

A photograph of a green hill with a stone tower on top, overlooking a valley. The tower is a small, square, stone structure with a small window and a door. The hill is covered in lush green grass, and the valley below is a mix of green fields and small buildings. The sky is a clear, bright blue.

WESTWARD *on the* HIGH-HILLED PLAINS

The Later Prehistory of the West Midlands

edited by **DEREK HURST**

THE MAKING OF THE WEST MIDLANDS | VOLUME 2

WESTWARD ON THE HIGH-HILLED PLAINS

THE MAKING OF THE WEST MIDLANDS

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THE LATER PREHISTORY OF THE WEST MIDLANDS

Edited by

DEREK HURST

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Westward on the high-hilled plains
Where for me the world began,
Still, I think, in newer veins
Frets the changeless blood of man.

First stanza of poem LV from *A Shropshire Lad* by A. E. Housman

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Preface

The move towards the production of this volume was first mooted at a meeting on West Midlands later prehistory held in the council chamber of Worcestershire County Council in September 2002 (doi:10.5284/1038433), as part of the national initiative by English Heritage (now Historic England) to promote research frameworks as central to the practice of archaeology. This event was followed up by a seminar which was focussed on establishing a research framework agenda for the later prehistoric period, and that was held at Birmingham University in July 2003. The later prehistoric research agenda and strategy was finally published (Hurst 2011), alongside that for the other periods, in *The archaeology of the West Midlands: a framework for research* (Watt 2011). That left the West Midlands regional research assessments, the period-based background surveys to the agenda and strategy, as still to be published to complete the West Midlands Research Framework. This is the second volume in this intended series of six volumes.

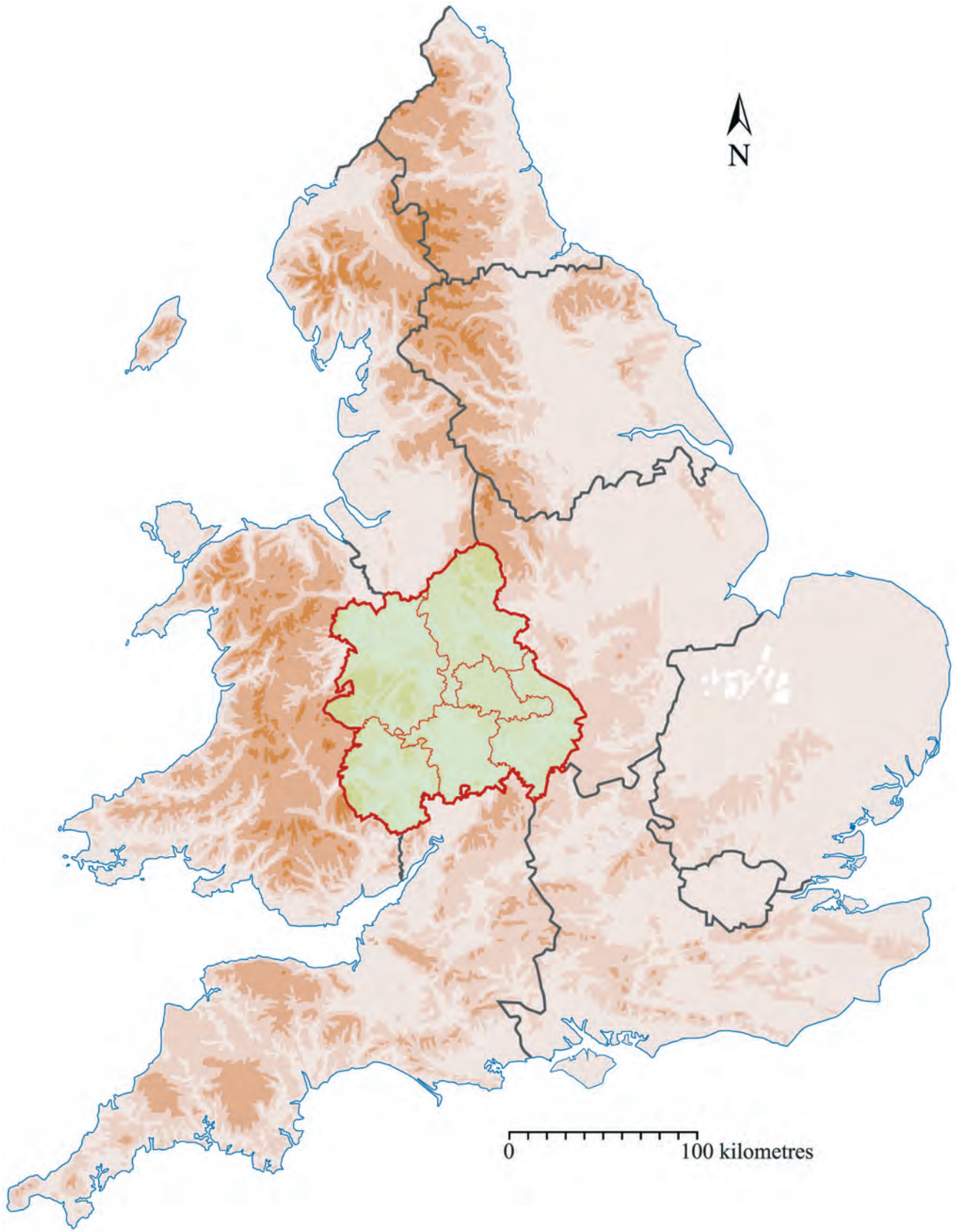
The majority of the research assessment papers in this volume were, therefore, first drafted in 2002. Thereafter, during 2004, a process of revision was instigated in consultation with authors with the intention to publish. At that time, however, several papers were still missing, and, in particular, one on a major topic, and it was not clear whether these would be forthcoming. Also illustrations, especially based on a map template, were lacking. With limited support from the Worcestershire Historic Environment and Archaeology Service (now Archive & Archaeology Service) the updating of existing papers was finally achieved in 2009, and this process then continued, selectively, into 2011. While this had significantly advanced the volume, the unavailability of funding to deal with the major topic omission and for drawing up the template maps, still remained major obstacles to publication. Fortunately, these difficulties were eventually overcome in 2014, when English Heritage undertook to support progressing the volume to final publication.

The West Midlands presently struggles archaeologically to project a distinct regional identity. The region is

geographically defined by reference to other areas, such as Wessex and the South-West, and the North, which have developed a stronger identity, both with regard to landscape and their associated historical culture. Whether this has always been the case going back into the more distant past, apart from a temporary eminence during the middle Saxon period (*viz.* kingdom of Mercia), is presently unclear, and this surely forms one of the lines of enquiry that might be pursued archaeologically. In more recent times part of the region attained international fame as the birthplace of the industrial revolution, though this occurred, incongruously, at Coalbrookdale in rural south Shropshire. This ignited the blaze of industrial expansion that later spread eastwards, as the Black Country, but, sadly, industrial heritage is not celebrated in the same way as other national achievements, and this has not adhered to the regional sense of identity. The resulting lack of a well formed self-identity is possibly exacerbated by the land-locked centrality of the West Midlands, and by its proximity to other much better (*i.e.* culturally) defined regions (*e.g.* Wales). This weak sense of identity has also probably led to a failure to recognise and then build a sense of character and place, even when circumstances allowed. This has even encouraged the view, perhaps most readily seen politically, that the West Midlands is peripheral, and so outside the range of normality. Hopefully this volume will serve to provide grounds for building a stronger sense of West Midlands identity based on the past, which could then be a source of greater inspiration towards developing a stronger sense of identity for the inhabitants of the region today.

Introducing this volume

This volume presents the papers that formed the basis of the research agenda and strategy for later prehistory (Hurst 2011) published in *The archaeology of the West Midlands: a framework for research* (Watt 2011). In common with the earlier prehistoric Regional Research Assessment volume in



The West Midlands region in geographical context.

this series (Garwood 2007), the papers of the later prehistoric volume adopt a variety of approaches, variously being either regional, county-wide or thematic (*e.g.* by site type, or artefactual typology). Inevitably, because of the nature of the assessment papers, they often conclude by looking forward and so also include agenda and strategy points, though in this case usually very specific. These seem quite validly expressed here as part of the assessment rather than the formal Agenda and Strategy volume, as it is clear that the broad agenda formulated in Watt (2011) is more concerned with the related general points and issues. The latter include the need to recognise key sites and deal with them appropriately, the need also for greater scientific focus, the case for select work on major monument types sympathetic both to their protected status and their significance for the period, and how to use the broad appeal of archaeology to pursue this agenda. Accordingly, both Watt (2011) and this volume are intended to both be of relevance, when looking to develop projects where later prehistoric archaeology is involved.

The later prehistoric papers have been arranged so that a survey of environmental evidence for changing landscape in the region (by Pearson) is followed by papers in chronological order, with most of these being reviews of the evidence within a county (*e.g.* by Palmer), followed in turn by some thematic papers largely focussed around artefacts of the period (*e.g.* by Hancocks), and, finally, there is an overview of the later prehistoric activity viewed against its West Midlands landscape and as compared with other parts of the country (by Wigley).

Whereas the West Midlands is largely an area of rural counties (Figure 1.1), the former West Midlands County Council area is administratively complicated, being composed of several, mainly densely populated, boroughs and the coverage in this volume reflects this. It has resulted in a variable coverage: that is, Birmingham and the Black Country with its own paper (Hodder), and Solihull being covered in the Warwickshire paper (Palmer), but no specific coverage for the other metropolitan parts of the region.

Acknowledgements

Many people have, over the long period of this project, given up their time and/or committed resources under their control to keeping this volume in view, with the knowledge that the

research assessments represent key statements on the state of later prehistoric studies in this region. These statements are important, not least because they are too rare examples of synthesis, but also because they provide an opportunity to disseminate more widely some striking highlights from the recent era of developer-funded archaeology. As such, this second volume in the West Midlands Regional Research Assessment series is a further stepping stone to greater understanding in an archaeological world currently largely drowning in data.

I am particularly indebted to Simon Woodiwiss and Victoria Bryant for their support in 2009 when the project was in danger of sinking, and, again, to the former for his more recently helping by reading and commenting on a draft text. Latterly I am indebted to Dan Miles and Ian George of English Heritage (now Historic England) for their crucial support in 2014. In the meantime, I have been generally encouraged and warmed by the unselfish response of fellow archaeologists who responded positively to the spirit of this project by providing the results of their work, and then, on occasion, were also ready to accept my calls for even more information.

Suzy Blake (Staffordshire HER) kindly pitched in with the production of template mapping for that county, while Alex Bayliss (Historic England) fielded my enquiries about radiocarbon dating, but I reserve my special thanks for Louise Buglass, who so patiently brought into being all the template maps (except for Staffordshire), regardless of how often I presented her with rather abysmal roughs and then went on to suggest more changes on top.

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- Garwood, P. (ed.) (2007) *The undiscovered country: the earlier prehistory of the West Midlands*. Oxford: Oxbow Books.
- Hurst, D. (2011) Middle Bronze Age to Iron Age: a research assessment overview and agenda, in S. Watt (ed.), *The archaeology of the West Midlands: a framework for research*, 101–126. Oxford: Oxbow Books.
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Résumé

Les West Midlands ont peiné sur le plan archéologique pour projeter une identité régionale distincte, ayant été largement définis par comparaison avec d'autres zones bénéficiant d'une identité culturelle et d'une histoire plus solides, telles que le Wessex, le sud-ouest et le nord. Ce n'est qu'occasionnellement que les West Midlands ont été sur le devant de la scène, par exemple au milieu de la période saxonne (c-à-d le royaume de Mercie) ou, beaucoup plus tard, quand le sud rural du Shropshire est devenu le berceau de la révolution industrielle. Pourtant c'est une région riche en ressources minérales naturelles, située parmi des terres agricoles facilement productives et avec d'importantes rivières, comme la Severn, pour faciliter le transport. L'échelle de ses monuments de la deuxième moitié de la préhistoire, en particulier les forteresses de sommet de colline, proclame la centralisation de certaines fonctions, que ce soit pour la sécurité, les échanges ou l'émulation tandis que la population maintenait une production et une distribution étendue d'objets artisanaux spécialisés.

Finalement, vers la clôture de la préhistoire, on peut voir émerger des royaumes locaux. Au cours de la revue des témoignages de la deuxième partie de la préhistoire de l'âge du bronze moyen à l'âge du fer final, les articles présentés ici adoptent des approches multiples, elles sont soit régionales, soit au niveau du comté, ou thématiques (*par ex.* par type de site ou typologie des artefacts) et elles comprennent aussi le paysage plus étendu tel qu'il a été reconstruit à partir des témoignages environnementaux. Ceci est le second volume dans une série – *La création des West Midlands*, – qui explore l'archéologie de la région anglaise des West Midlands à partir du paléolithique inférieur. Ces volumes, reposant sur une série de séminaires du Cadre de Recherches des West Midlands, ont pour but de transformer la perception de la nature et de la signification des témoignages archéologiques à travers une grande partie du centre de la Grande-Bretagne.

Annie Pritchard

Zusammenfassung

Archäologisch gesehen haben sich die West Midlands schwer getan, eine eigene regionale Identität hervorzubringen; sie wurden weitgehend in Bezug zu anderen Regionen mit stärkerer kultureller Identität und Geschichte, wie z. B. Wessex, dem Südwesten und dem Norden definiert. Nur gelegentlich haben sich die West Midlands hervorgetan, so z. B. in der mittelangelsächsischen Periode (d. h. zur Zeit des Königreichs Mercia), oder, wesentlich später, als der ländlich geprägte Süden der Grafschaft Shropshire die Wiege der industriellen Revolution war. Dennoch ist es eine an natürlichen Bodenschätzen reiche, in fruchtbarem Ackerland gelegene Region deren große Flüsse, wie der Severn, gute Transportanbindungen bieten. Die Größenordnung der in der Region vorhandenen bronze-/eisenzeitlichen Bodendenkmäler, vor allem der Ringwälle, zeugt von der Zentralisierung bestimmter Funktionen, sei es Sicherheit, Austausch oder Wettstreit, während die Gesellschaft die Produktion und weitreichende Verbreitung spezialisierter Handwerkserzeugnisse unterstützte. Am Ende der vorrömischen Eisenzeit ist letztlich die Bildung

regionaler Königreiche zu beobachten. Hinsichtlich der Bearbeitung des Quellenmaterials zur jüngeren Urgeschichte, von der mittleren Bronze- bis zur späten vorrömischen Eisenzeit, wurden für die hier vorgelegten Beiträge unterschiedliche Ansätze gewählt, so z. B. regionale, die gesamte Grafschaft umfassende oder thematische (z. B. nach Fundstellentyp oder Kleinfundtypologie), und sie schließen auch die anhand des paläoökologischen Quellenmaterials rekonstruierte weitere Landschaft ein. Dies ist der zweite Band einer Serie – *The Making of the West Midlands* (Die Herausbildung der West Midlands) – in der die Archäologie der englischen Region West Midlands seit der älteren Altsteinzeit untersucht wird. Mit diesen Bänden, die auf eine Reihe von Seminaren zu den Forschungsrichtlinien für die West Midlands zurückgehen, soll zum Wandel in der Wahrnehmung des Charakters und der Bedeutung des archäologischen Quellenmaterials eines großen Teils von Mittel-England beigetragen werden.

Jörn Schuster

Introduction: Westward on the high-hilled plains

*Niall Sharples**

The West Midlands is an unusual region in many respects. Its existence is related purely to modern political and economic developments and owes little to either the underlying geology and topography or to the historical settlement patterns (Figure 1.1). This might be regarded as a disadvantage and there is certainly diversity to the region that defies easy synthesis. However, it could be regarded as an advantage, as it is clear the region encompasses a series of social, economic and natural boundaries that are of considerable interest to any archaeologist attempting to understand the development of regional cultures and identities in later prehistory. A considerable number of archaeologists find the definition and maintenance of regional identities a key area for contemporary research (Bevan 1999; Giles 2012; Sharples 2010).

In my job as a university lecturer I teach the ‘British Later Bronze Age’ and ‘Iron Age’. These courses are very broad and synthetic, and do not allow the detailed analysis of many of the ‘Different Iron Ages’ (Bevan 1999) that characterise the last millennium BC. The courses are split into thematic issues and case studies. My regional case studies have tended to focus on the usual suspects: Wessex, Yorkshire, the Atlantic Seaboard and, for local reasons, Wales. I have no specific incentive to examine the West Midlands as opposed to any other region. It is, therefore, interesting to note aspects of the West Midlands archaeology that are of such interest that they feature in the thematic lectures in my course; these demonstrate, to my mind, the national importance of the archaeological record of this region.

- On a broad scale the hillforts of the Welsh Marches are of considerable significance (Forde-Johnston 1976).

These, though frequently linked geographically with the Wessex hillfort region, provide an interesting contrast to the evidence from that dominant region. They include some of the largest and most densely occupied hillforts known from Britain (Stanford 1974; 1981), and potentially they are very early, though the best dated examples The Breidden (Musson 1991) and Beeston Castle (Ellis 1993) lie just outside the West Midlands. They, therefore, provide important evidence for the development and significance of this very distinctive settlement form. The extensive excavation of large hillforts, such as Credenhill Hill Camp, Croft Ambrey and Midsummer Hill (Stanford 1970; 1974; 1981), has revealed regimented ranks of ‘4-posters’ that contrast with Wessex, and which require explanation, even if they cannot be interpreted as houses.

- The quality of the excavated record for these hillforts is very good. Stanford was a good field archaeologist and his recording of the hillforts at Croft Ambrey, and Midsummer Hill (Stanford 1974; 1981) is as good as, if not better than, other more celebrated practitioners of the era. Earlier excavations by Kathleen Kenyon at The Wrekin and Sutton Walls, and Thalassa Hencken on Bredon Hill (Kenyon 1942; 1953; Hencken 1938) were also good. Many of these sites produced substantial collections of artefacts, which include important assemblages of iron and bone tools that are still not common in many areas of Britain. The published excavations are sufficiently detailed to justify thorough reanalysis. All this could contribute a considerable amount to contemporary debate, and it is rather surprising that work on these artefact assemblages has so far been largely restricted to analysis of the ceramic record (Morris 1982).

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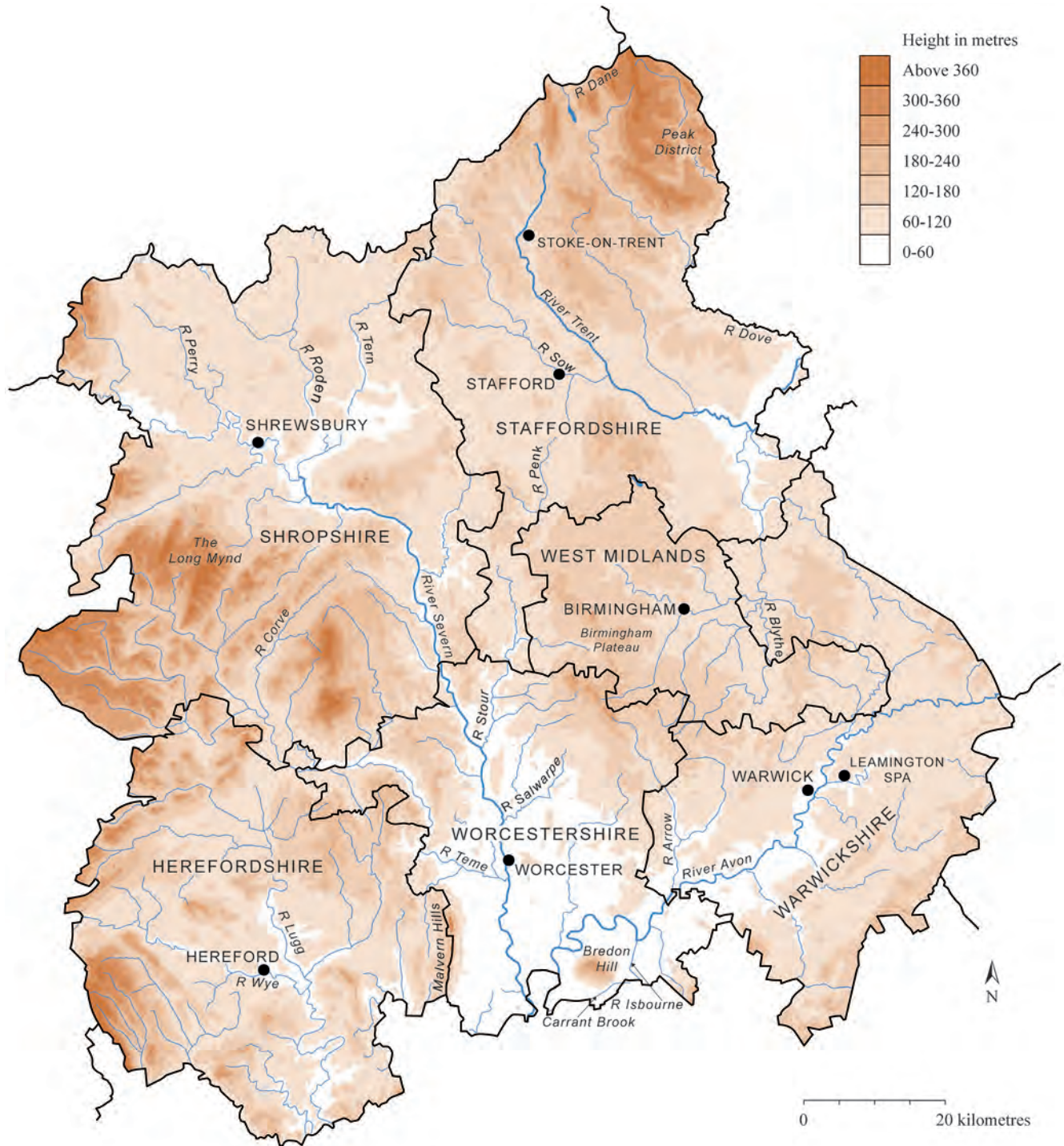


Fig. 1.1 West Midlands topography with main places and rivers indicated as mentioned in the text of this volume.

- The regional evidence for the understanding of exchange networks is unparalleled for the British Isles. The geology of much of the region is sufficiently distinctive to allow for sourcing pottery and important stone quarries (Moore 2006). The pottery evidence is perhaps the most well-known aspect, and this region was instrumental in demonstrating that specialised pottery production existed in Iron Age Britain (Peacock 1968), and in providing a quantified approach to analysing the distribution networks that connected producers to individuals at a considerable distance from the source (Morris 1982; 1994). The evidence for the exploitation

of salt at Droitwich and in Cheshire is even more important, as these are very unusual sources in Britain and the associated briquetage provides good evidence for the distribution of salt across a very wide area of western Britain (Morris 1985). The detailed analysis of these production and exchange networks is impossible to undertake in most of Britain where the geology is less conducive to investigation, or where the material culture simply does not exist.

- A particularly interesting discovery in the West Midlands is the burial evidence from Bredon Hill and Sutton Walls (Hencken 1938; Kenyon 1953). Both deposits have been interpreted as the result of warfare and certainly the remains at Bredon Hill had been systematically dismembered (Western and Hurst 2013). The only comparable deposit is the massacre level at South Cadbury which has recently been subjected to a detailed reinterpretation that has indicated the complexity of the depositional process (Barrett *et al.* 2000). The absence of a normal burial record for most of Iron Age Britain makes these deposits exceptionally important and provides some of the best evidence for the practice of warfare in Britain. These deposits have only recently been the subject of renewed study (Western and Hurst 2013), which has drawn attention to the international importance of the archaeological record of the region.

These are only some of the region's greatest hits and I am sure others would have a different list. Nevertheless, they give an impression of the important contribution West Midlands archaeology has made to the understanding of Later Prehistoric studies in Britain. I would now like to look at the potential the region has for addressing issues, which seem to me to be of considerable importance in current archaeological practice.

Landscape and territory

Within the region the ability to compare and contrast different landscapes is very important, and understanding the very different nature of these landscapes should be one of the principal research objectives of the region.

It is immediately obvious that there is an important east-west division between the hillfort-rich landscapes of the Welsh Border counties, and the small enclosures that are so common in the low lying river valleys of Warwickshire and Staffordshire. This pattern was a feature of Cyril Fox's Highland Lowland division of Britain (Fox 1952), and, though we can now dismiss the cultural assumptions that dominate Fox's interpretation, we must still address the significant differences between the settlement patterns in each area (see Wigley, this volume).

There is also a major north/south division that ignores the landscape and which is best represented by material

culture. This is reflected in a marked decline in the quantity and quality of the ceramics found in the northern counties of Shropshire and Staffordshire, compared to the southern counties of Herefordshire, Worcestershire and Warwickshire, and this may also be the case for other aspects of material culture, such as metal and stone tools, though these patterns are more difficult to determine. These divisions can be linked to the development of distinctive exchange networks in the Middle Iron Age, which in turn are normally explained as reflecting ethnic identities, such as between the Dubonni and the Cornovii. However, we need to explore the significance of these differences at the level of daily practice before we start to discuss ethnic and tribal affinities.

For example, it is worth asking why certain stone types are being used to temper specific types of pottery. Can we just assume that this is because of the thermal properties provided to the pot which make it a more efficient cooking utensil? I doubt it. If the decoration and form of pots is about building identities and defining communities, then it may be that a desire to be associated with particular localities is the most significant feature of the distribution networks. A Neolithic analogy is appropriate: it is now fairly acceptable to claim that stone axes were being quarried from specific sources because of the symbolic significance of the sources, which were located on very dramatic topographic locations (Edmonds and Bradley 1993). Is it possible that some of the sources of rock temper used in the Iron Age also had a symbolic significance to the producers and users of this pottery? The distribution of pottery has to be seen as a social process; it creates relationships between people, which are lubricated by stories that explain these relationships and place them in a broader cosmology. Ultimately these stories create an explanation for people's existence as human beings, and place them in a world of rocks, soils, plants and animals.

The possibility of a symbolic significance for these ceramic sources may also be linked to some of the most important hillforts. The Malvern ridge is a dramatic landscape feature, which is highly visible, as anyone who has ever driven up the M5 will know. It acts as a boundary separating the very different landscapes of Herefordshire and Worcestershire. In most traditional societies this natural feature would be written into the mythological ancestry of the surrounding peoples. It would have a central role in the narrative of existence and provide an explanation for their being. It may be this mythological role that led to the construction of the two massive hillforts of Midsummer Hill and Herefordshire Beacon on the ridge. Do they control the mythology of place?

Directly opposite the Malverns is another prominent landscape feature, Bredon Hill. This isolated hill is the end of the Cotswold Ridge and looks down on the meeting of the rivers Avon and Severn. The hill is again controlled by the construction of a hillfort, but it is a very strange construction and difficult to interpret because of a massive landslip on

the northern slopes. Nevertheless, it seems to have been densely occupied despite a very exposed location, and the importance may be reflected in the extreme violence that was used to kill and dismember the occupants.

Separating these two eminences is the River Severn, and, again, this natural feature must have had a prominent role in the cosmological, social and economic life of these communities. It is surprising, therefore, to find that this river does not appear to be marked by the activities of any prehistoric community. If this river was in Eastern England we would expect to recover Bronze Age, and probably Iron Age, metalwork from dredging, but this does not appear to be the case for the Severn, though the Ironbridge Gorge might be the exception (see Wigley, this volume). Is this a result of particular dredging practices which do not allow for the recovery of archaeological remains, or is it an accurate reflection of an archaeological reality? Did the people of the West Midlands have a religious practice that avoided rivers? As Dorling *et al.* observe (this volume) we know next to nothing about Iron Age religious practice in this region.

Site level

It is also necessary to consider the significance of the patterns recognised at the site level as part of this research process, and it is perhaps unfortunate that the analysis of sites was not a subject for detailed consideration in this volume. Certain aspects of settlements were a repeated feature of discussion during the original conference, and the nature of boundaries was one of these. This is a topic of considerable interest in later prehistoric research, and provides a thematic problem that cuts across different scales of the archaeological landscape:

- Large landscape boundaries are a conspicuous feature of some landscapes. Several of these have been identified in Warwickshire, and the redating of the cross-dykes of Shropshire to the prehistoric period is important. Pit alignments have a very interesting distribution, appearing in very limited areas on the river valleys of Warwickshire, Shropshire and Staffordshire.
- Field systems are also clearly a feature of some landscapes (notably at Kemerton, Worcestershire), though they are perhaps not as common as we would expect; recent work in Shropshire and Staffordshire suggests they are there, waiting to be explored (Wigley and Wardle, this volume).
- Enclosure boundaries are an important feature. The hillforts of the region are spectacularly well defined and can be used to distinguish the communities of the western uplands from the farmsteads occupying the less substantial enclosures of the eastern river valleys.
- Houses defined by shallow ditches are characteristic of the region. These should not be dismissed as drip

gullies, as they are a deliberate feature that would be a conspicuous part of the domestic arena.

All of these boundaries need to be interpreted, and cannot simply be assumed to have an obvious function. The enclosure of the landscape is not necessarily an efficient way of organising agricultural landscapes, particularly those where large-scale seasonal movements of animals are routine practice. The purpose of cross-ridge dykes and the precise physical characteristics of pit alignments are still a matter of some conjecture, but neither seem particularly efficient ways of creating an exclusive boundary. Field systems may be a feature of the Later Bronze Age, but as work on Dartmoor (Fleming 1988) and on Salisbury Plain (McOmish *et al.* 2002) clearly demonstrates, these divisions can be a relatively short-term phenomenon, which seems to be of little significance in the Iron Age. They do not simply reflect agricultural intensification to meet the demands of an increasing population in later prehistory.

The defensive nature of hillfort boundaries has been largely rejected in other areas within the hillfort zones of southern Britain (Bowden and McOmish 1987), and this re-interpretation has much to commend it, so long as people do not confuse the argument with a view that the Iron Age was a peaceful place, or that hillforts were never subject to attack (Sharples 1991). The effort involved in the construction of hillfort defences, and to a lesser extent settlement enclosures can be related to other issues of importance in these societies, and one of these must have been the social construction of identity. All of these boundaries have to be understood in terms of relationships between people who have chosen to define and delimit a specific place in the landscape. They are choosing to separate this place from other spaces, control access to the place and movement in the surrounding space. Hillforts separate communities from the landscape and other communities, and drip gullies separate a household from functionally distinct settlement space and from other households.

In recent years a considerable amount of emphasis has been placed on the understanding of depositional processes, in particular in houses. It is clear that the location and manner in which material is deposited within houses and in the settlement areas surrounding them, can tell us a considerable amount about society. This process of deposition is not simply occurring in a self-explanatory fashion, but uses a cultural logic, which can illuminate the different roles of individuals within these societies. The recovery of intact floor levels and *in situ* surfaces must be a very high priority in any research. These are always going to be rare in an intensively cultivated agricultural landscape, but recent work in Warwickshire suggests they do occur (Palmer 2012). Valley floors, uplands and localised accumulation zones, such as behind hillfort ramparts, become very important in this respect.

Finally, it is important to think of stratigraphic sequence as not just a useful means of demonstrating chronology but as a significant human decision. Why do people choose either to build on the same spot for several generations or, in contrast, choose to avoid past settlement locations for the construction of their own new settlements (Brück 1999; Gerritson 1999; Sharples 2010). In many areas of eastern England, the presence of settlement scatters which spread across the landscape in an unfocused manner, links these areas with the continent, and contrasts them with the location of specific settlements of areas such as Wessex. The creation of a settlement boundary clearly restricts a settlement's ability to expand or drift, and suggests a commitment to long-term occupation of a locale, which is otherwise unusual in prehistory. Does this indicate a change in inheritance and ownership?

Potential

The understanding of settlements is a crucial research goal for Later Prehistory, as in many ways the millennium and a half from the beginning of the Middle Bronze Age is defined by the ubiquitous presence of settlements in many areas of Britain. In the West Midlands, however, identifying Late Bronze Age settlement has proved to be very difficult and settlements belonging to this period are largely absent from many areas (Dalwood, this volume).

The potential of limited and restricted research excavations to transform radically the current understanding

of the archaeological record is ably demonstrated by the discovery of a Late Bronze/Early Iron Age settlement at Whitchurch (Waddington and Sharples 2011; Figure 1.2). This settlement lies in the valley of the River Stour, a tributary of the Avon. Research excavations by Cardiff University revealed a complex site which consisted of a Late Bronze Age/Early Iron Age midden; a thick accumulation of organic rich soil. This later became the focus for Iron Age settlement which included rectangular, trapezoidal and oval enclosures. Pits, postholes and gullies were recognised both cutting through the midden and stratified below the midden (Figure 1.3), indicating the presence of a complex sequence of settlement structures.

Despite the small-scale nature of the research, the excavations produced an enormous assemblage of finds: 251 copper alloy artefacts, 7,512 sherds of pottery, 519 fragments of fired clay (including briquetage and spear mould fragments), 47 pieces of worked bone, 16 stone tools and a blue glass bead. The pottery assemblage from the midden and contemporary settlement features belongs to the post-Deverel-Rimbury decorated tradition that dates to the period around 850/800–550/500 cal BC (Brudenell in Waddington and Sharples 2011), and is almost unique for the whole region. 17,890 animal bones were recovered dominated by sheep, but with relatively high numbers of pig, a feature of many other midden sites (cf. Madgwick in Waddington and Sharples 2011). The presence of isolated bones of beaver and wild boar are important.



Fig. 1.2 Whitchurch, Warwickshire. General view of site locality with Trench 4 in foreground.



Fig. 1.3 Whitchurch, Warwickshire. Trench 6 excavated.

The copper alloy assemblage largely comprises metalworking residues including casting waste and an ingot, which together with the mould fragments suggest metalworking was an important part of the settlement activity. There was also an important assemblage of objects which included a socketed axe and a late palstave; tools including a chisel, punch, awl and razor; fragments from weapons, and a wide range of ornaments including pins, rings and discs. The most interesting discovery was 20 miniature axes (Waddington 2007; Figure 1.4). This assemblage was a very unexpected discovery as, until recent reporting through the Portable Antiquities Scheme, only a small quantity of miniature axes had been discovered, mostly from Wiltshire (Robinson 1995). These were thought to date to the Iron Age or Roman period, and a Late Bronze Age date was unexpected.

This is a truly exceptional site and is currently without parallel in the region. Sites producing Post Deverel-Rimbury Decorated Wares are very unusual, bone assemblages seldom survive, glass beads are unknown, and copper

alloy objects are rare and seldom found on settlement sites. Most West Midlands finds assemblages fit a single box (see Dalwood, this volume). The site is best interpreted as an important meeting place, where people gathered together to exchange material culture, animals and perhaps people, and to undertake significant ritual acts, the most noticeable of which was the conspicuous and wasteful deposition of large quantities of material culture. The location is relatively inconspicuous and, though the Stour valley might be an important route connecting the West Midlands to the Thames Valley, there seems little intrinsic reason why this location was chosen.

The exploration of the settlement at Whitchurch demonstrates that new discoveries will transform our understanding of the region. The recent discovery of an Iron Age road at Sharpstone Hill (Shropshire; Malim and Hayes 2010), as well as the discovery of a sword scabbard in the nearby Late Iron Age enclosure at Meole Brace (Bain and Evans 2011), and of large coin hoards at Pershore (Worcestershire; Hurst and Leins 2013),



Fig. 1.4 Whitchurch, Warwickshire. Copper alloy axes, including rare miniature examples.

would not have been predicted on the basis of previous work in the region and indicate the complexity of the archaeological record. The Portable Antiquities Scheme has also produced a surprising number of finds that challenge the accepted view that the West Midlands is impoverished (Bolton, this volume). It should also be remembered that Staffordshire is one of the few areas of Britain outside East Anglia which has produced gold torcs, such as at Glascote (Painter 1971).

Conclusion

The West Midlands is one of the least understood regions of Later Prehistoric Britain. It does not generally have the long tradition of intensive antiquarian research that illuminates areas such as Wessex and Yorkshire, but nor does it have the intensive developer-funded excavations that have transformed our understanding of the East Midlands and South-East England in recent years. Nevertheless, it is clear that there is rich and interesting archaeology waiting to be discovered and that the region has the potential to make a major contribution to our understanding of many

of the key problems in Later Prehistory. A considerable amount of work is required and whilst some of it may be undertaken as developer-funded archaeology, this is unlikely to provide all the answers. Targeted research excavations are an urgent necessity, and it is unclear where the resources for these projects will be located. They are likely to require partnerships between universities, local communities and professional organisations to be successful.

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Cows, beans and the view: landscape and farming of the West Midlands in later prehistory

*Elizabeth Pearson**

Introduction

This paper considers the contribution that environmental archaeology makes to the subject of landscape and farming of the West Midlands in late prehistory. Although environmental sampling is now generally a routine part of excavation on prehistoric sites, one of the problems we face is that there is an unfortunate lack of direct evidence for specific information on crop and livestock farming. This is because animal bone and charred plant remains (which are the remains which give us the details on the farming economy) are generally very sparse on sites throughout most of the later prehistoric locally, as is the case elsewhere nationally. We can take steps to make the most of this sparse information, but increasingly we are also looking at the 'view', that is the environmental or landscape context of the site. This can help to offset the scarcity of the other environmental evidence mentioned, and also in the more general understanding of life in the later prehistoric period. The view, or environment, may be local and over a short time-scale, or regional and long-term.

The questions

The main questions covered by this paper are ones to which environmental archaeologists are usually directed, and more general issues which have been discussed by other speakers during the conference session:

Site specific

- What were the crops and animals farmed?
- What was the balance between pastoral and arable agriculture?

General trends

- What is the evidence for an increasingly settled, farmed and divided landscape?
- What is the evidence for climate and soil deterioration?
- The West Midlands compared with the national picture

When considering how the West Midlands compared to the national picture, there are ways in which we seem to be lacking evidence for a transition that is evident elsewhere in the country. However, there are other ways in which we are rapidly gaining ground, and are blessed with ample opportunity to collect the appropriate data.

The sites

There appears to be a range of sites dating to the Bronze and Iron Age periods: those which are extensive settlement sites, sites classified as defensive or ritual/ceremonial monuments, and also off-site palaeoenvironmental sequences. However, there are few sites in each category. Many of the sites excavated recently are in the main river valleys (particularly, the Severn and the Avon) or on relatively low-lying land, and these are the focus for this paper. Other sites are truly upland, for example on hillforts, but these were mainly excavated at least a couple of decades previously, and few (with a couple of notable exceptions) have been subject to an extensive programme of environmental sampling.

Some areas have been discussed in more detail by other authors (this volume). For instance, palaeoenvironmental

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sites in Shropshire, covered by Andrew Wigley (this volume), are a significant source of environmental data for the region. Sites in the Birmingham area, especially those associated with burnt mounds (see Hodder, this volume), are a specific valuable source of data.

Some sites of Bronze Age date are as follows (Figure 2.1):

- a) Farm settlements at Kemerton Quarry in Worcestershire (Jackson and Napthan 1998; Jackson 2015), and Salford Priors in Warwickshire (Palmer 1999)
- b) Defensive or ritual/ceremonial sites, for example, barrow monuments on Long Mynd (Dinn *et al.* 1996) and at Bromfield in Shropshire (Hughes *et al.* 1995), and a palisaded enclosure at Perdiswell Park and Ride in Worcester (Griffin *et al.* 2002).

Some sites of Iron Age date are as follows (Figure 2.1):

- a) Settlement sites at Wyre Piddle bypass (unpublished) and Beckford (unpublished) in Worcestershire; at Salford Priors (Palmer 1999), Ling Hall Quarry (Palmer 2002; in prep (a)), and Wasperton in Warwickshire (Bowker 1983); at St Mary's Grove, Stafford (Moffett 1987), Fisherwick (Smith 1979) and Whitemoor Haye (Coates 2002) in Staffordshire;
- b) Defended/ritual/ceremonial sites, for example, a cremation site at Walton in Warwickshire (Palmer in prep (b)); hillforts at Midsummer Hill (Stanford 1981), Croft Ambrey (Stanford 1974), and Sutton Walls in Herefordshire (Kenyon 1953), and The Wrekin in Shropshire (Stanford 1973).

Multi-period palaeoenvironmental sequences are located at the following sites:

- a) Worcestershire: various sites along the River Severn, on the Carrant Brook, at Beckford (Greig and Colledge 1988), and at Gwen Finch Nature Reserve, Birlingham along the River Avon (Bretherton and Pearson 2000), Impney Farm in Droitwich on the River Salwarpe (Griffin *et al.* 1999), and Cookley, near Trimpey Top Reservoir on the River Stour (Jackson *et al.* 1996);
- b) Herefordshire: at Wellington Quarry (Dinn and Roseff 1992; Figure 2.2) and Lugg Bridge Quarry;
- c) Staffordshire: at King's Pool (Bartley and Morgan 1990; Colledge and Greig 1991; Pearson *et al.* 1999) and;
- d) Shropshire: at Crose Mere (Beales 1980).

Environmental evidence from these sites has been analysed by a variety of specialists working in the region. Generally, there is a pattern of sparsity of both charred cereal crop remains and animal bone, which is partly a problem of poor survival in slightly acid soils, and probably constant wetting

and drying (many sites being on gravel terraces), with a few notable exceptions. However, in contrast, waterlogged sequences of peat and alluvium are well preserved on the floodplain of the river valleys, and buried soils can be found beneath monuments.

What were the crops and animals being farmed?

Of the crops grown, the staple cereal crops are usually the main focus of attention, and our sole source of detailed evidence for these comes from charred cereal crop remains. We know that the main wheat crops grown were emmer and spelt wheat, but the timing of the transition from a largely emmer based cultivation to a largely spelt based economy is hard to detect at the moment in the West Midlands. This is mostly because the quantity of remains accurately identified to species is low, and there are few sites dating to this period. There are few definite identifications from sites of Bronze Age date, although there are occasional sites where the dominant crop can be determined. The author has identified emmer wheat as the principle wheat crop on the extensive mid-Bronze Age settlement at Kemerton in Worcestershire (Pearson 2015), while Lisa Moffett identified spelt wheat as the main wheat crop at the mid-Bronze Age settlement at Salford Priors in Warwickshire (Moffett 1999), which is the earliest identified spelt wheat from Warwickshire sites (Stuart Palmer, pers. comm.).

Spelt is generally the wheat crop identified nationally from Iron Age sites, but on many sites in the region it has not been possible to distinguish between emmer and spelt wheat because of poor preservation. This is the case for cereal remains recovered from hillfort sites at Croft Ambrey (Greig 1974) and Midsummer Hill (Colledge 1981) in Herefordshire, and the author has also noted this during recent excavations on the Wyre Piddle bypass in Worcestershire, despite a rigorous and extensive sampling strategy.

The occurrence of other crops (such as free-threshing wheat, rye and oats) is also of interest, particularly as to where they are found, and whether they may indicate a more diversified economy. Generally, the question of why did one cereal crop replace another in importance is beginning to be addressed nationally, but without a reasonably large database for the region, it is currently difficult to begin to consider whether regional culture or the environment played the main part in these changes in the West Midlands.

The sole source of detailed information on farmed or hunted animals is animal bone, but unfortunately this is the poorest resource available in this region. The paucity of remains means that any biases towards a cattle-based or sheep-based animal husbandry are difficult to detect. However, at the later Bronze Age Kemerton Quarry site in Worcestershire Stephanie Pinter-Bellows (Pearson 2015) identified cattle as the most important meat source (that

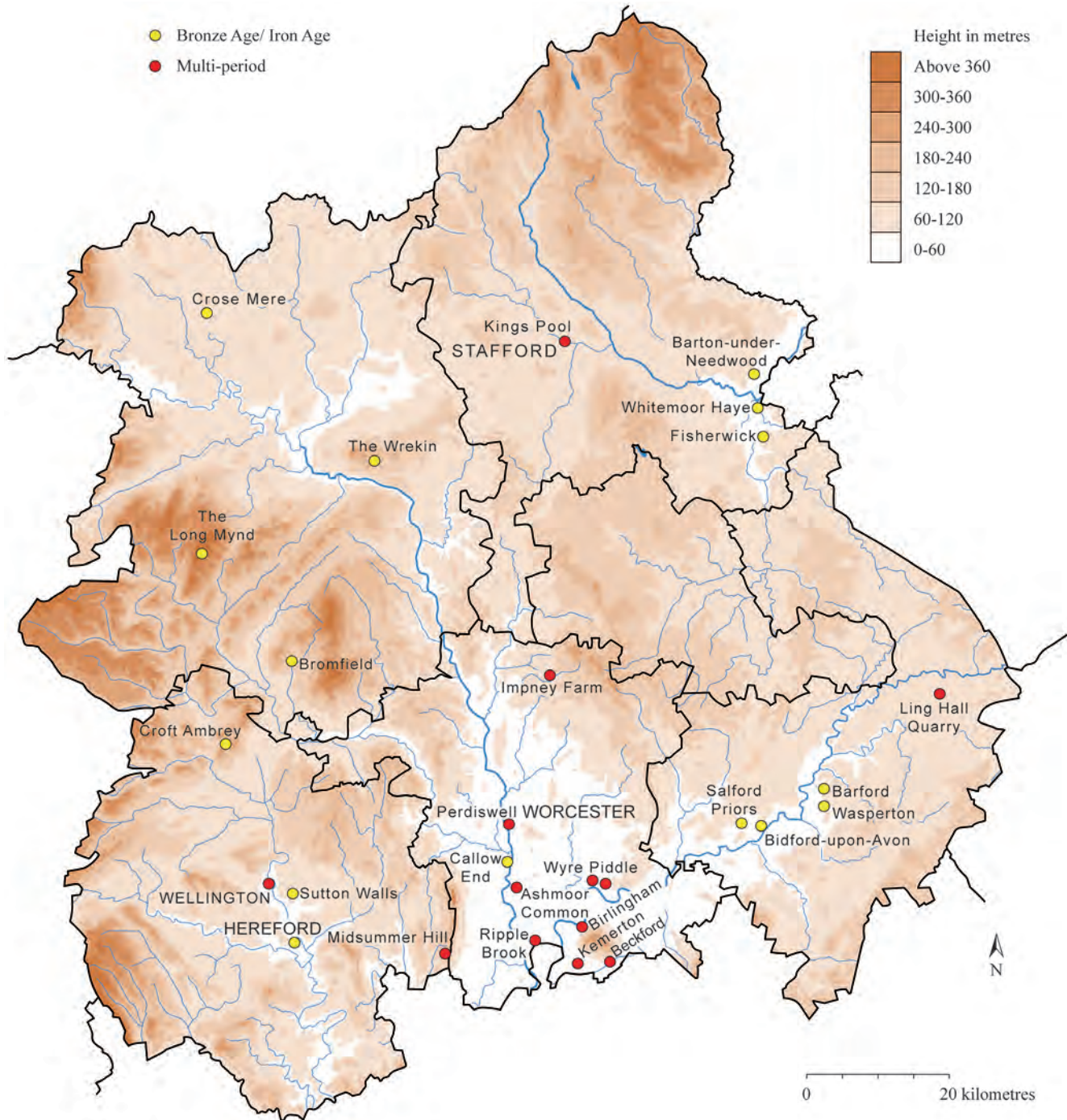


Fig. 2.1 Map of West Midlands sites with later prehistoric environmental archaeology as mentioned in text

is if they were not used for traction), although the three species (cattle sheep/goat and pig) may be represented in equal numbers. Deer were hunted, and dogs were also used. No animal bone was reported of a comparable period at Salford Priors in Warwickshire, and little bone has survived on other Bronze Age sites. Coton Park at Rugby (see Palmer, this volume) is one exception where animal

bone was relatively well preserved on Boulder Clay. Large assemblages of animal bone and detailed reports are also available from the Iron Age hillfort sites at Croft Ambrey (Whitehouse 1974), Midsummer Hill (Whitehouse 1981), and Sutton Walls (Cornwall and Bennet-Clark 1953), all in Herefordshire. In contrast, survival has been limited on river gravel sites.



Fig. 2.2 Alluvial layers at Wellington Quarry, Herefordshire (red = post-Roman and later, yellow and grey (gleyed) = prehistoric).

The general paucity of these remains may not be an encouraging sign, but there are ways to make the most of a sparse resource. Suggestions for this are that, despite the limitations of the data, it is important to:

- a) resist cherry picking the few examples of visibly rich assemblages;
- b) continue to sample even where remains are obviously sparse, because the gradual accumulation of species identifications is still needed, and;
- c) ultimately, collate the general distribution of material across a settlement (or even across topographical zones), as this may also be make an important contribution to the growing picture.

What is the balance between pastoral and arable agriculture?

This can be difficult to discern using crop and animal remains directly, because of their paucity on sites of late prehistoric date. However, this is a question where it is possible to ‘plug the gap’ in knowledge successfully. Using several strands of evidence is key to building up sufficient evidence to address such an issue. An example of where this has worked well is at Kemerton Quarry, Worcestershire. Here field boundary patterns were useful, along with the presence of deep waterholes and possible droveways, to indicate a pastoral landscape. Supporting evidence for a landscape relatively cleared of woodland and dominated by grassland comes from the pollen, the plant macrofossils from the waterholes, and molluscs from other features (Pearson 2015). At Bidford-upon-Avon insect remains similarly provided detailed information on the open grazed pastureland (Osborne 1988). This emphasis on grazed pastureland, here and elsewhere, may partly explain the low levels of charred cereal crop remains, as this could be due to arable farming probably being relatively unimportant here compared to pastoral farming.

Soil micromorphology can also be used to detect arable or pastoral land use, for example on buried soils beneath earthworks. The potential for survival of such soils may be good under the large earthworks of the major hillforts in the region. At Midsummer Hill, for example, the Iron Age hillfort overlies an earlier bank (Hal Dalwood, pers. comm.), and it is possible that if a buried soil survives here, analysis may indicate the character of previous land use.

What is the evidence for an increasingly settled, farmed, and divided landscape?

