Italy the main focus of these operations was the region of Lazio, concentrated in the area around Rome.[883]

The end of the fourth century saw the final split of the western and eastern Roman empires, and in AD 402 Honorius moved the seat of civil administration of the western empire from Milan to the more easily defended city of Ravenna, which was to remain the official seat of the western empire until AD 751 when Byzantine control of Ravenna finally came to an end. During the fifth and sixth centuries the movement of peoples of Germanic origin into the Mediterranean broke the political unity of the western Roman empire. The invasions of the Visigoths culminated in the attack led by Alaric on Rome itself in AD 410, followed by a number of sieges and attacks in 455 and 472. From the beginning of the fifth century Rome's population fell to roughly half that of the late fourth century, estimates of between 300,000 and 500,000 have been made. Nevertheless it was still a substantial number of consumers. The last year for which we have a date for this figure is 452. The next data is based on a letter of Cassiodorous, of 530, relating to the distribution of pork, from which Durliat has convincingly argued for a population of around 60,000. Therefore the real demographic crisis appears to occur between the end of the fifth and the beginning of the sixth centuries. This is supported by the archaeological evidence in the same period for the lack of urban maintenance and the partial infilling and abandonment of residential structures.[884]

As noted earlier, amphorae transporting local and regional products comprise a minimal percentage of the amphorae recovered at Rome, the majority reflecting medium and long-distance trade, as had been the case from the Augustan period.[885] The quantity of imports arriving in Rome in the fourth century has been estimated at around 80 per cent (including fine table wares), greater by far than that registered in other cities and towns of medium dimensions, such as Naples, which is around 20 per cent.

The supply patterns recorded in the fourth and early fifth centuries have their origins in the third century. Tunisian amphorae carrying oil and fish sauce predominate, representing 50–60 per cent of the amphorae recovered for this period, to which we must add the grain that from the early imperial period was an essential source for the supply of Rome, all largely supplied as tax in kind. As Panella points out,[886] these data clearly demonstrate the existence of a Rome-Carthage axis, which in the mid-fourth century is further consolidated doubtless due to the foundation of Constantinople. At the beginning of the fourth century, Africa became of primary importance as grain from Egypt, which until this period had supplemented Africa in the supply of Rome, was directed towards the new eastern capital. It is no coincidence that in the late fourth and early fifth centuries the African economy reaches its peak.

At the same time, at the end of the fourth/beginning of the fifth centuries there was a definitive decline of the foodstuffs from Baetica (oil) and Lusitania (grain), from Mauretania and Tripolitania (oil), clearly reflecting a reduction in the supplies to the city from these areas. These developments correspond with the appearance of new containers and new commercial links with wine from the Aegean, Asia Minor and the Levant. Evidence

[882] Fiocchi Nicolai 1988; 2009
[883] Sennis 1996: 33, tav. XVI.
[884] Durliat 1990 104-7; Lo Cascio 1999b; Panella and Sagui 2001: 277. See Santangeli Valenzani (2004: 21-24) for a useful discussion of the various estimates for Rome's population from late antiquity to the early middle ages, including references to the archaeological evidence.
[885] For a stimulating sythensis of the situation at Rome during the fourth to seventh centuries, see Panella and Saguì 2001.
[886] Panella and Saguì 2001: 770.

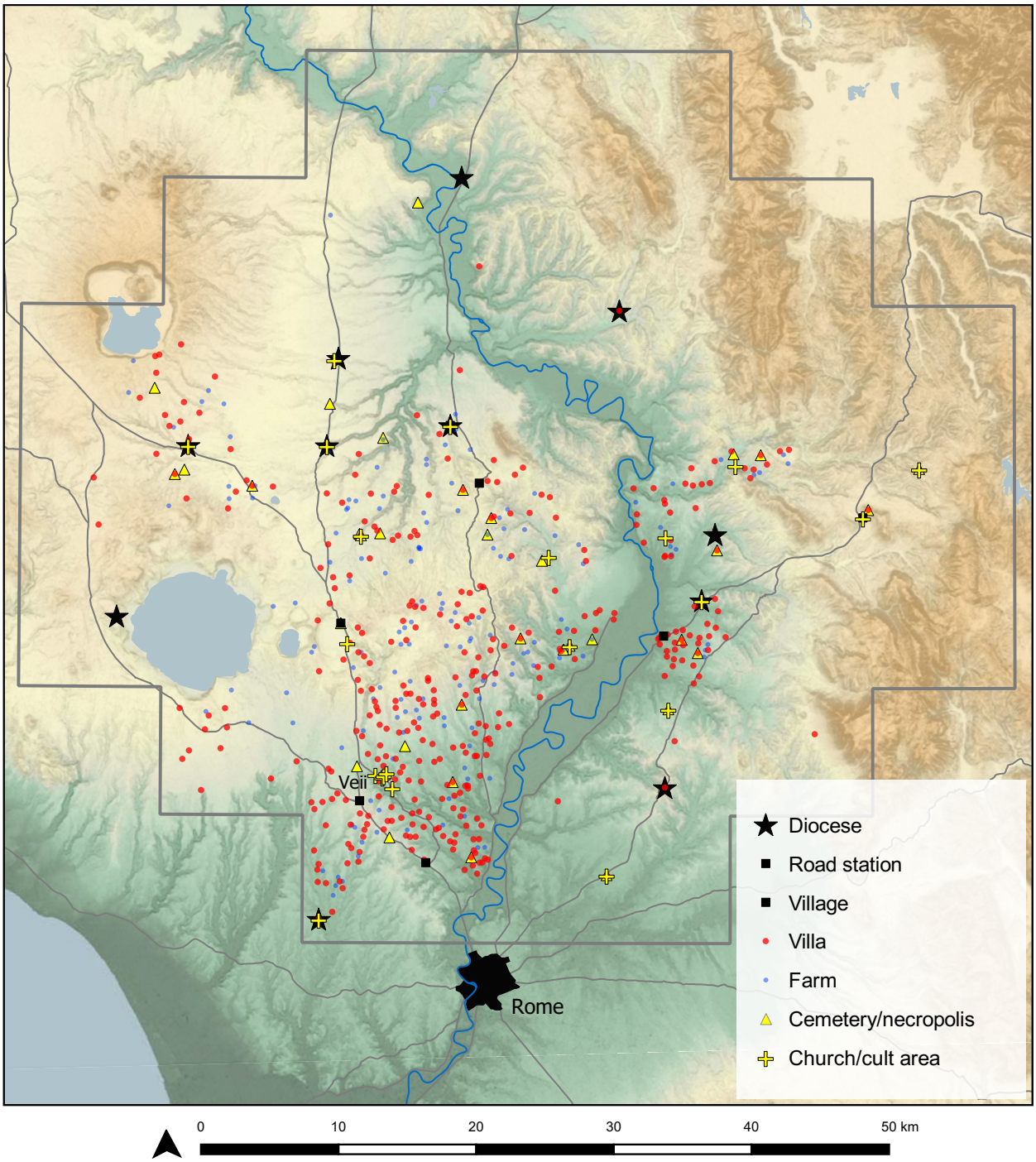


Figure 5.3. Tiber Valley Project settlement sites in the late antique 1 period (AD 250–450).

of trade links with the former areas is evident in Rome from the early fourth century when, following the foundation of Constantinople, they were able to gain access to the western markets.

There was also an increase in products from Bruttium (Calabria) and Sicily. Sicily was a major grain-producing area, while Bruttium (Calabria) which also supplied wood to the capital, was noted for its wine and grain, as also was Campania which in the fourth century was referred to as the granary of Rome.[887] Prior to Diocletian, the Roman aristocracy had begun to invest in Sicily and parts of southern Italy, but following his reforms these areas formed part of the Italia Suburbicaria and already from this period, alongside African products, an increasing number of wine amphorae of Sicilian and Calabrian provenance are attested at Rome. Both Sicily and Bruttium profited from the new political and economic situation: the economic prosperity of these areas seems to have reached a peak in the second half of

[887] Arthur 2002: 11.

the fourth and the first half of the fifth centuries. By the second half of the fifth century, wine amphorae from Sicily and Bruttium represent a significant percentage of the transport amphorae attested in Rome, alongside products from the East Mediterranean (see section 5.3.10).[888]

The situation accelerated with the Vandal invasion of the Maghreb in AD 429 which resulted in a major transformation of the western Mediterranean economic system. With the Vandal occupation, the supplies from Africa were curtailed and the Rome–Carthage axis was damaged. Although African products, amphorae and fine table-wares, continued to arrive in Italy and still represented the largest percentage of imports, presumably now organized by free merchants, their distribution was more limited and the agricultural produce from the remaining areas of the empire, the East Mediterranean, Sicily and southern Italy, assumed increasing significance with a progressive rise in the number of amphorae registered at Rome into the sixth century.

In AD 476 the last emperor of the west was deposed by Odoacer chief of the Rugian tribe who became ruler of Italy and a sort of deputy for the sole emperor in the new Rome, Constantinople. Odoacer won the support of the Romans and his rule was one of relative peace. It was, however, only briefly tolerated in the East: on the instigation of the emperor Zeno, in 490, Theoderic invaded Italy, resulting in Odoacer's assassination and, in 493, the establishment of the Ostrogothic kingdom. Like Odoacer, Theoderic paid great attention both to the Roman Senate and to the city itself, with the maintenance and restoration of its monuments. Hence the reactivation of the brick and tile production industry by Theoderic at the beginning of the sixth century, whose centres, both of imperial and private ownership, seem to have been located in the Tiber valley.[889] As well as reintroducing state control of brick and tile production, Theoderic also made provisions for ensuring the corn supply and for the maintenance of the Tiber (see section 5.3.10). The situation changed after Theoderic's death in AD 526, which led to grave troubles over his succession, culminating in the Byzantine-Gothic wars and, soon after, the Lombard invasions. These resulted in the breakdown of Roman control of the Italian peninsula. The effects of this are discussed in Chapter 5.4.

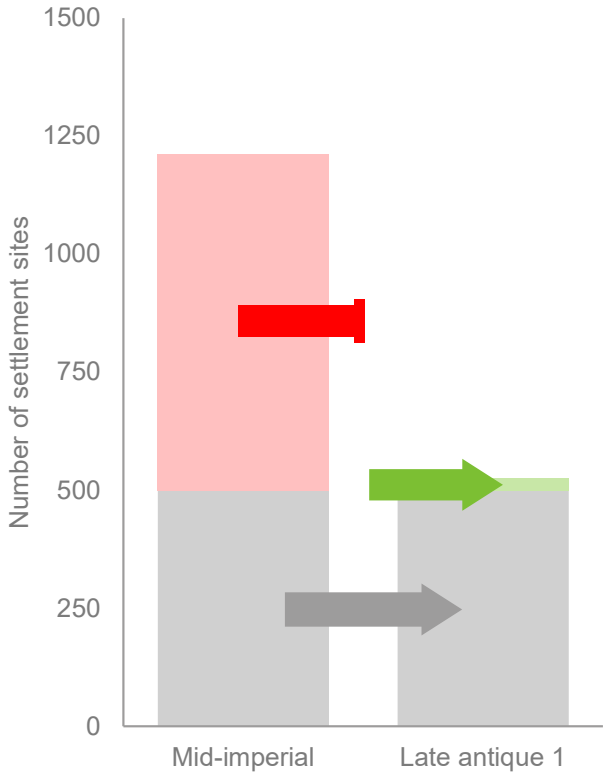


Figure 5.4. Numbers of settlement sites abandoned (pink), continuing (grey) and newly founded (green) at the transition from the mid-imperial to the late antique 1 period.

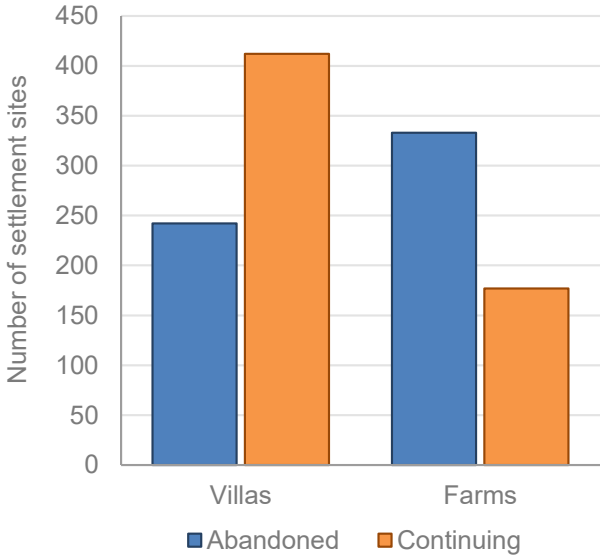


Figure 5.5. Numbers of abandoned or continuing at the transition from the mid-imperial to late antique 1 period: farms versus villas.

5.3.2 Rural transformations

Figure 5.3 shows settlement activity in the middle Tiber valley during the late antique 1 period (AD 250–450). In the early imperial period, this area was in every respect the hinterland of Rome, characterized by an extraordinary density of settlement and by close economic and cultural links with the *Urbs*. The South Etruria Survey identified a whole range of settlement types in this period, with broadly even numbers of farms and villas. Although the number of sites increased significantly in comparison with the Republican period, the overall extent of land occupied in the imperial

[888] Panella and Saguì 2001.
[889] Steinby 1986: 153–4, 158–9.

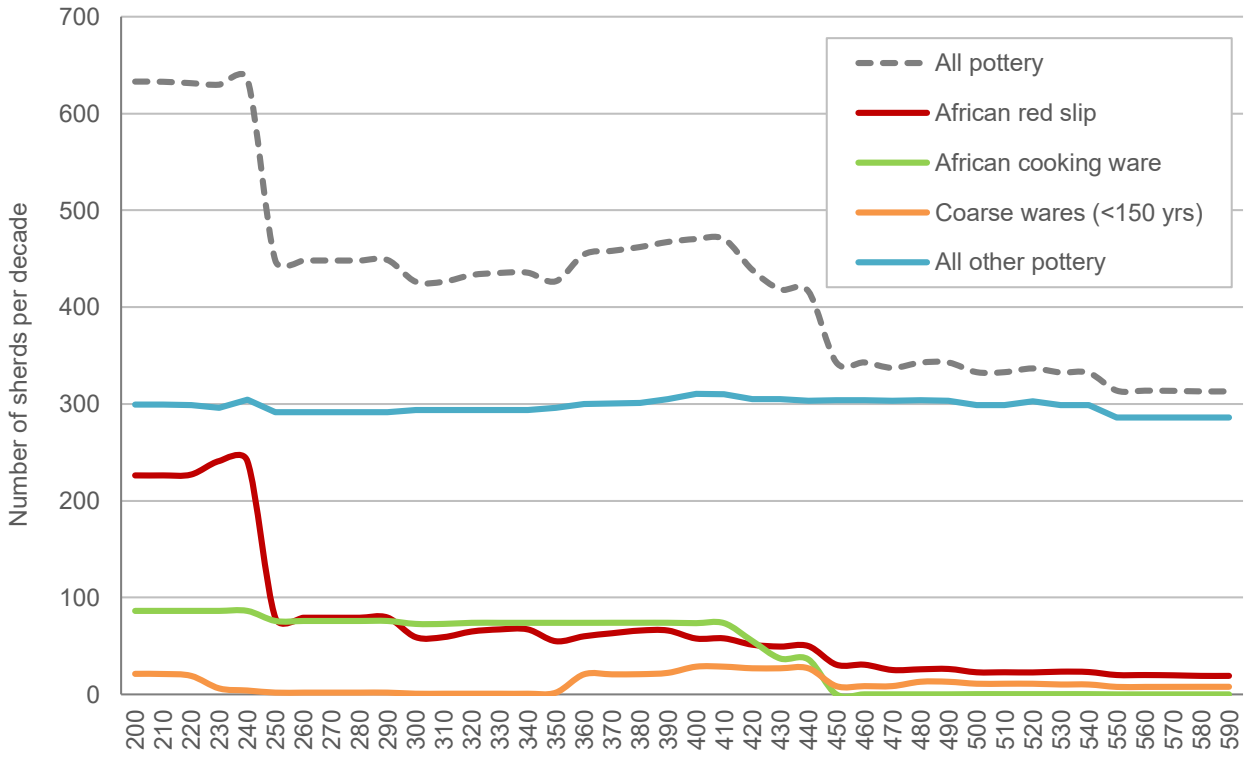


Figure 5.6. Weighted average numbers of late antique (AD 200–600) pottery sherds per decade collected by the South Etruria Survey.

period remained broadly the same as the previous period, suggesting both a degree of stability and the intensification of activity, rather than the occupation of new agricultural land.[890]

From the beginning of the third century, possibly as early as the mid- to late second century in parts of the Sabina, this situation changed dramatically. Firstly, there was a sharp fall in the number of rural settlements (Figure 5.4).[891] Just over half of the mid-imperial settlements were abandoned by the late third century, and there were relatively few new foundations. Secondly, it was primarily the imperial villas where occupation continued, whereas sites defined as *villa rustica* and farms were increasingly abandoned (Figure 5.5). These trends become increasingly marked from the mid-fifth century.

A similar pattern can be seen elsewhere in central Italy. In the Ager Caeretanus, field survey demonstrated that rustic settlements dominated over villas by over 50 per cent in the first and second centuries AD, but in the third century the situation began to reverse (53 villas to 51 rustic settlements); this trend increased slightly in the fourth and fifth centuries, and is especially evident from the sixth to seventh centuries (fourteen villas to three rustic settlements).[892] Work in Tuscany, in particular in the province of Siena, showed a decrease in the number of dispersed settlements during the third century that has been interpreted as the concentration of rural property and settlement.[893] Some areas of northern Italy also show a similar picture, although here the decline in settlement numbers appears to have begun earlier. For example, survey in the territory of Verona indicated a great reduction in the number of sites, in particular those of smaller dimensions, during the second to third centuries. It was the larger sites linked to the communication networks that survived.[894] The only exception to this picture are some areas of southern Italy and Sicily where there was not only an increase in settlement numbers in this period, but also evidence for the monumentalization of some villas, probably related to the importance of these areas for the food supply of the western empire, in particular after the Vandal occupation of the Maghreb in AD 429, as described above.[895]

[890] See Chapter 4; Witcher 2008c.

[891] Papi (2004: 58–60) notes that although the sharp decline in settlement numbers in the third century is characteristic of the Etrurian, Sabine and Umbrian territories, the fall appears to be somewhat less dramatic in the area of the Tiber Valley, probably due to its favourable geographical location and importance for Rome's provisions.

[892] Enei 2001: 76, fig. 48.

[893] Valenti 1995; Campana 2001; Felici 2004.

[894] Saggioro 2004.

[895] In some areas of Puglia, Basilicata and in Sicily there was an increase in the number of sites and in their dimensions in the third century, possibly related to the different consequences of the tetrachic period and in particular the significant developments in the agrarian economy in these areas: Vera 2005; Volpe 2005. See also section 5.3.4.5. For a synthesis of research in Italy and relevant bibliography, see Brogiolo and Chavarría Arnau 2005: 32–4.

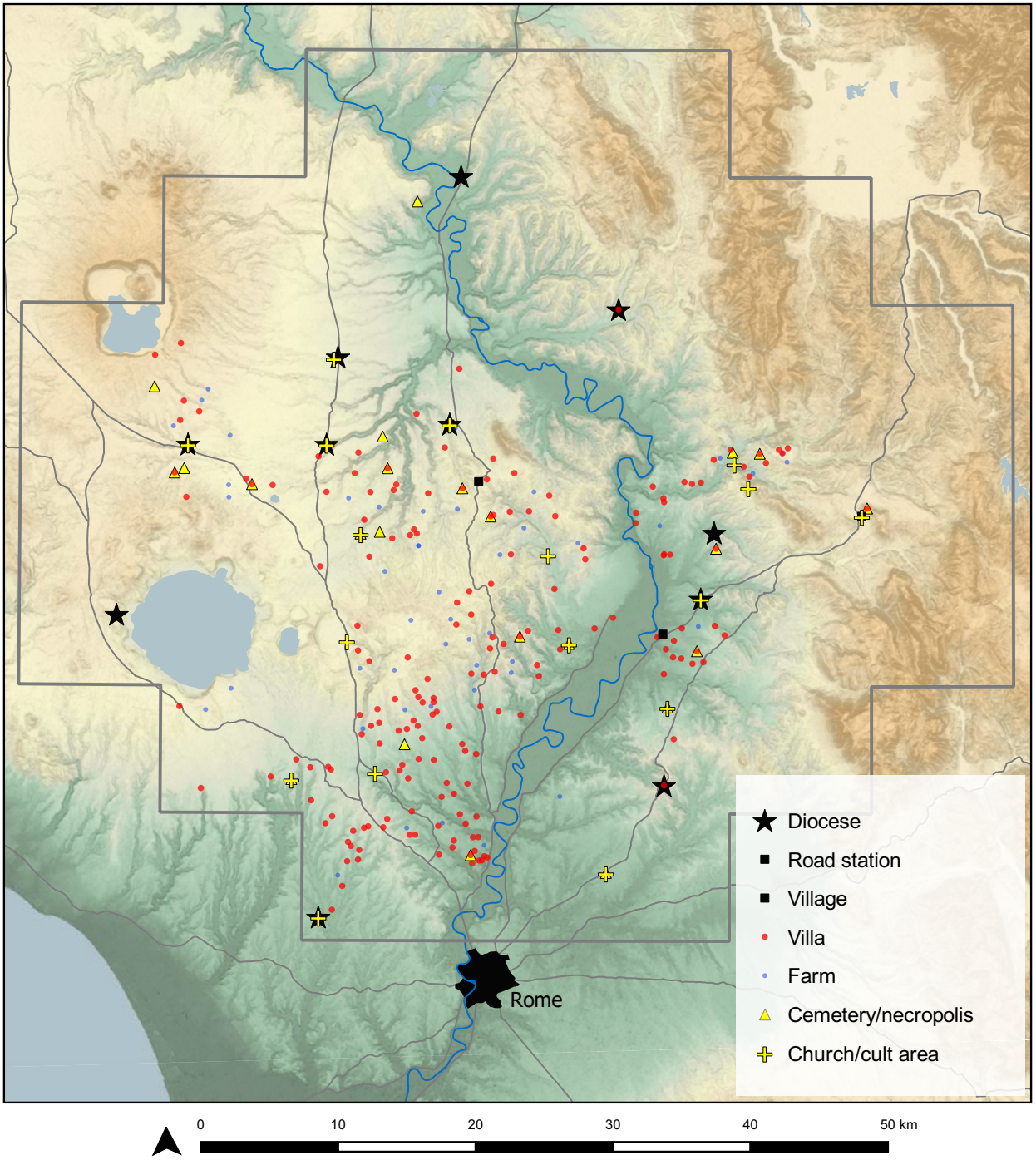


Figure 5.7. Tiber Valley Project settlement sites in the late antique 2 period (AD 450–550).

In South Etruria the fall in rural settlement numbers seems to apply both to the areas closer to Rome (the Ager Veientanus), and to those further to the north (the Ager Faliscus, where settlement numbers were roughly half those of the Ager Veientanus, and Sutri). The same pattern emerges in the Sabina, from the Eretum and Farfa Surveys, although in the latter area the fall appears to have occurred earlier. However, from around the second half of the fourth century, there was a slight 'revival' of settlement.

This level of detail is not visible on the settlement graphs because very broad chronological phasing chosen for the Tiber Valley Project has resulted in simplification of the evidence.[896] The weighted average of the pottery from the South Etruria Survey refines and modifies this picture, showing a sharp dip in the

[896] The latter, in effect, shows a sharp drop in settlement numbers in the second half of the third century and a further drop in the late fifth to early sixth centuries.

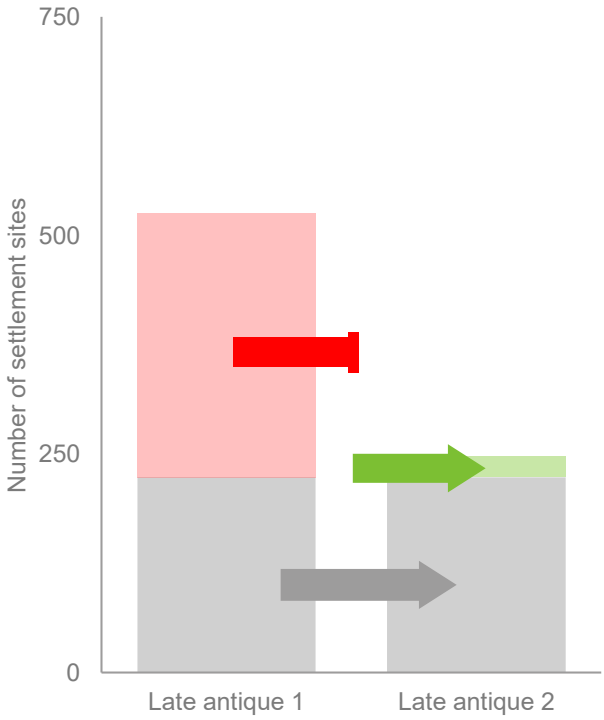


Figure 5.8. Numbers of settlement sites abandoned (pink), continuing (grey) and newly founded (green) at the transition from the late antique 1 to late antique 2 period.

quantities of pottery during the early third century. The numbers remain relatively stable until around the mid fourth century when there is a slight but evident rise followed by a gradual fall during the first half of the fifth century and subsequently a steady decline (Figure 5.6). Furthermore, although the sites that continued to be occupied from the imperial period often had little or no evidence for occupation in the first half of the third century, they were clearly occupied in the fourth. Therefore, whether continuously occupied or re-occupied after a period of abandonment, occupation on these sites was once again substantial in the fourth century. Finally, in the area of the South Etruria Survey for which the dating of the ceramics is more precise, the new foundations, probably small agricultural settlements, identified in our late antique 1 (AD 250–450), concentrated in the areas further from Rome, mainly date from the second half of the fourth century. A more detailed analysis of the survey data indicates, therefore, a revitalization of rural activity in the fourth century and supports the picture that emerges from the excavations of a number of sites and the epigraphic, religious and funerary evidence.

This 'revival' appears to have been relatively short-lived. By the mid-fifth century there was a further 50 per cent fall in settlement numbers throughout the valley (Figure 5.7). In the area of the South Etruria Survey, the relatively few new foundations mainly date from the second half of the fifth century and, in contrast to the situation in the fourth century, were concentrated in the areas closer to Rome (Figure 5.8).

On the east bank of the Tiber, in the area of the Farfa Survey, the fall in settlement numbers may have begun as early as the late second century AD. There appears to have been a slight revival in settlement in the fourth century, although there is the same problem of whether sites continued or were re-occupied.[897] However, the main characteristic of this area seems to have been the beginning of a gradual shift in settlement from the fifth century, away from the Tiber towards the upper Farfa Valley, where a relatively high number of new settlements were also concentrated.[898]

We can see therefore that there was a general thinning out of settlement throughout the study area from the third century, a trend that was increasingly marked in the later fifth to sixth centuries. This phenomenon appears to have been particularly evident in the areas further away from the main roads, while throughout the fourth and into the early sixth centuries, settlement along the roads was more consistent, such as in the area between the Via Clodia and Lake Bracciano, where there appears to have been an increasing concentration of settlement during this period, as Tim Potter noted for the area of Aquaviva (see section 5.3.5).

Another example is the area of the Eretum Survey. This area must have been of some importance given that it was particularly well-connected both by road and the Tiber to the city by the Via Nomentana and in particular by the Via Salaria, at the point where the road approaches the Tiber. Just to the north of the Salaria, and linked to the latter by another road, was the important river port of Passo Corese (*Portus Curensis*) at the confluence of the Tiber and the river Corese. This was still functioning in the late third to early fourth century (see section 5.3.10.1). Eretum itself (TVP-ID 10109) is described by Strabo in the early imperial period as a simple *vicus*, but it is mentioned in the *Tabula Peutingeriana* (fourth century) and again in the second half of the seventh century.[899] Furthermore the presence of a number of martyrial sanctuaries along both the Via Salaria and the Nomentana, especially common from the fourth century, such as Sant'Antimo which by the end of the fifth century had replaced the cathedral church of Cures, would have encouraged settlement. These factors explain the apparent vitality of this area in late antiquity and later.

The fall in rural settlement numbers certainly suggests a decline in the proportion of cultivated land.[900] However,

[897] Moreland 2010: 152.
[898] Moreland 2005.
[899] Fiocchi Nicolai 2008: 547.
[900] As noted by Paul Arthur 2002: 11 for Campania.

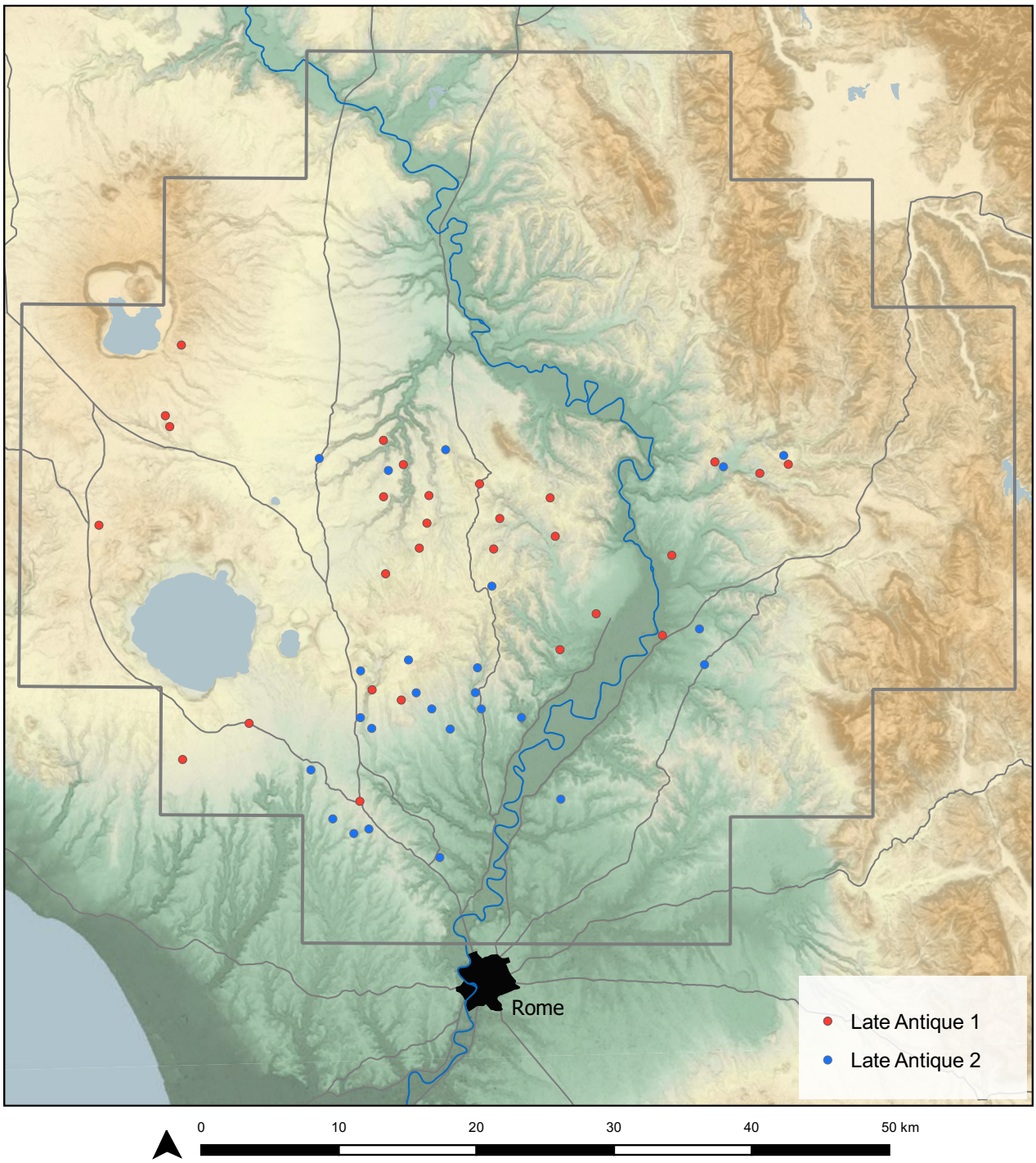


Figure 5.9. Distributions of newly founded late antique 1 (AD 250–450) and late antique 2 (AD 450–550) settlement sites.

the changes in this period, certainly as regards the fourth to early fifth centuries, can also be seen as a consequence of and a response to the new social and economic conditions in the hinterland of Rome in late antiquity. Two related elements are fundamental to our understanding of the nature of developments: firstly, the continuing importance of the middle Tiber valley for the supply of Rome and, secondly, the increasing Christianization of the landscape from the early years of the fourth century.

5.3.3 New late antique settlements

During the third to mid-sixth centuries, new foundations were rare. The majority were presumably farms and are defined as 'settlement' or 'occupation' and, in some cases, 'activity'. First we shall look at the evidence from the South Etruria Survey, including the southern area of the Sabina Tiberina around Eretum, and then look at the evidence to the north of Eretum, from the Farfa Survey, where the situation appears to have been slightly different.

As regards the South Etruria Survey area, there are some striking differences between the new settlements that appeared in the late third and primarily fourth centuries and those of the fifth to early sixth centuries. The majority of the new settlements of our late antique 1 (AD 250–450) date from the fourth century and especially from the second half of the latter. On the whole these were either completely new foundations or in some cases they had evidence for occupation in the Republican period. They were concentrated mainly in the areas further from Rome; in the Ager Faliscus, the central and northern parts of the Ager Capenas, and the Sutri survey area rather than in the areas closest to Rome, the Ager Veientanus and Eretum (Figure 5.9). In the light of the evidence for the reoccupation and/or restructuration of some villas in the same period, it is possible that these new sites reflect some attempt at the re-colonization and exploitation of these areas given the increased demands of the state for the provision of Rome following the third-century crisis.

In our late antique 2 phase (AD 450–550), the majority of the new settlements date from the second half of the fifth century. Unlike the new late fourth-century settlements, these were often established on the site of imperial villas abandoned in the early to mid-third century AD, and although it is possible that, at least in some cases, occupation continued during these centuries, this seems unlikely. Their distribution was also markedly different to those of the fourth century, since they were now concentrated in the areas closer to Rome (Figure 5.9). In particular, there is an inversion in the evidence from the Ager Veientanus and the Ager Faliscus, with a relatively large proportion of 'new' settlements documented in the former and relatively few in the latter. The same reduction in the number of new sites can be seen in the Ager Capenas and around Sutri, where in contrast to the previous period, only one 'new' foundation has been recorded. Again the reasons for this are unclear, but the foundation of new sites in the second half of the fifth century may be significant in the context of the loss of Rome's control of the Maghreb in this period, which led to an increasing reliance on more local sources for its food supply.

On the east bank of the Tiber, in the Sabina Tiberina, we are dependent mainly on the evidence from the Farfa Survey, and a different pattern emerges. There was a significant number of new settlements in the fifth century, frequently established on earlier first- to second-century sites (the same situation is found in some areas of South Etruria). However, they show a marked concentration away from the Tiber towards the upper Farfa Valley, and the majority appear to have been abandoned by at least the eighth century. An exception is the site (TVP-ID 15076) located on a hill to the west of Mercato Vecchio, just across the river Riana from the monastery of Farfa. Traces of a substantial wall were found built up against the side of the scarped hilltop. The date of the first phase of Roman occupation is unclear; however, it was then occupied in the fifth to sixth centuries continuing through to the eleventh to twelfth centuries, although evidence is missing for the eighth and ninth centuries.[901] This shift towards the upper river valley became more marked in the late sixth to seventh centuries (see section 5.3.2).

5.3.4 The villas

'The end of the villa system as a settlement type is a more general phenomenon; it marked the end of one of the major elements of western Roman elite identity and display'.[902]

The large majority of rural settlements in these centuries were first occupied in the imperial period or earlier and, as noted above, of these settlements it is the villas that are numerically dominant, in contrast with the more even numbers of farms and villas in the early and mid-imperial periods.[903] This trend begins during the third century and becomes especially marked in the mid-fifth to sixth centuries with the occupation of sites defined as farms in the preceding periods becoming increasingly rare. To a certain extent this conforms with Potter's interpretation of the original results, that the drop in settlement in this period could in part be explained by the absorption of smaller units by larger estates.[904]

It is now accepted that in most of Italy villas underwent a radical change from the third century onwards.[905] There are rare cases of fortified villas in northern Italy which may have formed part of a general defence system in this period.[906] There is also evidence for the monumentalization of some villas, although, as mentioned earlier, these seem to have been restricted mainly to parts of southern Italy and Sicily. However, it is probably true to say that for most areas of Italy the late antique phases of the villas were characterized by a relatively modest nature of occupation, frequently associated with agricultural production and in some cases the manufacture of goods.

It is difficult to ascertain the function of the imperial villas that continued to be occupied into late antiquity

[901] These gaps may be the product of the difficulties of identifying late eighth- and ninth-century pottery in the Sabina. The site does not seem ever to have been fortified.
[902] Wickham 2005: 481.
[903] Witcher 2008c; see also section 4.5.
[904] Potter 1979: 142–3.
[905] There is a vast bibliography on this subject. For recent syntheses regarding research in Italy and the western Mediterranean, see Ripoll and Arce 2000; Lewit 2003; Chavarría Arnau 2004; Sfameni 2004; Brogiolo and Chavarría Arnau 2005; Wickham 2005; Christie 2006. For the area around Rome, see, for example, di Gennaro and Dell'Era 2003.
[906] Roffia 2001; Brogiolo and Chavarría Arnau 2005.

from survey evidence alone, but where occupation is attested in the fourth century, in most cases the surface evidence suggests that they could no longer be defined as 'villas'. Some indication of the status of the inhabitants may be derived from the presence (or absence) of imported wares (African red slip ware and transport amphorae) whose circulation becomes increasingly limited from the mid-fifth century. The presence of specific pottery types on some sites and not others may also reflect the relationship of settlements to the distribution networks, whether roads or river, primarily the Tiber. For a clearer understanding of the late antique occupation we must look at the few published excavations. The late antique villas in this area have been divided into several rough categories, although often a villa can fit into more than one category:

- those with evidence solely for agricultural activities;
- those for agricultural, manufacturing and artisan activities and in some cases storage facilities often located alongside roads;
- villas, again along roads, that may have also provided services, including accommodation, for travellers;
- villas where churches were established;
- and villas that may have served as residences for the aristocracy (very rare in our area).

5.3.4.1 Villas with solely agricultural roles

The first and the most common type are those villas with evidence only for agricultural activities, which were probably modest agricultural settlements or farms in this period. This seems to have been the case at Baciletti, a villa in the north-east Ager Capenas, near Lucus Feroniae, where iron agricultural tools were recovered from fifth- to mid-sixth-century contexts.[907] On the east bank of the Tiber, excavations of the villa just outside the Roman *municipium* of Forum Novum and those at the villa near Lugnano in Teverina provide a similar picture. The villa at Forum Novum, built in the early imperial period, probably belonged to the patron of the small centre, a certain P. Faianius Plebius who built an aqueduct for the town at his own expense. However, in the early third century many of the villa structures were abandoned and other previously residential areas appear to have been used for agricultural purposes. The final phase of use was represented by a number of tombs inserted within the foundations of the villa in the fifth to sixth centuries.[908]

Further to the north, in Umbria, the villa at Poggio Gramignano near Lugnano in Teverina began to fall into ruins during the early third to mid-fifth centuries AD; although occupation continued during this period, the site was poorly maintained and may have gone out of use sporadically.[909] Around the mid-fifth century parts of the villa were used as an infant cemetery, interpreted by the excavators as being the result of a malaria epidemic.[910] The complex appears to have been completely abandoned in the sixth or seventh centuries.

5.3.4.2 Villas with roles in agriculture, manufacturing and artisan activities

Secondly there are villas, often located close to or facing on to roads, where, alongside agricultural activities (cisterns, olive presses), there is evidence for manufacturing and/or commercial activities (metal working, lime-kilns) and storage facilities. In some cases, contemporary with these activities, the settlement was re-oriented, the structures were renovated or new ones constructed and often defined as *tabernae* and workshops which faced directly onto the ancient roads. Presumably their functions included the production, processing and/or storage of various products, and perhaps their direct sale, as well as acting as a centre for the transport of goods.

The villa at the Mola di Monte Gelato clearly falls into this category and is discussed later (see section 5.3.4.4). Two other sites, one along the Via Amerina and the second on the Via Capenate, seem to have undergone this development. Excavations of one of two monumental areas along the ancient Via Amerina identified a series of workshops constructed in the Augustan period; in the fifth century the structures were rebuilt and oriented in a new direction. Various agricultural tools of late Roman date were recovered as well as utensils for commercial activities (butchering knives and scales). Close by was a lime-kiln with a deposit of marble fragments ready to be burnt. The final phase of use appears to have been a sixth- to early seventh-century burial inserted against the wall of one of the workshops.[911]

Similarly, excavations of a villa about a kilometre from Capena on the Via Capenate (*villa nei fondi Plini-Gigliotti/ Nocioni*) demonstrated significant changes between the end of the fourth and the early sixth centuries. A

[907] For the villa at Baciletti, see Pallottino 1937; Gazzetti 1992: 67–8; Carbonara and Messineo 1992: 38; Boenzi *et al.* 1996: 45–6.

[908] For the villa just outside the muncipium of Forum Novum, see Gaffney, Patterson and Roberts 2001; 2003; 2004a; 2004b.

[909] For the villa near Lugnano, see Soren and Soren 1999.

[910] Malaria was certainly endemic in the Roman Campagna and its effects must have been exacerbated by flooding, increasingly common in low-lying areas from the third century AD; Potter 1979: 145. For a discussion of malaria and its possible effects in ancient Italy, see Sallares 2002, although the importance given by Sallares to malaria seems to be in some cases exaggerated.

[911] Gazzetti 1992: 92.

new structure was built facing on to the Via Capenate reusing material from the villa, and just to the north the production area of the villa was built and restored, and another constructed on the northern side of the peristyle. The new structure facing on to the road reused earlier materials and was very probably a *taberna* rebuilt at the beginning of the fifth century. In the sixth to seventh centuries, a cemetery with tombs *a fossa* developed along the precinct wall of the Augustan villa, including one burial covered with tiles with a stamp of Theoderic (AD 493–526).[912]

In Umbria, north-west of the confluence between the Tiber and the river Nera, excavations identified a large villa on an artificial terrace with a rustic quarter where agricultural activities took place, and possibly brick production judging by the numerous brick stamps. The villa was probably linked to the nearby road, which led from Ocriculum to the river port of Seripola. By the end of the second/early third centuries AD and throughout the fourth century, the occupied areas were increasingly restricted. However, frequentation continued until the sixth to seventh centuries, reusing material from the now abandoned villa for structures and the supply of a lime-kiln.[913]

5.3.4.3 Villas providing services

Road stations, public institutions providing services for travellers are discussed further below, but there is evidence to suggest that some villas might have been restructured to provide similar services offering accommodation and/or food for travellers, serving as a villa *con hospitium caupona* or *deverorium* (a place to eat and sleep overnight). Rutilius Namatianus in his description of his journey from Rome to his family's ravaged lands in Gaul in the early fifth century vividly describes an overnight stay at a villa near Faleria that now functioned as a hotel. He notes that his party ate badly and paid too much for the harshness of the owner: '*Egressi villam petimus lucoque vagamur ... Sed male pensavit requiem stationis amoenae, Hospite conductor durior Antiphate... Vexatos frutices, pulsatas imputat algas, Damnaque libatae grandia clamat aquae*'.[914] A number of villas or settlements in or near our study area may have served this function in late antiquity; all are situated on or close to a main road. It is not impossible that the villa on the Via Capenate described earlier is such an example.

Two sites where the evidence is more substantial can be cited, although they are outside our study area, one near Cascia and the second in the Falacrinae valley, near Cittareale. The former, in locality of Coronella di Cascia, was a rustic settlement of early imperial date, abandoned and then reoccupied at the end of the third century when the site was restructured with the creation of smaller, minor rooms where agricultural and manufacturing activities took place; a loom weight, millstone and various iron wasters were recovered from the residential area. Significantly, although imported fine-wares arrived on the site in both phases, amphorae for the transport of wine and possibly oil (mainly from Africa but possibly also from the East Mediterranean) were attested only in the second phase. The site faced directly on to the road at the valley bottom, linking the area of Cascia with the Sabina, and the excavator has suggested that it could have served as a villa con *hospitium.* The site seems to have been abandoned sometime in the late fifth century.[915]

In the Sabina Reatina, the rich villa at San Lorenzo, near Cittareale, overlooking the Via Salaria and the river Aniene, was probably largely abandoned in the late second century. Following some sporadic frequentation in the second half of the third century, the villa was partially reoccupied in the mid-fourth century. Although the late antique occupation phase reused the preceding structures, maintaining the same orientation, the pavements were lowered and small dividing walls of relatively poor construction were built. These appear to have been service rooms replacing the previous residential structures. Ceramic production also took place judging by the presence of a coarse-ware waster. One, perhaps two, of the rooms seem to have been used as a kitchen in this period. The presence of a number of hearths accompanied by a large quantity of cooking-wares suggests that it catered for a substantial number of people. In the early fifth century, part of the late antique structure was destroyed by a fire and the roof collapsed, effectively sealing the last phase of activity in this area, and giving us a unique picture of the nature and function of one area of the villa in this period.[916] Given its location and the probable kitchen area, the structures may have served as a *caupona* or *deverorium*. Parts of the villa were still in use in the late sixth and seventh centuries when burials were also inserted within the structures. Occupation of the site may have continued, given the presence of a church documented in the tenth century (see section 5.3.4.5).[917]

5.3.4.4 Villas and churches

A phenomenon common throughout Italy from the early fourth century is the construction of churches

[912] Gazzetti 1992: 44
[913] Caretta 1986.
[914] Rut Namat. *De Reditu* 1.377–85.
[915] Stanco 2009.
[916] Filippone and Kay 2009; Patterson 2009; Kay 2011.
[917] The present church of San Lorenzo, situated directly over the villa, is modern, but a church was first documented at the site in AD 969 and it is likely that it overlay an early cult building. This area is now the site of a modern cemetery and therefore cannot be investigated.

and sometimes monasteries over or alongside Roman structures.[918] This is often taken to indicate the continuity of occupation throughout late antiquity and into the early medieval and medieval periods. However, in many cases the chronological relationship between the church (or monastery) and villa is uncertain. Many of the existing churches date to the eleventh or twelfth centuries or later. In some cases the reuse of early medieval architectural fragments and the documentary evidence demonstrate the presence of an earlier eighth- or ninth-century cult building. However, only in the rare cases where systematic excavation has been carried out can the chronological relationship between the end of the activity of the villa and the foundation of the church be established.

At least 12 villas in our study area were at some point occupied by churches. Those of the Mola di Monte Gelato, Le Mura di Santo Stefano and, in the central Apennines, San Lorenzo, have been mentioned already. Monte Gelato is one of the rare exceptions where there appears to have been a direct relationship between the church and the villa structures. The sequence of the villa at the Mola of Monte Gelato follows the general pattern described above; the villa was abandoned in the third century and then re-occupied in the mid-fourth with the reuse of earlier structures and the ample use of timber partitions. Tim Potter and Anthony King stated that these buildings 'would seem to have been essentially utilitarian in purpose and of unostentatious design'.[919] A series of workshops was discovered where artisan activity also took place, including metal and bone working, and a large lime-kiln was in use in the same period. Significantly the workshops, stables and lime-kiln all faced on to a road, a similar orientation to that noted on other late antique villa sites, suggesting that it may have had a commercial function. Around AD 400 a small funerary church was built, in a marginal area of the villa, with its façade again facing on to the road, indicating that the church founders (or whoever resided there) shared the use of the church with the surrounding communities.[920] The settlement seems to have been enlarged considerably in this period, and the excavators suggested the existence of a village-like community. Tim Potter's original hypothesis, recently re-proposed by Vincenzo Fiocchi Nicolai, was that the site belonged to a member of the aristocracy, but Potter later changed his mind, suggesting that the area and the site of Monte Gelato may have passed into the hands of the Church as early as the fourth century and that it was occupied by *contadini* dependent on the Church.[921] Whoever its owners were, the villa therefore may have served two purposes in this period: firstly for the production of goods (including lime) and the supply of these and agricultural products from its lands to Rome; and secondly for the *cura animarum* of the rural population in the area. The site gradually declined during the late fifth and sixth centuries, although it was reoccupied in the late eighth century, when it is identified as one of the farms of the *domusculta* estate centre of Capracorum; the latest evidence for the Roman use of the site, however, is a late sixth- to early seventh-century burial.[922]

The large villa on Monte Canino, some 5 km south-east of Castel Nuovo di Porto, may be a similar example of a church built while the villa was still occupied. In the Augustan period the villa seems to have consisted of the classic *pars urbana* and *pars rustica*: one part was richly decorated and the other may have been used for the production and storage of wine and oil. The later phases are unclear, but occupation seems to have continued into the fourth century and beyond. A small cemetery church, dated by Pallottino to between the early fifth to seventh centuries, was built just to the north-east of the imperial structures.[923] Over 50 tombs were recovered from within the structure and included a group of rich burial goods of the last quarter of the fifth century. The Ostrogoths left virtually no archaeological traces of their presence in Italy and this is a very rare example of the early period of Ostrogothic art in Italy.[924] The church remained in use until at least the ninth century[925] and both Barri Jones and Chris Wickham identify it as the *ecclesia S. Christinae* mentioned in eleventh-century documents.[926] The villa and church may be related to the nearby catacomb of Monte della Cassetta, also studied by Jones in his Ager Capenas survey. The catacomb was thought to have been abandoned by the early fifth century,[927] but the new study of the South Etruria Survey material suggests that it may have continued in use into the late fifth and sixth centuries.

The late antique occupation of the Villa dei Brutti Praesentes in the Sabina also may have been contemporary with the construction of the church.

[918] For discussion of this phenomenon, see Cantino Wataghin 2000; Ripoll and Arce 2000; Brogiolo and Chavarría Arnau 2005; Christie 2006, and section 5.3.8.

[919] Potter and King 1997: 423.

[920] Fiocchi Nicolai 2007: 114–17 notes a similar situation at the church built on a villa near Tivoli by a general of Germanic origins named Valilla.

[921] Fiocchi Nicolai 2007: 117 has suggested that the church is that of San Giovanni, one of the cult centres noted by the monk Benedict of Soratte as being founded by the *patricia* Galla.

[922] Potter and King 1997: 75, 423–4.

[923] Potter 1979: fig. 37.

[924] The grave-goods—a gold necklace, a pair of gold earrings and a pendant with a crescent moon and cross—were contained in a casket made of marble slabs covered with tiles found in a small subterranean funerary structure near the entrance to the church.

[925] A date confirmed by some architectural elements of the early ninth century.

[926] Jones 1962: 162; Wickham 1979: 66–71. See also: Pallottino 1937; Potter 1979: 128–9. For a synthesis of their conclusions, see Fiocchi Nicolai 1988: 353–5.

[927] Fiocchi Nicolai 1988: 355.

The villa belonged to an important consular family, and after various phases of restoration it was partially abandoned in the fourth century, when some burials were inserted within the structures. A cult building was built within the villa, reusing some of its structures, at the latest between the sixth and the seventh centuries, but perhaps as early as the fifth century. Tombs with grave-goods dating to between the late sixth and seventh centuries were discovered near the church.[928]

Finally, a possible, but certainly not proven example may be that of the martyrial cult site and later bishopric of Santa Rufina-Silva Candida, nine km to the north-west of Rome on the ancient Via Cornelia. The cult of Saints Rufina and Seconda is first firmly attested in the early fifth century, while the first mention of the bishopric of Silva Candida is in AD 501. Although the cult building and associated structures are in proximity to, but not directly overlying, Roman period remains.[929] In the Sabina, at the abbey of Farfa, possibly founded in the late sixth century and then re-founded in the late seventh, remains of Roman structures under the bell-tower were discovered in the 1930s, which, according to Croquison, belonged to a villa (see Chapter 6).[930] On the opposite bank of the Tiber, the abbey of Sant'Andrea in Flumine at the junction between the Via Flaminia and the Via Tiberina, was recorded by Benedict of Sant'Andrea del Soratte as being founded by the patrician Galla in the sixth century next to a port, although Benedict's Chronicon, written in the tenth century must be treated with caution. Remains of a Roman villa, including mosaic pavements of Augustan date, were discovered under the abbey.[931]

The presence of churches and monasteries overlying Roman villa structures, therefore, may (or may not) indicate the continued use of the villa but, where excavations have been carried out, the strong impression is that the nature and function of the villas had already changed before the foundation of the cult area.[932] The churches built at the villas from the fourth century were, in most cases, probably established for the *cura animarum* of the surrounding rural population. In this context it is interesting that they were established not only by the church but also, increasingly from the fifth century, by members of the Roman aristocracy.

5.3.4.5 Villas as residences for the aristocracy

Very few rich residential dwellings have been identified in our area, and it seems that the great late antique landowners preferred the city, in our case Rome, to the countryside. This picture is common to most of Italy, except for parts of southern Italy and Sicily where there is evidence for the monumentalization of villas with spaces for the *otium* and the reception rooms of the domus, bath complexes and cult buildings, first pagan and then Christian. These probably belonged to the aristocracy who resided there on a permanent or temporary basis.