Where evidence for an increase in arable agriculture is concerned, there appears to be no real increase in quantities of the charred cereal crop remains until the late Iron Age

to Roman period. Although poor preservation of these remains may be an issue, the evidence suggests that crops were generally processed on a small-scale. However, Lisa Moffett has pointed out that remains of charred cereals from Iron Age sites tend to be substantially more abundant on the settlements on the second gravel terraces. Examples are located at Wasperton on the Warwickshire Avon (Bowker 1983) and, outside of the region, at Ashville Trading Estate (Jones 1978) and Gravelly Guy on the Upper Thames in Oxfordshire (Moffett 1989). However, associated animal bone is so poorly preserved, that these remains contribute little to the debate on the contemporary importance of pastoral agriculture.

Most of the evidence for intensification of agriculture comes from the sites mentioned above, or from palaeoenvironmental studies carried out on sequences of peat and alluvium or colluvium which cover a long time span. These deposits provide an abundant resource in the region and are mostly found in river valley locations in the West Midlands. Several major rivers flow through the region, for example the Severn, Teme, Avon, Wye and Lugg. Other areas of potential include upland peat bogs and buried soils beneath monuments. Increasingly it is recognised that sampling and analysis of these deposits is an important part of archaeological work at all levels. Data from these deposits have accumulated from post-PPG16 developer-funded work in recent years across the region, but especially from Warwickshire, Worcestershire and Herefordshire. Two main aspects of environmental change may indirectly contribute towards this debate.

Woodland clearance

Palynological work has been useful for providing information on increasing woodland clearance in the region throughout the late prehistoric, much of which may be attributable to agricultural intensification. In the main river valleys, a point of interest is that the Severn valley shows a different pattern of woodland clearance to that evident in the River Avon. Work by Tony Brown (1982) showed that primary woodland was cleared on the Severn gravel terrace around the mid Bronze Age to early Iron Age, and agricultural exploitation, probably arable, had been established around 3000 bp. A much later floodplain clearance occurred during the Iron Age to Saxon period, clearance being earlier on the drier parts of the floodplain. However, James Greig’s work in the Avon valley has showed that an open, deforested environment is evident much earlier, at least by the early Bronze Age, demonstrated by sequences on the Carrant Brook at Beckford (Greig and Colledge 1988), and on the River Avon at Birlingham (Greig 2000) nearby. The difference may partly reflect the fact that the form of the two valleys is different, with that of the Severn in this region being narrow, and that of the

Avon having wider terraces and shallower valley slopes. This may have affected settlement patterns, land use and could have had implications for cultural diversity (Tony Brown, pers. comm.). In the Lugg valley (Herefordshire), a dated alluvial sequence, spanning the early Holocene to the present day has been described and related to land use (Meadows *et al.* 2011). An outline pollen sequence, dating from the Mesolithic and spanning the whole of the prehistoric period has been produced, but is not sufficiently detailed at the moment to interpret the pattern of woodland clearance for the later prehistoric period. Numerous other palaeochannel deposits have been sampled here in recent years, and have yet to be analysed.

Pollen sequences that cover a long time span, and are more or less continuous, are a prized resource. This is the case at Lammascote Road in Stafford (part of King's Pool; Figure 2.3) where the sequence covers the Mesolithic to medieval periods. James Greig has commented (Pearson *et al.* 1999) that this work has helped to fill in missing sequences of woodland clearance phases from earlier work. Cereal-type pollen also shows relatively early arable agriculture (estimated at 3800–3500 cal BC) in this part of the west Midlands.



Fig. 2.3 Monolith and spit sampling of a watching brief trench at Lammascote Road, Stafford (King's Pool).

Erosion of soils, and alluviation or colluviation on the floodplain

The alluvial floodplain in this region is a valuable archaeological resource, but the significance of such an area is often underestimated. An archaeological sequence here may range from scatters of artefacts and features spread over a wide area to entire settlement sites sandwiched between layers of alluvial silts. It is the floodplain deposits, and natural features such as relict river channels, which can provide valuable information on the past environment and the effect of human activity on this part of the landscape. This is an area of increasing importance, with successful studies having been carried out nationally.

Sedimentary studies have been carried out in the valleys of the Severn (Shotton 1978; Brown 1982), Lugg (Dinn and Roseff 1992; Jordan 2002) and Avon (Susan Limbrey, unpublished), which discuss periods of alluviation and floodplain stability, and their significance for interpretation of human activity and settlement. For example, phases of occupation and abandonment of the floodplain are evident in the Lugg valley during the Bronze Age and into the Iron Age, and a period of intensified arable activity is also discussed for the Severn valley. Shotton suggests that the latter may be attributable to the late Bronze Age, although Brown questions the dating of this phase and the complex relationship between floodplain alluviation and land use.

Climate and soil deterioration in the Late Bronze Age to Middle Iron Age

Nationally, it is well known that there was a gradual deterioration in climate which became progressively marked 3–2.5 ka (thousand years ago). However, climate change has been little discussed for this period in the literature from this region, although some information can probably be inferred from the actual build-up of peaty deposits, lowland and upland, and species change in pollen diagrams. This is an area which needs to be investigated. It may be asked whether there is evidence for the effects of this on: (a) settlement patterns and land use (particularly on floodplains); and/or (b) the agricultural economy.

Can we see evidence of soil deterioration as a result of farming?

At Ling Hall Quarry in Warwickshire environmental evidence for soil deterioration has recently been found (Palmer, in prep (a)). Here, an abundance of charred heather in ditch deposits of Iron Age date, identified by Rowena Gale, showed that development of heather moorland had occurred on acid, sandy soils by this period. Susan Limbrey's work for the Marches Uplands Survey also showed that podsolisation of soils had occurred in soils

buried beneath Bronze Age barrow monuments on the Long Mynd, Shropshire (Dinn *et al.* 1996). In both cases, the cause of these changes, and whether they are related to intensive land use or other factors, merits consideration.

The consideration of this environmental information, together with the other archaeological data on settlement patterns, will help to clarify the relative importance of natural and human-induced changes.

Exploitation across the topographical zones – from hilltop to valley floor

Environmental evidence, as well as other archaeological evidence, needs to be synthesised across whole landscapes in order to understand the varied use of land from hilltop to valley floor, not only for arable and pastoral agriculture, but, for example, for woodland and marsh resources. As Martin Locock (2001) pointed out, anthropologists have little use for the term ‘marginality’, and it is likely that most of the land available had some economic use during this period.

At Wellington Quarry, Herefordshire it is clear that wet floodplain areas have been a useful resource for long periods of time during the later prehistoric period. Artefacts and animal bone have been found in abundance in shallow hollows, perhaps representing debris from forays onto the wet grassland or marshland to either graze animals, provide drinking water for stock, or hunt for wild fowl and collect other marshland plant resources.

Research priorities

To summarise, deposits suitable for palaeoenvironmental studies are abundant in the region, and to make the best of this resource, it is advisable to:

- a) collate the available palaeoenvironmental data, and relate it to the known archaeology;
- b) map large areas of deposits with potential for palaeoenvironmental work at county/region wide scale (see Dalwood, this volume, Regional research priorities (3)), and, where possible, carry out auger survey of target areas near key settlement sites;
- c) use ‘small interval sampling’ for pollen sequences to look for specific episodes of environmental or cultural change, and;
- d) closely date the sequences (which will usually require AMS dating, now a standard and invaluable technique).

There is considerable variation in the recovery of different categories of environmental evidence, much of which is an issue of survival in the local ground conditions (see above). However, there are some notable gaps in the evidence when coverage over the whole region is considered. Relatively little recent environmental evidence appears to have been recovered

and analysed from Shropshire and Staffordshire (with the exception of work relating to the North-West Wetlands Survey in 1994–6). Some of this may reflect low levels of archaeological intervention (perhaps in areas where development levels are low), but it may instead reflect the degree to which environmental archaeology is not being integrated into the archaeological strategy for these parts of the West Midlands.

In order to plug the gaps in our knowledge for this period, there are some curatorial implications that should be considered, particularly for developer-funded work:

- a) Environmental work should be more prominent in the briefs. This is particularly the case for palaeoenvironmental work on so-called ‘natural deposits’ (alluvial sequences, peat deposits, and palaeochannels) which have their own intrinsic archaeological value. This work often requires specialist sampling and radio-carbon dating, and so can have a significant effect on budgets. Unless this is considered at the earliest curatorial stage of the process, it is all too common for this work to be overlooked when project proposals are submitted, particularly in a competitive tendering situation.
- b) Environmental work should be included in project proposals (allowing for on-site consultation with specialists), and curators should monitor its inclusion.
- c) The inclusion of environmental archaeological evidence, and the location and extent of deposits such as peat and alluvium in SMR/HER enhancement projects is becoming more prominent recently. This may help to flag up sites of importance for curators in future, and hence improve the inclusion of this type of work in archaeological projects on a regular basis.
- d) Opportunities should be sought to back up the developer-funded work through independently funded synthesis and research, so that the data accumulated on a site-by-site basis can be set in a wider context (see other papers, this volume), and tackling the questions discussed above can be facilitated.

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‘The Bronze Age has lagged behind ...’. Late Bronze Age settlement and landscape in the West Midlands

*Hal Dalwood**

Introduction

This paper is an overview of the evidence for later Bronze Age settlements and landscapes in the West Midlands region, and attempts to set that overview within the context of current archaeological research. There is a widespread view that research into the British Bronze Age in the last decade has been rather less dynamic than contemporary research into the Neolithic or the Iron Age. But there is a new dynamism in Bronze Age studies, with an upsurge in development-led fieldwork and the development of new approaches to understanding Bronze Age societies. The range of current approaches can be seen in the collection of papers edited by Joanna Brück, entitled *Bronze Age landscapes: tradition and transformation* (Brück 2001a). That volume clearly shows the dramatic impact of new archaeological information, particularly from extensive fieldwork on the river gravels. There is a new research agenda for the Bronze Age – a positive response to the situation of recent years when, as quoted above, ‘the Bronze Age has lagged behind’ (Brück 2001b, v).

The later Bronze Age has long been seen as something of a watershed in British prehistory. This has been identified in terms of changes in social organization, in the organization of agricultural land and farming systems, in the form of settlements, and in religious beliefs, at least as expressed in burial traditions and the form of ceremonial monuments (summarized cogently in Champion 1999). The view that the later Bronze Age is a period of change and transformation in

the West Midlands region will be accepted here, on the basis of a very broad overview of the archaeological evidence. However, this paper is by no means a rigorous examination of all the evidence, and can only be an interim overview.

The research framework organization itself reflects the view that profound changes occurred in prehistoric societies in the late second millennium BC. There is extensive evidence for widespread changes in settlement and agriculture in the late second millennium BC in Wales, attributed to climatic deterioration and adverse human impacts on the ecology of upland areas (Davies and Lynch 2000). This explanation of cultural change should not be adopted uncritically, but it is a task beyond this paper to undertake a rigorous critique. It should be noted that the ‘orthodoxies’ of later prehistory are unlikely to remain unchanged for long. The idea of climatic deterioration leading to the abandonment of upland areas at the end of the second millennium BC is one such orthodoxy (see Burgess 1980, 239). However, there is evidence for areas of arable cultivation and settlement on the East Moors of the Peak District in the second and first millennium BC, with no wholesale periods of abandonment (Willis 2002). Such evidence is clearly significant in any consideration of the upland areas of the West Midlands region in the late second millennium BC.

The character of current theoretical debate in Bronze Age studies is distinctive, and has developed in new directions from the 1980s (see Bradley 2001). Rather than studying broader processes of social and economic change, much

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current work is focused on the ways in which Bronze Age communities inhabited the landscape (see the case studies in Brück 2001a), and it is this research framework which will be drawn on here.

The Later Bronze Age in the West Midlands region

There is a rather limited range of evidence for later Bronze Age settlements in the West Midlands region (Figure 3.1). This is also true of other parts of lowland England away from the southeast, and can partly be traced to the low visibility of the field evidence and partly to the low level of field research. In the context of an overall survey of Late Bronze Age archaeology in Britain, the standard view was that ‘little is yet known about sites of this period in the Midlands’ (Champion 1999, 102). That this view now needs to be corrected is a testament to the rapidity of archaeological discovery: in parts of the East Midlands region (Leicestershire and Rutland) there is now a good sample of Late Bronze Age settlement sites (Willis 2002).

In the West Midlands region, the understanding of later prehistoric settlement and landscape has certainly advanced in the last decade, in the form of a rather small number of field projects and some academic research. There have been important studies with insights into the character of later prehistoric societies, of which a good example is the survey of evidence from Warwickshire by Hingley (1996). This paper provided an overview of current knowledge of the later Bronze Age in Warwickshire, and developed a range of ideas about the nature of later Bronze Age archaeology, which are relevant beyond the county (see below). Some landscape studies have sought to reconstruct the evolution of particular landscapes from earlier prehistory, and the most extensive published study is Stuart Palmer’s work in the Arrow Valley in Warwickshire (Palmer 1999). Consideration of evidence from lowland Shropshire (Buteux and Hughes 1995) reflects a concern with understanding how local communities may have used special places in the landscape over millennia. There are a number of other ongoing fieldwork projects in the region that will help develop knowledge of the Late Bronze Age in the next few years.

Nonetheless the existing information is rather thin overall, and it is difficult to produce a meaningful regional summary of what is known. Distribution plots of Sites and Monuments Record (SMR, now HER) data show some interesting patterns, although there are many provisos about the presence or absence of dots on such maps. For example, interrogation of the structure of that data would probably indicate simple reasons why the plotted distribution of cropmark enclosures dated to the ‘Bronze Age’ is so variable across the region. It is likely that the plotted distribution bears little relation to the real distribution of settlements of

this date (the plots are not reproduced here). A distribution plot of more carefully considered data, such as the very thin distribution of Middle Bronze Age and Late Bronze Age pottery published by Ann Woodward (1995, fig. 4), is certainly a more reliable indication of the existing evidence. But this does rather beg the question of what the blank areas signify. In the West Midlands region the number of settlement sites and field systems that can be confidently dated to the Later Bronze Age is very limited in relation to the size of the area. In part, this can be attributed to methodological problems in identifying settlement sites of this period (see below). Certainly palaeo-environmental and geoarchaeological evidence in the lower Severn Valley and the Avon Valley points to extensive clearance and farming by the later Bronze Age (Shotton 1978; Brown 1982). It is reasonable to infer that this part of the region at least was extensively settled prior to the start of the first millennium BC.

Across Britain, development-led archaeological fieldwork is dramatically improving the knowledge-base of Late Bronze Age settlements and landscapes. The Thames Valley is a case in point, where a recent study was able to synthesise data from numerous Bronze Age sites recorded in the last ten years (Yates 2001). In just one area, west of the River Colne (about 5km wide), 40 sites had revealed evidence for Late Bronze Age/Early Iron Age settlements, field systems and boundaries (Yates 2001, 67–68, fig. 7.2, table 7.1). Some lowland river valleys were clearly intensively settled and farmed by the later second millennium BC.

Methodological problems

There are undoubtedly problems in identifying Bronze Age settlement sites and field systems, a problem that is recognised across Britain (Champion 1999, 97). Many excavated settlement sites lack substantial enclosure ditches, and so this type of site is hard to recognise in aerial photographs. There is a deeper problem in identification and interpretation, which is that there is some doubt whether the monument categories developed from research in southern England are appropriate in other areas – a particular problem for interpreting and ascribing dates to features observed on aerial photographs (Bradley 2001, 231). We should be cautious about identifying sites recorded in aerial photographs as Bronze Age monuments, as is the case for earlier prehistoric monuments in the West Midlands region (Barber 2007).

Fieldwalking is not a method that can reliably lead to the identification of Bronze Age settlements, due in particular to the friability of pottery. Very little cultural material was recovered from fieldwalking at the extensive late Bronze Age site at Huntsman’s Quarry at Kemerton in Worcestershire for example (Robin Jackson, pers. comm.). It is likely that only gridded trial pits or a regular array

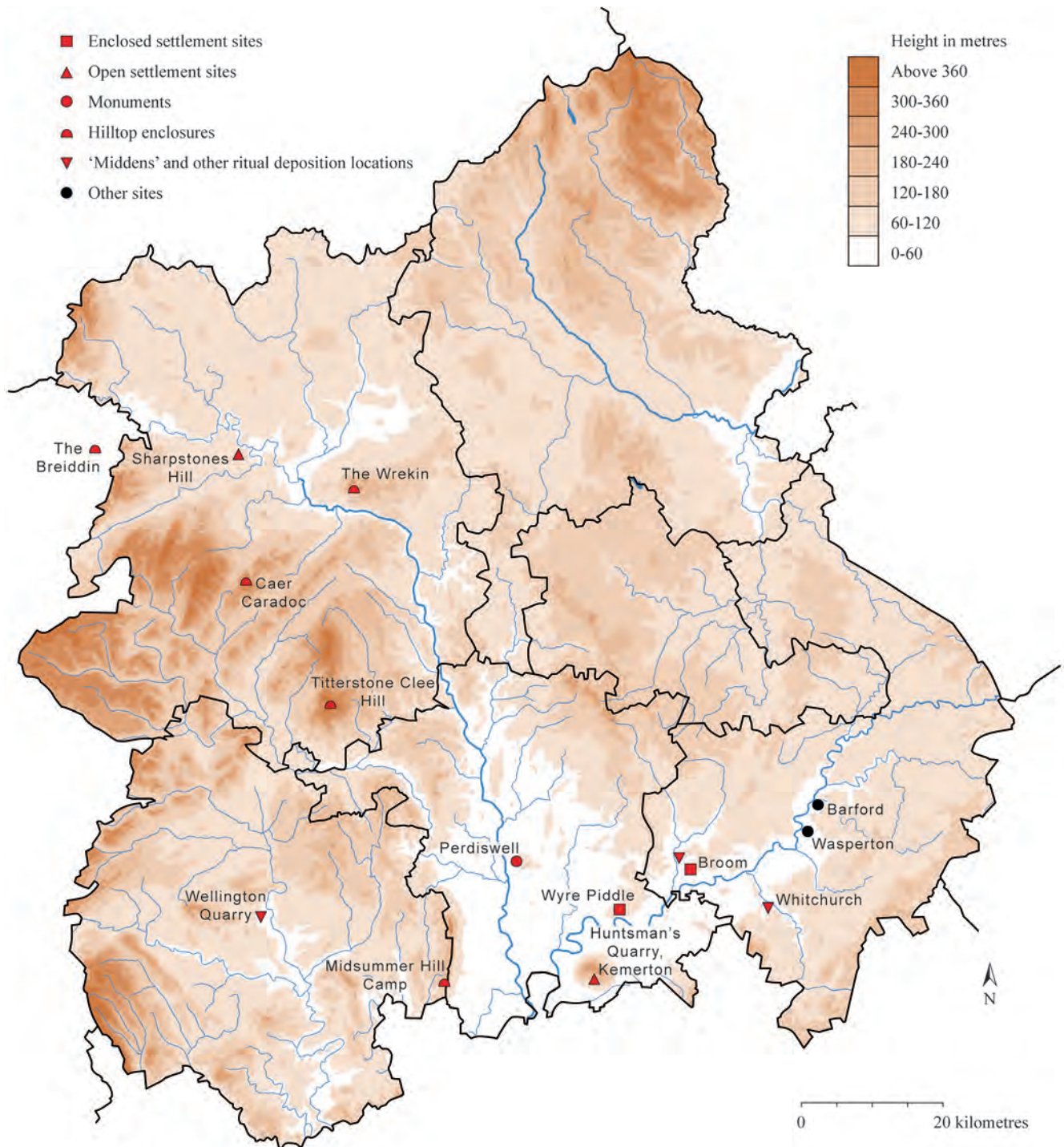


Fig. 3.1 Late Bronze Age sites in the West Midlands.

of wide evaluation trenches offer a fairly reliable means of locating Bronze Age settlement sites. The problem of recognising Bronze Age settlement sites through surface material has obvious implications for evaluation projects and wider landscape survey projects (the problem of 'false negatives'), as well as for interpreting the data recorded in

the Historic Environment Record. Perhaps the absence of artefactual material from fieldwalking a cropmark enclosure site should be taken as an indicator of a possible Bronze Age date? However empirical evidence suggests that artefact-free enclosure sites in the region are as likely to be Iron Age or Romano-British as Bronze Age in date.

Current issues for local-scale studies: current work and other possibilities

As discussed above, there are broad questions of social and landscape organisation in the later Bronze Age. Evidence from the West Midlands region is certainly important in this context, if our understanding of the period is not to remain dominated by few relatively well-researched areas of Britain. Richard Bradley (2001, 230) has remarked that much new research into the Bronze Age is in the form of local studies (whether of settlement sites or blocks of landscape). It is such local-scale studies that are leading to a richer and more sophisticated understanding of Bronze Age societies. The following discussion indicates how current local-scale studies in the West Midlands region are contributing to a new understanding of the period.

1. Lowland settlement sites

There is rather little evidence in the West Midlands region for settlement sites (see also above), although it is likely that there were many Bronze Age settlements in the river valleys at least, any open settlement sites presenting a particular challenge to their recognition. We do not yet have a clear understanding of the chronology of clearance and the changes in agricultural practice in the region in later prehistory which can be offered by environmental archaeology and geoarchaeology (Pearson, this volume).



Fig. 3.2 Reconstructed scene of Late Bronze Age settlement at Huntsman's Quarry, Kemerton, Worcestershire (illustration by S. Rigby).

There are a few excavated Late Bronze Age open settlements in the region, such as at Huntsman's Quarry, Kemerton, in Worcestershire (Figure 3.2; interim report, Jackson and Napthan 1998; Jackson 2015). This site is currently the most extensively excavated late Bronze Age settlement and field system in the West Midlands region. This open site contained a number of groups of roundhouses (Figure 3.3), together with large waterlogged pits (waterholes) up to 3m deep (Figures 3.4–3.5), associated with a ditched trackway and ditched field system. The site produced evidence for bronze casting, in the form of clay moulds for casting spearheads and other weapons, and for textile production (Jackson and Napthan 1998; Jackson 2015). Pollen evidence showed that the area around the settlement was dominated by grazed grassland, with limited cereal cultivation (Pearson 1998).

There are also examples of small open settlements, as at Sharpstones Hill (Shropshire.; Barker *et al.* 1991), where the Late Bronze Age/Early Iron Age settlement was associated with linear field boundaries. Other sites were probably enclosed settlements, such as the excavated Middle Bronze Age enclosure at George Lane, near Wyre Piddle, Worcestershire (see note in Dalwood 2002). At Broom, Salford Priors (Warwickshire), a 'clothes-line' enclosure cropmark has been provisionally dated to the later Bronze Age (Palmer 1999, 217). The site consists of three adjacent rectangular enclosures, each *c.*20m across, attached to a linear boundary.

There is considerable variation in known Bronze Age settlement sites in Britain. The true complexity and richness of such variation can only be revealed through extensive area excavation. The study of Cornish Bronze Age settlements by Nowakowski (2001) provides a detailed consideration of excavated evidence which points to new directions for prehistoric settlement archaeology. It has been argued that it is significant that from the Middle Bronze Age abandoned settlement sites were respected (Bradley 2001, 231), and that the process of abandonment of settlements was marked by elaborate rituals (Nowakowski 2001). The 'monumentalising' of abandoned settlements may indicate changes in the organization of landholding in this period (Bradley 2001, 231). Such approaches offer ways forward from economic reconstruction, into ways of understanding social life.

The ongoing post-excavation programme for Huntsman's Quarry at Kemerton promises to develop this type of approach. Here there were settlement areas with roundhouses and waterholes that appear to have had a short use-life, perhaps as little as a single generation on the evidence of extensive radiocarbon dating, with the settlement focus then shifting to a new location. One interpretation of this is that each generation established a new waterhole and a new house for the kin group, while the previous waterhole was backfilled with domestic refuse (Jackson 2015).

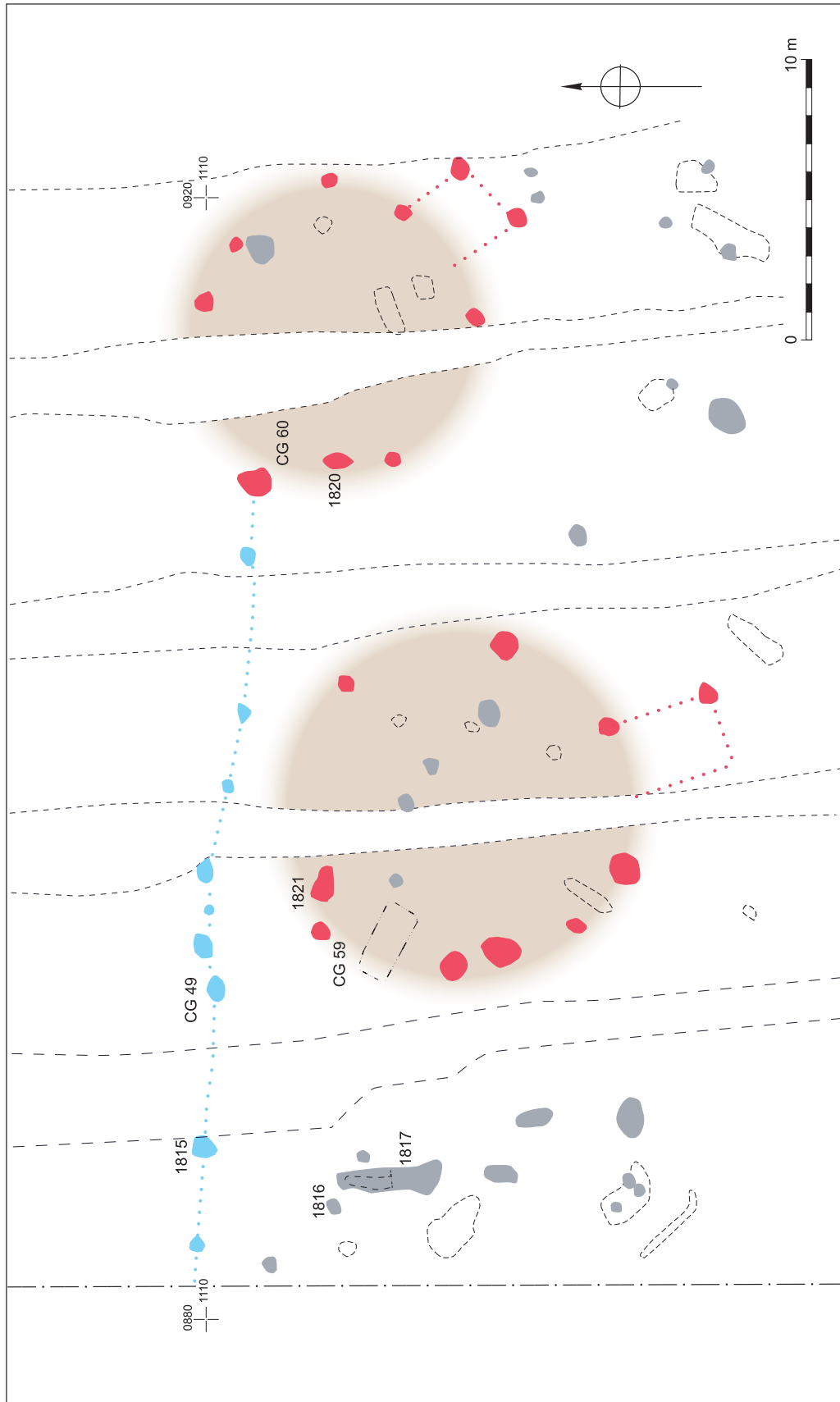


Fig. 3.3 Plans of Late Bronze Age roundhouses at Huntsman's Quarry, Kemerton.

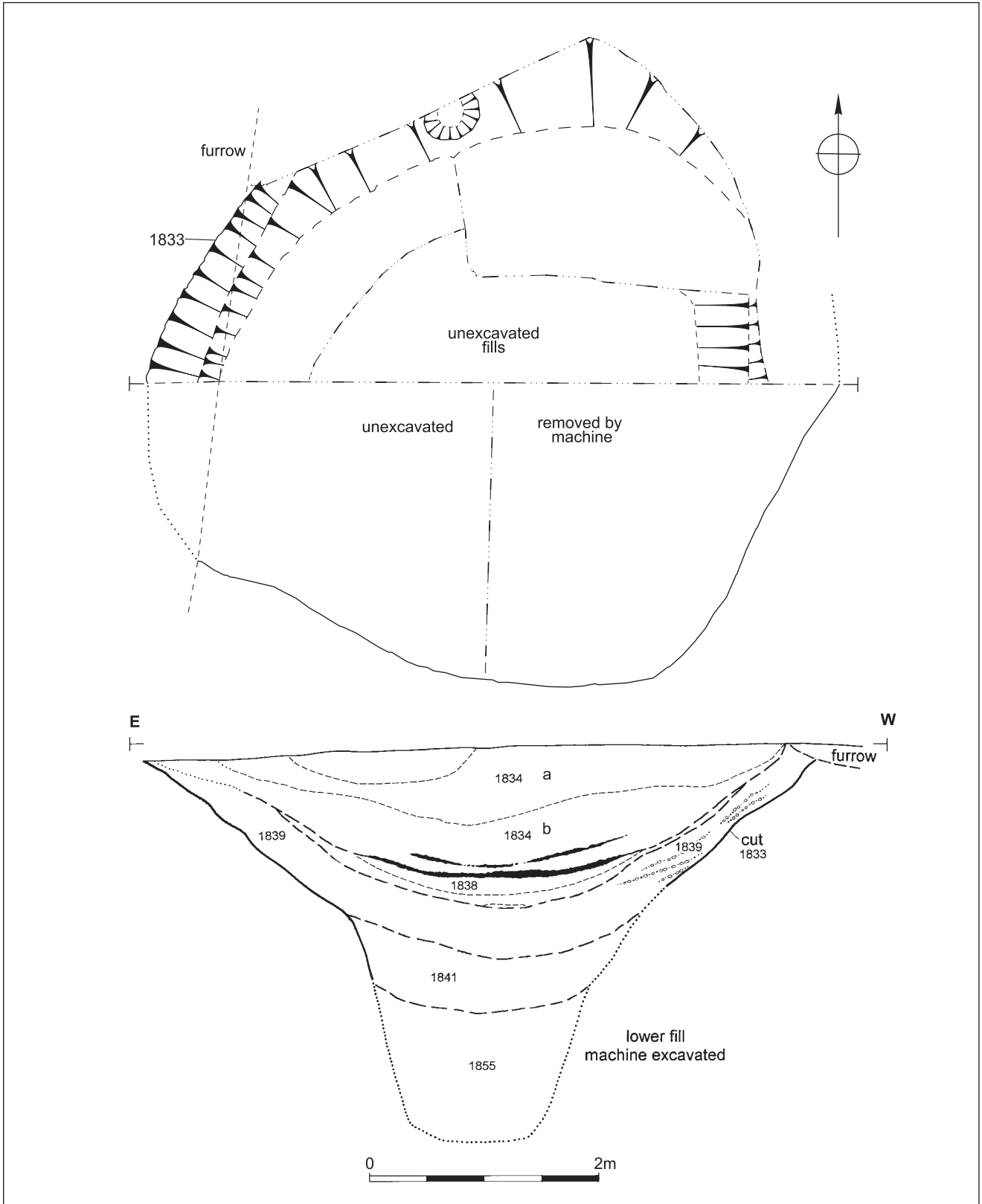


Fig. 3.4 Plan and section of a waterhole at Huntsman's Quarry, Kemerton.



Fig. 3.5 A Late Bronze Age waterhole at Huntsman's Quarry, Kemerton.

2. Field systems

In a number of regions of Britain, extensive field systems have been recorded that date to the later Bronze Age, surviving as earthworks or as ploughed-out boundaries. This formal demarcation of the landscape is a very noticeable feature of the later Bronze Age, and seems to have taken place after *c.*1500 BC (Bradley 2001, 230). But across Britain the environmental evidence suggests that there was no rapid intensification of farming at this period, but rather a long period of gradual clearance. The laying out of regular field systems may reflect a significant change in the organization of landholding in the late first millennium BC.

In some lowland areas, extensive field systems are now interpreted as evidence for specialised livestock farming in the Bronze Age (Yates 2001). There is similar evidence in parts of the West Midlands region. At Huntsman's Quarry in Kemerton (Worcs.) the Late Bronze Age settlement (see above) lay within a rectilinear field system laced through by droeways for stock (Jackson and Napthan 1998; Jackson 2015). There is little doubt that this settlement was concerned primarily with livestock farming. The small open settlement site at Sharpstones Hill was also associated with a rectilinear field system (Barker *et al.* 1991). In Herefordshire, some

extensive axially-planned field systems have been identified which survive as modern field boundaries, and which may date from the Late Bronze Age or Early Iron Age (see also Dorling *et al.*, this volume).

It seems probable that the lowland landscape of later Bronze Age Britain consisted of a dispersed pattern of small open settlements set within field systems, as may be the case for areas of lowland Worcestershire (Robin Jackson, pers. comm.) and Shropshire (Andy Wigley, pers. comm.). The idea that many Late Bronze Age communities, spread over quite extensive areas of lowland river valleys, were specialised in livestock farming has been argued for the Thames Valley (Yates 2001). Perhaps livestock farming was also characteristic of river valleys in the West Midlands region. This is not to say that these areas had purely pastoral economies, as complex field systems may have been required to keep animals out of arable fields at critical periods in the crop growing cycle, and to keep them in arable fields at other times in order to direct their manure to replenish the soil.

Some elements at least of these Late Bronze Age field systems were maintained through the first millennium, and formed the framework for shifting and reorganized fields and settlement locations. The re-digging of ditched field boundaries

over generations has been seen as more than fulfilling a functional need to keep ditches clear, but additionally as a symbolic re-inscription of the landscape (Chadwick 1997). Evidence from south Worcestershire shows that there was a marked change in the organization of the landscape in later prehistory (Robin Jackson, pers. comm.). The late Bronze Age field system investigated at Huntsman's Quarry, Kemerton, forms part of an extensive field system which can be detected across a wide area south of Bredon Hill. The boundaries have a broadly northwest to southeast and southwest to northeast orientation. This was replaced during the Iron Age and Romano-British periods by a comprehensively reorganized field system, with boundaries on a broadly north to south and east to west orientation, which only maintained a few elements of the earlier system. A major question is why such wholesale change in the organization of the landscape took place from the mid-first millennium onwards.

3. Major landscape boundaries

Major landscape divisions are a recognised feature of later Bronze Age archaeology in Britain, and may survive as either extensive linear earthworks or ploughed-out ditched boundaries that divide large blocks of the landscape. Such boundaries are important evidence for understanding how the landscape was organised and utilised at this period. The existence of major landscape divisions in the West Midlands region was first highlighted by Hingley, working in Warwickshire (Hingley 1996, 12, fig. 6), and such boundaries can be expected to be identified quite widely in the later Bronze Age in the region.

In Shropshire, the cross-ridge dyke at Devil's Mouth on the Long Mynd was constructed in the Middle Bronze Age or later (Dinn *et al.* 2004). Andy Wrigley has suggested that pit alignments in Shropshire can probably be dated to the later Bronze Age, and may relate to territorial boundaries (Andy Wrigley, *Fugitive pieces ...*, this volume). In Warwickshire both ditched boundaries and pit alignments have been recognised, as at Barford, Wasperton, and elsewhere, which may date to the Late Bronze Age (Hingley 1996, 12). Palmer (1999, 217) has suggested that territories in the Avon Valley (Warks.) were divided by natural boundaries, such as minor tributaries of the River Avon, but that in the Arrow Valley territories were divided by ditched boundaries. The 'Shire Ditch' on the Malvern ridge (Worcestershire/Herefordshire border), although used or rebuilt as a deer-park boundary in the medieval period, has been shown to underlie the hillfort rampart of Midsummer Hill Camp (Field 2000), and this earthwork is now interpreted as a Late Bronze Age linear boundary in origin, probably forming a territorial boundary (Field and Brown 2000, 14–15, 17, fig. 2).

Late Bronze Age landscape boundaries have long been recognized and held to define Late Bronze Age territories, reflecting a new relationship between communities and the land they occupied. Although there is some debate about

the idea of territories in the Bronze Age (Kitchen 2001), the identification and survey of such major landscape boundary features is clearly important. The identification of a major landscape boundary on the Malverns throws up the question of the significance of such localized areas of upland, as well as the way in which 'marginal' land was perceived.

4. 'Marginal' landscapes and settlements

There is a great deal of evidence that points to the varied environments that were utilised during the Bronze Age in Britain. As much as in earlier prehistory, we should be wary of adopting an overly deterministic view of the types of landscape where later Bronze Age occupation sites might be expected. We do not have any clear idea of how different parts of the landscape were used and perceived in this period (but see below on hilltop settlements). Perhaps we should keep inverted commas in mind around the word 'marginal' until we have a better understanding of how the wider landscape was inhabited and used.

In upland Britain generally, the Late Bronze Age seems to be a watershed, with extensive areas seemingly abandoned in the early first millennium BC (Davies and Lynch 2000, 146). In upland areas of the West Midlands region, the evidence for Late Bronze Age settlement may be hard to discern. There is little evidence from the western part of the Peak District for Late Bronze Age agricultural intensification, and in this period the area seems to have been peripheral to the areas of settlement, and was possibly principally used for pasture and woodland resources (Edmonds and Seaborne 2001, 179–181). There is contrary evidence from the eastern part of the Peak District (see above, Willis 2002). This is not to say that such upland areas were not integrated into the social life of local communities, but it does indicate that the archaeological evidence may be subtle and difficult to detect (Edmonds and Seaborne 2001, 181–182).

There is a tendency to see the West Midlands region as a lowland area with upland areas only on its margins. However, there are local areas of upland within the West Midlands region, such as the Malverns. This area has recently been the subject of a detailed landscape survey by English Heritage and local authority archaeologists, the results of which are an important case study in the region (Bowden 2005). But whatever the empirical results of the archaeological survey, we should have an open mind as to the way in which such dramatic landscapes were viewed by the inhabitants of nearby lowland settlements throughout prehistory. Were the Malverns imbued with legend, invested with the origin myths of local societies? (see Sharples, this volume). Can the symbolic significance of the Malverns in earlier prehistory help us to understand the siting of two large hillforts on the highest summits? Yeates (2008, 23–25 and 115–116) has suggested that in the Iron Age and later the Malvern Hills were a deified area of 'enclosed primordial woodland', a *nemeton* as noted by classical authors.

In recent years Bronze Age settlements have been found in the Severn Estuary wetlands, which were probably occupied seasonally (Locock 2001). Such evidence points to the exploitation of local environments that are rather different to the gravel terraces of the river valleys. At Wellington Quarry (Herefs.), quantities of Late Bronze Age pottery, human and animal bone, and lithics were recovered from a palaeochannel (Robin Jackson, pers. comm.). This material was probably a ritual deposit of refuse into a watercourse, analogous to locations on the River Thames (Cromarty *et al.* 2006). The evidence suggests utilisation of the floodplain alongside adjacent drier ground, and pending post-excavation analysis this would seem likely to have been seasonal occupation, perhaps utilizing natural resources such as reeds, osiers, fish, eels and wildfowl.

Burnt mounds may provide another type of evidence for the extensive nature of occupation and the range of landscapes that were inhabited in the later Bronze Age (Mike Hodder, this volume). Is the concentration of burnt mounds on the Birmingham plateau attributable to the intensity of fieldwork projects focused on their discovery? Or is the distribution meaningful, reflecting a particular use of this landscape in the later Bronze Age? Whatever the precise function of burnt mounds (Barfield and Hodder 1987; Ó Drisceoil 1988), their relationship to contemporary settlements and the question of how they were integrated into the wider landscape are important research questions (Waddell 1998, 174–177).

5. Late Bronze Age hilltop enclosures

There is good evidence to show that some hilltop sites in Britain were occupied in the Bronze Age, and Late Bronze Age hilltop enclosures are known in a number of areas. The most important hilltop enclosure site in the Welsh Marches is The Breiddin on the border of Powys and Shropshire, with this being constructed in the Late Bronze Age, and where there was also pre-hillfort Bronze Age occupation (Musson 1991). Evidence for Late Bronze Age hilltop enclosures has been recovered across Wales, with early enclosures consisting of fairly slight banks or timber palisades (summarized in Davies and Lynch 2000, 150–151). Late Bronze Age pottery has been recovered from The Wrekin (Shrops.; Stanford 1984), and Andy Wigley has suggested that this hillfort originated as a Late Bronze Age hilltop enclosure. Other possible contemporary similar sites have tentatively been suggested as the precursors other Shropshire hillforts, including Titterstone Clee, Earl's Hill and Caer Caradoc (Andy Wigley, pers. comm.; Wigley, this volume). It also has been suggested that Midsummer Hill on the Malverns (Worcs./Herefs.) was occupied in the Late Bronze Age (Field and Brown 2000, 17).

Although the archaeological evidence is not definitive, it can be suggested that some at least of the numerous Iron Age hillforts in the West Midlands region had Late Bronze

Age antecedents. It may be that these sites were significant in the West Midlands region in the context of Bronze Age society. As with Iron Age hillforts there is considerable room for debate about the nature of the significance of hilltop enclosures (Davies and Lynch 2000, 151). It is tempting to speculate, therefore, whether other Iron Age hillforts contain similar evidence, and this should be a research question for all fieldwork at such hillforts.

6. Ceremonial and funerary sites

In recent years a number of 'midden' sites have been identified across Britain, where extensive deposits of domestic refuse had been assembled in one location. The site at Whitchurch (Warks.; Figure 3.6) has been compared (see Hingley 1996, 12) to the better known 'midden' site at Potterne (Wilts.; Lawson 2000). The site was excavated in 2006–2009 and produced extensive midden deposits containing pottery, animal bone, and metalwork (Sharples *et al.* 2008). There are hints of other similar 'midden' sites elsewhere in the West Midlands region – such sites are clearly significant locations, and would repay further research.

The Late Bronze Age site at Broom (Warks.) included pits and a pyre containing fragments of three bronze cauldrons (Palmer 1999). It is interpreted as a focus for ceremonial activity, possibly continuing a long-lived function as such (Palmer 1999, 217–218). There is evidence across Britain for ceremonial monuments dating to the Middle Bronze Age and later, that cannot easily be ascribed to known monument categories. There are such sites in the West Midlands region, such as the penannular ring-ditch at the Perdiswell Park and Ride site, Worcester, a 27m diameter palisaded enclosure with an east-facing entrance, dated to the mid-second millennium BC (Griffin *et al.* 2002). The site is interpreted as a ceremonial focus, perhaps with some funerary use. There was no evidence for long-lived use of this site, and at the moment the monument seems anomalous within the region and beyond. It is notable that geophysical survey and evaluation produced evidence that was interpreted as a ploughed-out round barrow, and it was only on full excavation that the true form of the monument was apparent. This example indicates that later prehistoric ceremonial monuments in the region need to be interpreted within a broadly regional context, rather than being forced into monument types well known in other regions of Britain.

There remains the question of funerary practice. The general pattern in Britain is that evidence for burials ceases around the mid-second millennium BC, and we might expect the West Midlands region to conform to this. However, it has been suggested that earlier Bronze Age burial traditions continued longer in some parts of the West Midlands region than elsewhere in Britain (Hingley 1996). We need to be careful about assigning dates to burials on pre-determined criteria: radiocarbon dates are needed to date



Fig. 3.6 Whitchurch, Warwickshire, with excavation in progress.

such monuments. We also need to be aware of the possibility of not recognising the typical burial practices of the period. There is a strong argument for obtaining radiocarbon dates for all Bronze Age burials recorded during fieldwork.

The importance of these types of evidence for understanding later Bronze Age society is clear. Detailed investigations of settlement sites will reveal how individuals interacted on a day-to-day basis. But ceremonial and funerary sites are evidence for how society worked at a larger scale: at such places we would expect to find group interaction, the exchange of goods, and the transmission of material culture styles (Evans and Knight 2001).

Regional research priorities

1. Integration between site-based fieldwork, environmental archaeology and geoarchaeology

A major gap in our knowledge of the prehistory of the West Midlands region is a clear understanding of the processes and chronology of landscape change. In discussing evidence for later Bronze Age settlement and field systems in the river valleys, the evidence points to an extensively cleared landscape, and the culmination of a long period of change. But how extensive was the clearance of the hills?

What was the chronology of clearance in the river valleys? How prevalent was livestock farming in the river valleys?

Moffett and Ciaradini (1999) have pointed to the significance of James Grieg's work at Cookley (Worcs.) in the context of Late Bronze Age to Early Iron Age landscape change. This 'off site' locale produced a dated pollen diagram, which indicated major clearance in 960–760 cal BC (Moffett and Ciaradini 1999). The Cookley data is not fully published, but there is an interim publication of the pollen diagram (Jackson *et al.* 1996, fig. 10). This fits the evidence from the River Avon and Severn for increased alluvial build up, due to intensification of farming of the surrounding landscape, as discussed above (Shotton 1978; Brown 1982). Cookley lies in north Worcestershire, on the sandstone plateau far from the broad river valleys and gravel terraces of south Worcestershire, and this evidence for clearance in the first quarter of the first millennium BC indicates the extent of clearance by this period.

In some areas of the West Midlands region, such as those with gravel geology, the survival of archaeobotanical evidence is often poor. Those settlement sites, where survival is moderate or good, demand a high percentage level of feature sampling and intensive analysis. In many areas of the West Midlands region, 'off-site' locales are particularly important for the

palaeo-environmental evidence. Yet there is sometimes a reluctance to treat locales such as small peat bogs as 'proper archaeology' at all, which seems to be either a failure of the imagination, or a misguided adherence to a narrow legalistic definition of 'the archaeological resource'. It is crucial that palaeo-environmental and geoarchaeological work is integrated into prospection and excavation strategies for all prehistoric settlements and landscapes (Pearson, this volume).

2. The need for chronological precision

We need to have well-dated sites and field systems if we are going to understand Late Bronze Age settlement and the processes of change across the landscape. We cannot expect to use pottery as a close dating tool, and so, instead, there is a need to routinely use radiocarbon dating, alongside other dating methods (see Palmer, this volume).

3. Embracing opportunities

It seems likely that archaeological fieldwork arising from development or aggregate extraction will continue to make a substantial contribution to the developing understanding of the Late Bronze Age in the West Midlands region, as elsewhere in Britain. There is a need to embrace the opportunities provided by the implementation of mitigation strategies that involve large-scale excavation.

Opportunities for the excavation of Bronze Age settlements and field systems on a landscape scale should certainly be grasped (Palmer, this volume). The sampling fraction used for the excavated features on prehistoric settlement sites is probably too low at present, and needs to be revised upwards to achieve meaningful information on social and economic organisation. Settlement boundary ditches merit a sample excavation level of 50%, and all features associated with buildings (*e.g.* postholes, 'drip gullies') merit 100% excavation. It is only in the case of field boundary ditches that a low sampling level is appropriate (*e.g.* 10%), and so a distinction should be drawn between settlement enclosure, and field boundary, ditches.

We should also fully investigate 'off-site' locales with good potential for palaeo-environmental or geoarchaeological evidence where opportunities arise (Pearson, this volume). In order for large-scale archaeological projects to realise their full potential, we will need to develop new directions in prehistoric settlement archaeology and landscape studies, which require a thorough overhaul of current approaches in curatorial archaeology, as much as for excavation methodologies. The case studies in Brück (2001) offer inspiring examples.

4. Landscape studies

There are not yet any detailed studies of later prehistoric landscapes in the West Midlands, and the overall density

of Late Bronze Age settlement is not at all clear. The extent of clearance across the region by the mid-second millennium is not yet established, and perhaps it is premature to assume that the majority of the landscape was cleared, hedged, farmed and settled by 1000 BC. However, there were undoubtedly extensive areas of woods in the region that survived into the late Iron Age, and so the gaps in the distribution of evidence may be real and so constitute evidence for the location of such wooded areas (Niall Sharples, pers. comm.; Yeates 2008, 115–116).

Although there are potential uncertainties in confidently dating cropmarks, and in identifying Bronze Age settlement and land-use through fieldwalking, the potential of extensive survey should not be discounted. The data now coming from metal-detector users across the region needs to be synthesised along with reinterpretation of older material, and fairly basic work would put some flesh on the obviously incomplete picture offered by a simple trawl of the Historic Environment Record. Older material in museum collections needs reassessment, perhaps in particular the metalwork, especially in relation to its depositional context. Such data needs to be assessed with care, to pursue questions of deposition over which there is some debate (Pendleton 2001).

5. The West Midlands as a region in the Late Bronze Age

It might be asked whether there is value in the idea of a Late Bronze Age of the West Midlands region, as it is clear that some upland areas within the region are only artificially separated from their associated landscapes, such as north-east Staffordshire which belongs with the rest of the Peak District. However, Paul Garwood has suggested that the West Midlands region is of value as a study area in earlier prehistory despite its artificiality, and that the diversity of its landscapes should be embraced (Garwood 2007), and this should be done with an awareness of the possibility of differences from other areas, as well as the similarities.

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Burnt mounds and beyond: the later prehistory of Birmingham and the Black Country

*Mike Hodder**

Introduction

The evidence for all prehistoric periods in the former West Midlands County (*i.e.* including Solihull and Coventry as well as Birmingham and the Black Country) was summarised in an unpublished document produced by the West Midlands Archaeology Group in 1998. A synthesis for Birmingham has since been published (Hodder 2004, 27–48). Much has been published on the form, distribution and interpretation of burnt mounds based on the evidence from sites in the conurbation. Since 1998 experiments have taken place on the function of burnt mounds, and in 2001 important new data on the later prehistoric period was obtained in the excavations along the line of the M6 Toll motorway (Birmingham Northern Relief Road) in Sutton Coldfield (Powell *et al.* 2008). These have implications for our perception of the area in this period and for the curation of the archaeological resource.