There are, however, occasional examples in our area, the most striking being Le Mura di Santo Stefano (Anguillara). Excavations showed that following the abandonment of the first-century AD site, probably a farm, around the late second/early third centuries a large multi-storeyed building was constructed, as well as a complex of buildings to the north. It was richly decorated with a wide variety of imported and Italian marbles, which gave it 'an unparalleled standing in the Roman Campagna'.[933] Soon after, probably in the third or early fourth century AD, a larger apse replaced an earlier structure, which the excavators believe may have been a nymphaeum. There was also evidence for a possible bath complex that may have been related to the living quarters in the main building. The main building consisted of a series of rooms on three storeys around a central square and would have afforded panoramic views—from the top floor it would have been possible to see Rome, Monte Soratte and the Sabine hills. In contrast to the villas discussed earlier, there was no evidence for agricultural activity and the most recent interpretation is that it was probably one of the larger villas or a richly decorated luxurious country retreat, possibly a summer residence for a wealthy person, rather than a working estate centre. Robert Van der Noort and David Whitehouse believe that this luxurious complex had a relatively brief life, with no evidence for permanent habitation after the late fourth or early fifth centuries. On the basis of the pottery and two sixth-century coins, they suggest that some frequentation of the site may have continued.[934] However, sixth-century coins are relatively rare in our area, and this might be taken as an indication of more than temporary occupation.[935] The next major phase of use was in the early or mid-ninth century; the church of Santo Stefano was built and there are clear signs of

[928] Bazzucchi 2007.

[929] Excavations at Santa Rufina by were carried out in the 1960s by the Istituto Pontificio di Archeologia Cristiana and the British School at Rome, Ward-Perkins 1964. The final excavation report was not published until much later, in Cotton, Wheeler and Whitehouse 1991. See, in the same volume (Christie 1991), Llewellyn 1991 for a detailed historical history of the site and Christie 1991: 353–9.

[930] For discussion of the remains of Roman structures beneath the bell tower, see Croquison 1938.

[931] Gamurrini *et al.* 1972.

[932] For similar examples from elsewhere in Italy, see Brogiolo and Chavarría Arnau 2005.

[933] Van der Noort and Whitehouse 2009: 214. Their article presents a detailed synthesis of the results of the excavations.

[934] Van der Noort and Whitehouse 2009.

[935] The original study of the material in the late 1980s may have failed to identify ceramic types of this period. The excavations were never fully published and the existing articles do not include the finds. On the rarity of coins in the countryside in this period, see Rovelli in Patterson and Rovelli 2004: 270–71.

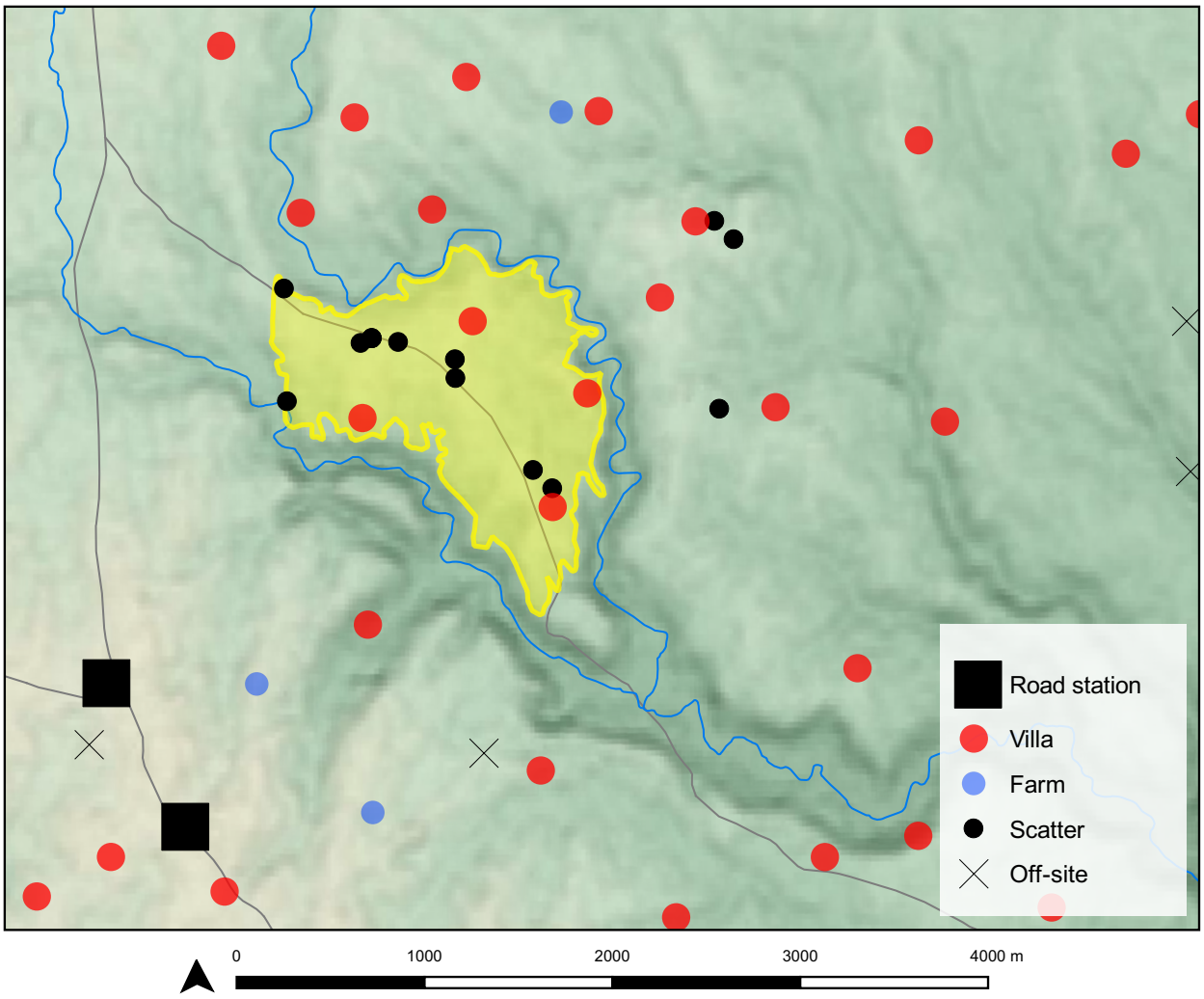


Figure 5.10. Distribution of late antique (AD 250–550) sites around the former town of Veii.

permanent habitation, the early medieval buildings in part reusing the Roman structures.[936]

Although the town of Veii was probably in ruins by the fourth century (see section 5.3.7), a number of villas just outside the centre continued to be occupied in late antiquity (Figure 5.10). Excavations of one of these, the villa of Quarticcioli, on the road leading to the North-west gate, revealed a rich fourth-century mosaic floor, whose iconography and style is very similar to that of the *Grande Caccia* of the Villa del Casale at Piazza Armerina.[937] The owner was clearly a person of a wealth and status who, if not permanently resident, was willing to invest in the building in this period. Another villa on the Via Flaminia also may have been the residence of a member of the aristocracy, given the discovery of a fourth-century mosaic during excavations of the bath-house. In this case we can name the owner or at least the family: the baths, probably public baths, were associated with a statue dedicated to Iunius Bassus (AD 364), a member of the *Iunii Bassi*, significantly one of the great landowning families in this area, involved in the supply of grain and other products to Rome.[938] The villa was certainly in an advantageous position, located along the road and close to the road station of Aquaviva (see section 4.3.5). Finally, on the Via Cassia not far from Rome, a site of the early imperial period was restructured at the beginning of the fourth century, as indicated by brick stamps and a mosaic, the technique and style of which are similar to those of the mosaicists of Narni.[939]

However, even including the rare examples mentioned above, in the middle Tiber valley there is no firm evidence for *praetoria*, as Alistair Small has suggested for the villa of San Giovanni di Ruoti in Basilicata,[940] or

[936] Van der Noort and Whitehouse 2009: 213–17.
[937] Ward-Perkins 1961: fig. 196; Baratte 1970; Cascino, Di Giuseppe and Patterson 2012.
[938] Papi 2004: 80.
[939] Faccenna 1948: 271–7; cited in Papi 2000: 234.
[940] Excavations of the imperial villa demonstrated that it was monumentalized in the fourth century and was clearly a great residence; however, the presence of byres for animals and food storage areas led Alistair Small to propose that it was the seat of an

as others have claimed for the centres of the *latifundia*. We see the same situation in the countryside around Naples where Paul Arthur notes their apparent absence, despite the importance of the latter for the food supply of Rome.[941] The very few rich residential villas in our area do not appear to have been maintained after the early fifth century, when both they and the other rural settlements, both villas and farms show increasing signs of degradation.

5.3.4.6 Summary

To conclude, on the basis of a number of villa excavations in South Etruria, Tim Potter suggested that there was a revitalization of settlement in the fourth and fifth centuries.[942] As we have seen, this is corroborated by our new study of the survey data. The new forms that the villas took in the fourth century add further support to this picture and suggest that there was considerable activity in the countryside. Clearly the late antique villas were very different from their imperial predecessors, but so were the social and economic conditions following the turmoil of the third century. With very few exceptions, they were clearly no longer the residences of the aristocracy, but now played a different, but no less significant, role. The changes must be seen in the context of Diocletian's laws ordering the produce of the estates in the area to be sent directly to Rome and the attention paid by the State to communication networks in this period. The evidence for production, manufacturing and commercial activities on a substantial number of the late antique villas, often located on the major roads, seems to reflect a conscious adaptation on the part of the major landowners to this new social and economic situation. In some cases, the villas may have been converted into structures providing services for the considerable number of travellers on the roads including increasing number of pilgrims visiting the new cult centres.

By the late fifth century, however, a substantial number of villas were abandoned. On those sites where occupation continued, the villa structures show increasing signs of degradation, including burials within the buildings. The rare examples of possible residences of the landowning aristocracy also seem to have been abandoned in this period or, where occupation continued, they no longer served this function. From the fifth century it was primarily the cult centres of the new Christian religion which maintained or injected some vitality into these sites. The majority of the villas do not seem to have survived beyond the mid-sixth century, with or without churches (the church at the villa site of Monte Canino is an exception). By this time, burials within the structures were common and in some cases represent the last signs of frequentation. Only a small number continued into the late sixth to seventh centuries and occasionally beyond, as discussed below, and the quantity of material recovered is noticeably small.

5.3.5 Road stations

The road stations were public institutions, sometimes associated with *vici,* spaced out at relatively regular intervals along the major roads. They supported the roadside towns and *fora* by providing basic services for travellers, in effect overnight stopping-places where horses could be changed and accommodation provided at the *mansio.* Their names, as listed in the road itineraries, often reflect this function. Some later became *municipia,* such as Forum Clodii on the Via Clodia (see section 5.3.7.2). Several road stations appear to have gone out of use after the third century, but others seem to have grown in importance in the fourth century, partly as a result of the renewed attention by the state to communication networks in general in this period, but also because of their role as important Christian centres.

5.3.5.1 The Via Clodia

Beyond the junction with the Via Cassia (see below), along the Via Clodia was the road station of Careiae, attested by both by Frontinus in his work on aqueducts and in the Antonine itinerary, the Peutinger Table and the Ravenna Cosmography.[943] Ward-Perkins, and later Potter, identified the road station with a site found during the South Etruria Survey, situated about 5 km to the north-west of the junction between the Via Clodia and the Via Cassia.[944] The new study of the survey material supports the original hypothesis that the main *floruit* of Careiae was between *c.* 100 BC and AD 250. Its abandonment after this date appears to be confirmed by the discovery of a large mid-third-century coin hoard, which Potter suggested might have been buried for security. Fiocchi Nicolai has suggested that the road station may be linked to the nearby church of Santa Maria in Celsano, near Santa Maria di Galeria, 2 km to the south of Careiae, where a fifth- to sixth-century phase for the church, overlying imperial structures, was attributed to a late antique cult building. An inscription of AD 529 that mentions a presbyter lends support to this hypothesis.[945] Therefore it is possible, as in other cases described below, that the settlement at Careiae shifted to the site of the cult building. Further

aristocrat or local administrator responsible for the the collection of taxes in the area; Small and Tarlano 2016.

[941] Arthur 2002: 99–100.

[942] Potter and King 1997: 424.

[943] Frontinus *De Aquae Ductu Urbis Romae* 71; the Antonine itinerary (300.2); the Peutinger Table (5.4) and the Ravenna Cosmography (274.8).

[944] Ward-Perkins 1955: 63–4; Hemphill 1975: 149–52; Potter 1979: 117.

[945] Fiocchi Nicolai 1994b: n.715.

along the Via Clodia, the small Roman town of Forum Clodii (today known as San Liberato) also served as a road station (see section 5.3.7.2)

5.3.5.2 The Via Cassia

At the XXI mile from Rome on the Via Cassia lay the road station of Ad Baccanas, recorded by the Antonine Itinerary (286.44) and the Peutinger Table (4.5; 5.3) at the point where the Via Amerina leaves the Cassia towards Nepi. An important *passio* of the sixth century describes the martyrdom of Bishop Alexander of Baccanus in the third century at the baths of the centre, called *Vicus Baccanensis*. The topographical information given by the *passio* is extraordinarily rich: it describes the route from the *vicus*, to the place of the martyrdom and gives a detailed description of the centre and its baths.[946]

The series of structures excavated by Gianfranco Gazzetti corresponds perfectly with the information provided by the *passio,* giving a rare insight into the layout of one of these centres.[947] This included the probable site of the forum, with direct access to the ancient road. A short distance to the south-east of the forum a row of rooms was interpreted by Gazzetti as an inn, but may be *tabernae*.[948] Opposite, on the other side of the road, was a bath complex, possibly public, with third-century black-and-white mosaics, around a small palaestra. Another building was tentatively identified by Gazzetti as the *caserma,* as well as a series of *tabernae* along the Via Cassia.

The main occupation sequence for the site comes from the excavations of the baths, which suggest that Ad Baccanas was founded in the Augustan period and continued to be occupied until the early fifth century. Two lime-kilns and a kiln for the re-smelting of metals were found, but it is unclear as to when they were in use. The cemetery, containing dozens of inhumation burials identified on both sides of the Via Cassia, did continue in use until the sixth century AD. Following its abandonment, in the fifth (or sixth?) century, the settlement probably gradually moved to the area to the south of the Roman *mansio* around the church of Sant'Alessandro at the XX mile of the Via Cassia, where the final martyrdom of Alexander is recorded as having taken place. The arguments for this shift, based on the archaeological and toponomastic data, are complex, but convincing.[949] This is the area of the modern Posta Baccano, the probable site of Baccano, a medieval road station on the Cassia (Burgus Baccanus) that also housed an important martyrial sanctuary. The *statio* was mentioned as late as the Itinerary of Sigeric, written in AD 990–4, as the second road station of the Via Cassia, between Burgo Nono and Sutri. A list of Vatican properties in this area in 1053 demonstrates that the cult of Alexander clearly survived. The *burgo Baccane* appears as the site of a house in 1093. Wickham suggested that these references indicate the existence of a settlement around a church with a continuous tradition from the Roman period, probably where the Posta di Baccano is now situated.[950]

Continuing north along the Via Cassia, between Sutri and Forum Cassii[951] lay the road station of Vicus Matrini, attested in the Peutinger Table and the Ravenna Cosmography. One of the Forma Italiae surveys identified the probable location of the site, which, on the basis of the surface material and inscriptions, seems to have been founded in the mid-Republican period and abandoned sometime in the third century AD.[952]

5.3.5.3 The Via Flaminia

At the IX mile of the Via Flaminia, close to the junction with the Via Tiberina, lay the road station of Ad Rubras, attested in the Peutinger Table and the Jerusalem Itinerary. Although the road station has not been discovered, it probably is to be identified with the site of the ancient *casale* of Grottarossa.[953] Unfortunately the material collected by the South Etruria Survey from the area around the *casale* is no longer to be found and the site can only be dated generically to the Roman period. However, Fiocchi Nicolai has suggested that a catacomb recorded near the villa of Livia at Prima Porta was probably related to the *mansio* (or to some villa in the vicinity). If this is so, settlement at the road station may have continued into the late antique period.[954]

[946] Fiocchi Nicolai 1988: 106–13; Gazzetti 1992: 84.

[947] For the results of the excavations, see, in particular: Gazzetti 1992. Geophysical survey of the site has provided further information regarding the plan of the centre; Johnson, Keay and Millett 2004.

[948] As suggested by Johnson, Keay and Millett 2004: 72.

[949] The church, with a cemetery, built in the early fourth century over the tomb of the martyr, as recorded by the *passio,* was not identified by the excavations at Ad Baccanas. For a detailed analysis of the *passio,* and for the arguments for the location of the early church further to the south where the final martyrdom took place, see Fiocchi Nicolai 1988: 109–13.

[950] Wickham 1978: 157–8.

[951] Forum Cassii, attested in several of the ancient road itineraries, is outside the Tiber Valley Project study area. Since the sixteenth century the site has been identified with the now abandoned church of Santa Maria di Forcassi. No systematic archaeological investigations of the site have been carried out, but the documentary sources show that a settlement existed in the ninth century and that a pilgrim church was established only a little later; Johnson, Keay and Millett 2004: 79–85. In other words, this could be a further example of a road station that later became a pilgrimage centre.

[952] Andreussi 1977; Gamurrini *et al.* 1972.

[953] Kahane, Murray-Threipland and Ward-Perkins 1968: 101–3, 173.

[954] For the *statio* and its territory, see Fiocchi Nicolai 1988: 289–91 (with extensive bibliography). The catacomb is no longer visible but Fiocchi Nicolai believed it could be identified with some fourth- to fifth-century tombs mentioned by Borsari (1893b: 517–18) and discovered in the same area. For early medieval settlement in the area of Prima Porta, see Wickham 1979: 74–5.

Further along the Flaminia, *c.* 20 Roman miles to the north of Ad Rubras, was the road station of Ad Vicesimum, attested in the Peutinger Table, and the Jerusalem and Antonine Itineraries. There are two main hypotheses as to its precise location. The South Etruria Survey placed the *mansio* near the church of Madonna della Guardia on the hill of Monte della Guardia.[955] The second hypothesis places the *mansio c.* 1 km to the north of Monte la Guardia. Here excavations identified an imperial-period villa. In the late antique period, a fourth- and fifth-century catacomb grew up in one of the cisterns which was reusing the old cuniculi. Fiocchi Nicolai suggested that this related to the presence of Christian community that settled around the road.[956] If this hypothesis is correct, there was clearly a revival in settlement at this site during the fourth century, which continued until at least the fifth.[957]

The road station or *mutatio* of Aquaviva is listed in both the Antonine and the Jerusalem Itineraries at the XXXII mile of the Via Flaminia. It briefly became the seat of a Roman bishopric, mentioned several times in the literary sources from AD 465 to 502 (when the last bishop is attested).[958] Again, the exact position of Aquaviva has been the subject of some controversy, but Potter plausibly placed it in the area of Monte dell'Osteriola (his site K12), to the east of the modern road that crosses the fosso Ponticello.[959]

In the early imperial period, a cluster of sites, some quite large, appeared around the crossroads between the junction of the Via Flaminia and a secondary road. At the same time the settlement at K12 expanded, and a mausoleum was built. By the fourth century most of the previously occupied sites in the area were abandoned, while at K12 there was a noticeable change in the focus of the settlement, suggesting it was reorganized in this period.[960] The new study of the survey material pushes the chronology slightly later than that given in the original publication, demonstrating that occupation continued until at least the mid-sixth century, perhaps as late as the seventh. The material includes a substantial amount of fourth- and fifth-century African red slip ware, as well as some of the early sixth century, and examples dating generically to between 500 and 700, coarse-wares of the end of the fifth to the mid-sixth centuries and two fragments of fifth-century glass cups. The presence of imported wares of this late date, which were not common in the countryside, and of glass cups, suggests that this site was of some importance and compatible with the seat of a bishopric. Further support is given by the correspondence between the latest definite pottery dates and the last attestation of a bishop at Aquaviva (AD 502); Duchesne recorded that in the early sixth century part of the territory under the control of the diocese of Aquaviva was probably absorbed by that of Falerii Novi.[961]

Aquaviva may also have been linked to the nearby villa with a fourth-century bath-house which was probably owned by the Iunii Bassi family.[962] As we have seen (section 5.3.4) this is one of the few possible examples of a rich residential villa of this date in the study area.

The sole example in our study area of a road station established *ex novo* in late antiquity is an imperial foundation attested in an inscription found in the area of La Storta that records that a *stabulum* was built by the emperors Gratian, Valentinian and Theodosius (379–83).[963] This *stabulum* or station for the horses of the state posting service, situated at the IX mile of the Via Cassia, is generally placed in the locality of 'La Storta', which covers a relatively large area, including the junction between the Clodia and the Cassia, at the IX mile from Rome.[964] No archaeological data have been found to confirm its precise position, but Fiocchi Nicolai, based on the excavations and conclusions published by Stefani in 1913, proposed a convincing hypothesis for the exact location of the site attested in the inscription.[965] In an area exactly on the junction, '*ad bivium*', of the Clodia and Cassia, about a half to one kilometre from the modern La Storta, Stefani recorded the discovery and subsequent excavations of a catacomb, built into a Roman cistern, and to the south-east of the funerary area, a late antique structure that reused an earlier imperial building. The new late antique structure was probably constructed in the fourth century and continued to be occupied into at least the mid-fifth.[966]

[955] See Jones 1962: 127–8; Potter 1979: 117. Potter noted that the site corresponded exactly with the distances given in the sources. The original survey records state that Italian *sigillata*, African red slip wares, amphorae and Roman coarse-wares were collected. Although this material could not be found at the time of the restudy, it indicates the existence of a substantial Roman settlement. For more recent discussions of the site, see Messineo and Carbonara 1993; Corsi 2000.

[956] Fiocchi Nicolai 1988: 294–306. See also: Gazzetti 1992: 57–9. For more recent bibliography on this site, see Messineo and Carbonara 1993: 79.

[957] Jones 1962: 167. The South Etruria Survey collected material from this area, but again it could not be found for the restudy and no description of the material is given in the survey records.

[958] Fiocchi Nicolai 1988: 16, 263, n.1, 202.

[959] For discussion of this with relevant bibliography, see Potter, Walker and Reynolds 1999: esp. pp. 199, 219, 224. For other hypotheses as to its location, see Evrard 1962.

[960] Potter, Walker and Reynolds 1999.

[961] Duchesne 1886.

[962] Potter, Walker and Reynolds 1999: 219, 225. The excavations of the baths in 1858–9 recovered an inscription with a statue base dedicated in AD 364 to Iunius Bassus; Evard 1962; Gazzetti 1992: 22. Evard and other scholars have proposed that this was the site of the road station.

[963] The place of discovery is described both as '*in Via Cassia loco qui dicitur La Storta*' and 'presso La Storta'. The inscription describes the foundation as '*un stabulum ne animalia cursus publici longi itineris labore diutius deperirent*'. *CIL* VI 1774; Fiocchi Nicolai 1988: 80, n. 488.

[964] Kahane 1977: 143.

[965] Fiocchi Nicolai 1988: 77–81.

[966] This chronology is suggested by the construction techniques and the discovery of a deposit of 1107 coins dating from the Constantinian period to the mid-fifth century.

The structure lies at the junction of the Clodia and the Cassia. Fiocchi Nicolai has proposed that it might be related to a small road station (a small *mansio* or *osteria*) which, given the date of construction, may be the *stabulum* recorded in the inscription, built in the late fourth century by the emperors.[967]

The site may be the precursor of the medieval road station first referred to in 990 as *Johannis VIIII* by Sigeric, as the first road station out of Rome and that indicates a clearly defined settlement in or around the ninth milestone on the Cassia, quite plausibly of Roman origin. San Giovanni reappears in twelfth-century documents, where possessions were located in *Burgo S. Iohannis in Nono*. Chris Wickham suggests that the *Burgo* very probably lies under the modern La Storta.[968]

5.3.5.4 Summary

Some road stations were abandoned in the course of the third century, such as Vicus Matrini and probably Careiae both on the Via Cassia. The latest phases of Ad Rubras and Ad Vicesimum are not clear, although in both cases it has been suggested that the presence of a catacomb might indicate continuity or a revival of occupation in the fourth and fifth centuries. The establishment of a new road station at La Storta and the reorganization of the site at Aquaviva, however, clearly indicates that renewed attention was given to these centres in the fourth century. This corroborates the other data for this period of the importance of ensuring the supply of goods to the capital. It is unlikely to be a coincidence that the villa owned by one of the great senatorial landowners in the *Ager Faliscum*, the Iunii Bassi, with its fourth-century bath-house lay close to the road station of Aquaviva. The significance of this site is clearly demonstrated by the establishment of a bishopric, albeit for a brief period, in the fifth century.

The importance of the needs of pilgrims in this development is evident. Increasingly it was the new Christian cult centres, especially the martyrial cult centres, which became the foci of settlement in the territory, as seen in the case of Sant'Antimo described below. The establishment of a martyrial cult centre a few kilometres from the road station of Ad Baccanas seems to have led to a shift in settlement to the site of the cult centre, where a medieval road station is documented in the tenth century. It has also been suggested, less convincingly, that the settlement at Careiae moved to the site of the nearby church of Santa Maria in Celsano. The survival of San Liberato, the roadside settlement and town of Forum Clodii, which later became a bishopric, was also probably due to the existence of a martyrial sanctuary.

The impression is that the attention by the state to the maintenance of the road stations had largely ceased by the later fifth century. It is possible that in some cases the martyrial cult centres now served a similar function, for in many aspects the cult centres would have resembled the ancient Roman road stations. They too were located along the major roads and would have offered accommodation and food to the pilgrims and so it is not surprising that these are sometimes on or close to the same sites where the medieval road stations are attested.

5.3.6 Vici and pagi

Archaeologically virtually nothing is known of *vici* and *pagi*. Few have been identified and excavated. They were probably modest settlements, only a few hectares in size, as recent excavations of the *vicus* of Falacrinae in the Sabina Reatina has suggested.[969] In some cases catacombs of considerable dimensions imply the existence of substantial settlements, possibly *vici*, in the vicinity; although again the latter have not been recognized archaeologically. The cemeteries were in use mainly during the fourth to fifth centuries. A *vicus* may have existed under the modern settlement of Rignano Flaminio; the nearby catacomb of Santa Teodora housed around 500 burials and an inscription suggests that here was the seat of a *pagus*.[970] Boccea on the XIII mile of the Via Cornelia may also have been the centre of a *vicus*, judging by the size of the nearby cemetery of Mario and Marta and the early Christian sanctuary of Mario, Marta, Audifax and Abacuc.[971]

5.3.7 Urban transformations

A brief premise should be made regarding the urban nature of Roman towns in this area in the imperial period. The establishment of the *municipia* by Augustus does not seem to have had any lasting effects, and many of the centres were already in decline during the first century AD. Federico Marazzi describes many of these ancient centres as 'virtual towns'.[972] The obvious exceptions are those directly involved in the supply of goods to the capital, therefore river ports, such as Orte and Ocriculum and the maritime ports of Portus and Ostia.

[967] Fiocchi Nicolai 1988: 80, n.488.

[968] Wickham 1978: 151. If Fiocchi Nicolai and Wickham are correct in their identification of respectively the Roman and the medieval road stations, the sites lie just under 1 km apart. The South Etruria Survey did not collect material from the area of Ad Bivium and survey of modern La Storta was not possible.

[969] De Santis and Gasparini 2010.

[970] Fiocchi Nicolai 1988: 77–81; 1994a: 249–59.

[971] Fiocchi Nicolai 1988: 64–72.

[972] For the use of the term '*citta virtuale*' and useful discussion of the effects of Rome on towns in the area, see Marazzi 2001a: 726–7. The small Roman *municipium* of Forum Novum in the Sabina is a perfect example of a virtual town.

The period of greatest change in the urban framework, however, as with rural settlement, was in the course of the third century.[973] During the last decade of the second century and the beginning of the third, some imperial investment was made in towns to the north of Rome. This is particularly clear for the reign of Septimius Severus, coinciding with his building projects in Rome, and of Gordian (238–44), when there is also evidence for investment on the part of the senatorial aristocracy and *domini nobiles*. However, it was only with Gallienus (259–68), who took up residence on his lands close to the Tiber that substantial renewed attention was given to municipal policy. As Emanuele Papi stated, this was dictated primarily by necessity, linked to problems relating to the food supply of Rome.[974] It is no coincidence that Gallienus's, and later Aurelian's, attention focused on the same areas as in the Severan period, that is the towns along the Tiber valley and the coast. Over a third of the inscriptions to Aurelian commissioned by all the Italic communities came from the Umbrian, Etruscan territory, and in the middle Tiber valley they were found at Veii, Forum Novum, Capena and Falerii, all close to or linked to the Tiber.[975] Aurelian's interest in the urban centres and in this area in general were clearly based largely on the need to ensure Rome's food supply; his reforms of Italy in AD 274 also regarded agriculture and measures for the provision of foodstuffs for the population of Rome (see section 5.3.1).

The interventions carried out during the third century seem to have had little real impact on the decline of urban life. They were restricted primarily to the restoration of public buildings and the urban infrastructure; furthermore, the construction techniques contrast markedly with those of the Augustan period with the frequent recycling of stone and marble from earlier, now abandoned, structures. During this period the urban forms that the towns had assumed in the Augustan period gradually became unrecognizable, and by the end of the third century the general picture is one of decadence and neglect. After Aurelian any attempt by the emperors to revive the urban centres seems to have ceased definitively. AD 305–6 are the last years where we see building activities marked by inscriptions. It was now left to the Church to inject new life, and new buildings, into these centres.

5.3.7.1 Failed towns

The major Etruscan centre of Veii, at the time Rome's greatest rival is a clear example of a 'failed' town. The re-study of the material collected by Ward-Perkins and his team from the plateau gives a new insight into the history of the centre.[976] Veii suffered a gradual decline from the period of the Roman conquest in 396 BC. Despite the creation in the Augustan period of the Municipium Augustum Veiens, from early empire large areas of the urban centre had already been abandoned and had begun to form part of the rural landscape. The re-use of marble inscriptions from the early third century supports this picture of change: a marble inscription, originally naming a *porticus Augusta* under Tiberius, was reused to honour Septimius Severus and his son (between AD 202–10). This is the first of a long period of such re-use at Veii and a similar picture emerges from other towns both in South Etruria,[977] as well as at Forum Novum.[978] During the third century AD some public buildings were restored, but there were no inscriptions after this date. By the early third century the centre of Veii appears to have been restricted to a very small area around the Augustan forum. By the late third century the *municipium* itself was probably in ruins and virtually no material of the late third onwards was recovered from the area.

The fact that a bishopric was never established at Veii, and indeed the lack of evidence for a Christian community, clearly reflects its insignificance by this period. The decline of urban life, however, does not seem to have affected the level of investment in the villas on the plateau, as the villa of Quarticcioli, mentioned earlier, demonstrates (see section 5.3.4.5). These villas now seem to have been the foci of settlement on the plateau. Many had developed in the Republican period, concentrated along the roads leading into the centre. The impression is that the great landowners of the plateau of Veii now preferred to invest in their own possessions rather than investing money in the declining town. By the late sixth to seventh centuries, even the plain of Veii seems to have been largely abandoned, and only three areas produced sporadic material of the sixth to eighth centuries. This decline is demonstrated clearly by a comparison of the weighted average of the pottery from the plateau of Veii and the Ager Veientanus (Figure 5.11). That for the Ager Veientanus follows the pattern from South Etruria in general, with a marked drop in quantities in the third century followed by a slight rise in the fourth and fifth, and then a drop again; whereas that for Veii itself shows a drop in the third century followed by a

[973] Emanuele Papi's analyses of the situation in Etruria based on an exhaustive study of the public works and private donations are extremely useful for developments during the second to fourth centuries; Papi 2000; 2004.

[974] For the period of Gallienus in general, see Papi 2000: 205–22; and 220–2 for the importance of Etruria for the food supply of Rome.

[975] For the distribution of attestations relating to the period between the principates of Gordian III and Aurelian, and building techniques, see Papi 2000: 174–7 and fig. 126.

[976] Cascino, Di Giuseppe and Patterson 2012.

[977] Lucus Feroniae and Falerii Novi: Papi 2004: 57.

[978] Gaffney, Patterson and Roberts 2001; 2003; 2004a, 2004b.

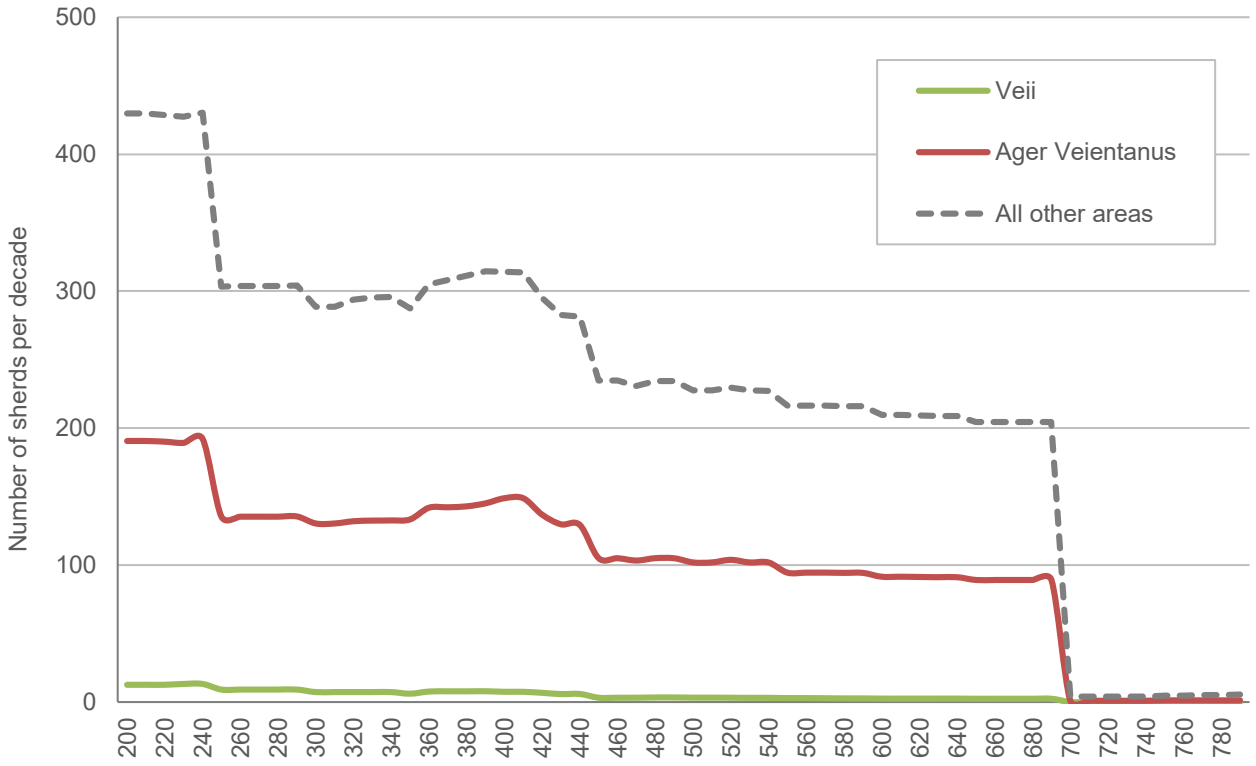


Figure 5.11. Weighted average numbers of sherds per decade from the South Etruria Survey, AD 200 to 800: quantities of material from Veii, the Ager Veientanus, and the remainder of the South Etruria Survey material.

steady decrease in quantity until the abandonment of the plateau.

5.3.7.2 Towns and bishoprics

Bishoprics were established at the majority of Roman towns: Cures Sabini, Nomentum, Forum Novum and Ocriculum on the east bank of the Tiber; and Falerii Novi, Forum Clodii/San Liberato, Nepi, Sutri and Capena on the west (see Figure 5.7, above). However, with the notable exception of Nepi and Sutri (which are discussed below under 'successful towns'), the effect of this was variable.

Cures Sabini is a case in point. Cures was an important Sabine centre, however by the early empire it was greatly limited in size; Strabo, writing in the Augustan period, mentions that the centre was by now reduced to a small village (Strabo 5.3.1). Its location, some distance from the Via Salaria, must have been a determining factor in the decline of the town. By the second and third centuries, the western hill, which was previously occupied, was used for burials. Although Cures enjoyed a certain vitality during the third and the beginning of the fourth centuries, as attested by the epigraphic evidence, after this date material evidence for urban continuity is virtually non-existent. Settlement seems to have been concentrated in the southern area of the valley between the hill of Santa Maria degli Arci and the western hill of Colli d'Arci. The reuse of building material from the town in a rural village about two kilometres away supports the idea of the breakdown of the urban fabric in this period.[979] The town became the seat of a bishopric from at least the mid-fifth century.[980] The exact location of the first church is not known but by at least AD 501, and probably as early as the second half of the fifth century, the cathedral church was established at the rural martyrial church of Sant'Antimo about 5 km (by land 10 km) away from Cures, along the Via Salaria. The shift is a clear sign of the decline of the town and the growing importance of the sanctuary in its position on a major road. Furthermore, the cult centre must have been frequented by pilgrims for some time. This would have led to the creation of the usual support structures at these centres, such as dwellings for the clergy and services for the visiting pilgrims.[981]

Nomentum lies to the south of Cures in the southern area of the Sabina Tiberina, on the Via Nomentana. Very little archaeological work has been carried out on the centre and certainly for the later phases we are dependent almost entirely on the documentary sources. It became the seat of a bishopric first attested

[979] Muzzioli 1980; Fiocchi Nicolai 2009: 66.

[980] The first known bishop is recorded in AD 465 as attending the *concilio romano* held by Pope Ilarius. In this document he still signs himself as *episcopus Curium Sabinorum* (Mansi, VII, c. 959), while in the councils of 482 and 499, the bishop is recorded as *Felicissimus Sabinensis et Dulcitius episcopus ecclesiae Sabinensis/Sabinensium* (Mansi, VII, c. 959).

[981] Fiocchi Nicolai 2004; 2008: 547–548.

in AD 402–17: the fourth- to fifth-century *passio* of Saints Primo and Feliciano describes their martyrdom during the persecution of Diocletian and Maximian and refers to a church with a subterranean cemetery. The possible location of the latter has been identified recently, close to Nomentum, on the Via Nomentana, and the cemetery must have served the urban population.[982]

Developments are much clearer at the small Roman town and bishopric of Forum Novum-Vescovio in the central area of Sabina Tiberina. Forum Novum is the only town in the middle Tiber valley where geophysical survey followed by the excavation of selected areas has provided a plan of the centre and allowed us to trace its history from the Republican period to the later middle ages.[983] It lies on a low plain at the head of a river valley leading to the Tiber. Founded in the second century BC, it became a *municipium* in the Augustan period. Inscriptions of the third and fourth centuries are attested, for instance a dedication Gordian (238–44), and in AD 400 the *Foronovani* dedicated a statue in Rome to the governor of the territories of *Flaminium et Picenum*.[984] By the mid-fifth century Forum Novum had become the seat of a bishopric, first attested in AD 465 when the bishop Paulus Foronovanus was present at the Roman synod.[985] By the tenth century Forum Novum-Vescovio became the bishopric for the entire Sabina Tiberina, with a vast territory including the districts of the now extinct bishop's seats of Cures Sabini and Nomentum, the former incorporated with the latter at the end of the fifth century. Forum Novum's role as a bishopric continued until the fifteenth century.

In common with other Roman towns in the Sabina, Forum Novum was a small centre, only about four hectares in size. As the geophysical survey and excavations demonstrated, it consisted mainly of public buildings, with no firm evidence for residential dwellings. Following the establishment of the Augustan *municipium* there was investment in the centre: the orientation of the form was changed, the basilica, an amphitheatre and baths were built, as well as a large villa and funerary exedra just outside the *municipium*. The latter probably belonged to the main patron of the town, a certain P. Faianus Plebius. Despite the evidence of the inscriptions, during the third century the amphitheatre and baths were abandoned as was the funerary exedra just outside the town, while the associated villa ceased as a residence. Thus, it followed the same pattern as many other villas at this time, with partial abandonment, evidence for agricultural activities and, later, burials (see section 5.3.4.1).

Unlike other Roman towns in our area where bishoprics were established, such as Falerii Novi, Nepi and Otricoli, no form of urban cemetery was identified. Instead a significant number of fine-quality late antique sarcophagi have been recovered both from the town and the territory. These must be related to persons of a certain status, probably the owners of the rich villas in the territory, and in most cases probably members of aristocratic families.[986]

Coupled with the lack of residential buildings, this indicates that Forum Novum was a 'virtual town' rather than a true urban centre; it was an administrative, commercial and later a religious centre serving a larger territory, a role it seems to have maintained until the end of late antiquity. Even in the sixth century, Forum Novum still shows a certain vitality, as well as the continued existence of the bishop's seat, as emerges from the results of the excavations behind the church, discussed below, and also a hagiographical text probably of the sixth century which attests that a market was still being held at the centre. The *passio* of the martyr Antimo and of his companions Fabio, Massimus and Bassus records the martyrdom of Bassus under the emperor Diocletian '*ad mercatum populi in locum qui appellatur Forum Novum, et illic fiebant sacrificia Livero et Cereri*'.[987]

Nevertheless, by at least the late fourth to early fifth centuries the focus of the centre seems to have been restricted to the area around the early medieval cathedral church of Santa Maria in Vescovio. The church still standing today is primarily of the Romanesque period, but the earliest phase of the present building is of the late eighth to early ninth centuries. As Fiocchi Nicolai has convincingly argued, it is very probable that it took the place of the early Christian church.[988] The situation of the building is significant; lying directly next to the Roman forum, as in the case of numerous other early Christian cathedral churches both in Lazio and in other parts of the Italian peninsula especially from the fifth century. Evidence for late antique and early medieval activity at the centre comes almost exclusively from the excavations behind the apse of the church which revealed a long sequence from the second century BC through to the thirteenth century.[989] Even here, however there appears to have been a period

[982] Fiocchi Nicolai 1997; 2004: 112–13.
[983] Gaffney, Patterson and Roberts 2001; 2003; 2004a, 2004b; Patterson, Gaffney and Roberts 2009.
[984] Gordian: Papi 2004: 64. For the dedication at Rome, see Fiocchi Nicolai 2009: 164–5.
[985] Fiocchi Nicolai 2009: 165.
[986] Fiocchi Nicolai 2008: 539–540. Although ploughing just outside the centre recently brought to light the remains of some cappuccin tombs, probably of early imperial date. The surface remains, however, cover a small area.
[987] For discussion and references regarding the date of the *passio*, see Fiocchi Nicolai 2008: 538; 2009: 165.
[988] For the reasoning behind this argument, see Fiocchi Nicolai 2008: 534; 2009: 166–168. Fiocchi Nicolai notes that the dedication of the church to Santa Maria is among the most attested in late antique episcopal churches, as for example at Rieti and Nepi.
[989] Unfortunately evidence for eighth- to tenth-century occupation in this area consists entirely of residual material; stratified contexts for these centuries are lacking.

of abandonment or partial abandonment in the third century AD. This was followed by a new phase of activity in the late fourth to early fifth centuries and therefore roughly contemporary with the establishment of the bishopric. New structures were built, including a large amount of *spolia* (including in the church itself). The structures were associated with rich and abundant rubbish tips including imported fine-wares, African red slip, and amphorae from North Africa and the East Mediterranean, as well as the latest productions of the local Spello-type amphorae. The establishment of a bishop's seat signifies not only the presence of a cathedral church, but also a baptistery and a bishop's residence, and it is very likely that the structures behind the cathedral church are to be identified with the latter. In the late sixth to seventh centuries, another major phase of construction took place, again associated with rich deposits of material (see section 6.4). These structures appear to have continued in use until the second half of the thirteenth century when they were abandoned and systematically destroyed.[990]

On the opposite bank of the Tiber, Falerii Novi represents a very different form of urbanism. It was a new Roman foundation of the mid-third century BC situated on a low-lying plain close to the Via Flaminia. Field survey and geophysical investigations have demonstrated that the walled centre was densely occupied in the early imperial period, but by the third century AD occupation seems to have been concentrated in the areas to the north and south of the forum, suggesting that the latter was now the focus of activity.[991] The epigraphic evidence attests some investment in the centre in the third century, under Gallienus, but it was largely limited to the restoration of public buildings. In the baths restored by the emperor a commemorative inscription was incised on a re-used marble slab. Nevertheless, the urban population in the fourth and early fifth centuries was still considerable, the catacomb serving the town in this period housed just under 1000 tombs.[992] Falerii Novi is first mentioned as a bishopric in AD 465, but at some point, the episcopal seat was moved to Civita Castellana, the site of the pre-Roman settlement of Falerii Veteres, situated on a spectacular defensible rocky plateau. Field survey at Falerii Novi failed to identify pottery after the sixth century[993] and it is probable that the remaining community gradually moved to Civita Castellana on the former site of Falerii Veteres during, or in the aftermath of, the Lombard invasions (see section 6.4).

Overlooking Lake Bracciano, on the Via Clodia at the junction with the Via Cassia, the town and road station of Forum Clodii (today San Liberato) is listed by the Antonine and the Ravenna Itineraries and depicted in the Peutinger Table. Founded in the Republican period, it later became a *municipium* and then a bishopric. A number of third- and fourth-century inscriptions exist. In AD 313 it was one of three bishop's seats attested in Lazio and a bishop is recorded at Forum Clodii again in 465. According to Duchesne the last mention of the bishopric is in AD 501 when it was absorbed by the nearby diocese of Monturanum (today Monterano), first mentioned in AD 649.[994] Overlying part of the Roman settlement is the present-day church of San Liberato whose earliest phase dates to the late eighth to early ninth centuries. The church was without doubt linked to the martyrial memory of Marciano: the *passio* of the martyrs Marciano, Macario and Stratoclinio, of uncertain date, informs us that during Diocletian's persecutions (AD 285–305) they were decapitated and buried at the *mansio*.[995] However it was until fairly recently unclear whether the site continued to be occupied in the period between AD 501 (the last mention of a bishopric) and the late eighth to early ninth centuries (the first construction phase of the church), and if an earlier cult centre existed.

In the early 1960s, profiting from restoration work on the apse of the church, a team of scholars carried out an architectural survey of the church and a study of the documentary and epigraphic evidence, alongside a very small excavation behind the apse of the church, with the aim of answering these questions. The excavation revealed that the walls of the church directly overlay the foundations of a Roman building of the second century AD.[996] However, as noted in the publication, although the presence of an early medieval church implies some form of continuity from the Roman settlement, the results provided no firm confirmation that this was the case and 'it is not possible to state at present whether this represents direct continuity or abandonment after the fifth century and reoccupation in the late eighth'. This concurs with Fiocchi Nicolai's analysis of the walled structures and inscriptions following which he concluded that no part of the church seemed to be of early Christian date.[997] This picture has now changed again, thanks to the recent restudy of the ceramics from the excavation[998] which clearly demonstrates that the site continued to be occupied into the late sixth to seventh centuries and argues strongly for a continuation of settlement between the Roman and

[990] Gaffney, Patterson and Roberts 2001; 2003; 2004a, 2004b; Patterson, Gaffney and Roberts 2009.
[991] Keay *et al.* 2000: 73.
[992] Fiocchi Nicolai 1988.
[993] Keay *et al.* 2000: 73.
[994] Duchesne 1886; Christie 1991: 316.
[995] In reality only one of the three martyrs, Marciano, can be attributed with any probability to Forum Clodii. Nibby 1837: 325–6 noted that, while in the documents the church was designated as San Marciano, '*il volgo*' di Bracciano prefer the name San Liberato; Christie, Gibson and Ward-Perkins 1991: 343, n. 11.
[996] The study of Forum Clodii was undertaken during and as part of the South Etruria Survey. Christie, Gibson and Ward-Perkins 1991.
[997] Christie 1991: 355; Fiocchi Nicolai 1988: 81–3.
[998] The pottery from the excavation was never published but was studied as part of the reanalysis of the South Etruria Survey data.

the early medieval periods (see section 6.4). Here then, survey, excavation and restudy of ceramics has demonstrated long continuities in this small centre.

5.3.7.3 Towns as river ports

The major town and river port of Ocriculum lies on the west bank on a low-lying plain occupying a bend in the Tiber. It was the most important river port in the Tiber valley, playing a major role in the supply of products from the rich Sabine and Umbria areas. The port still functioned in AD 368, when the proconsul of Africa, Hymetius, was accused at Ocriculum of having made illegal profits from the sale of grain destined for the people (Ammianus Marcellinus 28.1.22). In the fourth century Costantius II stayed there (Ammianus Marcellinus 16.10.4); a bishopric is first mentioned in AD 487; in the mid-sixth century the body of San Vittore was discovered by Bishop Fulgentius when Totila passed through Ocriculum; and around the mid-sixth century the bishop built a church over the tomb.[999] There is also a reference to the bishop's attempt to appease Totila with gifts during his passage through Ocriculum in AD 553–4. So, as confirmed by pottery from the site, there was considerable activity here until the mid- to late sixth century, the period of the Lombard invasions, after which information about the bishop's seat ceases.[1000] The last mention of a bishop is in AD 595,[1001] and the inhabitants moved to the hill overlooking the Roman town.

5.3.7.4 Towns and churches

Although most of the surviving Roman towns became seats of bishoprics, there are some where we just find a church testifying to the presence of a Christian community. Lucus Feroniae is situated on a low-lying plain, well-connected to the Tiber and the Via Tiberina. It was first settled in the seventh century BC as a sanctuary dedicated to Feronia. It was also a major commercial port. After the Antonine period the town seems to have declined, and evidence for third-century occupation is scarce, one of the few signs of new building activity being a bath-house possibly associated with an inn.[1002] By the fourth century large areas of the town appear to have been abandoned, but a Christian community seems to have been established during the fourth to fifth centuries, when the Roman basilica was probably transformed into a cult area surrounded by tombs, and another church, again with tombs, may have been established in the baths at the end of the fifth or the beginning of the sixth century. Although Lucus Feroniae appears to have been largely abandoned sometime during the seventh and eighth centuries, limited occupation of the site continued into the late eighth and early ninth centuries.[1003]

Capena was also in a strategically important position, linked by the Via Capenate to the Tiber and Lucus Feroniae. By the second to third centuries, occupation seems to have been restricted to the central area. Nevertheless, a church of possible early medieval date built on a Roman structure, probably a cult building, suggests the presence of a Christian community and has led Gianfranco Gazzetti to suggest that the site may have continued to be occupied in some form into late antiquity and possibly beyond.[1004]

5.3.7.5 Successful towns

There are few examples of 'successful' towns in the middle Tiber valley, and even then the term is relative. Forum Novum, Nomentum and very probably Forum Clodii/San Liberato are examples in our area of sites with evidence for continuous occupation from the Roman to the medieval period. However, Forum Novum was a town only in name, and there is little to suggest that a residential population existed at the Roman *municipium*, and the same was true of the bishopric.

The only Roman towns in South Etruria where we can say with some degree of certainty that urban life continued are Nepi and Sutri; indeed both centres are still occupied today. Their 'success' must derive from their strong position. Both were pre-Roman centres and, unlike the examples discussed earlier, they were in a highly defensible position, on rocky pedestals or high spurs flanked by deep gorges, and enjoyed good communications with Rome; Nepi is on the Via Amerina and Sutri on the Via Cassia, two of the main roads leading from Rome to central Etruria. Bishoprics were established at both centres: Nepi by 419 and Sutri by 465. We know little of the nature of these centres during late antiquity. Nevertheless, the funerary areas associated with both centres indicate that they had a considerable urban population in the fourth and fifth centuries (see section 5.3.9).

5.3.7.6 Summary

Systematic archaeological work on urban centres in the middle Tiber valley is scarce, and the more ephemeral post-classical phases of these centres makes our task even more difficult.[1005] However some general points emerge.

[999] Pietrangeli 1978.
[1000] Hay, Keay and Millett 2013: 112–13
[1001] Pietrangeli 1943.
[1002] Papi 2004: 72.
[1003] Gazzetti 1992; Romei 1992a: 435.
[1004] Gazzetti 1992: 14.
[1005] It should also be noted that none of the excavations is fully published.

With the exception of the major river port of Ocriculum, which was key to the provision of goods to the city of Rome, the third century, and possibly earlier, marked the beginning of a progressive decline of urban structures. From this period onwards the occupied areas became increasingly restricted, in general focusing around the forum where later the cathedral churches were often built, while areas of public land previously left free were occupied by private buildings. The latest epigraphic evidence for imperial investment in these centres is in the first decade of the fourth century. From the division of Italy into two administrative areas under Diocletian, when this area came under the jurisdiction of the *praefectus urbis*, no new public building activity is known to us. The building materials that the new administrative district was forced to produce were not used for the towns, but were sent to Rome to realize the ambitious building projects desired by Diocletian and later emperors. The fourth-century lime-kiln at Lucus Feroniae clearly served this purpose (see section 5.3.10).

It was now largely the Church, with the establishment of bishop's seats and the building of the new cathedral churches, which injected some life into some of the declining Roman towns. Indeed the positioning of the churches, usually directly next to the Roman forum, as at Forum Novum, Falerii Novi, very probably Nepi and Rieti must have had not only a functional, but also an ideological significance. This is a phenomenon noted throughout Lazio and other territories of the Italian peninsula especially from the fifth century.[1006] Other towns, such as Lucus Feroniae and Capena, did not become the seats of a bishopric but Christian communities are attested, certainly at the former, from the fourth to fifth centuries. The absence of any form of Christian cult centre at Veii fully demonstrates the failure of the *municipium* by this period.