Sources of information

The evidence for the later prehistoric period in the conurbation is derived from the following: chance finds (*i.e.* other than in deliberate archaeological work) of objects; the occurrence of prehistoric material in the excavation of sites principally of other dates; a few excavations and watching briefs specifically of later prehistoric sites; the discovery of objects and structures of later prehistoric date in extensive surveys; and the identification of potential later prehistoric sites on aerial photographs, in antiquarian literature and

from place-names (Figures 4.1–4.2). The only extensive and systematic survey specifically targeted on later prehistoric sites is the burnt mound survey by *stream walking* in south Birmingham, begun in 1980 and recently revived (Barfield and Hodder 1989).

Chance finds are inevitably limited to more easily recognisable objects such as bronze axes. They have been found throughout the conurbation. The find-spot is sometimes not precisely known; some finds are described as being from “near Birmingham” or “near Wolverhampton”, and these objects might actually have been found outside of the conurbation altogether. Extensive survey involving fieldwalking and earthwork survey has taken place in Sandwell Valley in West Bromwich (Hewitt and Hodder 1988), in the rural area east of Sutton Coldfield (Jones 1998; 1999), and in the rural area south of Halesowen (*e.g.* Smith 2000). Some fieldwork has taken place in the rural area east of Walsall (Hodder 1992).

Existing information

Burnt mounds are the most numerous type of prehistoric site known in Birmingham and the Black Country (*cf.* Figures 4.1, 4.3–4.4). Between 40 and 50 have so far been recorded, and all but one of the twelve radiocarbon dates so far obtained for them are in the range 1700–900 cal BC (Barfield and Hodder 1989; Hodder 2004, 28–44; Barfield and Hodder 2011). The first burnt mounds found in this area were located during the Geological Survey in

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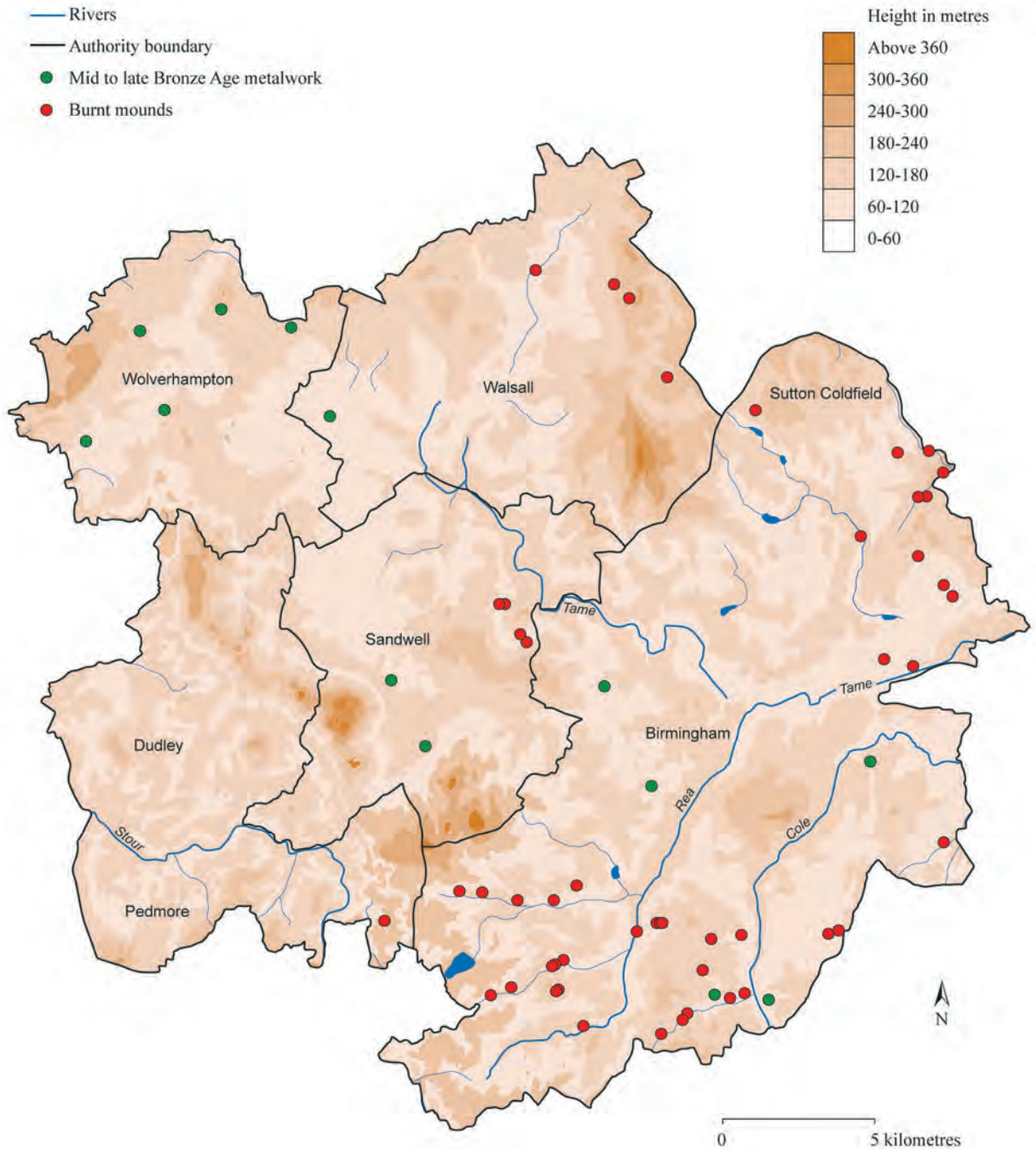


Fig. 4.1 Distribution of known Middle to Late Bronze Age sites in Birmingham and the Black Country.

Aldridge and Pelsall. The majority have subsequently been found through deliberate search in south Birmingham, Sandwell Valley and Sutton Coldfield by *stream walking* and in fieldwalking by those who knew what they were looking for. The current known distribution reflects this but also suggests that they are fairly evenly distributed throughout the area and not just on poor agricultural land as suggested for Staffordshire (Welch 1997) and Shropshire (Wigley, this volume). Recent discoveries have confirmed

the occurrence of burnt mounds in pairs as observed in the earlier surveys. Some individual sites have been further investigated by excavation and geophysics, and other sites have been identified from references in antiquarian accounts, such as the large mounds composed of broken stones in a meadow at Berwood in north Birmingham (Fowler 1885, 15). Surface scatters of burnt stones, possibly indicating burnt mounds have been recorded in the western part of the conurbation, but no systematic survey by stream walking has

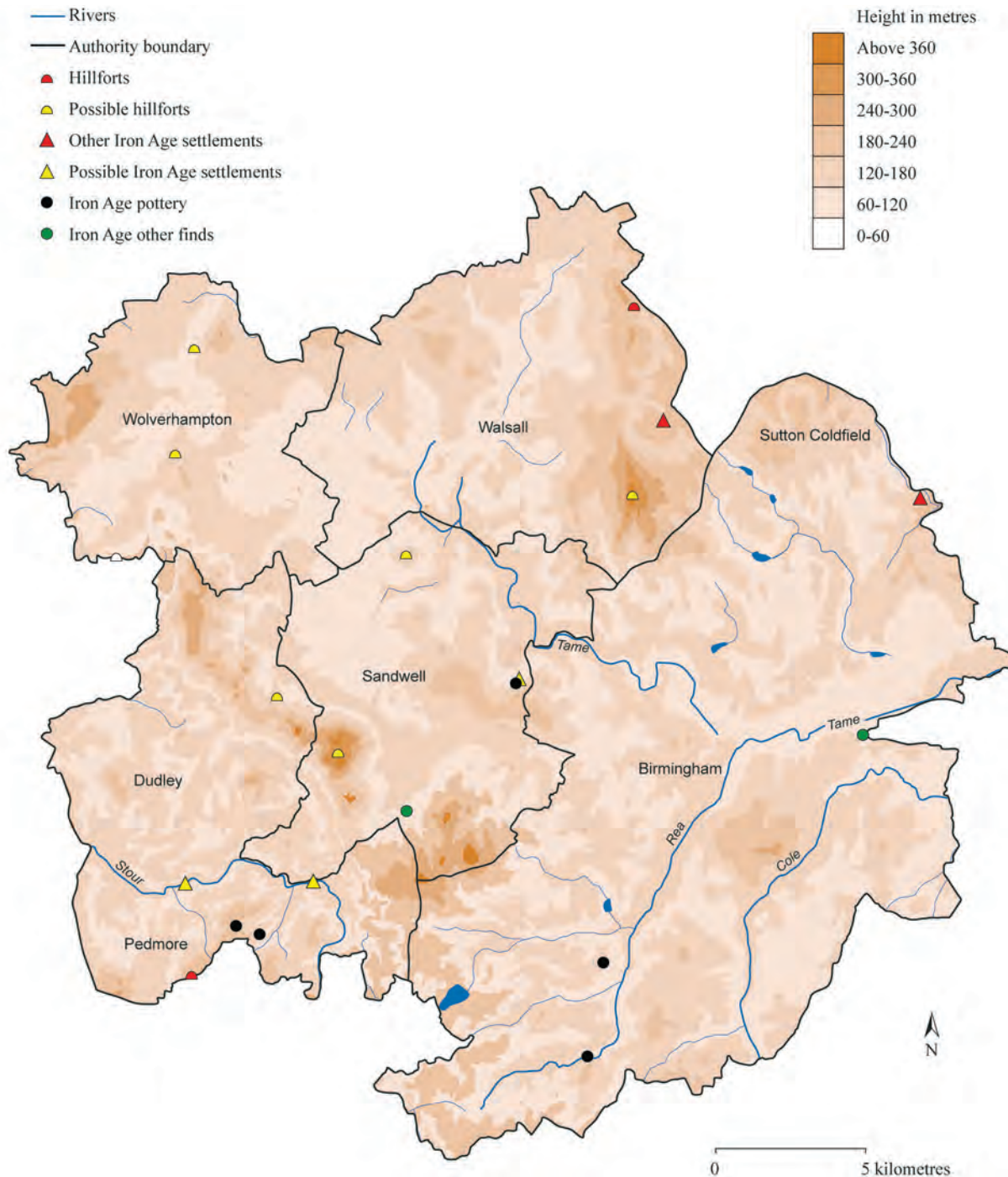


Fig. 4.2 Distribution of known Iron Age sites in Birmingham and the Black Country.

taken place here. Excavations of a burnt mound and related features at Pedmore are summarised below.

Despite their unglamorous nature burnt mounds are numerically significant, and their sheer number demands serious attention. However they are interpreted, they may be considered indicators of the distribution, location and density of otherwise elusive contemporary settlements. In addition they are invariably located in wet locations with

associated reservoirs of palaeoenvironmental data providing evidence for landscape and land-use. They are particularly important because of their survival and visibility in parks and other open spaces in modern urban areas, and because of their visibility in watching briefs undertaken in less than ideal conditions.

Field survey, geophysics, excavation, and experiments have demonstrated the complexity of these apparently



Fig. 4.3 The burnt mound at the Yachting Pool, Bournville Lane, Birmingham.

simple sites. Areas of burnt stone without charcoal have been found, which may be stones washed from a burnt mound further upstream or may relate to the use of the sites. Structures have been found at a distance from the mound, and there is often a smaller site in close proximity to a larger one, such as in Woodlands Park, Birmingham. Reconstructions of the sites as the debris from steam bathing (Hodder 1998; 2004, 37–42) have demonstrated that the mound of fragmented heat-shattered stones and charcoal, the actual “burnt mound”, represents the location of the fire on which the stones were heated. The sweat lodge structure would be up to 10m from the mound, and might well be indicated by the smaller sites in apparently paired examples or by the areas of larger heat-shattered stones without charcoal. Heat-shattered stones alone or mixed with charcoal have also been found in features other than burnt mounds, such as ring-ditches of presumably Early Bronze Age date and Roman enclosure ditches on the M6 Toll motorway.

Contemporary settlements would be expected to be nearby, but on slightly higher and drier ground than the burnt mound itself. Where the burnt mound is on a stream in a narrow strip of parkland in an urban area, such land may be occupied by modern houses, but in other locations such potential settlement sites may survive. The potential of burnt

mounds to provide evidence of the wider landscape was demonstrated at Cob Lane in Birmingham (Hodder 1990; Barfield and Hodder 2011) where an organic deposit only slightly predating the burnt mound contained a beetle fauna indicating woodland and grazing animals. This was overlain by a mineral soil layer, again predating the burnt mound and interpreted as colluvium resulting from ploughing upslope from the site. Tree trunks in the former stream bed suggested forest clearance. In addition to the environmental evidence from burnt mounds, there are other potential sources of environmental data such as a former stream channel at Peddimore with an infill of heat shattered stones, possibly from an adjoining burnt mound and, therefore, of Bronze Age date (Mould 1998).

Other than burnt mounds and related features, the only feature of Bronze Age date so far found in the conurbation is a pit at Northfield which is radiocarbon-dated to 1730–1500 cal BC, therefore overlapping with the date range for burnt mounds (Miller 2006). No Bronze Age settlements have been found in the conurbation, but excavations at Pedmore, near a spread of heat-shattered stones interpreted as a burnt mound, revealed pits containing burnt stones, a pit containing 84 sherds of Bronze Age pottery and other pits interpreted as an oven, a trough and a storage pit



Fig. 4.4 A burnt mound and former stream channels on the Bourn Brook, Harborne, Birmingham.

(Hemingway 2010). Tree trunks with axe marks in them discovered during peat-cutting in Sutton Park and recorded in an antiquarian account (Incola 1762, 403) may have been part of a timber trackway or other prehistoric wetland structure, and imply that there were settlements nearby, but, of course, are undated.

The small quantity and narrow range of Middle and Late Bronze Age metalwork from the conurbation consists solely of chance finds, not associated with any known features or structures. The majority are palstaves (nine in all) and there are also three spearheads, two socketed axes and two 'bronze axes', possibly palstaves. There are few Early Bronze Age types such as flat axes, so Middle Bronze Age objects (*i.e.* contemporary with burnt mounds) are more numerous than Early or Late Bronze Age types, as has been noted for the West Midlands as a whole (Barfield and Hodder 1989, 9–10).

The quantity of Bronze Age pottery found at the Pedmore site is exceptional for the area. A sherd of indistinct, but presumably Bronze Age, pottery was found in the excavation of a burnt mound in Sandwell Valley (Hewitt and Hodder 1988, 19), a single sherd thought to be Bronze Age in date was found in fieldwalking in Lutley, and another sherd has been found in the centre of Dudley (John Hemingway, pers.

comm.). It may be that little pottery was in use in the area in this period.

There are definite hillforts at Castle Old Fort in Brownhills and Wychbury Hill; others are suggested by earthworks at Dudley Castle, and by place-names, topography and antiquarian accounts at Wednesbury (Figure 4.5), Oldbury/Bury Hill, Wolverhampton, Penn, Bushbury, Barr Beacon, and Buckbury near the Pedmore Bronze Age site described above. There have been small-scale excavations and observations at Wychbury Hill, where metalwork (including horse fittings) was found, and at Castle Old Fort, where no archaeological features were located. No Iron Age structures or objects have been identified in excavations at Dudley Castle or Oldbury, but an evaluation on Church Hill in Wednesbury in 2008 located a substantial undated ditch which could be part of hillfort defences (Paul Belford and Graham Eyre-Morgan, pers. comm.).

An Iron Age farmstead excavated at Langley Mill Farm on the M6 Toll route in Sutton Coldfield consisted of circular house gullies of at least three phases inside a sub-square ditched enclosure (Powell *et al.* 2008, site 29). It is similar to the Iron Age enclosures at Fisherwick in the lower Tame Valley (Smith 1979) and might be anticipated to be part of



Fig. 4.5 Towering over the surrounding Black Country urban sprawl, the probable location of a hillfort on Church Hill in Wednesbury.

a similar landscape of enclosures at intervals with fields around. There were adjacent Roman enclosures and a field system at the Langley Mill Farm site, and another, smaller, Iron Age enclosure containing a single circular house gully was found just 400m away. Three converging and successive gullies, presumably boundaries, found in excavation at Walkers Heath in Kings Norton, Birmingham, contained late Iron Age pottery. There were also pits on the line of the gullies. Fired clay, possibly burnt daub, and charred wheat and barley in the fill of the gullies suggested the presence of a settlement nearby.

Loaches Banks is a triple-banked and ditched sub-rectangular enclosure on a low rise near a stream, now visible as a crop mark. Very small-scale excavations here revealed slight structural remains consisting of shallow gullies and postholes, but no dating evidence (Gould 1959; Hodder 1992, 90–91). The site is morphologically comparable to the Iron Age enclosure at Collfryn (Britnell 1987) and other sites in the Marches (Wigley, this volume). Sandwell Priory may have been established within a pre-existing double-ditched enclosure, potentially Iron Age in date (Hewitt and Hodder 1988, 23), and an enclosure in Stourbridge may be Iron Age (John Hemingway, pers. comm.). In addition a buried soil, with a podzol profile, was

revealed by excavation under the Roman road in Sutton Park (Walker 1940, 53 and fig. 3).

Few Iron Age objects have so far been found. Pottery has been recovered in and around the farmstead enclosure at Langley Mill Farm (Powell *et al.* 2008, site 29), in excavations at Walkers Heath (above), Sandwell Priory (Hodder 1991), in fieldwalking in Lutley near a known Roman site (John Hemingway, pers. comm.), in a watching brief at Selly Park, and as a chance find in Kings Norton. Sherds of briquetage salt containers, in the fabric made in Cheshire rather than the much closer Droitwich, have been found at Foxcote, near Lutley (John Hemingway, pers. comm.).

Metalwork was found in excavation at the hillfort on Wychbury Hill. There are also chance finds of a bead from Bromford in Birmingham and a Dobunnic coin from Langley in Oldbury. The very small quantity of Iron Age pottery from the excavated site at Langley Mill Farm suggests generally low use of pottery in the area in this period.

Recent work on past landscapes in the Dudley area suggests that many of the boundary features that have existed up until recently have a long history. The extent of territories potentially of pre-Roman origin and defined by watersheds can be inferred from parish boundaries, and

hillforts can be identified as central places within them. Wychbury would be a central place for a territory consisting of Oldswinford and Kingswinford, and a hillfort at Dudley Castle for a territory of Halesowen/Cradley/Cradley Heath and Rowley Regis. Given that the northern limit of the parish of Kingswinford was the Holbeach Brook and standing over it is Barrow Hill, this may have had an even greater ancestry. Both of these units are liable to have been right on the edge of the Dobunnic territory with the woodlands to the north as a sort of primary line of defence (John Hemingway, pers. comm.).

Curatorial issues

The existing evidence, particularly the number of burnt mounds and the results of the M6 Toll excavations, demonstrates the potential survival and extent of later prehistoric archaeological remains in Birmingham and the Black Country. There is likely to be particularly good survival in areas currently not built up (*i.e.* rural parts of the conurbation and open spaces within urban areas). Even if there is no indication from existing evidence, appropriate evaluation should always be required here in advance of consideration of development proposals.

The difficulties of locating sites (particularly settlement sites), the quality and interpretation of the evidence from non-intrusive survey and excavation, and the consequent curatorial implications for site prediction and the use of appropriate non-intrusive and excavation methods, are demonstrated by the results on the M6 Toll motorway. The lessons learned from this project will need to be applied to major potential developments in Birmingham on two large areas near the M6 Toll currently in agricultural use at Langley and Peddimore. These areas can reasonably be anticipated to contain similar types and quantities of sites, including a later prehistoric component.

The Birmingham part of the M6 Toll had fortunately been partly included in the field survey, including fieldwalking, undertaken by the Birmingham and Warwickshire Archaeological Society. Site 29, the Iron Age enclosure, was indicated by a scatter of Mesolithic flint and by heat-shattered stones (which were actually found to be in the fill of a Roman ditch). The site was not visible on available aerial photographs, but some features on the site were detected in geophysical survey. At site 30, the other Iron Age enclosure, a streamside exposure of burnt stone and a surface scatter of burnt stone were recorded. Unusually, the enclosure itself was visible, albeit indistinctly on a vertical aerial photograph. Here none of the features subsequently excavated was detected by geophysics.

The low numbers of finds in excavation of later prehistoric sites in this area is reflected by the general absence in fieldwalking of anything which is likely to be

of this date other than heat-shattered stones. As suggested above, little pottery may have been in use in this area at this time. It follows that, when fieldwalking is undertaken, heat-shattered stones must be recognised and concentrations recorded, fieldwalking intervals may need to be closer than is normally the case elsewhere in the country, and fieldwalking cannot be used as the only method of site location. The low artefact numbers and, therefore, scarcity of dating evidence in excavation also dictates evaluation and excavation methods. Conventional evaluation by trenching may not be an appropriate assessment technique for later prehistoric sites in this area. Even at the evaluation stage, larger scale excavation is required. When further excavation is undertaken, extensive areas must be excavated and a greater proportion of individual features excavated than might be required elsewhere.

The visibility of burnt mounds in comparison to other features enhances their importance. On the M6 Toll route, two burnt mounds were the only sites found in the route-wide watching brief, because of their visibility. Burnt mounds are probably more reliable indicators of Bronze Age settlement sites than metalwork finds. Assuming that burnt mounds are related to settlements, and by comparison with Deverel-Rimbury settlements in southern England, Margaret Ehrenberg (1991, 55) has suggested that contemporary settlements might be up to 50m away in any direction from the visible burnt mound. This is in addition to related features such as a sweat lodge which may be up to 10m away.

Heat-shattered stones may also indicate sites other than burnt mounds. This enhances their significance and emphasises the importance of recognising them. We also need to be aware of the possibility of later prehistoric finds on sites of other dates.

Gaps in the evidence, and future research

Location of settlement sites of the period is a major challenge and priority for future research. By comparison with neighbouring areas such as the lower Tame Valley and the Avon Valley, later prehistoric sites, particularly Iron Age enclosures and their field systems, should be visible from the air as cropmarks or parchmarks in open areas. There is currently little coverage taken specifically for archaeological purposes, but the archaeological potential of existing photographs has been demonstrated. The area needs to be included in the Historic England National Mapping Programme and there needs to be targeted flying in unexplored areas. Funding for new flying should be directed at these areas rather than to those areas which are flown over and over again because they are known to produce good cropmarks.

The wider significance of burnt mounds as potential indicators of settlement sites underlines the need for further

systematic stream-bank searches to locate them, and, in addition, heat-shattered stones, which could indicate burnt mounds or other archaeological features, should be routinely recorded in fieldwalking. Geophysical survey and trenching in the vicinity of burnt mounds could locate contemporary settlements and other features, and their palaeoenvironmental potential could be tested by small-scale interventions. In addition to burnt mounds, stream-bank searches can also provide information on landscape history through observation of colluvial and alluvial deposits and former stream channels.

It would be feasible and desirable to undertake a survey of all open areas in Birmingham and the Black Country (parks, other public open spaces and land in agricultural use) consisting of recording of earthworks, vegetation changes, parch marks, stream-bank searches where banks are exposed, and fieldwalking in arable land. This would be an extensive survey outside of specific development proposals, which would enhance the archaeological record on a strategic rather than reactive basis, and so would enable more informed curatorial responses. Local societies would be well placed to undertake such a survey, provided that personnel involved were able to recognise heat-shattered stone and prehistoric pottery, and that results were promptly reported to the appropriate HER.

Note

This paper was originally written in October 2003 and was updated in February 2014 to reflect significant publications and new discoveries since then. Where no published reference is quoted, information is from the appropriate Historic Environment Record.

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Any more old iron age? An archaeological resource assessment for the Middle Bronze Age to Iron Age in Warwickshire and Solihull

*Stuart C. Palmer**

The following account attempts in summary to assess the archaeological resource for the Middle Bronze Age to Iron Age in the County of Warwickshire and the metropolitan borough of Solihull.

Introduction

A considerable amount of data pertinent to the period is represented by cropmarks on the two Historic Environment Records held at the Warwickshire Museum, but as these have seldom been subject to finer resolution by analysis or corroborative fieldwork, it is beyond the scope of this assessment to include anything but their locations here (Figure 5.1). This implicit limitation is exacerbated by other factors including aerial survey no-flying areas, hostile geologies and the historic insistence that cropmarks, or more accurately, the geologies that cropmarks occur in, fundamentally represent the favoured locations for prehistoric settlement. Recent work has demonstrated that the less tractable geologies within the study area were probably widely utilised in later prehistory and that the settlement patterns of the period are far more complex than was intimated in Webster and Hobley's (1964) seminal report. In addition, it has become increasingly apparent that cropmark morphology is not necessarily a reliable indicator of site type or even chronology, although this may be refined after a more detailed study.

Although the rate of fieldwork on later prehistoric sites has dramatically increased in the survey area since Richard Hingley's review (1996), the impetus for the research has

largely been driven by commercial development. This obvious skew in the dataset is heavily biased towards mineral extraction sites, although linear infrastructure projects which have bisected a variety of topographical zones can now go some way to redressing the imbalance. A substantial part of this assessment has by necessity been gleaned from unpublished 'grey literature' reports, and some from conversations with, or details supplied by, others (Table 5.1). Readers are also referred to Hingley's previous synthesis (1989) and an earlier gazetteer by Thomas (1974).

Chronological issues

To even begin to understand the resource and its potential, it is imperative that we have in place a chronological framework by which we can organise the available data (Table 5.2). This seemingly obvious requisite actually presents a fundamental difficulty, not least because of the inconsistency of recording both in print and on the HERs. This problem does not just relate to the older records and publications, as the vagaries and confusion are evident even in relatively recent reports and summaries, albeit with some notable exceptions.

Scientific dating methods have in general been used sparingly, and often only to substantiate a ball-park time-frame within which a site could have been occupied. Few dates have been acquired on single events or phases (*terminus post quem* to *terminus ante quem*), and fewer still which can be used to corroborate or repudiate material typologies, particularly ceramics.

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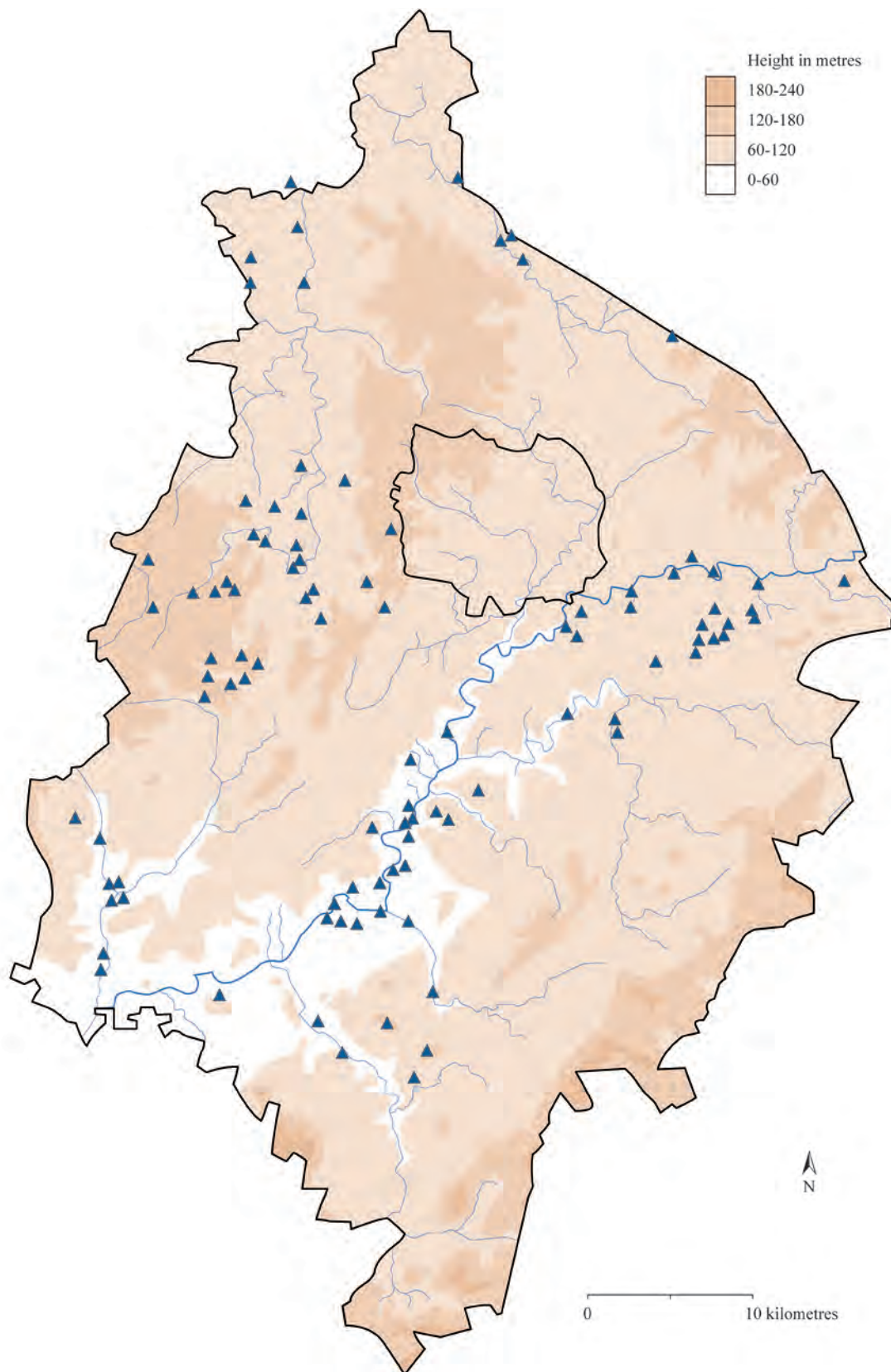


Fig. 5.1 Undated 'prehistoric' cropmarks recorded on the Warwickshire and Solihull Historic Environment Records – inset boundary is Coventry Metropolitan District Council.

Table 5.1: List of sites in text and publication reference

<i>Site</i>	<i>Publication</i>
Alcester, Cold Comfort Lane	Jones and Palmer 1995; Warwickshire Museum 2000
Alderminster, Foxhill	Hingley 1987a
Barford, Alderham Farm	Oswald 1969
Barford, Park Farm	Cracknell and Hingley 1994
Barford Bypass	Palmer 2010d
Bidford-on-Avon	Thomas 1974
Bourton and Draycote, Broomhill Farm	Hodgson 1991
Brailes	ArchaeoPhysica 2008
Brandon and Bretford, Brandon Grounds	Bateman 1978a
Bubbenhall, Wood Farm and Glebe Farm	Palmer <i>et al.</i> 2010
Burton Dassett, Church Hill	Booth 1989b
Charlecote, Middle Hunscombe Farm	Hughes and Jones 1996
Chesterton-on-Fosse	Taylor 1967
Church Lawford, Ling Hall Quarry (Areas A-W)	Palmer 2002
Church Lawford, Ling Hall Quarry (Areas Y-AD)	Palmer forthcoming b
Church Lawford, Ling Hall Quarry (Area BA)	Palmer 2008
Copston Magna, High Cross Quarry	Palmer 2009a
Corley	Chatwin 1930
Coughton, King's Coughton	Network Archaeology 2003
Ettington, Rattleborough Plantation	Hingley 1987b
Frankton	Palmer 2010a
Fulbrook, Sherbourne Hill	Palmer 1996; Palmer forthcoming (c)
Halford	Hingley 1987d
Hampton Lucy, Grove Fields Farm Cottages	Palmer 2010c
Harbury	Palmer 2010a
Harbury, Sharmer Farm	Barfield and Hodder 1989
Hartshill	Thomas 1974
Heathcote, Home Farm	Coutts and Jones 1998
Idlicote	Hingley 1987c
King's Newnham	Palmer 2003b
Lapworth, Hobditch	Cracknell and Hingley 1995
Long Itchington	Palmer 2009a
Long Lawford, Lodge Farm	Havard <i>et al.</i> 2006
Mancetter, Old Farm Road	Palmer 2004a
Meriden	Stevens 2005
Middleton	Hodder 1992
Napton, Windmill Business Park	Dalton and Booth 1997
Polesworth, Kisses' Barn Farm	Palmer 1992b
Quinton, Meon Hill	Hodges 1906; Price and Watson 1982
Ratley and Upton, Nadbury	McArthur 1990
Rollright	Lambrick 1988
Rugby, Coton Park	Northants Archaeology 1998
Rugby, Coton Park 2	Maul 2001

(Continued)

Table 5.1: List of sites in text and publication reference (Continued)

Site	Publication
Ryton-on-Dunsmore	Bateman 1978a
Ryton-on-Dunsmore, Peugeot Works	Mason forthcoming
Ryton-on-Dunsmore, traffic island	Palmer forthcoming (a)
Salford Priors, Broom	Palmer 2000a
Salford Priors, Marsh Farm	Palmer 2000b; Palmer 2010d
Stockton, Southam Cement Works	Palmer 2009b
Stretton-on-Fosse	Gardner <i>et al.</i> 1982
Tiddington	Palmer and Jones 2013
Walton	Palmer 2012
Wappenbury	Palmer 2003a; Stanley and Stanley 1960; Booth 1991
Wasperton	Ann Woodward, pers comm
Welford-on-Avon	Network Archaeology 2003
Wellesbourne, Charlecote Road	Palmer and Jones forthcoming
Whitchurch, Birchfurlong Cottages	Hingley 1988
Whitchurch, Crimscote Down	K Waddington, pers comm
Wishaw, Wishaw Hall Farm	Powell <i>et al.</i> 2008
Wixford	Palmer 2000a
Wolston, Wolston Fields	Palmer 1990a

To structure this assessment, the data has been divided into four periods that broadly reflect the chronologies referred to in the available records. They are relative to the traditional tripartite Bronze and Iron Ages, although it is recognised that such labels carry with them certain conventional prejudices and perhaps less significance than is now appropriate.

The assessment begins with the cessation of the construction of burial and ritual monuments and the archaeological prominence (in other regions) of settlement, land division and agriculture in the Middle Bronze Age. The Late Bronze Age and Early Iron Age are grouped together here because of the difficulties in distinguishing the ceramics of these periods on some sites. The Middle Iron Age is a necessarily vague cover-all, in which decorated pottery is absent and metalwork rare. The Late Iron Age, which on some sites is not necessarily pre-Roman, has generally been distinguished by the occurrence of wheel-made and grog-tempered ceramics on sites that might not otherwise be distinct from the Middle Iron Age. The rarity of these ‘Belgic’ type fabrics in the north of the county may be taken to indicate that handmade pottery, otherwise recorded as Middle Iron Age, continued in use into the Roman period.

The key site within the study area from which a chronology for much of the region may yet be extrapolated is Wasperton in the Avon Valley. The importance of the ceramic assemblage from this site cannot be underestimated and its publication has been long awaited, not least because

it should provide a well dated (both by radiocarbon and thermoluminescence) ceramic sequence to which other sites could be related. Provisional information from this site has kindly been supplied by Ann Woodward.

The archaeological landscape

Middle Bronze Age c.1500–1200 BC (Figure 5.2)

Across Britain the later second millennium BC is widely regarded as a time of enormous social change engendered by new conceptions of identity and territory. The landscape gradually became more divided, and as clearance and new settlement increased, so did new manifestations of prestige, authority and regional diversity (Champion 1999; Parker Pearson 2005, 96–100). There is, though, an alternative model in which the fluid and mobile lifestyle of the Neolithic prevailed well into the second half of the second millennium (Richmond 1999; Kitchen 2001, 110), with some regions not exhibiting the boundary and farmstead evidence associated with permanent settlement until the first millennium BC.

Prima facie evidence for Middle Bronze Age settlement in Warwickshire and Solihull is scant. However, there is a growing corpus of burnt mounds in the region which appear to indicate an otherwise inconspicuous population. Identification of these still enigmatic sites is largely a corollary of the intensive and systematic work undertaken in the north-west of the study area (Barfield and Hodder 1989; Hodder 1992). Other examples are known from

Table 5.2: A gazetteer of later prehistoric radiocarbon dates in Warwickshire

Site	Lab No.	Radiocarbon Age (BP)	$\delta^{13}\text{C}$ relative to VPDB (where recorded)	Material and Context	OxCal Calibration Programme	Calibration 68.2% (cal BC/cal AD)	Calibration 95.4% (cal BC/cal AD)	Publication or place recorded (not necessarily with present calibrations)
Alcester, Coulters Garage	HAR-4905	2410±110		Unspecified organic material	OxCal 3.10	750–680 cal BC (14.7%)	800–350 cal BC (90.3%)	Booth 1989b, 97
						670–630 cal BC (6.1%)	300–200 cal BC (5.1%)	
Barford bypass, Area A	SUERC-24745	2235±35	-21.3‰	Charred wheat seed from pit	OxCal 3.10	380–350 cal BC (17.6%)	390–200 cal BC (95.4%)	Palmer 2010d
						300–210 cal BC (50.6%)		
Barford bypass, Area A	SUERC-24746	2145±35	-21.9‰	Charred barley seed from dump in pit	OxCal 3.10	350–310 cal BC (17.0%)	360–280 cal BC (25.6%)	Palmer 2010d
						210–110 cal BC (51.2%)	260–50 cal BC (69.8%)	
Barford bypass, Area A	SUERC-24967	2235±30	-19.9‰	Human mandible	OxCal 3.10	380–350 cal BC (17.3%)	390–340 cal BC (24.8%)	Palmer 2010d
						300–210 cal BC (50.9%)	330–200 cal BC (70.6%)	
Barford bypass, Area B	SUERC-24744	2095±35	-23.0‰	Charred barley seed from pit	OxCal 3.10	170–50 cal BC (68.2%)	210–20 cal BC (95.4%)	Palmer 2010d
Barford, Park Farm	OxA-2303	2085±70		Charred plant remains (unspecified) from pit in top of enclosure ditch	OxCal 3.9	200 cal BC–cal AD 10 (68.2%)	360–280 cal BC (8.8%)	Cracknell and Hingley 1994, 25
							260 cal BC–cal AD 70 (86.6%)	
Barford, Park Farm	OxA-2304	2060±70		Charred plant remains (unspecified) from working hollow in top of enclosure ditch	OxCal 3.9	170–20 cal BC (68.2%)	360–290 cal BC (4.6%)	Cracknell and Hingley 1994, 25
							240 cal BC–cal AD 90 (90.8%)	
Barford, Park Farm	OxA-2306	2910±70		Charred plant remains (unspecified) from small hole	OxCal 3.10	1260–1240 cal BC (2.2%)	1320–910 cal BC (95.4%)	Cracknell and Hingley 1994, 25
						1220–1000 cal BC (66.0%)		

(Continued)

Table 5.2: A gazetteer of later prehistoric radiocarbon dates in Warwickshire (Continued)

Site	Lab No.	Radiocarbon Age (BP)	$\delta^{13}\text{C}$ relative to VPDB (where recorded)	Material and Context	OxCal Calibration Programme	Calibration 68.2% (cal BC/cal AD)	Calibration 95.4% (cal BC/cal AD)	Publication or place recorded (not necessarily with present calibrations)
Barford, Park Farm	GU-5043	2160±70		Charred plant remains (unspecified) from mid-section of enclosure ditch	OxCal 3.9	360–280 cal BC (23.2%) 260–90 cal BC (45.0%)	390–40 cal BC (95.4%)	Cracknell and Hingley 1994, 25
Barford, Park Farm	GU-5044	2080 ±80		Charred plant remains (unspecified) from mid-section of enclosure ditch	OxCal 3.9	200 cal BC–cal AD 20 (68.2%)	360–270 cal BC (10.4%) 260 cal BC–80 cal AD (85.0%)	Cracknell and Hingley 1994, 25
Barford, Park Farm	GU-5045	2500 ±90		Charred plant remains (unspecified) from primary fill of enclosure ditch	OxCal 3.9	790–510 cal BC (68.2%)	800–400 cal BC (95.4%)	Cracknell and Hingley 1994, 25
Bidford-on-Avon, Lloyds Bank	HAR-3456	1960±70	-22.5‰	Human bone	OxCal 3.10	50 cal BC–130 cal AD (68.2%)	160–130 cal BC (1.8%) 120 cal BC–cal AD 230 (93.6%)	HER MWA 529
(near) Bidford, Pilgrim Lock	BIRM-613	2770±250		unspecified	OxCal 3.10	1400–550 cal BC (68.2%)	1700–300 cal BC (95.4%)	Shotton 1978
Bubbenhall, Wood Farm	SUERC-24721	2130±35	-20.0‰	Charred wheat	OxCal 3.10	340–330 cal BC (1.4%) 210–90 cal BC (66.8%)	360–290 cal BC (14.0%) 210–40 cal BC (81.4%)	Palmer and Jones 2013
Bubbenhall, Wood Farm	SUERC-24722	2165±35	-22.8‰	Charred grain (indet)	OxCal 3.10	360–290 cal BC (35.4%) 240–160 cal BC (32.8%)	370–100 cal BC (95.4%)	Palmer and Jones 2013

(Continued)

Table 5.2: A gazetteer of later prehistoric radiocarbon dates in Warwickshire (Continued)

Site	Lab No.	Radiocarbon Age (BP)	$\delta^{13}\text{C}$ relative to VPDB (where recorded)	Material and Context	OxCal Calibration Programme	Calibration (cal BC/cal AD)	Calibration 68.2% (cal BC/cal AD)	Calibration 95.4% (cal BC/cal AD)	Publication or place recorded (not necessarily with present calibrations)								
Church Lawford, Ling Hall Quarry Area D	OxA-6393	2590±60	-26.0 per mil	Charred Rosaceae from posthole alignment	OxCal 3.9	830–750 cal BC (41.3%) 690–660 cal BC (6.7%) 640–590 cal BC (13.9%) 580–550 cal BC (6.2%)	900–510 cal BC (95.4%)	Palmer 2002, 117–8									
									Church Lawford, Ling Hall Quarry Area D	OxA-6394	2505±60	-27.2 per mil	Charred hazel/alder from posthole alignment	OxCal 3.9	790–750 cal BC (9.4%) 730–520 cal BC (58.8%)	800–480 cal BC (86.3%) 470–410 cal BC (9.1%)	Palmer 2002, 117–8
Church Lawford, Ling Hall Quarry Area Y	SUERC-24735	2455±35	-26.4‰	Oak charcoal from posthole alignment	OxCal 3.10	750–680 cal BC (22.0%) 670–640 cal BC (7.6%) 590–570 cal BC (3.1%) 560–480 cal BC (24.0%) 470–410 cal BC (11.4%)	760–680 cal BC (24.6%) 670–410 cal BC (70.8%)	Palmer forthcoming (b)									
									Church Lawford, Ling Hall Quarry Area Y	SUERC-24742	2540 ± 35	-23.6‰	Oak charcoal from posthole alignment	OxCal 3.10	800–740 cal BC (31.1%) 690–660 cal BC (14.1%) 650–590 cal BC (23.0%)	800–720 cal BC (37.1%) 700–540 cal BC (58.3%)	Palmer forthcoming (b)
Church Lawford, Ling Hall Quarry Area Y	SUERC-24743	2480±35	-25.5‰	Oak charcoal from posthole alignment	OxCal 3.10	760–680 cal BC (21.5%) 670–530 cal BC (46.7%)	770–480 cal BC (89.4%) 470–410 cal BC (6.0%)	Palmer forthcoming (b)									

(Continued)

Table 5.2: A gazetteer of later prehistoric radiocarbon dates in Warwickshire (Continued)

Site	Lab No.	Radiocarbon Age (BP)	$\delta^{13}C$ relative to VPDB (where recorded)	Material and Context	OxCal Calibration Programme	Calibration 68.2% (cal BC/cal AD)	Calibration 95.4% (cal BC/cal AD)	Publication or place recorded (not necessarily with present calibrations)
Copston Magna, High Cross Quarry, Area A	SUERC-24753	2145±35	-22.8‰	Charred wheat seed in pit	OxCal 3.10	350–310 cal BC (17.0%) 210–110 cal BC (51.2%)	360–280 cal BC (25.6%) 260–50 cal BC (69.8%)	Palmer 2009a
					OxCal 3.10	380–350 cal BC (14.8%) 300–200 cal BC (53.4%)	390–200 cal BC (95.4%)	
					OxCal 3.10	360–280 cal BC (44.7%) 240–190 cal BC (23.5%)	370–160 cal BC (95.4%)	
Copston Magna, High Cross Quarry, Area A	SUERC-24754	2230±35	-22.6‰	Charred wheat seed in pit	OxCal 3.10	380–340 cal BC (15.5%) 320–200 cal BC (52.7%)	400–160 cal BC (94.4%) 140–110 cal BC (1.0%)	Palmer 2009a
					OxCal 3.10	1310–1010 cal BC (68.2%)	1420–910 cal BC (95.4%)	
Copston Magna, High Cross Quarry, Area A	SUERC-24755	2180 ±30	-22.7‰	Charred wheat seed in pit	OxCal 3.10	1390–1080 cal BC (67.2%) 1070–1050 cal BC (1.0%)	1450–900 cal BC (95.4%)	Palmer 2009a
					OxCal 3.9	1500–1425 cal BC (64.3%) 1420–1410 cal BC (3.9%)	1530–1400 cal BC (95.4%)	
Harbury, Sharners Farm	BIRM-344	2950±100	-26.3‰	Charred wheat seed	OxCal 3.9	1500–1470 cal BC (18.2%) 1465–1405 cal BC (50.0%)	1520–1390 cal BC (93.5%) 1330–1320 cal BC (1.9%)	Palmer 2010a
					OxCal 3.10	800–530 cal BC (68.2%)	820–400 cal BC (95.4%)	
Harbury, Sharners Farm	BIRM-371	2990±100	-27.1‰	Charcoal (unspecified)	OxCal 3.10	800–530 cal BC (68.2%)	820–400 cal BC (95.4%)	Cracknell and Hingley 1995, 54
					OxCal 3.10	800–530 cal BC (68.2%)	820–400 cal BC (95.4%)	
Harbury (Transco pipeline 1999, Area G)	SUERC-3491	3185±35	-26.3‰	Charred onion couch grass tubers from cremation pit	OxCal 3.10	800–530 cal BC (68.2%)	820–400 cal BC (95.4%)	Cracknell and Hingley 1995, 54
					OxCal 3.10	800–530 cal BC (68.2%)	820–400 cal BC (95.4%)	
Harbury (Transco pipeline 1999, Area G)	SUERC-3492	3170±35	-27.1‰	Charred onion couch grass tubers from cremation pit	OxCal 3.10	800–530 cal BC (68.2%)	820–400 cal BC (95.4%)	Cracknell and Hingley 1995, 54
					OxCal 3.10	800–530 cal BC (68.2%)	820–400 cal BC (95.4%)	

(Continued)

Table 5.2: A gazetteer of later prehistoric radiocarbon dates in Warwickshire (Continued)

Site	Lab No.	Radiocarbon Age (BP)	$\delta^{13}\text{C}$ relative to VPDB (where recorded)	Material and Context	OxCal Calibration Programme	Calibration (cal BC/cal AD)	Calibration 95.4% (cal BC/cal AD)	Publication or place recorded (not necessarily with present calibrations)
Middleton, Langley Mill (M6 Toll Site 30)	NZA-25061	2234±30		Birch from annular gully	OxCal 3.9	380–350 cal BC (16.3%) 320–310 cal BC (2.2%) 300–230 cal BC (42.2%) 220–200 cal BC (7.5%)	390–200 cal BC (95.4%)	Powell <i>et al.</i> 2008, 339
Middleton, Langley Mill (M6 Toll Site 30)	NZA-25062	2288±30		Oak sapwood in roundhouse gully	OxCal 3.9	400–350 cal BC (54.2%) 280–260 cal BC (14.0%)	410–350 cal BC (58.0%) 300–200 cal BC (37.4%)	Powell <i>et al.</i> 2008, 339
Middleton, Langley Mill (M6 Toll Site 30)	NZA-25240	2178±30		Oak sapwood from oak post (slab)	OxCal 3.9	360–290 cal BC (39.8%) 240–170 cal BC (28.4%)	370–160 cal BC (93.9%) 140–110 cal BC (1.5%)	Powell <i>et al.</i> 2008, 339
Ratley and Upton, Nadbury Camp	HAR-5887	2410±90		Unspecified charcoal from pre-rampart pit	OxCal 3.9	760–680 cal BC (19.2%) 670–630 cal BC (5.6%) 590–570 cal BC (2.0%) 550–390 cal BC (41.4%)	800–350 cal BC (95.4%)	McArthur 1990, 13
Ryton-on-Dunsmore	BIRM-26	2701±41		Charred sweet chestnut from cremation urn	OxCal 3.9	900–820 cal BC (22.6%) 865–810 cal BC (45.6%)	920–790 cal BC (95.4%)	Bateman 1978a, 22
Ryton-on-Dunsmore	BIRM-228	2870±106		Charcoal (unspecified) from cremation urn	OxCal 3.9	1220–900 cal BC (68.2%)	1400–800 cal BC (95.4%)	Bateman 1978a, 22

(Continued)

Table 5.2: A gazetteer of later prehistoric radiocarbon dates in Warwickshire (Continued)

Site	Lab No.	Radiocarbon Age (BP)	$\delta^{13}\text{C}$ relative to VPDB (where recorded)	Material and Context	OxCal Calibration Programme	Calibration 68.2% (cal BC/cal AD)	Calibration 95.4% (cal BC/cal AD)	Publication or place recorded (not necessarily with present calibrations)
Ryton-on-Dunsmore	BIRM-227	2785±120		Charcoal (unspecified) from D-shaped enclosure ditch	OxCal 3.9	1120–810 cal BC (68.2%)	1400–750 cal BC (95.4%)	Bateman 1978a, 22
Ryton-on-Dunsmore, traffic island	SUERC-24756	2170±35	-25.1‰	Pomoideae charcoal 133/2	OxCal 3.10	360–290 cal BC (37.3%) 240–170 cal BC (30.9%)	370–110 cal BC (95.4%)	Palmer forthcoming (a)
Ryton-on-Dunsmore, traffic island	SUERC-24759	2110±35	-22.6‰	Charred <i>Triticum</i> spelta seed 210/1	OxCal 3.10	190–90 cal BC (62.7%) 70–50 cal BC (5.5%)	350–320 cal BC (3.8%) 210–40 cal BC (91.6%)	Palmer forthcoming (a)
Salford Priors, Broom A435 Area E	OxA-6282	2570±55	-23.6 per mil	Oak heartwood charcoal from pyre material	OxCal 2.17	810–750 cal BC (30%) 690–660 cal BC (8.2%) 640–540 cal BC (29.9%)	840–510 cal BC (95.4%)	Palmer 2000b, 53
Salford Priors, Broom A435 Area E	OxA-6283	2475±55	-23.4 per mil	Oak heartwood charcoal from pyre material	OxCal 2.17	770–510 cal BC (65.9%) 460–450 cal BC (1.1%) 440–430 cal BC (1.3%)	780–400 cal BC (95.4%)	Palmer 2000b, 53
Salford Priors, Marsh Farm Quarry	GU-11275	2235±45	-26.1‰	Charred <i>Prunus</i> from pit fill within enclosure	OxCal 3.9	380–350 cal BC (15.9%) 320–230 cal BC (45.3%) 220–200 cal BC (7.0%)	400–180 cal BC (95.4%)	Palmer 2010b
Salford Priors, Marsh Farm Quarry	GU-11276	2190±45	-25.5‰	Charred Pomoideae from enclosure ditch	OxCal 3.9	360–280 cal BC (37.2%) 260–170 cal BC (31.0%)	390–110 cal BC (95.4%)	Palmer 2010b

(Continued)

Table 5.2: A gazetteer of later prehistoric radiocarbon dates in Warwickshire (Continued)

Site	Lab No.	Radiocarbon Age (BP)	$\delta^{13}\text{C}$ relative to VPDB (where recorded)	Material and Context	OxCal Calibration Programme	Calibration (cal BC/cal AD)	Calibration 95.4% (cal BC/cal AD)	Publication or place recorded (not necessarily with present calibrations)
Salford Priors, Marsh Farm Quarry	GU-11277	2165±45	-25.9‰	Charred Pomoideae from enclosure ditch	OxCal 3.9	360–280 cal BC (29.4%) 260–150 cal BC (34.3%) 140–110 cal BC (4.4%)	370–50 cal BC (95.4%)	Palmer 2010b
Salford Priors, Marsh Farm Quarry	GU-11487	2125±45	-26.3‰	Charred hazel/alder (<i>Corylus/Alnus</i>) from structure in open settlement	OxCal 3.9	210–50 cal BC (68.2%)	360–280 cal BC (14.0%) 260–40 cal BC (81.4%)	Palmer 2010b
Stockton, Southam Quarry	SUERC-24731	2175±35	-21.7‰	Hazel nutshell in base of boundary ditch	OxCal 3.10	360–290 cal BC (39.4%) 240–170 cal BC (28.8%)	370–150 cal BC (92.4%) 140–110 cal BC (3.0%)	Palmer in 2009b
Stockton, Southam Quarry	SUERC-24732	2115±35	-22.5‰	Charred wheat seed in base of boundary ditch	OxCal 3.10	200–90 cal BC (68.2%)	350–310 cal BC (5.2%) 210–40 cal BC (90.2%)	Palmer in 2009b
Wasperton	GrA-32241	2370±30		Cremated bone	OxCal 3.10	510–430 cal BC (34.9%) 420–390 cal BC (33.3%)	540–380 cal BC (95.4%)	Carver <i>et al.</i> 2009, 46
Wellesbourne, Transco pipeline 2000, Area E, Walton	SUERC-6899	2395±35	-25.0‰	Charred <i>Rumex acetosella</i> from layer	OxCal 3.10	520–400 cal BC (68.2%)	740–680 cal BC (9.8%) 670–640 cal BC (2.1%) 550–390 cal BC (83.4%)	Palmer 2012
Wellesbourne, Transco pipeline 2000, Area E, Walton	SUERC-6900	2190±35	-25.1‰	Charred <i>Chenopodium album</i>	OxCal 3.10	360–280 cal BC (43.8%) 260–190 cal BC (24.4%)	380–160 cal BC (95.4%)	Palmer 2012
Wellesbourne, Transco pipeline 2000, Area E, Walton	SUERC-6903	2220±35	-21.9‰	Articulated human femur from pit burial	OxCal 3.10	370–340 cal BC (8.1%) 320–200 cal BC (60.1%)	390–200 cal BC (95.4%)	Palmer 2012

(Continued)

Table 5.2: A gazetteer of later prehistoric radiocarbon dates in Warwickshire (Continued)

Site	Lab No.	Radiocarbon Age (BP)	$\delta^{13}\text{C}$ relative to VPDB (where recorded)	Material and Context	OxCal Calibration Programme	Calibration 68.2% (cal BC/cal AD)	Calibration 95.4% (cal BC/cal AD)	Publication or place recorded (not necessarily with present calibrations)
Wellesbourne, Transco pipeline 2000, Area E, Walton	SUERC-6904	2180±35	-20.9‰	Articulated human femur from pit burial	OxCal 3.10	360–280 cal BC (41.2%) 240–180 cal BC (27.0%)	380–160 cal BC (93.8%) 140–110 cal BC (1.6%)	Palmer 2012
Wellesbourne, Transco pipeline 2000, Area E, Walton	SUERC-6905	2220±40	-20.2‰	Articulated human femur from pit burial	OxCal 3.10	370–340 cal BC (8.6%) 320–200 cal BC (59.6%)	390–190 cal BC (95.4%)	Palmer 2012
Wellesbourne, Transco pipeline 2000, Area E, Walton	SUERC-6908	2185±35	-21.7‰	Articulated <i>Bos</i> thoracic vertebrae from pit	OxCal 3.10	360–280 cal BC (45.2%) 240–190 cal BC (23.0%)	380–160 cal BC (95.4%)	Palmer 2012
Wellesbourne, Transco pipeline 2000, Area E, Walton	SUERC-6909	2255±35	-24.8‰	Charcoal Pomoideae from pit	OxCal 3.10	390–350 cal BC (27.8%) 290–230 cal BC (40.4%)	400–340 cal BC (33.5%) 330–200 cal BC (61.9%)	Palmer 2012
Wellesbourne, Transco pipeline 2000, Area E, Walton	SUERC-6910	2210±35	-24.1‰	Charcoal <i>Ilex</i> from pit	OxCal 3.10	360–340 cal BC (8.1%) 330–270 cal BC (28.0%) 260–200 cal BC (32.1%)	390–190 cal BC (95.4%)	Palmer 2012
Wishaw Hall Farm (M6 Toll Site 19)	NZA-25080	2429±35		Human skull in pit alignment	OxCal 3.9	760–700 cal BC (13.8%) 540–400 cal BC (54.4%)	770–680 cal BC (25.0%) 670–610 cal BC (6.6%) 600–400 cal BC (63.8%)	Powell <i>et al.</i> 2008, 363
Wishaw Hall Farm (M6 Toll Site 19)	NZA-25167	2313±30		Pot residue in pit alignment	OxCal 3.9	410–370 cal BC (62.7%) 270–260 cal BC (5.5%)	410–350 cal BC (78.1%) 300–230 cal BC (17.3%)	Powell <i>et al.</i> 2008, 363

Radiocarbon age BP (before AD 1950) uses the half-life of 5568 years.

Calibration is by the University of Oxford Radiocarbon Accelerator Unit calibration programme OxCal PROGRAM versions 3.9 and 3.10 (Bronk Ramsay 1995; 2003; 2005), the 1998 calibration curve (Stuiver *et al.* 1998) [v3.9], and the atmospheric data from Reimer *et al.* (2004) [v3.10].

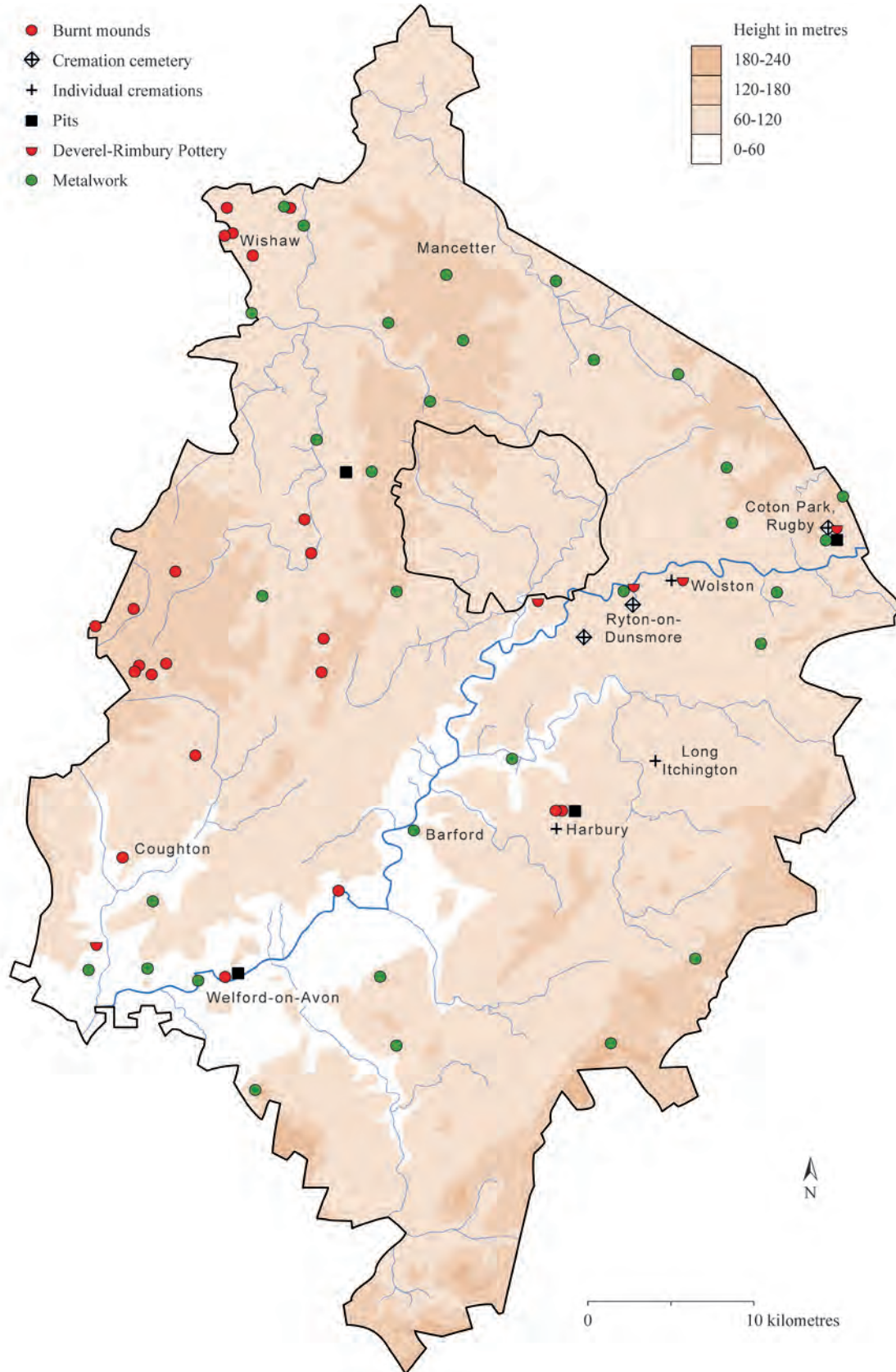


Fig. 5.2 Middle Bronze Age sites in Warwickshire.

Sharmer Farm, Harbury (Barfield and Hodder 1989) and more recently on the route of the M6 Toll (Powell *et al.* 2008), and in south Warwickshire at Welford-on-Avon and Coughton (Network Archaeology 2003).

The Deverel-Rimbury cremation cemetery at Ryton-on-Dunsmore (Bateman 1978a), along with a further example chanced upon in gravel workings at nearby Wolston (Chatwin 1943), clearly point to a populated Avon Valley. Pottery and a small copper alloy knife were found in a pit group in the Swift Valley at Coton Park, Rugby (Northamptonshire Archaeology 1998), and a second pit group associated with a significant assemblage of Deverel-Rimbury pottery was found on an adjacent site along with a small cremation cemetery (Maull 2001). A large portion of a single vessel of this date was recovered from a single pit during evaluation work at Mancetter (Palmer 2004a). Further Middle Bronze Age cremations have been excavated at Long Itchington (Palmer 1992a) and Harbury (Palmer 2010a).

Combine these finds with the thin scatter of Middle Bronze Age metalwork across the northern part of the study area and we can begin to see an unobtrusive populace, possibly living outside the areas of later settlement, and possibly not fully engaged in a sedentary agricultural economy.

The Late Bronze Age and Early Iron Age c.1200–400 BC (Figure 5.3)

The climatic downturn at the beginning of the first millennium BC may well have provoked social and economic pressures in an increasingly settled and divided agricultural landscape (Champion 1999). It is in this period that the earliest evidence for permanent settlement in the study area occurs, although the extensive field systems prevalent in other areas (Yates 2001; Evans and Knight 2001) are still not evident. Many of the unexcavated pit alignments known as cropmarks in the major river valleys may date from this period, as they do in the region to the east (Jackson 1993), and many of the undated cropmark sites could also reasonably be expected to include elements of this date.

Along parts of the Avon and Arrow valleys smaller tributaries defined land-units (Palmer 2000a), whilst at Wasperton the earliest example of a man-made boundary, a ditch that sealed off a loop in the River Avon, is dated c.1300–850 BC. This early boundary was re-dug as a pit alignment c.850–650 BC and four small, house-sized enclosures constructed either side of the boundary have also been dated 850–650 BC, whilst contemporary features include two large, linear pit groups. The earliest dated enclosures in the study area were also found at Wasperton: three large rectilinear enclosures have been dated 650–550 BC. One enclosure was associated with two ditched trackways or drove roads, which, by implication, suggests a fairly sophisticated regime involving fields for crops and/or areas of pasture.

A significant pit group excavated on the opposite bank of the Avon at Hampton Lucy appears to form part of a settlement which developed within a complex defined by parallel-sided land-units within a river loop (Palmer 2010c). The large ceramic assemblage recovered during fieldwalking at Whitchurch (Hingley 1988; 1996, 12) has proven to derive from a huge midden heap, similar to those known in Wiltshire such as Potterne (Gingell and Lawson 1985; Lawson 1994) and East Chisenbury (Brown *et al.* 1994). Kate Waddington and Niall Sharples of Cardiff University have conducted extensive geophysical survey and limited trial trenching across the site and recovered evidence, including a collection of votive bronze axes, suggesting that it was a high status site where social rituals of feasting and conspicuous consumption were performed (Waddington, pers. comm.). Fieldwalking and metal-detecting at Brailes have revealed another possible midden site (Angie Bolton, pers. comm.), which, when subsequently geophysically surveyed, has revealed an extensive settlement of buildings and enclosures (ArchaeoPhysica 2008; Figure 5.4).

At Ling Hall Quarry, Church Lawford, in the centre of the newly deforested Dunsmore plateau, parallel alignments of closely spaced posts were erected in this period (Palmer 2002; Figure 5.5). These unusual features may have formed screens between individual land units. A small number of possibly contemporary roundhouses have been identified: unenclosed in Area AB (Palmer 2004b) and enclosed in Area BA (Palmer 2008). They currently represent the earliest securely dated domestic buildings within the study area (Palmer forthcoming (b)) and are also associated with an early phase of pit alignment. Two parallel pit alignments aligned north-east to south-west divide the area (Figures 5.6–5.7), although the alignments may have followed an existing boundary. At nearby Coton Park, Rugby, several arcs of shallow gullies have been suggested as evidence for a transitory episode of settlement (Northamptonshire Archaeology 1998).

Elsewhere in the study area there is some evidence for activity of this date on many later period sites. A small group of pits of probable Late Bronze Age date was found at Park Farm, Barford (Cracknell and Hingley 1994), and these might have been related to a linear boundary ditch associated with a palisade, although a later date is also feasible. At Wolston Fields Farm, Ryton-on-Dunsmore, trial trenching identified several areas of activity over a 140ha site (Palmer 1990). One such area that included a large bell-shaped, clay-capped pit has recently been excavated and it seems that the Late Bronze Age material was residual within the later Iron Age pit (Palmer forthcoming (a)).

A few features of probable Late Bronze Age/Early Iron Age date were evaluated at Polesworth (Palmer 1992b), but it is far from clear how well such features reflect the settlement record. Trial trenching at Charlecote also produced pottery attributable to this period (Hughes and Jones 1996) and

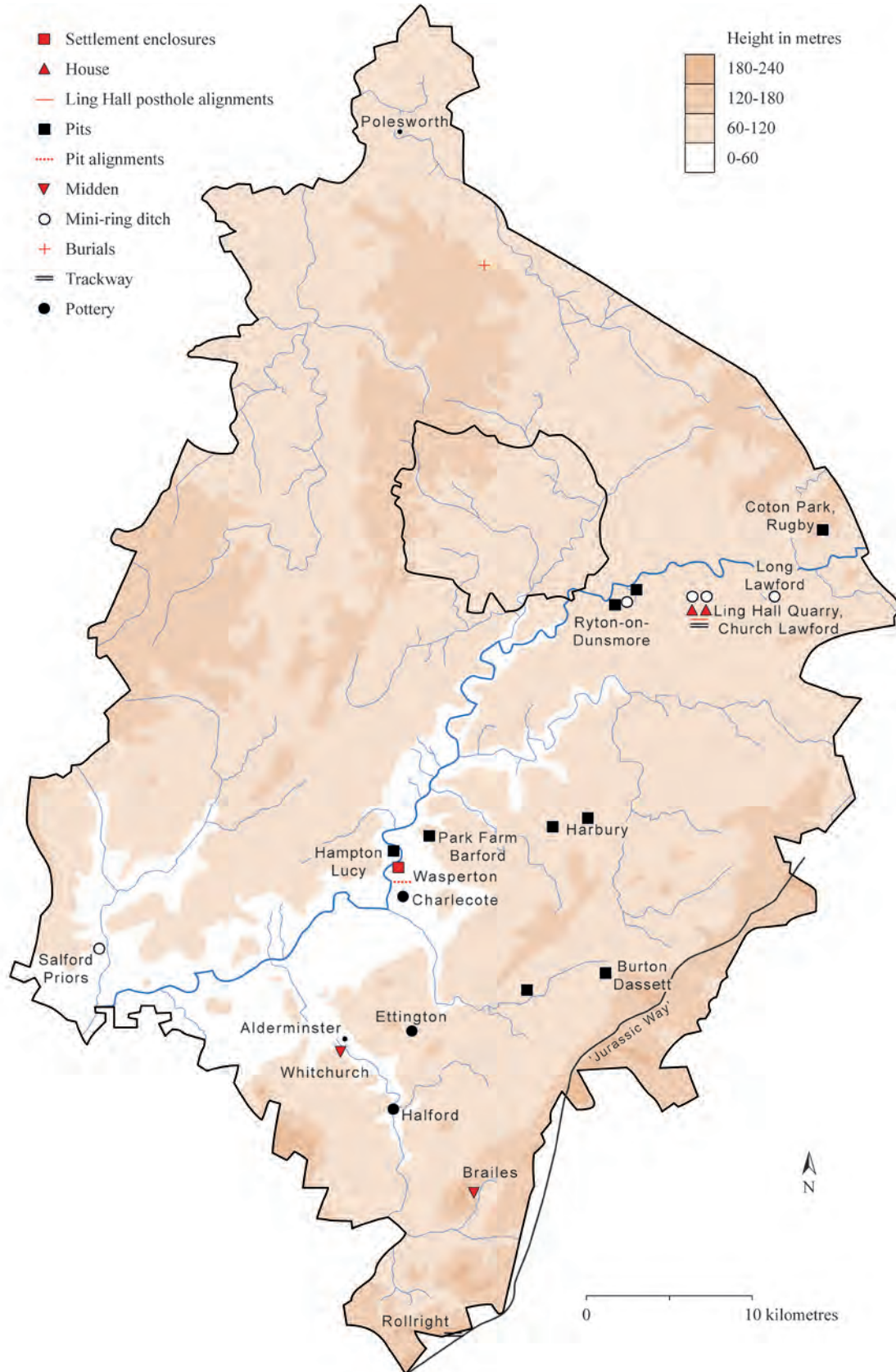


Fig. 5.3 Late Bronze Age and Early Iron Age sites in Warwickshire.



Fig. 5.4 Later prehistoric multi-phase settlement at Brailes, mapped using caesium vapour magnetometry during a joint project with the Portable Antiquities Scheme after the recovery of a significant ceramic assemblage by a local metal-detectorist (copyright of and by permission of ArchaeoPhysica).

a single pit was found at Harbury (Palmer 2010a). An unenclosed pit group of Early Iron Age date was excavated at Burton Dassett (Booth 1989a). It is conceivable that a trackway that was examined on the Oxfordshire side of the border at Rollright (Lambrick 1988, 801) extended into Warwickshire, or at least to an otherwise unrecognised settlement predating the Middle Iron Age enclosure.

Hillforts (Figure 5.8), perhaps once the quintessential site type of the Iron Age, have in the past been interpreted as tribal capitals, communal stores, meeting places, markets and community retreats in times of trouble, but are now more widely regarded as a regionally diverse manifestation often developed in the later Bronze Age. Only three within the county have been tested, but none sufficiently excavated to



Fig. 5.5 A Middle–Late Iron Age double-ditched trackway and triple posthole alignments terminating at a waterlogged ‘hollow’ at the nexus of the Ling Hall Quarry, Church Lawford, boundary complex, excavated in 2005.

determine their function, and the absence of such sites in large parts of the county raises many questions as to their role as central places or elite residences.

The defences at Nadbury hillfort, Kineton, have been dated *c.*600–400 BC, although pits beneath the rampart are likely to have been older still (McArthur 1990). Similarly dated pottery has also been recovered from the surface near the ramparts (Wager 2002). Pottery likely to be of a similar date has been recovered from a so-called pit dwelling at Meon Hill hillfort (Hodges 1906; Price and Watson 1982), yet there is no record of its considerable defences having been examined. The defences at Corley included a timber rampart (Chatwin 1930), whilst those at the one-time valley fort of Wappenbury (see Hingley 1996, 18, fig. 10) were again tested and found to be Romano-British or later (Booth 1991; Palmer 2003a). Further evidence that local hillfort sites were used at this time was recovered during fieldwalking at Foxhill, Alderminster (Hingley 1987a). Further settlement locations of this date in the Feldon area

are indicated by ceramic assemblages recovered from fields at Ettington (Hingley 1987b), Idlicote (Hingley 1987c) and Halford (Hingley 1987d).

The Middle Iron Age c.400–100 BC (Figure 5.9)

Population expansion, concomitant with a slowly improving climate, from the middle of the first millennium BC prompted new episodes of forest clearance (Haselgrove 1999), initially for pasture and later for cultivation. Earlier notions of belonging and exclusion were emphasised with the construction of major earthwork boundaries and the further division of the landscape.

The ubiquitous rectangular ditched enclosure cropmarks of Warwickshire are generally thought to be Middle Iron Age in date (Hingley 1996, 16), although more recent work at sites like Ling Hall Quarry Area Z (Palmer 2001; Palmer forthcoming (b)) suggests that they were still being constructed in the later Iron Age. At Wasperton the Early



Fig. 5.6 A Late Bronze Age pit alignment (left to right and heavily weathered) from which a double Middle Iron Age pit alignment extends away from, at Ling Hall Quarry, Church Lawford, excavated in 2005. The Middle Iron Age pits are considerably smaller and, in this instance, rectangular as opposed to round elsewhere in the complex.

Iron Age enclosure was abandoned between 500–250 BC and a replacement constructed to the south. Further enclosure modifications were made on the east of the boundary and open settlement occurred to the north. Other excavated settlement enclosures include Barford, Park Farm (Cracknell and Hingley 1994) and Rollright (Lambrick 1988), whilst an enclosure evaluated at Fulbrook was apparently empty (Palmer, N. 1996; Palmer, S. C. forthcoming (c)). An unusual polygonal enclosure settlement with double opposed entrances at Meriden is thought likely to have origins in this period (Stevens 2005), although the little pottery recovered from the excavation was largely Late Iron Age. The larger Marsh Farm Quarry, Salford Priors, enclosure and nearby open settlement features (Palmer 2000b; 2001) have radiocarbon determinations that indicate use throughout the Mid–Late Iron Age (Palmer 2010b).

On Dunsmore some of the washing-line enclosures at Church Lawford (Area F, Palmer 2002; Area AB,

Palmer 2004b; Area BA, Palmer 2007) and Bourton Heath (Hodgson 1991) are Middle Iron Age, although not all were actual settlement sites, as some were devoid of internal features and are likely to have been used for stock control. An arrangement including a small circular enclosure attached to a small sub-rectangular enclosure that was excavated at Frankton (Palmer 2010a) seems unlikely to have been domestic, given that they produced no more than a handful of sherds. A complex of enclosures and pits partially examined at the Peugeot Works, Ryton-on-Dunsmore may also date from this period, although dating evidence was particularly scarce (Mason forthcoming).

At Ryton Wood, Ryton-on-Dunsmore a double-ditched, D-shaped enclosure, with entrances aligned on the south-east arm, was originally published as Late Bronze Age (Bateman 1978a), although this date has subsequently been questioned and a Middle Iron Age date proffered (Cracknell and Hingley 1994, 27; Hingley 1996, 11). A single example

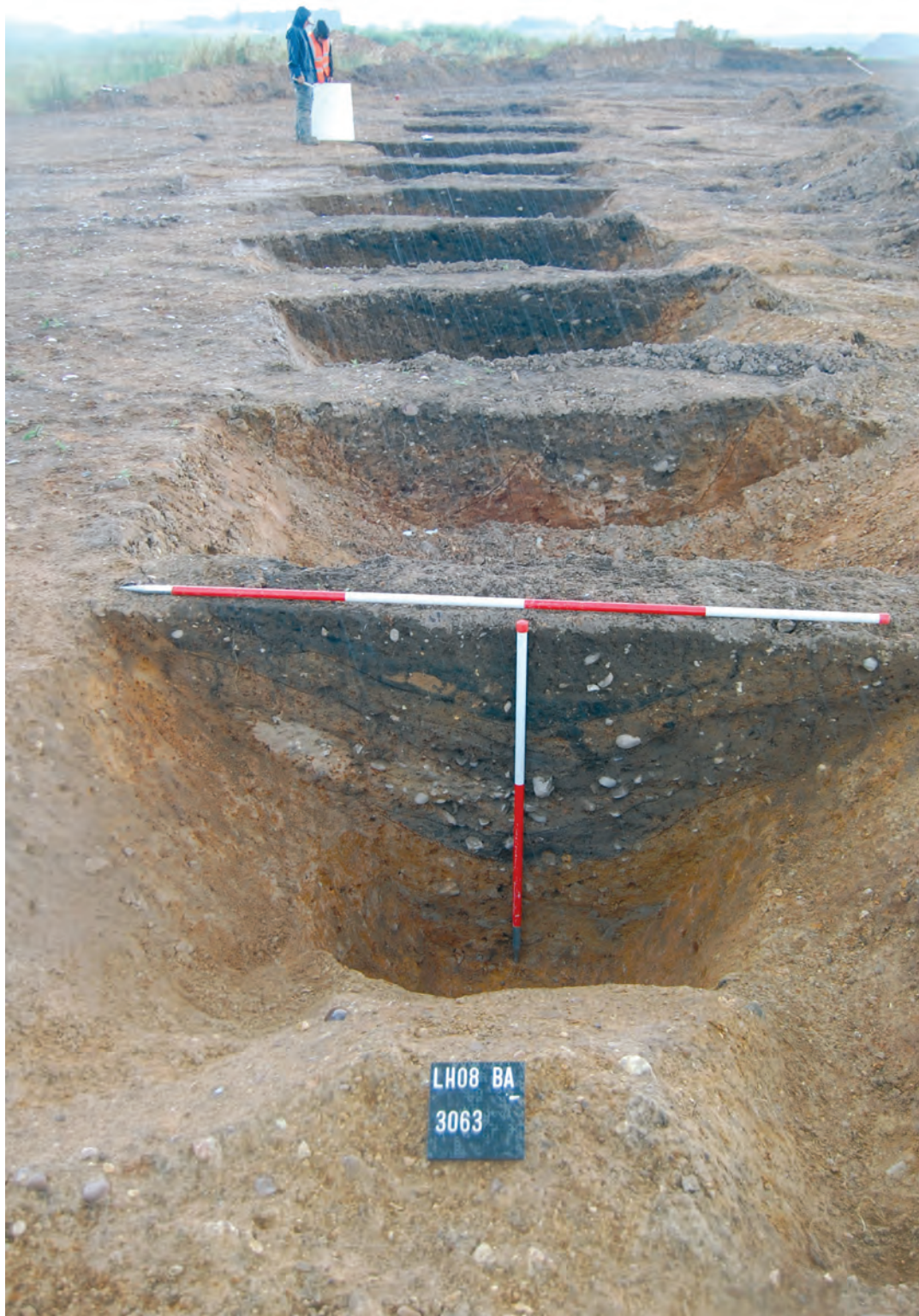


Fig. 5.7 A Late Bronze Age pit alignment excavated (in the rain) at Ling Hall Quarry, Church Lawford, in 2008. These large pits were rectangular and the profile depicts a typical sequence of weathering, slippage and silting over a considerable time span. Pits only contain pottery when adjacent to settlement sites.



Fig. 5.8 Hillforts in Warwickshire.

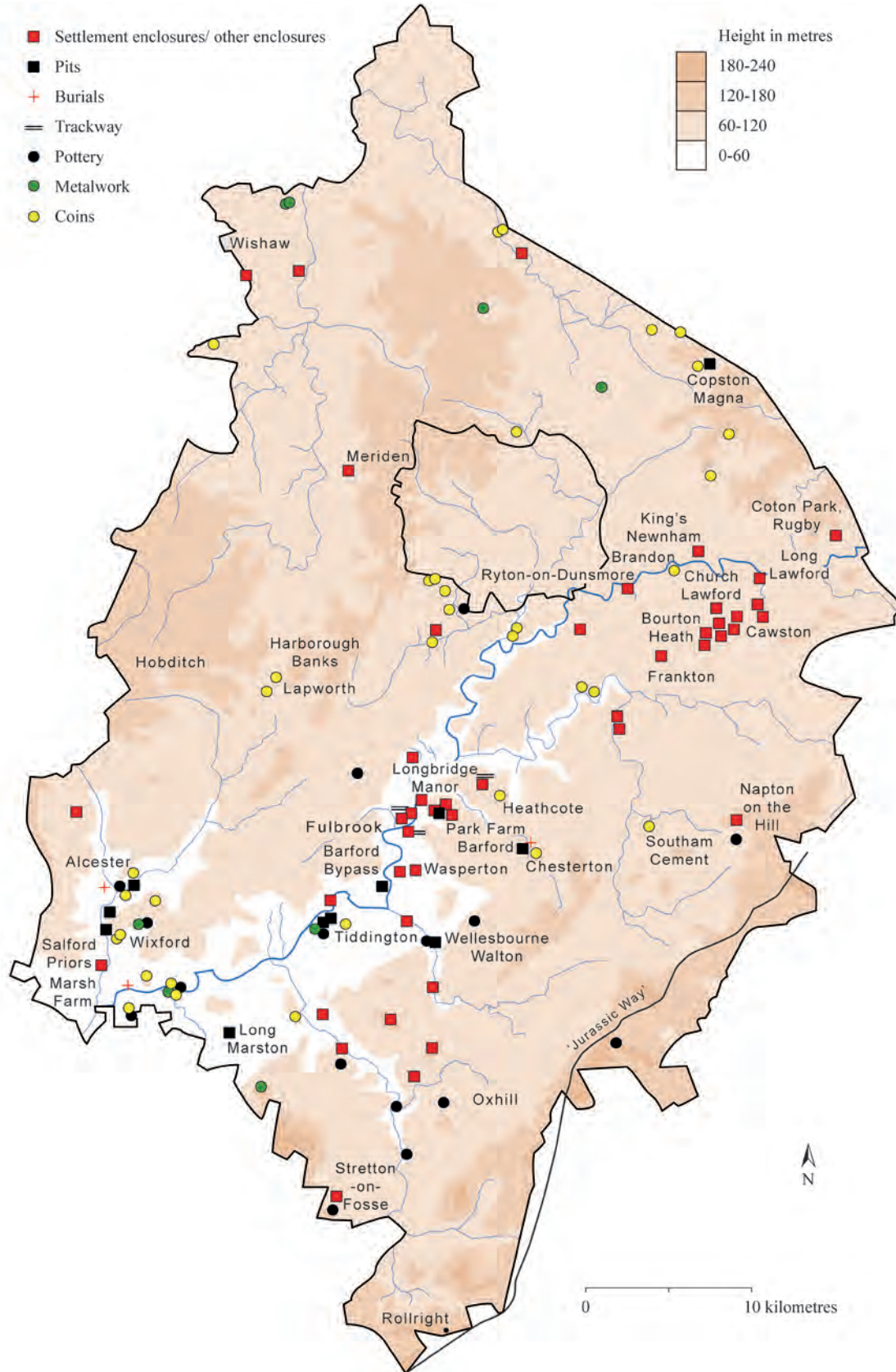


Fig. 5.9 Middle and Late Iron Age sites in Warwickshire.

of a ‘banjo’ enclosure in the county known at Heathcote produced a few sherds of probable Middle Iron Age pottery when evaluated (Coutts and Jones 1998).

Whereas unenclosed settlement of this period is not generally demonstrable in cropmark form, two major sites were discovered as a result of geophysical survey. An extensive settlement with at least 25 buildings at Coton Park, appears to be all the more important as it is the first in the study area to be found on Boulder Clay (Northants Archaeology 1998). The implications of this are potentially far reaching, as it appears that the site was far more sophisticated in terms of material culture than any of the sites so far excavated on gravel. Quite why this settlement produced substantial material evidence, whilst the enclosures beneath the DMV to the north did not (Maull 2001), is yet to be explained.

A further extensive site at Walton, Wellesbourne, though only partially excavated, was apparently occupied through to the Late Iron Age (Palmer 2012; Figure 5.10). Two areas of Middle Iron Age activity known from Tiddington, Stratford upon Avon, are thought to represent closely spaced settlements (N. Palmer, pers. comm.), although it is not known if either were enclosed, and a discrete, possible roundhouse, described by a curvilinear ditch at Wishaw also yielded pottery of this date (Powell *et al.* 2008).

Some of the pit alignments that divide earlier land-units on Dunsmore are of this date (Palmer forthcoming (b)), as is a pit alignment excavated at Wishaw (Powell *et al.* 2008). Linear boundaries also form integral parts of the settlements at Coton Park and Park Farm, although they

seem to have become redundant at Wasperton, as none are attributable to this phase. At Walton a linear boundary ditch divided the area of occupation and provided the axis for the settlement features (Palmer 2012). Other linear boundaries of suspected later prehistoric date are known throughout the study area, yet apart from those previously mentioned only the major earthwork of Hobditch, Lapworth, has been examined in detail. This was suggested as Middle or Late Iron Age construction (Cracknell and Hingley 1995; Hingley 1996, 12) despite a much earlier radiocarbon date from a secondary fill.

The Late Iron Age c.100 BC–AD 43

Late Iron Age settlement is now better represented in the record than the Middle Iron Age. A major complex of inter-linked enclosures based on a double pit alignment was excavated at Ling Hall Quarry (Area Z, Palmer 2001; Palmer forthcoming (b)). At Wasperton the main enclosure was enlarged, and open settlement is associated with a large pit group in the northernmost part of the excavated area during the period 250 BC–1. The main settlement enclosure was enlarged again during the conquest period but there was a focal shift to the south in the early Roman period.

Further enclosed settlement was examined at Brandon Grounds (Bateman 1978b), whilst the fragmentary enclosures excavated beneath the Coton DMV were apparently occupied throughout this phase with a suggestion of continuity into the Roman period (Maull 2001). Part of a settlement excavated at Ryton-on-Dunsmore yielded the fragmentary remains of



Fig. 5.10 Middle Iron Age pit burials found alongside a boundary ditch at Walton Wellesbourne on the Transco Newbold Pacey to Honeybourne gas pipeline in 2000. The inhumations were covered in ‘midden’ material which conveniently combines elements of boundary affirmation with regeneration and the agricultural cycle.

two unusual ovens which had been deposited in pits (Palmer 2005; forthcoming (a); Figure 5.11). Two settlements have now been excavated at Bubbenhall (Palmer *et al.* 2011), whilst a third has been revealed as a small pit group.

Late Iron Age pit groups have been examined in an enclosure at King's Newnham (Palmer 2003b), at High Cross Quarry, Copston Magna (Palmer 2009), at Southam Cement Works, Stockton (Palmer 2009b), and on the Barford bypass (Palmer 2005; Palmer 2010d; Figure 5.12). Further limited evidence for activity was examined at Wixford (Palmer 2000a). A disparate group of features of Late Iron Age/Early Romano-British date has been recorded under difficult salvage conditions at Stretton-on-Fosse (Gardner *et al.* 1982), but it remains unclear as to their function and significance. Late Iron Age settlement features were also recorded at Napton with some evidence that occupation continued into the Romano-British period (Dalton and Booth 1997). A similar date range is suspected of the settlement evaluated west of Alcester (Jones and Palmer 1995;

Warwickshire Museum 2000). Settlement at Marsh Farm (Palmer 2000b) continued seamlessly through the Late Iron Age into the Roman period (Palmer 2010b). Geophysical survey on the Lias clays at Oxhill has identified an extensive site of probable Middle and Late Iron Age date below a Roman villa (Archaeological Surveys, pers. comm.).

A few linear features that yielded pottery revealed during an evaluation at Longbridge Manor, Warwick (Jones 1997), probably indicate a former settlement site, although the site was developed without any further mitigation. No certain examples of boundary features of this period are known, although, on two sites, they have been extrapolated when found in association with Middle Iron Age pit alignments. At Ling Hall Quarry many of the pit alignments were cut by shallow ditches which have been suggested as re-defining the earlier land units or estates (Palmer 2002), and a Middle Iron Age pit alignment at Wishaw was followed by a segmented ditch of probable Late Iron Age date (Powell *et al.* 2008).



Fig. 5.11 A late third or second century BC brazier or oven deposited in a pit at Ryton-on-Dunsmore along with a La Tène involuted brooch, discovered on the A45/A445 traffic Island improvements in 2005.



Fig. 5.12 A Middle to Late Iron Age pit with central posthole recorded on the Barford bypass in 2005. It is one of a growing corpus in Warwickshire, although the significance of the central posthole remains unknown.

Geophysical survey at Walton revealed a rectilinear orientation to the major features and some of the linear boundaries may have formed small fields (Palmer 2012), but only at Ling Hall Quarry (Area AB) has a certainly pre-Roman field been excavated (Palmer 2004b; forthcoming (b)). A variety of linear features, which have produced pottery ascribed to the Middle or Late Iron Age in evaluation reports, have been described as field boundaries in the absence of evidence for any other function, but it is far from clear how many of these actually formed structural evidence within a settlement.

Material culture

Metalwork

The material culture of the Middle and Late Bronze Age is mostly represented in the two HERs by metalwork. Until recently only two stratified pieces were recorded: a chisel from Barford (Oswald 1969), and a knife from Coton

Park. Other occasional finds included 11 palstaves, 8 axes, 4 spearheads, 3 dirks, 1 gouge, 1 adze and 2 examples of gold ring-money. Many of these pieces have been poorly recorded, are unprovenanced, or long-lost, making it impossible to interpret their distribution, but none are known to have derived from riverine or watery places. This paltry list has recently been augmented by finds recovered from the midden site at Whitchurch, which include six stratified copper alloy artefacts and an assemblage of 10 ‘tools and weapons’, 19 ‘decorative’ pieces, and 38 pieces of waste (Kate Waddington, pers. comm.)

Further Iron Age metalwork includes an iron spearhead recovered from a Late Iron Age pit at Ling Hall Quarry (Area Z) and a La Tène iron brooch found in a pit at Ryton-on-Dunsmore (Saunders forthcoming). An undated bronze head and an undated torc are also known from the wider region. There are two known examples of Late Iron Age horse harness fittings, a hinged fitting (Wise 1997) and a harness mount (Bolton 1998), and there is also a

single Late Iron Age terret-ring. A total of only 39 coins are recorded on the HER, and, although their recording is inconsistent, they are predominantly Dobunnic, while a few Corieltauvi occur, including a hoard of ten from the north of Warwickshire. Many appear to have been deposited in Romano-British contexts, but their distribution may still relate to pre-Roman tribal territories (Booth 1996). Given the small number of other metalwork finds recovered from the study area, it is perhaps a surprise that a significant quantity of currency bars has been recorded (Hingley 1990; 1996, 20). Their occurrence in, or close by, boundary features at Park Farm (Barford), and at Nadbury and Meon Hill hillforts, strongly suggests that their burial was invested with meaning.

Ceramics

Hingley (1996, 20) has intimated that Middle Bronze Age ceramic forms may have been in use in the Late Bronze Age in parts of the study area based on the late date of one of the Deverel-Rimbury associated cremations from Ryton-on-Dunsmore. It has also been pointed out by Hancocks and Woodward (pers. comm., 2003) that there is a concentration in the upper Warwickshire Avon area of mainly funerary associated finds of probable Middle Bronze Age date that includes two new examples from Ling Hall Quarry.

Only a few sites have produced plain wares of Late Bronze Age type (cf. Barrett 1980), including Whitchurch, Park Farm (Ford and Woodward 1994), and Broom, Salford Priors (Woodward 2000). Pottery that is less easily definable and may as likely be Early Iron Age comes from Hampton Lucy, Ling Hall Quarry (Area BA) and Ryton-on-Dunsmore (Palmer 1990; Palmer forthcoming (a)). Other sites that have produced Early Iron Age forms include Nadbury (McArthur 1990), Burton Dassett, Church Hill (Booth 1989a), and Barford (Oswald 1969).

The division between the predominantly shell-gritted and predominantly non-shell-gritted pottery assemblages identified by Hingley (1989, fig. 9:6) as along the Avon Valley, appears still to hold true. Curiously of all the sites excavated, only Rollright (Morris 1988), Meriden (Stevens 2005) Marsh Farm (Hancocks 2010) and Tiddington (Booth forthcoming) have produced briquetage.

Buildings and structures

The open-area excavations at Coton Park and Ling Hall Quarry have substantially increased the number of buildings in the study area. No convincing rectangular buildings are known, all the structures being circular or sub-circular. The undated post-built structures at Barford were relatively small, albeit with evidence for porches on the south-east side and internal hearths. None of the remaining excavated buildings, with the possible exception of one at Tiddington

and another at Wasperton, revealed convincing patterns of posthole placements, although an example at Whitchurch has now been verified. Portal posts are suggested at the Middle Iron Age sites of Coton Park and Park Farm, and perhaps one example at the Mid-Late Iron Age Meriden site.

The majority of excavated structures are defined by regular or irregular penannular gullies. These are usually interpreted as eaves-drip gullies and the absence of postholes is taken to suggest either mass wall or ground-beam construction. Porches on the other hand are noticeable by their rarity. Two groups of Late Iron Age buildings at Ling Hall Quarry (Area Z and Area BA), identified as having wall slots also have elongated porches of exceptional length and a wall slot is also postulated for one building at Middle Iron Age Coton Park. Floors and hearths are currently conspicuously absent from those buildings which have been identified.

Banana-shaped gullies resembling the terminal ends of eaves-drip gullies have been found at Coton Park, High Cross Quarry, Marsh Farm Quarry, Meriden Quarry, Wishaw, and Ling Hall Quarry, spanning the Late Bronze Age to the Late Iron Age. However, it is often uncertain if they actually indicate the positions of buildings, not least because they have yet to be discovered associated with hearths or floors, although this is also true of the majority of the buildings defined by penannular gullies. With the exception of a single example from Wasperton that faced southwest and two buildings at Meriden that seem to have faced west or south, buildings in the region all faced either north-east, east or south-east. Few of the buildings are likely to contribute to the current debate as to whether orientation was a practical or cosmological (cf. Oswald 1997) consideration, mainly as a consequence of a general paucity of finds from the sites in question.

Agriculture/economy

The economy of the excavated settlements has in most cases been difficult to assess, principally because the survival of organic material on many of the sites has been poor, a deficit largely resulting from acidic soils. Coton Park is, therefore, rather an exception, having produced a reasonable assemblage of animal bones from the usual domestic species, as well as some from wild deer. A preponderance of sheep remains at the admittedly small-scale Rollright excavation was taken as evidence that the upland location was used for grazing, with pottery in the surrounding plough-soil indicative of manuring and, therefore, agriculture (Lambrick 1988, 84). Most sites, even those such as Ling Hall Quarry which is suspected of having a pastoral economy, have produced quern and/or rubbing stones, but an exceptional assemblage was retrieved from the Late Bronze Age pits at Hampton Lucy. Few sites though have yielded any particular evidence for crop husbandry, as for the most

part only occasional charred cereal seeds are recovered. The exceptional sites in this respect are in the Avon valley at Barford bypass and King's Newnham, where dumps of charred grain have been found.

Pits suitable for grain storage (cf. Reynolds 1974) have been recorded at Wasperton, and the unenclosed settlement sites at Hampton Lucy, Walton, Ryton-on-Dunsmore traffic island and Ryton-on-Dunsmore Peugeot Works (Mason forthcoming), Barford Sheds (Oswald 1969), Barford bypass, King's Newnham, and Burton Dassett (Booth 1989a, 86), and it may be significant that, in each of these cases, the associated settlements were unenclosed.

Sterile pit groups have been recorded within the enclosures at Marsh Farm Quarry, and at Long Itchington (Palmer 2010a), whilst enclosed settlements at Ling Hall Quarry (Palmer 2002; forthcoming (b)), Park Farm, Barford (Cracknell and Hingley 1994), Meriden (Stevens 2005) and Brandon Grounds (Bateman 1978a) were devoid of pit groups, as was the boundary based settlement at Coton Park, Rugby (Northamptonshire Archaeology 1998), and the open settlement at Bubbenhall (Palmer *et al.* 2011).

Industry

Evidence for industry and manufacture within the study area is almost non-existent, a recent significant exception being the Middle Iron Age Coton Park site. Here, there appears to have been distinctive areas where industrial or craft activities took place. One group of structures was associated with bone and copper working, as 'bronze working' crucibles and fired clay moulds for horse harness fittings have been identified. Iron smelting slag was recovered from another building and a separate building was associated with fired clay loom-weights. Limited evidence for iron smithing has, however, been recorded at Nadbury hillfort.

Death and burial

Warwickshire is comparatively lush with features associated with death and burial. A small Deverel-Rimbury associated cremation cemetery has been excavated beneath the Coton Park DMV, adjacent to the Middle Bronze Age pit group. The late Deverel-Rimbury cemetery at Ryton-on-Dunsmore (Bateman 1978a) seems to have provided a focus for later activity, and the absence of distinct settlement evidence can perhaps be taken to indicate that the overlying enclosure complex was used for ritual and ceremony. The mini-ring-ditch in the centre of one enclosure has been compared to another at Broom, Salford Priors, which was the site of a cremation pyre dated to the Early Iron Age and associated with two bronze cauldrons (Palmer 2000a).

Two further mini-ring-ditches have been examined at Ling Hall quarry. One example associated with a single Late Iron Age body sherd stood alone inside a land-unit, whilst the other was enclosed within a rectilinear ditched

enclosure set apart from and facing away from the main settlement site. This latter example was positioned in the south end of the enclosure leaving a wide open space to the north, possibly for mortuary and ceremonial use. It is worth noting the similarity of this layout to temples and shrines of the Roman period with their enclosed precincts. A further possible example was noted at Long Lawford (Havard *et al.* 2006). A group of three small rectangular enclosures set close by the Neolithic monuments at Barford (Oswald 1969), may also be considered as possible ceremonial sites.

A large circular building constructed immediately north of the proto-precinct enclosure at Ling Hall Quarry, and conspicuously apart from the settlement complex, was defined by a penannular gully with an unusually wide, east-facing entrance. This building conceivably had a non-domestic function, perhaps related to the ritual enacted within the enclosure, possibly for the use of a participant or functionary, or it could have been a liminal place where bodies resided prior to disposal. Nearby a group of three- and four-post structures of Middle Iron Age date set in an otherwise vacant land unit, immediately opposite another settlement enclosure and close to a Bronze Age cremation deposit, could represent excarnation platforms, perhaps placed to underpin land tenure in full and plain sight of the opposing settlement (Palmer 2002).

Four Early Iron Age pits with inhumations have been excavated at Wasperton and a group of three Middle/Late Iron Age pits aligned on the edge of the main boundary at Walton had also contained inhumations (Figure 5.10). Two of these had an ungulate tooth positioned in or adjacent to their eye sockets. A low stone platform, or reduced cairn, located within a C-shaped gully adjacent to the burials, produced a quantity of fuel ash slag that conceivably emanated from a pyre beneath the stone platform (Palmer 2012), although a more prosaic domestic explanation is also possible.

Further afield, the skeleton of an infant was recovered from an Iron Age pit at Rollright and the crouched inhumation of a child, albeit undated, was recorded below the Roman levels at Chesterton-on-Fosse (Taylor 1967, 18–19). A possible burial of Iron Age date from Stretton-on-Fosse was accompanied by two bracelets (Thomas 1974, 40), and further possible inhumations of the first millennium BC have been postulated at Bidford-on-Avon and Hartshill.