The establishment of bishoprics at some centres demonstrates that they continued to have some ideological and administrative importance in the landscape; some, for instance Falerii Novi, Nepi and Sutri also continued to have a sizeable population during the fourth and fifth centuries, as their substantial funerary areas demonstrate (see section 5.3.9). At other sites this was not the case, and 'cathedrals in the desert' is the suggestive and apt term which has been used to describe both Forum Clodii and the bishopric of Forum Novum.

The effect of the bishoprics was largely short-lived and failed to ensure the survival of the towns. The clearest example is that of Cures where by AD 501 the bishop's seat had been moved to the martyrial church of Sant'Antimo and Cures itself was deserted. By the late sixth to seventh centuries, contemporary with the Lombard invasions, many of the ancient Roman towns were largely abandoned and there was a general, gradual shift to more defensible sites, sometimes occupying the site of the pre-Roman Etruscan centres, as in the case of Falerii Novi-Civita Castellana. Even the river port of Ocriculum was no exception (see section 6.4). With the exception of Nepi and Sutri, those that did continue, such as Forum Novum and Forum Clodii and possibly also Nomentum, were very different to their imperial predecessors and can no longer be defined as towns, certainly not in an economic sense.

5.3.8 The Christianization of the landscape

From the early years of the fourth century the Church began to acquire extensive lands in the area around Rome, alongside the large imperial estates and those of the senatorial aristocracy (see section 5.3.1). Christianity spread rapidly throughout the hinterland of Rome.[1007] From the fourth century, cult centres of the new Christian religion increasingly became an integral part of the landscape; the new foci of settlement, frequently on the same sites that had characterized the imperial landscape. In the early years of the fourth century (AD 313–14) throughout Lazio nine centres were the seats of dioceses; by the end of the sixth century 42 bishop's seats are attested in the region.[1008] Martyrial sanctuaries of pre-Constantinian origin, where churches developed around the tombs of the martyrs, are documented by the archaeological and documentary sources both in the towns and the countryside and became increasingly common from the fourth century, attracting numerous pilgrims.[1009] Rural churches for the *cura animarum* were often built over or within Roman villas. The presence of churches and the numerous catacombs along the main consular roads, some of considerable size, serving both the towns and rural settlements attest the diffusion of Christian communities throughout this area.

The foundation of the dioceses and later parish churches, in particular, are indicative of the gradual reorganization of the territory by the Church. The first evidence for parish churches and a network of cult buildings whose function was the *cura animarum* of the population dates from the fifth century. The territory of the diocese of Nomentum was organized *per paroecias* by the early years of the century,[1010] and an inscription from the catacomb of Monte della Casetta, near Capena, recording the existence of a presbyter and a funerary church in the fifth century a few hundred metres from

[1006] Fiocchi Nicolai 2009: 168.

[1007] For an exhaustive discussion of the evidence from Lazio in general, see in particular the numerous publications of Vincenzo Fiocchi Nicolai (1994a; 1999; 2004; 2006; 2007; 2009); Cantino Wataghin 2000; Volpe 2007.

[1008] Fiocchi Nicolai 2006.

[1009] Fiocchi Nicolai 2007: 108.

[1010] Fiocchi Nicolai 2007: 108.

the catacomb, indicates that its function was similar to that of a *chiesa pievana*.[1011]

Regarding who built the churches, who lived in the centres and who they served, we are dependent almost entirely on the documentary sources. From the mid-fourth century, rich members of the Roman elite built a number of churches in Rome.[1012] Relatively soon after, from the fifth century and especially from the mid-fifth, their actions extended to Lazio, where aristocratic funding of the construction of cult buildings, usually in villas on their estates, is particularly evident—of the eight references regarding the foundation of churches, five refer to rich aristocratic benefactors. These churches frequently seem to have served not only a restricted local group but, in the same way as those built by the Church, also the surrounding population for the *cura animarum* of the inhabitants of the new ecclesiastical districts. However, it is significant that the references for which we have secure documentary evidence are to churches in southern Lazio.[1013] Southern Lazio is an extremely fertile area even today; here, the landowning aristocracy had a particularly strong vested interest, seen also in the number of rich residential dwellings in this area (see section 5.3.4). The wealthy benefactor who built a church at Fondi, almost certainly the cathedral, declared in a letter that his act, one of *civica caritas*, was based on his possession of a large estate in the area.[1014]

Evidence for the construction of churches by rich lay benefactors in the middle Tiber valley is less secure, given that it is based on medieval documents, notably the *Chronicon* written by Benedict, a monk living at Soratte in the tenth century. He describes the prolific activity of the *patricia Galla*, the most notable benefactor in our area. Galla was the daughter of the consul of 485, Quintus Aurelius Symmachus, who, according to Benedict, founded seven churches in the area immediately to the west and to the east of the Tiber.[1015] The information provided by Benedict is highly unreliable and must be treated with great caution, but Vincenzo Fiocchi Nicolai notes that in at least one case in our area, the church of San Giovanni near the Treia river, archaeological evidence seems to provide confirmation, at least as regards the date of the building of a church and the context of the settlement. He has suggested that the church of San Giovanni is very probably to be identified with that discovered at the Mola di Monte Gelato on a side road of the Via Amerina, built around AD 400 on the site of the Roman villa that was reoccupied in the late fourth century.[1016] Fiocchi Nicolai therefore supports Tim Potter's earlier hypothesis that the church was constructed by a member of the landowning aristocracy on one of their estates, and not, as Potter later proposed, that the site and cult building belonged to the Church with dependant *contadini* occupying the structures (see above).[1017]

In those cases where documentary evidence is available, the churches financed by the aristocracy were constructed under the close supervision of a Roman priest and the donations solicited, albeit not expressly, by the Church.[1018] They included rural parish churches and therefore had a public function. The majority of the churches, whoever their benefactors, were built close to roads.[1019] At Monte Gelato the church was built in a marginal area of the villa and its façade faced not towards the villa, but towards the public road which led to a nearby village. Therefore it was clearly used, not only by the occupants, but also by the communities in the surrounding area.[1020]

The martyrial cult centres must have played a similar role to that of the parish churches. Located along the major roads, they are found throughout the territory. In the southern area of the Sabina Tiberina they were particularly common along the Via Nomentana and the Via Salaria, and were primarily of a rural character, associated with extensive cemeteries.[1021] Only one of the seven linked to a martyrial cult is related to an urban centre, that of Santi Primo e Feliciano at the gates of Nomentum.

Some cult centres were held in particular esteem: the highest members of the ecclesiastical hierarchy of Nomentum and members of the senatorial aristocracy were buried, not at the cemetery of Santi Primo e Feliciano, but at the cemetery and cult centre of Saint Alexander, that is the burial place of the martyrs Alexander, Evenzio and Teodolu, over 10 km from the centre on the seventh mile of the Via Nomentana. The associated catacomb, fully active between the fourth and fifth centuries, housed around 1250 burials and was therefore on a similar scale to those of the urban

[1011] Fiocchi Nicolai 1988.
[1012] Fiocchi Nicolai 2001: 93–105; 2007: 107.
[1013] For instance, in the area of Tivoli, that of Valila, Dora, Trevi, Gabii; Fiocchi Nicolai 2007: 112–13, 117. For a general discussion of aristocratic intervention in the founding of cult buildings in Italy, see also Brogiolo and Chavarría Arnau 2005: 130–40.
[1014] Fiocchi Nicolai 2007: 117.
[1015] For the foundations that Benedict attributes to *Galla*, see Fiocchi Nicolai 2007: 114.
[1016] For discussion of this (and earlier considerations), see Fiocchi Nicolai 2007: 114.
[1017] Potter and King 1997: 75, 423.
[1018] Fiocchi Nicolai 1999: 453; 2007: 108–10
[1019] Brogiolo and Chavarría Arnau 2005: 131–5 have stressed the link between roads and churches with the function of the *cura d'animarum*.
[1020] Potter and King 1997. Fiocchi Nicolai 2007: 114 highlights a very similar example of the church of Valila in southern Lazio founded in 496, by a member of the aristocracy with the function of *cura d'animarum*.
[1021] Fiocchi Nicolai 2004: 112–13. For an exhaustive , fundamental study of Christian cult and funerary areas in the Sabina, see Fiocchi Nicolai 2009.

cemeteries in the Lazio area.[1022] Rural martyrial cult centres with cemeteries also existed in South Etruria, for example that of Santa Sevinilla of Nepi and that of Casale di Boccea on the Via Cornelia, possibly associated with a *vicus*, but they were relatively rare.[1023]

The establishment of bishop's seats and martyrial cult centres was a major factor in raising the status of some existing sites, as, for example, the bishopric at the road station of Aquaviva, while the martyrial sanctuary of Santa Rufina on the Via Cornelia which developed around the tombs of the Saints Rufina and Seconda must have raised an area previously in the vicinity of, or occupied by, a Roman site, to a centre of notable size, such as to justify the establishment of a bishop's seat, that of Silva Candida. However, as we have seen, the presence of a bishopric at a centre did not ensure its survival; the majority of towns occupied into late antiquity and in some cases beyond are those where bishop's seats were established, but several were abandoned in the course of the sixth to eighth centuries, often moving to more defensible sites. In addition, many of the catacombs associated with the urban centres have no evidence of use after the mid-fifth century, only a very small number continuing into the sixth century.

The seat of a bishopric could be moved, but to change the site of a martyrial sanctuary, given its very nature, was more problematic and this in part explains their longevity. They must have been fairly substantial centres; apart from the church itself, built over the tombs of the martyrs, their presence led to the creation of support structures, such as accommodation for the clergy, a hospice and services for the pilgrims.[1024] These are all elements which would have encouraged the development of settlement around these centres. The presence of a martyrial cult site was therefore a major factor in ensuring the continued existence of a settlement, many of which persisted into medieval times. As discussed below (section 6.4), this was clearly the case of the cult centre of Saint Alexander on the Via Nomentana, that of Santa Rufina-Silva Candida on the Via Cornelia, and San Liberato-Forum Clodii on the Via Clodia.

We have also seen how existing Roman settlements gradually shifted to the site of a martyrial cult centre during the fifth and sixth centuries, as in the case the road station of Ad Baccanas and the cathedral church of the bishopric at Cures which had moved to Sant'Animo. Sant'Antimo is one of the most ancient and important of the martyrial sanctuaries in the Sabina, erected around the tomb of the martyr, the commemoration of whose anniversary is recorded by the *Martirologio Geroniamiano* in the second quarter of the fifth century.[1025] The location of this prestigious sanctuary on the Via Salaria, presumably also provided with support structures, clearly made it a more favourable site for the cathedral church. Despite losing the status of cathedral church at the end of the sixth century, the church of Sant'Antimo was still the focus of an important settlement in the late medieval period '*villa sancti Antimi*' and '*castrum villae Sancti Antimi*'. Interestingly, in the late fourteenth century the settlement, which still had a *hospicium* and was a much frequented resting point on the Salaria, is recorded by the Statutes of Rome (in 1363) as being a centre for the counting of sheep during transhumance on the Via Salaria in the direction of Rome, and (in 1370) as a collection centre for cereals from the Sabina which were then sent to Rome by the Tiber.[1026] The concentration of such sanctuaries in the southern Sabina Tiberina and the particularly favourable connections to Rome by both road and river were two related factors which help to explain the relatively high density of late antique settlement in the area of the Eretum Survey (see section 5.3.2).

As in Rome, there is no evidence for significant aristocratic involvement in the construction of the cult building at the martyrial centres. Although the documentary sources frequently attributed the translation of the bodies of the martyrs to members of the aristocracy and referred to their patronage of these cult centres,[1027] their interventions seem to have been limited to the furnishings of the church and the tombs of the martyrs or donations of land for the maintenance of the sanctuary. The martyrial basilicas themselves, however, were built by the Church, clearly demonstrating its wish to maintain firm control of the cult of the saints, a very profitable enterprise.[1028]

5.3.9 People in the late antique landscape

Throughout the third to mid-sixth centuries in the South Etruria Survey area, the most densely occupied areas, not surprisingly, remained those closest to Rome. The Ager Veientanus had roughly double the number

[1022] Fiocchi Nicolai 2009: 412. See Fiocchi Nicolai 2009: 202–413 for a fundamental in-depth discussion of the sanctuary.
[1023] Fiocchi Nicolai 1988; 2009.
[1024] Fiocchi Nicolai 2004: 117–8.
[1025] Fiocchi Nicolai 2008: 541.
[1026] Fiocchi Nicolai 2004: 118. For the reference to the Statutes of Rome, see Fiocchi Nicolai 2009: 54; for the most up-to-date and informed discussion of Sant'Antimo, see the same volume, pp. 51–66.
[1027] On the translation of bodies, see Brown 1983. On the patronage of cult centres by Roman aristocratic families see Llewellyn 1991: 214, who notes that the individual acts of martyrs venerated along the Via Salaria, probably of the late fourth century, had by the late fifth century become a continuous account of the Salaria-Picene saints around the figure of Anthimus, patron saint of Cures. This legend was linked to members of a specific Roman family and according to Llewellyn reflects the patronage of a great Roman family of the late fifth century over the churches and cult centres of the Via Salaria in association with its estate ownership.
[1028] Fiocchi Nicolai 2007: 118.

of settlements of the area of the Ager Faliscus. The sharp drop in settlement numbers from the beginning of the third century affected the whole of the study area, probably in part linked to the emergence of larger farming estates at the expense of smaller settlements, but it clearly also reflects a fall in the numbers of people living in the countryside. A similar situation must have been true also of towns, given the marked contraction of the occupied areas.

From the beginning of the fourth century, as discussed earlier, rural settlement appears to have enjoyed an, albeit brief, period of revitalization. For this period, the fourth to mid-fifth centuries, the numerous catacombs and cemeteries, generally located along the principal Roman roads give us a very rough idea of rural and urban population numbers.[1029] Their presence is also a further indication of the importance of the major Roman road arteries in this period. As we have seen, the martyrial centres would have attracted a considerable number of pilgrims, and these centres in particular required services to meet the needs of the travellers. However, they also encouraged continuity of settlement, and in some cases their foundation resulted in a shift in settlement. The relatively dense number of late antique settlements in the area along and between the Via Salaria and the Via Nomentum in the southern part of the Sabina Tiberina is probably to be explained by the substantial number of rural martyrial cult centres in this area associated with extensive cemeteries (see section 5.3.8).

In South Etruria the majority of the funerary areas can be related to the dispersed rural population, the inhabitants of the villas and farms. The only two for which there is a virtually complete plan are those of Monte di Stallone, near the Via Cassia to the south of Formello, and Monte della Casetta, around 6 km north of Capena near the Via Tiberina, which housed respectively between 150 and 180 *c.* 80 burials.[1030] The burials in the catacomb of Monte della Casetta between AD 344 and 350 average out as little more than two a year. The identification of fifth- to sixth-century material from the cemetery during the new study of the South Etruria Survey material suggests that the cemetery may have continued beyond the fourth-century date proposed by Fiocchi Nicolai. Some funerary areas are probably to be attributed to larger settlements, *pagi* or *vici,* such as the cemeteries of Mario and Marta at Boccea, or that of San Teodoro at Rignano Flaminio that housed about 500 tombs, or with the settlements that developed around road stations, for example the funerary areas of Ad Baccanas, Ad Rubras and Ad Vicesimum that housed between 500 and 800 burials. A number of cemeteries appear to have been exclusively for urban communities. These could be large in size, in some cases reaching up to and over 1000 burials, as at Falerii Novi and Nepi, but that of Sutri had perhaps half that number[1031] and Trebula Mutuesca in the Sabina was smaller still,[1032] reflecting the minor dimensions of the town itself in common with other Roman centres in the Sabina. At the small *municipium* of Forum Novum, extensive archaeological work failed entirely to identify any firm evidence of a real cemetery, supporting the hypothesis that this was a 'virtual town' (see section 5.3.7).

We have little information for the central and northern part of the Sabina Tiberina, but in the southern part of the Sabina Tiberina cemeteries of small and medium dimensions are rare. This area is instead characterized by extensive cemeteries around martyrial cult centres largely of a rural nature. The complex of Saints Alexander, Evenzio and Teodulo at the VII mile of the Via Nomentana housed in the fourth to early fifth centuries over 1250 tombs on a rough calculation, which is a similar number to those of the urban centres of Falerii and Nepi. The cemetery continued in use until the second half of the sixth century (the latest funerary inscription is of AD 569). Although these cemeteries presumably mainly served the sparse agricultural settlements in the territory, the presence of the martyrs' tombs attracted Christians from local towns and from further afield, as we have already seen.

With the exception of the cemeteries around cult centres, relatively few funerary areas seem to have continued in use after the mid-fifth century; consequently our evidence for rural population numbers after this date is sparse, and by the sixth century very few still seem to have been active.[1033] Throughout South Etruria (not just our study area), of those cemeteries for which there is dating evidence, 39 are of the fourth century, 20 of which continued into the fifth century, but only four have secure evidence for being in use in the sixth century.[1034] This dating does, however, depend largely on the inscriptions in the cemeteries, which were increasingly rare after the mid-fifth century. The new study of the South Etruria Survey material identified African red slip from the areas around two small catacombs (those of

[1029] The most important contributions to this argument are those of Fiocchi Nicolai, in particular: Fiocchi Nicolai, Bisconti and Mazzoleni 1998; Fiocchi Nicolai 2009.

[1030] The catacomb of Monte della Stallone was first identified by the South Etruria Survey; Kahane, Murray-Threipland and Ward-Perkins 1968: 92–3. That of Monte della Casetta was described by Jones 1962 and Fiocchi Nicolai 1988: 97–105, 340–55.

[1031] The catacomb of Santa Savinilla which served the urban population of Nepi housed around 1200 burials dating to the fourth and fifth centuries. Near Sutri, along the Via Cassia, the catacomb of San Giovenale may have served Sutri itself and/or the surrounding rural population. Although poorly preserved, it was also in use in the fourth and fifth centuries.

[1032] Fiocchi Nicolai 2009.

[1033] Fiocchi Nicolai 1988; 2006: 25.

[1034] Fiocchi Nicolai 1988: 396.

Monte Stallone and Monte della Casetta) whose dating suggests that they may have continued in use into the late fifth and sixth centuries.

In general, however, the funerary evidence corresponds with that for settlement in suggesting considerable activity in the countryside during the fourth and early fifth centuries, after which there was a further drop in rural and urban population numbers.

As to the question of who actually lived in the countryside, with very few exceptions (only four to be precise), the villas do not seem to have represented a real alternative to the city for the residences of the great landowning aristocracy. This picture is common to most of Italy except for some areas of southern Italy and Sicily, as previously noted, and we have also seen that there is no firm evidence for the centres of the *latifundia* or *praetoria*.

On the whole the villas in this period were modest settlements, whereas in Rome the aristocracy continued to maintain and in some cases, improved their residences.[1035] Nevertheless, some scholars have suggested that the occupation or re-occupation of the villas should not be seen exclusively in terms of the practical advantages they offered (availability of building materials, reusable structures and so on), but also for their ideological significance. Andrea Augenti, primarily on the basis of the archaeological evidence, has suggested that to reside in the villas or re-occupy them would have been above all the choice of the elite (the Roman aristocracy, the Church), who already from the fifth century attempted to legitimize their ownership of the land, as well as assert their power at a local level over the rural. In other words, this practice should be seen not from a utilitarian point of view, but also in terms of the need for a deliberate exploitation of the past in ideological terms, involving the recuperation of key places in the landscape. Lewit argues that the aristocracy were occupying the villas, but living in more modest conditions.[1036]

These arguments do not totally convince. The archaeological and documentary evidence strongly suggests that by the fourth century the great landowners very rarely resided in the territory, even on a temporary basis (see sections 5.3.1 and 5.3.4.5). Yet the rural population seemed to have continued to enjoy a moderate lifestyle; most settlements continued to have access to fine table-wares from Africa and imported wine, oil and other goods at least until the mid-fifth century. The most convincing hypothesis is that the villas, and the small agricultural settlements, were occupied by peasant families or relatively modest tenants, although they may have been owned by well-to-do proprietors, the aristocracy or the Church.[1037]

We have previously argued that the settlement established in the fourth century on the abandoned villa at the Mola di Monte Gelato was a modest one, probably occupied by dependent *contadini*. At the small Roman *municipium* of Forum Novum even the villa a few hundred metres from the centre, built by a benefactor of the town, seems in part to have been abandoned by the second century after which some areas of the villa were used for agricultural activities. The aristocracy seems to have abandoned the majority of the towns in our area by the fourth century, by which time the urban fabric of most centres seems to have been in irreversible decline.

Furthermore, the overwhelming majority of the tombs recovered from the urban and rural funerary areas are relatively poor and unadorned, suggesting that there was little difference in the social status of the deceased: the rich late fifth-century burial goods recovered from a small funerary structure within the church next to the villa at Monte Canino are exceptional, and the tomb must have belonged to a relatively high ranking Ostrogothic woman (see section 5.3.4).[1038] The few exceptions are mainly in the cemeteries which developed around the tombs of the martyrs, such as at Santi Primo and Feliciano where people of high status and those living some distance away chose to be buried close to the martyrs in the hope of eternal salvation (see section 5.3.8). The clergy must have lived in the countryside; at the catacomb of Monte della Casetta, near Capena, an inscription records the burial place of a presbyter. But we cannot even be sure if the bishops took up permanent residence in the new bishop's seats. This was certainly not always the case in later periods for which we have documentary evidence.

This patchy evidence therefore is inadequate for supplying demographic information, but in general appears consonant with the other indicators we have been discussing. What then was the economic infrastructure that underpinned this story?

[1035] For the Tiber Valley study area, see historical context and section on villas. On Rome, see Delogu 2010: 48–49.

[1036] Augenti 2002; see also Chavarrìa Arnau 2004, again mainly based on the archaeological evidence; Lewitt 2003.

[1037] Arthur 2002: 99. We lack as yet evidence for anything on the scale of the settlements or estates mentioned in the *Life of Melania*, who is said to have owned around 60 estates near Rome, each of which supposedly had some 400 slaves who farmed the land.

[1038] The catacombs in Rome have stone inscriptions, but in the countryside the common and more economical practice was a type of inscription in graffito or painted in red on the plaster that covered the closure of the *loculi* (Fiocchi Nicolai 2001).

5.3.10 Rome and the Tiber valley: economic assessment

5.3.10.1 The river

The Tiber was fundamental in ensuring that the needs of the Roman populace were met, not only for products arriving up river from its numerous overseas provinces through the ports of Ostia and later Portus, but also for foodstuffs, such as grain, oil, wine and more perishable produce such as fruit and vegetables, as well as timber and building materials, brick, tile and lime, transported down the Tiber from the middle and upper river valley (see also section 4.7). The relatively high percentage of villas identified by the South Etruria Survey in areas near the Tiber supports this argument.

The Tiber valley continued to play an important role in the provisioning of Rome and its populace in late antiquity. The size of Rome's population during these centuries has already been discussed above. During the first half of the fifth century, numbers fell to roughly half that of the late fourth. This population still would have required considerable support. The real demograhic crisis seems to have taken place between the end of the fifth and the beginning of the sixth centuries.[1039] Despite the continued arrival of imports by sea, the provisions made by various emperors in this period to ensure the maintenance of the communication networks in the area of the Tiber valley demonstrate its importance for the supply of Rome. Furthermore, following Diocletian's division of Italy into two administrative areas, the estates in the middle Tiber valley, under the jurisdiction of the *praefectus urbis*, were now forced to send most of their products to Rome, and we have seen how local produce was critical following reduction of overseas supplies after the Vandal invasion and occupation of the Maghreb in the early fifth century.[1040]

The ancient authors confirm the continuing role of the Tiber in the supply of Rome into the early sixth century. Rutilius Namatianus, writing in the early fifth century, emphasizes the importance of the river for supplying Rome with, on the one hand, the riches of the countryside and, on the other, the wealth of the sea. Pseudo-Aethicus describes the boats that descended from the Sabina and Etruria towards Rome.[1041] These would have included *zattere,* or rafts, constructed using the timbers being transported for building activities in Rome (see below, timber). Alongside the *zattere*, the sources mention the boats used expressly for river transport, such as the *chiatta*, a flat-bottomed vessel, an example of which was discovered at the port of Passo Corese.

However, there is no mention in the documents regarding river transport in the other direction, that is, from Rome up the Tiber. It is possible that the goods arriving in the countryside from the city were all transported by road, but even if this was the case the question still remains as to what happened to the boats which travelled down river to Rome. Presumably they would have been returned to their place of origin. Up-river transport posed a serious problem; rowing against the strong current would have been extremely difficult, as would the use of mules to draw the boats up river, documented for the stretch of the Tiber from the coast to the capital. We can only hypothesize that some river traffic took place in this direction but it was probably limited to brief tracts.

In the early sixth century Procopius describes the traffic along its course between Rome and the sea.[1042] Benedict, the monk of Sant'Andrea del Soratte (although his text, written in the tenth century, can be unreliable), mentions the foundation of the Abbey (Sant'Andrea in Flumine) attributed to Galla, the daughter of Symmachus in the sixth century, noting that the building was constructed over Roman ruins and next to a river, and near the church a port was constructed called *Bonus*.[1043] Throughout late antiquity, river traffic on the Tiber was clearly managed by a complex and extremely well-organized system. The regulations laid down in the Theodosian code show that strict laws still existed regarding this in the fifth century.[1044] In a letter of the early sixth century (AD 523–6), Theoderic made provisions for the clearance of any artificial barriers that could obstruct the navigation of the main Italian rivers including the Tiber. After the early sixth century any references to interventions to ensure and govern river transport in our area cease.

5.3.10.2 Roads

We have seen that from the end of the third century, with Diocletian's administrative reforms, and especially in the early fourth century, both the epigraphic evidence and the monuments reveal the attention given by the state to the road system in the Suburbicaria.[1045] We have also seen the restructuring of a number of villas along or connected to the major roads for production

[1039] Whitehouse 1988; Durliat 1990; Lo Cascio 1997, 1999, 2001; Delogu 2001; Santangeli Valenzani 2004a: 21-24.
[1040] Delogu 1993: 13.
[1041] Rut. Nam. De Red. 1.37–42, 151–4, 179–82. Pseudo Aethicus (Valentini and Zucchetti 1940–43: I, 815-86. On river transport along the Tiber see the important work of Diosono 2008a; 2008b. On river and road communication networks in the middle Tiber valley in late antiquity and the middle ages see, Leggio 1989, 1992, 2004.
[1042] Procopius di Cesarea, De Bello Gothico 5.26.10–12.
[1043] Zucchetti 1920: 25; Leggio 2004: 298.
[1044] Theoderic's letter is reported in Cassiodorus, Variae 5.20.3, as described by Filippi and Stanco 2005. For a discussion of these regulations, which included those relating to the river transport of the *annona* goods for the State and the fraud control, see Diosono 2000b.
[1045] For a detailed synthesis and discussion of the epigraphic and archaeological evidence, see Papi 2000: 232–4; 2004: 68–9.

and commercial activities and in some cases to offer services for travellers. Some additional evidence can here be brought to bear.

Under Maxentius (AD 306–12) and Constantine (306–17) a substantial number of milestones are documented in this area. Ray Laurence notes that for Italy in general the greatest number of milestones is documented in the period AD 284–364, and although this figure fell sharply for the years 364–423, they still register the largest number of milestones after AD 86–161 (Nerva to Antoninus Pius).[1046]

There are also other infrastructural developments. The monumental arch over the Via Flaminia (Malborghetto) is of Constantinian date,[1047] as is probably the reconstruction of the bridge of the *Portus Curensis,* at the confluence of the river Corese with the Tiber. The bridge had been destroyed by flooding and an inscription refers to the construction of two great piers under L. Baebius Celsius.[1048] The continued interest of the emperors in maintaining the road system is further demonstrated by the foundation of the road station on the Via Cassia in the area of La Storta by the emperors Gratian, Valentinian and Theodosius (379–83).[1049]

Settlement continued along the major roads into the early sixth century, and it is clear from the documentary and archaeological evidence that the area of the middle Tiber valley continued to supply Rome and, vice versa, imported goods presumably from the Rome market continued to arrive in the countryside, although in decreasing quantities. All the evidence therefore indicates that there was still consistent traffic in this period, of goods and people, especially pilgrims. It is clear therefore that until the mid-sixth century, there was a determined effort by the state to ensure the continued efficiency of both river transport and the road system. One of the sorts of material which travelled this network was building materials.

5.3.10.3 Building materials

Etruria, and in particular the upper and middle Tiber valley, had always been the major source of building supplies for Rome (lime, tufa, bricks, tiles and wood). In the late fourth century, the *praefectura urbi* needed an annual supply of 3000 cartloads of lime, nine per cent of which came from Etruria. Clear archaeological evidence of this is the lime-kilns found in the late antique phases of a substantial number of villas, usually located on or close to the major roads, and in towns, such as at Falerii Novi.

The upper and middle Tiber valley was particularly important to Rome for the manufacture of bricks and tiles, which were sent down the Tiber to the capital. The chiatta found at *Portus Curensis* is a rare archaeological example of the transport of these products. The study of the brick and tile stamps together with the identification of a number of production sites has confirmed the existence in this area of many such centres that were owned by rich private owners from senatorial families and, increasingly from the second century, by members of the imperial families.[1050] In the Constantinian period production appears to have returned into the hands of private owners, although from Diocletian their products would have been destined primarily for the Rome market. The latest evidence we have for the production of tiles and bricks with stamps in this area, and throughout much of Italy, is during the rule of Theoderic and his successor Athalaric in the early sixth century. Numerous tiles stamped with the names of Theoderic and Alaric appeared on the urban market in this period. From their study of the documentary evidence and the stamps, Giorgio Filippi and Enrico Stanco have suggested that at least some of these tiles could have been produced by *figlinae* situated near the *Portus Licini*, mentioned in a letter of Theoderic (AD 507–11) who reacquired the latter with the express purpose of supplying the capital with 25,000 tiles a year. [1051] Theoderic needed to guarantee a secure and constant brick and tile supply for the restoration of the walls and public building, and this letter demonstrates the continued assertion of state control over brick and tile production. Filippi and Stanco note that the diffusion of these tiles corresponds with earlier productions linked to the *Portus Licini* and demonstrates an extra-urban location for the production centre, at the height of the territories of Statonia and Ameria (Bomarzo and Baschi), which supplied an annual income in kind, as usually happened in the late imperial period. They point out that the distribution of the brick stamps indicates the middle Tiber valley as a possible place of departure for these products.[1052] After the early sixth

[1046] Laurence 1999 notes that after this date very few milestones are attested. His figures are based on a comparison of inscriptions recording *curatores viarum* and milestones throughout Italy from 54 BC to AD 423.

[1047] Bosman 1993.

[1048] Papi 2004: 68.

[1049] The place of discovery is described both as '*in Via Cassia loco qui dicitur La Storta*' and '*presso La Storta*'. The inscription describes the foundation as a '*un stabulum ne animalia cursus publici longi itineris labore diutius deperirent*' *CIL* VI 1774, Fiocchi Nicolai 1988: 80, n. 488.

[1050] This process rapidly accelerated from the end of the Severan period, by the end of which there seems to have been a virtual monopoly of imperial ownership of the production centres and the *praedia* in which they are located. For a discussion of this process, see, in particular: Steinby 1986; Lo Cascio 2005: 95.

[1051] Cassiodorus, *Variae* I.25.2: 'Given that for some time for the walls of Rome ... our decree has established that the *Portus Licini* is to be re-acquired in consideration of the related incomes, so as to guarantee an annual supply of 25,000 tiles, and that contemporarily the same action is also to be taken regarding connected ports ...which are now occupied illegally by various persons.'

[1052] The evidence and various hypotheses regarding the function of the *Portus Licini* are discussed in detail by Filippi and Stanco 2005 and by Filippi, Gasperoni and Stanco 2008.

century there is no documentary or archaeological evidence for the production of brick and tiles until the central middle ages.

5.3.10.4 Timber

Rome required wood for domestic use, construction, heating of baths, furniture and artisan activity, as well as construction. The most important source of wood, in particular for the huge beams required for the construction of the basilicas and other public buildings in Rome, was the upper Tiber valley, from the forests of the Apennines and Mons Ciminus, where the trunks of wood were sent down to the Tiber mainly from the Massa Trabarica and floated down to Rome, often tied together to form rafts, or *zattere*, on which other products were transported (see above, river transport). The owners of the forests were subject to the *munus* for the provision of wood to the State for the army, the fleet, public works, baths and imperial offices and there were strict regulations regarding its organization and transport. The Theodosian code stipulates '*functio lignoria*' (the transport of wood for burning for the State both by sea and river), which was the role of both *navicularii* and *lyntarii*.[1053] Archaeologically virtually no evidence remains of this trade, and we are dependent almost entirely on the documentary evidence. The sole, important, exception is a marble weight for wood of the end of the fourth century found at the river port of Ocriculum. The inscription on the weight reads 'Ocricu(uli) pon(dus) lign(arium) hab(et) Aur(elius) Urb (...) po(ndo) CL'. The description *pondus lignarium* is unique. The inscription indicates a weight of 150 libbre, *c.* 49 kg, but the actual weight of the measure is over 56 kg: clearly a fraud but the person who lost out was the seller. Aurelius therefore could have been a state tax collector who in this way cheated on the person selling the wood.[1054]

5.3.10.5 Foodstuffs

The middle Tiber valley supplied a wide range of foodstuffs to Rome. The critical archaeological evidence is for amphorae, but this means that for many products data is lacking, as previously noted. Grain, for example, probably the principal export to the capital from the areas to the north and east of Rome in the Roman period, is not represented in the archaeological record. Furthermore, whereas amphorae were always used for the long-distance transport of wine, oil and other goods, for more local transport other containers, such as wooden casks, were probably often employed, as is certainly the case from the third century onwards.

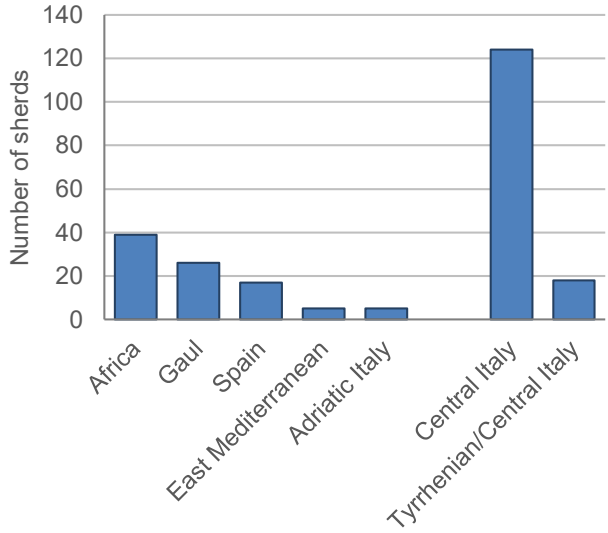


Figure 5.12. Numbers of amphora sherds collected by the South Etruria Survey by region of provenance (AD 1–300).

Leather vessels (*utres*) also may have been used. We have no firm archaeological evidence for the transport of olive oil, although the Tiber valley Spello-type amphorae (see below) probably transported oil as well as wine. The Sabina in particular was famous (and still is today) for its olive oil, the river port of Ocriculum was also known as the Porto dell'Olio and was still functioning into the early sixth century. In other words, the agricultural produce supplied by this area to Rome is not quantifiable archaeologically, but it would certainly have been substantial.

Evidence for the production and transport of foodstuffs from the inland central Italian area is limited to two main amphorae types: the Spello-type amphorae and the Tuscan Empoli-type. Both are flat-based vessels suitable for river and road transport, primarily carrying wine but probably also oil.[1055] The Spello-type amphorae, as Tina Panella has suggested, were very probably produced at several sites along the Tiber valley. A kiln was discovered at Spello in the upper Tiber valley (hence the name), but petrological analysis of the fabrics has confirmed the existence of a number of production centres.[1056] The circulation of the Spello-type amphorae reached a peak during the first to second centuries, yet even in this period they only represent a minimal percentage of the amphorae

[1053] Diosono 2008b: 21.
[1054] Caldelli 1994.

[1055] For discussion of the Spello-type amphorae, see Panella 1989; Arthur 1997: 313-15; Lapadula 1997. Sea-borne shipment of these vessels is probably to be excluded not only because they have not been found overseas but also because of their flat ring base, especially adapted to land or river transport; Arthur 1997: 314.
[1056] Panella 1989; Lapadula 1997. Macroscopic analysis of the fabrics of the Spello-type amphorae from South Etruria distinguished over 40 fabrics. The new study of the South Etruria Survey material also identified one site where production probably took place: a villa (02412; TVP-ID 2342) in the locality of Marzolano in the territory of Eretum in the southern area of the Sabina Tiberina, an area well connected to Rome by the Tiber and the Via Nomentana and the Salaria.

attested in the city. Together the central Italian Spello- and Empoli-types comprise about 15 per cent of Italian amphorae arriving in the capital in the first half of the second century AD , after which the numbers plummet to two or three per cent in the first half of the third century AD . The majority of the transport amphorae and their products attested in Rome from the imperial period through to the end of the seventh century reflect medium and long-distance trade.

In South Etruria the situation is reversed. Sergio Fontana's study of the amphorae from the survey demonstrates that during the first to third centuries AD imported amphorae were relatively rare, representing only 38 per cent of the amphorae recovered.[1057] The supply sources are similar to those of Rome, mainly Africa, but also Spain, Gaul and the East Mediterranean, but the central Italian products, primarily the Spello-type but also the Empoli-type, represent around 62 per cent of the amphorae recovered, roughly double that of the imported wares, demonstrating that this area not only exported its produce to Rome but was also largely self-sufficient (Figure 5.12).

During the third century, and in particular from the fourth, the situation changes markedly both in Rome and South Etruria. Although the Empoli-type amphorae continue to be attested at Rome until the end of the fifth century when production ceased, the Spello-type from the Tiber valley area seem to disappear from the urban market at the end of the third century.[1058] The explanation for this comes from the iconographic, epigraphic and literary evidence which attest that the use of wooden containers for the transport of wine, and presumably oil, to Rome was common at the end of the third and the beginning of the fourth century (contemporary with the disappearance of the Spello-type amphorae from the urban market). Furthermore, Aurelian's reforms regarding the production of wine in Etruria specify wooden casks for the transport of wine, not amphorae.[1059]

The gradual cessation of the manufacture of the locally produced Spello-type amphorae and the adoption of wooden casks is significant in the context of other changes seen in local ceramic production in this period (see section 5.3.10.6). However, we also lose an important indicator for our understanding of the role of the middle Tiber valley in the supply of foodstuffs to Rome; a role that must have assumed increasing importance with the contraction of the supply sources of the capital, in particular following the loss of the Maghreb in the early fifth century.

Returning to South Etruria, two major related changes can be seen: firstly, a marked drop in the quantities of amphorae (around 50%); and secondly, in contrast to the situation in the first and second centuries, the number of imported amphorae now predominate over central Italian products. Given the marked fall in the number of settlements in this period, these changes may in part reflect a decline in consumer demand, but again the adoption of wooden casks would have had an effect on the archaeological pattern. Transport amphorae, from the Rome market, continued to arrive in the middle Tiber valley throughout this period until at least the sixth century, as shown by Fontana's study of the South Etruria Survey material, and clearly demonstrate the continued links between Rome and the territory. Clearly this was not just a one-way traffic; given that products arrived in South Etruria from the Rome market, it is to be assumed that agricultural produce from the territory continued to arrive in Rome. Diocletian's reforms and the attention given by the State to the main communication routes leave no doubt as to the continued importance of this area for the food supply of the populace of Rome.

Given the broad chronology of the majority of the amphorae types and the fact that we are dealing with survey material and not stratified contexts, it is impossible to evaluate fluctuations through time with precision and compare developments in the territory with the situation in Rome. However some interesting elements do emerge. Until recently it was thought that production of Spello-type amphorae ceased sometime in the later third century, but Fontana identified a series of smaller vessels very similar to that of the Spello type that he believes derive from them. The end date of production is uncertain but can probably be placed in the mid- to later fifth century: examples have been identified on a small number of sites from the South Etruria Survey, as well as at Forum Novum from late fourth-century contexts, Lugnano in Teverina in fifth-century contexts, and possibly at a villa near Lucus Feroniae. [1060] Fontana's arguments are convincing, and suggest that during the third century in South Etruria the large Spello-type containers were replaced by a much more limited production of amphorae of smaller dimensions, which may also have been used for storage.

[1057] Sergio Fontana's study of the amphorae from the South Etruria Survey is a valuable contribution to our understanding of the circulation of these vessels and this discussion is based on his work; Patterson *et al.* 2003; Fontana 2005, 2008. Unfortunately, as regards the Sabina Tiberina, the amphorae from the Farfa Survey were not studied in detail, and in general, information is lacking. The exception is the material from the excavations of Forum Novum, again studied by Sergio Fontana. The Forum Novum publication is in preparation, but some of the preliminary results of Sergio Fontana's work are given below.

[1058] Panella 1999: 200.

[1059] Panella and Tchernia 1994: 159–60; Panella 1999: 202–4.

[1060] For a synthesis of the late Spello-type amphorae, see Fontana 2005. For Lugnano in Teverina, see Martin 1999; and for the villa in località Baciletti: Tron 1986. The sole central Italian wine amphorae that is still attested in Rome during the fourth century is the so-called Empoli type in Tuscany, Panella 1999: 199–200.

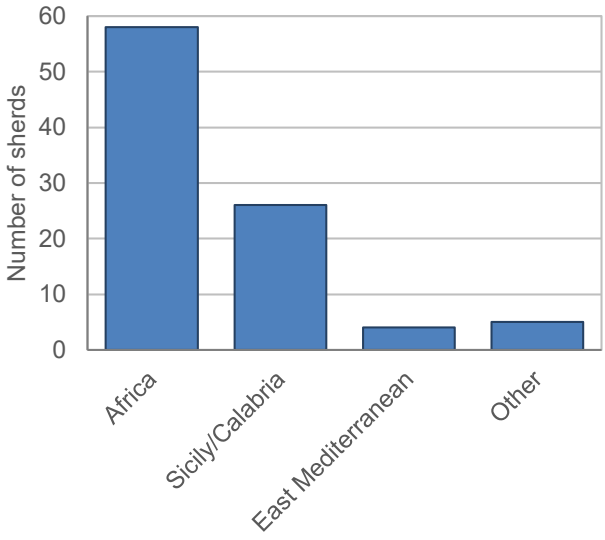


Figure 5.13. Numbers of imported Roman amphora sherds collected by the South Etruria Survey: African, East Mediterranean and Sicilian/Calabrian (AD 350–650).

These later productions do not appear to arrive in Rome.[1061]

During the third to fourth centuries, therefore, the analysis of the evidence from the South Etruria Survey demonstrates that a small number of central Italian amphorae, the Empoli- and the late Spello-type amphorae, continued to circulate in the territory, although the latter were now strictly for a local market. The majority of the amphorae recovered contained imported foodstuffs from Africa (primarily oil), Lusitania and the East Mediterranean (wine). Nevertheless, if we exclude the examples of the East Mediterranean amphorae (wine) that have a very broad date range (Ben MR3 between AD 50 and 350), amphorae dating to AD 200–400 are present in minimal quantities.

The Lusitanian products and the central Italian late Spello and the Empoli types ceased to circulate between the end of the fourth and early fifth centuries. At the same time, we see an increase in South Etruria in the number of amphorae characterized by the appearance of a substantial number of new African amphorae forms primarily for oil, East Mediterranean products and the first imports from Sicily/Calabria (Figure 5.13), both for wine. Again these general trends correspond with developments in Rome. If we take the amphorae types that date between AD 350 and 650 (keeping in mind that this is survey material), African amphorae were found on 50 sites, East Mediterranean amphorae on 4 sites and those of Sicily/Calabrian production on 23 sites. The amphorae of Sicily/Calabrian production can be dated only generically to the period AD 350–650, as can the one example of Egyptian origin (AD 400–650). Of the East Mediterranean wine amphorae, Late Roman 1 and Late Roman 3 again can be dated only broadly (AD 400 to 700), although Late Roman 5/6 (AD 450 to 650) is also attested from a small number of sites.

The African amphorae are more closely datable and here the results are interesting. Firstly, the succession of new African amphorae forms produced throughout this period—in the late third/beginning fourth, in the late fifth century and again in the sixth—also arrive in the territory. Secondly, the most represented of the African amphorae that first appeared in the late fifth century is Keay 26, possibly for the transport of wine. Presumably the Tiber valley was largely self-sufficient as regards oil. Thirdly, although African amphorae forms dating between 350 and 650 are attested on 50 sites, if we take the more precisely dated forms, 25 sites have African amphorae dating to between 350 and 500, while only six have amphorae datable to AD 500 to 600/650, suggesting that by the sixth century imported amphorae only rarely arrived in the territory.

We are less well informed for the Sabina Tiberina.[1062] At Forum Novum, Fontana's study showed that transport amphorae primarily from the East Mediterranean, to a lesser extent from Sicily/Calabria and occasionally from Africa are present in late fourth to early fifth-century rubbish deposits. The quantities are very small; the majority of the amphorae are local, in particular the Spello-type. Of 58 amphorae fragments registered in one late fourth century deposit, only four were imported: three sherds of East Mediterranean amphorae (Late Roman 3) and one of Sicilian/Calabrian production (Keay 52 type).[1063] Forum Novum was clearly more a privileged centre and it is impossible to judge how typical this situation was of other, rural, settlements in this area. The situation in and around Rieti is not known, but further inland in the eastern central Apennines at the richly decorated villa of San Lorenzo in the Falacrinae valley, amphorae are not common even in the imperial period, and no amphorae at all were recovered from late antique deposits, despite the possibility that the villa belonged to the family of the emperor Vespasian and the proximity of the site to the Via Salaria and the river Aniene.[1064] A similar picture emerges from the excavations of Villa San Silvestro just to the north of Falacrinae.[1065] Presumably in these mountainous areas, the transport of amphorae was also simply less practical and wooden containers would have been preferred.

[1061] Although Fontana 2005 cites an example similar to the late Spello type in a fifth-century context from the Domus Tiberiana on the Palatine.

[1062] A detailed study of the amphorae recovered by the Farfa Survey was not carried out and the results are unpublished.

[1063] Fontana *pers. comm.*

[1064] Patterson 2015: 468.

[1065] Diosono and Patterson 2014; 2015; Diosono 2015.

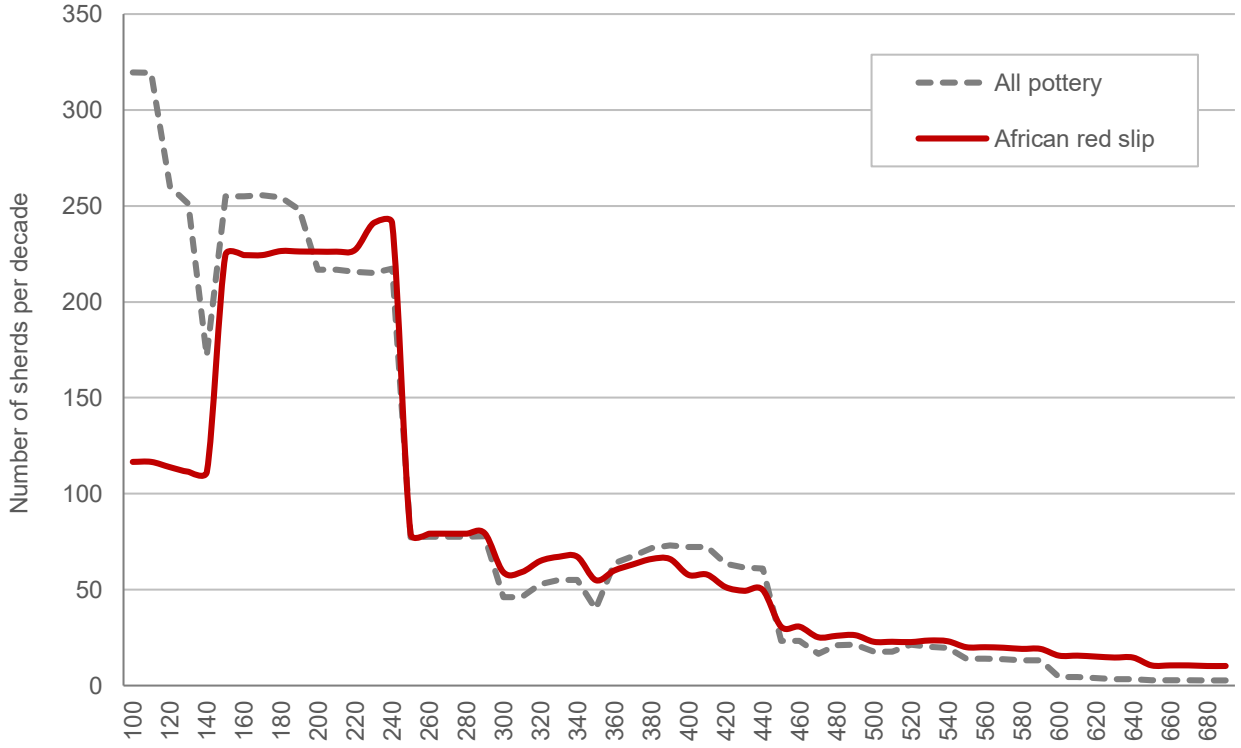


Figure 5.14. Weighted average numbers of African red slip ware sherds per decade (AD 100–700) collected by the South Etruria Survey.

5.3.10.6 Ceramics

After a noticeable drop in the circulation of African red slip in the territory during the third and early fourth centuries, in the later fourth there was a great rise in quantity. Unlike many other areas of rural Italy, where supplies of African red slip ware show a marked fall from the second half of the fifth century,[1066] in the Tiber valley only a slight drop is registered and the numbers remained relatively stable certainly until the mid-sixth century. This is followed by a massive decrease in the later sixth century (Figure 5.14). On the whole, however, its distribution is concentrated increasingly in the areas closest to Rome (the Ager Veientanus and Eretum), while finds further from Rome tend to be from sites close to the principal roads and the Tiber, or settlements of a certain status.

From the third century, contemporary with the sharp decline in the production of the Spello-type amphorae, there were some major changes in the kitchen- and domestic-ware productions in the territory.[1067] Rural ceramic production is one of the most interesting indicators regarding changes in the social and economic structures in the countryside and in the relationship between the latter and Rome. Firstly, the rural kiln sites in this area which were involved in the production of kitchen- and domestic-wares during the mid-imperial period ceased to function after the second century, for example the kiln site at the Mola di Monte Gelato. Rural specialist ceramic production must have continued in the middle Tiber valley during the third to mid-sixth centuries, judging by the presence of locally produced, high-quality, standardized cooking and domestic wares, although no kiln centres have as yet been identified.

Secondly there is a marked change in the proportions of kitchen- and domestic-wares. Kitchen-wares represent the majority of the ceramics in circulation in the territory throughout all periods, predominating over table-wares and storage-wares in refined fabrics. However, this situation is accentuated in the late antique period when, from the fourth century, coarse-wares overwhelmingly predominate over domestic-wares, which now represent only *c.* 3 per cent of the common-wares compared to the 13 per cent of the mid-imperial period. At Rome, the situation is different. In the mid-imperial period, although kitchen-wares predominate, domestic-wares are present in significant

[1066] In the area of the Sabina Tiberina, for example, African red slip ware was extremely rare after the mid-fifth century; Patterson and Roberts 1998; Patterson and Rovelli 2004; Fentress and Perkins 1988.

[1067] Many of these changes were first noted by Paul Roberts in his study of the Roman pottery from Monte Gelato: Roberts 1997. Alessandra Bousquet and Sabrina Zampini's valuable study of the South Etruria material has confirmed many of the points made by Roberts and added a number of new elements. Particularly interesting is their comparison of the South Etruria Survey pottery with that from excavated contexts in Rome and Ostia. Their findings are summarized here but for a detailed discussion of their study and its conclusions see Patterson *et al.* 2003; Bousquet and Zampini 2004; Patterson *et al.* 2005; Bousquet, Felici and Zampini 2008.

quantities, averaging around 30 per cent, sometimes as much as 40 per cent of the common-wares and although this proportion drops in late antiquity, domestic-wares in refined fabrics continued to be present in substantial quantities. It is very probable therefore that in the territory, in contrast to Rome, kitchen-ware vessels now also served functions for which previously domestic-wares had been employed, or at least the same fabrics were being used for both types of vessels. It is also possible that ceramic table-wares may now have been increasingly replaced by wooden vessels. In other words, there is evidence for slightly less specialist production.

Thirdly, transformations in the cooking-ware repertoire are also apparent, for example the increasing predominance of casseroles over jars. The latter, which had dominated the mid-imperial assemblages (36% were jars compared to 27% of casseroles), now represented 50 per cent of the kitchen-ware assemblage and jars only 33 per cent. The percentage of lids also dropped dramatically from 28 per cent to 4 per cent. These developments may be linked to contemporary changes in cooking practices and/or changes in the agricultural economy and consequently dietary habits, as suggested by the (unfortunately few) published animal bones (see below).[1068] The changes in the proportion of cooking- over domestic-wares and the increasing predominance of open over closed cooking-ware forms also occurred in Rome, but not until around the mid-fifth century, as did the changes in meat diet. A similar situation has been noted also for Naples (Arthur 2007: 16).

Finally, whereas in the imperial period the same common-ware pottery forms circulated in Rome and throughout the middle Tiber valley, indicating the strong economic and cultural links between the city and the countryside, this situation changed from at least the fourth century. In this period both the casseroles and jars were present in a notable variety of forms, some of which had no parallels on the urban markets of Rome and Ostia; a divergence which becomes increasingly apparent from the late fifth century.[1069]

On the evidence of the cooking- and domestic-wares, therefore, from at least the fourth century there is clear evidence for the beginnings of changes in the economic systems in operation in the middle Tiber valley, accompanied by an increasing divergence between the latter and Rome itself. As noted earlier these changes were first highlighted by Paul Roberts in his study of the pottery from the Mola di Monte Gelato;[1070] however, the new study of the South Etruria Survey material and excavation and survey in the Sabina Tiberina have confirmed that these changes occur throughout the middle Tiber valley. On the one hand, this suggests a fragmentation of the previous supply systems and a slight weakening of links with Rome. On the other, the fact that good-quality, standardized ceramic products with a varied repertoire continued to circulate throughout the middle Tiber valley provides clear evidence of a certain vitality in the rural economic systems and the continued existence of rural pottery production centres.[1071] It is worth highlighting that some aspects of the late antique ceramic productions are similar to those of the Republican period.[1072] Nevertheless, despite these changes, until the mid-sixth century the middle Tiber valley remained firmly within the economic and cultural ambit of Rome. This also, although to a lesser degree, seems to be the case in the Sabina Reatina, while further east, in the central Apennines, the late antique cooking and domestic forms clearly belong to a different cultural ambit, characterized by jars and bowls with tripod bases. The latter are in use in central Italy in the late Republican period and return to be widely diffused in central Apennine Sabina in late antiquity. The bases which characterize these vessels are indicative of their use on simple hearths.

5.3.10.7 Agrarian practices, animal husbandry and diet

During the imperial period the predominance of pigs over sheep and goat is a widespread phenomenon on both urban and rural sites throughout Etruria, Latium and Campania, indicating a homogeneity in diet and agriculture. However, in late antiquity and in particular from the fourth century this pattern changed. On major urban sites, such as Rome, Ostia and Naples, pork continued to be consumed in greater quantities than mutton or goat meat at least into the fifth century; in rural sites, such as Monte Gelato, by the fourth century the preference shifted towards sheep and goat meat.[1073] It is very likely that the increase in sheep/goat reflects

[1068] Paul Arthur, for example, in his work on Naples, suggested that the change in the ceramic repertoire may be linked to transformations in diet and agricultural practices; Arthur 2002.

[1069] Again, these are the trends that emerge from Bousquet and Zampini's study of the common-wares from the South Etruria Survey (Patterson *et al.* 2003; Bousquet and Zampini 2004; Patterson *et al.* 2005; Bousquet, Felici and Zampini 2008). However, the same is true also of the Sabina Tiberina on the opposite bank of the Tiber; Patterson and Roberts 1998.

[1070] The pottery kiln at the villa of the Mola di Monte Gelato ceased to operate after the second century, following which Roberts notes a change in the cooking- and domestic-ware fabrics, and from the fourth century some divergence between the cooking-ware forms at the site and those circulating in Rome; Roberts 1997.

[1071] For details of this, see Patterson *et al.* 2003; Bousquet and Zampini 2004; Patterson *et al.* 2005; Bousquet, Felici and Zampini 2008; Patterson 2008.

[1072] Some of these similarities are mentioned in Patterson *et al.* 2003; Bousquet and Zampini 2004; Patterson *et al.* 2005; Bousquet, Felici and Zampini 2008.

[1073] One exception to this is the villa at Lugnano in Teverina, where pork continued to be the dominant meat consumed throughout the occupation of the site, reaching a peak in contexts of the mid-fifth century. It has been suggested that Lugnano might have been linked to markets where pigs where sold (Soren and Soren 1999: 553, 558).

the return of previously cultivated land to pasture. At Monte Gelato, for example, the shift in late antiquity appears to have been towards raising sheep for wool, and seems to have coincided with regional pollen evidence for less cereal cultivation and perhaps wetter conditions.[1074] The change to a predominantly sheep/goat economy might be interpreted also as a sign of increased impoverishment, given its relative cost-effectiveness with respect to pigs, although sheep would also have been valued for their wool as an exchange product.[1075]

It is highly probable that the changes in agricultural practices and dietary habits resulted in different cooking techniques. The contemporary changes in the kitchen-ware repertoire add support to this. One of the main points to emerge from Paul Arthur's study of the relationships between cooking vessel types, culinary practices and food resources is that the distribution of open casserole type vessels seems to correspond fairly closely to the distribution of sheep/goat dominated faunal assemblages.[1076] The change in the cooking-ware forms in the middle Tiber valley in late antiquity, from a predominance of jars to casseroles, roughly contemporary with the changes in the faunal assemblages adds further support to his argument. As noted earlier, in Rome the change in cooking-ware forms was also contemporary with the shift to a sheep/goat-dominated diet, although occurring later, around the mid-fifth century.

5.3.10.8 Coins

On the basis of the limited published evidence, coins continued to circulate throughout this area into the mid-sixth century, after which finds are extremely rare. However, it has now been demonstrated that the small denomination late fourth- and fifth-century bronze issues remained in circulation for a long time and contributed greatly to the amount of coinage in circulation in later periods, certainly into the sixth century.[1077] Late fourth- and fifth-century coins are extremely common.[1078] At Monte Gelato they represent over 60 per cent of the total number of coins recovered, followed by a sharp drop in the number of coins minted after AD 450. The situation at Monte Gelato appears to be valid for other rural sites in the middle Tiber valley, in contrast to the situation in Rome.[1079] Therefore, although many of the products from the territory were now supplied to Rome as part of the *annona* system, a coin-based market economy continued to exist, and the longevity of the late fourth- and early fifth-century emissions is significant in the light of the other changes seen in this period.

5.4 Conclusions

From the third century, throughout the middle Tiber valley and in common with most of the Italian peninsula, we see a marked decline in settlement numbers and presumably rural population. This 'crisis' was accompanied by a change in the nature and function of both urban and rural settlements and the social and economic systems supporting them.

In the South Etruria Survey area, relatively few new settlements were founded after the third century. We can identify two main phases of new settlement, in the late fourth century, concentrated in the areas further from Rome, and in the late fifth century concentrated in the areas closest to the city. In the area of the Farfa Survey in the Sabina, on the other hand, from the fifth century there appears to have been an increasing shift in settlement away from the Tiber, up the Farfa Valley. In the fourth century and into the mid-sixth century, throughout the middle Tiber valley, most settlements were occupied continuously from the imperial period and earlier. Of these the overwhelming majority had been at one stage villas, a trend that was accentuated in the fifth to sixth centuries. These sites now served different functions and can no longer be defined as villas in the imperial sense. Furthermore, there were clear changes in the ceramic production and distribution systems, as well as in agricultural production and eating habits, all of which, certainly from the late fourth century, show increasing signs of divergence from the situation in Rome itself.

Nevertheless, there was a slight revival in the late fourth to early fifth centuries, seen both in settlements and in the religious and funerary evidence. The restructuring of some villas in the fourth century, the evidence for production and storage activities as well as services for travellers, the vicinity of some of these sites to the major roads that also show clear signs of investment by the State in this period, all imply a vitality in the new late antique landscape. In large part this is a reflection of the importance of this area for the supply of Rome itself, which involved not only the imperial estates and the estates of the rich aristocracy, but also those of the Church. The rich landowners may have resided

[1074] For the evidence for Monte Gelato, one of the few excavations in our study area where the animal bones have been published in detail, see King 1997: 398. See also Arthur 2002: 116. For a similar situation in England, see Grant 1988: 159.

[1075] Arthur 2002: 116; Wickham *pers. comm.*

[1076] Arthur 2007 also discusses the implications of the diverse forms in terms of cooking practices.

[1077] Rovelli 2009: 48–50.

[1078] In general, the fourth- and early fifth-century issues are small denomination coins and more likely to be lost and recovered, unlike the high denomination second- and third-century coins, which in part explains the large quantities of the former found both in Rome and the countryside. For a discussion of this and a comparison of the coins per period from Rome with those of Monte Gelato, see Hobbs 1997: 236, table 52, fig. 167.

[1079] See Alessia Rovelli's contribution in Patterson and Rovelli 2004.

only in very rare cases on their estates in the country, preferring to live in the city, where they continued to maintain and even enhance their residences, but they had a vested interest in ensuring that their lands were exploited for the Rome market.

This revival, although experienced in every region, was short-lived, and did not halt the overall trend of decline.[1080] All of these processes—the fall in settlement numbers, the gradual degradation of the settlements, including burials within the structures, the divergence between developments in Rome and those in its hinterland—became more marked from the second half of the fifth century and suggest that the aristocracy, and for that matter the Church, paid less attention to their estates. These changes coincided with the situation in Rome itself; the urban population numbers began to sharply decrease and there was a general decline in the maintenance of urban structures accompanied by the abandonment or partial abandonment of residential structures.

With the loss of the Maghreb to the Vandals in the early fifth century, the area of the Tiber valley must have become increasingly important for the supply of Rome. The second phase of new settlements, now concentrated in the areas closest to Rome, may reflect an attempt to boost the productivity of the land; but on the whole there is little evidence to suggest any real effort on the part of the major landowners to invest in their estates, unlike the situation in some areas of southern Italy and Sicily, where the presence of ecclesiastical or fiscal estates was stronger (see section 5.3.1).

Investment by the great lay and ecclesiastical landowners in the countryside in this period can now be seen primarily in the Christian cult centres. From the fifth century, the aristocracy also participated in the foundation of a number of rural churches, as well as supporting the Church with grants of land and money. During the fourth and especially from the fifth century the Christian cult centres increasingly became the new foci of settlement, many of which were built on existing Roman settlements, such as the bishoprics in the towns, the churches on the villas and, in the case of the martyrial cult centres, often new sites.

We must, however, be wary of over-exaggerating the significance of the decline in settlement numbers during late antiquity: it could be argued that to a certain extent it is the imperial period that is the anomaly both in terms of density of settlement and the wealth of the material culture.[1081] In this period Rome was at the centre of a Mediterranean system, and the Tiber valley was its hinterland. Therefore with the drop in the number of sites, the demographic level of the countryside was simply returning to a more 'normal' level.[1082] In fact, if one looks at the Tiber Valley Project settlement graphs (Figure 2.35, above), the number of settlements documented for the mid-third to fourth centuries is only slightly less than that registered for the late Republican 2 period and the mid-Republican period, and much greater than that given for late Republican 1 (generally regarded as a another period of 'crisis'). In this context, it is significant that the economic systems in the Republican period, in particular as regards ceramic production, also has some interesting similarities with those of late antiquity.[1083]

That rural population numbers were on the decrease cannot be denied. Nevertheless, the system of open, dispersed settlement persisted throughout the middle Tiber valley into the early sixth century, rural ceramic production continued with potters manufacturing goods of a high quality (despite some signs of less specialized production), and a market economy also probably continued to exist. Imported goods, both fine African red slip table-wares and amphorae, continued to arrive through the Rome market, although their circulation was increasingly restricted. Furthermore, throughout the area cultural and economic links were maintained with Rome. The real watershed was to come in the later sixth or seventh century, when the Lombard invasions led to the breakdown of Roman unity of the Tiber valley. At this point we must distinguish between South Etruria, which remained in Roman-Byzantine hands, and much of the Sabina Tiberina, now under Lombard control.

[1080] Francovich 2002: 145–6.

[1081] Moreland 2008: 862, in his discussion of the results of the Farfa Survey, has emphasized that it is the early imperial period that represents the aberration in the long-term settlement history of the region.

[1082] For this argument see, for example, Moreland 2008.

[1083] Patterson *et al.* 2004a.

Chapter 6

The end of the Roman unity: the Tiber valley in the late sixth to seventh centuries AD

Helen Patterson

6.1 The historical context: the Gothic Wars and Lombard invasions

Theoderic's rule was relatively successful but following his death, in AD 526, tensions grew. The assassination of Amalsuntha in 535 gave the emperor of the east, Justinian, the excuse he was looking for to bring Italy back under the direct control of the Roman empire and in the same year he declared war. The Byzantine-Gothic wars lasted almost 20 years and had a devastating effect on Rome with the large-scale emigration of its inhabitants (including members of the senatorial families who fled to Constantinople) and throughout Italy. As Procopius vividly describes, the Roman Campagna, with Emilia, Picenum and Umbria, was one of the most severely fought areas.[1084] These were the strategic points in an Italy that was to be governed from Rome by Ravenna, and it was exactly these areas that were later to become the remaining Byzantine territories in Lombard Italy.[1085] In the Roman Campagna the areas along the Via Flaminia and the Via Aurelia were at the centre of the action during the conflict. The Roman *municipium* of Nepi is described by Procopius as a *phrourion* or fortress, referring to its strategic role on the Via Amerina as a stronghold for the defence of the southern part of the Tuscan-Lazio region (Procopius *De Bello Gothico* 4.35). The wars seem to have affected the Sabina only marginally.[1086] The sole mention made by Procopius is the passage through the area by the troops of Witigis as they marched from Narni towards Rome in AD 537 where they set up camp at a bridge, probably the Ponte Salaria.

Justinian's victory in AD 552–4 led to the re-establishment of Byzantine control. The seat of the western imperial government was transferred to the more secure location of Ravenna. Justinian's Pragmatic Sanction of 554 codified the restoration of Roman rule and Italy's position as the westernmost province of the empire, ruled by Narses, as commander-in-chief, but the decrees laid out do not seem to have been implemented, largely because they required endowments from a now impoverished and much depleted wealthy elite.[1087]

The Lombard invasions of Italy in AD 568–9, just ten years after the Gothic Wars, were the final blow to Roman control of the peninsula. After *c.* AD 600 the Lombards occupied around two-thirds of Italy and from this period until 1871 it did not have a sole political system, even nominally.[1088] From a historiographical viewpoint too, the Lombard occupation marks a major break; after 568, and even more so after the 610s, the written evidence becomes extremely sparse, only reappearing again in the 710s with the first medieval documents.[1089]

The Lombards first entered Italy under king Alboin. Following his death in 572, the Lombard invasions slowed down and took the form of a war of bands. From 574 the Lombards remained without a king for ten years, governed by a number of military chiefs to whom the sources give a Roman military title, 'dukes' (*duches*). The diverse military chiefs and their warriors penetrated into Italy as far as Tuscany; at the same time other bands, probably completely autonomous from those operating to the north, had created two strongholds at Spoleto and Benevento, from where they began to conquer central southern Italy.[1090] The invasions seem to have affected the area around Rome and the middle Tiber valley during the last quarter of the sixth century. The Lombard incursions are first mentioned by the *Liber Pontificalis* during the pontificate of Benedict (AD 575–9). It is at this moment, in an attempt to adapt to the new political and military situation, that the Byzantines first carry out a territorial and administrative reorganization of the peninsula.[1091] Several scholars have argued that it was in AD 584 under Pope Pelagius II that Rome became the seat of a Byzantine duchy, with the nomination of a duke under the jurisdiction of the Byzantine exarchy at Ravenna.

[1084] Sennis 1996: 35.
[1085] Wickham 1981: 26.
[1086] Sennis 1996: 35.
[1087] Llewellyn 1971: 78.
[1088] Wickham 2002: 118.
[1089] Wickham 1981: 28–9.
[1090] Gasparri 2012: 8. The political situation was actually much more complex; many of the Lombard chieftains at various times became allies of the Byzantine empire and were maintained by finances from the latter; Gasparri 2012: 15.
[1091] Bavant 1979: 49–50; Sennis 1996: 35. Some information regarding the new structure is provided by George of Cyprus in his *Descriptio Orbis Romani*, written around 580: 'the peninsula was subdivided into five provinces or *eparchie*, each of which grouped together several ancient provinces, the middle Tiber valley forming part of that known as *Urbicaria*.'

However, the first, and almost last, secure mention of a *ducatus romanae urbis* is not until the beginning of the eighth century (see Chapter 7).[1092]

The degree of actual violence involved in the Lombard invasions has been disputed.[1093] Whatever the reality, they had a major impact on the area around Rome. Gregory the Great mentions the Lombard incursions into the Rome area no fewer than seven times in AD 592–3 alone.[1094] In 592 Ariulf, duke of the Lombard Duchy of Spoleto threatened Rome itself and the Lombards occupied a number of centres, including Sutri in the Ager Faliscus, and cut the line of communications between Rome and Ravenna. While in the Sabina Tiberina they advanced as far as Cures Sabini. On several occasions Pope Gregory I appealed directly to the Ravenna authorities and eventually obtained the intervention of the exarch. Romanus reconquered parts of Tuscia, notably Sutri, in 594, and Polymartium. He then departed again for Ravenna reconquering other centres to the north and east of the middle Tiber valley, in particular Orte, Amelia, Todi and, further to the north, Perugia. In essence the aim of the Byzantines was to ensure communications between Rome and Ravenna, and fundamental to this objective was the Via Amerina, given that the Via Flaminia, certainly in its northern stretch, was largely in the hands of the Spoletan Lombards. The Via Amerina and the lands along the road now formed a corridor linking Rome with the exarchate, which was to be maintained for around 150 years.[1095]

Tim Potter and David Whitehouse argued that during the first wave of Lombard invasions in the 590s, the Ager Faliscus effectively formed a frontier zone. This argument was then used to support their hypothesis for an early move to hill top sites in this area some of which, following the model proposed by Tom Brown, may have been 'strategic hamlets' established by the Byzantine military.[1096] However as Brown later pointed out, their arguments did not hold for a number of reasons. In particular the incorrect dating of the earliest phases of some hilltop settlements and the fact in this period that the Ager Faliscus did not lie in direct conflict with the Duchy of Rome and therefore cannot properly defined a frontier zone in this period. Although the former would have seen much devastation, the Ager Veientanus would have been equally affected. This situation was only to change as a result of the Lombard offensives in the 720s.[1097] As we shall see, the archaeological evidence for rural settlement seems to support Brown's arguments (see section 6.2.1).

The turbulent political and military situation was worsened by a series of famines and plagues which affected Rome and the surrounding area during the early years of the invasions. The effects of these events are described by the Gregory the Great (*Epistles* 3.20). A number of bishoprics were amalgamated indicating the decay of some Roman towns. In the Sabina, for example, in AD 593, following the disturbances caused by the invasions, the *Sancti Anthemi Curium Sabinorum territorio constituta* was integrated by Pope Gregory the Great with the nearby bishop's seat of Nomentum. In a letter, Gregory explains that this was due to the desperate state of devastation and depopulation of the territory.[1098] This is reflected in the archaeological evidence which shows, alongside a drop in rural settlement numbers and the definitive abandonment of many of the declining Roman towns, a breakdown in the economic structure of the middle Tiber valley. This, however, was part of a long process that had been affecting Italy from the later fifth century onwards, exacerbated by the impact of the Gothic wars on the economic and administrative structure of Italy, in which the Lombards were the final culminating factor.

The situation during the early years of the Lombard invasions first stabilized around 600. Thanks to the letters of Gregory the Great, we can roughly trace the extension of the Byzantine territories around Rome in this period.[1099] In our study area of the middle Tiber valley, the west bank was now firmly under Byzantine control, falling within the corridor linking Rome to Ravenna. In South Etruria as a whole, the most northern town on the coast in Byzantine hands was Rosellae and, east of Lake Bolsena, the Byzantines still held Bolsena, Orvieto and Bagnoregio, as well as Orte and Todi, while at Narni a Byzantine garrison was re-established in around 593.

Although the Byzantines succeeded in re-establishing their control of the west bank of the middle Tiber valley, this was not the case on the east bank. The Sabina remained firmly under the Lombard duchy of Spoleto and, in the case of the Sabina Tiberina, more directly under the *gastaldato* of the former Roman *municipium* of Rieti, which was occupied early by the Lombards, by at least 598. In the southern area of the Sabina Tiberina the Byzantine-Lombard frontier was more fluid;

[1092] For discussion of this question, see, for example, Sennis 1996: 36; *contra* the more 'traditional' views of Llewellyn 1971: 78 and Bavant 1979.

[1093] For a discussion of how German and French scholars have viewed the Germanic invasions, emphasizing respectively their peaceful and violent character, see Wickham 1994: 99; Ward-Perkins 2005: 5–10, fig. 1.4; Delogu 2010.

[1094] Brown 1984: 39–40.

[1095] Bavant 1979: 57; Sennis 1996: 36.

[1096] Potter and Whitehouse 1981: 206–210; Brown 1978.

[1097] Brown and Christie 1989: 396–7.

[1098] Fiocchi Nicolai 2009: 67, 548–50.

[1099] Bavant 1979: 58–9; Sennis 1996: 36–7. Duchesne 1886 has shown that the Pope never wrote to those bishops who were not in Byzantine territories, with the exception of the Duchy of Spoleto, and therefore the bishops of the towns with whom the Pope corresponded give us an idea of the extent of the Byzantine territories at this time.

although the bishopric of Cures Sabini was integrated with that of Nomentum because of the devastation caused by the Lombard incursions, Pope Gregory the Great stresses that it was a temporary invasion and not a definitive annexation.[1100] Cures itself and the area to the south seem to have remained in Byzantine hands. Our evidence for this area, from now on referred to as the 'southern Sabina Tiberina', comes primarily from the Eretum Survey. As we have noted, this area with its excellent connections by road and river must have been of great strategic and commercial importance to Rome. Perhaps due to the scarcity of documentary sources it is not certain if the port (*portus Curensis*) functioned during the sixth and seventh centuries, but it certainly was working in the third and fourth centuries and again in the medieval period. [1101] Indeed, we argue that this area maintained links with Rome, and the settlement and economic patterns are very similar to those of the Roman-Byzantine territories on the west bank. The rest of the Sabina Tiberina, the entire area from Cures to the north, was in the hands of the Lombards.

In synthesis, after around 600 years, Rome's control of its very hinterland had finally ended and Rome passed from being the centre of the Roman empire to the head of a peripheral province and a frontier zone, with the Tiber for much of its course now acting as a boundary rather than a corridor.

These events marked the end of what remained of the imperial and senatorial estates in our area and, given that in many cases the aristocracy had fled to Constantinople, their interests in these lands ceased. As regards the properties owned by the church, the most dramatic and lasting effects were in the Sabina. The lands of the church had undergone a series of reorganizations, which, although not securely attested until the first half of the eighth century, can be dated back to at least the beginning of the early sixth. The various estates can be defined with relative precision. As regards the middle Tiber valley, those on the west bank between the Tiber and the Tyrrhenian Sea and located along the main Roman roads, formed part of the *Patrimonium Tusciae*; while those on the east bank formed part of the *Patrimonium Sabinense*.[1102] So by the end of the sixth century the Roman church already owned a substantial *patrimonium* in the Sabina. We know from the letters of Gregory the Great that it consisted of large properties grouped into territorial units (*massae*) directed by papal administrators. These properties were now in Lombard hands and were to remain so until the late eighth century. Their importance to the church and to Rome is demonstrated by the papacy's repeated attempts during these years to retrieve the *patrimonium Sabinense,* not least because it was a fundamental source of food supplies for the city.

The church played an important role during the early years of the Lombard invasions, but the roles of the church and the State in this period were complex. The lay aristocracy inserted themselves into the ecclesiastical order and the distinction between the two entities was often blurred. From the mid-sixth century the church was increasingly active in the administration of the city. The pontificate of Gregory the Great (590–604), contemporary with the last mention of the *praefectus urbis* (599) and of the Roman senate (603), has often been seen as the moment when the government of Rome passed from the empire into the hands of the popes. The papal documents refer to the pope's involvement in political and diplomatic initiatives regarding the defence of Rome, as well as interventions relating to the food supply. However, current opinion is that this was not the case: the few seventh century papal documents are silent on this subject, suggesting that Gregory's actions were an exception, related to particular episodes of need, rather than in the order of ordinary administration.[1103] Therefore Rome remained firmly in Byzantine hands, a situation which was only to change in the second half of the eighth century.

One of the main problems faced by the administrators of Rome in the light of the new political situation was that of feeding the urban population. According to Procopius (*De Bello Gothico* 3.20), during the Gothic Wars no more than 500 people remained in Rome, a figure which is no doubt exaggerated but still implies that there was an enormous fall in the number of inhabitants. As we have seen, a convincing estimate for the urban population in the sixth and seventh centuries is in the order of 50–60,000, roughly a tenth of the early fifth century. An estimate which is based primarily on information from a letter of Cassiodorus of AD 530, and therefore prior to the Gothic wars (see Chapter 5). It suggests that the demographic collapse was not entirely a consequence of the military events. Although the great trouble of the early fifth century and certainly the Gothic wars, followed a few decades later by the Lombard invasions, must have had a major impact, they probably exacerbated an already existing situation.[1104] Yet Rome was still the largest city in the West and the permanent establishment of Byzantine troops, now recruited locally and partly recompensed with lands, would have created an additional need for

[1100] Bavant 1979: 61.

[1101] A *chiatta* (a large boat for river transport) of the third to fourth centuries AD was discovered with its cargo of building materials and ceramics. In 1105 the Abbey of Farfa was given rights for the use of the port and a ferry is also documented (Romanelli 1956; Toubert 1973: 631; Muzzioli 1980: 52; Quilici Gigli 1986: 81–2; Reggiani 1986).

[1102] Sennis 1996: 33–34.

[1103] For discussion of the problem, see Marazzi 1998a: 43–4; Sennis 1996: 30–1; Marazzi 2001b.

[1104] Delogu 2010: 235; Santangeli Valenzani 2004.

food supplies,[1105] as would the influx of refugees who fled to the city from the wars in the countryside. These numbers probably remained relatively stable through the late sixth and seventh centuries.

The situation regarding provisions for the city had not changed greatly from the late fifth century. Throughout the sixth and until the end of the seventh century imported fine-wares and produce transported in amphorae continued to arrive in Rome from Africa, Palestine, Asia Minor and the Aegean islands and its mainly ecclesiastical possessions in southern Italy and Sicily. The rich late seventh century deposits from the excavations of the Crypta Balbi are a striking testimony to their presence in Rome.[1106] However, the products imported from overseas probably increasingly reflect directional trade, that is to say, where a commodity is traded directly from its source to a distant point without any intermediate exchange. The same phenomenon is seen in other Byzantine strongholds in Italy, such as Ravenna, Istria, Naples, Otranto and Reggio Calabria as the eastern empire attempted to ensure the survival of its remaining strategic centres in Italy following the Lombard occupation of a substantial part of the peninsula.[1107] Goods were no longer transported through the *annona* system but would have been grafted on to the mechanisms used for the movement of troops and functionaries. Delogu points out that Pope Constantine's voyage to Constantinople at the beginning of the eighth century included stops at Portus, Gaeta, Naples and Sicily, Reggio and Otranto. Presumably the same route, in the opposite direction, would also have been used to transport goods from these regions to Rome. This was probably the case for the wood brought from Calabria by Pope Sergius I (687–701) to repair the roof of the basilica of Saint Paul (Book of the Pontiffs 86: 12), and of the distinctive Sicilian-type lamps which appeared in Rome at the end of the sixth century, presumably accompanying the grain, a further confirmation of the importance of the Sicilian connection in this period. The Sicilian lamps have been found, as well as at Rome, in other regions where the Church, increasingly involved the supply of the city, owned substantial lands.

Regarding the papacy's possessions in southern Italy and Sicily, Paolo Delogu argues that the revenues obtained from these lands were for the use of the church, presumably similar to those of the *domuscultae* in the late eighth and early ninth centuries, rather than intended for the supply of the urban population in general. Although there is no direct evidence that this was the case at Rome, to support his argument he cites the better documented Ravenna where he calculates that in the mid-seventh century the Sicilian provisions could only have supplied about 2000 people, certainly not the entire population of the city. Indeed the sources implicitly state that Sicilian grain was reserved for the needs of the bishop of Ravenna.[1108] Our study lends further support to these arguments. By the late sixth to early seventh centuries imported table-wares and amphorae, presumably arriving through the Rome market, are attested at only a small number of sites in the middle Tiber valley and by the late seventh century they are extremely rare, mainly restricted to high status sites, such as monasteries and martyrial sanctuaries (see section 6.6.2).

Internationally imported produce clearly did not fully satisfy the needs of the urban population. The written texts referring to periods of famine in Rome during the late sixth century relate the latter not to problems in the supply of overseas supplies but to local causes, and in particular to the Lombard invasions of the surrounding area.[1109] In the life of Pope Benedict I (575–579) the *Liber Pontificalis* records a famine caused by the Lombard incursions; many *castra* tried to resolve this problem by surrendering to the invaders, while Rome was aided by the emperor Justinian who sent grain from Egypt (*Liber Pontificalis*, 111, p. 308). Here the Lombard presence seems to have obstructed the normal supply canals not only for the *castra* but also for the city of Rome itself. Another source which illustrates the importance of regional production, although in this case not necessarily related to the Lombard invasions, is a letter of Gregory the Great to the patrimony of Saint Peter in Sicily in AD 591, ordering an additional supply of grain to be sent to Rome during the winter, because production in the region of the city had been so modest as to risk a famine (Gregory the Great, *Epistles*, I, 70). This link between periods of famine in Rome and the situation regarding regional food production continued to exist throughout the seventh and into the early eighth century as recorded by various mentions in the *Liber Pontificalis*.[1110]

It appears therefore that during the late sixth and seventh centuries, supplies from southern Italy and Sicily alongside those from overseas were insufficient for the needs of the urban population. Regional production of grain and other foodstuffs may not have been the primary source but they were still essential. The papacy's attempts to regain its *patrimonium* in the Sabina add further support to this. It also implies

[1105] On the question of Byzantine troops, see Marazzi 2001b: 43–4; Delogu 2000: 100. On the other hand, the presence of Byzantine military can also be viewed as representing a contribution to the market economy (Chris Wickham, *pers. comm.*). On immigrations as a result off the Lombard invasions, see Delogu 2010: 235.

[1106] Saguì 2002; Panella and Saguì 2001.

[1107] Saguì 2002; Panella and Saguì 2001; Delogu 2001: 9; Arthur 2002.

[1108] Delogu 2010: 241.

[1109] See Paolo Delogu 2010: 234–35. The examples given here are taken from his comments.

[1110] Delogu 2010: 241.

the inadequacy of those lands of Rome's immediate territory still under Roman-Byzantine control, primarily South Etruria, to step up to meet Rome's needs and that prior to the crisis caused by the Lombard invasions, and in contrast to the situation in parts of southern Italy and Sicily, little had been done to exploit this area systematically in agricultural terms. The scarce investment and lack of maintenance seen in rural settlements after the mid-fifth century reinforce this argument.

We have no direct evidence as to the quantities of agrarian produce which reached Rome from its territory, or how they arrived in the city and were distributed.[1111] Certainly as regards the supply mechanisms, references to river transport on the Tiber cease after the mid-sixth century as does any mention of the transport of timber. Although this is probably due, at least in part, to the lack of documentary sources, as regards timber, Rome have looked to its other major supply source, Calabria, as discussed below. In South Etruria, now Rome's primary source of regional provisions, the principal roads still seem to have functioned (see section 6.6.).

The documentary sources and the archaeological evidence indicate the late sixth to seventh centuries as Rome's period of greatest decline: threatened by the Lombards, in 592 Ariulfo Duke of Spoleto and King Agilulf in 594 managed to bring the combat almost to the gates of the city, and afflicted by plagues, famines and floods. There are clear signs of the degradation of the urban infrastructures: the increase in numbers of burials within the city, a phenomenon first seen in the fifth century; the abandonment of some areas; the disuse of buildings and so on. After the end of the sixth century there are fewer references in the documents to church building in Rome. The latest building initiatives are those of Pope Honorius (625–8); six 'new' churches are attributed to the pope, but with a sole exception these involved the restructuring of existing buildings. Ecclesiastical buildings founded on the initiative of both the church and the lay aristocracy are consistently documented in Rome during the second half of the sixth century but are virtually absent for the seventh. [1112]

Nevertheless, the Byzantine emperors did not renounce their government of the province of Italy and of Rome in particular. Despite the great difficulties faced by the empire during this period, they established their own civil and military officials and troops to defend the city as well as ensuring the continuing supply of foodstuffs to the capital, as in the case of other Byzantine strongholds in the Italian peninsula. Notwithstanding the increasing urban degradation, recent excavations show that during much of the seventh century elements of urban and institutional life were still maintained. The Roman forum and the Palatine preserved their role as centres of Roman civic life and monetary circulation continued, solidly based on the Byzantine tri-metal system. In particular a coin-based market economy still existed for everyday transactions; the Crypta Balbi excavations recovered large numbers of small denomination coins of the seventh and early eighth centuries.[1113] Also on a day to day level Rome continued to function; specialist butchery practices still existed certainly at the end of the sixth century and centralized bread production continued, as did the local production of high-quality, standardized ceramic vessels.[1114] However in the territory around Rome, in the middle Tiber valley, the events of the late sixth century had a profound effect. With the arrival of the Lombards we see not only the breakdown of the political unity of the city's hinterland, but the emergence of diverse settlement, economic and cultural systems. This is clearly reflected in the archaeological evidence, as discussed below.

The late seventh century was a period of military and religious pacification. In AD 680 the Byzantine empire officially recognized the Lombard kingdom, thus ending more than a hundred years of war between their respective territories. In AD 681, the resolution of a serious religious doctrinal controversy (the papacy's opposition to the imperial policy of Monothelitism) resulted in the re-establishment of good relationships between the papacy and the Byzantine empire.[1115] At the end of the seventh century the Lombards occupied about three quarters of the Italian peninsula. In the Lazio area, the west bank of the middle Tiber valley, following the retaking by the Byzantines of Nepi and Sutri and other centres in northern Lazio in the 590s, remained firmly in Byzantine hands. Their control extended to Centumcellae in the north; the frontier, following the course of the river Marta, must have passed between Tuscania and Blera. The region of the Monti Cimini remained Byzantine, while further to the north, between Polymartium and Todi, the Byzantines only retained a small group of territories. On the east bank of the Tiber, the Monti Sabini would have divided the imperial territories from the Rieti basin which formed part of the Lombard duchy of

[1111] Although see Delogu 2010: 235–36, where he is referring primarily to grain, for a hypothesis of the possible mechanisms by which this took place.

[1112] For a discussion of this and the close correspondence between donations to the papacy in gold and silver and papal building activity in Rome, see Delogu 2010: 259–287.

[1113] Rovelli 1998; 2009.

[1114] For butchery practices, see Santangeli Valenzani 2003a.

[1115] Imperial condemnation of monothelitism was given at an ecumenical council at Constantinople, which recognized the legitimacy of the doctrine defended by the papacy over the last decades; Delogu 2001: 20.

Spoleto,[1116] while the southern frontier remained as before with the Byzantines maintaining control of the area to the north of Rome as far as Cures in Sabini.

The peace was short-lived: in the first quarter of the eighth century renewed military conflicts broke out which directly affected the middle Tiber valley. By the end of the seventh century, as Byzantine links with Rome increasingly weakened, the strength of the papacy had grown. In the same period the mint of Rome began to produce silver coins with the face of the emperor on one side and on the other a monogram of the pope in office, an official confirmation of the new authority conferred on the papacy by the empire.[1117] During the conflicts of the early eighth century it was the papacy, much more than the Byzantine empire, which actively attempted to resolve the situation, and by the second half of the century, the popes, no longer subordinate to the empire, emerged as the rulers of Rome and of its territory.

6.2 The *incastellamento* debate[1118]

In 1973 Pierre Toubert published his famous thesis on the transition between the Roman and medieval landscapes in Lazio. Toubert's work was based mainly on the archives of the monasteries of Farfa and Subiaco.[1119] His model regarding this transition and the emergence of *incastellamento* centred on three related points: i) the concentration of the *contadini* population; ii) the fortification of villages; and iii) the definition of the boundaries of the *tenimentum castri*.[1120] He saw the great lay and ecclesiastical authorities as being the authors of this '*révolution castrale*', who during the tenth century, having eliminated the Saracen threat and put an end to the brigandry of the *contadini*, began the great movement towards the concentration of people and territories. They fundamentally changed the rural landscape, creating a new form of settlement (the *castelli*) and a more effective means for the exercise of their power. The *castelli* were not only centres of a newly nucleated population, but also represented focal points for new forms of social control, new forms of production and distribution, and the basis for a new religious landscape.[1121]

Essential to Toubert's argument was that the *castelli* were foundations *ex novo*, and that they replaced a system of large properties consisting of open dispersed settlement, with *case coloniche* around centres of signorial management. In other words, the classical system of open dispersed settlement had continued until this period. Toubert did not stress the emergence of the *castelli* as being caused by the urgent need for defended sites and therefore having primarily a military role, but saw the phenomenon as being more due to internal social and economic reasons.[1122] Although Toubert's model was based on the evidence for Lazio and in particular for the Sabina, his work has had an enormous impact on historical and archaeological research on the landscape of Italy in general in the central middle ages. This, as Wickham states, has led to some 'nuancing' of his overall model. In particular, and fundamental to a discussion of sixth to seventh century settlement in our area, is the question of how sharp the settlement break is which Toubert saw as marked by *incastellamento*. This break has been placed in doubt by more recent archaeological work.[1123] Alessandra Molinari has highlighted two contrasting interpretative models which, as she says, represent to a certain extent the current state of the debate regarding the origins of incastellamento: that of Riccardo Francovich and Richard Hodges, on the one side, and the various contributions of Étienne Hubert on the other.[1124]

Francovich and Hodges contested Toubert's thesis and his proposal that there was substantial continuity of the Roman and late antique forms of settlement until the beginning of the tenth century. Their hypothesis stemmed largely from the results of survey and large-scale excavation in southern Tuscany, which demonstrated that in this area, many of the *castelli* documented from the tenth century had earlier occupation phases characterized by wooden structures. Some were small complexes, others were substantial villages. Some dated from as early as the late sixth to seventh centuries, but by the late eighth to ninth they were widely diffused and in the course of the tenth to eleventh centuries these settlements were simply walled. In other words, in this area the archaeological evidence indicated that there was a precocious move to village-type hilltop settlements beginning as early as the late sixth to seventh centuries.[1125] However, in their volume *Villa to Village*, Francovich and Hodges extended this model to much of the Italian peninsula. In particular they proposed that as in Tuscany, so too in

[1116] Sennis 1996: 37.

[1117] See Delogu 2010: 227; Rovelli 1998, 2009. Bronze coins of 30 nummi and silver coins with the papal monogram were identified dating to the period between AD 690 and *c.* 740. On this and the implications for the economy of Rome, see also Delogu 2010: 247–8.

[1118] See Molinari 2010 for the best and most recent synthesis of the process of *incastellamento* in Lazio. What follows is based on part on her work, although now see also the more recent work of Chris Wickham 2015. Both are essential reading.

[1119] Toubert 1973; Wickham 2015:43 notes, because the Farfa archives is by far the largest collection of documents for the whole of Lazio, the Sabina is by far the best documented area of the castle zone.

[1120] Hubert 2000a, 2000b; Molinari 2010.

[1121] Francovich and Hodges 2003: 13–14.

[1122] Although Tabacco 1974, in his review of Toubert's (1973) work stated that these settlements by their very nature must also have had a defensive aim his affirmation has not really any solid basis.

[1123] Wickham 2009: 45.

[1124] Molinari 2010; Francovich and Hodges 2003; Hubert 2000a, 2000b; 2002.

[1125] For the best synthesis of the results of the research in Tuscany, see Valenti 2004, and also Valenti 1995; Campana 2001; Francovich and Hodges 2003; Felici 2004.

Lazio, both in South Etruria and the Sabina, the move to the formation of hilltop villages took place as early as the sixth to seventh centuries, 'accentramento' to use Wickham's term, and that the tenth century simply represented the consolidation of a process that had already begun. They did not see a '*rèvolution castrale*' in the tenth century, but the transformation of already existing sites in the context of the affirmation of signorial control over the territory.[1126]

Étienne Hubert's thesis, on the other hand, is based on a number of excavations directed by himself and carried out by the École Française de Rome in the Sabina (in the Valley of Turano just outside our study area), aimed specifically at examining the processes of *incastellamento*.[1127] The excavations were integrated with a detailed study of the documentary sources. Hubert suggested that it was very likely that dispersed settlement continued until the tenth century, although this is not clearly attested archaeologically. He did not believe in a '*révolution castrale*' in the tenth to eleventh centuries; rather he proposes that in this period *castelli* existed alongside open dispersed settlements, and that the first hilltop sites documented as *castra* were often of small dimensions, without any significant settlement, or they were villages with no signorial residences and without fortifications.[1128]

The evidence from both South Etruria and the Sabina has played an important role in this debate. So, firstly, let us look at the evidence from both areas focusing on the site of Ponte Nepesino in South Etruria and then the evidence from Casale San Donato in the Sabina. Both sites were used by Riccardo Francovich and Richard Hodges to suggest that in this area we may be seeing an earlier move to hilltop village-type settlement along the lines of the Tuscan model.

6.2.1 South Etruria: ceramica a vetrina pesante *and Ponte Nepesino*

The results of the South Etruria Survey and the excavations that followed are fundamental to the '*incastellamento* debate'. Ward-Perkins, primarily on the basis of the work in the Ager Veientanus, originally proposed that, throughout the South Etruria Survey area, the Roman system of dispersed settlement persisted until the tenth to eleventh centuries when, because of the insecurity of the times, the people fled to the hilltops and established fortified centres, such as Mazzano Romano (945), Calcata (974), Pietrapertusa (*c.* 980) and Isola Farnese (989).[1129] Tim Potter later modified this model, suggesting that some of the fortified centres may date prior to the tenth century and to test his hypothesis carried out excavations at one of these centres, Mazzano Romano.[1130] The presence in the first occupation phase of *ceramica a vetrina pesante*, then attributed by David Whitehouse to the late eighth to ninth centuries, demonstrated that at least some of the *castelli* in this area pre-dated the main phase of *incastellamento*, and their first mention in the documentary sources.[1131] Tim Potter returned to this problem in his work on the Ager Faliscus noting that firstly *ceramica a vetrina pesante* had also been recovered from a number of other *castelli* in this area and secondly that there also appeared to be a closer geographical relationship between the late Roman villas and farms and the fortified villages.[1132] On this basis he suggested different developments in the Ager Veientanus and the Ager Faliscus.

This hypothesis was supported by Chris Wickham's detailed examination of the early medieval land organization through the documentary evidence.[1133] In the Ager Veientanus the continuation of the Roman system of open dispersed settlement, based on the classical *fundus* seemed, from the documentary evidence, to remain the basis of land organization until the end of the ninth century, probably perpetuated by the foundation of the *domuscultae*. Thereafter a new pattern emerged based principally on larger concentrated medieval villages, such as Isola Farnese, Formello and Sacrofano, documented mainly from the tenth century. Further to the north, however, in the Ager Faliscus, the archaeological evidence indicated a much earlier move from the villas and farms to the defensive positions typical of the medieval villages or *castelli*. In his volume, *The changing landscape of South Etruria*, Tim Potter suggested that the latter began to be established by the eighth century, possibly earlier, perhaps between the sixth and the eighth centuries.[1134]

The date of the first occupation phases of the medieval nucleated settlements hinged on the recovery of the distinctive early medieval glazed ware, *ceramica a vetrina pesante*, from a number of such sites in the Ager Faliscus. As noted earlier, David Whitehouse, primarily on the basis of the excavations at Santa Cornelia and Santa Rufina, had (rightly) proposed that the earliest production of this ware was in the second half of the eighth century. However, a few years later, on the basis

[1126] Francovich and Hodges 2003.On 'accentramento', see Wickham 1985.

[1127] Hubert 2000a, 2000b; 2002; Bougard, Hubert and Noyé 1987; 1988.

[1128] One point regarding Hubert's model, to which I shall return later, is that eighth- to ninth-century pottery types are still not recognizable in the Sabina. It is possible, therefore, that the earliest phases of some of the excavated sites, such as Caprignano, characterized by wooden structures, may in fact date to this period (see Chapter 7).

[1129] Ward-Perkins 1955. The dates refer to the first mention of these centres in the documents.

[1130] Potter n.d., 1972.

[1131] Whitehouse 1980: 153–5; Potter 1972.

[1132] Potter 1979.

[1133] Wickham 1978; 1979.

[1134] Potter 1979: 164, 166.

of the material recovered from the Lacus Juturnae in Rome, Whitehouse (wrongly) revised this dating and proposed that *ceramica a vetrina pesante* or Forum ware, was already in use by AD 600.[1135] In other words, on the basis of the new dating, the excavated *castelli* for which a late eighth- to early ninth-century foundation date had been proposed were now placed earlier in origin, and the shift to hilltop settlements began earlier than previously thought. Tom Brown appeared to offer a historical explanation for this pattern. In 1978 he had published a paper in which he proposed that some promontory settlements may have functioned as 'strategic hamlets' in the frontier zone of the Duchy of Rome and that it was possible that 'these early sites were set up for defensive purposes, the initiative may have come from Byzantine military commanders in the late sixth and seventh centuries.[1136] With the aim of testing this model and in the light of the new dating of the ceramics, Tim Potter and David Whitehouse carried out excavations at the medieval castle of Ponte Nepesino. As they stated in the excavation report noted 'the implication of the new hypothesis for the *castelli* of the Ager Faliscus is clear, the presence of *ceramica a vetrina pesante* (for example at Mazzano Romano), indicates occupation sometime between the fifth and the seventh centuries, a period in which the frontier could have been strengthened by a zone of strategic villages as Brown proposes.[1137]

Ponte Nepesino was ideal for their purposes. It lies just to six kilometres to the south-east of Nepi, at the end of a promontory and, although the site is not mentioned in the documents prior to the thirteenth century, it is in a strong position overlooking the Via Amerina, the principal route from Rome to Nepi and particularly important in the early middle ages given that it was indispensable for communications between Rome and Nepi.

The excavations at Ponte Nepesino identified six settlement phases. The earliest consisted of wooden structures with a possible walled circuit, *ceramica a vetrina pesante* was recovered and, on the basis of David Whitehouse's revised dating, a sixth to seventh century date was suggested. The second phase was again composed of wooden structures, but which now occupied a large part of the promontory, while the third included some stone structures. Phases 2 and 3 were dated on the presence of ceramica a vetrina sparse or sparse glazed ware, then attributed as in use between the first half of the ninth and the eleventh to twelfth centuries.[1138] Therefore the evidence seemed to support Potter and Whitehouse's hypothesis that Ponte Nepesino was occupied not only prior to its first mention in the sources, but as early as the sixth to seventh centuries and that, following their interpretation of the model proposed by Brown, it may have been one of a series of strategic villages or hamlets established in the area of the frontier during the first stages of the Roman-Lombard conflict.

It is now clear, however, that this was based on the incorrect revised dating of *ceramica a vetrina pesante*. Furthermore the radiocarbon dates from Ponte Nepesino indicated that occupation was unlikely to have begun before the ninth century. This is supported by our new study of the material, which confirms that the earliest ceramics are of the late eighth to early ninth centuries. In a later article Tom Brown discussed Potter and Whitehouse's conclusions in detail, noting the more recent and correct dating of the ceramics. More importantly he also noted that their application of his 'model' to the South Etruria data was mistaken, specifying that although the Ager Faliscus saw much devastation in the 580s and 590s 'it did not properly form a 'frontier zone'' and the Ager Veientanus would have equally been affected (see section 6.1). The period of greatest disturbance in the Ager Faliscus would have been in the early eighth century with the renewed Lombard offensives on the Duchy of Rome under king Liutprand and it is in this period, he concludes, that Ponte Nepesino, given the date of its foundation and its position may well have had the role of a 'strategic hamlet' (see Chapter 7).[1139]

The argument for a possible sixth to seventh century phase at Ponte Nepesino has been re-proposed more recently, although for different reasons, by Riccardo Francovich and Richard Hodges to support their (Tuscan) model of early village formation, using the site of Casale San Donato in the Sabina Tiberina, to which we now turn.[1140]

6.2.2 The Sabina and the case of Casale San Donato

As we have said, Pierre Toubert's model which saw the appearance of *incastellamento* in Lazio in the tenth century was based primarily on the documentary evidence for the Sabina. Until relatively recently archaeological work was unable to confirm or disprove Toubert's hypothesis. Maria Pia Muzzioli's Cures Sabini Survey, for example, failed to identify pottery and settlement of the late sixth to seventh centuries. In fact, it identified very few settlements after the

[1135] For the arguments for the redating of *ceramica a vetrina pesante*, see Whitehouse 1981.
[1136] Brown 1978: 329–330.
[1137] Potter and Whitehouse 1984: 67.
[1138] It is now established that production of sparse glazed ware, a later development of *ceramica a vetrina pesante*, began in the late tenth to early eleventh centuries a continued, undergoing a series of well-dated transformations, into the early thirteenth century.
[1139] See Brown and Christie 1989: 396–99, for a clear explanation of the reasons and for a discussion of the effects of the Lombard-Byzantine frontiers in Italy on settlement.
[1140] Francovich and Hodges 2003.

third century, not surprisingly given that at the time archaeologists were totally dependent on fine-wares for the dating of sites.[1141] Similarly the original study of the material from the Farfa Survey directed by John Moreland in the 1980s produced very little evidence for the sixth to seventh centuries.

This situation was, however, resolved by a further study of the Farfa material, which succeeded in identifying a range of coarse- and domestic-ware pottery types of this period. Although these types have similarities with the pottery circulating in Rome and South Etruria, they represent a new and different ceramic tradition specific to much of the Sabina Tiberina and to the Sabina Reatina (see section on Rome, the Tiber valley and the Lombards).[1142] The substantial number of settlements identified by this pottery has provided a new contribution to the debate. In John Moreland's words, the restudy of the material from the Farfa Survey, followed by the excavations of Casale San Donato, revealed a 'more nuanced picture' than that described by Toubert.[1143]

The Farfa Survey focused on a broad strip of land along the river Farfa, from the area around the abbey of Farfa itself down to the Tiber. In this area, as we have seen, from the fifth to sixth centuries there appears to have been a shift in settlement away from the Tiber and towards the area of the abbey. This trend was even more pronounced in the late sixth to seventh centuries. Furthermore, a number of new sites were identified, now located on higher land, which in some cases later became *castelli*. One of these sites, Casale San Donato was excavated, and it is now an emblematic example of a precocious move to hilltop settlement.

Casale San Donato lies on a small rise or knoll, just to the north of the abbey of Farfa. The excavations and the documentary evidence for the settlement have been discussed amply by John Moreland.[1144] The importance of Casale San Donato is that it can be related to a settlement mentioned in the texts of the archives of the abbey of Farfa. The texts tell us that in 768 a Lombard widow, Taneldis, donated the *fundus Cicilianus* to the monastery, and a document of 817 records the *fundum Cicilianum in quo est aecclesia sancti Donati*. By the mid-eighth century it is likely that the monastery already held significant possessions in this part of the Sabina, including the area within which the site of San Donato is situated. Two texts of 746 record that Lupus, duke of Spoleto ceded to Farfa first a part and then the whole of the *gualdus* of San Giacinto. These texts clearly link this *gualdus* with the place called Agellum, while the 817 document makes a definite connection between San Donato and *Agellum*: *Fundum Agellum Fundum Ciclianum in quo est aecclesia sancti donate*. Finally, in a document of 1046 it is referred to as a *castellum* (*castello Sancti Donati*).

Survey and subsequent excavation of the site revealed the following picture. Casale San Donato was a new settlement of the late sixth to seventh centuries, pre-dating its mention in the documents. This initial phase consisted of wooden buildings. A number of pits were associated with this phase, containing ceramics and animal bones, but also rare fragments of soapstone (probably from northern Italy) and some glass vessels. Apart from some reused architectural pieces, Roman material was absent, a fact confirmed by the ceramics.[1145] This was followed by a second major phase in which the buildings were probably constructed in stone: cutting through the wooden structures was a large stone wall, to the south of which two kilns were found possibly for the manufacture of bricks and tiles. John Moreland has convincingly argued that this phase may be related to Farfa's acquisition of the site in AD 768, and that the wall formed a terrace on which a series of buildings were constructed, including the church referred to in the documents in 817. The excavations failed to identify securely datable contexts of the late eighth to ninth centuries. However, pottery types of this date have not been as yet identified in the Sabina, apart from a few examples of wares such as *ceramica a vetrina pesante* mainly from high-status sites (see section 7.2). Therefore, here we appear to have a new foundation of the late sixth to seventh centuries, with continuity through until the eleventh century, and a transition from farm, to church and settlement, and finally to *castello*.

To conclude, there is no doubt that there was an early move to hilltop sites in the area of the Farfa Valley. However, Riccardo Francovich and Richard Hodges interpreted San Donato as a proto-village in wood that underwent a series of transformations along the lines of the Tuscan examples to become a *castrum*,[1146] an interpretation which they have used, as for Ponte Nepesino, to support a general model of a precocious move to village formation in this period for the whole of central southern Italy.[1147] John Moreland, however,

[1141] Muzzioli 1980.
[1142] Patterson and Roberts 1998.
[1143] Moreland 1987: 417.
[1144] Neither the Farfa Survey nor the excavations of Casale San Donato are fully published. However, a number of important articles synthesize the preliminary results: Moreland 1986; 1987; 1993; Moreland *et al.* 1993; Moreland 2005; 2008; 2010. My thanks to John Moreland for his permission to use the unpublished data from the Farfa Survey.
[1145] *Contra* Francovich and Hodges 2003: 65 there were not 'fourteen types of pottery some known from coin deposits found in the excavations of the Crypta Balbi', which according to the authors illustrated the scale and extent of production, consumption and distribution. The presence of imported soapstone is, however, interesting.
[1146] Francovich and Hodges 2003: 63–8.
[1147] Cirelli and Fentress 2012 have also disputed Francovich and Hodge's extension of their model to Cosa on the coast of southern Etruria.