Ritual

Evidence for the continued deposition of significant and special deposits in the later prehistoric period has been found at a number of excavated sites. At Barford a bronze chisel was deposited in a pit within the Neolithic hengiform enclosure (Oswald 1969). A pit with structured deposits which included a ceramic 'drinking set' was, in the Late Bronze Age, positioned on an alignment of Neolithic monuments at Wasperton, and similar 'drinking sets' have now been recognised at Hampton Lucy and Barford bypass (A. Hancocks, pers. comm.).

Other special deposits are known from Iron Age contexts generally in pits or threshold features. A human skull was placed in the bottom of a pit in an alignment at Wishaw (Powell *et al.* 2008, 290), and a human maxilla fragment was recovered from the end of a ditch at Barford bypass. At Walton several pits contained articulated animal bones, including the pits that contained inhumations. Other special pits are known from Nadbury, Ling Hall quarry, High Cross, Meon Hill, Park Farm, and Rollright, and a very deep, almost shaft-like pit, containing a sizeable pottery assemblage,

was found within a possible enclosure at Charlecote Road, Wellesbourne (Palmer and Jones forthcoming).

Other threshold locations such as the terminal ends of penannular gullies and enclosure ditches, which have yielded concentrations of pottery and quern fragments, are known from Ling Hall (*e.g.* Figure 5.13), Marsh Farm, and Wishaw, but they are almost certainly more widespread than cursory examination of the records suggests.

Two (surviving from a group of four) Ewart Park-type Late Bronze Age swords from the River Blythe at Meriden



Fig. 5.13 A Late Bronze Age/Early Iron Age roundhouse gully excavated at Ling Hall Quarry, Church Lawford, in 2008. The terminals were significantly 'exaggerated' and were infilled with heat-cracked pebbles and pottery.

appear to be the only known votive offerings in the study area not from dry-land. Whether this is because the practice of conspicuous consumption (cf. Bradley 1990) was not focused on the 'watery places', common to other regions, or too little river dredging has occurred in recent times, is a matter for future research.

Environment

Few of the sites so far analysed have produced evidence for their respective local environments. The oft-quoted supposition of Professor Shotton (1978, 28–29) that the sedimentation at Pilgrim Lock near Bidford-on-Avon resulted from large-scale ploughing and soil erosion in the Late Bronze Age has yet to be substantiated despite the extensive excavations in the Arrow Valley. At Salford Priors there was evidence for the exploitation of woodland, such as coppicing in the Late Bronze Age, and also evidence for the cultivation of spelt wheat in the Iron Age (Palmer 2000a). Pollen, plant macrofossil (Woodwards and Greig 1989, 91–94), and insect remains (Girling 1989, 95–96) evidence from Alcester suggested an extremely wet environment, probably of marshy ground with standing water. Some nearby forest of oak and lime with hazel scrub was indicated, although grassland and weeds of disturbed land were likely to have been closer by, this horizon dating to the Middle Iron Age.

At Southam Cement Works, Stockton, the analysis of snail shells and charred plant remains from a possible territorial boundary ditch (snail shells being a very rare occurrence in Warwickshire soils) provided evidence for an open environment, although it is possible that a hedge grew alongside the ditch (Robinson forthcoming).

At Ling Hall extensive sampling for charred plant remains has recovered evidence that suggests that woodland clearance precipitated the development of heathland on the acid-rich soils, and the shortage of timber probably resulted in the burning of gorse and heather as fuel throughout the occupation of the area. Waterlogged deposits from a Late Iron Age well have revealed moderate amounts of local mixed woodland within a heathland environment, possibly indicative of a heathery pastureland (Greig forthcoming).

Implications for research

It is clear from the available evidence that few trends emerge from these data. The sharp increase in the number of excavations carried out over the last few years has actually served to increase the diversity of the settlement and landscape record of the later prehistoric period, as it has in the East Midlands (Willis 1997, 210).

The Middle Bronze Age lacks definitive settlement evidence, and contemporary landscape utilisation is perhaps more akin to that of the equally evasive earlier prehistoric period. If the mobile lifestyle truly did persist much longer

than was conventionally recognised (cf. Richmond 1999), we need to refine our survey methods accordingly and perhaps adopt a subtler approach to researching this period. There is a perceptible increase in activity during the Late Bronze Age/Early Iron Age with the first clear evidence of settlement and boundary construction on a limited number of sites. The midden site at Whitchurch, in the Feldon of south Warwickshire, could provide a crucial context for ceramic and other material class studies.

The first enclosed settlements occur in the Avon Valley in the Early Iron Age, and at least one hillfort site may have been utilised at this time. Post-built linear boundaries were constructed on Dunsmore in an area with little evidence for earlier prehistoric activity, and mini-ring-ditches may have been used in some funerary practices, as they are in the Arrow and Avon valleys, where the earliest pit inhumations also occur. Extensive areas of settlement are indicated by pottery scatters in the Feldon region, whereas few sites across the remainder of the study area have produced surface scatters. The construction of boundaries seems to have been an important aspect of Late Bronze Age–Middle Iron Age settlement patterns. Natural boundaries, such as stream tributaries, defined estates in the Avon and Arrow valleys (Palmer 2000a) and, alike the land-units on Dunsmore, they underwent a period of subdivision as populations increased. However, unlike the Dunsmore examples, which suffered from soil denudation and eventual abandonment, in the Arrow Valley intensification was successfully managed during a shift to more arable farming in the first century AD (*ibid.*).

By the Middle Iron Age the complex of land-units imposed on Dunsmore had developed and settlement enclosures used the boundaries as their spine. There appears to be a distinction between this organised landscape and the discrete settlements known nearby. Extensive open and enclosed settlements developed on the Boulder Clay slopes between the Avon and the Swift near Rugby, the material assemblages from one site being a rich vein of cultural data only matched at the Whitchurch midden. Open and enclosed occupation continues in the Avon Valley, the subtle shifts in settlement foci perhaps indicative of localised soil denudation, or perhaps even deeper, arcane cultural requirements.

Late Iron Age settlement, predominantly known from the major river valleys and on Dunsmore, was both open and enclosed, and often witness to a change in settlement foci in the period leading to the conquest. At present, the Late Iron Age does not witness the same preoccupation with boundary features as earlier, except on Dunsmore, although larger landscape boundaries, on the territorial level, are suspected in the later period. How far this reflects a more sophisticated set of social relations is far from clear.

Large projects such as the quarry sites of Wasperton, Marsh Farm, Ling Hall, Meriden, Bubbenhall (Figure 5.14),



Fig. 5.14 Archaeologists fence off an area of Late Iron Age settlement during topsoil stripping at Bubbenhall Quarry; the quarry operator removes surrounding overburden and provides ladder!

and High Cross, and the large-scale housing developments at Coton Park have shown the benefits of excavating on a landscape scale. From all of these sites important deposits that were not suggested by cropmarks have provided invaluable physical and contextual data. Too few other settlement sites have been excavated on a wide enough scale to attempt meaningful intra-site analysis or to determine landscape use and environmental setting.

Environmental indicators, evidence for agriculture, and evidence for craft and industry are almost non-existent, as is evidence for material culture aside from ceramics, although the Portable Antiquities Scheme may well provide interesting metalwork data.

Future directions

Clearly there is a perceptible increase in the evidence for activity throughout the period under consideration, as has been forecast by researchers in other regions (cf. Willis 1997,

210). But is this a reflection of the increase in population and the widespread adoption of farming as was widely forecast? Or, does the evidence depict more subtle processes related to changing domestic architecture and cropmark formation, or changing depositional and taphonomic processes revealed by material evidence? The once seemingly rigid correlation between settlement sites and gravel geology has now been fractured by the evidence from the clay-based Coton Park sites, and the Lias clay sites at Brailes and Oxhill. Shattering this orthodoxy has perforce demonstrated that the gravel sites only represent the occupation and use on the gravel sites, and not the region as a whole. Moreover, the gravel sites may well have been far from favoured (contra Webster and Hobley 1965, 2).

Future emphasis should be on locating and sampling settlements in non-gravel areas. The work by Richard Hingley in the Feldon has ably demonstrated that prehistoric ceramics do survive in the local plough-soils. This is a condition that could be capitalised on by field survey across

the study area, particularly in areas covered by subsoil unlikely to be conducive to cropmark production. Syntheses of the period will continually suffer if we are not prepared to take on this shortfall.

A major obstacle in our understanding of the period is the lack of a reliable chronological framework. The remedy begins with an insistence at the curatorial level that radiocarbon dating becomes routine and that appropriate dating strategies are specified on development control sites. It should be possible to acquire a suite of AMS dates from all such future sites and, where possible, they should be accompanied with programmes of TL and OSL dating (cf. Haselgrove *et al.* 2001). Where possible scientific dating should be used to augment and rationalise local ceramic typologies which currently are over-reliant on typologies from other regions.

There are no substantial tracts of pristine woodland, upland pasture or moorland that have escaped the ravages of the plough, masking archaeological sites within the study area. The majority of settlement sites are, therefore, likely to be heavily ploughed out, a condition that can only worsen over time. The absence of upstanding earthworks and positive features requires that particular attention be paid to the negative features on such sites in order to understand depositional and taphonomic practices. An emphasis on the accurate and detailed recording of all finds within settlement areas for instance, is required to undertake spatial analysis, and consistent sampling strategies are needed to understand the vagaries and complexities of deposition.

The gravel terraces on which the majority of sites have been identified have largely proven poor in archaeobotanical and environmental remains, and there are no known waterlogged sites in the study area, nor are there any known preserved under alluvial or colluvial deposits. This is a major deficit for it is on these sites in other regions that the highest quality data is retrieved. It is crucial, therefore, that where waterlogged or otherwise preserved deposits are discovered, that a full and extensive range of environmental and artefactual sampling is undertaken. On gravel sites the potential for off-site sampling should be explored wherever possible. In addition, a programme of predictive modelling could be undertaken and the results incorporated into development control procedures.

We know next to nothing about the hillforts of Warwickshire and Solihull, a deficit in understanding that is unlikely to be remedied in the development control process, as nearly all are prominently positioned in the 'green belt'. This is a serious shortfall that must be addressed if we are to move forward our understanding of their potentially pivotal relationship to the wider region (cf. Hill 1995). Exploration of these sites, located as they are between the hillfort-dominated landscapes of the south and west, and the 'open country' of the east, could make a suitable project for academic research. Of particular interest in this respect is Harborough Banks, a nexus of earthworks

possibly indicative of a territorial oppidum (Hingley 1989, 145) constructed on a tribal boundary in an area of little previous settlement evidence (Moore 2006). This potentially links with the apparent north/south division in ceramic fabric types highlighted by Hingley (1989), which broadly mirrors in the distribution of Iron Age coins of the Dobunni and Corieltavi, and could provide the basis for the detailed study of tribal affiliation and trade networks in the first millennium BC.

The apparent dearth of pre-Roman field systems in the study area, if actually representative of the landscape in the later prehistoric period, is critically important, as it may well be indicative of broader agricultural practice. In the past, this type of evidence has too easily been dismissed as mundane or insignificant, and there has been a shortfall in appropriate mitigation during development control.

The overarching shortfalls that frustrate detailed analysis and understanding of the later prehistoric period stem from our reliance on the data from cropmark gravel sites. Settlements and boundary features clearly did not exist in isolation, as they were small parts of complex landscapes and territories. It is essential that ways and means are developed for wide-scale survey and sampling in the apparently blank areas that are currently receiving no attention, and are unlikely to in the future if left to development-led survey. This said, the data now amassed, represents a significant corpus of material which is easily comparable to that in many of the better studied regions and which will no doubt reward any future interrogation.

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Herefordshire: from the Middle Bronze Age to the later Iron Age

Peter Dorling, Keith Ray** and Paul White****

Introduction

This brief review of archaeological evidence for the time-span from the Middle Bronze Age to the later Iron Age in Herefordshire is focused upon the first millennium BC, but begins with evidence from c.1500 BC and ends with the Roman invasion of this part of Britain beginning c.AD 50. The paper is organised chronologically, but the scope for conventional historical narrative is limited, so the discussion instead embraces themes as diverse as settlement activity, farming, funerary practices, landscape organisation and exchange. It will become clear that although new studies in the past 15 years have improved our understanding of these themes, present knowledge remains slight. This is so even for periods during which complex sites are abundant, such as the Middle Iron Age, c.550–c.150 BC, due to the small scale, and the infrequency, of archaeological investigations.

One subject that has until very recently dominated discussion of this time-span in Herefordshire is the character and development of ‘hillforts’, the often massively built earthwork enclosures for the most part sited upon hilltop eminences (see Ray 2002, for a preliminary overview of settlement in Iron Age Herefordshire as understood at the turn of the millennium; Figure 6.1). These sites developed sometimes over extended periods of time, and in some cases their early developmental phases included short-lived individual campaigns of construction that produced substantial earthworks. A series of archaeological investigations at Credenhill

(west of Hereford; Figures 6.7–6.9), at Croft Ambrey (north-west of Leominster) and at Midsummer Hill (east of Ledbury) in the 1960s and 1970s contributed to the literature on hillforts across Britain more generally (Stanford, 1974; 1991). Recent work has produced the beginnings of a corrective to some of the interpretations promoted then, but what should be emphasised is how small in scale have been the recent interventions, and on how limited a number of sites. This is such a minute sample of the potential evidence that could be gathered from investigations, that any general interpretations have to be treated with caution.

Middle Bronze Age

Settlement sites at Rotherwas, south-east of Hereford

The only firm evidence for settlement structures in Herefordshire during the Middle Bronze Age (c.1500–900 BC) has come from development-related investigations at Camp Farm, Rotherwas, in 2007 and in 2013. In the former project, a circular post-built roundhouse with a south-facing porch was dated to the Middle Bronze Age, and traces of further circular structures were noted (Jackson and Sworn 2014, 24). More recent work in 2013 uncovered traces of activity of likely Middle Bronze Age date north of an industrial sheds complex constructed in 2011 that abutted the new Rotherwas Access Road

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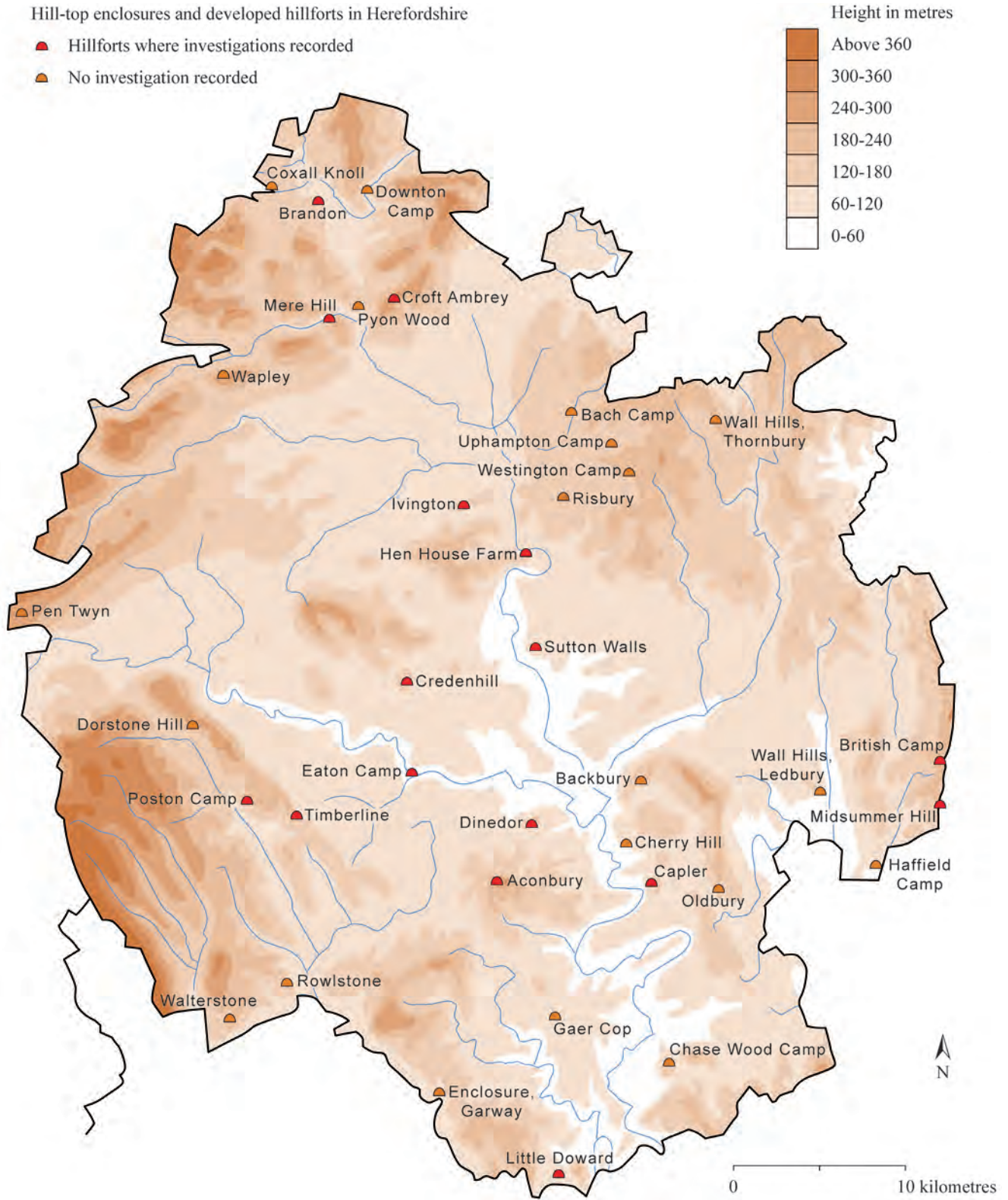


Fig. 6.1 Known hill-top enclosures and developed hillforts in Herefordshire. Recent research excavations have taken place at Mere Hill, Hen House Farm (Dinmore), Credenhill, Eaton Camp, and the Little Doward fort as part of a deliberate programme of inquiry.

on its northern side. It is at least possible, given that no archaeological monitoring or investigation occurred when the complex concerned was built under agricultural ‘regulations’, that these finds represented the northern and southern limits of a settlement extending over some 200m north to south.

Half a kilometre to the west of the Camp Farm site, a massive section was cut across a dry valley east of Green Crize during construction of the Rotherwas Access Road in 2007 (Jackson and Sworn 2014, 29–30). This revealed a substantial ‘organic rich’ deposit that had formed between the middle of the second millennium BC and the 12th century AD. From the time that drainage of this valley below Dinedor Hill first became impeded, the local landscape was largely open and farmed (Pearson, this volume).

Across an area around 6km in east-west extent south of Hereford a series of ‘burnt mounds’ comprising spreads of fire-cracked stones have also been found (Hodder, this volume). These were mostly of Middle Bronze Age or Late Bronze Age date, but some continued to be created into the Iron Age. At Camp Farm, Rotherwas, their origins date back at least to c.2150 BC, when fire-cracked stones were used – along with glacial terrace cobbles – to create the sinuous narrow linear paved Beaker-period surface known today as the ‘Rotherwas Ribbon’ (Jackson and Sworn, 2014, 13–23 and 84–92). Some of the fire-cracked cobbles were seemingly re-used in the Middle Bronze Age to create an upper surface to the ‘Ribbon’ (separated from the lower surface by 0.2m of colluvium, particularly in the near vicinity of the settlement described above; Alex Bayliss, pers. comm.). Towards the northern end of what has so far been traced of the sinuous structure (or here, potentially a separate structure), a burnt mound dated to the early Iron Age had been dug into a 0.5m thick deposit of colluvium that had accumulated over the upper of two narrow, paved linear surfaces.

At Moreton-on-Lugg, to the north of Hereford, during excavations in advance of quarrying, an apparent water-hole (with waterlogged timbering collapsed inwards and perhaps having once acted as a retaining wall) was found associated with a series of pits containing burnt stone (Mann 2007). A further burnt stone deposit formed a paved area lining one side of the water-hole, while the stone-filled pits were arranged in an east-west arc, perhaps screening the hole. The fill of the latter contained plain rim sherds and thumb-nail impressed body sherds from Middle to Late Bronze Age Deverel-Rimbury-like bucket urns.

Middle Bronze Age metalwork and its contexts

A number of isolated discoveries of bronze objects were reported as a result of late 19th century drainage of meres and moors in Herefordshire. An example is Adley Common

near Buckton, on the border with Shropshire, not far from the renowned discoveries at Broadward (Wigley, this volume). Alternatively, they resulted from mid-20th century changes in agricultural land management, such as at Walford, near Ross, and at Willox Bridge at Allensmore, south-west of Hereford. More recently, such finds have been made during recreational metal-detecting activity: an example being the ‘dirk’, or short stabbing sword, found at Admarsh Meadow, Eardisland, in 2003 (White, 2003, 35–37). This latter was the subject of an investigation that failed to find further items, but that established that the meadow occupying a broad hill-crest hollow here had once been a shallow pool (*ibid.*).

Middle and later Bronze Age funerary practices

Evidence for burial practices for the period from the mid-second to early first millennium BC has been found in the east of the county near Mathon, where the remains of what seems to have been an extensive urn cemetery were being destroyed by a sand and gravel quarry in the early 20th century. Between 1907 and 1910 twenty to thirty interments were uncovered before a local antiquarian visited the site and noted two fragments of pottery urns and 13 further deposits *in situ*, some with associated bronzes including spear tips (Ray 2010, 8–11).

At Bradbury Lines, Redhill, in the southern suburbs of Hereford, a primary activity had involved the digging of a circular flat-bottomed and steep-sided hollow 19m across, to a depth of nearly 2m into the natural gravel (Jones and Duncan, 2003; 2010). The lowest fill of the base of this feature contained four cord-decorated rim and collar fragments of a Collared Urn, of Secondary Series type with a date range of around 2000 to 1500 BC. The tip-lines in primary fill at the sides suggested a rapid infilling from an external bank. A circular mound of grey clayey gravel around 7m in diameter had then been formed in the centre of the circular depression, and a structure made from oak timbers had been built on top of the mound. A radiocarbon date of 1310–1050 cal BC was obtained from sapwood from these timbers. This timber structure could have been a large plank coffin or timber chamber, later collapsed; a deposit that contained a few scraps of burnt cattle bone was spread over it. A sample of this bone returned a date indistinguishable from that of the timber structure. A total of 24 sherds from at least three different Middle Bronze Age plain jars with rims featuring perforations were retrieved from the same deposit. This was, therefore, presumed to be a funerary deposit, although no pieces of cremated human bone were found in either context.

A series of ring-ditches of small diameter have been investigated at Moreton, ranged along a slight ridge above the floodplain of the River Lugg close to the water-hole noted above. These features appear to be of a funerary character, but produced few finds apart from sherds of

plain pottery. A feature of the sites was the paving over with small cobbles of parts of the ditches. To the south towards Moreton village was found the most coherent flat cemetery so far investigated in the county, with the burial of cremated bone in inverted urns but mostly in presumed organic containers (Hancocks, this volume).

At Stapleton, near Presteigne in the upper Lugg valley, close to its confluence with the Hindwell Brook, a substantial cremation pyre deposit was found filling an oval-shaped linear scoop or hollow in the upper fill of a penannular ditch defining a small (18m diameter) ‘henge’ (Dorling 2007, 26–30). Both human and animal bone was found to have been cremated, and the presence only of fragments of the bone of hands and feet suggested that the larger bones had been retrieved (Western 2007). A date of 800–740 cal BC was obtained on charcoal from this deposit, which also contained Late Bronze Age pottery and a fragment of a clay spindle-whorl (Woodward 2007).

Late Bronze Age: metalwork ‘hoards’

Several groups of metalwork have been discovered that belong to the Late Bronze Age (Mullin 2012). The most varied group of such items was that discovered at Fayre Oaks, just to the west of Hereford, in the 1920s. This included both swords and spear-heads. A significant group of socketed axes was found in the 1980s at Madley airfield, and further finds have been made to the west of the village more

recently. A group that included both socketed axes and a sword fragment was found in 2007 at Pencoyd (Reavill n.d.).

Middle Bronze Age to Middle Iron Age

Landscape organisation

In some areas, and especially in the north of the county in a 20km ‘arc’ between Eardisley and Leominster, a pattern of fields is discernible that is laid out on a north-west to south-east co-axial orientation. The antiquity of this system is indicated by the fact that both the north-south Roman road, ‘Watling Street West’ and the post-Roman Rowe Ditch aligned north-south across the Arrow valley cut across the trend of this pattern in such a way as to indicate that they were created in periods subsequent to the development of the field system. At The Leen farm, north of Pembridge, investigations in 2003 and in 2007 demonstrated that a pattern of small enclosures located within this system and sharing its orientation date to the late Iron Age and Romano-British periods (White 2003).

To the north-east of Leominster small fields defined by lynchets and sharing the same orientation as those west of Leominster survive in the Whyle Brook/Pudleston area, located both on the steeper slopes and on the tops of the hills. Although undated, they ‘underlie’ the pattern of later enclosures and are in some locations crossed by the ridges of formerly open fields of presumed medieval date. Similar ‘square’ fields ranged along steep hillsides



Fig. 6.2 Trackway (foreground), field-system and rectangular farmstead enclosure seen from the air at Stapleton, north of the River Lugg near Presteigne. Test excavation of a section across the ditch of the enclosure indicated a likely Iron Age date for its construction and use. The field system was clearly contemporary.

also exist in the woodlands of Storridge and neighbouring areas north of Cradley near the Malvern Hills. However, the most convincing pattern of surviving early fields is that associated with an early trackway and a rectangular farmstead enclosure of likely Iron Age date at Stapleton on the River Lugg, north of Presteigne (see below; Figure 6.2).

The first hill-top dykes and enclosures

An apparent Iron Age enclosure at Dinmore Hill (Figure 6.3) explored in July 2009 was located across a hilltop ridge contained within a loop of the River Lugg. Although reasonably well-defined to the west by two arcs of prominent bank and ditch and to the east by a mirroring curving line of ditch, no two sections through the ditch had the same method of construction. A sample of charcoal from the well-sealed base of the most easterly stretch of ditch produced a date of 1310–1270 cal BC. Whether this was a ‘cross-ridge’ dyke or part of an early enclosure is uncertain, and it may be echoed in the flat-bottomed ditch found by Stanford in the earliest part of the Croft Ambrey sequence, which, it

has recently been postulated, may also have been, in origin, a cross-ridge dyke (Field and Smith 2008, 34–35 and 50).

Salvage recording within Ivington Camp overlooking the Arrow valley south-west of Leominster in 1996 (Dalwood *et al.* 1997; Figures 6.1 and 6.4) also revealed a possible primary phase of activity at the site of the later ‘developed hillfort’. Investigation of the inner rampart revealed a row of postholes interpreted as comprising a timber palisade, given a provisional date of the sixth–fifth century BC. This was then succeeded by a dump rampart, traces of which are visible today, before the hillfort developed into a much more extensive complex on the same north-facing promontory.

At Eaton Camp on the south bank of the Wye, west of Hereford, total geophysical survey of the interior of the fort produced indications of two early ditches crossing parts of the promontory on which it was placed (Dorling 2013; Figure 6.5). One of these apparent ditch lines was located just within and parallel to the massive bank and ditch that currently defines the western defences of the hillfort. By inference, this ‘inner’ ditch demarcated the limits of an enclosure that preexisted the more massive upstanding



Fig. 6.3 Hen House Farm, Dinmore: excavations in 2011, looking west. The site (located in the two fields containing trenches at centre of the photograph, as well as that area of woodland immediately to their west) occupies a high spur of Dinmore Hill overlooking the largest bend in the River Lugg. Four detached lengths of curving bank and ditch were investigated during the Time Team-sponsored project. Each length had been built in a different style, facing north-west, north-east, south-east and south-west, respectively. No traces of occupation were found in the interior, prompting speculation that this was some kind of ‘ritual’, or otherwise specialised, site.

bank and ditch to its west. A sample excavation of part of this inferentially early circuit produced an Early Iron Age date (c.590–410 cal BC), which correlates well with a date of c.510–400 cal BC from the base of a ditch nearer to the end of the promontory.

Meanwhile, at the Little Doward fort, a surface representing an interval at the end of a second major episode of infilling of a north-facing ditch, which cut off a promontory defined in other directions by a vertical karst limestone cliff, was dated between 360 and 170 cal BC (Dorling 2012; Figure 6.6). A date for the digging of the original ditch is provided by material that was carbon-dated to 410–390 cal BC. However, traces of a palisade slot beneath the former bank to the south of the ditch were found likely to pre-date the cutting of the ditch in its surviving form. This date is most likely (95% probability) to lie between 770–420 cal BC, or 760–540 at 68% probability. It seems, therefore, either to have been a free-standing palisade without a ditch in front of it, or, perhaps more likely, its accompanying ditch was subsequently re-cut as a deeper more prominent feature when the bank was first built.

The date from the ‘interval surface’ at the Little Doward fort was associated also with the preparation of iron, in a possible ore-roasting pit. This activity appears to relate to, and to be contemporary with, the creation of middens and the occupation of platforms on carefully prepared circular terraces within the enclosure (although these two activities – midden-creation and house-building – may themselves have been sequential rather than contemporary activities, since the midden material, which was intercepted in the limited archaeological excavation, appears to have been re-deposited during the Iron Age occupation of the hill).

At Credenhill, recent excavations (Figures 6.7–6.8) produced pottery that probably dates to the Early Iron Age. In addition to information about rampart construction methods, there was also some evidence for a change in land-use, probably during the early part of the first millennium, prior to hillfort construction. A depth of colluvium was found underlying the massive later enclosure bank near the east gate of the fort. This represented centuries of arable cultivation on the slopes above, and was sealed by an old land surface representing the development of a stabilised



Fig. 6.4 Ivington Camp, near Leominster. The fort (at centre) occupies a prominent spur overlooking the valley of the Stretford Brook, which is crossed by part of a large pre-Roman co-axial field system. Two main phases of development of the fort clearly shown.



Fig. 6.5 The promontory enclosure at Eaton Camp, immediately south of the river Wye at Eaton Bishop, west of Hereford. Prominent banks above the paddocks to the west (left) in this aerial view define the developed phase of the site; geophysical survey revealed the existence of a primary-phase ditch crossing the centre of the two left-centre fields.

grassland sward in the years immediately preceding hillfort construction here (Dorling 2011).

Put together with indications of Late Bronze Age/Early Iron Age activity from Midsummer Hill, and the suggestion of an early circuit of ramparts there (Stanford 1981; Bowden 2005, 15), it would appear that there is a horizon, perhaps dating to the sixth century BC, when the first simple hilltop enclosures were in use. The evidence in particular from the Little Doward enclosure indicates that these were domestic settlements that were larger than that of a single household. The scale and date of these enclosures varies, and several of them appear to occupy promontories or scarp-side locations. In scale and complexity, as well as date, they are similar to the Early Iron Age enclosures of Wessex, such as Segsbury and Uffington in Oxfordshire (Sharples 2010, 116).

Farmsteads and fields in the Iron Age countryside

A considerable number of small-scale simple enclosures are known from aerial photography in Herefordshire, just as in Shropshire. Besides the enclosure at Stapleton noted above, an elongated rectangular single-ditched enclosure, also discovered as a cropmark, was sample-excavated in 2000 at The Ridgeway, Cradley. An area was opened near the south-facing entrance which encountered metalworking debris associated with Middle Iron Age pottery. These deposits had slumped into the upper fills of the ditch, preserving them from the ploughing that had all but erased the internal features and deposits within the enclosure ditch. The lower ditch fill was a single phase comprising stone derived from the levelling of the rampart, with further sherds of pottery indistinguishable in type from that of the upper levels (Hoverd 2000).

Exploratory excavation at an enclosure on Garway Hill (Atkinson and Williams 2007) produced information about the form of the earthen banks, treatment of entrances, and, to some degree, also about the character of occupation inside the enclosure. A small group of potsherds found in one of the ditch terminals near the entrance to the enclosure was dated by its fabric and rim-forms to the Mid to Late Iron Age (perhaps around 150 BC). The banks on either side of the single entrance pointing down-slope to the south-east had apparently been faced with large stones. Inside the enclosure a rammed earth floor, traces of stone and earth wall-footings, and an integral drain were uncovered, all of which features related to a circular or oval hut that was placed centrally.

While the ditched square enclosure at Stapleton (above; Figure 6.2) was most likely to have been a farmstead, its attached fields are of significance in demonstrating the degree of organisation of its immediate environs. However, arguably the most interesting among the features visible in aerial photographs here was a long linear (Dorling 2007, 33–37). Excavation revealed that this linear feature was not a ditch, but rather had been in use as a broad route-way long enough to have formed a hollow-way or sunken track. Subsequently, the linear hollow had then been surfaced with deliberately placed stones. In the silts infilling the hollow, worn and abraded Romano-British pottery was found. No such pottery was found in the ditch of the farmstead enclosure, and it is, therefore, inferred that the farm, the fields, and the accompanying track were in use at one and the same time in the Iron Age. The track is traceable for over a mile across the valley-floor, from the west initially on an almost west-east orientation, and then with a turn to a more north-westerly to south-easterly one. Since the early fields also mirror the changing orientation of the track-way, it suggests that the field system extends southwards as well as northwards of the modern lane, and that the whole landscape here was purposefully laid out from at least Iron Age times.

The developed hillforts

The upper fills of the ditch at the Little Doward fort were the site of industrial activity in the fourth century BC, and it may have been at this time, or slightly later, that a much larger area of ground uphill to the north was included in an expanded settlement delimited by massive ramparts and at least one complex entrance. The process of site expansion is represented clearly at both Ivington Camp and at Eaton Camp; and the nature of activity at the latter included feasting-scale food consumption. In this later phase at Eaton Camp, dated to the fourth–third century BC, there was a circular hut with a partially-paved floor located close to the end of the promontory. This was subsequently buried beneath an artefact-rich horizon that included quantities of pottery.

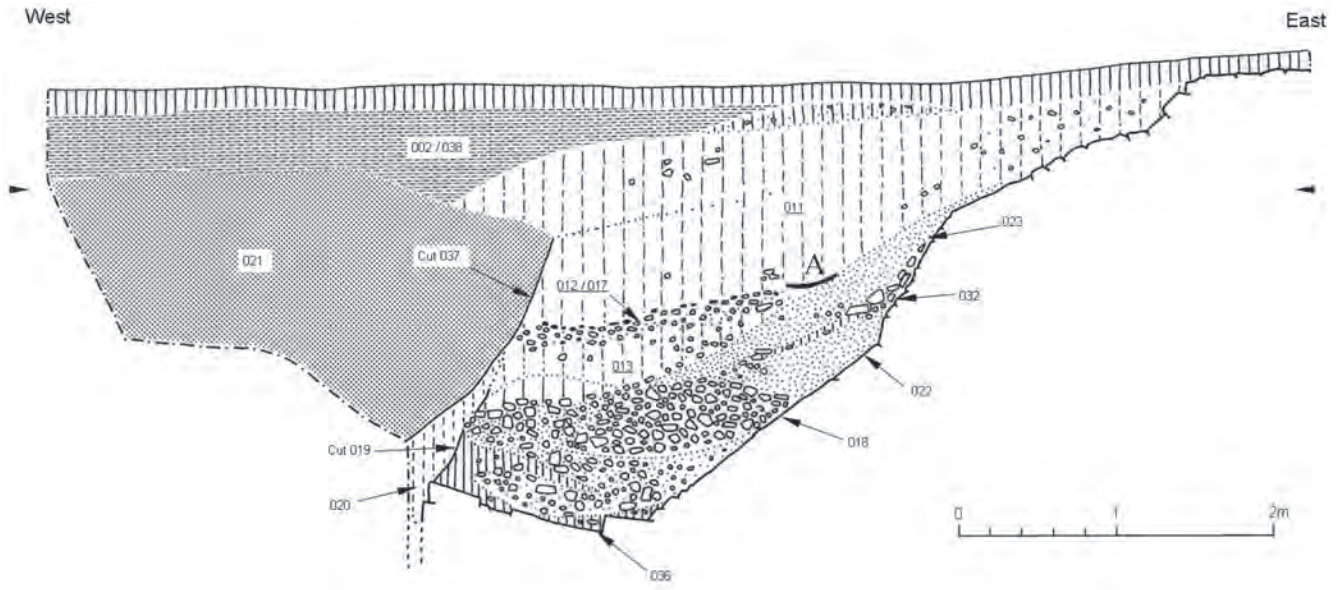


Fig. 6.6 Photograph and section of the primary ditch of the hillfort occupying the promontory at the Little Doward fort.

The excavations at Croft Ambrey and at Midsummer Hill involved extensive excavation of three entrance-ways or 'gate-houses'. Both entrances excavated at Croft Ambrey were located along access-routes into the hillfort that could have had up to three gates ranged along them. In one case,

the excavated entrance was located at the outer end of the 'passage', and in the other at the inner. Both here, and at Midsummer Hill, the entrance was redesigned and rebuilt on at least two occasions, alcoves (possibly for housing tutelary figures) were located to either side just within the



Fig. 6.7 Credenhill Fort, west of Hereford: section across the hillfort bank, viewed from the west (from the interior of the fort). The trench (south-facing drawn elevation, to the left, illustrated below) was dug across an area of bank damaged by modern drainage works, being stepped back for site safety reasons.

gates, and the erosive impact of traffic was reduced by the insertion of a laid cobbled surface.

In the interior of these excavated hillforts there were both circular and rectangular levelled platforms, although those at Credenhill had been much reduced by subsequent ploughing (Figure 6.9). Both four-post-supported raised buildings and circular 'hut' buildings were found on these terraces and elsewhere within the forts: for example, in the

former quarry-ditches situated just within the prominent earthwork ramparts. The four-post structures were used as store-houses, and at Croft Ambrey and at Midsummer Hill some of these were grain-stores. At Croft Ambrey, the buildings were sometimes multi-phase, and in the case of one hut within the lee of the western ramparts a loom had been allowed to decay *in situ* and its clay loom-weights were ranged in a line upon a former floor-level.

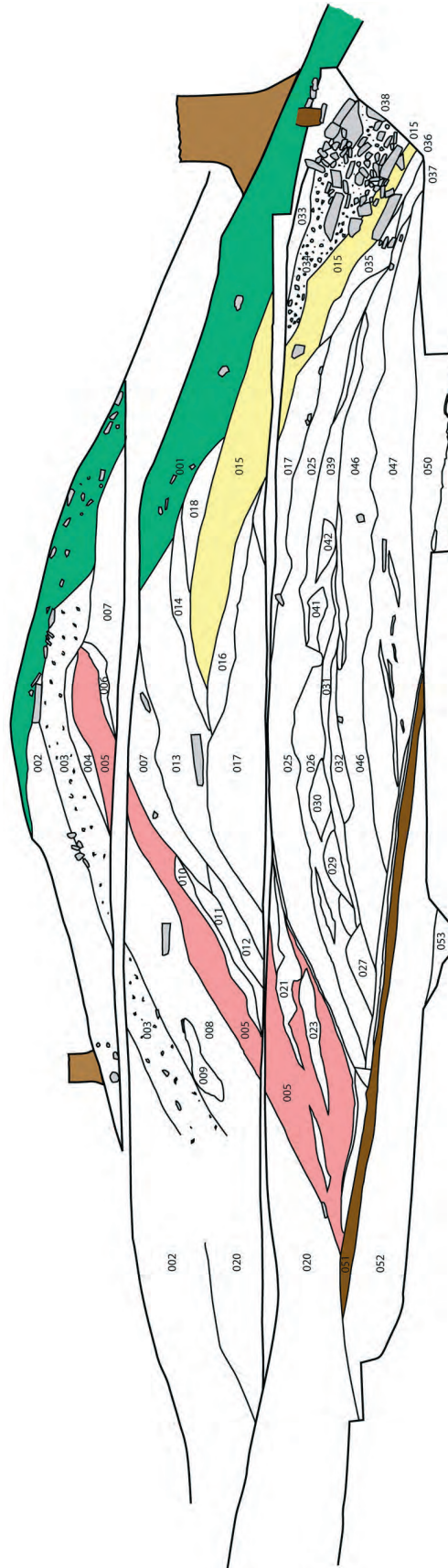


Fig. 6.8 Section across the hillfort bank at Credenhill fort. This south-facing east-west section, with the ditch downslope to the right (east) was excavated in 2008, just to the south of the main eastern entrance to the enclosure. The total length of the section shown here is 15m, and shows the considerable number of individual dumps of soil that made up its bulk in only one or two seasons of construction.



Fig. 6.9 Several of the major hillforts in Herefordshire were planted over with conifers in the 20th century. At Credenhill (shown here), and at the Little Doward, extensive clearance has taken place recently to reveal the interior and defences. The yews growing on the banks are a prominent feature of the fort, which was once used as a warren in Credenhill Park.

Much comparative work has been carried out on the size and morphology, as well as the location, of hillforts both in Herefordshire and elsewhere in the central Marches (for example, see Jackson 1999). Some attention has been paid to the phenomenon of ‘pairing’ of enclosures (cf. Toase, 2008; and as exemplified by Croft Ambrey and Pyon Wood Camp situated less than a kilometre to the west on a considerably lower hilltop nearer the River Lugg). Equally interesting, if equally intractable to explanation, is the identification of similarities between the plan form and construction devices evident between hillforts separated from one another by some distance. Examples within Herefordshire include Sutton Walls on the Lugg to the north of Hereford and Capler Camp above the Wye to the south, near Fownhope. Another ‘pair’ whose plan-form is strikingly similar is Risbury Camp to the east of Leominster, and Old Oswestry in Shropshire. Whether this similarity of form might represent a cultural or historical

link, or is pure coincidence, is an interesting question to ponder but, in our present state of limited exploration, is incapable of resolution.

The endings of hillfort occupation are as difficult to assess as are their beginnings. While Stanford assumed that occupation at Croft Ambrey continued unbroken up until the Roman incorporation of the area into the Empire, the fibulae from the site appear to tell a somewhat different story. While third and second century BC forms are common, the absence of later forms would seem to suggest that by the end of the second century BC, the site was no longer inhabited (Haselgrove 1997).

Religion, ritual and burial

There are no known Iron Age temple sites in Herefordshire, and most of the evidence for ritual and religion is, so far, derived from finds or features that are in essence of Romano-

British date. There is as yet also little evidence for Iron Age burial practice in the county. Rare discoveries such as the finger-bone included in a presumed midden deposit at Croft Ambrey indicate that such finds, representing a wide range of cultural practices, should be anticipated here as elsewhere in southern Britain (Hill 1995). At Wellington Quarry in the lower Lugg valley, a rare double burial of a late adolescent male and a relatively elderly (for the time) female was found in a shallow grave near to a former stream-channel (Jackson and Miller 2010). Not far away at least one head/skull was found actually within a channel, and other body parts and fragments were discovered not far from one another. This series of watery deposits may have derived from a mix of deliberate placement and the erosion of bank-side features, in an area where there were relatively few traces of settlement.

Production and exchange

The probable economic significance of multiple sources of pottery is that its production had become a specialised craft, and its distribution an organised process. This may reflect competition in distribution, but it is equally likely that there are time trends at work as well. So, for instance, while the Malvernian wares with igneous inclusions continued through the period from c.500 BC (or earlier) to the Roman conquest, the Palaeozoic limestone-tempered ware was more common in the earlier part of this period than the later, and the reverse was true for the mudstone-tempered ware. The fact that individual sites could draw in pottery from different sources at the same time does, however, imply that the contacts they had with areas outside their immediate area were varied, and that the systems of exchange or trade that existed were relatively sophisticated.

The suggestion has been made that a gap in the presence of Cheshire salt-container briquetage in the middle Severn valley meant that the salt so attested in Herefordshire was transhipped around the coast of Wales (Matthews 1999). While this cannot be discounted, the discovery of paved Iron Age track-ways in mid-Shropshire (near Atcham) and in north-west Herefordshire (at Stapleton) suggests the simpler alternative that early trade in salt was mediated through what became ‘Cornovian’ rather than ‘Dobunnic’ territory via the Church Stretton ‘gap’ later followed by Watling Street West (Malim and Hayes 2010; Wigley, this volume). A more commoditised and market-influenced distribution appears likely to have emerged in the later period, with the presence of salt from both Cheshire and from Droitwich (Worcestershire) at several Herefordshire sites being a reflection instead of the existence of a ‘salt emporium’ somewhere in Herefordshire, or alternatively the simple co-existence of two overlapping trading spheres.

Specialisation in iron production is another ‘economic’ aspect to be factored in here, and this is perhaps hinted at by the fact that the Cheshire briquetage appears to have

predominated at the Little Doward hillfort and yet this is close to the farthest southern limit of its distribution. The role of ore extraction in the Forest of Dean is clearly likely to have been central to the earliest development of this industry, but it is not the only product of this area that appears to have been traded from at least the mid-first millennium BC. Research on the lithography of quernstones has shown that a major source was the quarries into the sandstone of the domed May Hill at 296m above sea-level between Aston Ingham (Herefordshire) and Longhope (Gloucestershire), to the south-east of Ross-on-Wye. Both saddle and rotary querns in this stone found their way onto hillforts east and north from May Hill, or perhaps the stone was quarried and transported, to be worked into querns of different kinds nearer to the point of use. Finds of May Hill sandstone querns were made at the Cotswold hillforts at Crickley Hill and at Salmondsbury, while others travelled as far afield northwards as Croft Ambrey (Moore 2007).

Towards the end of the Iron Age in Herefordshire

The spread of Dobunnic coinage across eastern Herefordshire in particular has been taken to imply that this area had fallen under ‘Dobunnic’ political control in the period between Caesar’s invasion of south-east England and the Claudian invasion of AD 43 (van Arsdell 1994). The situation may not be as clear-cut as this. Large numbers of Iron Age coins, dominated by Dobunnic issues, have been found in the area to the east of Ross-on-Wye which later became the settlement thought to have been the one called ‘Ariconium’ in the Roman road itineraries (Jackson 2012). The volume and density of late Iron Age pottery from the core area of ‘Ariconium’ is such as to suggest that there was an important settlement focus here at least during the early part of the first century AD. This was presumably due to the working of iron ore from the Forest of Dean so evident in the succeeding Romano-British period, but the black-surfaced wares from the site evince forms with Aylesford affinities suggesting that this activity may have originated in the mid-first century BC (Willis 2012, 101). The presence of elaborated beakers, jars and bowls in this fabric, together with imported Gallo-Belgic fine wares is unusual for a site so far west, and indicates high status associated with the specialised manufacture of iron (*ibid*, 107). Put together with Corieltauvian, Trinovantian, Atrebatian and imported Gallic coin-finds (King 2012), brooches with East Anglian affinities (Mackreth 2012), and possible linear ditches (Jackson 2012, fig. 1.5), there are clear similarities with sites such as Bagendon near Cirencester which have a similar ‘profile’. Such sites have been termed ‘territorial oppida’, indicating a proto-urban role in regional exchange networks. The presence of 20 ‘Dobunnic’ coins at the site, and the similarities to the imported material from Bagendon, might be seen to reinforce the idea that this was a ‘Dobunnic’ settlement specialising in iron production in the same way that Droitwich specialised

in salt production. However, it is equally plausible to see it as a ‘gateway’ settlement for a polity, or loose confederation of peoples, occupying ‘Herefordshire’ and engaged in long-established trading networks that included the ‘May Hill’ quernstones noted above.

Overview of the state of knowledge and identification of gaps

The later Bronze Age and earlier Iron Age

The final centuries of the second millennium BC and the first centuries of the first millennium in the county are, as elsewhere in the West Midlands, poorly documented. Apart from finds of typologically late bronze objects, hardly a site is clearly attributable to this period before the appearance of developed hillforts. Paradoxically, however, it seems most likely that both the earliest post-Neolithic ditched enclosures and the earliest land divisions belong to this period. It has been suggested that the primary phases of sites such as Midsummer Hill fort belong to the latter part of this period (Stanford 1991, 43).

The developed Iron Age

The period from the mid-first millennium through to the Roman conquest will have seen many changes. As a result of investigations at a number of hillforts in the county and now at a sample of farmstead-scale enclosures, we can now characterise aspects of this period with some confidence. Hillforts comprise the most visible remains from the period, especially in their developed forms reaching both massive size and considerable complexity. Both roundhouses and store-buildings have been examined within the forts, but the internal chronologies of these settlements, including the nature of their occupation and use, remain to be resolved.

The farmstead enclosures are now known to have had both open and enclosed phases of occupation in several cases, and to have contained oval as well as round huts. Aspects of life, such as livestock farming and trading in salt, are attested from sites in the county, and the nature and range of implements from excavations at Croft Ambrey fort, and at Sutton Walls in particular, shed much light on Iron Age life and community organisation. The salt trading and coinage finds from the later part of the period provide as yet only hints as to the likely political complexities of the immediate pre-conquest period.

Gaps in knowledge

The earlier first millennium remains largely a ‘blank’ so far and our knowledge of this period relies heavily on interpolation from better documented areas such as central southern and eastern England. For the later Iron Age, it should be noted that variability among either forts or farmsteads has scarcely been probed at all, and that the dating sequence of the more complex sites is much in need of refinement. Other ‘gaps’ that remain are primarily those

concerning the landscape and activities away from either forts or farmsteads. The discovery noted above (during works undertaken in advance of quarrying) of parts of human bodies dated to the Iron Age inserted into former stream channels of the River Lugg at Wellington, indicates the potential for the discovery of remains away from the settlements. Much of our knowledge of the later Iron Age comes from the excavation of sites that became more visible, archaeologically, due to their continued occupation into the Roman period. While this is useful in showing that there is much settlement continuity from around 200 BC, it serves only to emphasise our lack of knowledge, relatively speaking, about the preceding period.