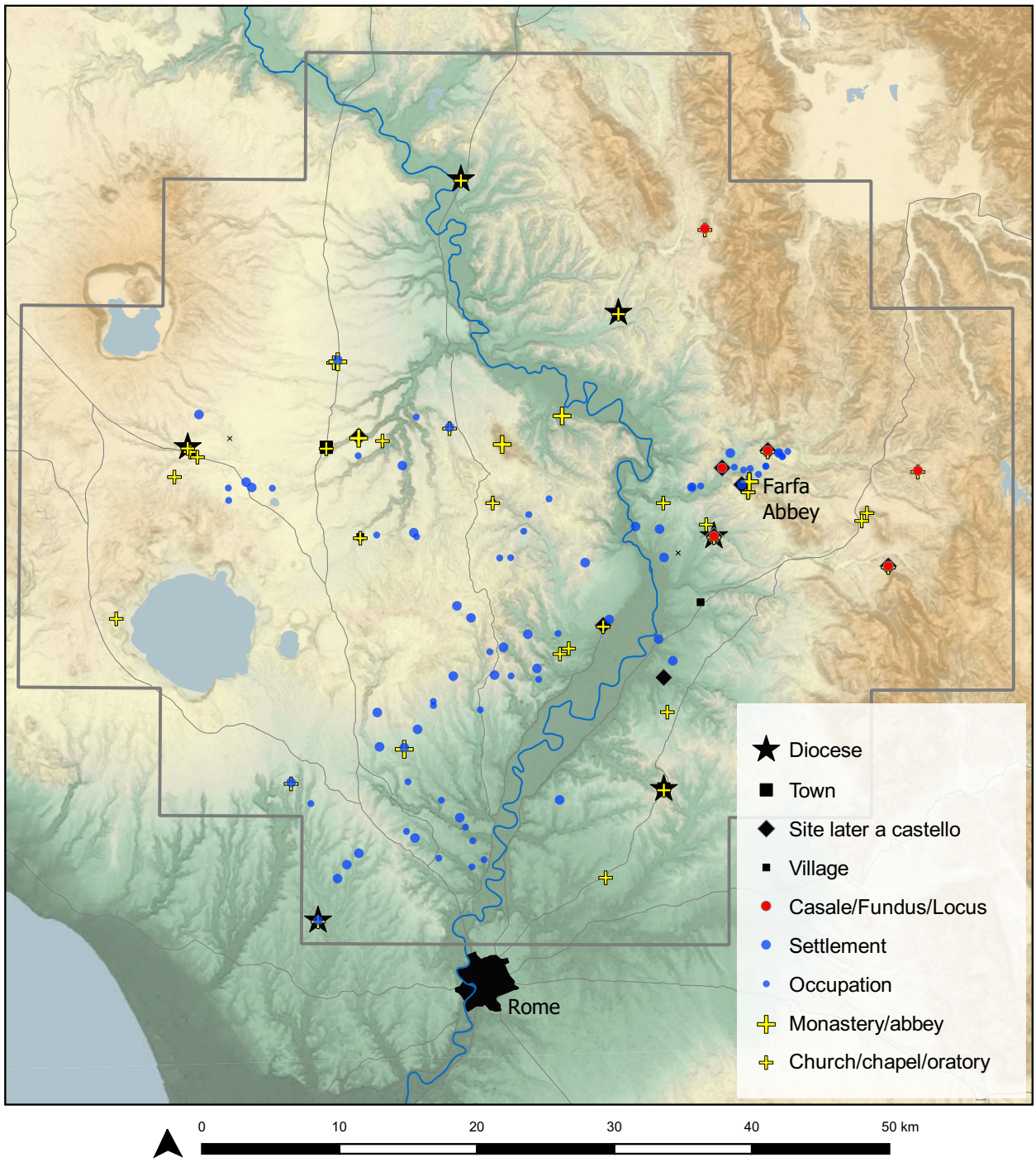


Figure 6.1. Tiber Valley Project settlement sites in the early medieval 1 period (AD 550–700).

has interpreted the site as a farm; and Etienne Hubert strongly disagrees that the site was a village, while Chris Wickham has interpreted the site as an early medieval version of a Roman villa.[1148] I follow the latter arguments: one only has to visit the site to realize that the dimensions are too small and that it cannot possibly have been a village in any sense of the term. Furthermore, the pattern that emerges from the Farfa Survey does not seem to be typical of the whole of the Sabina, as discussed later.

Clearly the processes behind the move to concentrated hilltop settlements and eventually *incastellamento* cannot be explained by one overriding model. As Chris Wickham pointed out in his study of *incastellamento* in central Italy, any settlement shift is a complex and variegated process, involving a variety of factors, as is clearly demonstrated by the analysis of the data from

[1148] Hubert 2000a: 589; Wickham 2005: 483.

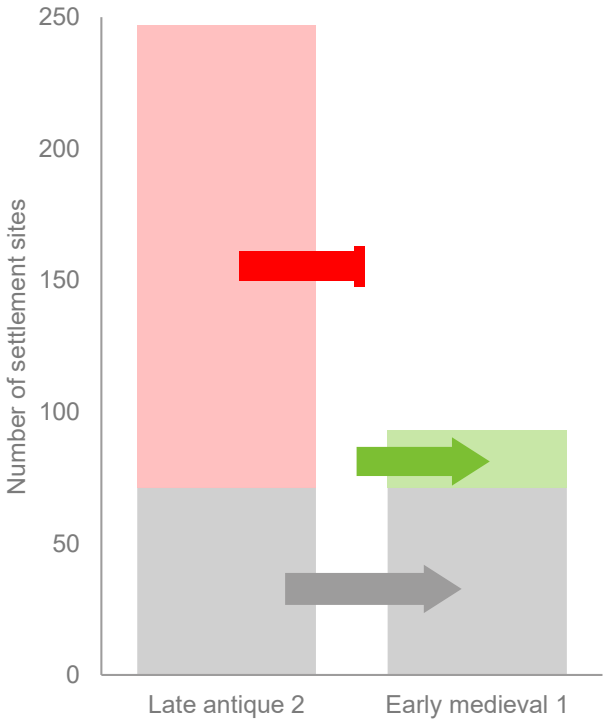


Figure 6.2. Numbers of settlement sites abandoned (pink), continuing (grey) and newly founded (green) at the transition from the late antique 2 to the early medieval 1 period.

the middle Tiber valley.[1149] This is discussed in more detail below and in Chapter 7.

6.3 Rural transformations

When we look at the situation in the countryside across the study area, by late sixth- to seventh-century settlements, there was a significant drop of 63 per cent in the number of settlements from the preceding period. A similar pattern has emerged from surveys carried out in geographically and politically different areas elsewhere in Italy.[1150] There are, however, variations within the study area, from a decrease of 83 per cent around Sutrium and 73 per cent in the Ager Veientanus, to 68 and 43 per cent around Eretum and Farfa respectively (Figure 6.1). Once again, activity at villa sites demonstrates stronger continuity than farm sites (Figure 6.2).

Finally, there are now distinct differences between the rural settlement patterns on the west bank and in the southern area of the Sabina Tiberina, which continued to be mainly in Roman Byzantine hands, and the area of Farfa, further to the north under Lombard control, a difference that is also seen in the local ceramic productions. Let us look at this in more detail.

6.3.1 South Etruria

Although the fall in settlement numbers varies across the area, a common factor seems to have been the beginnings of a shift in settlement away from the principal Roman roads, especially evident on the tract of the Via Flaminia closest to Rome and along the Via Tiberina.

Throughout the area, the majority of the settlement sites of this date demonstrate continuous occupation from the imperial period; in other words, the classical system of open settlement appears to have continued in some form, and newly founded sites represent just 21 per cent of the total. In the area of Sutri, no new foundations have been recorded, and in the other South Etruria Survey areas new sites of this period were limited to just a handful, and often had a religious function. As noted earlier, the trend noted from the third to fourth centuries is now increasingly evident; the overwhelming majority of the sites that continued were the imperial-period villas. However, the scarce amount of material suggests that occupation in the late sixth to seventh centuries was both limited and modest (see section 5.3.4).

The Survey identified occasional examples of villas that might possibly have been reoccupied in this period: for example, one in the Ager Veientanus (TVP-ID 00736) has produced evidence for activity through to the second to third centuries and then a single sherd dated to 500–600 (and is therefore excluded from the figures above). A villa in the area of Eretum at Casacotta (TVP-ID 02309), can be more confidently assigned to this period with a sherd dated to 575–625, suggesting renewed activity after a gap from the mid-fourth centuries, and then again some frequentation in the late sixth to early seventh centuries. In this context, the villa of Selvicciola near Viterbo, just outside our study area, is interesting. Excavations showed that the villa developed on the site of an Etruscan farm and reached its maximum expansion in the early imperial period. At some point during the second century or first half of the third century the villa appears to have been abandoned, however between the end of the sixth and the seventh centuries, a settlement of modest dimensions with wooden structures was established on the ruins of the villa, contemporaneous with the creation of a large necropolis, and around the seventh century, a cemetery church was built.[1151]

In general, the few new settlements of this period have a religious role. The only definitely new settlement with no religious function is a site (TVP-ID 00720) in the Ager Veientanus, near Via di Sacrofano. Wickham suggested that this settlement may have been linked to the area of the *domusculta* of Capracorum,[1152] but the

[1149] Wickham 1985: 53–94.
[1150] For a synthesis of the evidence, see, for example: Delogu 2010: 57.
[1151] Gazzetti 1995.
[1152] Wickham 1978: 167–8.

new study of the material indicates that this was a new settlement of the seventh to eighth centuries, after which any frequentation seems to have ceased.

In South Etruria, the Lombard invasions mainly affected the areas of Sutri and Nepi. Both centres played a major role as strongholds in the conflicts. A rich Lombard tomb group which has been identified as coming from Sutri is a further affirmation of the Lombard presence.[1153] As we have seen, the Ager Faliscus, cannot properly be defined as a frontier zone in this period.

6.3.2 The southern Sabina Tiberina: Eretum and Sant'Antimo

The southern Sabina Tiberina was gravely affected by the Lombard invasions led by Ariulf, duke of Spoleto, in the 590s. In 593 Gregory the Great was forced to abolish the diocese of Sant'Antimo and incorporate it with that of Nomentum due to the devastation and depopulation of the territory. One presumes this would have led to the decline of the sanctuary.

The Lombards failed to establish control over this area which, as noted earlier, was closely connected to Rome by the Via Salaria and the Tiber and would have been of great importance to the city strategically and for the supply of agricultural produce from the Sabina. In the late fourteenth century, the Statutes of Rome refer to the involvement of the settlement at Sant'Antimo in sheep transhumance and the collection of cereals for the Rome market (see section 5.3.8).

The results of the Eretum Survey, as elsewhere, show a great reduction in the number of sites, though the settlement pattern remains similar to that of South Etruria, with no new foundations and continuing sites, again, predominantly the villas. There is one noticeable difference between this area and South Etruria: the continued existence of settlement close to the main roads, probably related to the presence of the martyrial cult centres along these routes (see section 6.4).

6.3.3 The central Sabina Tiberina: the Farfa Survey

By the late sixth century this area, to the north of Cures, although very close to the Lombard-Byzantine frontier, was under Lombard control. For the central Sabina Tiberina, we are almost entirely dependent on the evidence from the Farfa Survey where a very different picture emerges. From the fifth century many settlements were abandoned and new ones founded or reoccupied after a period of abandonment. A shift in settlement was also noted; both continuing and new settlements began to be concentrated away from the Tiber toward the Upper Farfa Valley and the area of the abbey of Farfa itself (compare Figures 5.3 and 6.1, above). This contrasts markedly with the situation in the mid-imperial period and the third to fourth centuries when settlement was distributed fairly evenly along the river valley. In the late sixth to seventh centuries these trends become more marked. Furthermore, there appears to have been a move to hilltop sites, some of which are later documented as *castra* or *castelli*. In other words, in this area, during the late sixth to seventh centuries, we seem to see the first move towards concentrated hilltop settlements.

Some sites appear to have been reoccupied sometime in the sixth century. Both these and the sites reoccupied in the fifth century are often topographically similar to the new foundations that later became *castelli*, situated on a slight rise or, in the words of Moreland an 'eminence'. Few of the reoccupied sites appear to have continued into the eighth century. This may be due to our failure to identify eighth and ninth century pottery types, but there is no evidence either of occupation from the tenth century onwards, for which our understanding of the ceramic typologies is secure. [1154]

In contrast, all three of the new late sixth- to seventh-century settlements with no previous evidence for occupation (TVP-ID 10805, 15126, 12194) are later documented as *castelli* or *castra.* Casale San Donato has been discussed already, but at least two other sites identified by the Farfa Survey probably underwent a similar development. Although no recognizable eighth and ninth century pottery was recovered, both appear in the Farfa documents from the eighth and tenth centuries respectively. In other words, as at Casale San Donato, the combination of the archaeological and documentary evidence suggests the continuity of these sites from around the mid-sixth century into the early middle ages and beyond. In both cases the topographical situation is similar to that of other early medieval sites in the area.

First, let us take the site in the locality of Granica (TVP-ID 10805), situated on a scarped hilltop, overlooking the river Farfa. Moreland has associated this site with the *castellum* known in the early middle ages as Bezanum, first cited in the mid-eighth century (AD 750–76) when there are references to the *curticela de Bezano* (*RF* n. 28, v.2, p. 39 and n. 93, v. 2, p. 85). The monastery acquired the site from Lupo the Duke of Spoleto (*CF*, I, 150, 21–

[1153] Ciampoltrini 1993; Potter and King 1997: 425, fig. 255. Potter noted that the richness of the objects, several of which are in gold, is in contrast to the relatively poor material culture characteristic of rural settlements in this period. The material from the tomb is on display at the British Museum.

[1154] See Part 3 for the problems of identifying late eighth and ninth century pottery, and therefore settlement, in much of the Sabina area.

4, *RF*, n. 28). In 954 Farfa built a *castellum* 'aux lieu-dit Bezanum'.[1155]

Second, a site (TVP-ID 15126), in the locality of Casa Traversa, situated on a hilltop and enclosed by a perimeter wall; the hilltop itself is terraced and cut into by what are probably house platforms. At the south-east end of the wall a substantial structure is interpreted as a tower. Moreland has suggested that this site is that of the *castellum* of Postmontem, one of the most important of Farfa's *castra* in the medieval period. It first appeared in the documents in 994 (*LL* N.41. p.22), but was certainly founded earlier, by at least AD 970. Wickham also recognized the importance of Post Montem, noting that it was one of Farfa's *castra* in 1090 and closely linked to the political and juridical structure of the Abbey.[1156] If the site really is Postmontem, the ceramics demonstrate that it was first occupied during the late sixth to seventh centuries and therefore prior to the first mention in the documents. The problem is that we do not know whether occupation continued through the eighth to ninth centuries, again due to the problem of the ceramic evidence; no eighth- to ninth-century pottery was recovered or at least identified. However, there is substantial archaeological evidence for tenth- to thirteenth-century occupation, which corresponds with the documents that tells us that by 1159 Postmontem had already failed, after which it was reduced to the status of a *casale*.

There is one noticeable exception to this pattern: a large villa (TVP-ID 10720) overlooking the Tiber with secure evidence for continuous occupation from the third century BC into second half of the sixth century and perhaps the seventh century AD. This was one of the most impressive sites in the area of the Farfa Survey. Several examples of late African red slip ware were recovered, including one Hayes 91c (AD 530 to 600+); probable burials were also identified within the Roman structures. It was clearly a site of some importance until at least the later sixth century, possibly related to its position overlooking the Tiber.

In synthesis, rural settlement numbers throughout the middle Tiber valley show another substantial fall in this period, and the 'depopulation' of certain rural areas as a direct result of the Lombard invasions is mentioned by contemporaneous written sources. There are, however, differences in terms of settlement patterns between South Etruria and the southern Sabina Tiberina, the area of the Eretum Survey, and the area of the Farfa Survey in the central Sabina. In the former areas the late antique settlement pattern persisted, despite evident signs of decline, into sometime in the seventh century. However, it is important to stress that as regards those settlements identified purely on the basis of the ceramics although we can be relatively certain that the great majority were occupied into the early seventh century, no ceramic forms were recovered by the South Etruria Survey which can be firmly dated to the second half of the century. Only forms with relative broad date ranges (e.g. AD 500–700, AD 600–700, AD 600–800) attest possible occupation in this period. In this context the weighted average of the pottery from the South Etruria Survey is significant (Figure 5.2). The quantities of pottery drop again from around the mid-sixth century, corresponding with the fall in settlement numbers shown in the Tiber valley settlement graphs. However, whereas the settlement numbers then appear to remain broadly stable until the beginning of the eighth century, the quantity of ceramics falls again around the beginning of the seventh century with yet further decline around the mid-seventh century.[1157] The pattern that emerges from the weighted average of the pottery (Figure 5.2) although not necessarily signifying a corresponding decline in population and rural settlement numbers certainly indicates that there were moments of change, especially noticeable in the second half of the seventh century. The situation regarding the ceramics is very similar for the beginning of the eighth century, for which our only possible evidence consists of broadly dated forms and therefore the late seventh to early eighth centuries remain, archaeologically, a relatively dark area (see Chapter 7).

A genuine change in the pattern of rural settlement, attested from the second half of the sixth century, is only apparent in the area covered by the Farfa Survey, an area where the Lombards succeeded in establishing their control. Nevertheless, in other parts of the Lombard duchy of Spoleto where archaeological work has been carried out, around Rieti and elsewhere in the central Apennines, there is more continuity of the late antique settlement pattern.[1158] As Tersilio Leggio has suggested on the basis of the documentary sources, the shift in settlement in the area of Farfa is probably related to its position very close to the Roman-Byzantine and Lombard frontier, presumably an area of maximum tension (see section 6.7).[1159]

6.4 The new foci of settlement

The general trends which characterized the later phases of the Roman towns are fairly clear and have already been discussed; the shift to sites in more defensible

[1155] Toubert 1973: 349, n. 1.
[1156] Wickham 1985: 64.
[1157] For a discussion of the limitations of the Tiber Valley settlement graphs which in some cases, due in part, to the chronological phasing chosen, have simplified the evidence, and a comparison with the weighted average of the pottery see section 5.2 in particular regarding developments during the late fourth and early fifth centuries.
[1158] Patterson and Roberts 1998.
[1159] Leggio 1989.

positions (Ocriculum, Falerii Novi, Lucus Feroniae), the survival of those (Nepi and Sutri) that were already sited in such locations, and centres that continued but that can no longer be defined in any sense as towns (Forum Clodii/San Liberato, Forum Novum and probably Nomentum). In most cases, given the lack of systematic excavation, we lack the detailed picture; Forum Novum is an exception. Although the decline of Roman towns was a gradual process that began in late antiquity and accelerated from the sixth century, the Lombard invasions seem to have represented the final blow; this period clearly marked the definitive end of a number of centres which had continued to survive in some fashion into late antiquity, despite the establishment of bishop's seats.[1160]

In some cases this appears to have been a direct result of the invasions, as at the river port and town of Ocriculum. Although the town was still active in the mid-sixth century, the last mention of a bishop is in AD 595 and the centre seems to have been abandoned definitively in the seventh century when the inhabitants moved to a more defensible location, the hilltop overlooking the Roman town.[1161] The same is probably true of Falerii Novi, whose inhabitants again moved to a more defensible location, Civita Castellana, the site of the ancient Faliscan centre of Falerii Veteres. When this move took place is not clear. A cathedral church is first mentioned in an inscription of AD 727 reused in the walls of the present-day church at Civita Castellana, although the first secure attestation of the bishopric at Civita Castellana is in the early eleventh century. Intensive field survey of Falerii Novi, however, did not identify any ceramics dating to after the sixth century[1162] which corresponds with the period of the Lombard invasions of this area.

Lucus Feroniae and Capena, along with Veii, are two relatively rare cases of Roman towns where bishoprics were not established, an indication of their lack of importance at a relatively early date. At both centres churches were founded suggesting the presence of a Christian community. This was certainly the case at Lucus Feroniae where limited occupation of the centre continued into the late eighth and early ninth centuries.[1163] Nevertheless the site appears to have been already largely abandoned prior to this date, possibly in the seventh or eighth centuries when Gianfranco Gazzetti suggests that the inhabitants probably moved to the site of *Castellum Scoranum*, here excavations revealed a settlement of modest dimensions which seems to have replaced Lucus Feroniae from the seventh century.[1164] Although Capena deserves a mention, the evidence for continued occupation of the site into this period is by no means secure. By the second to third centuries the occupied area of the town was already greatly reduced, evidence for any continuity of settlement is largely hypothetical based on the presence of a church of possible early medieval date built on a Roman structure which has led Gianfranco Gazzetti to suggest the presence of a Christian community which may have occupied the site throughout late antiquity and into the early middle ages.[1165]

The small Roman *municipium* and bishopric of Forum Clodii (San Liberato) has already been discussed (see section 5.3.7). The recent re-study of the ceramics from a small excavation behind the apse of the martyrial cult church of San Liberato has now confirmed that activity in this area of the centre continued into the end of the sixth or early seventh centuries. This in part fills the gap between the last mention of the bishopric in AD 501 and the date of the first construction phase of the church in the late eighth to early ninth centuries and strongly argues for continuity between the Roman and early medieval phases, with occupation now focusing on the area around the church. Although Forum Clodii can clearly not be defined as a town in this period, the presence of African red slip of the end of the sixth to early seventh century (one fragment of Hayes form 104b dated AD 570–625) implies that it was a high-status site.[1166] Its importance is probably due to its role as cult centre and would seem to suggest the existence of a martyrial cult building prior to the existing late eighth/early ninth century church.

Following the Lombard invasions, Forum Novum/Vescovio was included in the territory of the duchy of Spoleto, but it retained its status as the seat of a bishopric until the end of the fifteenth century. By the fourth century, occupation at the centre seems to have been restricted to the area around the late eighth to early ninth century cathedral church. Excavations behind the apse of the church identified late fourth to early fifth-century structures, probably relating to the bishop's palace (see section 5.3.7), followed by a new phase of building activity in the late sixth to early seventh centuries. The rubbish tips associated with these structures demonstrate that a substantial range of imported wares arrived at the centre in this period comparable with that from other major towns

[1160] For a fuller discussion of the history of the towns in this area, see section 5.3.7. On the effect of the Lombard invasions on Roman towns in this area, see also Sennis 1996: 38.

[1161] Hay, Keay and Millett 2013: 151

[1162] Keay *et al.* 2000: 73.

[1163] Late eighth- and ninth-century *ceramica a vetrina pesante* was recovered from Lucus Feronaie and the nearby villa of the Volusii; Romei 1992a, 1992b.

[1164] Gazzetti 1992: 11, 22–37.

[1165] Gazzetti 1992: 14.

[1166] African red slip ware of the late sixth to early seventh centuries has been recovered from only a handful of South Etruria Survey sites, while other examples are known from excavations of important ecclesiastical centres, including the cult centre of Santa Rufina (see section on Rome, the Tiber Valley and the Lombards).

and coastal areas, including African red slip ware (form Hayes 104b, dated AD 570–625) and East Mediterranean and African amphorae, as well as one example of a Sicilian-type lamp.[1167] The buildings and the associated material are almost certainly linked to the bishop's palace and, as at Forum Clodii, there is no evidence for any form of urban activity (see section 5.3.7).[1168] Like the Abbey of Farfa, the presence of imported goods is interesting, given that both centres lay in the area under Lombard control.

Developments at Nomentum, a bishop's seat from the early fifth century, were probably similar to Forum Novum, though it must have maintained a certain importance given that at the end of the sixth century it absorbed the now extinct diocese of Sant'Antimo. The only later reference to the centre in this period is a reference in the *Anonimo Ravennate* which cites the existence of a *Civitas Nomentum* sometime between the seventh and eighth centuries.[1169]

The towns of Nepi and Sutri, despite being major players in the Lombard Byzantine conflict, continued and are the very few examples in our area of what we have termed successful towns. Although, as noted earlier, they were probably no longer towns in an economic sense.[1170]

The cult centres seem to have maintained their importance throughout this period, in particular those associated with the tombs of martyrs. As early as the fourth century, but especially from the fifth, the martyrial sanctuaries had gradually begun to replace Roman road stations and towns as a focus for rural settlement, in some cases resulting in a shift in existing settlements (see section 5.3). Some were still being visited by pilgrims into the seventh century, such as that of Saints Alexander, Evenzio and Teodulo on the Via Nomentana and the shrine of Santa Rufina-Silva Candida on the Via Cornelia, respectively in the mid- and the late seventh century, as was the sanctuary of the martyrs Mario, Marta, Audifax and Abacuc in the locality of Casale di Boccea a few kilometres beyond Santa Rufina on the Via Cornelia[1171] As Peter Llewellyn notes, the survival of Santa Rufina during the sixth and seventh centuries was probably was due more to its status as a shrine than as the seat of a bishopric.[1172]

This also seems to be the case with the martyrial cult centre of Forum Clodii-San Liberato, which again had a long history, despite losing its title as a bishop's seat at the end of the fifth century, and the sanctuary and former cathedral church of Sant'Antimo, on the Via Salaria.

The monasteries now appear as major new foci of settlement. In South Etruria, the foundation of the monasteries of San Silvestro on Monte Soratte in the Ager Capenas and Sant'Elia in the Ager Faliscus date to this period. Both monasteries are mentioned by Gregory the Great (590–604), although San Silvestro is not mentioned by name until the early years of the eighth century and Gregory simply mentions the existence of a monastery with oratory on the summit of Monte Soratte.[1173]

The most important, and one which was to play a crucial role in later events, is the Abbey of Farfa. Nevertheless, the origins of Farfa are obscure. In the middle ages, the monks attributed the foundation to a bishop, Laurence the Syrian, some time before the Lombard invasions. As David Whitehouse explains, there may be some truth in this tradition.[1174] Excavations indicate occupation in, or on the site of, an earlier building in the last decades before the Lombard invasions of the area, after which the site appears to have been abandoned. According to the *Chronicon Farfense*, Farfa was then re-founded around AD 680 by Thomas, a pilgrim from Maurienne in Savoy. Soon after it came under the protection of the Lombard duke of Spoleto, an arrangement recognized by the Pope in AD 705.[1175]

6.5 People in the landscape

Regarding numbers of people, the fact that the catacombs and cemeteries had gone out of use limits the evidence. There is increasing evidence for burials within the villa structures, a trend that had begun in the fifth century. The sparse funerary evidence does correspond with the marked reduction in the number of settlements and suggests that there was a real fall in population.

The material culture was also noticeably poorer. As Paul Arthur notes, 'despite the increasing amount of evidence for many ancient Roman villas after the early sixth century, the remains are usually so slight as to suggest that it relates to single families or small

[1167] This would seem to imply that the centre was not greatly affected by the Lombard invasions, as has been suggested.
[1168] Gaffney, Patterson and Roberts 2001; 2003; 2004a, 2004b; Patterson, Gaffney and Roberts 2009.
[1169] Fiocchi Nicolai 1997; 2004: 112–13.
[1170] Fiocchi Nicolai 1980 suggests a fifth-century origin for the cathedral of Nepi.
[1171] All three cult centres are mentioned in pilgrims' guides for this period. For Saint Alexander, see Fiocchi Nicolai 2004: 117; for Santa Rufina and the sanctuary at Casale di Boccea see Fiocchi Nicolai 1988: 57–72; for Santa Rufina, see also the important discussion in Llewellyn 1991: 214.
[1172] After the mid sixth-century documentary references to the Santa Rufina are limited to occasional mentions of a simple name and indicate the existence of a shrine, which is still being visited by pilgrims in the seventh century, but there is no direct attestation of a bishops' seat until late eighth century; Llewellyn 1991: 216.
[1173] Fiocchi Nicolai 1988: 238–240.
[1174] Whitehouse 1984: 245.
[1175] Whitehouse 1984: 245. Whitehouse cites the version of the *Chronicon* edited by Balzani (1903) vol. I, pp. 3–16 and 135–147.

groups eking out a living on the land and producing limited surplus for exchange. Many of these sites had probably become farms or hamlets'.[1176] Very few, if any, buildings seem to have been constructed *ex novo*, and in general the settlements of this period reused earlier structures or their building materials, or built wooden constructions as, for example, the new settlement at Casale San Donato and some of the villa sites that continued to be occupied. Bryan Ward-Perkins has noted that even wooden structures can be relatively fine and comfortable buildings, and therefore their use should not necessarily be seen as an impoverishment of the material culture, but rather as a change to a different way of living, motivated by cultural reasons. However, he admits that 'post-Roman houses were, for the most part, pretty basic'.[1177] With the possible exception of ecclesiastical bodies, it is unlikely that the early medieval lay elite lived in the countryside. The degradation of rural settlements and the abandonment of the few rich residential residences, increasingly apparent from the second half of the fifth century, suggests that there was now little interest on the part of the aristocratic landowners in investing in their estates. During and in the aftermath of the Gothic Wars (535–53) the situation became even more critical, when many of the Roman aristocracy fled to Constantinople and the Lombard invasions would not have encouraged them to return. As the senatorial aristocracy disappeared after the mid-sixth century, so too there is no evidence for aristocratic intervention in the building or embellishment of Christian cult buildings.[1178]

The impression is that the rural population now had a much more modest lifestyle. Imported amphorae and fine table-wares which can be securely dated to this period are rare in the countryside. Rural pottery production centres clearly still existed in this period and continued to produce standardized vessels of a relatively high quality, albeit in a more limited range of forms, and this is true both of the products circulating in South Etruria and the new ceramic tradition which appears throughout much of the Sabina. In other words, specialist pottery production still continued and therefore a market still existed for such products.

6.6 Rome, the Tiber valley and the Lombards

6.6.1 Transport

Despite the continued arrival of imported foodstuffs to Rome, primarily as a result of directional trade, the historical and archaeological evidence demonstrates that the city relied heavily, if not primarily, on Lazio for its food supply during the sixth and seventh centuries. The central role of Rome's hinterland has often been undervalued.[1179] The major change in Rome's economy to one entirely dependent on regional and local production, certainly as regards foodstuffs, has been generally seen as occurring in the second quarter of the eighth century when the papacy lost its rich lands in Sicily (see Chapter 7). However, the documentary sources for the sixth through to the early eighth centuries, albeit limited, indicate that even prior to this event, regional production was a primary source of Rome's food supplies and that the revenues that the church received from its lands in southern Italy and Sicily largely had a subsidiary function. The clearest demonstration of this are the famines documented at Rome during the late sixth and seventh centuries, following the Lombard invasions and occupation of the Sabina (and intermittently parts of South Etruria), which also suggests that regional grain production had a more important role than previously thought (see section 6.1).[1180] The Church owned a substantial patrimony in the Sabina, and its continued attempts throughout the seventh and eighth centuries to regain these lands are a further indicator of the importance of the area for the supply of the city.

The military conflicts and the new territorial divisions must also have affected communication and transport routes to and from the city. We know little of the scale of impact of the Lombard invasions on the intensity and movement of river traffic. From the mid-sixth until the eighth century there are few, if any, references to navigation, and no references to the transport of timber, on the Tiber. This is almost certainly due, at least in part, to the scarcity of documents in general for the seventh century. When texts referring to transport on the Tiber reappear in the early eighth century and especially from the second half of the century, some of the organizational aspects have elements in common with those of late antiquity, which might imply continuity (see section 7.6).[1181]

Lombard legislation regarding river traffic, or at least that which has come down to us, refers only to local traffic in the area around Pavia,[1182] in contrast to the situation in the late Roman period, which gives the impression that the Lombard kings were not particularly interested in establishing any sort of jurisdictional control over rivers and their tributaries. The turmoil caused by the invasions and the resulting new political and institutional divisions clearly had a major effect

[1176] Arthur 2004: 116–17
[1177] Ward-Perkins 2005: 110, fig. 5.8.
[1178] Fiocchi Nicolai 2007: 121.
[1179] As a number of scholars have pointed out, for example Delogu 1993: 13; Panella 1993; Saguì 1998.
[1180] For a clear discussion of this argument see Delogu 1993: 14–18; Delogu 1994: 13.
[1181] See Leggio 2004: 298 for a useful synthesis of river and land communication routes in particular in the Sabina in this period.
[1182] My thanks to Chris Wickham for pointing this out.

on river traffic: we have seen that the major port of Ocriculum seems to have no longer functioned by this period and during the seventh century the town was abandoned. Therefore, it is highly plausible that there was a marked decrease in the volume of river traffic in this period.

On the west bank, largely under Roman-Byzantine control, the road system seems to have continued to function, although there is a tendency for the abandonment of road side settlements. There is no epigraphic or documentary evidence for investment by the State or the church, and the foci along these routes were no longer the road stations but the cult centres. Similarly, in the southern Sabina Tiberina, to the south of Cures, which also remained in Roman Byzantine hands, the Via Nomentana continued to be viable; pilgrims were still visiting the rural cult centre of Saint Alexander at the end of the seventh century. In the rest of the Sabina Tiberina however the situation is different, here we see the degradation of the local land routes, in part due to the general situation in part to the lack of a strong institutional power capable of organizing the maintenance of the roads. The Via Salaria was partly abandoned in the area on the Roman-Byzantine frontier.[1183] In the internal area of the Sabina Reatina the presence of the powerful *gastaldato* of Rieti was able to guarantee a greater continuity.[1184]

The implication is that the Byzantine-Lombard division was not only a political and military one, but also had significant economic implications. This clearly emerges from the ceramic evidence, the variations in the distribution of imported goods arriving from the Rome market and, in particular, in the marked change in local ceramic productions.

6.6.2 Economic activity and pottery evidence

As regards the products and produce which arrived in Rome from the remaining territories under its control we lack archaeological evidence. The latest references to state tile and brick production is under Theoderic in the late fifth to early sixth centuries;[1185] after the mid-sixth century there is no reference to the transport of timbers down the Tiber. It is also true that there is very little evidence for major building works in Rome after the beginning of the seventh century. Nevertheless, one of the few mentions of the supply of wood to the city in this period are the large beams which Sergius I (687–701) brought from Calabria where the Church had substantial possessions. The transport of wood from the forests in the upper Tiber valley may now have been, if not impossible, certainly less convenient. We have already seen that the port of Ocriculum was abandoned by this period. The provision of foodstuffs must however have continued. Nevertheless, it is probable that the Church, which owned substantial lands in South Etruria, played a determining role in maintaining agricultural production in this area and ensuring a supply of goods to the capital. The mechanisms behind these processes, however, are unknown as is their nature and quantity, how they reached the city and by what means they were distributed to its inhabitants.[1186]

An analysis of the amphorae is problematic given their broad date range, but the impression is that by the sixth century imported amphorae only occasionally arrived in the territory, even in the areas covered by the South Etruria Survey, including that of the Eretum Survey on the east bank, which remained under Roman-Byzantine control (see section 5.3.10). Our evidence is scarce for the area in Lombard hands on the east bank of the Tiber, due to the lack of archaeological work. The amphorae from the Farfa Survey were not studied in detail and are not published. At Forum Novum-Vescovio African and East Mediterranean amphorae were found in sixth to seventh century contexts, alongside late African red slip ware,[1187] but given that this was a bishopric, it is a special case, and their presence cannot be taken as typical of the rest of the area.

We are better informed regarding the circulation of the more precisely dated African red slip ware vessels which accompanied these goods. In the middle Tiber valley, despite a slight fall in circulation around the mid-fifth century, there was substantial continuity into the mid-sixth century, in contrast to much of central Italy (see section 5.3.10.6). The great change in our area comes during the later sixth century: African red slip of the late sixth to seventh centuries was recovered from only eight sites on the South Etruria Survey, including examples from two sites in the area of the southern Sabina Tiberina,[1188] while other traces are known from excavations of important ecclesiastical centres, such as Santa Rufina and Forum Clodii-San Liberato. In the area of the Sabina Tiberina under Lombard control the fall

[1183] Evidence for the stretch of the Salaria from Cures to Rieti disappeared after the mid-sixth century, and the Via Salaria is mentioned again in the documentary sources only in the eighth century when, however, it appears near Farfa (Leggio 1989, 2004: 302). For discussion of the late antique and early medieval road system in the Sabina Tiberina, see also Fiocchi Nicolai 2009: 12–14.

[1184] Leggio 2004: 302.

[1185] Filippi, Gasperoni and Stanco 2008.

[1186] For a discussion of the possible mechanisms, see Delogu 2010: 234–236, where he refers primarily to grain. A clearer understanding of the relationship between Rome and its hinterland can be achieved only by excavation: unfortunately, well-stratified sixth- and seventh-century contexts are extremely scarce in the South Etruria Survey area.

[1187] The amphorae and African red slip ware from the excavations at Forum Novum-Vescovio were studied by Sergio Fontana. The publication of the excavation volume is in progress and I am grateful to Sergio Fontana for permission to use this information.

[1188] The examples, both Hayes form 104B AD 570–625, were recovered from a site on the Eretum Survey and from a site in the area around Passo Corese, identified by the Corese Survey (Di Giuseppe *et al*. 2002).

is even more marked. Late sixth to seventh centuries African red slip was found at Forum Novum-Vescovio (an example of Hayes 104B, AD 570–625) associated, as noted earlier, with African and East Mediterranean amphorae, and a Sicilian type lamp, and from the Abbey of Farfa; an African red slip dish (Hayes 104A, AD 530–580) associated with a coin of Justinian II (565–578).[1189] These were clearly sites of a certain status. From the rural settlements in the Farfa Survey area, African red slip of possible late sixth to seventh century date (Hayes 91c, 530 to 600+) was recovered from only one site, a large villa site overlooking the Tiber, mentioned earlier. To the east, in the Sabina Reatina, African red slip wares probably ceased to arrive on rural settlements after the mid-fifth century, on the evidence from the Rieti Survey, [1190] and although they continued to arrive at the Roman *municipium* of Rieti itself until the mid-sixth century, the quantities are very limited, after which supplies seem to cease, contemporary with the establishment of the Lombard *gastaldato*.[1191]

The impression is that, following the Lombard occupation of much of the Sabina, the circulation of imported wares was largely, if not entirely, restricted to high-status, ecclesiastical centres and the same may well be true of the imported amphorae and their produce. The scarce presence of amphorae and fine-wares in the territory contrasts markedly with the situation in Rome itself, and the variations in the distribution of the imported wares throughout the middle Tiber valley, suggests that the collapse of the pre-existing political and institutional system also had an effect at an economic level.

Confirmation comes from the analysis of the local ceramic productions which give an insight into the impact of the political changes on the previous economic system. On both sides of the Tiber, ceramic production continued to be of a relatively high standard, demonstrating the continued existence of specialist potters, although producing a more limited range of forms—open vessels, with the exception of the *testi*, are virtually absent presumably substituted by wooden vessels. Furthermore, in both cases domestic-wares in refined fabrics are rare and on the whole the same fabrics seem to have been used for both the latter and for cooking vessels. However, for the first time in our period the same pottery types did not circulate throughout the area of the middle Tiber. On the east bank of the Tiber, again with the exception of the southern area of the Sabina Tiberina, we see the appearance of a new ceramic tradition. Furthermore, the forms indicate changes in cooking and possibly dietary habits. This phenomenon merits a more detailed discussion.

In South Etruria and the southern Sabina Tiberina, the same areas where there is also more evidence for the continued arrival of imported wares, the coarse- and domestic-wares are still essentially of the Rome tradition. The precise dating of the late sixth- to seventh-century coarse-wares from South Etruria is problematic; again we are dealing with survey material, and therefore the coarse-wares can be dated only on the basis of parallels with excavated contexts. The study of the survey material identified very few seventh-century forms. Nevertheless, the examples identified seem to confirm that in South Etruria very similar forms to those of the urban centre continued to circulate into the seventh century, although it is impossible to quantify the material through time. As described earlier, there are some differences between the urban and rural assemblages, a trend that began in the fourth century and became more accentuated during the later fifth century, but cultural links continued to exist between Rome, South Etruria and the southern area of the Sabina Tiberina during the late sixth to seventh centuries.

The situation is very different in the central area of the Sabina Tiberina and in the Sabina Reatina where, sometime in the later sixth century, the local ceramics change markedly. A number of excavated contexts from this region confirm that these wares were produced from the late sixth to seventh centuries and, very probably, on the evidence from excavations in Spoleto, into the early eighth century.[1192] These productions, in a new range of forms, are almost all in coarse fabrics and appear to have served for both cooking and domestic purposes. Domestic ware vessels in refined fabrics are extremely rare. A characteristic element of all the assemblages is a distinctive type of decoration which when it was first identified was defined as 'combed slipped decoration'.[1193] Usually applied on or just below the rim or on the shoulder of the vessels, it consists of a horizontal band, or bands, of cream, white or yellowish slip, cut through with combed or other decorative motifs. The colour of the slip is a particularly distinctive characteristic of the decoration.

These products are found in the Sabina Tiberina on many sites identified by the Farfa Survey (production may also have taken place here, judging by a possible waster from one of the sites); from the excavations of Casale San Donato near the abbey of Farfa; further to the north, at Forum Novum/Vescovio (although here they are associated with ceramics of the Rome

[1189] Whitehouse 1984: 245.
[1190] Evidence regarding rural settlements is based on the results of the Rieti survey; Coccia and Mattingly 1992; 1995.
[1191] Alvino and Lezzi 2015: 488.
[1192] For the probable continuation of production into the early eighth century at Spoleto see Costamagna 2015: 381.
[1193] Patterson and Roberts 1998.

tradition) and a villa site near Magliano Sabina. In the Sabina Rietina they were recovered from sites identified by the Rieti Survey and from excavations at Rieti itself.[1194] On the contrary, only one example has been identified so far from the area of the South Etruria Survey; from Santa Rufina,[1195] an important pilgrimage centre. Similarly, none were recovered from the Eretum Survey in the southern Sabina Tiberina or around Cures, areas which remained in Byzantine hands. More recently, the same ceramic types with combed slipped decoration have been recognized as characteristic of this period at Spoleto itself, where it excavations suggest that production continued into the early eighth century, and from various sites in the territory, including a production centre at a *fundus* in the locality of Eggi;[1196] in the central Apennine Sabina area from the excavations of Falacrinae (Cittareale) and San Silvestro (Cascia),[1197] at Narni and Amelia;[1198] and in the inland area of the Abruzzo around L'Aquila and at Amiternum, although not on sites along the Adriatic coast where the Byzantine presence was stronger.[1199]

The range of forms is fairly limited: primarily cooking jars and jugs, with tubular or trefoil spouts, and wide jars and casseroles or *catini* with heavy rims. Another common element of the assemblages are *testi da pane* or baking covers and in particular baking dishes. The wide jars and casseroles are distinctive forms, sometimes with small horizontal handles, while most of the cooking jars and jugs have simple, tall, vertical or lightly everted rims. Another characteristic is the frequent presence of light, horizontal rilling over the exterior surface of some vessels (see Patterson and Roberts 1998).

The appearance of *testi di pane*, a sort of portable oven in the form of a large domed lid, and baking dishes suggests changes in cooking habits and possibly diet. As their name suggests, *testi da pane* were used primarily for the baking of bread and presumably cooking other foodstuffs, and are indicative of household production of bread. Although common on rural settlements in the Republican period, they more or less disappear in the imperial period, when commercial bread production and the use of ovens was the normal practice in both urban and rural areas. Their re-appearance is, therefore, significant and suggests they were for domestic use by the inhabitants of small, agrarian settlements. The late sixth to seventh century types are usually flanged vessels, similar to those of the Republican period, and often have stabbed decoration.[1200] At Rome, *testi da pane* are virtually unknown in late antique contexts, first appearing occasionally in the eighth century and becoming common only from the end of the century.[1201] The same appears to be the case in the countryside in the South Etruria Survey area (see section 7.6). *Testi da foccaccetta*, or baking dishes, are more common. The forms are diverse from the *tegami* found in Rome and South Etruria[1202] and in some cases seem to have been made by hand. They are thick-walled vessels in coarse fabrics with short, vertical or lightly everted walls and simple or beaded rims. Used for on the hearth cooking, almost identical forms were produced in eastern Liguria until the 1960s. Tiziano Mannoni described the Ligurian examples as *testi da foccacetta*, used to cook focaccia of various types (grain, corn, chestnut flour and earlier barley and farro).[1203] It is very likely that these vessels served a similar purpose.

Whether these vessels can be defined as a common ceramic tradition or simply the diffusion of a decorative style is highly debatable. Given the marked similarities between the ceramic forms associated with this decoration throughout the areas cited above, the former is possible. Although identifying parallels between ceramic forms can be risky (the small jars and jugs have, on the whole, simple forms and are typical of early medieval ceramic assemblages in many areas of Italy in this period), the wide jars and casseroles are more distinctive vessel types and are common to all the assemblages.[1204] There are some regional

[1194] My thanks to Francesca Lezzi who confirmed that vessels with this decoration were found at Rieti by excavations at Palazzo San Aluffi in late sixth- to seventh-century contexts, contrary to the information given in Alvino and Lezzi 2015: 490. Other examples were recovered by rescue excavations at Piazza San Rufo (material studied by Helen Patterson and Paul Roberts and submitted for publication).

[1195] The fragment, a rim of a wide-mouthed casserole or *catino* with combed slipped decoration, illustrated in the Santa Rufina excavations publication came from an unstratified context (Cotton, Wheeler and Whitehouse 1991: fig. 91.5).

[1196] For a synthesis of the distribution of these wares, see Patterson 2010; Diosono 2015: 358; Diosono and Patterson 2015 and relevant articles in the same volume. For a synthesis of the late sixth- to seventh-century ceramics from excavations in Spoleto and it territory, see Costamagna 2015, for those from the excavations of Casa Sapori and the Via dell'Arco di Druso and Vicolo di Volusio, again at Spoleto, see Donnini and Gasparini 2015. For other excavated contexts at Spoleto, see Costamagna, Donnini and Giorgi 2011. For the production centre in the locality of Eggi where three kilns were found, see Carbonara and Vallelonga 2015.

[1197] For the area of the Sabina Tiberina and the Sabina Reatina see Patterson 1997; Patterson and Roberts 1998; Patterson 2010: 150–51; Patterson 2015. For Villa San Silvestro see Diosono and Patterson 2014.

[1198] For Narni, see De Luca 2012: 301, n. 193.

[1199] Regarding combed slipped decoration Enrico Siena (with references) notes that it appears to be diffused throughout penuinsular Italy; Siena 2015: 641, n. 35.

[1200] The flanges, which presumably served to hold the ashes in place, are not present on medieval *testi*.

[1201] Santangeli Valenzani 2003a.

[1202] One example is recorded from Monte Gelato probably of the sixth century (Roberts 1997: 354, fig. 234, drawing number 166).

[1203] See Mannoni 1965, for an ethnoarchaeological study of the production of *testi da pane* and *testi da foccacetta* in Liguria in the 1960s.

[1204] For the Sabina Tiberina, for example, see Patterson and Roberts 1998: fig. 6: 1–4; fig. 7, 8; for the area of Spoleto and the central Apennine Sabina area, see Costamagna 2015: tav. 4: Diosono and Patterson 2015: tav. 6: 8–9; and for sites in inland Abruzzo, such as Amiternum, see Siena 2015: 641, tav. 2, 14). However, it is significant that further towards the coast in the Abruzzo in the area of Val Pescara, which remained primarily in Byzantine hands, although the

variations in the vessel forms associated with combed slipped decoration, in particular between those of the assemblages in the Sabina Tiberina and those common to the Spoleto and the central Apennines areas.[1205] The wares are not present in the Sabina Tiberina. Clearly further analysis of such regional variations is necessary.

The appearance of *testi da pane* and baking dishes in this period is common in other rural areas in this period, although not in South Etruria. We should note that although these vessels were produced at a kiln site in the territory of Spoleto, they do not seem to have been used in the centre itself where other modes of bread production continued.[1206]

The diffusion of these wares, certainly the decoration, roughly corresponds to the area under the control of the Lombard duchy of Spoleto. Furthermore, the combed slipped decoration is extremely common, and elaborate, on vessels from Spoleto itself, but less so in the Sabina Tiberina: it is present on only three per cent of the fragments from Casale San Donato.[1207] Liliana Costamagna notes that at Spoleto combed slipped decoration 'compare improvvisamente in un momento ...da collocare verosimilmente intorno alla metà del VI secolo'.[1208] Whether its appearance at Spoleto is linked to the arrival of new artisans, as Costamagna suggests as a possible hypothesis, we do not know (and probably never will), but the evidence strongly suggests that the idea for this decoration certainly came from potters working at, or in the area of, Spoleto, from where the fashion spread, predominantly throughout the territory of the Lombard duchy.

In this context the evidence from the middle Tiber valley is significant. The frontiers of the Roman-Byzantine and Lombard territories are not clearly defined. Not only did they shift through time, but they were also permeable, certainly in the case of the land frontiers. However, the frontier represented by the Tiber was, by its very nature, a different matter. In the middle Tiber valley there is a clear difference between the ceramics in use on the west bank and those which appear on the east bank in the area under the Lombard duchy of Spoleto. By this, we do not wish to suggest that these ceramic productions were linked to a specific ethnic group; any sort of 'ethnic concept' is to be avoided.[1209] However, as Paolo Delogu has argued, the new political, administrative and military frontiers must have had a substantial impact on the economy and the circulation of goods and probably also on a cultural level.[1210] The changes in the local ceramic productions, which also reflect new dietary practices and the use of diverse methods in the preparation and conservation of foods, must have been influenced, at least in part, by the arrival of the Lombards. It certainly seems that much of the Sabina Tiberina and the entire Sabina Reatina were largely isolated from the Rome market and now looked towards the Lombard *gastaldato* of Rieti and the Duchy of Spoleto.[1211]

6.6.3 Coins

At Rome, a coin-based market economy persisted: small denomination coins were still available for everyday transactions throughout the seventh century and into the early eighth (see section 6.1). However, their circulation seems to have been restricted to the city itself: after the mid-sixth century coins are extremely rare in the surrounding territory. Very few sites have yielded coins of this period: two seventh-century examples from Santa Rufina, a bishop's seat and an important pilgrimage centre, one late seventh- to early eighth-century coin from the abbey of Farfa and two late sixth-century coins from Mola di Monte Gelato. The latter example is somewhat of an anomaly, given that the coins were found in situ in a phase when the villas was almost totally abandoned.[1212] Despite the evidence for the long duration of the circulation of fourth- to fifth-century coins, the strong impression is that by the late sixth and during the seventh century small denomination coins no longer circulated in the territory around Rome and were certainly not an integral part of the rural economy.[1213] Therefore although a market economy almost certainly existed, it was not a monetary onebut probably based on barter and exchange.

6.7 Conclusions

On the west bank and in the southern Sabina Tiberina, still largely under Roman-Byzantine control, settlement trends continued as before, although with a marked accentuation of the elements that first emerged in

vessels have close typological parallels with these wares and in some cases combed decoration, the distinctive band of slip seems to be lacking (Siena, Trioano and Verrocchio 1998; Patterson 2015).

[1205] There are also some differences in the various proportions of vessel types between the ceramics from Spoleto and its territory and those from the settlements of Falacrinae and Villa San Silvestro in the central Appennines. In particular, the higher proportion of large basins and casseroles from the latter reflect the diverse needs of these rural settlements.

[1206] The publications of the material from Spoleto do not mention the presence of *testi* (Costamagna 2015; Donnini and Gasparini 2015), however they were recovered from the production centre in the locality of Eggi (Carbonara and Vallelonga 2015).

[1207] See, for example, Costamagna 2015: Tav. 3; Patterson and Roberts 1998, for example, figs 5–6.

[1208] Costamagna 2015: 381.

[1209] Gasparri 2012: 33; Siena 2015: 644, for a similar comment regarding the diffusion of these products.

[1210] Delogu 2010: 26–7, 171–2.

[1211] Leggio 1989; Patterson and Roberts 1998.

[1212] Rovelli in Patterson and Rovelli 2004; see 271 for the point that the numismatic finds from excavations are frequently not published, and often it is not stated whether coins were recovered or not.

[1213] Rovelli 2009.

the third to fourth centuries and accelerated from the late fifth century: a reduction in the number of sites and very few new settlements, while those that did continue were again primarily the imperial villas whose level of occupation was increasingly modest. Of the new foundations, it seems that most had been occupied at some point previously, frequently until the first to second centuries AD, then abandoned and reoccupied in the late sixth to seventh centuries, again there was a preference for locations where an imperial villa had previously existed. Nevertheless, in these areas the late antique settlement system appears to have persisted into at least sometime in the seventh century.

Developments in the late seventh and indeed the early eighth centuries are problematic, which is unfortunate given that this period is crucial for an understanding of the transformation from an open dispersed settlement pattern to the gradual move to hilltop sites and, eventually, the concentrated fortified settlements typical of the medieval landscape. The Tiber Valley Project settlement graph, which shows a marked drop in settlement around the mid-sixth century and another fall in the eighth century, clearly masks a more complex picture. It is impossible to say when many of the sites occupied in the late sixth to seventh centuries were abandoned; the ceramics of the seventh, certainly the late seventh, and of the early eighth century cannot be dated with precision. Again it is the pattern which emerges from the weighted average of the pottery which gives some indication as to possible developments in this period. The small drop in the quantities of ceramics around the early seventh and the very marked drop around the mid-seventh century although not necessarily reflecting a fall in population and settlement numbers in these periods, is certainly indicative of significant changes especially from around the mid-seventh century (see sections 5.2 and 6.3).

The Lombard offensives, documented principally in the 590s (see section 6.1) without doubt resulted in the abandonment of many rural settlements. Nevertheless, even in the territory of Sutri, one of the most seriously affected along with that of Nepi, some rural settlements continued until at least some time in the seventh century. Furthermore, there is no noticeable difference between the settlement pattern in the area closest to Rome, the Ager Veientanus, and the *Ager Faliscus* where military action was more intense. In particular there is no evidence to suggest a shift to more defensible locations and more concentrated settlements. On the present evidence in South Etruria the move to hilltop sites, which in some cases eventually became *castelli*, did not occur until the late eighth to early ninth centuries. A similar picture appears to emerge in the southern area of the Sabina Tiberina, around Eretum, which again suffered much devastation during the conflicts with the Lombards, but remained under Roman-Byzantine control. This area must have been strategically and commercially very important to Rome, lying along two main roads, the Via Salaria and the Via Nomentana, and directly linked to the Tiber. Although we have no evidence to confirm its importance in the early medieval period, the mention in late fourteenth century documents of the role of the village around the church of Sant'Antimo on the Via Salaria in sheep transhumance and the collection of cereals from the Sabina is significant (section 5.3.8). Throughout this period these areas, South Etruria and the southern Sabina Tiberina, were still economically and culturally linked to Rome. Imported products continued to arrive, although their circulation was limited, and the cooking- and domestic-wares are of the Rome tradition.

The great part of the Sabina Tiberina, however, was now under Lombard control, more specifically under the Lombard duchy of Spoleto and the *gastaldato* of Rieti. Archaeological work in this area is patchy, and our evidence comes mainly from the Farfa Survey, in the central Sabina Tiberina. Here the settlement pattern shows a marked change with a shift in settlement and the first evidence for the occupation of sites later documented as *castelli*. These sites, however, bear no resemblance to the proto-villages identified in areas such as those which emerged in southern Tuscany in the same period. Furthermore, the area of Farfa lay on, or very close to, the Lombard-Byzantine frontier in an area of maximum political and military friction. On the basis of the documentary evidence, Tersilio Leggio proposed a shift of discontinuity in settlement in the area of Farfa, contemporary with the Lombard invasions and occupation, an argument strongly supported by the evidence from the Farfa Survey.[1214] This pattern, however, does not seem to have been typical of other areas of the Sabina under Lombard control. Where archaeological work has been carried out, for example further inland in the more mountainous area of the Sabina Reatina in the heart of Lombard territory, there seems to have been more continuity of the Roman settlement pattern into the late sixth and seventh centuries and the same may be true of the road system. A similar pattern of continuity is seen in the central Apennines at the villas of San Silvestro (Cascia) and San Lorenzo (Cittareale).[1215]

Therefore, the arrival of the Lombards had a varied effect on pre-existing rural settlement patterns. As the ceramics demonstrate, on an economic and cultural

[1214] Leggio 1989.

[1215] For the Sabina Reatina, see for example the results of the Rieti survey in the plain of Rieti itself; Patterson and Roberts 1998. For Villa San Silvestro see Diosono and Patterson 2014; 2015; for the villa of San Lorenzo, Filippone and Kay 2009; Patterson 2009; Kay 2011.

level, the impact appears to have been more consistent. In the area of the Sabina Tiberina in Lombard hands the maintenance of the main communication routes largely ceased, also river traffic, although probably not ceasing entirely, must have seriously diminished. The impression is that the entire Roman institutional and economic system collapsed and most of the Sabina Tiberina was largely isolated from the Rome and the Rome market. These factors not only affected the circulation of imported wares, but also the production and circulation of ceramics for everyday use. From this point much of the Sabina Tiberina appears to become part of a cultural *koiné* whose focus is the Lombard duchy of Spoleto, seen most clearly in the appearance of new cooking and domestic vessel forms associated with new decorative techniques, which also implies changes in culinary and dietary habits and, possibly, agricultural practices.

The situation regarding towns is different. Throughout the middle Tiber valley, in a number of cases, the Lombard invasions seem to have marked the final demise of the Roman *municipia*. Some centres were virtually abandoned. Others such as Falerii Novi, Lucus Feroniae and Ocriculum, moved to more defensible locations, similar to those of Nepi and Sutri which survived throughout this period until the present day. Forum Novum continued as a bishopric but even prior to this period it could no longer be defined as a town, only the cathedral church and some associated structures still existed. The bishop's seat of Nomentum, also a former Roman town, probably underwent a similar development.

The most stable elements in the countryside, sites whose importance was maintained throughout this period and often into the middle ages and beyond, were the martyrial cult centres which became increasingly common from the fourth century AD. Some former Roman towns, bishoprics and ex-bishoprics, such as Forum Clodii-San Liberato and Santa Rufina-Silva Candida, very probably owed their survival to the presence of a martyrial shrine. These centres were all located along the major roads and certainly the stretches of roads leading from Rome to the sanctuaries must have continued to function.

Throughout the middle Tiber valley, independent of whether the areas were under Lombard or Roman-Byzantine control, the material culture both in terms of quantity and quality shows a marked accentuation of the trends which emerged in late antiquity. Where structural evidence for occupation has been identified, both as regards the continued occupation of the imperial villa sites and the new sites, the re-use of building materials and earlier structures, and wooden buildings, such as those of the earliest occupation phase at Casale San Donato, are all common features. The ceramic repertoires are also much more limited. Nevertheless, the ceramics in use throughout the area demonstrate that rural specialist pottery production continued. The scarcity of coins, however, indicates that, unlike in Rome, a coin-based market economy no longer existed.

Finally, despite the continued arrival of imported foodstuffs to the city, the famines documented at Rome contemporary with the Lombard offensives demonstrate that food supplies from Rome's immediate territory were essential for the feeding of the urban population. By the sixth century regional agricultural production cannot have been particularly efficient. The Gothic wars had caused much destruction in the countryside especially on the west bank of the Tiber and from the second half of the fifth century the major landowners, many of whom had fled to Constantinople, seem to have made little investment in their estates. The Lombard offensives in South Etruria and the Sabina Tiberina in the 590s must have had a final major negative effect on the already weakened state of agricultural production in this area as well as on the transport mechanisms both by land and by river. Even more serious was the total loss of much of the Sabina Tiberina as a supply source following the Lombard conquest as indicated by the repeated attempts by the papacy to regain their '*Patrimonium Sabinense*'.

Chapter 7

The middle Tiber valley in the eighth and ninth centuries AD

Helen Patterson

7.1 The Church and the Carolingians: historical and archaeological context

During the first half of the eighth century the links between Rome and the Byzantine empire weakened and the power and authority of the church grew. With the military and religious peace established in 680 (see section 6.1) the government of the Byzantine provinces was modified. A duke was instituted at Rome. This was first explicitly mentioned in the early eighth century, and was nominated by the exarch at Ravenna; the role was the military government of the city and the territory of the duchy.[1216] There is, however, little mention of the duke in the sources, suggesting that he worked alongside the pope in the administration of the city and the surrounding territory, but in a subordinate role. Historically the early eighth century was a turbulent period marked by the breaking of the political and territorial equilibrium between the Lombards and Byzantines, the violent controversy over the iconoclastic doctrine imposed by the emperor Leo III in 726, and the consequent loss of the church's rich lands in the south. The actions of the papacy were decisive in confronting these events, and the papacy played a leading role in the negotiations during the renewed Lombard conflicts of the early eighth century.[1217]

The peace agreement of 680 had ended over a century of great conflict, but it was short-lived, and broken by Liutprand (712–744), who was the first Lombard king to exercise a real political hegemony over the entire Italian political arena. Liutprand profited from the internal erosion of Byzantine Italy, whose territories—Venice, the exarchate, the southern duchies and Rome—were increasingly detached from Byzantium. From around 713 Liutprand carried out a long series of military expeditions aimed at establishing Lombard control over the Italian peninsula beginning with the southern duchies of Spoleto and Benevento.[1218] The former were traditionally independent duchies who regarded themselves more as allies of the Lombard kings than subjects. Liutprand forced them to recognize his authority and later controlled the ducal succession.[1219] He then advanced on towards the imperial possessions including the Duchy of Rome arriving as far as Sutri, just 30 km from Rome itself. Narni and Sutri, both under Byzantine control in 680, fell into Lombard hands; Narni in 721–724 and Sutri, for a brief period, in 728. This led to a dispute over Gallese, Rome's military aid to Spoleto and Liutprand's renewed offensives in 738–9 when he took Ameria, Orte, Polymartium and Blera (Sennis 1996: 36–37). In the intervening years the Lombard king also attacked the exarchate, even establishing himself for a brief period at Ravenna, in 732–5, and taking the port of Classe. [1220]

In the middle Tiber valley Liutprand's offensives in the 720s affected the Sutri-Nepi-Civita Castellana zone in particular. As we have seen (see sections 6.2 and 6.3), it was probably in this period, and not during the first wave of Lombard invasions in the late sixth century, when settlement would have been greatly disturbed in the Ager Faliscus, in particular in the area around Sutri.[1221] Presumably the renewed military actions would also have had an economic effect, impeding both the production and the supply of regional foodstuffs to Rome.

In the last decades of the seventh century, more simplified forms of urban institutional and economic organization emerged and were consolidated in the first half of the eighth century, when there are also signs of a move towards self-sufficiency in the city.[1222] This is the period that marks a major break with late antiquity, seen at all levels and in all aspects of the material culture (coins, ceramic production, construction techniques and so on). After the end of the seventh century, imported foodstuffs from Africa

[1216] As mentioned earlier, some scholars believe that the establishment of a duchy of Rome took place earlier, in 584. For discussion of the controversy over the exact date of the instititution of a *ducatus romanae urbis*, see Sennis 1996: 36.

[1217] Delogu 2010; Gasparri 2012: 76–7.

[1218] Llewellyn 1971 [1993]: 200.

[1219] Delogu 2010: 201.

[1220] For a synthetic discussion of the events in central Italy and the complex politics involved, see Llewellyn 1973; Gasparri 2012: 85–89 and Delogu 2010: 201–202).

[1221] Brown and Christie 1989: 397.

[1222] For valuable discussions of this phenomenon, see Delogu 2010, in particular chapter III which integrates the historical and archaeological evidence and Santangeli Valenzani 2003b who analyses primarily the archaeological data. Delogu sees these changes as a part of a process that began in the last decades of the seventh century and was consolidated in the early eighth; see Delogu 2010: 229, and in general on this argument see Delogu 2010: 233–57. Santangeli Valenzani 2003b views the changes as beginning in the early eighth century.

and the East Mediterranean ceased to arrive, and the situation worsened in the second quarter of the eighth century with the loss of the papal lands in Sicily and Calabria. Nevertheless, Paolo Delogu has suggested that the changes which marked Rome in the early eighth century can be interpreted as representing a new dynamism in Roman society, rather than the steady 'destructuration' of the ancient world.[1223]

Riccardo Santangeli Valenzani has synthesized the archaeological evidence for the elements that characterize the changes in urban life.[1224] The virtual disappearance of open ceramic forms such as plates and bowls, which in the seventh century represented 70 per cent of the table-wares, and by the end of the eighth century comprised only 2 per cent, must signal their substitution by wooden vessels. Even in the late sixth century, Gregory the Great mentions wooden vessels as being characteristic of rural environments.[1225] The appearance of *testi di pane*, baking covers for cooking bread and presumably other foodstuffs, is particularly significant. These vessels are not attested in any quantity until the first half of the eighth century and become common from the end of the eighth century onwards,[1226] an indicator of bread now being, at least to some extent, baked at home. They suggest the breakdown of commercial bread production with ecclesiastical institutions and, probably, the Roman elite equipped with ovens, now producing bread for their own households.

Butchery practices also seem to have changed. Although organized butchery continued, Santangeli Valenzani's comparison of the evidence of the animal bones from a late-sixth century deposit from a Roman insula near the church of San Paolo alla Regola with those of late eighth century domestic rubbish tips from the imperial fora shows a change from a highly specialized and organized system of butchery to butchery in the domestic environment.[1227] A great transformation is also seen in the building techniques and building typology of religious and civic buildings, as well as those of dwellings.[1228] From the mid-eighth century, a new building technique appears, characteristic of religious and civic buildings in the city and, from the ninth century, elite residential buildings. The same technique is also used for the structures of the papal *domuscultae* founded in the same period.

Alessia Rovelli's analysis of monetary circulation, based on the evidence from the Crypta Balbi and confirmed by other excavations in Rome, shows that during the first half of the eighth century small denomination coins, present in significant quantities in the seventh century and the beginning of the eighth, disappeared entirely. They are completely absent in the following period, therefore by the mid-eighth century a monetary economy, at least for daily transactions, seems to have ceased. From at least the eighth century and especially in the ninth, there are clear signs of a growing self-sufficiency in Rome. Santangeli Valenzani has discussed these aspects, some of which are synthesized here. Firstly, the new elite residences, the two-storey domus solare', which appear from at least the ninth century. The residents lived on the upper floor and the ground floor rooms were reserved for domestic and agricultural activities, including housing animals, as probably were the courtyards characteristic of these buildings. Secondly, to this we can add the references in the eighth and especially the ninth century to portions of land inside the city walls turned over to agriculture. Earlier such mentions are sporadic and limited to more marginal areas. The first archaeological evidence for this is in the early ninth century in the forum of Caesar. The focus seems to have been on intensive cultivation, in particular wines and fruit tree; references to grain are very rare. However, the archaeological and tenth-century documentary evidence indicate that these areas were owned primarily by the aristocracy and religious or monastic institutions, presumably producing for their own households. Cultivation within the city, therefore, seems to be limited to supply of the personal needs of certain sectors of society. It is very unlikely that it would have produced a surplus for sale on the market, and certainly would not have sufficed for the needs of the entire urban population. The foundation of the papal farming estates, the *domuscultae*, in the late eighth century, confirms this.[1229]

It is difficult to gauge the size of Rome's population in the eighth century, recent estimates for the ninth century are in the range of 20–30,000 people, a significant drop in numbers, maybe about half from the sixth/seventh centuries, but still substantial.[1230] After the end of the seventh century the foodstuffs from North Africa and the East Mediterranean, which for years had supplied the city through the *annona* system, ceased to arrive

[1223] Delogu 2010: 92–3.
[1224] Santangeli Valenzani 2003b.
[1225] Excavations of a well at San Martino Valle Caudina, near Benevento, recovered lathe-turned wooden bowls, alongside ceramic jugs with wooden stoppers, dating to the seventh century or later; Arthur 2002: 124.
[1226] The excavations at the Crypta Balbi recovered only one example of a *testi* from a seventh century context. Ricci 2009 suggests that this was an imitation of a metal vessel.
[1227] Santangeli (2003a: 120) compared the evidence of the animal bones from a late sixth-century deposit from a Roman insula near the church of San Paolo alla Regola (Quilici Gigli 1986–7) with domestic rubbish tips from the Imperial fora.
[1228] For the changes in the building techniques in this period, see again Santangeli Valenzani 2003a: 120–2.
[1229] On the circulation of coinage, Rovelli 1998; 2000a, 2000b; 2001; 2009; Rovelli's analysis is synthesized by Santangeli Valenzani 2003a: 118. On agriculture, see Santangeli Valenzani in Meneghini and Santangeli Valenzani 2004.
[1230] Wickham 2000: 164; 2005, 736; 2015: 112; Santangeli Valenzani 2004: 21-4.

when the Arabs, following their definitive conquest of North Africa in 698, controlled both of the latter and the near eastern market. This would have had a major impact on the provision of the city. Although there is some evidence that Rome continued to be connected to a Mediterranean trade network until the mid-ninth century, this was mostly limited to luxury goods for a select sector of Roman society.[1231] Consequently for its food supplies, as the transport amphorae demonstrate, alongside regional products, Rome was now dependent solely on Sicily, a major source of grain for the city, but also a supplier of wine, and Calabria and Campania, predominantly for wine. As we have seen, Calabria was also an important source of wood used by the popes in the late seventh and at the very beginning of the eighth century for the repair of the basilicas in Rome (Chapter 6). The appearance of the distinctive lamps of Sicilian manufacture in the city is further confirmation of the importance of such connections in this period.[1232] However in 724, Rome suffered a second major blow when the church was deprived of its lands both in Sicily and Calabria following the imposition of heavy taxes by the Byzantine emperor on the papal patrimonies.[1233] Sicily in particular had been an important source of grain for the city's population for centuries; the city's supply sources were now restricted to its remaining lands in southern Italy, namely the surviving papal lands in Campania, and Rome's immediate territory.

It is no coincidence that around this period, in the second half of the eighth century, there is evidence for strong links between Campania, in particular the bay of Naples area, and Rome, as Paul Arthur's studies of the amphorae have shown. In the Naples area, the production of amphorae, probably for the transport of wine and known from Roman times, continued into the eighth and ninth centuries. Wasters have been found at both Misenum and Ischia and amphorae very similar to these types are found in eighth century contexts in Rome.[1234] Arthur notes that Duke Theodore, stipulating a 29-year lease on Capri with Pope Gregory II in the eighth century agreed to pay him 100 amphorae of wine per year. He concludes that it seems likely, therefore, that at least some of the vessels found in Rome may be imports from the surviving papal patrimony around the Bay of Naples.[1235] Further support for close contacts Rome and Naples is also given by the marked similarities between the domestic wares in use in the two cities during the late eighth and early ninth centuries, including vessels with painted decoration.[1236] However, as in the sixth and seventh centuries (see section 6.1), it is probable that the supplies from the Campanian papal estates were intended for the use of the church, and not available to all sectors of Rome's population. This was certainly the case for the products from the papal farming estates, the *domuscultae*, founded around Rome in the late eighth century. The Neapolitan type products do not seem to have arrived in the territory, judging by the virtual lack of these amphorae from the middle Tiber valley study area.

This period is therefore generally seen as marking a major change in Rome's economy. From the second quarter of the eighth century the city was almost entirely dependent on regional resources. It is true that owing to our continuing difficulties in dating the pottery of this period, we are poorly informed as to agricultural production and rural settlement in this period, but there was certainly some rural abandonment. This situation was to change in the second half of the century with the consolidation of papal control of Rome and its territory.

At the end of Liutprand's reign, on his death in 744, the Lombards occupied about three-quarters of the peninsula. The Lombard kingdom, comprising most of northern Italy and Tuscany, was politically pre-eminent over the Lombard duchies of the Apennines, Spoleto (which included much of the Sabina Tiberina) and Benevento, and the Roman outposts centred on Rome, Ravenna, Naples and the southern extremities of the southern mainland. After Liutprand, the two successive kings, Ratchis and especially Astiulf, continued his expansionist policy. In 751 Astiulf finally took Ravenna and the entire exarchate. The end of Byzantine control of Ravenna effectively marked the end of Byzantine rule in Italy, resulting in the transfer of Rome's government and leadership to the papacy (the duke of Rome is not attested after 781). This, therefore, is the period when the papacy finally gained control of Rome and also became the head of a state power with an enormous territory comprising the duchy of Rome and the existing Byzantine provinces of central northern Italy which included Lazio as well as Romagna and the Marche.

[1231] The evidence for foodstuffs is based largely on the archaeological record and in particular on the evidence of the transport amphorae. The mention in the *Liber Pontificalis* of the import of large quantities of Byzantine and Oriental precious textiles to Rome during the late eighth and the first half of the ninth centuries has led scholars to propose the continuing existence of a network of commercial traffic beyond the local and regional level. It would seem, therefore, that Rome was connected to this network, which supplied such luxury goods, probably with others, that have left no trace archaeologically or in the written record, Delogu 2010: 233–57.

[1232] Ceci 1992.

[1233] For detailed discussion of these events and their consequences, see Marazzi 1991; 1993. See also Prigent 2004.

[1234] For the amphorae produced in the Naples area, see Arthur 1989, fig. 7.4–5; for similar amphorae found at the Crypta Balbi, Rome, see Paroli 1992, tav.3.7. For a comparison of the amphorae from Naples and Rome see Arthur and Patterson 1994, fig. 3, 1–2, fig. 4. 1–3.

[1235] See Arthur and Patterson 1994, 415–417, figs 3–4.

[1236] Arthur and Patterson 1994, in particular figs 3 and 4. Painted pottery is particularly typical of southern Italy where it has a long tradition from the late antique period through to the middle ages and beyond. It only appears briefly in Rome in the late eighth to early ninth centuries and again in the late twelfth and early thirteenth centuries.

By the end of the western Roman empire the popes were already the largest landowners in Lazio, as well as owning properties throughout most of the western Mediterranean. In the later eighth century, as the new papal sovereigns of Rome, they also became the rulers of the *territorium San Petri* as the fiscal land of Lazio, previously under imperial control, now passed to them.[1237] This probably took place between around 745 and 782.[1238] The popes now had full political autonomy over a vast area. Whereas in Ravenna the archbishops always had to recognize some external authority, from this period the territory of Rome (certainly that on the west bank of the Tiber) was as autonomous as any southern duchy or principality, such as those of Benevento and Salerno, and different from the cities of the centre-north which formed part of the *Regnum Italiae* and whose control was generally restricted to their dioceses. One further element which distinguished the territory of Rome from other centres was its very size, extending over some 1400 square kilometres.[1239] It was an epochal transformation with wide-reaching implications and consequences, and substantial economic implications.[1240]

Just how much of the *territorium San Petri* had been imperial land is not known, but it was extensive. Wickham suggests that it was at this moment that the popes gained control of the Agro Romano and probably were able to take over the lands which remained in private hands, a practice which is documented for some eighth century popes.[1241] Documentary sources for the eighth and ninth centuries are extremely rare (scarcely 20 documents prior to 900), so the processes by which the *territorium San Petri* was administered during the later eighth and ninth centuries are unclear. It is likely that, initially, only the *Sancta Romana ecclesia* itself would have benefitted from the new territories.[1242] The popes then distributed much of this land among the various Roman ecclesiastical institutions (churches, monasteries, *diaconiae* etc.), given that these are the institutions recorded as owning the land in the tenth century for which the documentary evidence is much more abundant. Presumably the popes would have also kept a substantial proportion for themselves. Like imperial territory prior to 750, some lands, especially those further from Rome, would have then to be leased out by the Church to the laity, above all to the aristocratic urban elite, a practice known from tenth-century documents but which very probably existed in the ninth century. More rarely some lands remained in the hands of private individuals.[1243] However, the leased properties remained in the hands of the church and in some cases, for example, the papal farming estates or *domuscultae* (see below), the lands were farmed directly by the papacy.

Chris Wickham believes that the economic importance of this territory probably even out-weighed the effects of the loss, shortly before, of the papal lands in Sicily and Calabria. It is unsurprising that the church takes an active interest in its territory soon after the loss of the papal patrimonies in Sicily and Calabria in the third quarter of the eighth century and contemporary with the consolidation of its new patrimony. We see this in the foundation of a series of large farming estates, the *domuscultae*, to the north and the south-east of the city.[1244] Established by Pope Zacharias (741–52) and in particular Hadrian I (772–95), and incorporating existing *massae* and *fundi*, they resembled in some respects the large landed estates of late antiquity, although the purpose of the *domuscultae* was specifically to supply the needs of the clergy and the poor of the city.[1245] The documentary sources also tell us of the renewed attention given to the main communication routes in this period, essential for the transport of foodstuffs to Rome.

The *domuscultae* also had an ideological and political purpose. In the eighth century, Rome was still threatened by the Lombards (Liutprand had taken Sutri and its territory in 728–9) and by nobles such as Duke Toto of Nepi, who in 768 established his brother as anti-pope. Furthermore, the popes' new role as rulers of the *territorium San Petri* was resented by local landowners, primarily the aristocracy. The *domuscultae* were therefore also intended as an assertion of papal authority in the countryside around Rome, as were the construction of new churches and the rebuilding and monumentalization of others in the same period.[1246]

The arrival of the Franks on the political scene from the second quarter of the eighth century and the resulting Papal-Carolingian alliance gave a great boost to Rome's

[1237] The papacy's right to these lands was based on an alleged donation of Constantine (the *Constitutum Costantini*) to Pope Sylvester. However, the document was with all probability written by the church during the pontificate of Paul I (757–767), coinciding with the Byzantine loss of Ravenna (for details regarding the papal strategy, see Sennis 1996: 39).

[1238] See Wickham 2015, 57.

[1239] Wickham 2015, 36.

[1240] See Wickham 2015, 57; Marazzi 1994. Delogu 2010: 21 discusses also the actions taken by the popes during the eighth century.

[1241] Wickham defines the Agro Romano as the second of three agrarian belts around Rome, lying between 3–5 km and 20–25 km from the Aurelian wall and primarily involved in grain production. See Wickham 2015, 57–8.

[1242] Delogu 2010.

[1243] See Wickham (2015: 54, 57) who notes that in the ninth to eleventh centuries leases to aristocrats and other sectors of the urban lay population were a common element of ecclesiastical practice in Italy.

[1244] There is a vast bibliography relating to the origins and the role of the *domuscultae*; see, Marazzi 1998a for the most recent study.

[1245] The *domuscultae* were clearly not intended to supply all sectors of the urban populace; indeed, it is highly unlikely that they would have been capable. For useful discussion of this argument, see in particular: Delogu 2010.

[1246] Potter 1979: 6; Wickham 1979; Christie 1991.

economy. It also strengthened and confirmed the role of the church as governor of the city and its territory and on the international scene, and strengthened its position vis-à-vis the remaining Lombard threat. The popes, especially Hadrian I (772–95) and Leo III (795–816), worked hard to ensure the protection of the Franks without giving up their political rights over Rome and its territory, and soon after the Frankish sovereigns guaranteed to the bishops of Rome the military protection which the eastern emperors were no longer able to offer.[1247] Despite some conflicts, the Papacy succeeded in avoiding its absorption by the Frankish kingdom and there is no doubt that the Church, and consequently Rome, gained greatly from the alliance. One of the main consequences was the elimination of the independent Lombard kingdom, the traditional adversary of the temporal power of the papacy, and the confirmation of the latter within the new Carolingian political organization, in which Rome played an important role as the religious and ideological basis of the increasing *dignitas* of the Frankish monarchy.[1248]

It was on Pope Hadrian's request that Charlemagne declared war against the Lombards. Following his victory, Charlemagne conquered the Lombard kingdom in 773–4 and became *rex Langobardom*. Northern and much of central Italy passed under the direct control of the Franks and the temporal dominion of the papacy over the old Byzantine provinces was definitively confirmed. This included the restoration of the *Patrimonium Sabinense* which was specifically requested by the pope immediately after the final defeat of the Lombards in a letter of May 774 to Charlemagne, listing the territories to be restored 'which for a long period have been removed and denied to us by the Lombards'.[1249]

The papal-Carolingian alliance was symbolically endorsed by Pope Leo, who, on Christmas Day 800, crowned Charlemagne as the emperor of the Romans, thus restoring to Rome its role as the head of an empire. The alliance also resulted in a new source of wealth. The restoration of public buildings in Rome, already documented at the end of the seventh century probably as a result of Constantine's concession of new administrative powers to the papacy,[1250] grew progressively during the eighth with the gradual affirmation of papal power. As Delogu describes, at the beginning of the eighth century there was a notable increase in the amount of silver available, probably related to the donations offered by pilgrims and devout Christians to the tombs of the apostles.[1251] However the great increase in papal resources around the 800s was mainly thanks to Charlemagne's desire to maintain and increase the splendour of Rome. Charlemagne, and his son Ludovicus the Pious, attributed great importance to the symbolic power of Rome and the role of the Papacy in the Christian world. Charlemagne made donations to the basilicas of the Apostles on his visits to Rome, and sent large quantities of gold, silver and precious stones to the popes for the maintenance and embellishment of the city's churches.[1252] In the first half of the ninth century, with pope Hadrian I and, to a slightly lesser extent, Leo III (795–816, both contemporaries of Charlemagne), papal initiatives regarding the churches of Rome reached a peak, financed by the enormous resources of the Frankish sovereigns, and were extended to the construction and restoration of other public buildings. As a result of both the Carolingian funding and the revenues from its *territorium*, the papacy became extremely wealthy and Hadrian began the large-scale re-organization of the city.[1253] The *Liber Pontificalis* also records the improvements to the urban infrastructure, such as the restoration of the drainage system and the aqueducts, and the construction of the Civitas Leoniana walls by Leo IV around 850.

The aim, especially of the church building works of the ninth century, seems to have been the glorification of the popes who were depicted in the apsidal mosaics and recorded in the inscriptions of the monuments they had patronized.[1254] All these initiatives clearly stimulated the revival of artisan activities, not only those related to building works, but also the production of domestic goods, with the appearance of a new ceramic repertoire, including the early medieval glazed ware, *ceramica a vetrina pesante* or Forum ware. This was a specialist product with a wide distribution. Small quantities of *ceramica a vetrina pesante* of Rome production have been found as far afield as Tuscany, Liguria, Sardinia and Corsica.[1255]

On the other hand, coinage was extremely scarce. Small denomination coins seem to disappear entirely at Rome after the mid-eighth century. Ninth-century contexts have yielded only extremely rare examples of the new silver coinage, the *denarius*, imposed by the Carolingian government in the territories they conquered in central northern Italy and soon imitated by the popes. No other type of coinage has been identified which

[1247] Wickham 2000: 158; Sennis 1996: 38.
[1248] Delogu 2010: 267.
[1249] See Llewellyn 1971, 239. As Llewellyn notes, Hadrian's letter, written in May 778, was a revival of ancient claims to properties many of which had been out of papal control for nearly 80 years.
[1250] Delogu 2010: 266; Llewellyn 1986.
[1251] See Delogu 2010: 277 for the reasoning behind his arguments.
[1252] These comments, and those which follow, on the building activities of the popes are based on Delogu 2010: 259–87 and his detailed discussion and comparison of the former and their sources of income during the eighth and ninth centuries.
[1253] Regarding papal revenues from its *territorium*, these included not only rents from the leasing of lands, but also gifts from the lay aristocrats to obtain lands and other privileges (Wickham 2015).
[1254] Delogu 2010: 268.
[1255] Paroli 1992: 50.

was suitable for everyday transactions.[1256] This seems to imply that Rome was undergoing an economic recession, which contrasts with the intense building and artisanal activities in the city in the same period.[1257] One explanation for this apparent contradiction is that presumably much of the produce now arrived directly to the ecclesiastical institutions and to the households of the Roman aristocracy from their lands in the newly acquired Patrimonium, including of course the papal *domuscultae*. Cultivation within the city by these sectors of society would also have played a part, while for the daily needs of the lower sectors of Rome's inhabitants, exchange and barter were presumably common practice.

The Neapolitan-type amphorae also disappear from contexts in Rome in the ninth century. This does not necessarily mean that the Naples area ceased to supply wine to Rome; there is no evidence for the Neapolitan amphorae in Naples itself after the ninth century and certainly by the end of the tenth century wooden casks had replaced the use of ceramic containers.[1258] At the same time, the close similarities between domestic vessels of Campanian and Roman origin, noted in the eighth century, also cease.[1259] It is possible that, with the foundation of the *domuscultae*, regional production now largely satisfied urban demand, at least as regards the needs of the church. Wine was certainly one of the products stipulated by Pope Hadrian to be provided by the *domusculta* of Capracorum (see section 7.2.1.1).

The revival in Rome is also evident in its territory, not only in the construction of new churches and the restoration and aggrandizement of others, but also in more basic artisan activities, such as ceramic production. Furthermore, the same ceramic products, in use at Rome from the late eighth century now appear in the countryside and were also produced there. Even a specialist product such as *ceramica a vetrina pesante,* although at this stage probably of Roman production, arrived on a limited number of sites in the countryside. However, it is significant that the strengthened links between the city and its hinterland appear to concern primarily those territories which had remained primarily in Byzantine hands. Despite the restoration of the *Patrimonium Sabinense* to the papacy in AD 781, papal control seems in this area seems to only have been nominal—here the main force was the abbey of Farfa, under the direct patronage of the Carolingians.[1260]

The *domuscultae* had a brief life. There are no documentary references to their existence after the 840s and the archaeological evidence suggests a similar picture; at the estate centre of Santa Cornelia, for example, by the late tenth century only the church seems to have been still in use.[1261] There are various reasons for their demise, in part it was the direct result of revolts by the Roman aristocracy, who resented this further sign of papal territorial control, but it was also part of a wider crisis affecting Rome and its territory in the late ninth century, a period marked by the Arab attacks which affected Rome and Lazio, and grave problems within the papacy itself.

In 846 the Arabs sacked Saint Peter's. The Leonine walls were built by Pope Leo IV soon after. The Arabs also carried out sustained and widespread attacks in the Roman countryside which became more serious from Pope John IV's reign (872–882) onwards causing much devastation in particular around the Baccano crater, and in the Sabina the Abbey of Farfa was sacked and occupied in *c.* 898.[1262] The Arabs were forced out of the territory of Nepi and the Sabina, the regions of central Lazio under their control, probably around 900, back to their stronghold in southern Lazio. Here, in 915, they were defeated at the battle of Garigliano by an alliance of central and southern Italian powers from Rome, Naples, Capua and Gaeta and the Byzantine provinces which resulted in their definitive expulsion from Italy.[1263]

The Arab threat was coupled with a period of intense and sometimes violent political rivalry in Rome culminating in the Formosan crisis which led to a breakdown in the papal political structure.[1264] This was also a time of great economic difficulty for the papacy: the Arabs had sacked the extra-urban basilicas of the Apostles and removed the enormous treasures accumulated by the popes. Leo IV immediately began the restoration of the basilicas affected and took a series of measures to prevent this happening again. The sources of papal income must have been squeezed to their limit. In the last two decades of the ninth century, the problems of the papacy's finances increased with the political and military crisis of the Carolingian empire and the collapse of public order in Italy. The church would have had great difficulty in ensuring the regular collection of land revenues and tributes, and the contribution of the Frankish sovereigns to the papal coffers must have become relatively insignificant.[1265] Although the last biographies of the popes in the *Liber Pontificalis* are irregular after 867, after Leo IV the clear impression is of a marked reduction in papal building activity and

[1256] Rovelli 1998; 2000b; 2001; Delogu 2010: 309.
[1257] Noble 2000; Delogu 2010: 310–313.
[1258] Delogu 2010: 310 has suggested that the disappearance of the Neapolitan amphorae at Rome indicates a further restriction of the areas supplying the city, but cf. Arthur 2002: 112.
[1259] Romei 2004.
[1260] Leggio 1992: 60.
[1261] Wickham 2015: 22; Christie 1991.
[1262] Zucchetti 1920: 157; Potter 1979: 139; for the destruction of the Abbey of Farfa, see Ugo of Farfa, *Destructio Farfensis*: 29–32.
[1263] Wickham 2015: 22.
[1264] Wickham 2015: 58.
[1265] Delogu 2010: 279.

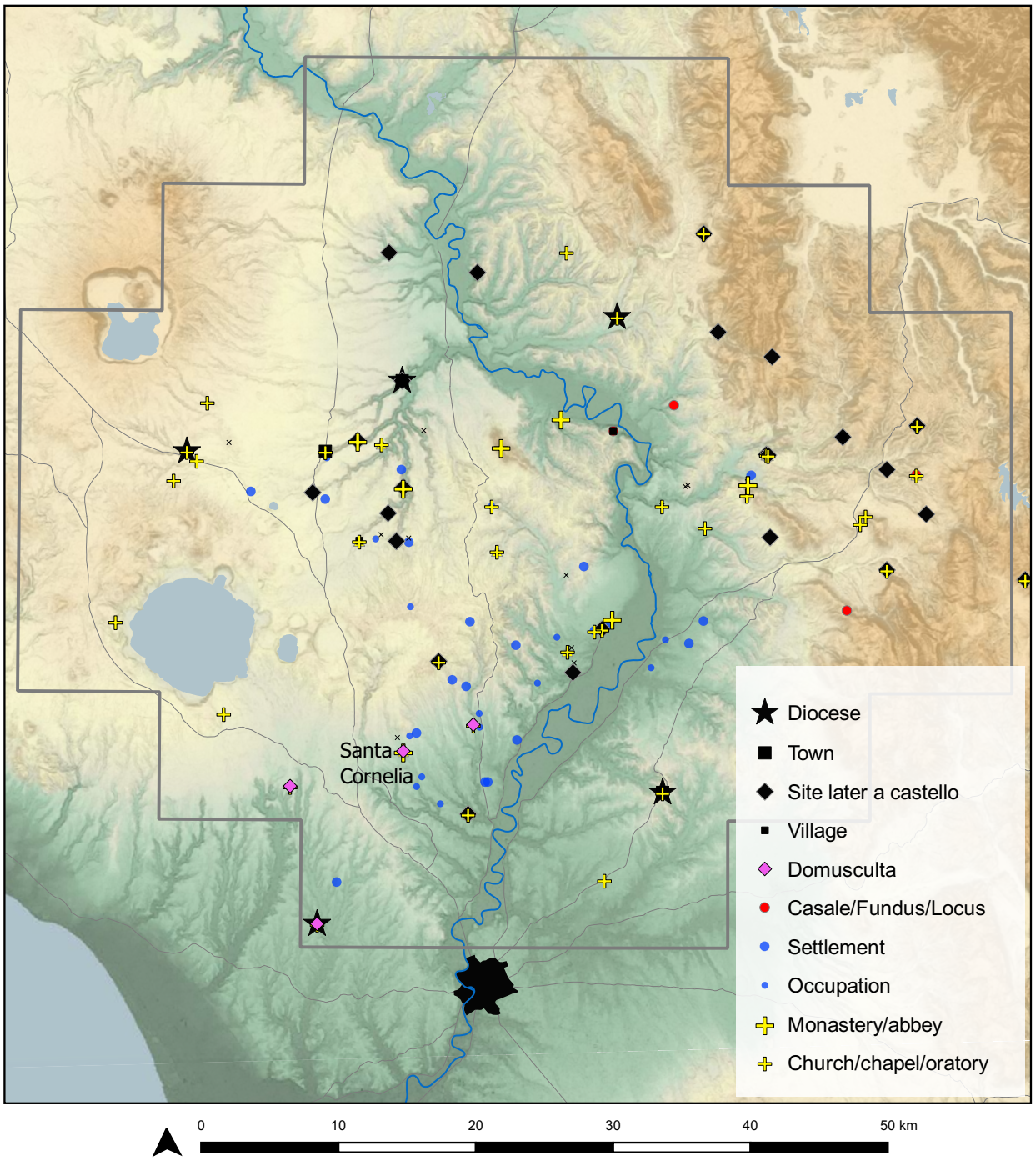


Figure 7.1. Tiber Valley Project settlement sites in the early medieval 2 period (AD 700–900)

papal gifts, suggesting that the financial resources were no longer available for these activities.[1266]

This section will discuss the impact of these events on the settlement and the economy of the territory as visible through the work of the Tiber Valley Project. However, two problems with the archaeological evidence need to be highlighted. Firstly, South Etruria pottery types which could be securely dated to the early eighth century were not identified by the new study of the survey material, at least in part because even in Rome, well-dated contexts of this period had not been identified at the time of our study. Secondly for much of the Sabina Tiberina, known ceramic types of the eighth to ninth centuries are virtually lacking. The former is largely a methodological problem, the latter, however, also has historical implications, as we shall see.

[1266] Despite the problems with the accounts of the Liber *Pontificalis* after 867, Paolo Delogu sees a reduction in papal building activity under Nicolò I (858–67) followed by an absence of information relating to Hadrian II (867–72) indicating a change in this activity in the second half of the ninth century; Delogu 2010: 269, 280, 332.

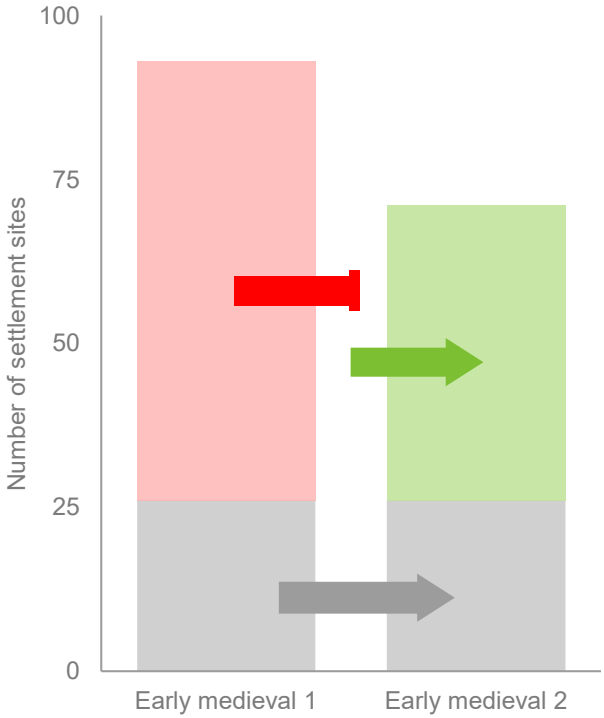


Figure 7.2. Numbers of settlement sites abandoned (pink), continuing (grey) and newly founded (green) at the transition from the early medieval 1 to the early medieval 2 period.

7.2 Rural transformations

The historical events we have described were accompanied by a series of major settlement changes. One of the most obvious changes is in the apparent density of population; across the middle Tiber valley study area, the archaeological evidence registers the lowest number of settlements for 1500 years (Figure 7.1).

In South Etruria and the southern Sabina Tiberina in the area of the Eretum Survey, settlement numbers remained fairly stable throughout the late sixth and seventh centuries, followed by another marked drop in numbers (around 25%) at the beginning of the eighth century (Figure 7.2). However, as discussed in Chapter 6, we cannot be certain precisely when the majority of the late sixth- to seventh-century settlements were abandoned. Significantly, the weighted average of the pottery from the South Etruria Survey suggests a more gradual picture registering almost continuous decline in the amount of pottery recovered from the mid-fifth century through to the beginning of the eighth (Figure 5.2). It seems fair to propose, therefore, a gradual fall in settlement numbers in these areas during the late seventh to early eighth centuries, rather than the sharper picture of settlement abandonment in the eighth century as indicated in the settlement graphs.

The area of the Farfa Survey, and indeed the entire area of the Sabina Tiberina which remained under Lombard control until the late eighth century, poses a different problem. Here, on the basis of the Sabina type pottery, occupation of the late sixth- and seventh-century settlements may well have continued into the early eighth century when production of these wares seems to have ceased. In this area, however, with rare exceptions, we are still unable to date and identify ceramics of the late eighth and ninth centuries and consequently we have virtually no archaeological evidence for rural settlement of this period, despite the wealth of documents from the archives of the abbey of Farfa. Let us look at these processes in more detail.

7.2.1 South Etruria

In South Etruria the further drop in settlement numbers, results in a level of occupation comparable to the protohistoric periods. The abandonment of settlements in this period is particularly striking in the area around Sutri, and in the survey area of La Storta to the west of the Via Clodia, and in the Ager Capenas north of Lucus Feroniae, though each has its own specific methodological problems.

Three other major changes characterize the rural settlement pattern in this area, all of which can only be securely dated from the second half of the eighth century. First, for the first time since the early imperial period, the number of new foundations is greater than those with continuing occupation. Second, alongside the continued and new occupation of open settlements, there is now firm evidence for a move to hilltop locations some of which are later documented as *castelli*. Third, there is a further change in the relationships between settlement and the ancient road system.

We shall discuss the evidence for the *domuscultae*, followed by a discussion of some of the general settlement trends, then two case-studies within the South Etruria Survey area—the area around Santa Cornelia in the Ager Veientanus, and the Treia valley in the Ager Faliscus—and finally the question of settlement and roads.

7.2.1.1 The domuscultae

> This blessed prelate (Hadrian I) created and newly established four *domuscultae*. One was called Capracorum, in the territory of Veii, about 15 miles from Rome. Of this he originally held as a legacy in succession to his parents the Capracorum farm itself with many other farms contiguous to it, homesteads and estates, paying fair compensation to various persons in return, and added them to this *domusculta*. He laid down by an apostolic privilege under very binding anathemas that this *domusculta* of Capracorum, with its *massae* (lands), *fundi* (farms),

> *casales* (farm buildings), vineyards, olive groves, watermills and everything pertaining to it, should remain for the use of our brethren Christ's poor for ever; the wheat and barley grown every year on the lands of the *domusculta* should be carefully brought to our holy church's granary and stored separately; the wine and the various legumes grown every year on the estates and lands of this *domusculta* should also be diligently brought to our holy church's cellar and stored apart. As for the pigs tended at pannage every year on the homestead of this *domusculta*, a hundred head of them should be slaughtered and stored in the same cellar. (He decreed) that every day a hundred of our brethren Christ's poor and even more if available, should be gathered at the Laterna patriarchate.... and 50 loaves..., each loaf weighing 2lb, and 2 decimatae of wine, and also a cauldron full of broth should be disbursed every day to these poor... each of them receiving a portion of bread, a drink of wine, that is 1 beaker containing 2 cupfuls, and a ladle of broth....The revenues of the produce and the various properties of this *domusculta* should be disbursed or expended on no other needs, but all the profit should be for, and should be disbursed for ever on the assistance and daily sustenance of these our brethren Christ's poor. [1267]

This is one of the most frequently cited passages regarding the *domuscultae*. It is the most detailed description of the papal estates given by the *Liber Pontificalis* and gives a unique insight into their role and organization.

The *domuscultae* are fundamental to a discussion of developments in the territory in this period.[1268] Essentially large farming estates, they were founded in the late eighth century by Pope Zacharias and especially by Pope Hadrian in the 740s and 770s–80s respectively. The *Liber Pontificalis* mentions four (possibly five) founded by Zacharias and six by Hadrian. Managed directly by papal officials, the aim of the first *domusculta* founded by Zacharias was for the pope's privy purse, and the second is described vaguely as being for the church's use. Hadrian's first *domusculta*—Capracorum—was to provide for the poor and for the others when any function is stated it is 'for the church's use and requirements'.[1269] As Davis notes, the other *domuscultae* were no doubt described in a similar document to that given in more detail for Capracorum[1270] and when the properties of the estates are mentioned, they include farms and homesteads, as well as vineyards, olive groves and watermills. However, they also had a wider political significance; Christie sees an ideological role for the *domusculta* of Capracorum and the construction and the restoration of a number of churches at these centres, including the church built at Santa Cornelia, the estate centre of Capracorum, was very probably part of this policy.[1271]

Although once believed to be a continuous area of land, it is now clear that the *domuscultae* consisted of a series of farms, with their own separate estates.[1272] Although some of the lands almost certainly already belonged to the church, whenever their origins are mentioned, they are lands newly acquired by the church. In some cases, these are bequests, in others the church took over lands in private hands, although the *Liber Pontificalis* repeatedly claims that the popes had paid a fair price for such lands, while some of the *domuscultae* founded by Hadrian were established on what had been his own family's lands. The phrase 'by apostolic privilege under strictly binding anathemas ...should remain for ever for our holy church's use and requirements' is repeated by the *Liber Pontificalis* for other *domuscultae*, suggesting that they were all inalienable properties.

Two *domuscultae* have been securely identified in our study area, both founded by Hadrian: Capracorum and Galeria. Excavations have been carried out on two, probably three, settlements which formed part of these *domuscultae*: Santa Cornelia which has been demonstrated by excavations and documentary evidence to have been the estate centre of Capracorum, and the Mola di Monte Gelato, very probably one of a series of farms within the latter. The *domusculta* of Galeria is more problematic. It may have consisted of two estates separated by other properties given that the name is attached to two entities. However, one is on the Via Aurelia *ab urbe Roma plus minus X ad Sancta Rufinam* (*Liber Pontificalis* I, 502). It is not clear whether this was actually at Santa Rufina, the cathedral seat of the bishopric of Silva Candida, or somewhere nearby.[1273]

Monte Gelato and Santa Rufina were certainly founded on previously existing Roman sites. Santa Cornelia is interpreted as probably being a new foundation, although as Wickham has demonstrated, the *Liber Pontificalis* makes it clear that Capracorum was composed of existing farms.[1274] In fact the recent identification by the new study of the South Etruria Survey material of one coarse-ware jar of the sixth to seventh centuries suggests that Santa Cornelia was occupied previously. Santa Cornelia provides a good impression of what one of these centres would have looked like. In an open non-defensible position, it consisted of a fairly large church, with an attached baptistery, a walled

[1267] *Liber Pontificalis* 97, 54; Davis 1992 [1995], 144–46.
[1268] There is an enormous bibliography on the role of the *domuscultae*. For a recent synthesis of these studies, see Delogu 2010.
[1269] Davis 1992 [1995]: 31.
[1270] *Liber Pontificalis* 97, 55. Davis 1992 [1995], 147.
[1271] Christie 1991: 8.
[1272] Wickham 1978: 174; Potter and King 1997: 6.
[1273] For discussion of this problem, see Christie 1991: 308–9.
[1274] See also Christie 1991: 6.

enclosure, possibly also for defensive purposes, a set of outbuildings presumably for storage, and a restricted settlement area. With the exception of the church itself, the structures were not particularly rich, in some cases consisting of stone foundations supporting timber walls. All the other excavated examples had a church, a cemetery, storage areas and, certainly at Santa Rufina, a walled enclosure that was substantial enough to suggest that it may have served for defence. Ceramic production also took place at the Mola di Monte Gelato.[1275]

As regards the size of the settlement area at these centres, the evidence is not secure. None were fully excavated and no geophysical survey has ever been carried out. Potter remarked that, apart from the ecclesiastical element, Monte Gelato and Santa Cornelia were quite differently organized; in particular at Monte Gelato there is no evidence to suggest the existence of a nucleated farm or village similar to that at Santa Cornelia. If anything 'the huddle of buildings around the ninth-century church of Santo Stefano, near Anguillara, provides a closer parallel' and he concludes that the church at Monte Gelato probably served a largely dispersed rural community.[1276] Interestingly, as regards Santa Rufina, David Whitehouse (*pers. comm.*), on the basis of the material visible on the surface, noted that the excavations seemed to have covered only relatively a small area of the site which he believed was extensive and possibly a village-type settlement.

The *domuscultae* would have been dependent on a functioning road system to fulfil their role of supplying sectors of Rome's society with provisions, as well as reinforcing papal control of the territory (on this see below, section on settlement and roads). From her detailed analysis of eleventh-century documents, Bosman convincingly argued that the *domuscultae* of San Leucio, mentioned in the *Liber Pontificalis* as being founded by Pope Hadrian in 783, lay at the XIV mile of the Via Flaminia, 2 km to the north of Malborghetto, where the Constantine arch bridges the ancient consular road (modern locality of Tor di Quinto).[1277] This confirms that the road was still in use in this period and that this stretch was in use from the Roman period until the end of the tenth century. The close dependence of the *domuscultae* on the road system is highlighted by other passages in the *Liber Pontificalis*. Bosman also noted that the importance of the Via Flaminia is supported by the substantial number of settlements of the eighth and ninth centuries along the ancient road.[1278] It is significant that contemporary with the establishment of the *domusculta* estate centre of the Mola di Monte Gelato, the Roman paved road adjacent to the centre was restored with many of the blocks being re-laid around this time.[1279]

The *domuscultae* did not survive for long; after 850, there is no trace of them in the documentary sources and some passed out of the control of the papacy into the hands of other churches or to lay tenants.[1280] The rise of the aristocracy, who resented the attempts by the church to establish their control in the territory, and the Arab attacks at the end of the ninth century were contributing factors. The unpopularity of the *domuscultae* with the Roman aristocracy is well-documented, given that these were inalienable properties it is likely that the *domuscultae* system had taken lands which might otherwise have been granted to nobles on perpetual leases. Although the *Liber Pontificalis* stresses that the lands of private persons were absorbed into the estates with fair compensation, this may not have always been the case and the individuals may not been bought out willingly.[1281] They may have all been destroyed around 815, although excavations of two of the estate centres have revealed no evidence to suggest that this was the case.[1282] In 846, the *domusculta* of Capracorum was still one of number of active papal estates (a work crew from the estate is recorded by an inscription as having taken part in the construction of the Leonine wall). However, at Santa Cornelia, although the campanile was added to the church in 875–900, the administrative quarter was probably burnt down in the same period and there is no evidence that it was replaced. Excavations at Santa Cornelia indicate that the estate working area was out of use by *circa* AD 950, and by the early 1000s only the church seems to have still existed.[1283] Christie suggests that the estate workers may have by then all been drawn away to the nearby defended site of Formello (first recorded in 1026) or that of Isola Farnese. The latter is first mentioned in 989, although the new study of the survey material shows that Isola Farnese was occupied from at least the early ninth century. The Mola di Monte Gelato also seems to have been in decline by the tenth century; relatively little material was identified from this period.[1284] The *domusculta* of Galeria on the Aurelia had already passed into the hands of the Vatican monasteries by 854, Galeria on the Portuense was under the Bishop of Portus by 1018 and Capracorum was in the hands of a lay aristocrat by 1041.[1285]

[1275] For the Mola di Monte Gelato, see Potter and King 1997; for Santa Cornelia and Santa Rufina, see Christie 1991.
[1276] Potter and King 1997: 78–9.
[1277] Bosman 1993.
[1278] Bosman 1993: 297–9, n. 5. Francesca Bosman's study is an important contribution to the role of the Via Flaminia in late antiquity and the middle ages.
[1279] Potter and King 1997: 425.
[1280] Wickham 2015: 56.
[1281] Davis 1992 [1995]: 32.
[1282] Wickham 2015: 56.
[1283] Christie 1991.
[1284] Potter and King 1997.
[1285] Wickham 2015: 56, n. 56.

As we shall see, the establishment of the *domuscultae* seems to have had a broader impact on the rural landscape, encouraging both the continuation of existing settlements and stimulating the development of new open foundations. This may be supported by the fact that when they were in decline, during the tenth century and especially in the eleventh century, many other open settlements in the area were also abandoned. The latter is probably largely due to the broader changes in the settlement pattern in these centuries and the gradual consolidation of *incastellamento* (see section 7.2.1.5).