Towards a research agenda for the Middle Bronze Age to the later Iron Age in Herefordshire

Presence-absence-character questions to inform the research agenda for the period in question include:

- a) When did the period of hillfort building begin?
- b) Why were hillforts often built quite close together, and sometimes seemingly in pairs?
- c) What other kinds of major enclosure, such as the Staunton-on-Arrow palisaded site located within a low-lying bend of the river, exist in the county?
- d) What were ‘open’ settlement sites in the Iron Age like, and where were they located other than where they happen to coincide with (either pre-dating or post-dating) enclosed sites?
- e) How many among the more than a hundred small enclosed settlement sites, now known from aerial survey, were occupied only in the Iron Age?
- f) Were there dedicated burial sites or temple sites in the Iron Age landscape in Herefordshire?

Higher-order questions can be framed, albeit hazily at present, for example:

- a) What was the significance of the increasing complexity of hillfort sites through the Iron Age?
- b) What can be inferred about local Iron Age societies from the indications that some forts (such as Cherry Hill, Fownhope, and Poston Camp, Vowchurch) were destroyed and then rebuilt?
- c) How can we better characterise Iron Age ‘forts’ as settlements and points of religious or ritual significance in the landscape?
- d) What was Iron Age pottery in Herefordshire used for?
- e) How can we achieve a better understanding than at present, of how the Iron Age landscape of Herefordshire was farmed and managed?

There are a number of ways to address these questions. One that has not in recent years been promoted, or apparently possible, is through dedicated research projects. The best

example from the past was the series of excavations directed by Stanford on behalf of the Woolhope Club and Birmingham University in both Shropshire and Herefordshire in the 1960s. Such a project as the University of Reading long-term excavations at Silchester (which in the summer of 2013 produced evidence of a complex series of Late Pre-Roman Iron Age halls in what became the centre of the Romano-British cantonal capital of *Calleva*) is a modern-day example of such research-led work. The nearest we have in Herefordshire today to these efforts has been the series of conservation-linked investigations between 2007 and 2014 by Herefordshire Archaeology, in partnership with a variety of organisations, at Credenhill Fort (Figure 6.7), Dinmore Hill (Figure 6.3), the Little Doward fort (Figure 6.6), and at Eaton Camp (Ruckhall, Eaton Bishop; Figure 6.5), the results of which have been noted above.

However, none of these projects, including the Credenhill work, has looked at the surrounding landscape and sought to characterise the nature of their ‘hinterlands’ during the period of fort construction and use. Arguably, the closest we have yet come to this is the Herefordshire Archaeology survey work in the environs of Croft Ambrey and including the measured survey of the earthwork farmstead enclosures on Bircher Common: but this has yet to include an excavation component.

Another means of approaching these research questions is through developer-funded works. Most advisory intervention in respect of hillforts concerns their management rather than development projects. Meanwhile Iron Age discoveries elsewhere tend to occur as an accidental outcome from requirements to investigate Roman period sites, the presence of which has been established by prior casual finds or archaeological field evaluations tailored to the specific impacts arising from the development concerned. Again, the best scope to build in research into this period is likely to be in advance of quarrying in the lower Lugg valley.

Resource assessment and conservation works

Summaries of the archaeology of the Middle Bronze Age to later Iron Age in the county have been produced in recent years for a regional conference at Warwick and, more locally, for the regional resource assessment exercise that gave rise to the present volume. In addition, a seminar was held in Leominster in 2001 that addressed what is known of the period in the county from comparison with work elsewhere, although the papers from this meeting were not published. A review of the extent of knowledge and of the conservation status of major Iron Age enclosures in the county was funded by English Heritage and carried out between 2009 and 2011. This study (Dorling and Wigley 2012) addressed gaps in knowledge of particular sites, as well as reviewing the significance of variability in sites as noted above.

Some interim conclusions

Firstly, concerning the extent of current knowledge:

- a) Our current level of ignorance about the Early Iron Age in Herefordshire is only just becoming more clearly evident.
- b) Although the county is very much ‘hillfort country’, and despite Stanford’s excavations and recent high quality measured surveys, these often imposing sites remain poorly characterised and under-investigated.
- c) We are beginning to realise how diverse the ‘settlement record’ may be, for instance with both rectilinear and curvilinear ‘farmstead-scale’ enclosures.
- d) We also know next to nothing about Iron Age religious sites and burial.

Secondly, some research agenda items:

- a) Improve knowledge of the later Bronze Age/earlier Iron Age landscape, in particular in respect to the more accurate dating and characterisation of what may be the earliest linear boundary works and field systems in the county.
- b) Determine the nature of the earliest simple enclosures of first millennium BC date in the county, and establish whether there are examples of such enclosures located away from, as well as underneath, more complex later fort sites.
- c) Build upon the review of the extent of knowledge about major Iron Age enclosures in the county by developing a programme of investigation of such sites linked to improved conservation for these sites.
- d) Promote the extensive examination of a major Iron Age fort in addition to Credenhill, in a location and within a research context in which it is possible also to survey the immediate hinterland and examine at least one significant ‘farmstead scale’ enclosure within this zone.
- e) Investigate further Iron Age farmstead enclosures, to include the aim of uncovering the whole interior of a site in which, as at the Garway Hill enclosure, remains of houses and their floor levels survive intact.
- f) Locate and examine Iron Age temple or shrine sites in the county, at the same time seeking to study modes of human burial, including watery deposition.
- g) Seek to better characterise early iron production in the county, particularly along the northern margins of the Forest of Dean.
- h) Encourage research effort devoted to a more thorough examination of the changing and differential use of items of material culture within and between sites of the Iron Age in the county that have been examined over the past 50 years.

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Fugitive pieces: towards a new understanding of the later second and first millennia BC in Shropshire

*Andy Wigley**

Introduction

Like much of the West Midlands, Shropshire was traditionally viewed as something of a wasteland prior to the beginning to the Iron Age (*e.g.* Hawkes and Hawkes 1944; 1947; Fox 1952; Chitty 1957). Sparsely inhabited by groups in which social change was only thought to result from external ‘influences’ or invasions, it was argued that the county was crossed by a network of trading routes, which linked Wales to more populous regions in southern England. Against this background, the appearance of the first hillforts was thought to mark one of the most significant junctures in the county’s later prehistory. Constructed under the direction of an invading elite that ultimately originated from north-western France, these monuments heralded the development of more complex forms of socio-political organisation (Varley 1948; Stanford 1971; 1972; 1980). However, although the hillforts were interpreted as major population centres, it was thought that the landscape beyond their immediate environs remained thickly forested and largely uninhabited.

This is not a view of the county’s, or indeed the region’s, later prehistory that many still subscribe to. Yet it is striking just how little space is devoted to sites in Shropshire in recent syntheses on British prehistory (*e.g.* Bradley 1984; Darvill 1987; Parker Pearson 1993; contributions in Hunter and Ralston 1999). The reasons for this are complex, and limitations of space prevent their exploration in detail here. However, the papers from the first two West Midlands Research Frameworks seminars demonstrated how influential Sir Cyril Fox’s Highland and Lowland Zone model has been in shaping previous conceptions

of this region’s prehistory. Fox published his theories in his seminal volume *The Personality of Britain*, the first edition of which appeared in 1932. In many ways it was a collaboration with the Shropshire-based prehistorian Lily Chitty, whose work in the county still provides us with a rich source of information (Grimes 1972; Lynch 1992). Fox and Chitty drew the boundary between their Highland and Lowland Zones through the centre of Shropshire, such that the hill country of South Shropshire fell within the Highland Zone. As a result, it was thought to have been occupied by a culturally conservative population that gradually absorbed new ideas, technologies, and groups that were introduced to it from the lowlands. In contrast, the northern half of the county lay within the more dynamic Lowland Zone, where socio-cultural change was stimulated by successive invasions from north-western Europe. However, it was argued that the expansion of lowland cultures over the West Midlands was inhibited by a thick mantle of ‘damp oak woodland’ that supposedly thrived over the region’s heavy clay subsoils.

The validity of Fox’s thesis was called into question in the early 1970s (Stevenson 1975), and very few continue to adhere to it today. Yet many of the contributions from the first two West Midlands Regional Research Framework seminars illustrated that we are still striving to overcome the deep roots that Fox’s model put down in the archaeological consciousness of the inter- and early post-War years.

It has been recognised for some time now that a number of lines of evidence require the rethinking of the traditional view of Shropshire’s prehistory (Carver 1991; Buteux and Hughes 1995). Across the border in Wales, the work of

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Clwyd-Powys Archaeological Trust over the past two decades has shed considerable light upon developments in the wider region, highlighting the potential of its prehistoric archaeology. Within Shropshire itself, aerial photography, rescue and developer-funded excavations and, to a more limited extent, palaeoenvironmental work, all indicate that most parts of the county were inhabited at some point, and in some form, during later prehistory. At present these sources do not provide us with anything approaching a complete picture – hence the ‘fugitive pieces’ of my title. In particular, it is necessary to emphasize the vagaries that still surround the chronological framework for the later second and first millennia in the county. This forms part of both a wider regional and national problem, as Haselgrove *et al.* (2001) acknowledged, and building a more detailed framework will be a long-term project. However, it is only by committing to a greater use of absolute dating techniques in curatorial archaeology, augmented by more targeted programmes of research designed to resolve particular issues, that progress is likely in this area. This said, when used in a critical manner the data currently available does provide a broad outline, to which future work can add detail and (more importantly) rework as necessary.

The mid–late second millennium BC in Shropshire

For the present purpose, the sequence begins with the gradual cessation of round barrow construction and enlargement in the early–mid second millennium BC. Funerary monuments of this kind are widely distributed across the county. Many of those that occur individually or in small groups on the higher ground have long been recognised. However, aerial photography has also revealed a significant number of ring-ditches at lower elevations, which frequently occur in dispersed groups along the major river valleys (Watson 1991; Hughes *et al.* 1995). After *c.* 1500 BC there appears to have been a shift towards the deposition of cremation deposits around their margins. Evidence for these developments comes from a number of sites in Shropshire and immediately over the Welsh border in north-eastern Powys (*e.g.* Britnell 1982; Warrillow *et al.* 1986; Hughes and Woodward 1995). To these sites we can now add the example discovered at Espley in north Shropshire, during the construction of the A53 Hodnet bypass (Hannaford 2002). This consisted of seventeen pits containing fragments of cremated bone and charcoal, samples from three of which have produced radiocarbon dates that fall in the middle of the second millennium BC. Stakeholes were also found in the base of some pits, perhaps suggesting a concern with marking individual graves.

Elsewhere, the sequence from Bromfield, near Ludlow, is also of particular interest. At this location an extensive linear barrow cemetery developed along a gravel terrace close to the confluence of the rivers Corve and Teme (Stanford 1982; Hughes *et al.* 1995). Excavated in advance of gravel

extraction, the evidence from this site suggests that the construction of burial mounds had ceased by the middle of the second millennium. However, the discovery of three flat cremation cemeteries – two of which appeared to be focused upon earlier barrows – indicates that it remained a highly significant locale. In the majority of cases the mortuary deposits in these cemeteries were characterised by token deposits of cremated bone and pottery placed within circular or sub-circular pits. Radiocarbon dates from these features span the later second and early first millennia BC. This may indicate that the funerary practices associated with this cemetery had a considerable longevity, although Needham (1996, 135) has recently questioned the accuracy of some of the dates from this site.

In terms of the structure of the wider landscape, a number of dated pollen sequences from wetland sites in northern Shropshire, and Buckbean Pond on the Breiddin, suggest a gradual increase in clearance activity across the course of the later second millennium (Beales 1980; Smith *et al.* 1991; Twigger and Haslam 1991; Leah *et al.* 1998). This probably produced a shifting patchwork of larger clearings and more open areas, which may indicate that the agricultural cycle had an increasing influence upon the structure of the landscape. At the same time, it also hints that these landscapes were significantly different in character to the chalklands of southern England, with their extensive areas of ‘Celtic’ fields and small residential enclosures. However, testing these generalised assertions is dependent upon our ability to locate and excavate settlements dating to this period, evidence for which is at present entirely lacking.

The late second–early first millennium BC in Shropshire

By the turn of the first millennium continuing clearance activity may have produced a partially open landscape. Geoarchaeological evidence from various parts of the Severn basin also suggests that the removal of woodland cover from floodplains promoted hydrological change (Brown 1982; 1988; Brown and Barber 1985; Taylor and Lewin 1996; 1997). The associated increase in over-bank flow and alluviation would have provided new opportunities and resources.

The desire of communities to secure and extend their control over these newly available areas of open land may have resulted in an important phase of formal land division. The cross-ridge dykes that exist at higher elevations in a number of places in Shropshire have traditionally been seen as early medieval territorial boundaries (Fox 1955). However, the way in which these features are set out in relation to topography, the clear parallels with other such features elsewhere in Britain (Guilbert 1975; Wigley 2002), and the evidence from an evaluation of the Devil’s Mouth cross-dyke on the Long Mynd (James Dinn, pers. comm.; Milln, pers. comm.), all suggest a later prehistoric date.

It is also possible that the numerous pit alignments that occur at lower elevations were associated with these developments (Wigley 2002; Wigley 2007). These features occur in a number of distinct concentrations along the valleys of the Severn and its immediate tributaries – often in areas where there are greater numbers of ring ditches and barrows (see Figure 7.1). A number of outliers hint at a wider distribution than evidence, currently available, appears to suggest. However, the limitations of the cropmark evidence do not entirely account for the apparent ‘clustering’ in the distribution of these features. It is, therefore, worth noting that this pattern also has parallels with boundary systems of this date in the river valleys of Warwickshire, the East Midlands and the middle Thames Valley (Hingley 1996; Yates 1999; 2001; Taylor forthcoming).

Dating these features with any degree of certainty is at present very difficult. This is largely due to the fact that, with the exception of the Four Crosses complex (in Powys), no pit alignments have been excavated in the county. Undertaking such work must be seen as one of the priorities for future research, because the results will have important implications for our understanding of the development of the landscape in this period. At present, however, broad dating evidence is provided by the ways in which some pit alignments relate to other landscape features. For instance, at both Moss Plantation, near Ruyton-XI-Towns, and Cotsbrook Farm, near Badger in south-east Shropshire, individual examples appear to be aligned upon and cut across ring-ditches. These features probably represent the remains of round barrows, implying that the pit alignments are later in date. In two other cases short lengths of pit alignment appear to be obscured by large multi-ditched cropmark enclosures at Osbaston and Meoles Meadow Plantation, near Stapleton, which on morphological grounds probably date to the later first millennium BC. This gives us a ‘window’ of approximately a millennium between c. 1500–500 BC, to which, on present grounds, these features might be assigned.

Analysis of the way in which these boundaries are set out in relation to relief and drainage suggests that the aim was to control access to a range of different resources, through the definition of extensive blocks of land (Wigley 2002; Wigley 2007). However, the way in which the boundaries within each of the clusters of alignments work together to achieve this is slightly different in each case. This undoubtedly results from subtle variations of relief between these areas, but it may also reflect the ways in which separate communities chose to divide up their lands.

Exactly what kinds of settlements people inhabited within these areas remains unclear. Excavations during the 1960s at Sharpstones Hill Site A, near Shrewsbury, produced evidence for a phase of activity consisting of at least one roundhouse structure set amidst a series of linear field boundaries (Barker *et al.* 1991). Dated on the basis of the ceramics to the Late Bronze Age/Early Iron Age,

the evidence from this site may indicate that people lived amongst the fields in small, dispersed ‘open’ settlements. Again, this situation has parallels in other parts of Britain, but much more work is required before we can say whether the evidence from Sharpstones Hill Site A is representative of the wider picture. Indeed, one of the challenges for future research in the county will be to identify and characterise settlements dating to this period.

In a number of places the character of the archaeological evidence appears to change significantly as we move away from the clusters of pit alignments (see Figure 7.2). Two areas in particular (Baggy Moor and the Weald Moors) stand out in this respect. During later prehistory these locations were occupied by extensive valley mire systems, and the palaeoenvironmental evidence from Baggy Moor suggests that these areas may have remained wooded until the early medieval period (Brown 1990). Survey work by the North-West Wetlands Survey and others has identified significant numbers of burnt mounds around the edges of the wasted peats in these areas (Leah *et al.* 1998). Caution is, of course, required when interpreting such distribution patterns. At best, they inevitably present us with a partial impression of what may once been a more widely occurring phenomenon. Varying degrees of preservation and rates of discovery influenced by, amongst other things, differing histories of land use, landform processes such as alluviation and peat formation, and different programmes of fieldwork must be taken into account. It is clear from the occurrence of a number of burnt mounds in the valleys of the rivers Roden and Perry, and the reported ‘outliers’ on the Long Mynd and elsewhere, that sites of this nature probably occurred more widely than the current distribution pattern suggests (see Figure 7.2). However, the density of burnt mounds around the fringes of the large valley mire systems in Shropshire is striking. Leah *et al.* (1998, 122) conclude that ‘...it is stream and river valleys that appear to have determined the location of [burnt mounds]...’. Although many more sites probably await discovery beneath alluvial deposits elsewhere in the county, more detailed investigation of the large numbers of burnt mounds that occur along the margins of the valley mires is an important priority for future research. The need is all the more pressing because many of the known sites are subjected to frequent ploughing, which threatens them with destruction.

To date the only excavation of a burnt mound in the county was that conducted recently at Rodway, on the edge of the Weald Moors in eastern Shropshire (Hannaford 1999). This revealed the usual range of features associated with sites of this nature, and a sooty deposit at the base of the mound produced a radiocarbon date of 2994±38 BP (UB-4290). This gives a calibrated calendrical date (at 2 sigma) of 1390–1080 cal BC. Whatever the function of these sites, the successive layers of burnt material and sand within the ‘water trough’ at Rodway suggest repeated episodes of activity. The large blocks of woodland that may have existed

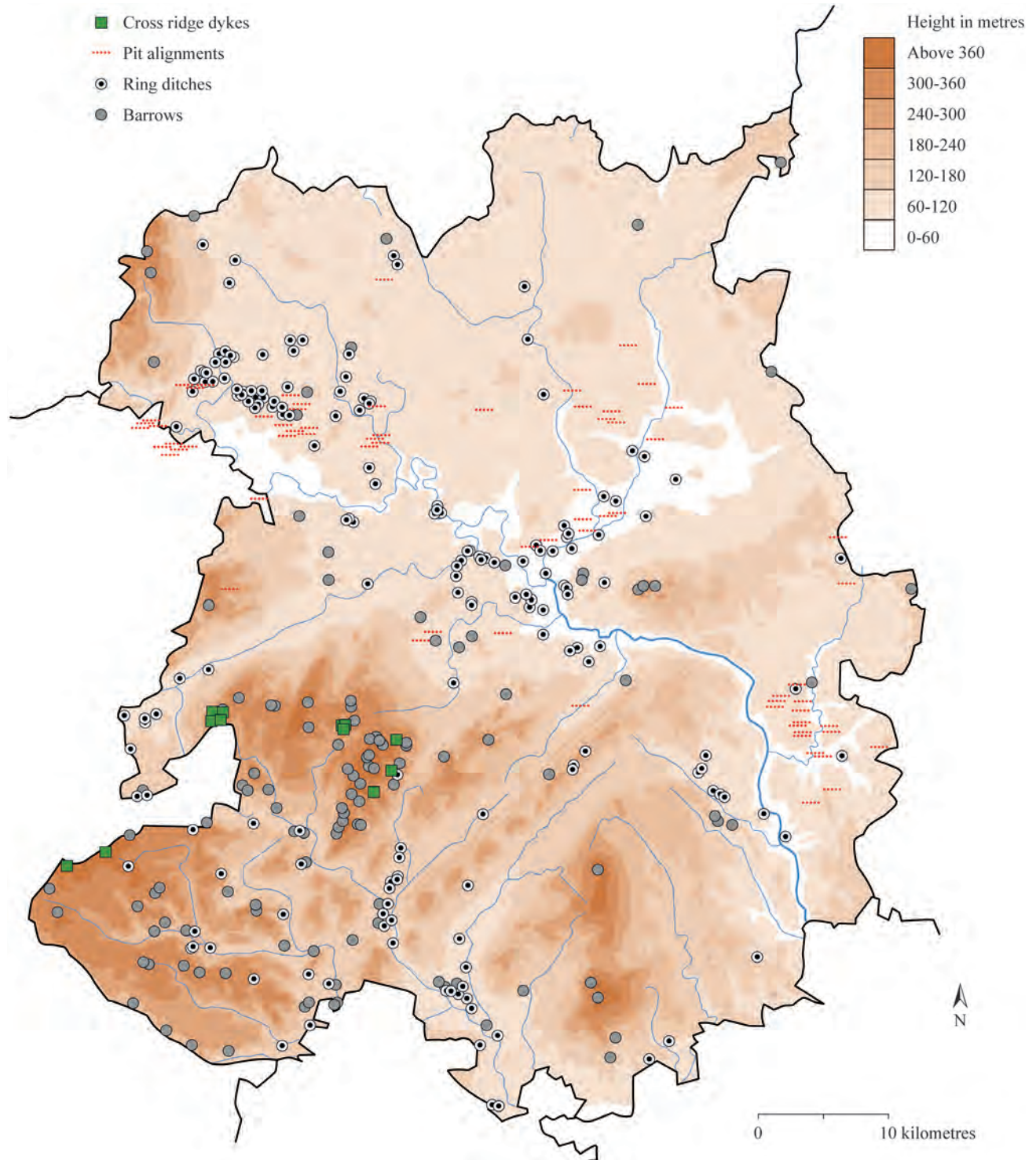


Fig. 7.1 The distribution of cross-ridge dykes and pit alignments in relation to round barrows and ring-ditches in Shropshire. Source: Shropshire SMR.

over and around the valley mires would have offered a broad spectrum of different resources, whose availability varied through the course of the year. It seems possible that the burnt mounds around the fringes of these forested wetlands may have been associated with seasonal exploitation of these

areas, although much more work is clearly required before we can be more certain about this.

It would also appear that much of the Middle and Late Bronze Age metalwork from Shropshire comes from those areas that lie beyond the main concentrations of

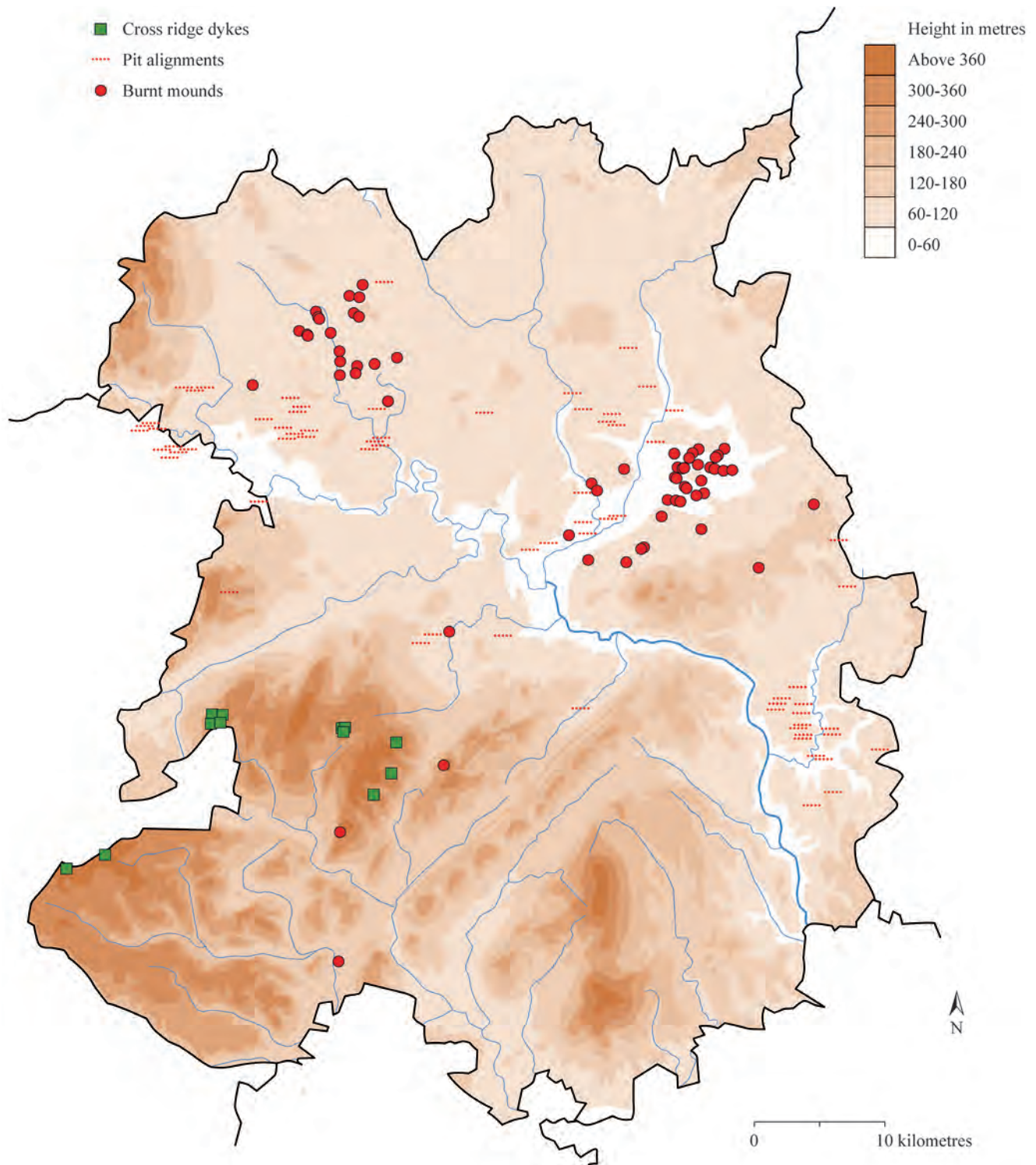


Fig. 7.2 The distribution of pit alignments, cross-ridge dykes and burnt mounds in Shropshire. Source: Shropshire SMR and Leah et al. 1998.

burial monuments and land boundaries (Wigley 2002; see Figure 7.3). A significant proportion of this corpus of material was recovered during agricultural improvements and drainage operations during the 18th and 19th centuries. As a result, it is often difficult to be certain of the exact find-

spots. However, the patterns that emerge from analysis of the data are comparable to those from elsewhere in Britain and north-western Europe. The amount of metalwork being deposited appears to have increased over time and much of the material comes from 'wet' locations, such as peat

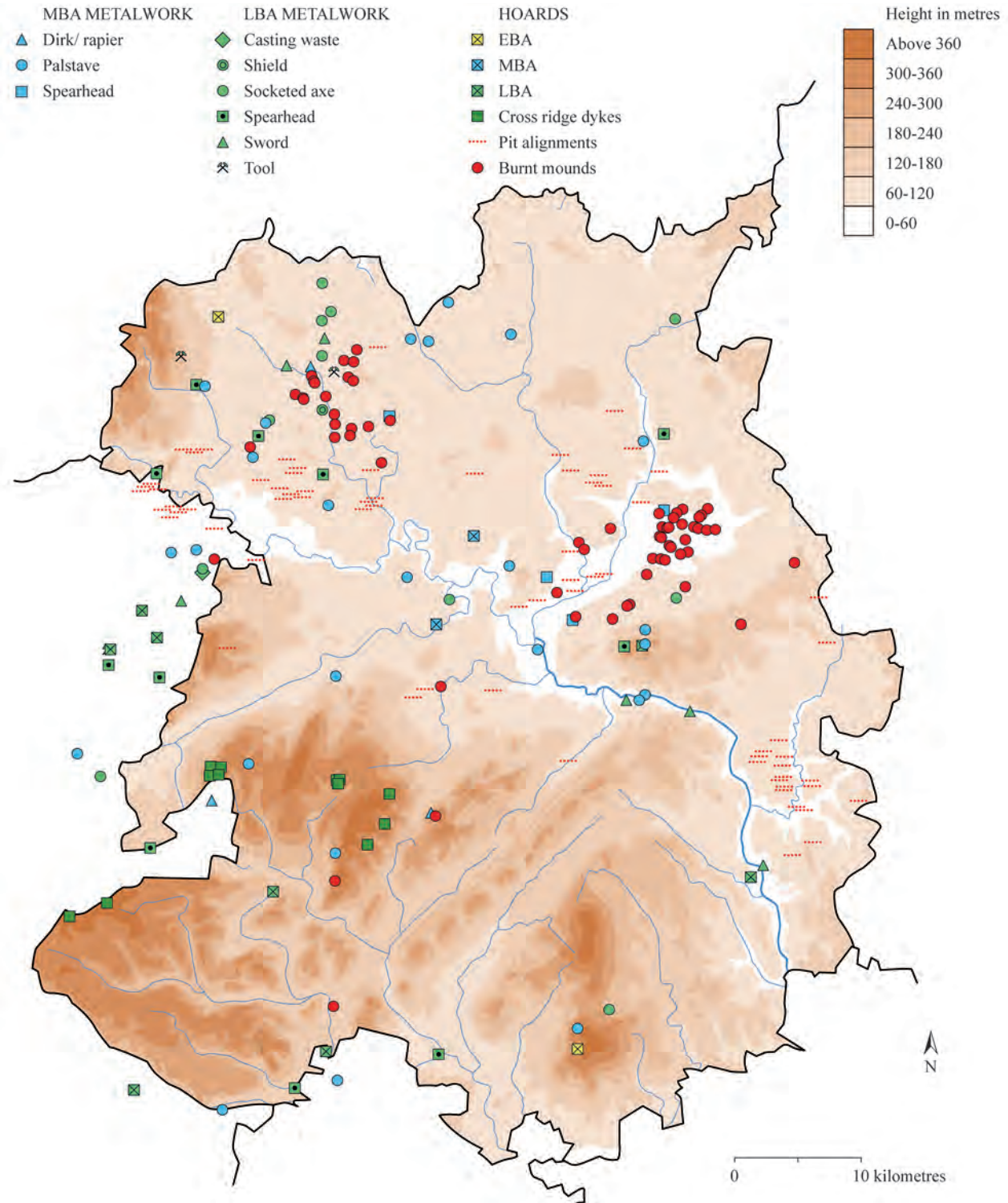


Fig. 7.3 The distribution of Middle and Late Bronze Age metalwork in Shropshire. Source: Peter Northover.

bogs and floodplain marshes. For example, a number of items of Middle and Late Bronze Age metalwork have been recovered from the surface of the peats around in the Baggy Moor/Tetchill Moor area, including a Yetholm-type shield from near Bagley Marsh and two Ewart Park-type swords

from separate locations near Hordley. During the Late Bronze Age a number of large 'Broadward-type' spearhead hoards were also deposited in marshy locations. One of the largest and best known is the Broadward Hoard itself, which was found in a low-lying field on the Shropshire/

Herefordshire county boundary (Rocke and Barnwell 1872; Burgess *et al.* 1972). In addition, a range of artefacts has also been recovered from the banks and channel of the Severn along the Ironbridge Gorge, including a rare example of a Grundlingen-type sword from Jackfield.

A further demonstration of the variability in the types of locations that were selected for the deposition of metalwork comes from two Middle Bronze Age pieces from the slopes and summits of prominent hills. These consist of a Middle Bronze Age Group IV rapier from Cordon Hill, immediately over the border in Powys, and a fragment of Group IV dirk from Caer Caradoc, near Church Stretton. The fact that the latter object was discovered wedged in a crevice in a rock outcrop may indicate that these finds represent intentional deposits rather than casual losses (cf. Bradley 2000).

Significant new discoveries continue to be made in the county, such as the hoard of three Middle Bronze Age looped palstaves, discovered recently in a field near Rednall (Burns, pers. comm.; Watson, pers. comm.). However, the pace of research has slowed over recent decades and there have been few attempts to re-examine the existing body of material in the light of recent theoretical developments. For instance, it has been recognised for some time now that bronze metalwork was probably deposited for a variety of different reasons during this period (Bradley 1998). Similarly, analysis of the metalwork from the Thames demonstrates these almost certainly varied over time (York 2002). At the most basic level, however, we can now acknowledge that the act of depositing items of metalwork would have changed the structure of the social relations that existed within and between different communities. Together with the activity that resulted in the creation of the burnt mounds, it seems possible that the deposition of this metalwork in the areas beyond the bounded landscape brought people from different groups into contact with one another. Future work must aim to increase our knowledge of the practices associated with the deposition of this material through, amongst other things, detailed investigation of find-spots, consideration of their landscape context, and careful analysis of the condition of the material recovered.

It can be argued that it is against the background of these developments that the emergence of the first hillforts in the early first millennium BC should be viewed. It is clear from the excavations that have been conducted in north Wales and the Marches that the hillfort building tradition has a long and complex history in this part of Britain. It seems likely that the initial phases of a number of hillforts in Shropshire may well date to the early first millennium BC, although the number of sites in the county which have seen any kind of excavation remains very small. Communal participation in linear boundary building projects, and the changing ways different communities interacted with one another, may have resulted in the establishment of new senses of community identity. The potential for co-operation, as well as conflict and competition, that arose as a result, probably helped to

establish the conditions that made the construction of the early hillforts possible. The key sequences come from the Breiddin just over the Welsh border, where a timber-laced bank was constructed at some point in the ninth–eighth century BC (Musson 1991), and Beeston Castle in Cheshire, where the remains of a hillfort with two Late Bronze Age phases were found beneath the defences of the medieval castle (Ellis 1993). However, the ceramic evidence from The Wrekin also suggests that an enclosure of a similar date probably existed on the summit of this hill (Kenyon 1942; Morris, in Stanford 1984; Morris, in Ellis 1993). Both of the hillforts on The Wrekin and the Breiddin occupy the summits of these strikingly prominent hills. The evidence from these two sites, and from Beeston Castle, may indicate that early phases of occupation occur beneath hillforts on other prominent hills. In contrast, Varley and O’Neil’s work at Old Oswestry suggests that the earliest phases of this hillfort perhaps dated to the seventh or sixth centuries BC, by which time the first enclosure on the Breiddin appears to have been abandoned (Hughes 1994).

The later first millennium BC in Shropshire

The reworking and aggrandisement of hillforts in Shropshire probably continued through much of the latter half of the first millennium BC. It is clear from the earthworks at numerous sites in the county that this eventually resulted in the creation of a highly complex class of monuments, in which there is a considerable degree of variation between different sites. All four of the former Monuments Protection Programme categories for hillforts (*e.g.* slight univallate, large univallate, small multivallate, large multivallate) are found in Shropshire. For particular sites, such as Wall Camp, Kynnersley (Bond 1991) and The Berth at Baschurch, the term ‘hillfort’ is something of a misnomer. Both of these sites occupy low-lying positions surrounded by former wetlands. In addition, many now doubt that hillforts actually functioned as fortifications, since recent reassessments of the sites in Wessex suggest that they may have had other social and symbolic significances (*e.g.* Bowden and McOmish 1987; 1989; Hill 1989; 1995).

Together with the obvious variables of size and topographical setting, the differences between the hillforts in Shropshire also extended to the manner of their construction and the nature of their occupation. The sequence from the Breiddin, with its dry-stone ramparts, suggests that some sites may have been inhabited spasmodically, perhaps even seasonally in some cases (Buckland *et al.* 2001). Others, such as Old Oswestry and Burrow Hill Camp, appear to have had deep ditches (at the latter example, like those at many other hillforts in the county, these are partially rock-cut), which were accompanied by stone-revetted earthen ramparts that probably underwent multiple phases of development (Hughes 1994; Reid, pers. comm.). It is possible that both these and other hillforts had more continuous histories

of occupation, with interiors that were covered by dense concentrations of roundhouses and four-post structures. At Earl's Hill Camp and The Wrekin, the notion of a ditch was created through terracing of the steep hillsides (Reid, pers. comm.). At both of these sites a new rampart circuit was also laid out at some point in their histories, which resulted in a considerable reordering of the internal space. Further morphological variability can be seen at Bury Walls, in north Shropshire. The results of a recent geophysical survey suggest that material for the construction of the earthworks of this hillfort was obtained through extensive terracing of the interior, and the excavation of quarry ditches behind some sections of the ramparts (White, pers. comm.).

This diversity makes it likely that the county's hillforts fulfilled a range of functions above and beyond that of communal security. However, the evidence that is currently available is not sufficient to enable us to sketch out the kind of detailed individual site histories in the same way that we can in parts of Wessex. Indeed, although there is pressing need for more excavation, building on the small quantity of existing data presents us with a considerable challenge. Much could be achieved through more extensive programmes of geophysical survey, and/or analytical earthwork survey of the kind that have been conducted on the Malvern hillforts (Bowden 2000; Field 2000). The inspections of hillforts in Shropshire undertaken by English Heritage as part of the Monuments Protection Programme demonstrate the morphological complexity and variability that exists within this monument class (Reid, pers. comm.). In seeking to increase our understanding of the ways in which these extraordinary sites were inhabited, future research must address this diversity.

Although it has traditionally been argued that construction and occupation of Shropshire's hillforts continued right down to the Roman conquest, the evidence currently available is at best ambivalent. The evidence for a Roman attack on The Wrekin, as represented by the burning and destruction of the final phases of the four-post structures in the interior (Stanford 1984), rests on a single radiocarbon date of 1960±90 BP (Birm-532). This gives a calibrated calendrical date (at 2 sigma) of 200 cal BC–cal AD 350 and cannot, therefore, be used to support a date of *c.* AD 50 for such an assault. Two Roman javelin points have been discovered on The Wrekin, but these were surface finds and one comes from outside the hillfort (White and Webster 1994). It is, therefore, uncertain what sort of activity these items relate to. They may, for instance, have been lost during some sort of training exercise, similar to that which has recently been proposed for the 'chieftain's hut' at Hod Hill, Dorset (Sharples 1991). Musson (1991, 180) has noted that there is little evidence at the Breiddin to suggest that the site was occupied beyond the first century BC, whilst many now argue that the majority hillforts in southern England were abandoned in the second century BC. This may well

have been the case in Shropshire, although much more work is needed before we can say this with any greater degree of confidence. It should also be noted that a number of hillforts in the county have produced significant evidence for activity during the Roman period, including a possible Romano-British temple at Bury Walls (White, pers. comm.). At present, however, we have little understanding of how the hillforts were used after the conquest.

Apart from the hillforts, small enclosed settlements, perhaps inhabited by a single household or several household groups, are widely distributed across both the lower and the higher ground in Shropshire and neighbouring counties. Excavations of such enclosures at Bromfield (Stanford 1995), Hay Farm near Eardington (Hunn 2000), Sharpstones Hill Sites A and E (Barker *et al.* 1991) and Tycoch Farm near Pant (Hannaford 1993), demonstrate that they were constructed from around the fifth century BC onwards. The evidence from some sites, such as Hay Farm, Sharpstones Hill Site E, and an enclosure at Ellesmere Road in Shrewsbury (Oxford Archaeology Unit 1995), indicates they continued to be built and occupied until at least the second century AD. Some of these settlements, especially the well preserved examples on the higher ground, have traditionally been seen as small hillforts (Ordnance Survey 1975; Jackson 1999), largely because they are often prominently sited and have ostentatious enclosing earthworks. However, over the last three decades aerial photography has revealed considerable numbers of small enclosures at lower elevations, which have been levelled by the plough, ranging from single to more complex multi-ditched examples (Whimster 1989). The tendency has been to view all enclosed settlements in the lowlands as farmsteads (*i.e.* non-defensive). The Monuments Protection Programme is currently reassessing Iron Age and Roman period rural settlement types. In Shropshire, distinctions are being made between small enclosed settlements (under 2ha) where the enclosing earthworks are imposing and might have had a defensive role, and those sites where the enclosing earthworks are less complex. It was assumed that construction of those sites in the first group began in the Iron Age, whereas those settlements in the latter group may date to either the Iron Age or Roman periods (Reid, pers. comm.). Testing this hypothesis will, however, require the examination of more of these sites through excavation.

Future research must also focus upon examining the relationship between the small enclosed settlements and the larger, more impressive hillforts. The evidence suggests that the household groups that dwelt within the enclosures were linked together by complex networks of social relations, which also encompassed the inhabitants of the hillforts. For instance, the distribution patterns of the kinds of artefacts that have been recovered from Iron Age settlements in the county extended over considerable distances. The pottery assemblages that these enclosures have produced

are notoriously small, but, what little is present, invariably belongs to the regionally distributed Malvernian and Clee Hill ceramic traditions (Peacock 1968; Morris 1981; 1982; 1996). However, by far the most numerous types of finds from these sites are sherds of briquetage salt containers, which originate from the brine springs at Droitwich and northern Cheshire (Morris 1985; 1994).

The evidence from the enclosures at Sharpstones Hill Site A, Hay Farm, and the small enclosure at Bromfield, also suggests that some of these settlements were positioned within preexisting field systems. Together with the palaeoenvironmental evidence, which implies that the landscape remained largely open across this period, this may indicate that the appearance of the small enclosed settlements resulted from a reworking of pre-existing tenurial arrangements, rather than a wholesale colonisation of virgin land. The archaeobotanical and archaeozoological evidence from the extensively excavated Collfryn enclosure in north-eastern Powys (Britnell 1989), and to a limited extent from some sites in Shropshire, suggests that these units engaged in mixed agriculture. It seems likely that cultivation was concentrated on the lighter more easily worked soils, whilst stock was grazed on the wetter floodplain pastures and poorer upland grasslands. However, investigating the structure of this agricultural cycle in greater detail, and examining the character and scale of the social relations bound up with it, will require work at the landscape scale. There is a need to examine more of the smaller settlement enclosures, so that greater understanding can be generated of the nature of the activities that occurred at different sites.

At the same time, there is also a need to explore the field systems and other features beyond the enclosures, so that the broader organisation of the landscape can be investigated. For example, it remains unclear whether or not unenclosed Iron Age settlements were present in the county. An anomalous group of cropmarks at Domen Castell on the floodplain of the Severn in north-eastern Powys (Whimster 1989, fig. 37.2), and the 'Celtic' field system and unenclosed settlement at Black Knoll on the end of the Long Mynd (Ainsworth and Donachie 1995), certainly suggest that they may have existed. Field systems defined by sizable lynchets have also been identified elsewhere in the county: for example, between Cefn Gunthly and Heath Mynd, in south-western Shropshire, and on the south-facing slopes of Hope Bowdler Hill, near Church Stretton. Although these remain undated and poorly understood, they could potentially date to the Iron Age or earlier.

Extensive ignorance remains of many other aspects of life in the later first millennium BC, not least of which is how people treated their dead. The only notable exception is a single Iron Age inhumation burial, which was found within a ring-ditch at Bromfield (Hughes 1995). It is difficult to be certain whether this burial had been inserted into a pre-existing barrow mound, or whether a new mound was raised at the

time the body was placed in the ground. Evidence for Iron Age intervention in earlier monuments has been found in north-eastern Powys, in the form of a possible metal-working hearth found within a ring-ditch at Four Crosses (Warrilow *et al.* 1986), and metal-working debris from the upper fills of the central pit at the Sarn-y-bryn-caled timber circle, near Welshpool (Gibson 1994). However, if the ring-ditch is indeed Iron Age, then we might well ask what proportion of the other ring-ditches in the county date to this period. The deposition of human remains also appears to have been occurring at some of the hillforts in the region in the Iron Age. For example, an extended inhumation of a child of about seven-years-old was found recently during a watching brief within the interior the Llanymynech hillfort (Owen 1997). A sample of bone produced a date of 2375±55 BP (OxA-6824), which gives a calibrated calendar date (at 2 sigma) of 800–350 cal BC. Although undated, O'Neil (1942) also found human remains in association with the later phases of the ramparts at Ffridd Faldwyn, near Montgomery. In most cases, they do not appear to represent discrete burials but separate deposits of disarticulated bones. Deposits of human bone in hillfort ramparts and entrances have been found at a number of sites in southern England, and many commentators now view these as having a symbolic significance (*e.g.* Hingley 1990; Hill 1995).

Conclusion

By necessity this paper represents a brief summary of the later prehistoric sequence from Shropshire. As a consequence, many of the nuances relating to both the limitations and the interpretation of the data remain unexplored. However, many of the priorities for future research will already be obvious to the reader. These can be brought together under a number of key headings, based upon those outlined in the Prehistoric Society's and English Heritage's *Understanding the British Iron Age: an agenda for action* (Haselgrove *et al.* 2001).

Chronology

There is a need to do much more work to refine the chronological details of the outline sketch provided in this paper through greater use of radiocarbon dating.

Settlement and landscape

All available opportunities should be taken to locate and characterise the types of settlements that existed between the mid-second millennium BC and mid-first millennium BC. This will allow the gaining of a much better understanding of the historical context of later developments in the settlement pattern. Identifying these sites is unlikely to be straightforward, since they appear to be invisible from the air, and in some cases may lie 'buried' beneath later sites,

as at Sharpstones Hill Site A. Carefully conducted watching briefs along the course of utility pipelines and road building schemes, which provide extended linear transects across the landscape, will also be essential. However, these must be backed up with resources that allow the sites thus identified to be properly investigated.

The county's hillforts require much more investigation, since many questions concerning their chronological development and the nature of the habitation of these monuments remain unresolved. In the immediate future, developer-funded work is unlikely to provide significant opportunities to excavate any of these monuments, so co-ordinated research programmes are needed to enable such work. Mustering the resources and expertise that will make such projects possible will require different organisations to come together in partnership. Having said this, smaller scale work on individual sites has the potential to make a very substantial contribution. Programmes of geophysical survey and detailed analytical earthwork survey are likely to be particularly important in this respect. However, advances in knowledge could also be made through selective re-excavation of earlier excavation trenches at key sites, in order to undertake detailed recording and obtain material for dating purposes.

There is also a need to investigate more of the smaller enclosures in the county. Achieving a better understanding of the practices that were occurring at these monuments can only come from excavating a much greater sample of the features associated with them (particularly house gullies, boundary ditches and intersections) – Haselgrove *et al.* (2001, 10) argue for a minimum 20% sampling of all deposits, evenly spaced and including all terminals.

Beyond these sites there is a need to examine more 'non-settlement' features such as field systems and, as a matter of priority, other forms of land divisions such as the pit alignments. Working at the landscape scale will be the key here. This does not necessarily require vast expenditure or resources, since major advances could be made through co-ordinated programmes of 'key-hole' excavation.

There is a need to adopt procedures which will allow the amount of information that these various different kinds of interventions produce to be maximised. This requires the much greater use of palaeoenvironmental and geoarchaeological evidence, since this will provide a much greater understanding of background landscape change.

Material culture

The problems and questions relating to the ceramic sequence from the county have barely been touched upon in this paper (see Hancocks, this volume). Needless to say, there are plenty, and there is a need to ensure fieldwork methodologies are adopted that allow this to be overcome. Similarly, for bronze metalwork a way forward might come from surveys

of the areas around known find-spots, and detailed studies of use-wear and breakage patterns. Both of these would be good topics for Ph.D. theses.

Only by addressing these points, and many more besides, will it be possible to gain a greater understanding of later prehistoric socio-economic change and, ultimately, of the distinctiveness of the sequence from this region. Whilst much of the above represents a plea for more fieldwork, this cannot provide us with all of the answers in itself. Only by synthesising the new information that such work generates will the understanding of the later second and first millennia BC in Shropshire progress. Similarly, much can and will be gained from working with the existing data, and reinterpreting it in the light of new ideas and theoretical perspectives. Ultimately, it is only by taking the results of such research and engaging in debate at the regional and national level that progress can really be made.

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The Late Bronze Age and Iron Age in Staffordshire: the torc of the Midlands?

*Chris Wardle**

As there are several definitions of what constitutes Staffordshire, it is probably worthwhile to state which of the many definitions is being used for the purposes of this paper. The definition of Staffordshire used below is the administrative county in the period between 1973 and 1997. This includes the City of Stoke-on-Trent and the south-western element of the Peak District National Park, but excludes the Black Country. Staffordshire extends for approximately 90km from north to south, and, excluding the southern ‘panhandle’, is roughly 55km across (Figure 8.1).

The highest land is found in the north-east, where the Peak District rises to over 400 metres. Cannock Chase towards the centre of the county rises to a height of 240 metres. The rivers Dane and Tern form discrete sections of the county boundary to the north and west. The principal river is the Trent, which flows south from the vicinity of Stoke-on-Trent, then turns gradually eastward before making a sharp turn in a north-easterly direction, to the south of Burton-upon-Trent. The main tributaries of the Trent are the Sow/Penk, the Tame and the Dove, the latter forming most of the border with Derbyshire. The only other stream of any significance is the Semstow Brook. This takes a southerly course down the ‘panhandle’. In terms of drainage, therefore, Staffordshire has more in common with Derbyshire than it does with any West Midland county.

The county is especially fortunate in terms of the number of monuments that predate the Late Bronze Age.¹ Well over 250 round barrows are recorded in the county. Many of these, including most of those in the limestone area of the

Peak District, survive as substantial earthworks. In addition, a large number of Neolithic and Bronze Age monuments (causewayed enclosures, henges and ring-ditches) have been observed in the form of cropmarks on the river terraces in the region of the confluence of the Trent and Tame (Figure 8.2). Whilst some of the ring-ditches may not be evidence for ploughed-down round barrows, a number of excavations in the area suggest that the majority are the remains of burial mounds.

There are a number of indicators for the continuity of activities after the main era of the construction of ritual monuments in the county. One such comes from Barton-under-Needwood, in the Trent valley to the south of Burton. In 1996, during the excavation of a pair of ring-ditches, a flat cremation cemetery was found to lie just beyond the remains of a ploughed-out round barrow. A group of 21 cremations was excavated, along with the remains of five cinerary urns. The urns were of the Deverel-Rimbury type and are believed to date from the Middle Bronze Age (Martin and Allen 2001).

To date, 21 burnt mounds have been identified in Staffordshire (Figure 8.3), ten still surviving as earthworks. All of these are in the central part of the county, the majority lying in the vicinity of Cannock Chase, and many are to be found in a single cluster beside the Moreton Brook. Only one burnt mound has been excavated. This is the most northerly example, at Milwich, where the farmer noticed the mound in spite of it being buried under a metre of colluvium. This was due to it being exposed in the bank of a stream.

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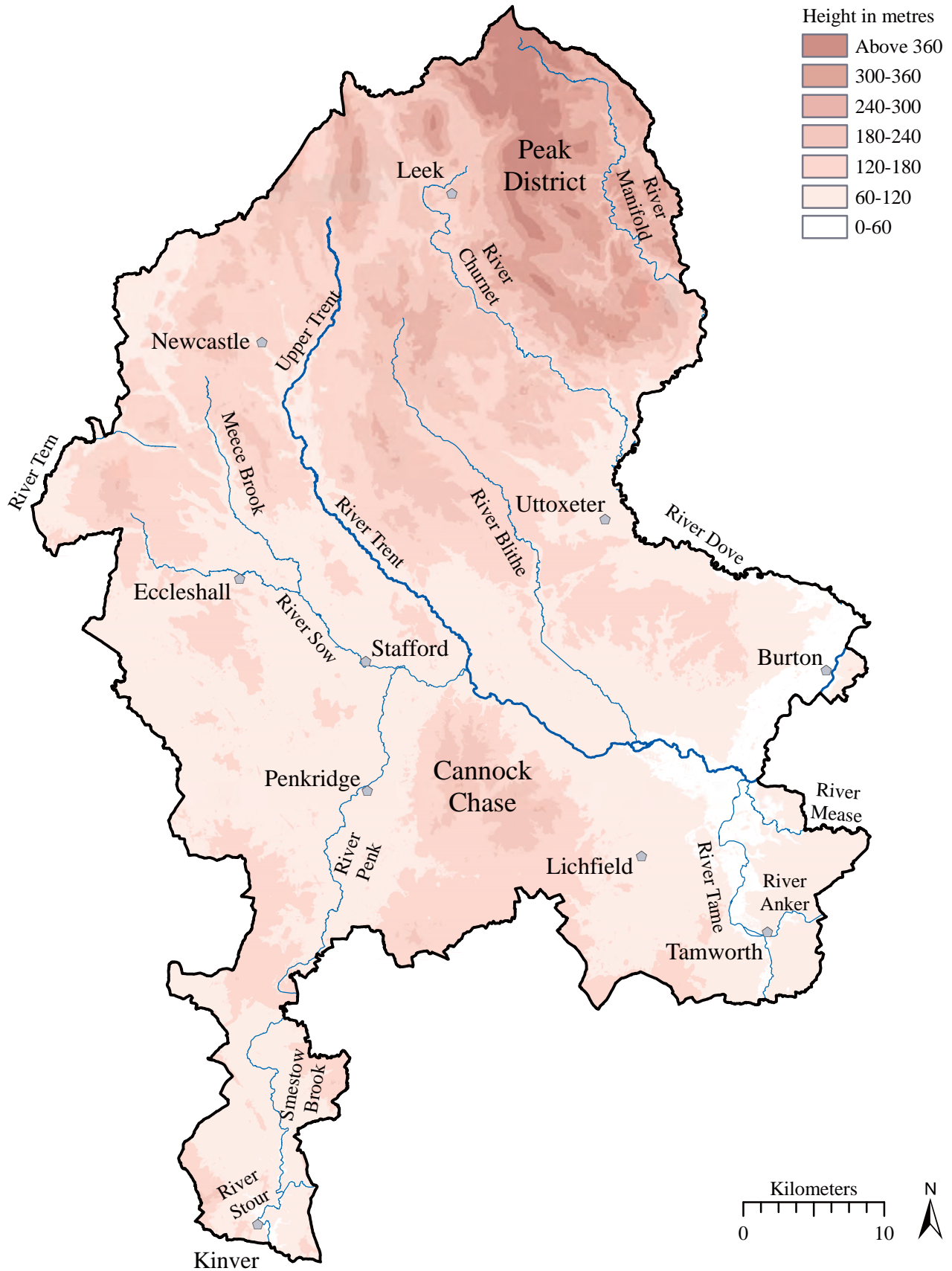


Fig. 8.1 Staffordshire – general topography showing principal natural features.

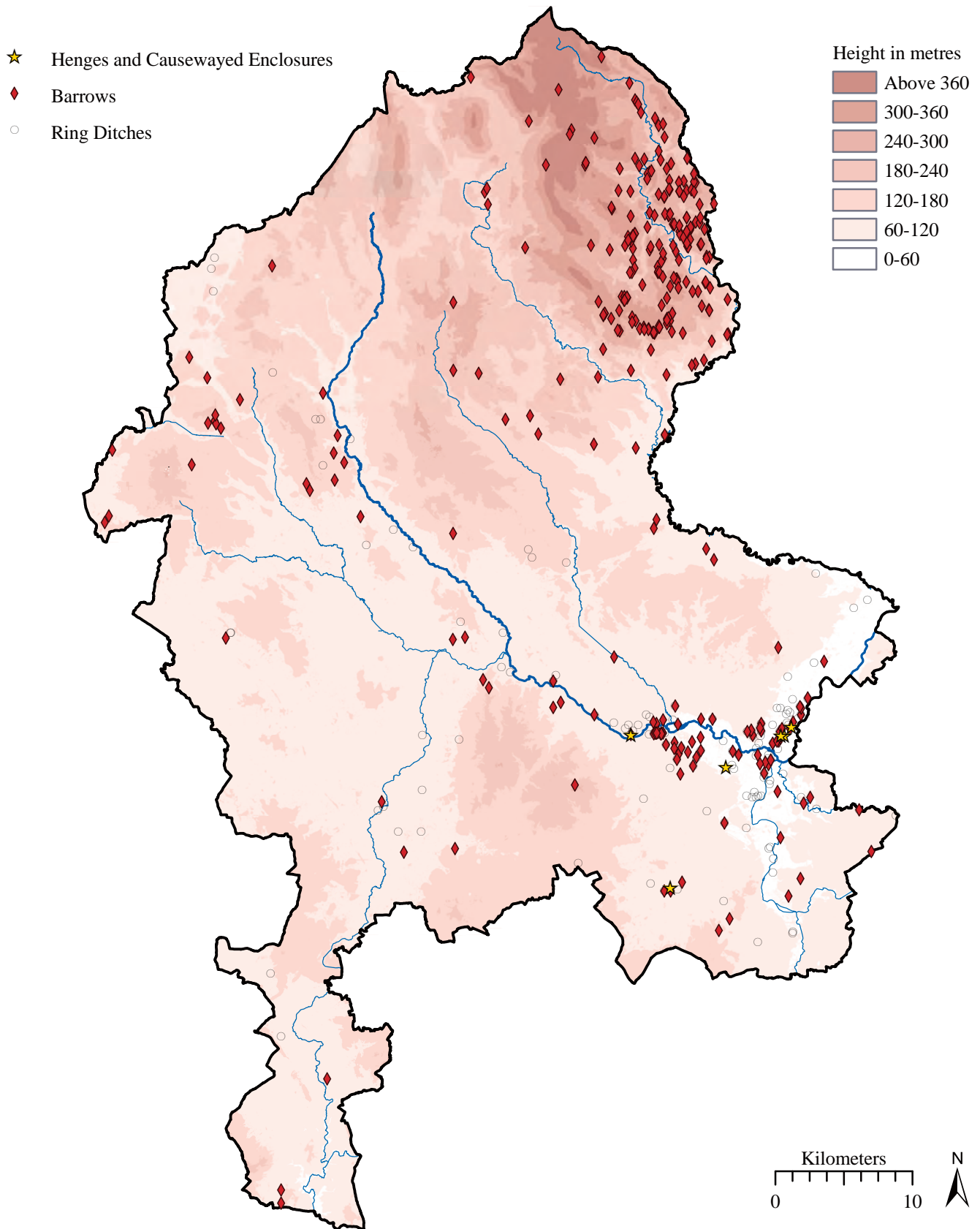


Fig. 8.2 Neolithic and Bronze Age ritual monuments in Staffordshire.

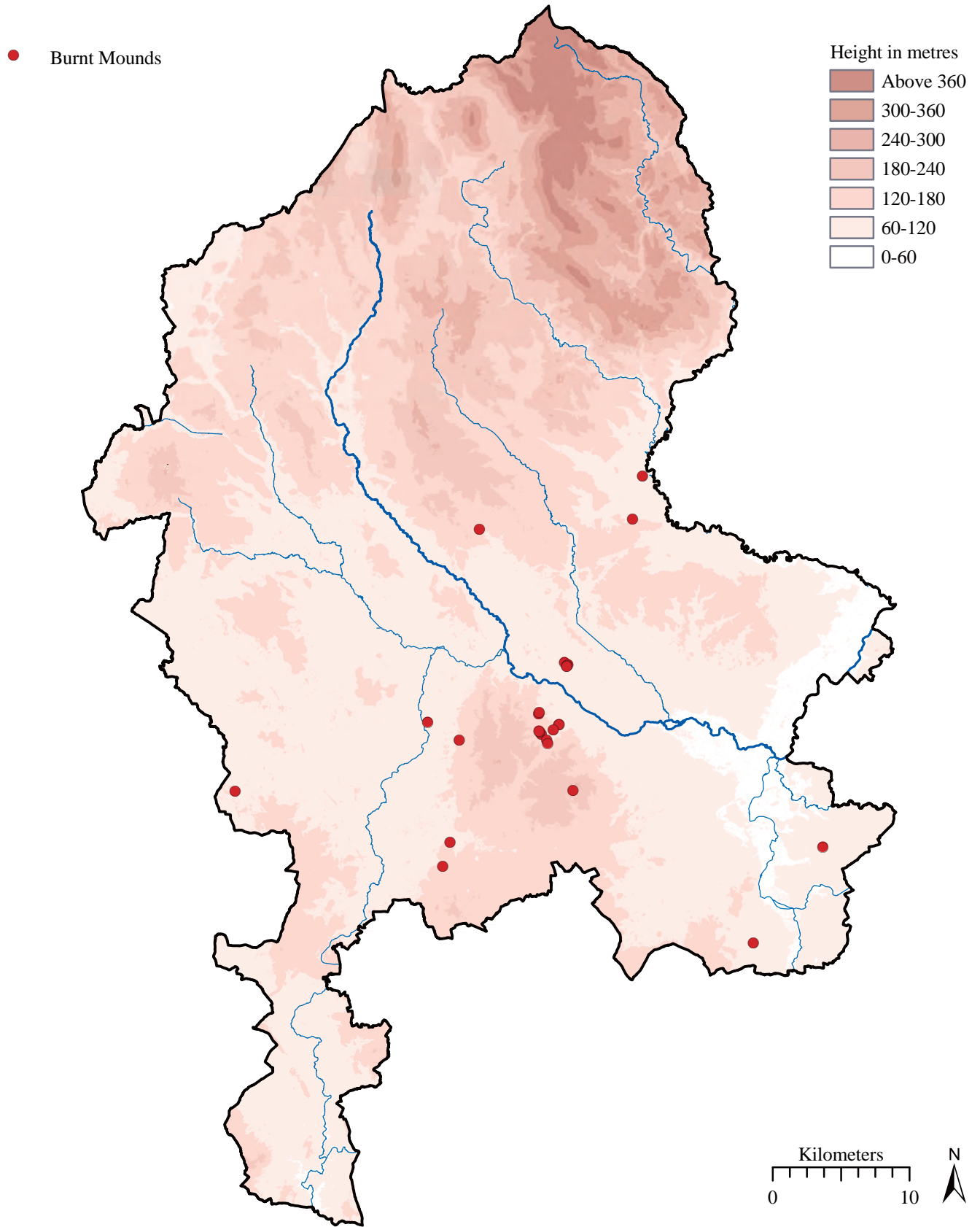


Fig. 8.3 Burnt mounds in Staffordshire.

As the mound was considered to be in danger from erosion, the site was excavated. Radiocarbon dating suggested that the mound was originally created in the Early Bronze Age, but that it seems to have been reused until the Late Bronze Age (Welch 1997). The chance discovery of this example raises the question as to how many other instances of burnt mounds buried under later deposits there might be in the county.

Although it is now recognized that many examples have their origins in the Bronze Age, hillforts have long been regarded as the archetypal monument of the Iron Age. So it is appropriate that they should be the first monuments examined when looking for evidence of Late Bronze Age and Iron Age activity. There may be as many as eleven hillforts in the county (Figure 8.4), but not all of these are confirmed examples. Of those monuments which are most definitely hillforts, one is multivallate in form, three are univallate, and two are promontory forts. The remaining definite hillfort is so badly damaged that it remains uncertain what form the defences took. In addition there are two possible hillforts beside the River Dove, and a rather more questionable site in the north-east of the county.²

Unfortunately, there is not sufficient information to allow us to make an adequate analysis of the distribution of these hillforts (Figure 8.4). All that can be said is that they seem to be fairly evenly distributed save for a slight bias in favour of the western side of the county. There is also an apparent absence of hillforts in the Peak District.³ Knowledge of the hillforts in Staffordshire is hampered by the very limited nature of the fieldwork, only two hillfort excavations being known. One is a recent evaluation and subsequent watching brief at Alton Towers, which revealed no significant archaeological deposits (Anon 1998; Bell 1998; Dalton 1999). The other is a 19th-century excavation at Castle Ring, where William Molyneux, a local historian, exposed the footings of a building, believed to be a mediaeval hunting lodge (Simms 1932). The rectangular footings of this stone structure are still visible, but the excavation report was never published and the records are now lost. As a result it remains unknown whether any evidence for prehistoric activity was encountered. The only other recorded fieldwork is the hillfort survey carried out by the RCHM(E). Although this survey has provided valuable insights as to the sequence of construction and renewal of the defences, it does not provide a chronology, nor can it provide information about activity in the interiors (Anon 1996).

It is necessary to look at other sites to obtain a fuller understanding of what was going on in the Late Bronze Age and Iron Age, the most obvious thing to look for being evidence of settlement or field systems.

In a county with a reasonable amount of upland the first place to look would be in these uplands where prehistoric sites might still be seen as earthworks. Unfortunately, relatively few earthworks have been demonstrated to be the

remains of settlement and field systems of Late Bronze Age, Iron Age or Roman date, and those that are, all lie in the vicinity of the Manifold Valley (Cleverdon 1995). There is, however, some reason for optimism in this regard. A recent survey has identified a number of other earthworks in the Peak District as potentially being Roman in date, and a number of these sites might, upon examination, turn out to be Late Bronze Age or Iron Age in date (Makepeace 1998). Furthermore, there are extensive earthworks in the form of enclosures, extant field boundaries, banks and lynchets, in the limestone areas of the Peak District, especially in the vicinity of the Manifold Valley (Meeson 1984). It is extremely likely that, if more of these earthworks were examined, a considerable proportion would be found to be Bronze Age or Iron Age in date.

Fortunately, prehistoric settlements and field systems also manifest themselves as cropmarks, many of which are traces of prehistoric settlement and field systems (Figure 8.5). Although some of these features have been recorded on other aerial photographs, most cropmarks have been recorded on aerial photographs taken specifically for archaeological purposes. A great deal is owed to these surveyors, most of whom are amateurs, and, in Staffordshire, the greatest debt is owed to the efforts of Jim Pickering.

Before turning to look at how cropmarks can add to our knowledge of the Late Bronze Age and Iron Age in Staffordshire, it is worth considering the factors affecting the identification of cropmarks from the air. Perhaps the most significant factor is that flying is expensive. Another major consideration is that cropmarks are best seen under certain conditions. At best, these ideal conditions only occur on a few days a year when crop growth and ripening passes through certain stages. In many years the ideal conditions do not occur at all. In years when these conditions do occur, it is difficult to predict if and when they will occur. It should also be understood that those, who survey for cropmarks, only have limited access to aircraft. Often they only have a share in aircraft, or else they only have access to a plane owned by a flying club. So when the correct conditions occur these archaeological surveyors have to drop whatever else they are doing, arrange to have access to a plane and take to the skies at short notice.

The expense and the limited window in time have had a profound effect on how people have set about looking for cropmarks in the county. The first phase has been an initial survey, looking for areas where the geology favours the formation of cropmarks. Subsequently, the surveyors have tended to visit and re-visit those areas where the ground conditions favour cropmark formation. Even within these areas there are zones where there are strict controls on civil aviators. The normal practise, therefore, has been to pay particular attention to complexes of cropmarks, in order to identify additional detail. The only areas to receive similar attention are those that are in the vicinity of important

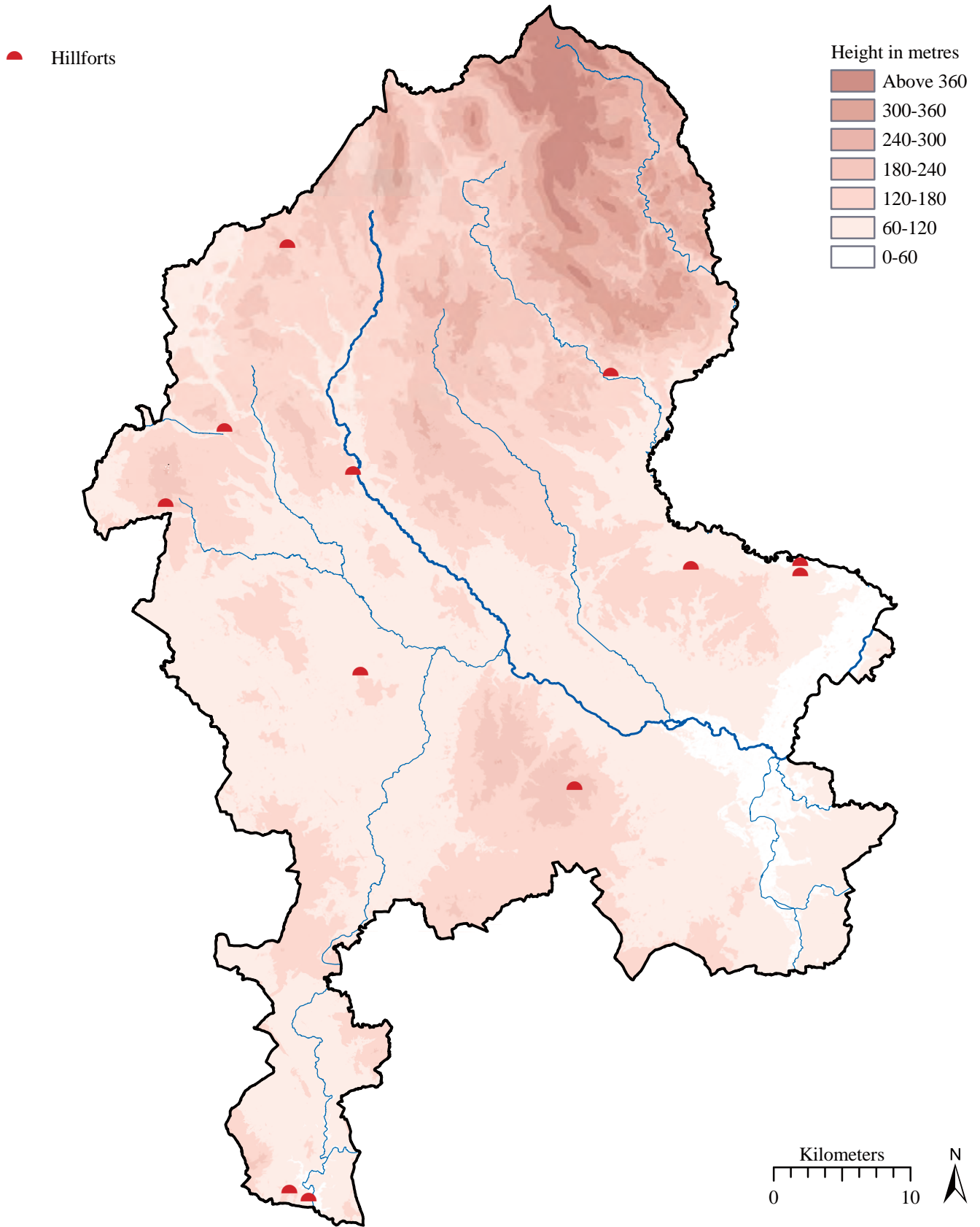


Fig. 8.4 Hillforts in Staffordshire.

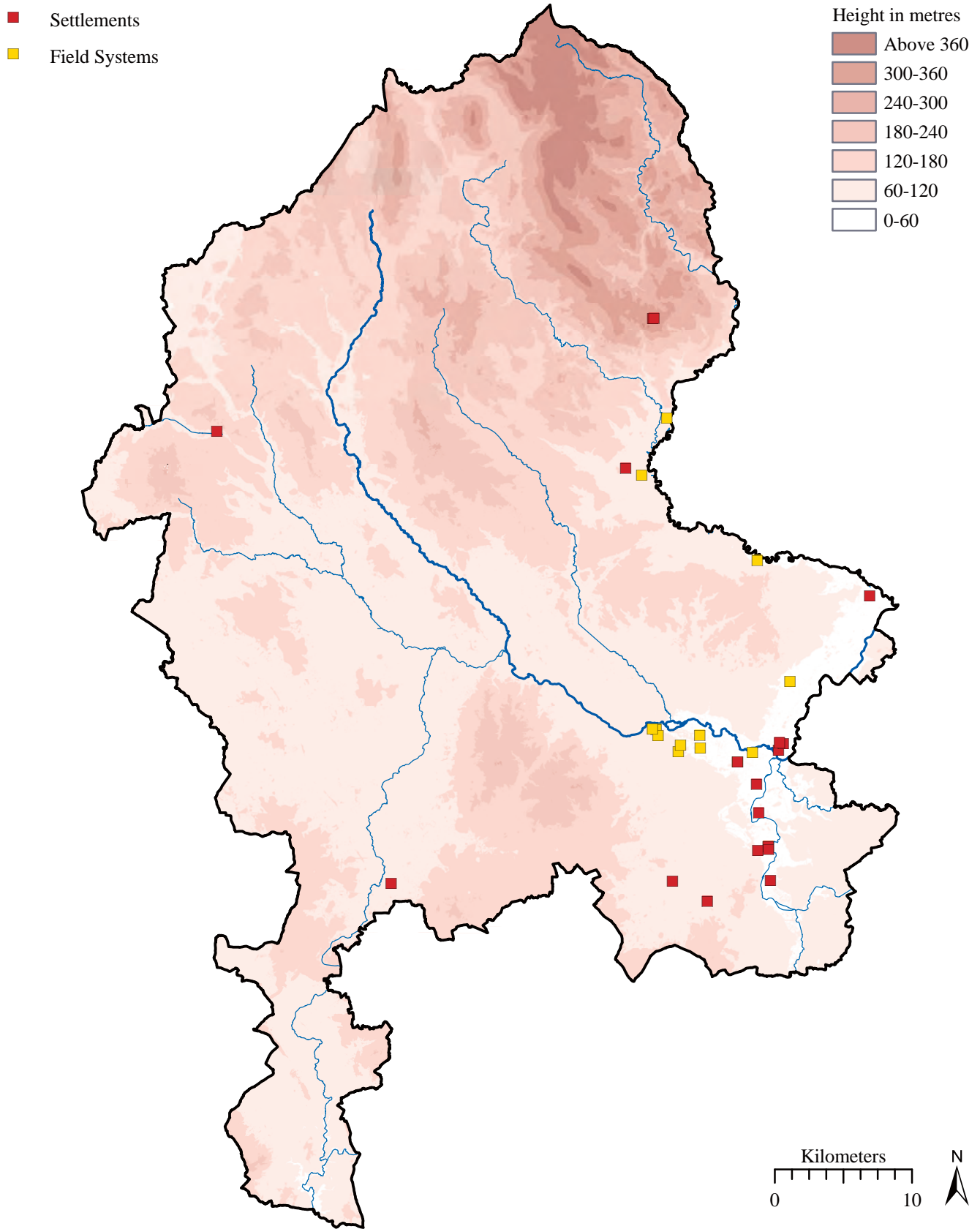


Fig. 8.5 Later prehistoric settlements and field systems in Staffordshire.

archaeological monuments, especially Roman sites. As a result, it has been a long time since fliers looking for cropmarks have visited most of Staffordshire.⁴

The vast majority of these cropmark sites are to be found on the terraces of the rivers Trent and Tame, close to the confluence of these two rivers. Smaller clusters are also to be found near to some of the county's principal Roman sites. Relatively few of these features have been subjected to excavation. It is likely that a proportion of the features shown on the map will be due to geological and agricultural features, and not to archaeology. Similarly not all of the archaeological cropmarks will be evidence of Late Bronze Age and Iron Age activity. Many cropmarks will be Roman in date, and some even later in origin.

Given the limited nature of the resources available to archaeologists, it is inevitable that the vast majority of the features revealed as cropmarks will never be the subject of an excavation. Indeed many cropmarks in Staffordshire have been destroyed either with very minimal salvage recording, or else with no archaeological fieldwork at all.⁵ The only evidence, therefore, for many of these cropmark sites are the aerial photographs themselves, and any plots that might be produced from them. Fortunately, certain inferences may be drawn directly from the aerial photographs.

In the centre of Figure 8.6 there are a number of ring-ditches, which almost certainly mark the site of a barrow cemetery. There is also a field system, the boundaries of which are shown by a series of pit alignments. The fact that the pit alignments respect the ring-ditch cropmarks indicates two things. The field system was set out some time after the presumed barrows had been constructed, and the presumed barrows must have been substantial earthworks when the fields were established. This example also serves to illustrate that there are limits to the number of reliable inferences that can be drawn from the cropmarks without recourse to excavation. Without excavation there cannot be absolute certainty that the ring-ditches were barrows. Similarly, without excavation there cannot be any certainty about the date of the field system.

Excavation of the Late Bronze Age and Iron Age cropmarks in Staffordshire has had varied success. On one hand there have been cases where no trace of the cropmark could be found (Hughes 1990), or where the features were so truncated as to yield little evidence (Hughes 1992). On the other hand some of the field investigations of cropmarks have yielded, or are yielding, a considerable amount of evidence. One example of a site that has added a vast amount to our knowledge of the period is Stuart Losco-Bradley's excavation at Catholme. Although this site is probably best known for Anglo-Saxon settlement evidence, a large prehistoric settlement was identified utilising the site of an earlier round barrow. The site was first occupied during the Late Bronze Age and continued in use during the Iron Age. However, it seems that at some point before the

Roman invasion the settlement site shifted to a site beyond the excavated area (Losco-Bradley and Kinsey 2002). The gravel quarry at Whitemoor Haye may prove to be a site of similar interest. Here an ongoing programme of excavation has identified a system of Bronze Age drove-ways on the site, part of which was occupied by a number of barrows. Sometime in the Iron Age, or else during the Roman period, the drove-ways were replaced by a field system (Gary Coates, pers. comm. in 2002).

In spite of the abundant evidence of Late Bronze Age and Iron Age activity in the southeast of the county, there are still significant gaps in our understanding of this period. There is also little idea of what was going on beyond in the south-eastern corner of the county. The only source of information currently available that might fill this void is the information provided by find-spots. These are the places where the general public – gardeners, farmers ploughing their fields, and people out walking or, as is increasingly the case, using metal-detectors – come across artefacts.

Before we turn to looking at distribution maps of these finds, it is probably useful to consider the shortcomings of any plot of the distribution of reported find-spots. The most serious difficulties relate to the way in which finds of this nature come to be reported. The vast majority of such discoveries probably never get reported to an archaeologist. Even when they are reported, the accuracy of the location is often uncertain, and the level of precision, at which the location is reported, is often inadequate. To add to these problems it is very difficult, using simple dot distribution maps, to differentiate between locations from which individual finds were recovered and those from which a number of finds (*e.g.* coin hoards) have been found. In spite of these shortcomings, the study of the distribution of reported find-spots has the potential to contribute to our understanding of the past.

Before any understanding of the past can be gained through an examination of distribution maps, it is necessary to understand the factors that distort the apparent distribution. In the case of find-spots two principal biases in the data should be expected. The first of these is that a greater density of reported find-spots should be anticipated in the vicinity of urban areas. This is because there will be a far greater density of gardeners digging their gardens and allotments in the suburbs than there will be farmers ploughing their fields in rural areas. Furthermore, far more people go for walks in the urban fringe than go for walks anywhere else, and the heaths, moors and grassland which draw walkers beyond the urban fringe tend not to provide the conditions for chance finds of artefacts. The second bias we should anticipate is a greater level of recovery of finds from the vicinity of important monuments. These areas, especially the vicinities of well-known Roman sites, attract people using metal-detectors. Even if the metal-detectorists are looking for material from other periods, they are likely

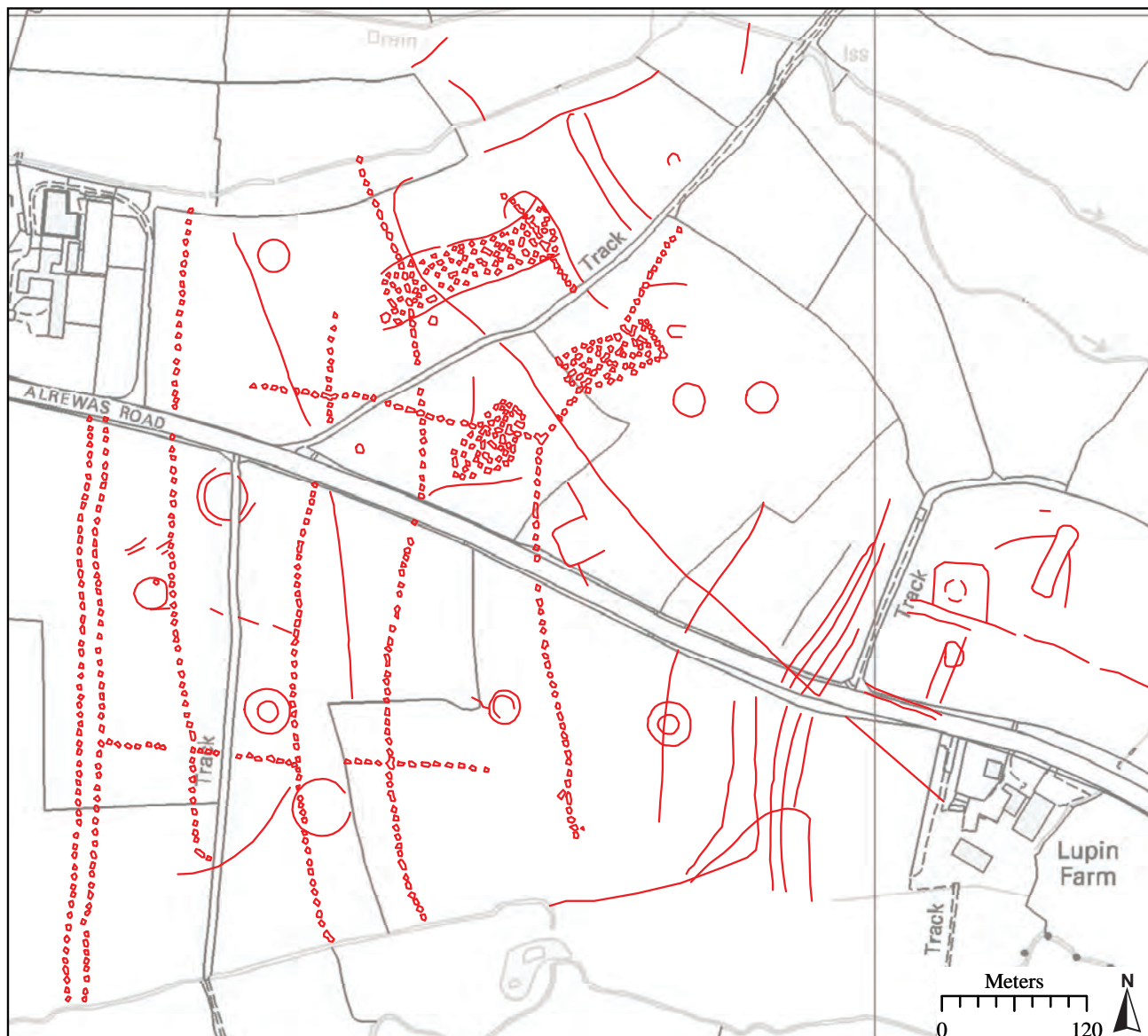


Fig. 8.6 Kings Bromley, Staffordshire: plot from aerial photographs.

to find at least some material from the Late Bronze Age and Iron Age.

It is, therefore, possible to identify the more obvious biases when studying the distribution maps. There are clearly areas of greater densities of find-spots in the vicinity of two of the major urban centres, the conurbation of Stoke on Trent and Newcastle under Lyme, and Burton-upon-Trent, and a less obvious cluster near Tamworth (Figure 8.7).⁶ There are also clusters near the barrows of the Peak District and two of the better known Roman sites, Wall and Penkridge.⁷

Setting aside the obvious biases, it is immediately clear that find-spots are much more widespread than either hillforts or the evidence for settlements and field systems. There also seems to be a greater density of find-spots in

the arable areas, which tend to be restricted to the valleys of the Trent, Tame, Sow and Penk. It is, however, difficult to provide an analysis as to why this might be the case. To some extent this probably reflects the tendency for people to settle on the land that is easiest to cultivate. It probably also reflects the fact that farmers are more likely to find artefacts on ploughed land than on pasture, and are more likely to allow people using metal-detectors onto ploughed land than elsewhere.⁸

It is also clear that not enough is known about the processes of find deposition and recovery, to be able to make a detailed analysis of find-spots. The contrast between the relative abundance of Late Bronze Age find-spots and the dearth of Iron Age material serves to illustrate this point.

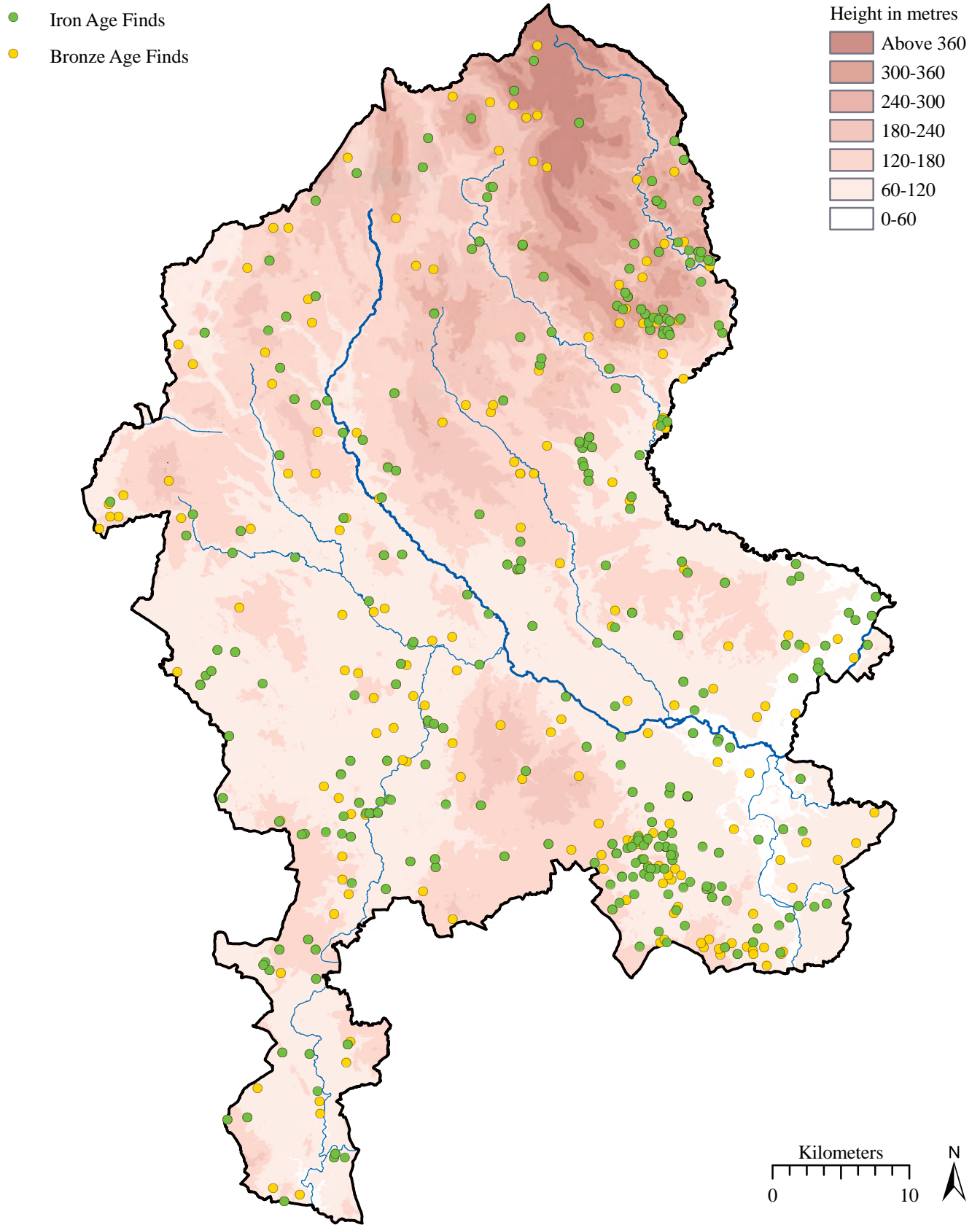


Fig. 8.7 Late Bronze Age and Iron Age find-spots in Staffordshire.

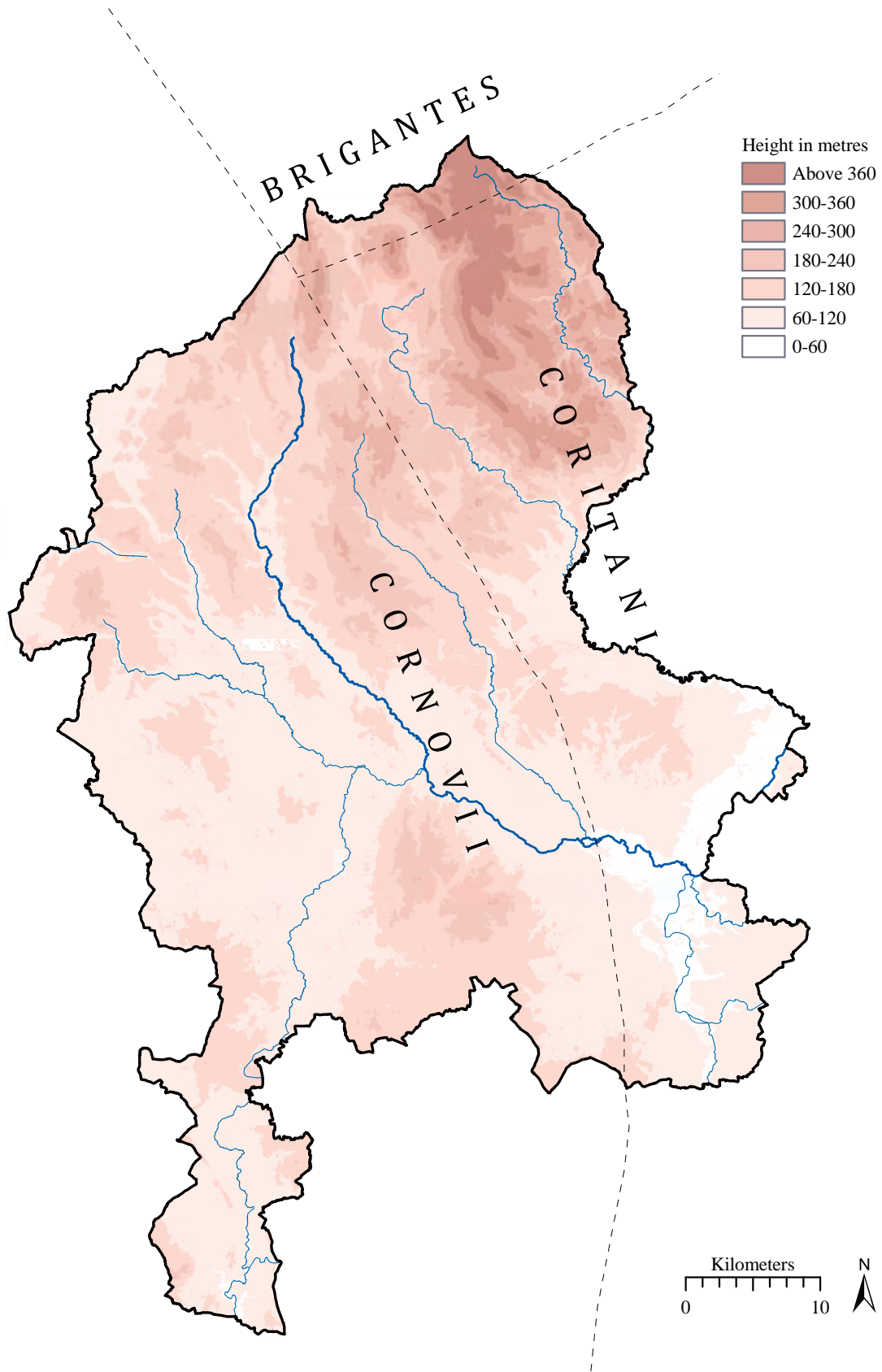


Fig. 8.8 Tribes in Staffordshire area at time of the Roman conquest.

The most likely explanation is that the Bronze Age artefacts recovered from find-spots are invariably of gold, bronze, or flint. Ground conditions mean that most other materials, such as wood and leather, do not survive in the soil, and those materials that do survive, chiefly pottery fired at low temperatures, are easily overlooked. In the Iron Age, bronze and flint ceased to be used for the manufacture of tools. The material that replaced it, iron, either does not survive, or else tends to be overlooked.⁹ This does not mean that the Iron Age cultures of Staffordshire were marked by relative poverty. The gold and bronze torcs found in a number of sites in the county give the lie to this idea.¹⁰

At the end of the Iron Age, for the first time, the native peoples in what is now Staffordshire came into contact with a literate society. It might have been hoped that Roman authors provided a clear picture of the country that the legions invaded in the first century AD. Unfortunately, this is not the case. Classical historians do provide a sketchy account of the conquest of southern England,¹¹ but they directly report nothing about the occupation of the West Midlands. Nevertheless, through a combination of reading accounts of later campaigns and inscriptions found beyond the county, modern historians believe there were two, or possibly three tribal groups living in the area that is now Staffordshire. These were the Cornovii, whose heartland was in Shropshire, the Coritani, whose main focus was in Leicestershire, and the Brigantes, who inhabited northern England (Figure 8.8).¹² This is an interesting strand of evidence, as it might indicate to what extent these tribal confederations were transforming themselves into proto-states. Immediately, however, there are two difficulties, as it is uncertain how accurate this information is, nor is it known to what extent the situation reported by classical authors was the result of the crisis brought about by the Roman invasion.

In summary, therefore, there are three main strands of evidence for the Late Bronze Age and Iron Age in Staffordshire. These are evidence from the hillforts, the earthworks and cropmarks of settlement and field systems, and find-spots. None of these strands by itself will ever provide a complete picture of the period. However, by studying all three strands together, and developing the information base, it may be possible to progress an understanding of the period.

In the case of the hillforts, fieldwork is urgently required. This should be undertaken with a view to establishing a reliable chronology and in order to ascertain what role, if any, the hillforts played in the hierarchy of settlement. The evidence provided by the earthworks and the cropmarks provides more detail than any other form. Unfortunately, this evidence is very dependent upon local circumstances and is only present in discrete parts of the county. One method of improving our information base is through embarking on a programme of broadening our methods of survey, especially aerial photographic surveying. There is also a

need to create and develop techniques that will enable some understanding to be gained of those cropmarks that have not been excavated. Only a minority of these cropmarks will ever be excavated, and so it is important that, not only the individual hut circle and enclosure are better understood, but also, as far as possible, the entire landscape.¹³

Yet even if the results of field research in the county's hillforts are available, the survey for cropmarks is extended, and the tools are developed to enable the analysis of unexcavated cropmarks, there will still be huge gaps in our knowledge, and only by recovering artefacts can we hope to plug many of these gaps. There are, therefore, two ways in which it might be possible to overcome the biases in the Staffordshire data:

- a) The first is to establish a programme of systematic fieldwalking using a sampling strategy. This might also help to fill some of the gaps in knowledge about some of the other periods. Largely as a result of lack of resources, Staffordshire has lagged behind some of the other West Midland counties in this regard.
- b) The second is to improve liaison with metal-detectorists, who are out there gathering finds which can be used to generate useful data. Adequate resourcing is, therefore, required for the Portable Antiquities Scheme, and its full integration with professional archaeological practice.

Notes

- 1 Unless stated otherwise, all the information supplied in this paper comes from Staffordshire Sites and Monuments Record.
- 2 The multivallate hillfort is Castle Ring (PRN 25, at SK04431282) the largest hillfort in the County; Bury Bank (PRN 22, at SJ88203590), Berth Hill (PRN 23, at SJ78793904) and Berry Ring (PRN 24, at SJ88752120) are univallate; Kinver Camp (PRN 195, at S083558326), Bishop's Wood (PRN SJ74483355), and the example at Bunbury (PRN 64, at SK07104312) which was severely damaged when the site was landscaped for the Earl of Shrewsbury's estate at Alton Towers, and has probably been further damaged by the process of turning the estate into a theme park. It has been suggested that the earthworks which lie outside the later defences at Tutbury Castle (PRN 40, at SK20922919) could be those of a hillfort, and an earthwork a few kilometres to the west at Forest Bank (PRN 727) could be those of a hillfort. It has also been suggested that Harecastle Clump (PRN 30042) is also a hillfort, but the reason for this belief is unclear.
- 3 It is worth noting that, in spite of the dearth of hillforts in the Staffordshire part of the Peak, a number of examples are to be found elsewhere in the Peak District (A. Myers, pers. comm.).
- 4 Some detail as to the methods/techniques employed in archaeological aerial survey can be found in Wilson (1982) and Riley (1987). However, most of what I know of the techniques used by aerial surveying has been learnt through conversations with Jim Pickering, Fred Hartley and the late Derek Riley.

- 5 An example of an important site that has been destroyed with only minimal fieldwork is the cluster of hut circles at Stretton, north of Burton. These features were destroyed in the 1960s when the area was developed. The hut circles were subject to a very limited salvage excavation that was reported by Wheeler (1969). The excavators found two pits, one containing Iron Age pottery and the other Romano-British pottery. Even they were forced to admit that this level of recording did not do the site justice.
- 6 The absence of a similar cluster of find-spots in the vicinities of the other sizable towns, Stafford and Cannock, is difficult to explain, but may be linked to the proximity to Cannock Chase. The Chase attracts many walkers, but it is covered by forest, bracken, heather and grass. Chance finds tend not to be made in these conditions.
- 7 Of the other main Roman sites, much of one, Chesterton/ Holditch, lies under factories, and it is possible that many of the detectorists who work close to the other two, Rocester and Greensforge, either tend not to report their finds, or else report them to museums well beyond the County (*e.g.* Derby).
- 8 Anecdotal evidence indicates that many arable farmers are quite willing to allow detectorists on their land in the period between ploughing and their seeds sprouting, on the condition that any profits will be shared. On the other hand, many farmers with livestock will not let people with detectors on their land for fear that their animals will hurt themselves in the remains of the pits excavated by the detectorists.
- 9 Anecdotal evidence indicates that metal detectorists often tune their machines so they can avoid spending time digging for iron objects, many of which will be horse shoes or items of modern agricultural equipment.
- 10 The gold examples from the Needwood Forest, and Glascote, near Tamworth, and the recent discovery at Alrewas, are as fine as any in other parts of the West Midlands.
- 11 Even here the relevant section of one writer's history, Tacitus' *Annals*, is missing, so we are heavily reliant on Cassius Dio.
- 12 Based on the details in Frere (1979).
- 13 When this issue was raised during the seminar, Professor Bradley said that the RCHM(E) project, aimed at dating features on typological grounds, foundered because it did not take regional variations into account. I do not doubt the truth of what he said, but would still argue that it would be very useful to develop this type of technique. We should explore the possibility of developing regional typologies. In the case of Staffordshire, where the majority of known cropmarks lie in the valleys of the Trent and its tributaries, it might not be appropriate to see the cropmarks in a West Midlands context. It might be more useful to look at them in the context of the Trent basin.

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Middle Bronze Age to Late Iron Age Worcestershire

*Derek Hurst**

Introduction

By later prehistory Worcestershire had become central to its region through the production and distribution of material goods such as pottery, and of at least one commodity, salt. However, even in the case of these archaeologically prominent industries much still remains to be discovered. As for other aspects of Middle Bronze Age to Iron Age life, there are many more evident gaps in our knowledge and understanding due to the scarcity of excavated sites, and the lack of publication of the largest excavated Iron Age site from the region (namely Beckford). However, PPG16-led (and, more recently, PPS5-led) archaeology seems to have produced a considerable increase in the discovery rate for sites and finds of this period since late 1990, and, in due course, a much more balanced and informed understanding is likely to emerge as a result. In view of this increasing pace of discovery, now is a good time to be establishing a fresh research agenda for the future.

Back in 1982 Alan Hunt suggested that a programme of research into the prehistory of the West Midlands should be carried out over the next two decades (including the investigation of all methods and a synthesis; Hunt 1982). In view of the present (2002) programme for developing research frameworks Alan is to be congratulated on his foresight about the necessary way forward, and it has just been commenced in time to comply with his timetable (though as it turns out the production the results of this process has been taking rather longer).

The need for a review of Mid Bronze Age to Iron Age Worcestershire is keenly felt, especially in the absence of any recent synthesis. Only a few sites of any size have so

far been investigated: Aston Mill (Dinn and Evans 1990, 58–63), Blackstone (Hurst *et al.* 2008), and Holt (Hunt *et al.* 1986), while the largest excavation of a site dating to this period remains unpublished after the excavation ceased 36 years ago (Beckford). This paper is a first step towards gathering the available evidence together and assessing it in the light of the results of research in areas where more work has become possible, most often as result of post-1991 developer-funded work.