7.2.1.2 Settlement trends

Although a further fall in settlement numbers is registered throughout the study area, a fall which probably began in the late seventh century and was accentuated in the early eighth, there are some clear differences within the South Etruria Survey area, in particular when we compare the evidence from the Ager Veientanus and the Ager Faliscus.

From the imperial period until the late sixth to seventh centuries, the number of settlements recorded in the Ager Veientanus is more than double that of the Ager Faliscus. However, the percentage fall in the number of sites in both areas remained similar throughout these centuries. In the (late) eighth and ninth centuries this proportion changed, with the absolute difference in the numbers of settlements recorded in both areas much reduced (18 in the Ager Veientanus and 11 in the Ager Faliscus). In other words, the decline in the number of settlements in the Ager Veientanus was greater than in the Ager Faliscus. Indeed, whereas the trend in the Ager Veientanus was for a small decline in numbers, there was actually a small increase in the Ager Faliscus. The reasons for this are still unclear.

Secondly, in both areas, roughly the same number of settlements continue to be occupied from the previous period (around 37%). However, new foundations now predominate over the latter. Thirdly, of the new foundations, in the Ager Veientanus those settlements that were never fortified predominate, while in the Ager Faliscus a number of sites are later documented as *castelli*. The *castelli* only appear in the documents from around the mid- tenth century and therefore these variations probably at least in part related to the political situation which emerged in the late ninth and tenth centuries. Nevertheless, in the Ager Faliscus and to a much lesser extent, in the Ager Veientanus a pattern emerges of open settlements existing alongside a first move to sites that were at some point fortified.

There are some significant differences regarding the degree of the abandonment of settlement within the study area. The most striking, in terms of abandonment is the territory around Sutri (the Sutri survey area and, just to the south-east of the latter, along the Via Cassia). In the late sixth until sometime in the seventh century, only a handful of settlement sites are recorded from this area, all of which continued from the late antique period and earlier. However, by the eighth to ninth centuries, evidence is limited to two sites, one of which is the church and cult centre of San Giovenale just to the south of Sutri, while a single sherd of eighth- to early ninth-century pottery on a site of uncertain settlement status (a former Roman farm, TVP-ID 03071) was also identified. The most convincing explanation for this apparent picture of almost total abandonment is the Lombard incursions in the late 720s and 730s which affected the area of Sutri in particular (see section 7.1). The Sutri and Nepi areas were also occupied by the Arabs in the 870s. On the other hand, the area around the Baccano crater, on the border between the Ager Faliscus and the Ager Veientanus was also very sparsely occupied, though even in the imperial period this area was less densely settled than elsewhere. Finally, in the Ager Capenas, the number of new sites slightly exceeds those continuing in occupation.

7.2.1.3 Continuing sites

The impression is that although on a number of sites, primarily the imperial villas, occupation of some sort trickled on into sometime in the seventh century, in the great majority of cases after this date occupation ceased. Only a few of the former Roman villas and, more rarely, farms were occupied into the eighth and ninth centuries. Where occupation did continue, the sites either tended to be related to the *domuscultae*—Mola di Monte Gelato itself, for example; and one large villa site (TVP-ID 01530) on the northern spur of Monte Sant'Angelo, just to the north of the *domusculta* estate centre of Santa Cornelia—or were those that had an ecclesiastical and funerary function. Furthermore, they remained open settlements and did not become *castelli*. The majority of the martyrial cult centres, which provide some of the most consistent evidence for activity in the late sixth and seventh centuries, survived and in some cases even underwent a revival in this period.

7.2.1.4 'New' foundations

Most of the new sites had been occupied at some point in the Roman period, mainly until the second to third centuries, then abandoned, and reoccupied in the eighth to ninth centuries. It is significant, however, that when the topography was noted by the South Etruria Survey team (and this was not always the case), most of the new and reoccupied sites are located on hilltops, ridges, spurs and so on, in other words we appear to

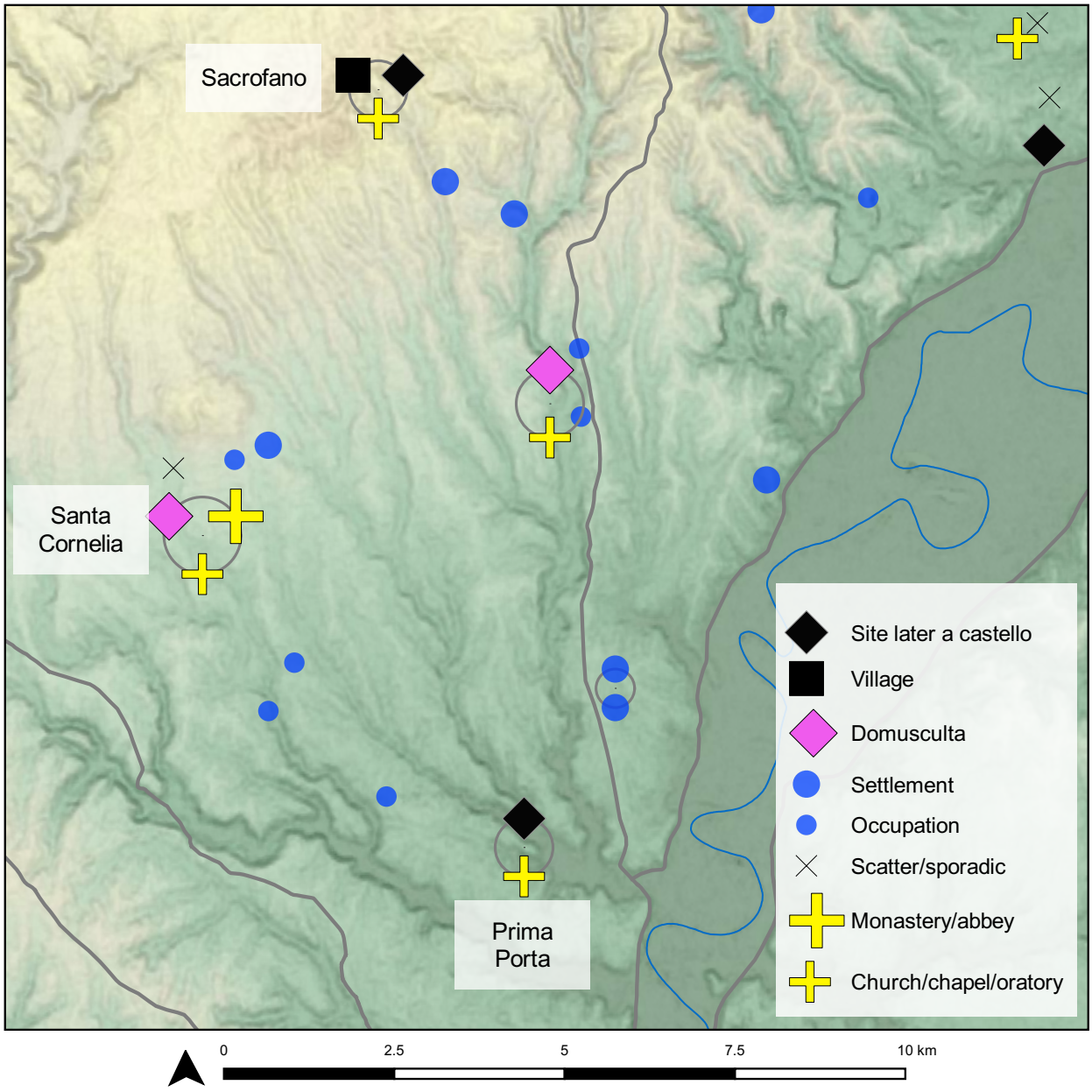


Figure 7.3. The Santa Cornelia area (northern Ager Veientanus) in the early medieval 2 period (AD 700–900).

see a move to and a reoccupation of '*siti di altura*'. This is similar to the situation noted in the area of Farfa where, however, this change appears to have taken place earlier, around the late sixth to seventh centuries. Of the new settlements roughly half seem to have had a relatively brief life: with very few exceptions those which were never fortified were abandoned by the tenth or at the latest the eleventh century.

7.2.1.5 Two case-studies

These two studies focus on the lands between the Via Amerina and the Via Flaminia: firstly the area around Santa Cornelia, the estate centre of the *domusculta* of Capracorum in the Ager Veientanus, and secondly that of the Treia valley in the Ager Faliscus, in the southern part of which lies the Mola di Monte Gelato, very probably one of a series of farms within the estate of the *domusculta* of Capracorum.[1286] Both areas with their continuous and new foundations, some of which were later documented as *castelli,* well illustrate the palimpsest of settlement types that characterize the eighth- to ninth-centuries landscape of South Etruria.

7.2.1.6 The Ager Veientanus and the area of Santa Cornelia

Although few eighth- to ninth-century settlements were identified in the northern section of the Ager Veientanus (an area always characterized by a lower density of occupation), in the central part of the area, a

[1286] Christie 1991; Potter and King 1997: 6, 78.

cluster of three open sites was recorded immediately to the north of Santa Cornelia (Figure 7.3). Unlike Monte Gelato, Santa Cornelia has been interpreted it as a new late eighth-century foundation.[1287] However, as noted earlier, the new study of the survey material suggests that the site was at least frequented from the late sixth to seventh centuries and therefore prior to the foundation of the *domusculta*.

Of the three sites in the vicinity of Santa Cornelia, one (TVP-ID 01530), located on the northern spur of Monte Sant'Angelo, has a long history, a Roman villa occupied from the mid-Republican period until the tenth century. Evidence for the eighth and ninth centuries is limited to coarse-wares. The second (TVP-ID 01423), on a platform overlooking the river course, may also have been occupied continuously. Dating from the Archaic period until the late fifth to early sixth centuries, it is interpreted as a villa during the Roman period. Evidence for the late sixth to eighth centuries is lacking but, on the basis of the domestic wares, there was some activity or frequentation in the ninth century, after which any evidence ceases. Similarly, it is uncertain if there was a settlement at the third example (TVP-ID 01488), on a hilltop in the locality of Coda di Monte Aguzzo, the site of an Etruscan cemetery. There was certainly activity in the eighth century, therefore around the same period as the foundation of the estate centre, and possibly into the ninth. As in the case of the sites in the area of Mola di Monte Gelato, none have evidence for activity beyond the tenth century.

In the Ager Veientanus evidence for settlements later documented as fortified sites, or castles, is noticeably rare, contrasting with the Ager Faliscus (see below). None are particularly close to Santa Cornelia and the cluster of open settlements. In the area between the Via Amerina and the Via Flaminia, they are limited to one, possibly, two sites whose histories, however, are not particularly clear. Firstly, a *castello* in the locality of Prima Porta (TVP-ID 00471) in the southern part of the Ager Veientanus which, at least on the basis of the survey evidence, was an important site. Here the South Etruria Survey team recorded a large village on a flat-topped promontory overlooking the junction of the river and a steep-sided tributary valley about 1.5 km to the west of the Via Flaminia. The entire settlement was defended by a fortified enclosure and at a certain point a castle was built. They noted, however, that in 1964 the entire site was obliterated by bulldozing. At the time of the survey the lack of visible structures within the walls led the team to suggest that the settlement was composed of wooden structures. Although various scholars have attempted to relate this site to settlements mentioned in the documentary sources, there appears to be no definite confirmation of their hypotheses. The survey material indicates that the area was occupied from the late third until the fifth centuries, after which it was abandoned and then resettled in the ninth century. Occupation continued into the late thirteenth to fourteenth centuries.[1288]

The second, Sacrofano, is an extremely dubious example, given that there is no archaeological evidence for the site. Located in the northern area of the Ager Veientanus, on a spur at the head of the Fosso Vignale, it is first mentioned in a document of 1027, when it already had three churches, while the existence of a *castello* is first mentioned in 1269 (*castrum Scrofani*). The possibility of an earlier date for the settlement is based on the mention in the eighth century of a *località Scrofano*, one of a number of *fundi* donated to the church of Santa Maria in Cosmedin in Rome. However, the earlier reference to Scrofanum may well still refer to a *fundus* of this name rather than the present village.[1289]

Finally, a mention should be made of three sites to the west of the southern Ager Veientanus between the Via Aurelia and the Via Clodia. They lie just outside the Tiber Valley Project area but were visited and surveyed by the South Etruria Survey team. All are *castelli* whose earliest secure settlement phase is of the late ninth/early tenth centuries, although two may have been frequented earlier. Firstly, a fortified settlement located on a cliff, the area was first occupied by a Roman, probably imperial, villa. The area was frequented in the seventh to eighth centuries (on the basis of one pottery fragment with the generic date of 600 to 800), however the bulk of the material is from the late ninth to early tenth century to the sixteenth century. The site was first visited in 1957, on a second visit, in 1966, the survey team noted that the site had been ploughed and that only the outer walls remained. Secondly, opposite this site is another known as Il Castellaccio. The earliest material recovered by the survey was one undiagnostic sherd possibly of the eighth to ninth century, but the bulk of the pottery dates from the late ninth/early tenth until the thirteenth or fourteenth century, when presumably the site was abandoned. The survey team recorded the site as a single stage promontory village. On the first visit in 1966 the remains of a gateway, the base of a tower and extensive wall footings were still visible, as well as a small plastered chamber and large cistern. By their second visit, in 1971, there were no signs of the tower, only a curtain wall. There appears to be no bibliography for either of the last two settlements. Finally, a site in the locality of the Torre di Pascolare appears to date from the late ninth/early tenth century until the thirteenth to fourteenth centuries. A tower, a fortification wall and a series of buildings were

[1287] Christie 1991; Christie and Daniels 1991.

[1288] Kahane, Murray-Threipland and Ward-Perkins 1968: 102, 173–5; Wickham 1978; 1979: 72.

[1289] Kahane, Murray-Threipland and Ward-Perkins 1968.

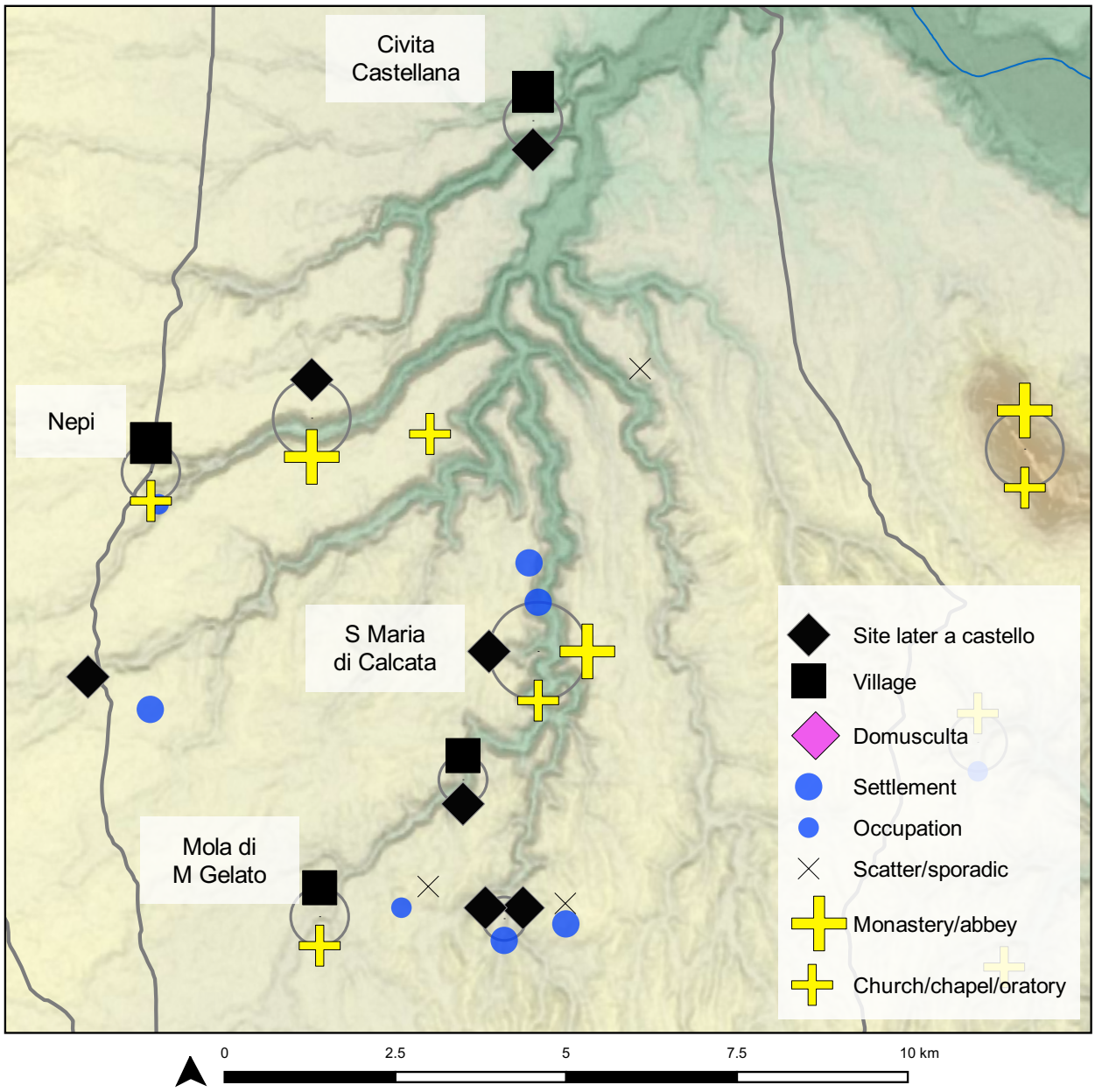


Figure 7.4. The Treia valley in early medieval 2 period (AD 700–900).

recorded. De Rossi dates the construction technique of the tower to the thirteenth century.[1290]

7.2.1.7 The Treia valley

Moving further north, the Treia valley lies to the east of Nepi in the Ager Faliscus, in a relatively remote area (Figure 7.4). The course of the Treia river is about 20 km long. The relatively high density of settlement in this area is interesting and here a very different pattern emerges. As Potter described, the sites lining the Treia are typical of the medieval settlement pattern, with fortified villages occupying almost every major spur and promontory.[1291] They range from existing towns and villages, such as Civita Castellana, Calcata and Mazzano Romano, to abandoned ruins such as those of Castel Paterno, Agnese, Santa Maria di Calcata, Castellaccio and Pizzo.

It was here that Potter and Whitehouse first hypothesized a precocious move to hilltop settlements, prior to the late eighth to ninth centuries, some of which later became *castelli* (see section 6.2.1). The new study of the South Etruria Survey material has helped clarify developments in this area.

[1290] De Rossi 1969: 82.

[1291] Potter 1979: 155–61.

If we take a relatively broad stretch of land on either side of the Treia river, at the top of the valley lies the medieval and modern settlement of Civita Castellana. On present evidence the remaining inhabitants of the Roman *municipium* had probably moved to this highly defensible site by at least the late eighth century. Further down on the west bank lies Cava Santi, a cemetery in use from the fifth until the eighth to ninth centuries, when a church was built.[1292] On the other side of the valley, the survey identified a scatter (TVP-ID 01098) on the ridge of Monte Paterno near the road station of Aquaviva. There was some presence recorded in the first and second centuries AD, and in the eighth or ninth centuries an open settlement was founded which continued to be occupied into the eleventh century, with some evidence for activity into the late thirteenth to early fourteenth centuries. There is no evidence to suggest that it was ever fortified and this seems to be a rare example of an open settlement established in this period which continued beyond the tenth to eleventh centuries.

A few kilometres further down the valley in locality Sant'Agnese (TVP-ID 02137), on a ridge or spur directly overlooking the Treia river, the survey identified another open settlement where occupation appears to have continued from the fourth to fifth centuries until the tenth (in the Roman period it is also defined simply as a settlement). This site is of particular interest not only because of the continuous occupation through these centuries, but also for the discovery of a possible ninth-century waster of *ceramica a vetrina pesante* suggesting that production of this specialist ware took place. If so, this is further evidence of a rural production centre in the Treia valley manufacturing goods identical to those of Rome.[1293] Like the settlement at Monte Paterno there is no evidence for fortifications. There is no evidence for activity after the tenth century when the site was very probably abandoned and it is possible that the inhabitants moved to the defended site of Santa Maria di Calcata, a few kilometres to the south.

Santa Maria di Calcata lies on a promontory opposite the medieval and modern village of Calcata (Calcata is first documented in AD 974). On a promontory, the highest point was enclosed by a walled circuit with a tower, and included a church and convent, a settlement area and caves, possibly used for dwellings, were also identified. The church, convent and tower were dated by Tomassetti to the fourteenth century; but the new study of the survey evidence indicates that this site was also frequented sometime during the late eighth to early ninth centuries.[1294] Further to the south, on a steep-sided pedestal, lies the hilltop defended site of Mazzano Romano. Although first described in a document of AD 945 as a '*castellum cum casis ed edificiis*', again excavations demonstrated that the earliest occupation phase, with wooden structures, was of the late eighth to ninth centuries.[1295]

In the same valley but further to the south-west, lies the Mola di Monte Gelato, which we have discussed already (see section 7.2.1.1). As we have seen, the villa and church seem to have been largely abandoned by the seventh century; a new settlement was established in the late eighth century, interpreted as one of the farms forming part of the domusculta of Capracorum, and a new church was built. Ceramic production also took place; a small kiln was discovered which produced domestic ware of the late eighth to early ninth centuries identical to contemporaneous products in Rome. There is little evidence for any substantial occupation after the early tenth century when only the church seems to have survived and the site was definitively and systematically abandoned in the early twelfth. It is probable that the inhabitants moved to the modest defended hilltop settlement of Il Castellaccio above Monte Gelato, identifiable as castrum Capracorum from a bull of 1053. Excavations of Castellaccio carried out specifically to examine when the move took place recovered a little eleventh-century pottery and large amounts of twelfth-century ceramics, corresponding with the abandonment phases of Monte Gelato.[1296]

Just to the east of Monte Gelato, a group of small open sites were identified. All appear to have been new settlements founded between the eighth to ninth centuries, although all were occupied at some point in earlier periods. Only one (TVP-ID 02160) yielded *ceramica a vetrina pesante*. TVP-ID 02161, located on the top of a ridge and occupied in the Orientalizing and Archaic period, seems to have been occupied in the late eighth to early ninth centuries and was probably abandoned after the tenth century. TVP-ID 02053, a Roman farm occupied until the mid-imperial period, was settled in the eighth to ninth centuries and again appears to have been abandoned by the tenth century. TVP-ID 02160, a Roman villa located on a flat area, on the other hand, may have been occupied continuously. Although material of the sixth and seventh centuries is lacking, there is clear evidence for occupation from the late eighth or early ninth centuries, including

[1292] Here Fiocchi Nicolai 1988 suggested that the church could have been earlier and served as a *parocchia* for the surrounding rural settlements.

[1293] As, for example, at Monte Gelato, see Potter and King 1997.

[1294] Tomassetti 1979b: 429–30; Tim Potter, unpublished notes in the BSR Archaeological Archives.

[1295] Potter 1972. Potter erroneously dated the site to the late sixth to seventh centuries, as part of the model of strategic forts on the Lombard-Byzantine frontier but later retracted this hypothesis. The revision of the survey material corroborates the results of the excavation, with a first occupation phase in the late eighth to ninth centuries.

[1296] Potter and King 1997.

ceramica a vetrina pesante, but by the tenth century the site appears to have been abandoned. All of these open foundations of the eighth to ninth centuries were therefore abandoned by the tenth or at the latest by the eleventh century, roughly contemporary with the decline of the settlement at the Mola di Monte Gelato.

A later foundation date is attributed to a fortified settlement located in the same area, La Rocchetta or Il Pizzo (TVP-ID 02110). The site is not mentioned in the documents but on the evidence of the ceramics from the survey it dates from the late ninth to early tenth centuries. Situated on a 'grassy platform' on a low hill at the head of a river valley, it lies in a remote and secluded area surrounded by low, but steep, cliffs, with the only access to the site being from the north-east. A Roman settlement, cautiously interpreted as a villa, existed on the site, occupied until the second to third centuries and in one area the medieval structures lie directly over the concrete floor of the Roman building. The medieval structures are described in the South Etruria records as being of 'poor masonry, possibly reusing Roman structures'. The main site is located on the upper of the two levels of the hill where the defences were identified. At the time of the survey these included a small rectangular tower (3.40 × 2.6 m) and a stretch of wall, of uncertain date. At least six caves that may have been used for habitation were also identified. Occupation appears to have continued into the eleventh century, after which the site was probably abandoned, perhaps because of its less defensible position when the inhabitants may have moved to Mazzano Romano.[1297]

In the Treia valley therefore, open settlements comprise both those that continued from the sixth and seventh centuries and earlier, as well as new sites that usually had been occupied at some point in the Roman period. We see the first move to hilltop settlements that subsequently became fortified, such as Mazzano Romano and Santa Maria di Calcata, occupied from sometime between the second half of the eighth to early ninth centuries. La Rocchetta/Il Pizzo is probably of a later date, from sometime between the late ninth to early tenth centuries. Most of the settlements which were never fortified, whether new or continuous, were also located on higher land, ridges and spurs. They had a relatively brief life, and most appear to have been abandoned by the tenth or at latest the eleventh century, when the inhabitants had probably moved to more defensible sites.

One final point regarding the Treia valley is the long tradition of ceramic production in this area, very probably related to the geology of the valley, where the river has cut through a thick mantle of volcanic tufa to the underlying Pleistocene levels, and provides an outcrop of clay that is rare in this area.[1298] This outcrop appears to have been exploited at various points from at least the Roman period to modern times. Ceramic production took place at Monte Gelato in the second century and again in the late eighth to ninth centuries, contemporary with the foundation of the *domusculta* estate centre. To the north of Mazzano Romano, in the locality of Santa Agnese, a site was identified that produced *ceramica a vetrina pesante* in the ninth century.[1299] This may have been one of the attractions of this valley for settlement. In this context, Toubert's mention of a port where the Treia river flows into the Tiber is interesting; although the port is documented only in medieval times, it is possible that a similar structure existed in the early medieval period.

7.2.2 The southern Sabina Tiberina: Eretum Survey

The Eretum Survey covered an area between the Via Salaria and the Via Nomentana. In the late sixth to seventh centuries a number of settlements existed in the area of the Via Nomentana, but by least the eighth to ninth centuries they had been abandoned, and settlement was now focused entirely in the area along the Via Salaria, where the cult centre and former cathedral church of Sant'Antimo is located. Although the diocese was integrated with that of Nomentum in AD 593, settlement around the church, cited as an *oratorium* in a mid-sixth century source, may well have continued, given that later medieval sources refer to a *'villa Sancti Antimi*'. The basilica of San Giacinto, for example, in the locality of Casa Cotta, near the former Roman town and bishopric of Cures Sabini still had a presbyter in the mid-eighth century.[1300] To the south of Sant'Antimo, along or close to the Via Salaria, three new open sites were identified with evidence of at least activity or frequentation in the eighth to ninth centuries.

Close to Sant'Antimo, situated on a spur overlooking the Rio Moscio, is TVP-ID 02407. The area, first occupied by a rich early to mid-imperial villa, has evidence for activity during the eighth/ninth to tenth centuries (two common ware sherds). Along the line of the Via Salaria, between two ridges at the head of a valley, TVP-ID 02328 was again the site of a rich Roman villa occupied until the late fourth to early fifth centuries, the area was then reoccupied or frequented during the ninth to early tenth centuries (one fragment of *ceramica a vetrina pesante* was recovered). Finally, TVP-ID 02377, set slightly back from the Salaria on a hilltop overlooking Fosso dei Cupicci. This site also

[1297] Tim Potter, unpublished notes in the BSR Archaeological Archives.

[1298] Ian Freestone, *pers. comm.*

[1299] In the 1990s a modern tile kiln, using traditional techniques, still existed 2 km to the north-east of Monte Gelato.

[1300] Fiocchi Nicolai 2004: 117.

has evidence for Roman frequentation (a possible outbuilding of the late Republican to mid-imperial period). Only one fragment of pottery was recovered of early medieval date, but it is significant given that it is a possible waster of *ceramica a vetrina pesante* dating to the ninth century. In all these cases, given the small quantities of pottery recovered, the interpretation of the material in terms of settlement, activity and so on, is problematic (see section 5.2).

The pattern in this area, seems to be similar to that of South Etruria and in particular, given the absence of sites which were later fortified, to the Ager Veientanus. All three open sites were occupied at some point previously, and all show no signs of frequentation by the eleventh century. The ceramic types are identical to those circulating in Rome and South Etruria, and one of the sites may have produced *ceramica a vetrina pesante*. In this area of the Sabina Tiberina, as in South Etruria, therefore, contacts with Rome seem to have been maintained and very probably revived in this period.

The sole site in our study area with evidence for continuity from the fifth or possibly sixth century into the medieval period lies outside the area of the Eretum Survey, further north along the Via Salaria. Perhaps not surprisingly this is the church of Santa Maria ad Vicum Novum, overlying the villa of the important consular family of the Brutti Praesentes (see section 5.3.4.5).

7.2.3 The central Sabina Tiberina: the Farfa Survey

In this area there appears to have been more continuity of settlement from the late sixth to seventh centuries. Occupation can only be attested archaeologically as continuing at latest into the early eighth century on the basis of the 'Sabina' tradition coarse-wares, after which production of these wares seems to have ceased (see section 6.6.2). Given that there was an intensive survey here, it should have been possible to identify late eighth- to ninth-century pottery and settlement, at least if the pottery of the area was similar to that circulating in Rome and South Etruria and in the southern Sabina Tiberina. This is not the case and despite the rich documentary evidence from the Farfa archives, archaeologically late eighth- to ninth-century settlement in this area is a virtual blank. Some high-status settlements such as the abbey of Farfa and, further to the north, the early medieval bishopric of Forum Novum, yielded *ceramica a vetrina pesante* and other ceramics of the Rome tradition, but no eighth- and ninth-century pottery was identified from the sites on the Farfa Survey. This suggests that despite the restoration of the *patrimonium Sabinense* to the church at the end of the eighth century, the links between the church of Rome and its newly restored *patrimonium* were still weak (see section 7.6).

Nevertheless, John Moreland's integration of the documentary sources with the archaeological evidenced strongly suggests the continued occupation of at least three rural settlements in the area of the Farfa Survey from the late sixth century through into the tenth or eleventh centuries (see section 6.2.2). In all cases these were open sites first occupied in the late sixth to seventh centuries, then cited in the documents in the eighth/ninth centuries and which, by the tenth or eleventh century, appear in the documents as *castelli*. Therefore, in this area the major break occurred in the late sixth to seventh centuries, after which there was more continuity in the settlement pattern. This may bring into question Hubert's dating of some excavated *castelli* in the Val del Turano to the tenth to eleventh centuries, overlooking their sixth to seventh century beginnings and the possibility that the gap in the eighth and ninth centuries is a product of our problem with the archaeological material.

Some indication of where people lived in the area comes from the churches. Churches frequently built over Roman structures are fairly common in the Sabina Tiberina. The chronological relationship between the villa and church is often not known (see section 5.3.4.4). The case of Brutti Praesentes/Santa Maria ad Vicum Novum, mentioned earlier, on the Via Salaria is a rare exception. Usually the churches are much later in date than the villa structures, and in the absence of systematic excavation, the relationship between the end of the activity on the villas and the foundation of the church is unclear. Often of Romanesque build, the churches frequently incorporated early medieval elements, architectural fragments and occasionally inscriptions of the late eighth and ninth centuries, as well as Roman *spolia*, suggesting the presence of an earlier cult centre.[1301]

We can cite three examples: Santa Maria Assunta at Fianello Sabino, Santa Maria in Legarano (Casperia) and the church of San Pietro *in muris centum* just outside the medieval and modern centre of Montebuono. Santa Maria Assunta at Fianello Sabino was built over a late Republican and imperial villa. The present church is of the eleventh or twelfth centuries, but the crypt includes a column with an inscription of the eighth and ninth centuries, as well as a marble fragment of the same period. The Romanesque crypt of the church, therefore, must incorporate part of an earlier church.[1302] Santa Maria in Legarano (Casperia) was built over a first-century AD villa. Part of the walls of the church rest directly on the mosaics of the villa. It has been proposed that the original church was of the late seventh to eighth centuries, while the existing

[1301] For a discussion of examples in the Sabina, see Patterson 2009.
[1302] Faccenna 1951; Alvino 1999; Sternini 2004; Valenti 2007.

structure is of the eleventh or twelfth centuries.[1303] The final, but less clear, example is the church of San Pietro *in muris centum*, just outside the medieval and modern centre of Montebuono. The church covers and in part reuses the structures of a great late Republican and early imperial villa, the so-called 'Terme di Agrippa'. Here, however, early medieval elements have not been identified.[1304] These complexes would certainly be worth systematically excavating in the search for eighth- and ninth-century settlement in this area.

7.3 Settlement and Roman roads

A functioning road system would have been essential if the papacy was successfully to implement its new policies regarding the territory, in particular regarding food supplies for Rome (see section 7.2.1.1) and from our first textual evidence, mostly of the tenth century, it is extensively documented. We have already mentioned the evidence for the Via Flaminia, and the Roman road network, principally the Via Cassia and the Via Flaminia, but also their offshoots the Via Clodia and the Via Tiberina, continued to play an important role throughout the medieval period.[1305]

The initial impression from the South Etruria Survey data is that there was a further diminution in the number of roadside settlements, continuing the trend which emerged in the late sixth and seventh centuries. However, the situation is more complex. The eighth- and ninth-century settlements along the major roads are virtually all new foundations, while almost all the late sixth- to seventh-century settlements have been abandoned. Furthermore, as emphasized earlier, it is impossible to date when occupation ceased at the latter with precision. This strongly argues for a revival in settlement along some of the ancient consular roads sometime in the eighth century.

When exactly these sites were founded remains a problem. The majority of the sites can only be securely dated from the late eighth to early ninth centuries (Figure 7.1). A number of new sites are in defensible locations, on spurs or hills overlooking the roads and, as suggested earlier, may have been founded for defensive purposes in the early to mid-eighth century following Liutprand's attacks on the Duchy of Rome, such as Ponte Nepesino on the Via Amerina and possibly Grotta Colonna on the Via Tiberina. Others may have been founded from the late eighth century with the stabilization of the political and military situation and the foundation of the *domuscultae*. The only sites which continue from the late sixth to seventh centuries have a religious role, such as the cult centre of San Giovenale near Sutri, on the Via Amerina and Santa Rufina and the martyrial sanctuary at Casale di Boccea on the Via Cornelia. One example of a settlement which continued may be that of Casale Scorano, which had absorbed some of the inhabitants of Lucus Feroniae, though both sites seem to have co-existed into the late eighth to early ninth centuries.

Along the minor consular road of the Via Cornelia, the sanctuary and cathedral seat of Santa Rufina-Silva Candida continued; indeed, the cathedral church and baptistery was restored by Pope Hadrian I (see section 7.4.1), as did the substantial settlement which had grown up around the centre. The sanctuary in the locality of Casale di Boccea also continued to function, the church still existed in the ninth century and may have been associated with a settlement given that in a document of 854 Pope Leo IV refers to a '*fundum umum in integro qui vocatur Buccege cum ecclesiae Sanctorum martirium Marii et Marthae filiorumque*'. Fiocchi Nicolai suggests that the early Christian church, certainly in existence in the sixth century, may have been associated with a *vicus*, and the '*fundus*' referred to in the document could well be the same settlement which survived alongside the sanctuary.[1306]

On the Via Clodia, with the exception of San Liberato-Forum Clodii, no settlements were identified and the same is true for the Via Cassia. Along the Via Amerina settlements are limited to Ponte Nepesino and one other site very close to Nepi itself. Ponte Nepesino has already been discussed, a defended settlement in a strategically important position overlooking the road, its foundation may well be related to the renewed Lombard offensives in the 720s. The second lies just to the south of Nepi, on a promontory (TVP-ID 01935). This was the site of a Roman farm occupied into the fourth to fifth centuries and then reoccupied or frequented in the eighth century, when caves and quarries were also identified. After this there is no evidence for activity.

Along the Via Flaminia the evidence for settlement is more consistent. Some time after the abandonment of the late sixth to seventh century settlements, a small number of new, unfortified sites were founded.[1307] With the exception of the *castello* at Prima Porta, the earliest evidence for which is of the ninth century, some distance (1.5 km.) from the Flaminia, on leaving Rome two sites have evidence for occupation or activity from the late eighth or ninth centuries. The first (TVP-ID 00521), in the locality of Cento Uccelli, cannot be dated more precisely than between the late eighth and ninth

[1303] Sternini 2000.
[1304] Alvino 1999, 2009; Sternini 2004; Valenti 2007.
[1305] Wickham 1978: 146. Wickham notes that even geographical locations in charters were until the twelfth century normally given in terms of distance from Rome along a particular road.
[1306] Fiocchi Nicolai, Bisconti and Mazzoleni 1998.
[1307] Bosman 1993 demonstrated the importance of the Via Flaminia in the late antique and medieval periods, and our study adds further support to her conclusions.

centuries, possibly even the early tenth century. This is a frustrating site as the original South Etruria Survey records note a large amount of material including 14 fragments of *ceramica a vetrina pesante* out of a total of 75 sherds, but the material was not found at the time of the restudy. The pottery recovered from the second site (TVP-ID 03844) suggests a substantial early medieval and medieval settlement dating from between the late ninth or early tenth centuries until the twelfth centuries. The close vicinity of these two sites suggests that at some point there was a shift in location of settlement from one site to the other. Further to the north, close to the catacomb and church of San Marcello (Bamboccio), which was still frequented in the eighth and ninth centuries, another site was identified (TVP-ID 00507) on a knoll south of the ancient Sacrofano road, again first occupied in the Roman period and then with evidence for activity in the ninth century.[1308] Finally, further on from the church of San Marcello is an interesting medieval settlement (TVP-ID 03870); a significant amount of *ceramica a vetrina pesante* was recovered including the earliest late eighth- to early ninth-century productions which are not particularly common in the countryside. Occupation continued into the first half of the eleventh century. Again, unfortunately no topographical information was given for any of the above sites.

Similarly, along the Via Tiberina, on the stretch from Rome towards Lucus Feroniae, there is a revival of settlement. No late sixth- to seventh-century sites were identified along this tract, but during the eighth to ninth centuries two new settlements appear (Procoio Nuovo and Grotta Colonna). Both are located on hilltops overlooking the road, a very similar situation to Ponte Nepesino, suggesting that they may have had some strategic function. There is no documentary evidence for either, but on the basis of the survey material both were founded during the eighth to ninth centuries on the site of pre-existing substantial Etruscan settlements, which had also signs of limited Roman activity.[1309] That in the locality of Procoio Nuovo (TVP-ID 00640) is located on a low, but prominent hill. Occupied from at least the ninth century, possibly earlier, it was never fortified and remained an open settlement until its abandonment probably in the eleventh century.[1310] The second, Grotta Colonna, a fortified site, although the date of the defences is unclear, lies on a promontory some kilometres to the north of the latter. There are two South Etruria Survey coordinates for this site, referred to as Grotta Colonna A and B[1311] (TVP-ID 00976), but it is very likely that this was a single settlement which saw an expansion of its inhabited area during the eleventh century. The area defined as Grotte Colonna B was first occupied in Etruscan and Republican times. Some frequentation then took place in the fourth and fifth centuries, after which it was occupied from the eighth/early ninth centuries until the fourteenth century.[1312] At some point it was fortified: the remains of a tower still existed at the time of the survey and storage pits, presumably for grain, were also identified. As regards the area named Grotte Colonna A, the surface material is of a later date, from the second half of the eleventh century, suggesting that the settlement expanded in this period. Occupation in this area also continued through until the late fourteenth/early fifteenth centuries. An aerial photograph of 1943 shows traces of a defensive ditch and the survey again identified grain storage pits.[1313] Finally, continuing to the north on the Via Tiberina a small cluster of sites around Lucus Feroniae is worth a mention. From the fourth to fifth centuries there is evidence for a Christian community at the Roman town, and it was still frequented in the late eighth to ninth centuries, although by the seventh century the majority of the remaining inhabitants had probably moved to the nearby settlement of Casale di Scorano (see section 5.3.7). Nearby lies *Castellum Scoranum,* which overlooks the Roman town. First documented in AD 986, excavations have demonstrated that it was occupied from the ninth century. Finally, the site of a Roman villa in the locality of Monte Scorano (TVP-ID 10202) was certainly occupied in the eighth or ninth century.[1314] Although there is no evidence for sixth- to seventh-century occupation, it is possible that this was a continuing settlement rather than a new foundation.

Along the Via Salaria in the area of the Eretum Survey, again the two sixth to seventh century sites are abandoned by this period, however one new site was identified (TVP-ID 02328). It is situated in the locality of Casacotta close to Eretum on a spur overlooking the Rio Moscio. Originally the site of a villa occupied until the mid-imperial period, the recovery of one fragment of *ceramica a vetrina pesante* suggests frequentation or occupation of the area sometime during the late ninth to tenth centuries.

7.4 Urban transformations

Nepi and Sutri, the only towns in the study area that continued to maintain an 'urban' function from the Roman period and earlier, are located on rocky pedestals. Although there was still very limited activity at some Roman towns, by the eighth century the inhabitants of

[1308] Fiocchi Nicolai, Bisconti and Mazzoleni 1998: 291–2, 315–19.
[1309] The Etruscan settlement phase at Grotta Colonna is defined as a nucleated settlement, that at Procoio Nuovo as a farm, significant amounts of Etruscan material were recovered from both sites.
[1310] Only *ceramica a vetrina pesante* was collected from this site and therefore it is possible that occupation began slightly earlier.
[1311] See Jones 1962: 155, 164–5; Wickham 1979: 67–69.
[1312] The date of the earliest phase of the site is based on a considerable quantity of domestic wares dated to AD 700–850.
[1313] The original South Etruria Survey records note that at the time of the survey the remains at Grotte Colonna A and B were being destroyed by tufa quarrying.
[1314] Mazzi and Cotroneo 1995.

the other Roman towns, or what was left of them, had moved to similar defensible sites, some of which can be defined as towns, as in the case of Civita Castellana and Ocriculum. This move had already begun from the sixth to seventh centuries, and appears largely to have been a direct consequence of the Lombard invasions. All the latter, whether continuously occupied or new foundations, were the seats of bishoprics. We know little or nothing of their layout and nature, mainly because most of them are still occupied today. However, the building and rebuilding of some of the churches in the centres suggests, as for rural settlement, that there was a slight revival (see section 7.4.1). The cathedral church of Nepi, for example, was rebuilt in the ninth century. As discussed earlier, other Roman towns where occupation continued, such as Forum Novum, Forum Clodii and probably Nomentum, had completely lost any urban function and their continued importance is due solely to their religious role; Forum Clodii-San Liberato was an important cult centre and Forum Novum and Nomentum were the seats of bishoprics. At Forum Novum, the seat of the bishop of the Sabina Tiberina, a commission of enquiry was held in 781 to discuss the legitimacy of the papal claims to their patrimony in the Sabina, members included the abbot of St Martin at Tours, Charlemagne's secretary and duke Theodore, while in AD 800 Charlemagne is said to have met Pope Leo III at Nomentum.[1315] Certainly at Forum Novum, only the cathedral church seems to have survived; even the excavations of the probable bishop's palace directly behind the church recovered only a few residual pottery fragments of this period.

7.4.1 The creation of a territorium

The new papal control of Rome involved papal ownership of the former Byzantine imperial lands, which were extensive and added greatly to the pre-existing already substantial lands of the church. Tenth-century sources attest that aristocratic and non-aristocratic landed wealth in the city and its hinterland was held overwhelmingly in lease from the church, and this was very probably true of the ninth century. There is no doubt that one of the main objectives of the popes in regard to the acquisition of the imperial lands was to ensure provisions for the city of Rome, as we have seen. They replaced lost sources of imported food and their express aim, as recorded by the *Liber Pontificalis*, was to supply food to the poor of Rome and for the use and requirements of the church. They were supplemented by land still in private hands for which the *Liber Pontificalis* stresses the popes paid due recompense. Given the serious situation regarding supplies for the provision for Rome, worsened by the neglected state of the countryside following the long period of intermittent warfare, the acquisition of new lands and the reorganization of existing church properties at this time was essential.

The popes' actions were not only based on economic motives. The *domuscultae* were also an expression of papal power aimed at affirming their authority (see section 7.1). The construction, rebuilding and aggrandizement of churches in the area was, as in Rome, an integral part of this policy. Furthermore, the church now had at its disposition the financial resources to carry out such an enterprise. The revival of ecclesiastical building activities by the church in Rome from around the mid-eighth century, following a virtual lack of such initiatives in the seventh century, was extended to the countryside.[1316]

Most notable in these initiatives is the prolific activity of Hadrian I carried out at a time when a relative peace had been finally restored to the countryside. The *Liber Pontificalis* records that Hadrian founded and built the church at the *domusculta* of Santa Cornelia 'beautifully adorning it'. At the bishop's seat of Silva Candida, part of the estate centre of Galeria, the same pope 'renewed with great care' the basilica of Saints Rufina and Secunda 'which had decayed with great age, along with its baptistery' (*Liber Pontificalis*, The Life of Hadrian 97,69; 97,76). At the estate centre of Monte Gelato, the late Roman church was replaced by a second substantially larger church built *c.* AD 800.[1317] Molinari has highlighted the great similarity in building techniques between the capital and churches at the domusculta estate centres of South Etruria, suggesting that certainly in the case of the *domuscultae* specialist artisans from Rome may have been employed.[1318] However, this phenomenon was not restricted solely to the *domuscultae*, for in the same period we witness the building, rebuilding and restoration of many churches throughout the territory by the papacy. For example, the earliest phase of the church of San Liberato dates to the late eighth to early ninth centuries and in the mid-ninth century was the object of donations by Pope Leo (847–55), no doubt linked to the martyrial memory of San Marciano.[1319] The rebuilding of the cathedral church of Nepi in the ninth

[1315] For Forum Novum, see Llewellyn 1971: 240. To this phase of Forum Novum-Vescovio's history can be dated a funerary inscription of the priest Uvaldipertus, probably to be identified with the Spoletan priest who in 768 was a protagonist in the events which led to the election of the Antipope Filippo; Fiocchi Nicolai 2009: 165. For Nomentum, see Fiocchi Nicolai 2004: 112–13.

[1316] Delogu 2010: 54–5.

[1317] The date is proposed by Tim Potter on the basis of the documentary and archaeological evidence. At the time of its construction it is uncertain if the earlier late Roman church was still standing, although it is likely that it was already in ruins (Potter and King 1997: 79–82)

[1318] Molinari 2010.

[1319] Only one of the three martyrs, Marciano, can be attributed with some probability to Forum Clodii. Nibby 1837: 325–6 noted that while in the documents the church is designated as San Marciano, the 'popular' name preferred by the inhabitants of Bracciano is that of San Liberato; Christie, Gibson and Ward-Perkins 1991: 343, n. 119.

century has already been mentioned, as was the church at Le Mura di Santo Stefano sometime in the early to mid-ninth century, and that at the hilltop village of Mazzano Romano.[1320]

The same phenomenon is seen in the Sabina Tiberina, although here the dominant power was the increasingly powerful abbey of Farfa, which possessed extensive lands in South Etruria. The Abbey of Farfa was also the beneficiary of donations by Charlemagne and seems to have profited from this by the construction and renovation of a number of churches in its territory. The case of Casale San Donato has been mentioned already, where the transition from wooden to stone structures in the eighth century, including the construction of a church, is seen by John Moreland as a possible physical manifestation of the power of the monastery in the area.[1321] The earliest construction phases of a number of churches in the Sabina Tiberina are also of the late eighth to ninth centuries, for example, Santa Maria Assunta near Fianello, San Pietro *in muris centum*, near Montebuono, and Santa Maria in Legarano, near Casperia. The earliest existing phase of the cathedral church of the bishopric at Forum Novum-Vescovio is also of the late eighth to early ninth centuries (see section 5.3.7.2) and it may well have been in this newly built church that the meeting to discuss the papal claims to their *Patrimonium Sabinense* took place in AD 781.

7.5 People in the landscape

Here the real question is where were the people in the eighth and ninth centuries? How can we reconcile the poverty of the material record, especially in the later eighth century onwards where issues of visibility are less relevant, with indications of an increase in papal-sponsored activity? We will consider the nature of the material culture, the structure of land organization and the shift to hilltop sites.

Clearly material culture was much poorer and therefore much less visible than in the Roman period, a phenomenon that became marked from the late sixth and seventh centuries with the reuse of building materials and the frequent use of wooden structures, which are not very helpful for field survey. Stone structures did begin to be built again in the countryside in the Carolingian period, and the building techniques have been studied and are now clearly defined, but they are overwhelmingly limited to towers or defences in general and churches.[1322] The earliest late eighth- to ninth-century occupation phases of the first '*castelli*' in South Etruria, such as Ponte Nepesino, Mazzano Romano and La Rocchetta/Il Pizzo, all consist of wooden structures.[1323]

In the late eighth, and especially in the ninth century, the basis of the urban economic system probably remained agricultural production. However, if temporary agricultural workers were used, their work may have left few traces. Santangeli Valenzani notes that a large number of people certainly would have been required for the papal *domuscultae* during harvest times for the gathering of crops. The discovery of a *granaio* in perishable material to the east of Rome, near Torre Spaccata, attributed by radiocarbon dating to the tenth century, has led him to suggest that the existence of temporary settlements occupied by workers in the Roman countryside who moved to the area at peak times of agricultural activity, such as harvest time, and whose dwellings, probably wooden huts, would be very difficult to identify archaeologically.[1324] To support his hypothesis Santangeli cites the evidence from the modern period for this phenomenon. Bercé, for example, described how in 1953, 40,000 labourers from the uplands of the Abruzzo and the Marche arrived in the vicinity of Rome, first to reap the wheat and barley, then to thresh it, and afterwards to harvest the grapes.[1325] Sallares related this phenomenon in the Roman world to the effects of malaria, noting Varro's recommendation that 'hired labour should be employed in unhealthy regions, rather than slaves'. Although some of Sallares's hypotheses are questionable, it is also true that following the collapse or transformation of the Roman system (however one views it), and the consequent breakdown in the maintenance of its structures, the effects of malaria, already felt in the Roman period, must have been more severe.[1326] Such temporary workers would probably have used metal vessels for cooking, and for other needs wooden bowls (for eating) and leather vessels (to contain liquids), both of which would survive only in exceptional circumstances in the archaeological record.

Santangeli Valenzani's argument offers a very attractive solution to the problem of the lack of settlement for this period, one cited by a number of archaeologists including myself. However, more recently Chris Wickham has convincingly argued against this

[1320] For Le Mura di Santo Stefano, see Van der Noort and Whitehouse 2009: 216. The authors have noted its construction was probably a reminder to the local population of the considerable and rapidly growing temporal authority of the pope.
[1321] Moreland *et al.* 1993; Moreland 2010.
[1322] Molinari 2010.
[1323] Even in Rome excavations have demonstrated that from the first half of the eighth century the houses of the poorer strata of society were simple buildings with beaten earth pavements, whose walls consisted of a base of resused material without mortar, clay walls and wooden or straw roofs (Santangeli Valenzani 2003a: 122).
[1324] Santangeli Valenzani 2003a; 2008; Molinari 2010.
[1325] Bercé 1989.
[1326] Salares 2002. The systematic destruction of the bishop's palace at the bishopric of Forum Novum-Vescovio in 1295 and the construction of a new building, probably on the hilltop above the lowlying centre, was due to the 'mal`aria' in the area as we know from the documents. There are other examples of settlements in our study area being abandoned in the late thirteenth century for the same reason.

reconstruction. He stresses that hired temporary rural labour is virtually undocumented anywhere in the early middle ages before 1300, whereas rural leases sometimes mention stable subtenants and, even if they do not say where they lived, they were not temporary labourers. The documentary evidence indicates that at least as regards the *Agro Romano*, the majority of the area was always exploited agriculturally and demanded a relatively intense pattern of cultivation, one which temporary settlement, whether in the early or central medieval periods, could not provide.[1327]

Santangeli Valenzani's hypothesis may not offer the whole answer, but the nature and organization of settlement is still very probably one of the reasons behind the difficulty in identifying it archaeologically. The popes appear to have reorganized agricultural production through the rationalization and the expansion of landed properties. As Delogu notes, documentary evidence for how this was structured relate primarily to the lands owned by the church. The popes promoted the organization of new, dispersed properties in structured, administrative entities—corti, *massae*, sale e patrimonies—from which they received revenues of various types. In other words, the documents seem to be referring to dispersed settlement which are less easily detected by archaeology. Wickham also points out that houses were probably scattered and although he is referring mainly to the situation in the tenth and eleventh centuries, this was probably also the case for the eighth and ninth centuries too.[1328] Certainly in our area, with the exception of the *domusculta*, there is no evidence for large estate centres in the late eighth and ninth centuries, and even the centres related to the *domuscultae* do not always seem to have been large in terms of areas of actual settlement, as for example at the Mola di Monte Gelato (see section 7.2.1.1).

Finally, another factor is the move to hilltop sites, a process which began in the area of Farfa in the late sixth to seventh centuries and in South Etruria from the late eighth to early ninth centuries. As already noted, the earliest occupation phases of these sites are not easily detected by field survey. However, in both cases where excavations of *castelli* have been carried out in this area, at Ponte Nepesino and Mazzano Romano, the pottery indicates a first occupation phase in the late eighth to ninth centuries. It is very likely that this problem is biasing our evidence, and that at least some of the other *castelli*, for which we only have survey evidence, would if excavated reveal a similar picture. In the end, the likelihood is that the countryside was occupied in a relative sparse manner by *contadini* living in relatively modest settlements.

As for the elite, the Roman aristocracy and the higher echelons of the Church, the former appear to have lived in Rome; not even if the bishops actually resided permanently in their *episcopium*; there is no record of the bishop of Vescovio even visiting his bishopric in the ninth century. We know that by the tenth and eleventh centuries the bishops of Silva Candida (Santa Rufina) and Porto had alternative *episcopia* on the Tiber Island, and this could well have been the case in earlier periods.[1329]

7.6 Rome, the Church and the Tiber valley

Papal control of the city and the territory was consolidated in the second half of the eighth century, the period when the popes also actively renewed their interest in its hinterland and began their attempts to establish a *territorium*. As mentioned in the introduction to this section, the first half of the eighth century marked a new era for Rome, a change reflected in all levels and aspects of the material culture: ceramics, bread production, butchery practices, construction techniques, and monetary circulation. No less important was the cessation of supplies to the city after the end of the seventh century from its remaining overseas provinces: by the early eighth century, the city's only sources for provisions, apart from regional produce, were its lands in the south: primarily Sicily, Calabria and also Campania.

The loss, shortly after, in 724, of the church's lands in Sicily and Calabria have therefore been seen as having major implications for the food supply of Rome's population; although Delogu emphasizes that even in the seventh century the produce of the church's Sicilian patrimonies had always been a subsidiary source, supplying just certain sectors of the urban population and Wickham argues that the effects of the loss were probably outweighed by the pope's acquisition soon after of its new *territorium* (see section 7.1).

Nevertheless, regional agricultural production must have assumed increasing importance in this period: despite the fall in urban population numbers, the supplies from the papal lands in Campania, by now the only extra-territorial source remaining to Rome, would not have sufficed. This is demonstrated by the foundation by the popes of the *domuscultae*, as we have argued.

The *Liber Pontificalis*, referring specifically to the estate centre of Capracorum, stipulates the production and supply of wine, olive oil, grain (wheat and barley) and

[1327] See Wickham 2015: 64–66 for his arguments against the possibility of temporary settlement. My thanks to Chris Wickham for pointing this out to me, and also the fact that the Torre Spaccata site is relatively fragmentary.

[1328] Delogu 2010: 252–3; Wickham 2015: 64–6.

[1329] Llewellyn 1991: 216.

pork. Vineyards, olive groves and mills are also among the properties of the other *domuscultae* founded by Pope Hadrian for 'the use and requirements of the church' and presumably the same products were to be provided by these centres. Archaeologically, evidence for these supplies is almost impossible to detect. Grain was probably transported in sacks; wine and oil in wooden casks, although the large flat-bottomed, amphora type vessels found throughout the territory may have served for the transport of goods, as well as for storage. The latter are not dissimilar in size and form to the latest productions of the Spello-type amphorae and were also produced by the kiln at the *domusculta* estate centre of Monte Gelato, between the late eighth and early ninth centuries.[1330]

As regards meat, the few (actually only two) published animal bones from contexts of this period, from Monte Gelato and the hilltop settlement of Ponte Nepesino, reveal a predominance of pig bones.[1331] At the former this might be expected, given its role as an estate centre; the fact that the same pattern also emerges at Ponte Nepesino is significant and suggests that, following the dominance of sheep/goat in the late antique period, in the late eighth to early ninth centuries there was a reversion once again to a pig-dominated economy. The latter is more labour intensive, indicative of an expansion of arable farming and the increased consumption of pork, presumably influenced by the requirements of the church. The relationship between cooking vessel types, culinary practices and food resources, in particular animals, has already been noted regarding developments in the fourth century (see section 5.3.10.7). In particular, Paul Arthur's studies suggest that open casserole forms are typical of rural areas with a predominantly sheep/goat economy: in this context it is significant that in the countryside the changes in animal resources and diet seen in the late eighth century is roughly contemporary with a change in the cooking wares forms from an assemblage predominated by casseroles to one almost entirely composed of jars.[1332]

This is not to imply that the entire agricultural produce of the middle Tiber valley, apart from that for the immediate needs of the rural inhabitants, now ended up in the warehouses of the Church and other ecclesiastical institutions. Despite the *domusculta* system, from the tenth, and almost certainly from the ninth century, some lands further from the City were leased out to members of the Roman aristocracy. More rarely, lands remained in the hands of private individuals, while after the restoration of the *Patrimonium Sabinense* the main beneficiary seems to have been the Abbey of Farfa rather than the papacy. In all these cases the produce from the territory would only to a very limited extent have been sold (or exchanged) on the market, and would have directly served the needs of the major landowners. As mentioned earlier, this could explain the disappearance of small denomination coinage at Rome from sometime in the later eighth century. If this is the case it is hardly surprising that in the countryside, where even in the late sixth to seventh centuries a coin-based market economy did not exist, there is no evidence of monetary circulation. The only *denarius* of Carolingian tradition found is that from the Mola di Monte Gelato in the name of Hadrian III (884–5).[1333] Furthermore, it was deposited in a child's tomb, rather like a funerary offering. A similar case is that of the *denarius* from the catacomb of Santa Cristina at Bolsena. Other ninth-century contexts at sites that are well-documented from the point of view of the ceramics have no corresponding numismatic finds, confirming the general rarity of coins in this period.[1334] This suggests that, as in the late sixth and seventh centuries, coins were not used, certainly not for daily transactions, and that the rural population relied on other methods such as exchange to obtain those goods or agricultural products which they could not produce themselves.

Functioning river and land routes would have been essential to ensure that supplies from the territory reached the city. We have seen that the *domuscultae* were located along major roads, which began to be repaired at this time (see section 7.3). In addition, after a virtual blank during the late sixth and seventh centuries, river traffic seems to revive from the beginning of the eighth century, at least on the basis of the documentary sources.[1335] The *Chronicon* of Benedict refers to the presence of ports and port activity, and although this is not always a reliable source, but there is also written evidence for the extension of the exemptions and concessions of public rights by the Lombard kings and the Carolingian emperors in favour of the great ecclesiastical bodies, in particular the abbey of Farfa.[1336] River traffic had probably continued throughout, but on a much reduced scale. From the tenth century with the great increase in the documentary evidence, references to river traffic along the Tiber become more

[1330] Patterson 1997.

[1331] King 1997; Cameron *et al*. 1984.

[1332] Arthur 2002. In the fourth century the change is reversed: in the countryside we see the change from a pig dominated economy using primarily jar forms to a sheep/goat economy and the prevalence of open casserole forms. It has to be said though that when there is a return to a sheep/goat dominated economy sometime in the tenth century, jars continue to be the characteristic cooking ware form.

[1333] Hobbs 1997, cat. no. 58.

[1334] Patterson and Rovelli 2004: 280.

[1335] Leggio 2004.

[1336] For details, see Leggio 2004: 298. As he and other scholars note, the *Chronicon* must be treated with a certain amount of caution, given the numerous inaccuracies in the text which was written in the tenth century and used oral sources almost exclusively.

frequent. They give a valuable insight into some of the main aspects of fluvial transport and it is plausible that some of the aspects first described in the tenth century documents existed earlier, in particular when the papacy acquired its badly needed Patrimonium San Petri and made an exerted attempt to exploit the territory. Thanks to the archives of the Abbey of Farfa, we are particularly well informed for the Sabina. A succession of three main ports are described, as well as various secondary landing points, along the stretch of the middle Tiber from Orte leading down to Rome which were equipped with various facilities. One of the secondary landing points lies at the confluence of the river Treia with the Tiber, the same river which runs past Mola di Monte Gelato, and it is possible jetty may have existed in this area when the site was functioning as a domusculta centre.

As we have seen, the question of how the goods were transported down the river is linked with the transport of wood. There are rare mentions in the seventh and the beginning of the eighth century to popes bringing wood from Calabria, after which the documents are silent (see 7.1). However, great beams of wood would have been essential for the construction and renovation of the papal basilicas in Rome, by the second quarter of the eighth century the papacy had lost its possession in Calabria. Beams of wood from the Appennines, almost certainly transported by the Tiber, were used for the rebuilding of the church roof of the Abbey of Farfa at the beginning of the tenth century, in AD 911-13, taken, one for every five, from those sent to Rome from the Appennines for the reconstruction of the roof of San Giovanni in Laterano. The importance of this area, in particular that known as the Massa Trabaria, for the supply of wood to Rome has already been mentioned (Chapter 5). The Massa Trabaria probably came under the control of the Church in the second half of the eighth century, donated to the Church following Pippin's reconquest of the Byzantine pentapolis in AD 756.

As discussed in Chapter 5, one of the means by which the timbers were brought down the Tiber to Rome were as zattere or rafts. Like the flat-bottomed boats such as the chiatte of the Roman period and the chiode documented in the medieval period, they were almost certainly used to transport other goods. Very probably both types of crafts were also used for river transport in the early middle ages. The use of zattere, in particular for the transport of agricultural produce, is attested during the seventeenth to nineteenth centuries (Chapter 5).[1337] Yet the degree to which links between Rome and its territory were strengthened in the late eighth century is perhaps most strikingly demonstrated, however, in the ceramics for everyday use and these merit a more detailed discussion.

7.6.1 The ceramics

Although none of the pottery recovered throughout the middle Tiber valley can be firmly dated to the early eighth century, from the late eighth, contemporary with the foundation of the *domuscultae*, the ceramics in use on settlements in South Etruria and the southern Sabina Tiberina are identical to those in Rome itself and were also produced in the territory. They consist of kitchen wares, primarily cooking jars, a range of domestic-ware vessels in refined fabrics, jugs, jars, amphorae and anforette, often with incised decoration in various motifs, and from the late eighth century, the glazed ware known as *ceramica a vetrina pesante* or Forum ware, again primarily jars with rich, applied and/or incised decoration. This ceramic 'tradition' was to last, both in the territory and Rome, into the late twelfth to early thirteenth centuries with the forms and the decoration undergoing a gradual evolution, marked by the increasing standardization of the forms and the gradual disappearance of decoration on the vessels. The ceramics of this period, therefore, are almost exclusively closed vessels, indicating that open forms, such as bowls and plates, were now substituted by wooden vessels. At the same time, we see the appearance of a small number of *testi da pane*, used primarily for the household baking of bread, which even more significantly also appear in contemporaneous urban contexts in Rome (see section 6.1).

There is one clear difference between Rome and the countryside: the Neapolitan-type amphorae, almost certainly from the bay of Naples, which are common in Rome in the late eighth century until sometime in the ninth, seem only in rare circumstances to have reached rural areas. These amphorae were probably for the transport of wine from the church's lands in Campania, but the produce seems to have been intended for solely for the city and very probably only for a selected part of the urban population (see section 7.1). So far only one example has been identified in the territory and that was found at the *domusculta* estate centre of Santa Cornelia. Wine was also one of the products which the *domuscultae* were required to supply to the church, and presumably locally

[1337] Further support for continued activity on the river is the fact that when references to river transport reappear in the medieval documents there are several elements in common with the situation in late antiquity. For an exhaustive discussion of the supply and transport of wood, see Diosono 2008b. For example, she notes that the *nautae tiberini* seem to reappear in the form of the important corporation of the *sandalarii*, whose name derives from *sandalae*, flat-bottomed boats whose *schola* was based in Rome. On port facilities on the Tiber, Toubert 1975: 633–8, 641–2; Leggio 2004: 298. On the reconstruction of the roof of San Giovanni in Laterano, Leggio 1992: 63, 2004: 298–9. On Church control of the Massa Trabaria, Diosono 2008a: 23-7.

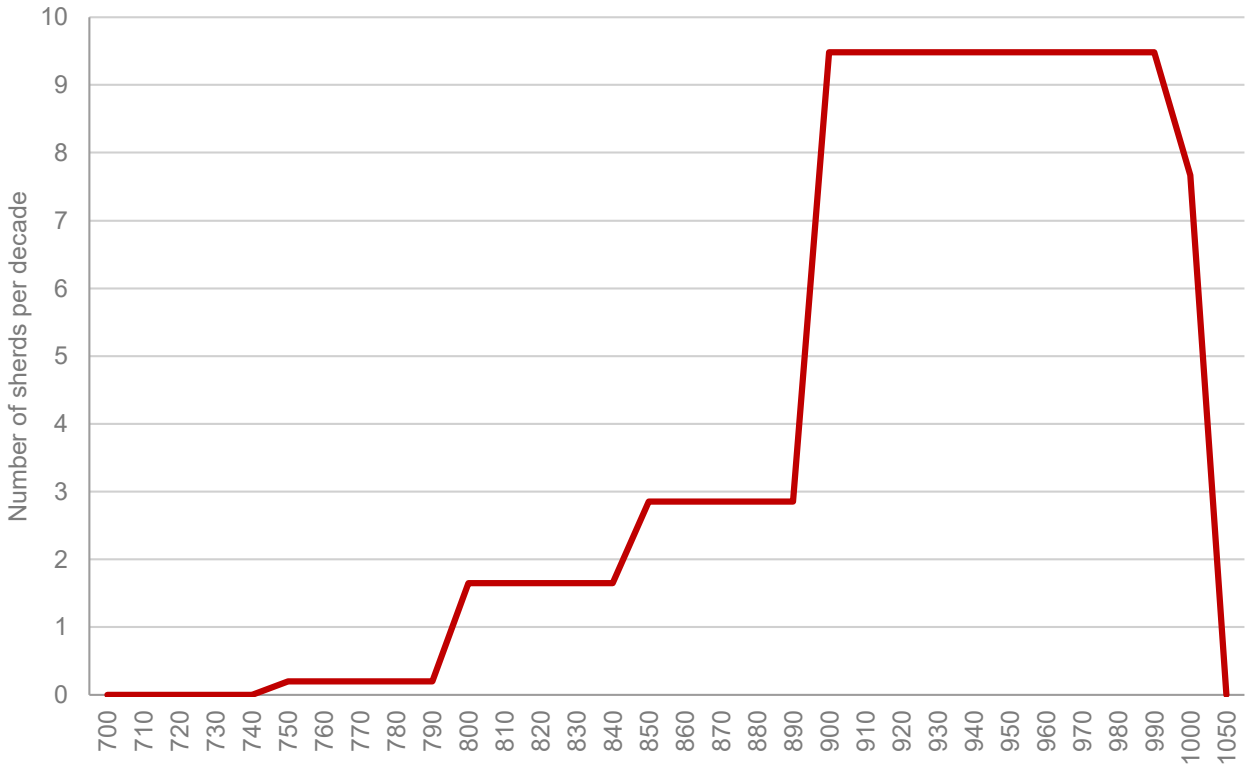


Figure 7.5. Weighted average numbers of *ceramica a vetrina pesante* sherds per decade collected by the South Etruria Survey.

produced wine would have sufficed for the needs of the rural population.[1338]

Therefore, not only was South Etruria and the southern Sabina Tiberina once again strongly linked to the city, but social and economic conditions existed in the countryside that were favourable to ceramic production, contemporaneous with the foundation of the *domuscultae*.[1339] The presence of the *domuscultae*, and the more stable political and military situation appear to have stimulated the rural economy, and this may have extended to ceramic production.

Rural ceramic production clearly continued throughout late antiquity but after the abandonment of the imperial pottery production centres, at the end of the second century, no secure kiln sites have as yet been identified in the middle Tiber valley until the late eighth to early ninth centuries.[1340]

At Mola di Monte Gelato, in the Treia valley,[1341] ceramic production took place at the villa in the first and second centuries AD. From the late eighth century, at the same time as the establishment of the *domusculta* estate centre, a small kiln was also in operation. Production continued into the early ninth century, possibly into the later ninth. It was certainly no longer in use in the tenth century, by which time the site also seems to have ceased to function as an estate centre. Therefore, in this case, ceramic production seems to have been managed by the Church and may have involved specialist potters brought from Rome. It was suggested earlier that specialist builders from Rome may have been used for the construction of the churches at the domusculta centres.The kiln produced a range of domestic-ware products in a refined fabric whose forms are identical to those of Rome in the same period, consisting exclusively of closed forms: jugs, jars, small anforette and amphorae, often with incised decoration.[1342] As suggested earlier, some of the larger amphorae-type vessels may have been used for the transport of foodstuffs to Rome as well as for storage and it is possible that other vessels were produced for Rome, accompanying the foodstuffs that the estate centre sent to the city.

The diffusion of *ceramica a vetrina pesante* in the territory merits some attention. This glazed ware, which in its early phases was richly decorated, required specialist production, and therefore its appearance also indicates that there was a market for such goods. It first appeared in Rome in the late eighth century and was also produced there, as demonstrated by the

[1338] See Patterson in Christie and Daniels 1991.
[1339] Patterson 1992a.
[1340] However, a seventh-century kiln producing coarse-wares has recently (summer 2016) been identified at Campo della Fiera, near Orvieto, in the upper Tiber Valley (my thanks to Simonetta Stopponi for this information; the material is being studied by Danilo Leone).
[1341] Artisan brick and tile production was still taking place in the Treia valley in the 1980s.
[1342] Patterson 1997.

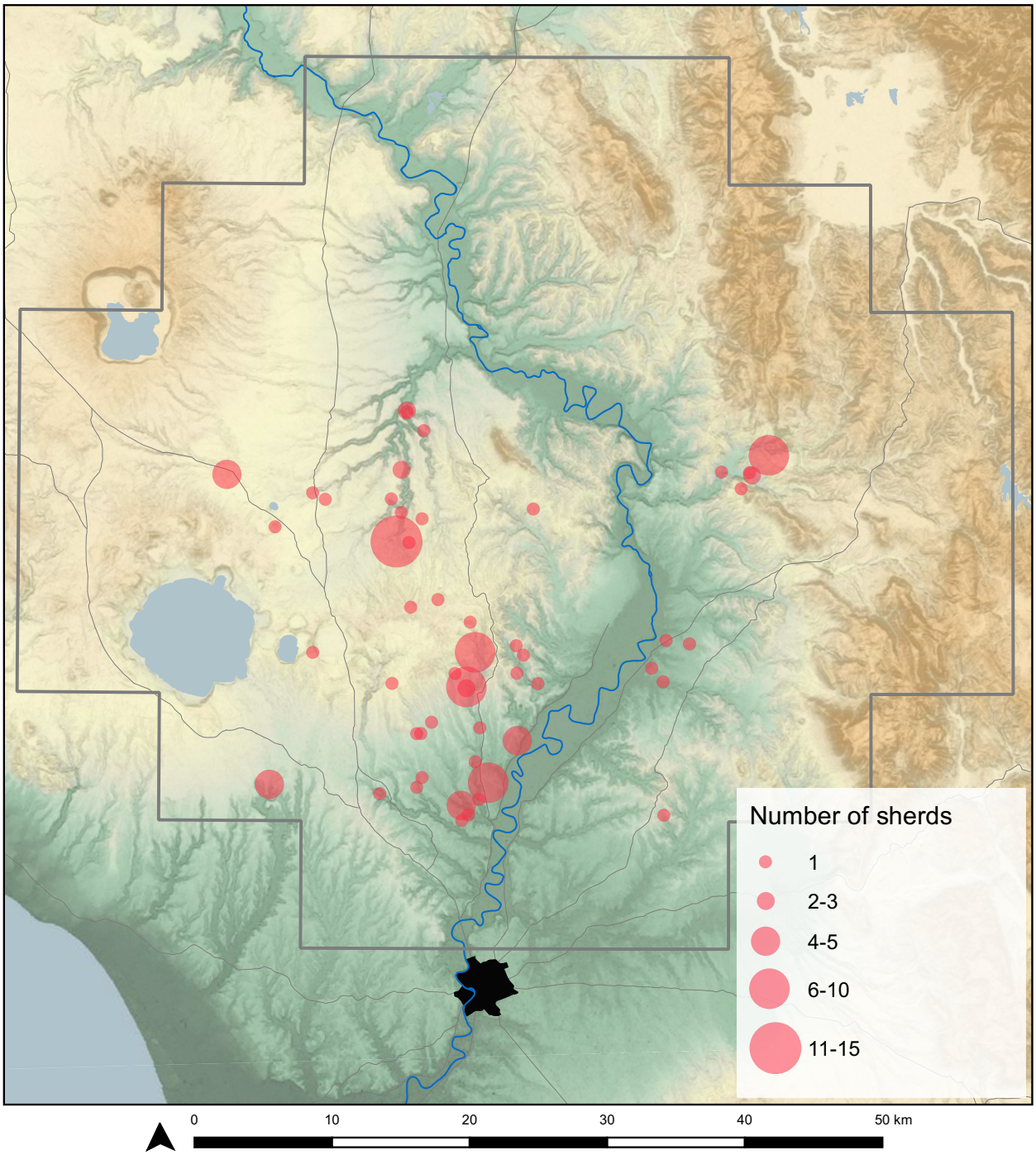


Figure 7.6. Distribution of *ceramica a vetrina pesante* collected by the South Etruria Survey.

recent discovery of waster in the Forum of Caesar.[1343] In the countryside the first late eighth- to early ninth-century productions of *ceramica a vetrina pesante* are very rare. They were found on only five sites in the South Etruria Survey area; from two survey sites, a former villa reoccupied in the late eighth/early ninth century (TVP-ID 02160) and a new open settlement close to the Via Flaminia (TVP-ID 03870),[1344] as well as from three excavated sites; significantly the estate centre of Santa Cornelia, the sanctuary of Santa Rufina and Lucus Feroniae linked to the Via Tiberina and to the Tiber.

In the late ninth century there is a marked increase in the quantity of *ceramica a vetrina pesante* in circulation in South Etruria and the southern Sabina Tiberina (Figure 7.5), accompanied by a significant widening of distribution (Figure 7.6). Five of the eight sites with late eighth- to ninth-century *ceramica a vetrina pesante* are located in the Ager Veientanus; during the

[1343] Alessandra Molinari, *pers. comm.*
[1344] The South Etruria Survey records do not give any topographical details for this site.

late ninth to tenth century, this material is found on a substantial number of sites across the whole area.

The *ceramica a vetrina pesante* circulating in the countryside during the late eighth and early tenth centuries appears to come from the same production centres, or at least areas, which supplied Rome.[1345] In this context, the identification of possible wasters identified from three survey sites, two of late ninth-century date and one probably of the tenth century, must be treated with caution. Therefore, in this case, ceramic production seems to have been managed by the Church and may have involved specialist potters brought from Rome. It was suggested earlier that specialist builders from Rome may have been used for the construction of the churches at the domusculta centres.

All three sites are situated *in altura*, however they remained open settlements that never evolved into *castelli*—indeed they appear to have already been abandoned by the end of the ninth or the tenth century. The first, in the Ager Veientanus, is a settlement (TVP-ID 02137) in the locality of Sant'Agnese, in the Treia valley, providing further confirmation of the good clay deposits in this area. Located on the crest of a ridge overlooking a road, the settlement has a long history of continuous occupation from the fourth/fifth centuries into the tenth century. A substantial amount of pottery was recovered from the site of the late eighth/early ninth to tenth centuries, including a possible waster of ninth century *ceramica a vetrina pesante*. The second (TVP-ID 00916) in the Ager Veientanus and again located on a ridge, was also continuously occupied, in this case from the mid-Republican period through to the tenth century. Unfortunately, the fragment, again identified cautiously as a waster, can be dated only generically to the ninth to tenth centuries. Finally, a site (TVP-ID 02377) identified by the Eretum Survey in the southern Sabina Tiberina, an open settlement located on a hilltop, slightly set back from the Via Salaria, in locality Fossa dei Capucci. The site was frequented in the Roman period, abandoned and then reoccupied in the early medieval period. The survey team noted the presence of a medieval site but the material was abraded and scattered around the slopes of the hill. One possible waster of ninth-century *ceramica a vetrina pesante* was identified. Other medieval pottery collected by the survey, including two coarse-ware handles, were not found during the restudy of the material.

The evidence for late eighth- and ninth-century pottery production in South Etruria and the southern Sabina Tiberina, whether domestic-wares, as at Monte Gelato, or the possible *ceramica a vetrina pesante* kiln sites identified by the survey, comes from open settlements and wasters were not recovered from those sites which evolved into castles. However, at Monte Gelato and the two survey sites where the possible wasters can be relatively precisely dated, production does not seem to have continued into the tenth century.

Finally, some discussion is necessary regarding the appearance of *testi da pane* or baking covers in Rome and in South Etruria and the southern Sabina Tiberina in this period (as discussed in Chapter 6). These vessels, principally used for the baking of bread, are indicative of a change in cooking habits from an oven or *furnus* to a hearth. At Rome, they first appear in the early eighth century but are only attested in any quantity from the end of the century (see section 7.1). In rural areas their presence implies that commercial bread production did not exist and that bread was produced in the home on a hearth rather than in an oven.

Elsewhere in the Sabina and in the central Apennines they first appear, along with *testi da foccacetta,* much earlier in the late sixth to seventh centuries, roughly contemporaneous with the Lombard occupation (see section 6.6). At the excavated sites of Santa Cornelia, the Mola di Monte Gelato and Santa Rufina they are not securely attested until the late ninth and tenth centuries. However, these sites all formed part of the *domuscultae*, and the third is also an important cult centre. At these centres, therefore, it is highly probable that ovens were still used for cooking. For example, at the monastery of San Vincenzo al Volturno in the Molise, *testi da pane* were extremely rare in tenth and eleventh century deposits, whereas they were a typical element of contemporary ceramic assemblages from rural settlements in the territory of the monastery. In fact their appearance on the three sites in our area related to the *domuscultae* is contemporaneous with the decline of the latter. Nevertheless, on other rural settlements in South Etruria and the southern Sabina Tiberina *testi da pane* are rare in the ninth century and they only appear to be widely diffused from the tenth century.

This is the picture which emerges in South Etruria and the southern Sabina Tiberina. The situation in the rest of the Sabina Tiberina is very different. Production of the Sabina-type ceramics which circulate throughout the Sabina Reatina and most of the Sabina Tiberina from the late sixth century seems, on the evidence from Spoleto, to have continued into the early eighth century (see section 6.6). After this date we are as yet unable to identify the ceramic types in use in these areas until the tenth century. As noted earlier, this creates enormous problems for our identification of settlement of this period. Ceramics of the Rome tradition have been found on only very few, high status, sites so far, limited to a very small quantity of *ceramica a vetrina*

[1345] Patterson 1992a. This is what emerged from the petrological analysis of samples of material from a number of excavated sites.

pesante and other wares recovered by excavations at the Abbey of Farfa and Forum Novum-Vescovio. Even so the *ceramica a vetrina pesante* found on these sites is of the ninth century and, on the present evidence, the earliest late eighth to early ninth century productions do not seem to have reached the central Sabina Tiberina.[1346] Furthermore they are very probably from the same production centres which supplied Rome, as suggested by the petrological analysis of samples from the Abbey of Farfa.[1347] Apart from the latter, as yet no ceramics of the Rome tradition have been identified elsewhere in the central Sabina Tiberina, including the area covered by the intensive Farfa Survey. This seems to indicate that although the Sabina Tiberina had returned under the control of the Church and Rome in the later eighth century, economic and cultural links with the city had not been fully re-established. Only from the tenth century do the same ceramic types, including small amounts of glazed pottery as found in Rome, South Etruria and the southern Sabina Tiberina appear to be diffused throughout the rest of the Sabina Tiberina.

7.7 Conclusions

To conclude, we briefly synthesize developments in the middle Tiber valley during the tenth and eleventh centuries which represents the end of our story, from the late antique landscapes of villas and farms to the medieval landscapes of the castelli. The tenth century, especially from the mid-tenth, is the period when the great process of reorganization of settlement known as incastellamento began. The foundation of the castelli, primarily on the initiative of the Roman aristocracy who nevertheless continued to live in the city, was not primarily for defence, as once thought, but was a general process involving new forms of social and economic organization and control of the territory.

A move to hilltop sites, some of which later became castelli, is seen from the sixth to seventh centuries in the Sabina and from the late eighth/ninth centuries in South Etruria, however, there is no evidence for the concentration of settlement, 'accentramento', unlike some other areas of Italy. On the present evidence this only seems to take place with incastellamento. Even so into the tenth century, if we take the study area, as a whole, dispersed settlements continued to exist alongside the castelli in a similar ratio into the tenth century. If we look at the Tiber valley data in more detail, however, one significant difference is the greater continuity of open settlements in the areas closer to Rome as, for example, the Ager Veientanus. In the Ager Veientanus the ratio of fortified to open sites is 1:2, whereas in the Ager Faliscus the figures are reversed with a ratio of 2:1, adding support to Ward Perkin's original hypothesis that in the Ager Veientanus the 'classical' open settlement system persisted longer than in the region further to the north of Rome. In the Ager Faliscus the process of incastellamento appears to be much more pronounced.

The situation changed in the eleventh century. In contrast to the tenth century, in both areas there are now more fortified than open settlements and the trend seen in the tenth century when very few new open settlements are registered has now escalated. All the eleventh century open settlements were occupied from at least the tenth and in some cases earlier and are generally located on hilltops or spurs. The majority of these were abandoned in the course of the eleventh century. Although, as in the tenth century, the major difference between the areas remains the higher proportion of fortified to open settlements in the Ager Faliscus.

In synthesis, the settlement data from the Ager Veientanus and the Ager Faliscus confirms the picture suggested by that from the study area as a whole. Although incastellamento was especially pronounced in the area further from Rome, the Ager Faliscus, throughout the Tiber valley study area the tenth century was a period of transition, open sites existed alongside the newly founded castelli in roughly equal numbers. The process of incastellamento was only consolidated in the eleventh century, in the course of this century the castelli become the dominant form of settlement in the landscape and were to remain so throughout the twelfth and thirteenth centuries.

[1346] In the Sabina Reatina *ceramica a vetrina pesante* of the ninth century has been recovered from Rieti itself but not from the rural settlements in the territory of Rieti covered by the Rieti survey, Coccia and Mattingly 1992: 262.
[1347] Patterson 1992b.

Chapter 8

The Tiber Valley Project: retrospect and prospect

Martin Millett

8.1 Introduction

The South Etruria survey represents one of the unique and enduring achievements of the British School at Rome in the twentieth century. John Ward-Perkins's energy and foresight in encouraging a generation of scholars to engage in a collective low-budget project has had a greater impact on our understanding than anyone could have imagined in the 1950s. As Robert Witcher demonstrates in Chapter 2, the work was carefully thought out and methodical, and not the rather amateur and haphazard undertaking that has sometimes been suggested. Witcher's careful discussion of the methods of the fieldwork (sections 2.2 and 2.3) shows that Ward-Perkins and his collaborators were as aware of many of the problems of what we now call 'survey archaeology' as are his successors in the field. However, in the mode of the time, they were less explicit in their discussion of the problems which they encountered than some of their more theoretically aware successors. It is because of the care and foresight exhibited by the BSR team in the 1950s–1970s that the material they collected is worthy of reconsideration more than half a century on. It is equally to be remarked that the reconsideration of the evidence in this volume owes its success to the thoughtfulness and tenacity of the team of Helga Di Giuseppe, Helen Patterson and Robert Witcher (as well as the group of pottery specialists) who have laboured long and hard to draw the results together.

It is a matter of regret that amongst the publications from the BSR South Etruria Survey there is nothing to provide insight into Ward-Perkins's own reflections on the success of the work and the historical issues that it raised. On the other hand, we have long benefitted from Tim Potter's enthusiasm and flare in providing a coherent overview of the results in his synthesis, *The changing landscape of South Etruria.*[1348] This is a book that has been widely read and has been highly influential. Although in it Potter shows a subtle appreciation of the problems and potential of the data, the book is fundamentally an empirical analysis of the survey results fitted into a broad-brush historical framework. Indeed, it is perhaps this approach that has made it so attractive to those with broad historical interests. Although it is difficult to substantiate the claim, I also suspect that Potter's clear narrative, based on apparently 'easy-to-collect' data, was at least partly responsible for the upsurge in popularity of Mediterranean field-walking projects in the latter decades of the twentieth century. It should of course be added that a theoretical turn in the subject at this date also drew attention to the need for good information about the ancient countryside—but *The changing landscape of South Etruria* was vital in showing how survey evidence could contribute to this. Potter himself was very definitely not keen on the theorising of survey that followed, but it is equally important to note that he was anxious to see his results critically re-evaluated at the outset of the BSR Leverhulme Project in 1998.

Whilst *The changing landscape of South Etruria* provided 'one man's view'—in the style of the particular author and of the times—the present volume is by contrast multi-vocal. It is therefore right that the core chapters reflect the slightly different intellectual visions of the three key researchers on the project. They have nevertheless provided coherent and thoughtful accounts, chronologically arranged, and I do not think it is either necessary or appropriate for me either to summarize their conclusions or to impose any single narrative on them. However, looking back on the work since 1998, it does seem legitimate to reflect broadly on what the Tiber Valley Project has contributed and how it relates to the rapidly developing field of landscape archaeology.

8.2 The scope of the Tiber Valley Project

As noted in the introduction, the Tiber Valley Project comprised a group of related projects, at the centre of which lay the Leverhulme-funded restudy of the material from the BSR's South Etruria Survey. The relationship between the different elements was always loose, so the material presented here in the chapters by Helga Di Giuseppe, Helen Patterson and Robert Witcher draws on a very wide range of evidence that moves well beyond the re-study of the material collected by Ward-Perkins's teams. What connects all this work is the unique context: Rome was one of the first global cities, so understanding the landscape around it has the potential to provide new and unique insights into the origins, operation and decline of the city itself, as well as its functioning within its empire.[1349] As such, it also has

[1348] Potter 1979.

[1349] Morley 1996; Edwards and Woolf 2003

the potential to provide new insights into pre-industrial empires more generally. On the other hand, there is a danger that Rome overshadows other aspects of the achievement of the project. Thus, notwithstanding its specific historical and geographical context, this is one of the most intensively studied landscapes in the ancient Mediterranean, ensuring that the Tiber Valley Project has the potential to contribute to a broader appreciation of the contribution of archaeological survey.

Inevitably, the nature and quality of the evidence varies between the different periods studied in this volume, and hence the core chronological chapters follow slightly different approaches, but it is interesting to note how, alongside the narrative of the rise and decline of the city of Rome, we also see a consistent evidence for geographical variation across the area studied. As well as putting a welcome emphasis on the differing experiences of the various communities involved, this provides something of a counter to the use of the survey evidence to chart changes in population which underpins much of the volume. The emphasis on demography is perhaps inevitable, partly because of the way historical debates have been framed, so the restudy of the South Etruria ceramics has provided an important corrective to simplistic narratives of gradual and inevitable population growth towards an imperial golden age, followed by an equally inevitable decline. For me, two key questions remain.

First, given that we can clearly see different spatial patterns (most notably between the two sides of the Tiber), how far can generalised patterns of population change really be robustly mapped? Put another way, if the area studied had been more extensive, or differently placed, would the same general trends in population be visible? For the future, there is surely some potential here for some more sophisticated modelling, which might use variations across space to establish error limits on estimates of population size through time. Equally, building on the approach used by Alessandro Launaro[1350] it should surely be possible to model population trends more subtly, including regional variation.

Second, how far might changes in the use of pottery rather than increases or decreases in population underlie these apparent trends?[1351] Whilst this is clearly an issue for the very early periods and parts of the early medieval period where pottery was really scarce—and has been addressed by both Di Giuseppe and Patterson—it remains a concern for me in two contexts. First, throughout the chapters, reference is made to sites as 'new foundations'. Now whilst many may be, we also surely have to entertain the possibility that in some cases what we are seeing is a change either in access to and use of pottery *per se*, or a change in the robustness of the pottery so that it is more likely to survive in the ploughsoil, and hence be collected by archaeologists. This is a particularly important issue for the earliest period—was there really so little settlement before the Bronze Age—or might some of the later sites have earlier phases not susceptible to discovery through surface survey? Second, I also see differential access to and use of pottery as a key issue in apparently better documented periods like the late Republic and early empire. Social and economic exclusion may even then have made elements of the population archaeologically invisible. This applies not only to peasants (who, if truly working at a subsistence level may not have had access to marketed goods), but also to those in marginal areas (in the hills and more remote areas) or living in seasonal camps as shepherds for instance. These issues seem to me to pose interesting questions for future research.

Having noted these matters, it is important to appreciate that the studies presented here are careful in their use of both legacy data and material from other research in the region. The sheer quantity of information is highly impressive, and the achievement of making these data available on-line is one of the outstanding achievements of the project. Whilst we should expect the subject to move on, and the discovery of new evidence will no doubt alter conclusions in the future, I would echo the sentiment expressed by Witcher (section 2.2), that although not perfect, the *quality* of the evidence as much as its quantity encourages confidence in the conclusions reached. This is important not only in itself, but as it provides a strong justification for the expenditure of resources on good-quality legacy data in other circumstances.

8.3 The historical contribution

Although it would be inappropriate here to repeat the conclusions offered by the three core contributors, I think it is worth briefly highlighting some key themes that have emerged. This should be prefaced by noting that the structure of the way in which the data has been collected limits the nature of the questions that can be posed. This is especially true in two particular respects. First, the focus on 'sites' as the collection unit, and second the fact that only a representative sample of the surface material was collected and retained. We will return to the 'sites' issue below, but for now it is important to note that the restudy of the pottery has inevitably focused on chronology. Because of the nature of the material retained, there were only limited opportunities for exploring aspects of production and distribution which might in other circumstances have

[1350] Launaro 2011

[1351] Millett 1991. Note that this paper argued that changes in volume of supply occurred with all types of pottery, not just fine-wares.

provided significant new information. The emphasis on pots for dating leads each of the contributors to a prime focus on change through time, and it is only with the early imperial material that the data give much scope for exploring other dynamics. Equally, given the inherent differences in the resolution of pottery dating, the degree of refinement of the historical commentary is differently constrained through the various periods. This is offset to some extent by the quality of the historical texts available, the character of which also influences the narrative that is possible. Hence, although in parts of the early medieval period the ceramic evidence is limited, there is valuable textual evidence complemented by diverse other sources. This contrasts with the Bronze Age to Archaic periods where the ceramic evidence is comparatively sparse, and the textual evidence is also limited. Both Di Giuseppe and Patterson highlight the way in which the chronological resolution might be refined in future, allowing a more fine-grained picture to be drawn, although in both instances, there is a tension between a desire for closer dating and the problems brought about by the limited quantities of finds. Paradoxically, in the early to mid-imperial periods, when archaeological finds are very plentiful, the texts offer surprisingly slight evidence. Needless to say, through the long time-period under consideration, texts vary in their focus, with few offering detail that can easily be linked to the local landscape. This is not to say anything very new, but it is important for those less versed in the vagaries of archaeological landscape data to appreciate that, even in an exceptionally well-explored landscape like this one, the patchy character of the evidence will always constrain our understanding. In this context, Witcher's advice on how to read the maps (section 2.4.1) is essential for every user of this volume.

In the Bronze Age to Republican periods what emerges is a much more varied and nuanced development with the vicissitudes of settlement making clear that there was no gradual increase of settlement or inevitable growth of Rome. Taken together with the project's previous publication of the South Etruria Survey work at Veii,[1352] the information on rural settlement in its surroundings makes an immense contribution to knowledge of this key period and site. Beyond this, I would also draw attention to two details that I found instructive in illustrating how such an analysis can have broad and important implications. First, is Di Giuseppe's suggestion that *cuniculi* perhaps date to the sixth century BC rather than a century or two later as previously thought (section 3.2.1), thus linking to population growth and the development of key nucleated centres at this time. Beyond this, the unique engineering achievement of such water systems attests to a particular level of social organization and planning which surely acts as a *leitmotif* for this period. Second, is the way in which her careful analysis of the pottery from the survey has enabled a string of productive centres to be identified, throwing light on the emergent economy. Furthermore, the association of such production with sanctuaries also contributes to a clearer understanding of the ways in which our categorization of sites arguably needs revision: not in every society does production equate with economy as a distinct and separate category.

The early to mid-imperial landscape is the one best represented in the evidence and this means that it has been possible to provide an account that explores a much wider variety of aspects of society. The key point that this was an exceptional period—dominated by the city of Rome as a global centre—is well made and the understanding of the implications of this for the Tiber valley are carefully explored. In this context, the difficulty in identifying historically evidenced colonization (see section 4.2.1) and careful analysis that undermines the notion of big estate owners driving out small farmers are particularly striking. This area thus provides little evidence to support the conventional and idealised model of a landscape that came to be dominated by large slave estates (section 4.5.2).[1353] In both instances it is important to appreciate that since text and archaeology should not be expected to match each other, the proper interrogation of a mismatch can produce valuable historical information.

Witcher's revision of his previous population estimates[1354] are also of key importance (section 4.6.1). In the context of the urban evidence I am inclined to go even further than he does in playing down the size of the towns in the valley, and giving greater emphasis to their roles as centres for elite display. With the evidence from the geophysical surveys of Falerii Novi and Ocriculum both completed within the project, we can move a little beyond estimates for urban populations based on simple densities. On the basis of the clear magnetometry evidence from Falerii, I have suggested that the original city of the middle Republic was designed for a population of about 1400–1700, rising to perhaps 2300–2800 in the empire.[1355] Using comparable densities for Ocriculum I suggested an early imperial population of 1300–1600.[1356] This contrasts with the generally very high urban population figures provided by Hanson.[1357] Even if one can reasonably argue

[1352] Cascino, Di Giuseppe and Patterson 2012

[1353] Marzano 2007: 125–54

[1354] Witcher 2005; 2008a

[1355] Millett 2013: 36–39

[1356] Hay, Keay and Millett 2013: 151–52

[1357] Hanson 2016—who extrapolates from what he takes to be a 'representative sample' of sites, taking maximalist estimates of size and high population densities. As the sample of known sites appears skewed towards larger cities, this reinforces the overestimations. The reliability of his area estimates is also questionable—he quotes 25 ha for Ocriculum, whilst our survey measured it as 14 ha.

that the sizes of sites like Falerii Novi and Ocriculum were unusually small because of their proximity to Rome (4.4.1), the evidence seems to imply that we need a model of the ancient city which gives greater emphasis to their social and religious roles rather than their economic functions. This would be compatible with the evidence of key centres like Ocriculum and Forum Novum, and contrasts with the current trend towards interpretations based on modernist economic assumptions.[1358]

The other big issue for the imperial period is that of identifying villas and understanding their roles now that the generality of the slave-estate model has been undermined. This is a particular issue in an area so close to Rome where we have both the issue of the enhanced value of production because of the city's demand, and the political and social premium on elite residence because of the proximity to power. This clouds the already murky water of villa definition, in which issue of production and expenditure on display are too often confused. In this volume, the practical problem of characterizing a 'villa' and distinguishing a farm on the basis of surface survey evidence is dealt with effectively in the context of the evidence available. However, it is importantly noted by Witcher that 'the classification of scatters as farms relies on an 'anti-definition'... Farms simply are sites, usually smaller, that lack evidence for the key categories of material culture'. This not only highlights the point that villa definition in survey is generally related to consumption and display, not production, but also underscores the point (section 4.5.2) that farms are not well understood from the excavated evidence, and their investigation should be a priority for future research. This is an issue to which I will return below.

Since the early to mid-imperial period was exceptional in every sense, documenting the return to a more regular settlement system, and then showing how this changes through the transitions of the early middle ages in particularly challenging. This is not least because the late antique population were adapting the landscape as they found it, not creating something anew. So, for instance, as Patterson notes, it is very difficult to distinguish between a continued human presence at a villa site from its continued use as a villa (section 5.3.1). Hence problems of identifying which sites were occupied and how this changes as supplies of identifiable ceramics become scarcer mean that most previous accounts have found it difficult to strike a balance between historical generalization (based on difficult texts) and rather slim accounts of the material. Here for the first time we have a clear and balanced discussion of the area which explores first the decline of Roman power, then the fragmentation of settlement leading to the beginnings of a new society in the region. Particularly important is the way in which increased regional differentiation is seen in its broader historical context providing a nuanced account of change. Interestingly as the vestiges of Rome wane, only the road system and the Tiber itself provide strands of continuity albeit now functioning within a new context.

[1358] E.g. Wilson 2011

8.4 Issues for debate

For me, this volume is the crowning achievement of one key phase in a landscape archaeology that was founded on the simple but effective technique of fieldwalking. The contributions in the core chapters draw out a great amount of information and are effectively integrated with other sources of evidence. The value of this type of landscape archaeology has also been demonstrated by other smaller-scale studies, and notably by the success of using the data produced to contribute to bigger historical debates.[1359] Against this background, and thinking ahead about the future development of Mediterranean landscape studies (as discussed below), it seems appropriate to explore three aspects of critique.[1360]

I wish first to make a very obvious point, touched upon in Chapter 2, but which is too often lost when people use survey evidence. The evidence collected and analysed is primarily based on pottery. This is important not only because of the evidence, noted above, that as the circulation of pottery varied not only through time but under the influence of socio-economic factors, so it is impossible simply to equate pots with people, or in the case of surveys, pots with population numbers. Our authors generally show a strong awareness of this issue, but the corollary is hardly touched upon. The pottery itself, how it was used, and things like differential access to it, offer considerable potential for understanding the inner workings of past societies. Patterson illustrates this well in her observation about the relationship between the emergence of new early medieval pot types and changes in the baking of bread, with an apparent move towards household production (section 6.6.2). With the very much larger and more diverse assemblages from earlier phases, there is considerable potential for exploring such aspects further. An example of this potential is illustrated by Witcher's mapping of the distribution of certain locally produced *terra sigillata* forms (section 4.7.2, Figure 4.27). Although studies in the 1970s which sought to establish the nature of distribution mechanisms by

[1359] Launaro 2011; Witcher 2005

[1360] Some of the ideas in the section and the following were presented as my keynote lecture, 'Towards a new landscape archaeology?' at the Computer Applications in Archaeology annual conference in Siena in 2015. This can be viewed on-line at https://www.youtube.com/watch?v=e-LyTku_isY (accessed 24 August 2018); for a complementary and thoughtful discussion see Witcher 2006a

analysing and mapping finds patterns[1361] have now been superseded, I have no doubt that there remains considerable untapped potential in the study of local distributions. In the case of the South Etruria material, we are of course constrained by what was collected and retained, but I do wonder how far the data might be further explored—and it seems obvious to me that future projects involving surface collection should build this into their sampling designs.[1362] In this way it may be possible to contribute towards a new type of local socio-economic history.

My second point relates to a different aspect of access to material culture, specifically in the case of those at the lower end of the socio-economic spectrum. As indicated above, and evidenced by the discussion elsewhere in this volume, there is an underlying awareness that smaller farms—especially peasant establishments—are the most difficult to find, to map and to understand. This is widely recognized as an issue, and it has become clear that it is not susceptible to resolution through surface survey alone. This led to the recent 'Roman Peasant Project', discussed by Witcher (section 4.5.2), that sought to investigate a number of possible peasant sites found by field-walking through sample excavation following localised geophysical survey.[1363] Interestingly, the sites samples have not turned out as might have been expected, with the surface scatters not simply covering peasant farmsteads. At Pievina, the excavation revealed structures with strong evidence for production and networking into the broader economy.[1364] Then at Case Nuove, Cinigiano, they uncovered an agricultural processing complex with pressing facilities, perhaps used seasonally then later subsumed by a nearby villa.[1365] This has led the team to question the use of surface survey evidence for the classification of sites,[1366] and has sometimes been generalised into doubts about the use of field-survey evidence more widely.[1367] In my view this is a misreading of the evidence.

If we take a step back from the Mediterranean field survey evidence and look at some of the fundamental discussions of surface assemblages[1368] and the few very detailed contextual studies of finds in the ploughsoil (albeit from temperate climatic zones)[1369], it is obvious that we should not expect there to be a direct correlation between surface pottery distributions and habitation. Living areas were often kept clean, with rubbish processed (for manuring or other reasons), before being dumped when it was commonly placed away from the house. Furthermore, studies of human use of the landscape show that people occupy and use it fully and extensively in a variety of ways, many of which may involve the deposition of artefacts away from living places.[1370] In this sense, sampling small surface assemblages through small-scale excavation should be expected to reveal not a series of houses, but a bewildering variety of diverse depositional contexts—very much as the Roman Peasant Project has done. In this sense, it does not undermine the value of field-survey. What it does show is that we need to get better at mapping the totality of past landscape use.

What these results do emphasize is the need to rethink the focus on the 'site' that underpinned the South Etruria Survey as it has most subsequent work. This should not just be about the debate concerning manuring (that has become something of a *cul du sac* in Mediterranean survey),[1371] but rather thinking much more clearly about the totality of human use and exploitation of the landscape. This will involve not only a different way of thinking, but also the application of new methods of research. It is to the prospects for this that I will now turn

8.5 The future of field survey: the Tiber Valley Project and beyond

When Ward-Perkins and his colleagues set out on their survey of South Etruria, landscape archaeology was in its infancy. The surface collection methods that they developed and refined provided a key window onto past settlement, with the mapping and collection of artefacts generating a rich source of evidence that moved beyond the monumental structures that earlier scholars had been recording. As noted, the South Etruria Survey did draw on the evidence of RAF aerial photography, and given his military background it is not surprising that Ward-Perkins exploited this source. However, in the Tiber valley it proved less effective than elsewhere in Italy.[1372] In the Tavoliere, for example, the favourable conditions meant that high level black-and-white vertical aerial coverage led to the widespread occurrence of crop-marks.[1373] It is interesting to speculate in passing on whether the earliest colour images taken by the US Air Force in central Italy during the Second World War might have provided better information if they had been released into the archaeological domain at the time.[1374] As it was,

[1361] Hodder and Orton 1976
[1362] Witcher 2006a: 45–49
[1363] Ghisleni *et al.* 2011; Vaccaro *et al.* 2013.
[1364] Ghisleni *et al.* 2011
[1365] Vaccaro *et al.* 2013
[1366] Ghisleni *et al.* 2011, 133–34
[1367] K. Bowes 'Excavating Roman peasants: theory and practice'. Research seminar presented at the Faculty of Classics, University of Cambridge on 21 May 2013.
[1368] Haselgrove 1985
[1369] Crowther 1983; Pryor and French 1985, 45–58; Gaffney and Tingle 1989
[1370] Foley 1981; Gaffney and Tingle 1989
[1371] Bintliff 2000
[1372] Bradford 1957
[1373] Bradfield 1957: 99–103
[1374] I am grateful to Chris Goings for drawing this coverage to my attention.

topographical mapping and surface collection have remained the mainstay of landscape archaeology in Italy until very recently. This has undoubtedly constrained the subject and led to the continued emphasis upon finding and characterising 'sites' through the medium of artefact distributions.

The value of such 'site'-based data nonetheless remains considerable, so it is significant that a new stage in the story of the Tiber Valley Project is a collaborative project to unite its data with that from the Suburbium Project of La Sapienza University and the Pontine Region Project of Groningen University, to create one of the largest ever archaeological databases from field survey. It contains evidence for thousands of sites, hundreds of thousands of objects, the vast majority accurately georeferenced, and with relatively coherent and consistent pottery sequences over some 2000 years of history, across a contiguous area around the city of Rome. The surveys include historical data, as well as data acquired through survey, and will offer unrivalled opportunities for future research.[1375]

In data collection, with changes in the attitude of the Italian authorities, archaeological aerial photography has become much more important,[1376] whilst widespread access to satellite imagery has transformed the ways in which we all can work. However, there is still much further to go if our aim is to understand the human exploitation of the landscape in its broadest sense, moving away from identifying sites as points on a map that can be counted as a proxy for populations.[1377] In this vision, we should be using a range of techniques of data collection in complementary ways in order to map continuous tracts of landscape and thereby understand how they have been used in different ways in the past. This involves seeking and mapping not only settlements but fields, trackways, woodlands, quarries, crop and industrial processing areas, and anything else through which people used and occupied the land. Importantly, this needs to be achieved over large and contiguous areas. In doing this, we may be able to map how people exploited the land differently through both space and time.

Such an objective is now increasingly within our grasp. Beyond the use of conventional aerial photography and satellite imagery, we now have access to UAVs (drones) which enable us to map the ground surface at high intensity using the full light spectrum, LiDAR and 3D photographic modelling.[1378] In addition, ground-based techniques of geophysics can now be used on a truly landscape level, to collect a range of data (magnetic, electrical resistance and radar)—with the results showing just how much lies beneath the surface of the Mediterranean countryside.[1379] It is my contention that if we deploy a variety of these methods in a co-ordinated way across substantial tracts of countryside, it will revolutionize our understanding of past landscape use. When combined with artefacts collected from the surface we have an unbeatable combination. Surely there can be few better places to experiment with such approaches than in places such as the Tiber valley where—as the work in this volume shows—legacy data has already contributed so much to understanding. In this sense, we should aspire to build on the work of the past 70 years and work towards a new dimension of landscape research for the future.

[1375] This project is led by Peter Attema, Tymon de Haas, Willem Jongman, Gijs Tol, Martijn van Leusen (Pontine Region Project), Cristina Capanna and Paolo Carafa (Suburbium Project) and Christopher Smith and Robert Witcher (Tiber Valley), with support from the British Academy and the Dutch Research Council (NWO).

[1376] E.g. Guaitoli 2003; Vermeulen *et al.* 2017

[1377] Witcher 2006a

[1378] E.g. Bewley and Raczkowsky 2002; Campana and Piro 2009; Optiz and Cowley 2013.

[1379] Powlesland 2009; Campana 2017; 2018

Appendix 1

List of Tiber Valley Project participants

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Appendix 2

List of Tiber Valley Project publications

General

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