Middle to Late Bronze Age

Historically the Bronze Age has probably never been very visible in the archaeological landscape of Worcestershire in more modern times. Though this period has never been the subject of any concerted research programme, and so its scarcity may be more apparent than real. The known sites are generally isolated chance finds of metalwork, except in a very few instances. There seem to be some areas that are particularly rich in these chance metalwork finds (*e.g.* around Bewdley in north Worcestershire), but this may be because of the efforts of a single fieldworker rather than being significant in any archaeological sense. Increasingly, however, it is becoming possible to identify settlement sites from the identification of pottery from fieldwalked sites (*e.g.* Bretforton in south Worcestershire; Hurst 2004), whereas it has until now been thought unlikely in this area that any prehistoric pottery would survive at all in the plough-soil. Where, as at Bretforton the fieldwalking is related to a cropmark, it may be possible to identify with some certainty features of this period, and thereby provide

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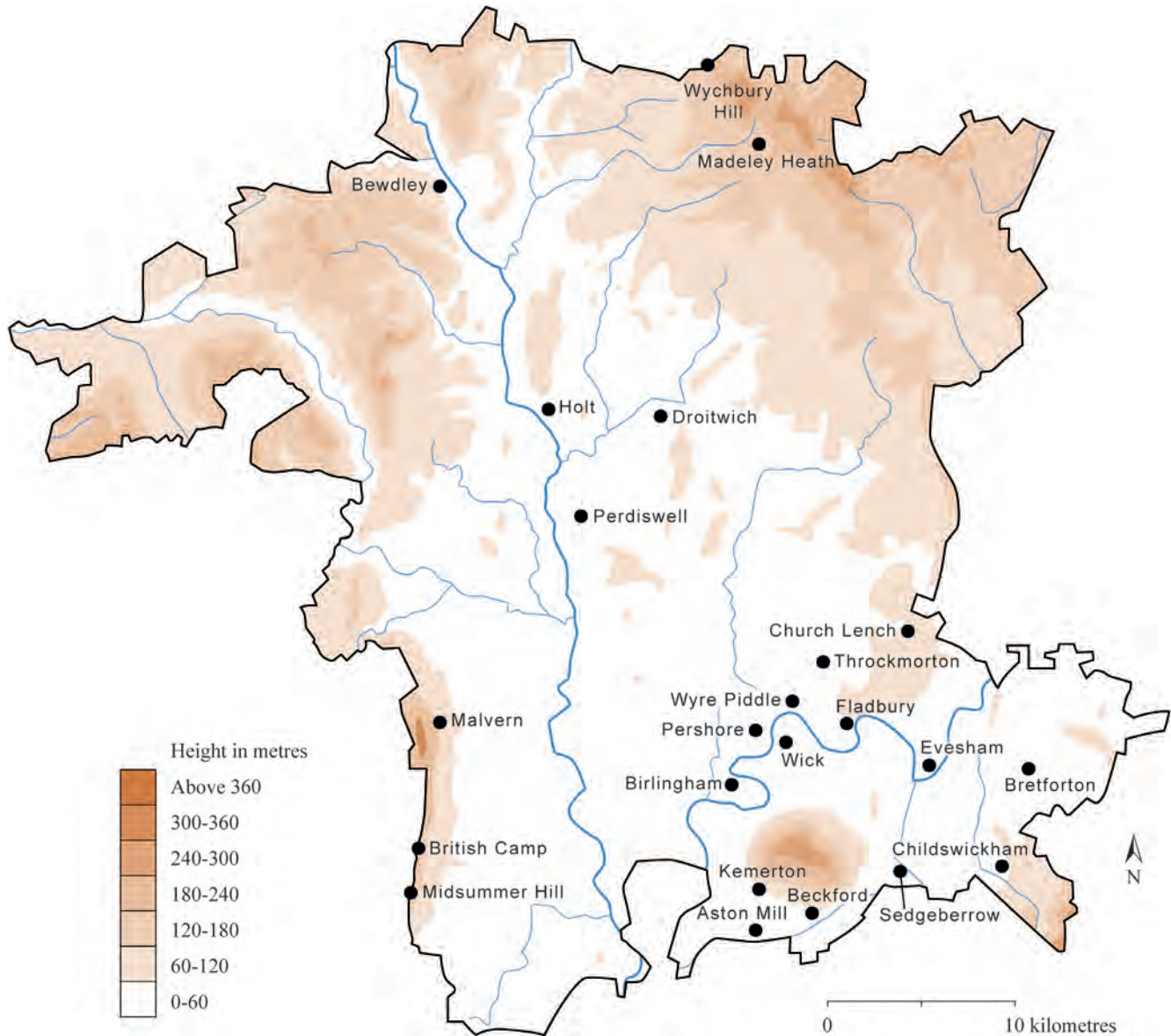


Fig. 9.1 Main Worcestershire places mentioned in text.

further (provisional) evidence about settlement morphology without the need for expensive excavation.

Survey and excavation, however, remains the only real way of locating and dating prehistoric sites in the West Midlands. Fortunately, the influence of PPG16 has led to greater opportunities to scan large blocks of landscape in the field, and this type of archaeological intervention is beginning to give some clues to the true incidence of Bronze Age and Iron Age sites in Worcestershire (Figure 9.1). The large linear ditches which often characterise the Bronze Age period in southern England, have also been identified, for instance during the recent excavation of a largely Roman site in Childswickham. Here a large land boundary set up in the Bronze Age (Figure 9.2) seems to have been respected

at least into the Roman period, as lesser Roman boundary ditches were integrated into the same alignment (Hurst *et al.* 2002; Hurst and Patrick 2012), and so it is likely to have served a similar purpose in the later Bronze Age and Iron Age landscape.

Burnt mounds have also come to characterise the Middle Bronze Age period in adjacent areas to Worcestershire, especially to the north around Birmingham, where they have been generally dated *c.* 1700–1000 cal BC (M. Hodder, pers. comm.). These sites are now coming to light further south, but they are still rare. Other mid to later Bronze Age sites are also really quite rare, and only one has been explored in much detail. A settlement site was encountered during a watching brief on a quarry at Kemerton near Bredon Hill in



Fig. 9.2 Slot through a Bronze Age ditch (5m wide) at Childswickham near Broadway, Worcestershire.

south Worcestershire, and this has shown that the features of this period can occur in some profusion, and sometimes on a considerable scale. This has also been the first occasion in Worcestershire that a sizeable assemblage of pottery and other domestic material, including a good assemblage of (loom)weights (Hurst 2015; Figure 9.3), has come to light, much of it in the infilling of large water-holes, possible relating to the deliberate closure of these features (Jackson 2015). If so, this would be an important clue as to why this material has been so difficult to find in the past, as much of its disposal may have been done in a selective way. The finer detail of such a site, in between the occasional large features such as the water-holes, also requires its survival without too much subsequent disturbance, and Kemerton is a rare instance of this.

More typical of the period perhaps is the secondary use of a ring-ditch at Aston Mill, also in south Worcestershire, where there were later cremations inserted into the ditch (Dinn and Evans 1990). Some of the pottery showed that

activity here continued into the later Bronze Age. More Bronze Age funerary material has appeared on the line of the Wyre Piddle by-pass, where cremation burials were found during the evaluation. None, however, were found during the excavation. An unusual and, potentially, rare site has also recently come to light on the north side of Worcester at Perdiswell (Griffin *et al.* 2002a). This has been interpreted as a circular palisaded enclosure rather than a barrow. A small amount of Bronze Age pottery was associated, though its precise date was uncertain.

Some cropmarks have also been tentatively interpreted as of Bronze Age date. Such sites have been discovered at Bowers Hill in Bretforton (unenclosed settlement), though other sites have been assigned a broader Bronze Age to Iron Age date (*e.g.* at Fladbury, and Wick; Mike Glyde, pers. comm.). Worcestershire has an extensive range of crop-marked archaeological sites, but little or no synthesis has been carried out to date (Mike Glyde, pers. comm.).

The presence of large areas of cleared ground has been demonstrated by environmental evidence (see Pearson, this volume), and, taken in association with the scarcity of evidence for cereals, current interpretations favour the view that pastoral farming/ranching may have been important at this time. For example, pollen and plant macrofossil remains from deep and waterlogged pits at Kemerton, in combination with mollusc remains from contexts widely distributed across the site, support this view (Elizabeth Pearson, pers. comm.). In addition, buried peat deposits on or near the Avon flood plain in particular (*e.g.* at Carrant Brook, near Bredon Hill; Greig and Colledge 1988), and at Birlingham (Greig 2000) show a landscape largely cleared of woodland by the Early Bronze Age. This may also fit quite neatly with the large boundaries that have been found dividing up large tracts of land.

Bronze Age pottery has also recently come to light in Malvern. It is possible that the evidence for the commencement of the adjacent hillfort (Herefordshire Beacon) needs to be reviewed, as other hillforts in the Marches have now been shown to have Bronze Age antecedents (*e.g.* the Breiddin in Powys; Musson 1991). The recent earthwork survey by English Heritage across the Malverns has apparently given further credence to an old idea that the ditch on the crest of the Malverns, which is usually attributed to the medieval period, is in fact much older, and so potentially of Bronze Age date.

There are some intriguing antiquarian references such as to the discovery of large amounts of metalwork from the River Isbourne at Sedgeberrow, though few details survive. Such deposits may be important indications that the special use of watery areas for the deposition of objects, as demonstrated in eastern England and beyond, may extend to the West Midlands.



Fig. 9.3 Late Bronze Age ceramic weights from Kemerton, Worcestershire.

Iron Age

The earlier Iron Age seems to be virtually absent as typically defined in southern or eastern England by a particular ceramic phase. It may be that the sites in Worcestershire have so far eluded us, but it is looking increasingly likely that it will soon be necessary to reappraise some of the pottery dating currently applied in this region.

In the Middle Iron Age Worcestershire comes much more sharply into focus. The county becomes the centre of at least one regionally significant pottery industry (based in the vicinity of the Malvern Hills), and the production of salt also becomes a prominent feature. The latter was also accompanied by distinctive ceramic containers which were carried well beyond the confines of the modern county (Morris 1983; 1985; 1994). It is, accordingly, now well established that trade and/or exchange of manufactured material goods was very much a way of life in this period.

Some of the more spectacular sites in Worcestershire are of Iron Age date (*e.g.* Kemerton Camp hillfort on Bredon Hill). However, as with the Bronze Age there are relatively few occupation sites identified with certainty. Excavations at Beckford in the Avon valley in the 1960s–70s certainly revealed the quality of Iron Age deposits that can survive

in Worcestershire. This site had many of the classic features of a lowland Iron Age settlement in the Middle Iron Age. A similar site has also been excavated at Holt in the valley of the River Severn, and here the Iron Age settlement seems to have respected the Bronze Age features, which were left largely undisturbed (Hunt *et al.* 1986). Similar remains have more recently come to light at Wyre Piddle (Robin Jackson, pers. comm.), where a cluster of roundhouses was found close to a stream. Clearly a good water supply was one of the dominant concerns when planning such settlements. Sites of similar date are at Kemerton (Bellamy *et al.* 2001), and at Throckmorton (Griffin *et al.* 2005). At the latter, limited trenching has demonstrated an extensive Middle–Late Iron Age settlement (Figure 9.4).

Environmental evidence is clear about the production of wheat in this period, and bread is likely to have been a staple food. Probably as a result, for the first time more permanent structures relating to the basic human activity of cooking become more visible (*e.g.* domestic ovens in some of the Beckford roundhouses), as well as other residues such as ‘potboilers’, presumably accumulating on the edges of cooking areas. In contrast to this wealth of evidence for the living there have been few clues about how the dead

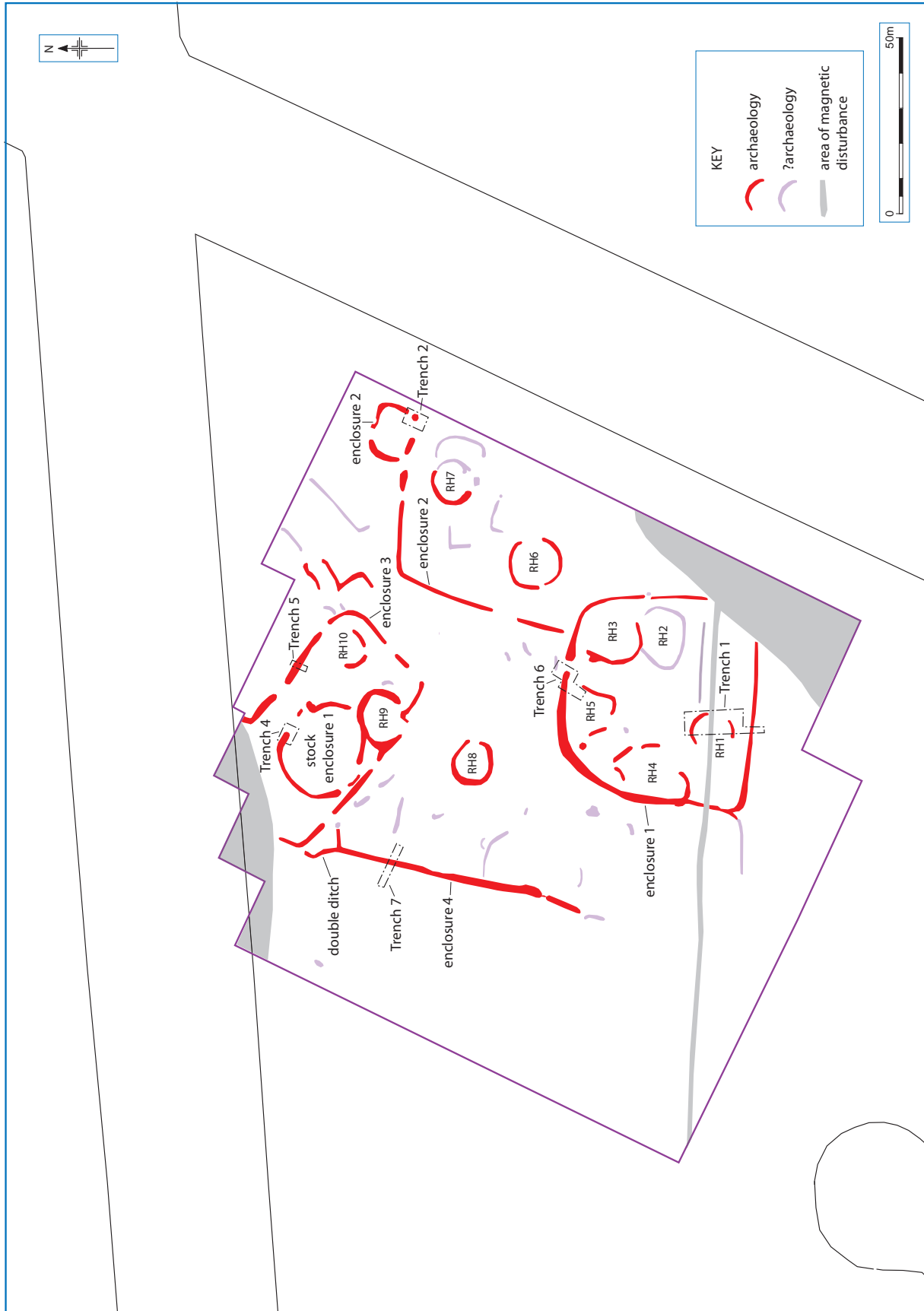


Figure 3

Iron Age activity and trench locations (based upon GSB Prospection project 2001/98)

Fig. 9.4 Throckmorton Airfield, Worcestershire: Time Team site geophysics interpretation with excavated areas indicated.

were attended to. A single burial has, quite recently, been dated to the Iron Age, and this was an accidental discovery in isolated circumstances along a stream bank at Church Lench, where the associated radiocarbon date was 190 cal BC–cal AD 20 (Griffin *et al.* 2002b).

The adoption of PPG16-type methodology, especially in the case of larger linear infrastructure projects, has in Worcestershire, as elsewhere no doubt, led to unusual, and, by definition, unexpected discoveries relating to the Iron Age. Such a site would be an isolated pair of pits at Madeley Heath in north Worcestershire (Hurst and Pearson 1996). These were packed with burnt stones ('potboilers'), which would probably have been interpreted as simply the residues of cooking, except for the isolation of the pits from any settlement features, and the rather odd composition of the associated artefact assemblage. The latter comprised a single sherd of pottery, and a single piece of ironworking slag together with worked antler and pieces of Droitwich salt container (*ibid.*). The isolation of the pits was striking, given that extensive soil stripping left no doubt about the absence of any other contemporary features, and so the function of the pits and their contents remains uncertain, though the curious composition does suggest a case of

structured deposition (Hill 1995). The nearest known Iron Age site is the hillfort on Wychbury Hill, 5.5km away. Such remains in an earlier era would have been interpreted as pits inside a sweat lodge (M. Hodder, pers.comm.), which begs the question of how safe period-conditioned interpretation should be viewed, and poses the likelihood that we should probably still be keeping an open mind, regardless of how much academic weight has been given to any given interpretation.

The ensuing Late Iron Age phase is less well known, partly as a result of a major change in the settlement pattern occurring at the transition from the Middle to Late Iron Age. This is evidenced by the wholesale evacuation of the Middle Iron Age settlement sites, which are then incorporated into enclosure systems with settlement presumably refocused elsewhere. This pattern has been seen most recently at Evesham (Edwards and Hurst 2000). As a corollary of this pattern, one enclosure overlooking the River Severn at Blackstone, near Bewdley, is now known to have a Late Iron Age construction date, its contemporary internal features including a pair of pits which were rich in finds (Hurst *et al.* 2010; Figure 9.5). This was short-lived being deserted later during the same period (*i.e.* before the Roman conquest).



Fig. 9.5 View across interior of the Blackstone Late Iron Age enclosure showing pits and a small ring-ditch (lower centre right). Main enclosure ditch just visible crossing left–right beyond persons on the site.

The hardware of Iron Age living also went through some transitions during the Iron Age. For instance, pottery, which was formerly largely made locally, had become mainly a regional product in the Middle Iron Age (Morris 1982), supplied mainly from the Malvern area, and from the Woolhope area further west in Herefordshire – though there is less certainty about the exact source of the latter fabric. Salt was being transported over long distances (Morris 1985). These patterns suggest that a vigorous economy may have flourished (see also Hurst (b), this volume), though this distribution may have reflected a zone which developed for other reasons. One suggestion is that the relative consistency in the distribution of several commodities (*e.g.* salt, and iron in the form of spit-shaped currency bars), which seems to disregard several natural barriers such as the River Severn or the steep scarp slope of the Cotswolds, has some validity as representing a tribal territory (*i.e.* that of the Dobunni).

The Pershore hoards (formerly the South Worcestershire hoard) of Iron Age gold and silver coins represent one of the largest caches of Iron Age coins from an excavated site in England (Hurst and Leins 2013). The coins seemed to represent two hoards buried close together, and the presence of an offcut from a gold torc from close by, suggests the possibility that other rich objects could have also been originally buried in this vicinity. Follow-up archaeological fieldwork showed that there was an extensive associated settlement site. Since the site was completely unknown prior to the metal detecting find, the question arises as to how many more such sites remain totally undiscovered to date. Though within an area (the Avon/Severn valleys) where many cropmark sites are known, this site is largely situated on clayland geology that is not at all receptive to aerial photography, whereas geophysical survey has since revealed multiple enclosures covering several hectares.

The status and detailed dating of the Pershore hoards site is still unknown, but this is clearly an Iron Age focus, which, though not a classic hillfort location, takes advantage of higher ground. The site is also significant in terms of archaeological research methodology and management, as fieldwalking here has produced both Iron Age pottery and briquetage, once more (as for the Bronze Age sites above) showing that combining fieldwalking with other fieldwork techniques can be archaeologically revealing (at least in terms of acquiring some basic understanding) without the need necessarily for expensive excavation. It is possible that the hoards indicate a particularly important tribal centre of the Dobunni.

A way forward?

Obviously there have been some notable successes in terms of discoveries of significant and informative sites, and, in particular, it seems that the rate of Bronze Age data

being accumulated is definitely increasing. This must mean that something is going right. In addition, the quality of these new discoveries is striking, and so only now is the true potential for the presence of Bronze Age and Iron Age sites in Worcestershire becoming more apparent. However, while reviewing this evidence, it has become clear that there may be some aspects of archaeological practice that could be improved to achieve even greater advances in data. The following are a few suggestions in the light of current progress, where changing methods or adjustments to current methods of working, may bring even greater rewards in terms of the quality and quantity of data acquisition:

- 1) More interpretations of aerial photographic evidence in association with targeted fieldwalking would seem to be productive, given recent experience at a site such as Bretforton (see above). So far, local groups have played a major role in this, but only in an impromptu way, and there is certainly no formal acknowledgement of the contribution that this joint and inclusive method of working can make towards the professional management of the archaeological resource. This approach, which is particularly suited to research, needs greater public acclaim and academic acknowledgement, as does the achievement of the voluntary group, and there is also a need to attract a more solid funding base for this type of amateur/professional partnership, with the new role of community archaeologist acting as the link between archaeologists and the community.
- 2) Given the importance of wetland habitats to earlier and later prehistoric people it would be sensible to be watching all dredging operations carried out on both major and minor waterways. The author knows of no formal and direct consultation with the archaeological curator taking place in the event of major riverine dredging operations in the Worcestershire area, nor even in the case of some major engineering works, such the excavation of balancing ponds for flood alleviation – the latter has recently been proven to have been highly destructive of archaeologically significant peat deposits at Impney near Droitwich, despite the significance of the deposits being recognised during site evaluation (Griffin *et al.* 1999). Such works are often viewed as peripheral to the main development scheme, where the scheme is primarily for other than environmental purposes. The Environment Agency does not necessarily carry out direct consultations with archaeologists as part of the planning system, while planning authorities do not always see fit to apply PPG16 in the same way to works associated with environmental improvements as to other construction work. Such failures could continue to be expensive in terms of lost heritage sites of spectacular potential given the rarity of surviving deposits of this type.

- 3) There are only two Middle to Late Bronze Age radiocarbon dates, and sixteen Iron Age radiocarbon dates for the whole of Worcestershire held on the ADS website (doi:10.5284/1017767), which includes over 9000 radiocarbon dates in total for Great Britain and Ireland as a whole (2002). These few dates are mainly only from two locations, namely Droitwich and Blackstone. There is clearly a need for much more scientific dating, specifically radiocarbon dating, especially given some of the difficulties/gaps that seem to exist in the pottery sequence. These should be AMS dates using the methods described by Haselgrove *et al.* (2001, 4–5). All opportunities to establish scientific dates must be maximised, as these can help to refine data from other sites, and so place the whole regional structure on a sounder footing. This is especially crucial for the purposes of refining pottery trends.
- 4) More human burials should be dated scientifically rather than relying on associated typological criteria for dating, since it is clear that Iron Age burials can also adopt forms that would often be interpreted as earlier prehistoric in date.
- 5) The later prehistoric pot gazetteer (doi:10.5284/1000013; accessed 16 March 2009) seems to indicate that many Iron Age sites also have pottery of other periods including earlier prehistoric. This suggests that it would be useful for any prehistoric, and even Roman pottery assemblages, to be carefully studied by appropriate ceramic specialists with a track record in recognising this material.
- 6) Finally, a conundrum, for if prehistoric field systems and landscapes include elements which are physically so substantial (*e.g.* Bronze Age land boundaries, and Iron Age field boundaries), why do so few traces turn up on watching briefs covering major linear infrastructure projects in the county? Does this in fact imply that there are not really that many later prehistoric settlement features to be found? Though too soon to say, the available evidence does seem to point this way, in which case later prehistoric sites may be generally relatively rare, and should, in that light, be more fully excavated perhaps, whenever encountered, than is being allowed for at the moment.

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An overview of the ceramic basis within the broader West Midlands region

Annette Hancocks

Needham (1996) defined seven periods to the Bronze Age in Britain and his paper provides an excellent chronological overview. A summary of the Early Bronze Age is essential to understanding the changes and developments which follow throughout the ceramic development. From *c.*2000 BC the Bronze Age emerges with the occurrence of urns and accessory vessels associated with the cremated burial rite. This marks a major change in funerary practice, and the new era sees pottery and potters being replaced by bronze and bronze smiths. This is reflected in the decline of pottery technology and the decoration of ceramic vessels.

The Middle Bronze Age is marked by a major change in funerary practice. Collared Urns appear and there is a marked diversification in pottery for funerary use and a new burial rite (urned cremation) emerges. It sees a Deverel-Rimbury *floruit* within the region, namely Bucket Urn groups. Settlement sites come into the forefront of archaeological visibility and become an important source of dating evidence. Where Deverel-Rimbury settlement sites are reasonably well dated by metalwork and one or more radiocarbon dates, they seem attributable to 1500–1150 BC.

Throughout the Late Bronze Age there is evidence for more widespread usage of ceramic containers. Morris (1994) has argued that the Late Bronze Age plain ware assemblages in the region are characterised by vessel types such as coarse and fineware shouldered and concave or ovoid jars, and a variety of mainly fineware bowls, with occasional cups. Swords and shields appear and can be linked with the emergence of new, high-investment and high-prestige sites. The presence of these weapons would have wrought radical changes in warfare and the first metal cauldrons would have allowed new modes of ostentatious eating.

Across much of the region there is a distinct shortage of ceramics of the Late Bronze Age and Early Iron Age periods (Figure 10.1), and a shortage of radiocarbon dates for this period in the region contributes to this situation.

Middle and Late Bronze Age

The distribution plot in Figure 10.1 and Table 10.1 demonstrate a scarcity of ceramics of this period within the region as a whole, with only two assemblages (Wasperton, Warks., and Kemerton, Worcs.) being large enough to be studied meaningfully. During this period the emphasis is on the number of urn cemeteries excavated, as opposed to Middle Bronze Age assemblages from domestic settlement sites. This is partly as a result of antiquarian activity, creating a natural bias in the published archaeological record, and the fact that very few domestic settlement sites of this period have been excavated within the region. This imbalance obviously needs addressing.

Table 10.1: Range of ceramic assemblages of Bronze Age date within the region

	<i>Herefordshire</i>	<i>Warwickshire</i>	<i>Birmingham/ Black Country</i>	<i>Worcestershire</i>	<i>Shropshire</i>	<i>Staffordshire</i>
urn cemetery	4	8	1	4	2	4
other site type	-	1	-	4	-	-
site totals	4	9	1	8	2	4

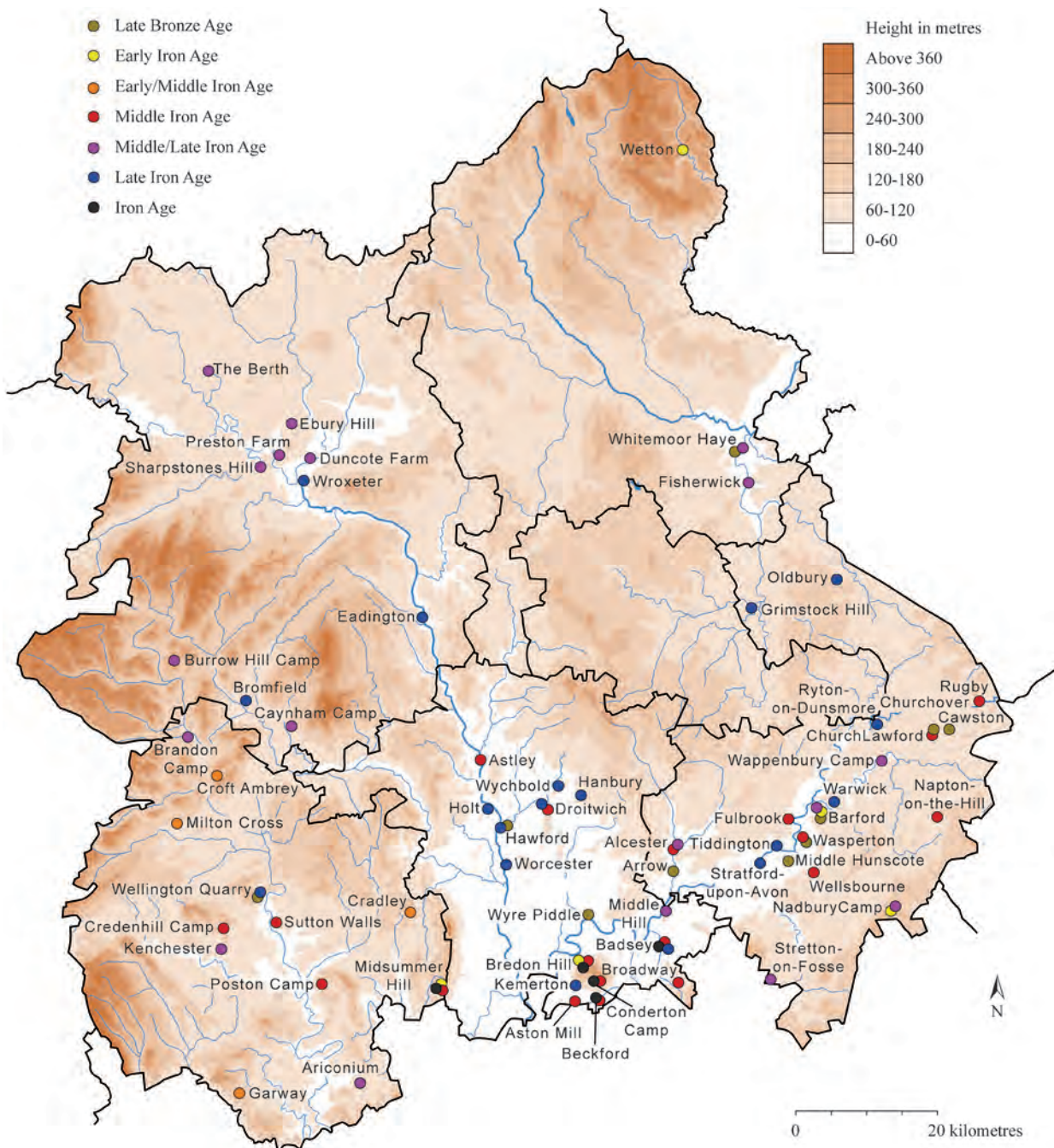


Fig. 10.1 Places in the West Midlands with pottery dating from within the Middle Bronze Age to Late Iron Age period.

During this period, pottery inclusions may have some symbolic significance. From about 2400–1200 BC grog-tempered beakers prevail, and may represent evidence for the recycling of earlier pottery vessels (*i.e.* where being re-used as grog temper).

Herefordshire

Distribution mapping (Figure 10.1) highlights the scarcity of ceramics of this period in Herefordshire.

Warwickshire

A significant Deverel-Rimbury Urn cemetery has been excavated at Ryton-on-Dunsmore. This comprised upright urns and represents the second assemblage of any size of Bucket Urn type recovered from the West Midland region. The assemblage comprises a far more restricted and homogenous range than that recovered at the Bromfield cemetery (Shrops.; Stanford 1982). Parallels with the Bromfield cemetery are cultural and chronological (*cf.* at Bromfield, 1190–810 cal BC (2800±71 BP; Birm-63) and 1020–780 cal BC (2712±75 BP;

Birm-62), at 2 sigma), with classic Middle Bronze Age radiocarbon dates being recovered from Ryton.

During the Late Bronze Age Deverel-Rimbury ware is plain, with examples being recovered from Park Farm, Wasperton, and Salford Priors (below), and with similar general trends being recognised elsewhere (Thames Valley, Somerset and Avon; 11th to 7th century BC). From the Late Bronze Age assemblages become much larger, and questions can be asked such as “how are vessels deposited in their various contexts?”, evidence pointing to deposition in a variety of ways. For example, at Broom on the Norton Lenchwick bypass, near Alcester, one pit containing Late Bronze Age pottery was adjacent to small ring-ditch containing the remains of a Late Bronze Age cremation pyre, thereby suggesting a continuing funerary association for some pottery vessel deposition.

Worcestershire

As stated previously, during the Middle Bronze Age patterns of ceramic deposition changed. This coincides with the emergence of settled agriculture and the construction of field systems. Most Middle Bronze Age vessels derive from burial contexts, especially cremation cemeteries within or just outside round barrows. Middle Bronze Age assemblages on domestic settlement sites are very small and rare. Late Bronze Age assemblages are larger and appear to be exploiting the developing local and regional trade and exchange networks, such as at Kemerton (Woodward and Jackson 2015).

Shropshire

The upper Teme and upper Severn valleys are rich in prehistoric settlement (*e.g.* Burrow Hill Camp; The Wrekin; and see above for Bromfield). Three early hillforts are known within this region, including The Wrekin. Ceramics are tempered with distinctive rocks locally derived to each site. It is at this point that local trade and exchange networks in Late Bronze Age Britain commence, and the development of local production for local consumption emerges.

Staffordshire

At Whitemoor Haye 432 sherds were deliberately deposited. This is a significant assemblage, as ceramics of this period are so rare in the county. Other pottery concentrations in the Tame valley occur at sites such as Catholme and Barton-under-Needwood.

Early and Middle Iron Age

Early to Middle Iron Age sites within the West Midlands region (see Figure 10.1) demonstrate that Early Iron Age pottery production is similar to that during the Late Bronze

Age period. The ceramics are defined by shouldered and ovoid jars, biconical/carinated bowls and shouldered jars with finger-tip/nail impressions. Some vessels have red finished ‘haematite-coating’. There is increasing recognition of the trading of fine decorated wares, as well as limited evidence for trading of distinctive coarsewares, such as Droitwich briquetage in the Severn Basin, though in that case it is the contents that were the direct subject of trade. From 800 BC onwards there is a transformation in use of metals for both social and technological ends, and ironworking superseded bronze working, during the later stages of which many more hoards of bronze were deposited than formerly. ‘Recognition of concentrated locations of production and intra-regional distribution of Early Iron Age wares is an important part of our understanding of the development of Iron Age pottery production’ (Morris 1994).

Droitwich briquetage made its appearance in the Early Iron Age (800–500 BC) amongst hillfort and non-hillfort sites in the Severn Basin, its production scale and distribution varying through time. Few radiocarbon dates have been recovered from sites containing the early occurrence of this material. Throughout the Severn-Avon valleys during the Early Iron Age period (800–500 BC) jars with/without finger-tip decoration on the shoulder, angular shouldered jars, small shouldered bowls, and the use of incised geometric decoration are found in the West Midlands. From the Middle Iron Age onwards there is a significant change in pottery production. This coincides with the explosion in the number of settlements, as is borne out by the number of open settlements versus hillforts producing ceramic assemblages (Table 10.2), while there is also differing development within each region.

It is unclear why the production and exchange of coarse- and fine-wares began to change during this period and the catalyst for change has not been determined. The development of regional pottery styles heralds a fundamental change in production/exchange systems. The ceramic assemblage becomes modified into a more highly decorated repertoire, at least in lowland Britain, at the same time as hillforts and hilltop enclosures, previously thinly scattered, began to proliferate. Artefacts were deposited in wet places such as rivers and bogs, settlement archaeology becomes much more evident, and hillforts develop and become more common-place. This results in an overall increase in the quantity of distinctive types of pottery being produced at concentrated production locations, and then the use of that pottery can be traced at sites a considerable distance from the source area.

Herefordshire

Ceramic assemblages in this period are dominated by material from the hillforts. Both upland and adjacent lowland resources were being exploited, and hillfort ‘pairings’, such as Pyon Wood and Croft Ambrey hillforts, develop, and

Table 10.2: Occurrence of Iron Age ceramics assemblages within the region

	Herefordshire	Warwickshire	Birmingham/ Black Country	Worcestershire	Shropshire	Staffordshire
open settlement	3	25	2	15	4	5
hillfort	6	3	1	4	4	-
total of sites	9	28	3	19	8	5
<i>assemblage size</i>						
4 sherds			X			
10 sherds					X	
50 sherds		X				
96 sherds	X					
1259 sherds	X					
1903 sherds	X					
3000 sherds		X				
3640 sherds				X		
5000 sherds				X		
30kg				X		
103kg (including LIA plus 40 boxes)				X		
small						X
large	X	X				
unknown	5	25	2	14	3	4

resources, such as water, become more important. The hillforts are potentially deliberately located to exploit and control trade routes along the Severn and Warwickshire Avon, and to act as distribution links between Herefordshire (Wye valley) and Worcestershire (Severn valley). Across this region (principally Herefordshire and Worcestershire) Droitwich briquetage and pottery vessels with stamped/tooled decoration were distributed in the Middle Iron Age.

Warwickshire

Warwickshire lies at the boundary of Iron Age tribal zones: Dobunni, and Corieltauvi/Coritani. An extensive later prehistoric settlement landscape is revealed for the Iron Age, the area stretching from Hampton Lucy and Wasperton to Barford and northwards containing the densest concentration of known prehistoric sites in the county (Figure 10.1). Settlement enclosure was very common, and pit alignments mark out territories in the Dunsmore and Avon regions. Hillforts are important, but largely absent from the Avon Valley. However, the Warwickshire Iron Age is poorly understood compared to Herefordshire, Shropshire,

and Worcestershire. Coins and iron currency bars act as other material culture indicators of trade and exchange mechanisms, but pottery, as usual, remains the principal guide to socio-economic connections (Hingley 1996). In terms of coins Warwickshire lay at the conjunction of two Iron Age coin using areas (Dobunni/Corieltauvi).

For a long time no Group A–E (*e.g.* Peacock 1968) or Droitwich/Cheshire Plain briquetage (Morris 1985) had been recorded in Warwickshire, apart from Droitwich briquetage at the Rollright Stones (Morris 1994). This has recently changed with the analysis of assemblages from Meriden (Hancocks 2005) and Marsh Farm (Hancocks forthcoming), since both types of briquetage have now been found at these two sites.

Culturally in this area the artefacts are distinctive, but the evidence of their reciprocal exchange is quite limited, in contrast to further west. This should not, however, rule out the possibility of movement of goods across this region as many goods were perishable (*e.g.* wool, meat and salt), and it remains possible, therefore, exchange was equally active from the area but just focussed on other, less visible, materials.

Birmingham and Black Country

Here the Iron Age in general is also poorly represented, and, until recently, Iron Age pottery had only been recovered from two settlement sites of this period: Kings Norton Grammar school and Sandwell. However, recent discoveries along the route of M6 toll route have included small quantities of Middle/Late Iron Age pottery from Langley Mill (Site 29), and Middle Iron Age pottery from Wishaw Hall Farm (Site 19) (*e.g.* Leary 2008). At Solihull (Meriden) a further 151 sherds have been identified, including Cheshire Plain and Droitwich briquetage, and La Tène-style decorated pottery (Hancocks 2005, 21).

Worcestershire

For the Early Iron Age period within this county there appears to be no clear distribution pattern for ceramics, with localised wares predominating. The only exception is that a small number of sites occur with Droitwich briquetage (Morris 1994). Then, subsequently, the distribution of Droitwich briquetage increases and this is associated with pottery consisting of both local and non-local fabric types, so that, during the Middle Iron Age, chronological trends in pottery production and supply emerge. Stamped and linear-tooled decoration is commonly seen on Malvernian vessels, and this is contemporary with the emergence of hillforts and hilltop enclosures, which show rapid growth. Sites such as British Camp and Midsummer Hill may have controlled trade routes around and across the Malverns, thereby exploiting the trade and exchange mechanisms during the Iron Age. Some have linked this consistency

in pottery styles closely with the emergence of a unified territory, to which a Dobunnic identity has been assigned.

Shropshire

Within Shropshire the Iron Age is most fully represented by the evidence from the hillforts, such as The Wrekin, Wall Camp at Kynnersley, and Pave Lane, Chetwynd Aston. The Wrekin hillfort pottery comprised the following range of types: undecorated jars, one unusual haematite-coated jar, open bowl forms and a globular jar. The Early/Middle Iron Age sees local dolerite-tempered pottery on sites such as Caynham Camp, Ludlow. In the Middle/Late Iron Age pottery becomes widely present and diversified on settlement sites, and the range and variety of vessel forms increases. During the Late Iron Age, Group A (Malvernian) and Group D (Mudstone-tempered) pottery dominates, and salt containers from Droitwich/Cheshire are barely present, though in many cases the quantities of sherds are very low, and so assemblages may not be truly representative.

Staffordshire

Historically very little material culture has been recognised between the Trent and the Middle Severn area (Catholme, Fisherwick and Whitemoor Haye). The modern-day county lies between the Iron Age tribal areas assigned to the Cornovii to the west and Corieltauvi to east. The archaeology of this part of the West Midlands region can be characterised by a ceramic exchange mechanism that involved, amongst other resources, granodiorite-tempered pottery, Cheshire Plain briquetage, and quernstones. Recent discoveries of Middle Iron Age pottery from five sites (300 sherds) along the M6 toll road at Shenstone and Wall (*e.g.* Leary 2008, 250) represent a small, but very significant increase in the data for this area.

Future research priorities

- 1) Routine radiocarbon dating is needed to help develop and resolve regional chronological issues coupled with associations of metalwork with pottery and other datable finds.
- 2) Residue analysis on collared urns and accessory vessels should be encouraged in order to examine the function and use of these vessels.
- 3) A holistic and integrated approach is needed to tie in the ceramic element of material culture to coin evidence, quern distribution, briquetage, iron exploitation and small finds (such as brooches) in order to try and get further insights into trade and exchange mechanisms, and to examine their possible complexities. This would be especially desirable as more data accumulates, in order that the results can inform an active debate on new findings.
- 4) Iron Age pottery stylistic zones can be perceived as indicators of social/economic groups. Further research is required into fabrics (*e.g.* chemical characterisation of composition), and into clay source and temper resource identification, to locate more precisely the production centres and to identify the processes involved in manufacture.
- 5) There should be continued application of petrological analysis of pottery fabrics (where appropriate) in order to reveal as much as possible about manufacture, especially in the absence of located production sites.
- 6) Quantitative analysis of spatial distribution of wares is highly desirable to provide information about the scale of production/exchange, and would now be relatively straightforward to undertake given the prevalence of GIS technology.

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The potential of the Portable Antiquities Scheme and treasure finds for understanding the Iron Age in the West Midlands

*Angie Bolton**

Introduction

This paper examines the material culture recorded by Finds Liaison Officers (FLO) under the West Midlands Portable Antiquities Scheme (the Scheme; PAS), focussing on the material culture of the Iron Age. It discusses how these data can contribute to, and further our understanding of, the archaeological record in this region. The artefacts recorded by the Scheme have been discovered by members of the public, mostly metal-detector users, and where appropriate some items have been reported under the Treasure Act (1996).

Portable Antiquities Scheme in the West Midlands

One of the catalysts for the introduction of the Scheme was the publication of the discussion document *Portable Antiquities* commissioned by the Department of National Heritage in 1995. This document highlighted that a vast number of archaeological chance finds, discovered by the general public, were going unreported every year. The Scheme started as a pilot scheme at the same time as the Treasure Act (1996) came into force, in September 1997, with six FLOs, the West Midlands being one of these initial pilots. The aim was to record these archaeological chance finds discovered by the public. Due to the success of the first six pilot scheme a further five pilots were established in the Spring of 1999. From December 2003, the scheme had extended to cover the whole of England and Wales with three FLOs now covering the West Midlands region.

The main aim of the Scheme is to advance our knowledge of the history and archaeology of England and Wales. The success of this aim can be illustrated, for example, simply through the quantity of the finds and the quality of the records created by the FLOs. From 1997 until 2009 the PAS recorded 32,985 finds from the West Midlands region, dating from the Palaeolithic to the modern period. These finds were mainly metalwork, but also included ceramics, glass, worked bone, flint and stone. Between 1997 and 2009 the PAS recorded 1102 West Midlands finds of the Bronze Age and Iron Age periods.

Existing perception of Iron Age metalwork in the region

Thomas (1974, 38) quoted an unknown source regarding the traditionally held view of prehistory in the West Midlands region, classing it as an 'archaeological desert'. Although Thomas (1974) disputed this view, in the main it continues to persist. This view is a common perception of the West Midlands Iron Age as well, and it has been commented (2002) that the perception outside the West Midlands is that there is little or no fine Iron Age metalwork in the region (J. D. Hill, pers. comm.). This perception is compounded by a lack of published material on finds and sites in the region (Hingley 1996, 2; Palmer, this volume). Specialist finds surveys published on particular categories of Iron Age finds support the view of there being a dearth of Iron Age metalwork in the West Midlands. For example, the region does not feature significantly in published finds distributions: strap unions

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(Taylor and Brailsford 1985), tankards and tankard handles (Corcoran 1952), cosmetic sets (Jackson 1985), and button-loop fasteners (Wild 1970). This dearth of material is disputed below in this paper by examining the PAS data.

Assessment of the Iron Age material culture recorded by the PAS in the West Midlands

How can the results of the Scheme be seen to be improving our knowledge of the Iron Age through the material culture being recorded? One simple method is to compare the number of finds recorded by the Scheme in its first five years with the number of Iron Age finds recorded by those museums which were the major contributors to finds recording in the West Midlands in the five years prior to the introduction of the Scheme: Birmingham Museum and Art Gallery, Worcester City Museum and Art Gallery, Worcestershire County Museum, Warwickshire Museum, and the Potteries Museum and Art Gallery. These museums had only recorded 21 Iron Age finds, whereas the Portable Antiquities Scheme recorded 98 finds (Figures 11.1–11.2). This is a 366% increase in the number of Iron Age finds recorded. All of the museum and PAS finds were finds discovered by the general public either by using a metal detector, or by chance, whilst gardening, out walking, building, or fieldwalking.

Since the start of the Scheme it has recorded 356 Iron Age finds from the West Midlands: 95 (27%) coins, 201 (57%) copper-alloy artefacts, 12 (3%) glass beads, 4 fragments of stonework (1%), and 44 (12%) ceramic sherds. The metalwork can be broadly classified into the following categories: harness and vehicle fittings, including strap unions (Figures 11.3–11.4) and lynch pin terminals (Figures 11.5–11.6); feasting, including tankard handles and bucket mounts (Figures 11.7–11.9); personal equipment (Figures 11.10–11.12; including a strap fitting); weaponry, votive, including miniatures of a shield and a wheel (Figures 11.13–11.14 respectively); and unidentified artefacts and coins. J. D. Hill has commented, in relation to the variety of find types recorded, that “this is the most

Table 11.1: Quantity of finds in each PAS functional category

Find	Quantity
weaponry	3
votive	2
feasting	6
personal accessories	97
harness and vehicle fittings	66
unidentified artefacts	27
coins	95

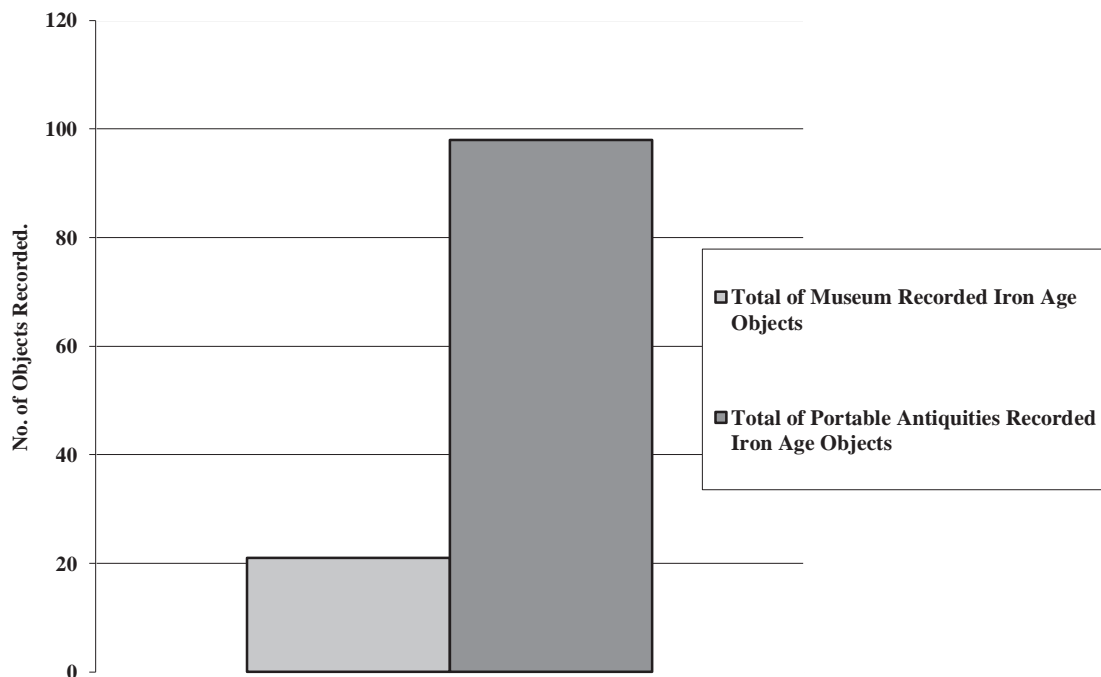


Fig. 11.1 Rate of discovery of Iron Age objects in the West Midlands: comparing as recorded by museums between 1992–1996 and by the Portable Antiquities Scheme between 1997–2002.

significant contribution the Portable Antiquities Scheme has so far made to the study of the Iron Age". The PAS has, therefore, made an important contribution to expanding knowledge of the distributions of these items, and by doing so has encouraged the more positive view that the West Midlands was not marginal in respect of Iron Age metalwork.

Firstly, strap unions; the PAS has recorded two Iron Age strap unions from the West Midlands, one from Kingsbury (Warks; Figure 11.3), and the other from Cubbington (Warks.; Figure 11.4). The Kingsbury example is designed using curvilinear trumpets and bulbous knops. On one edge there is a break which occurred in antiquity. It is debatable whether this was by accident or design, as the edges are straight and parallel, but have a gap. However, the union has since been broken into three fragments by the plough. The finder discovered the three fragments over three consecutive years. Seen singularly the strap unions may not contribute certainties about the site or place of activity from which it was found, but it has highlighted the find-spot. The artefact can be studied to suggest cultural associations through its style and typology. This strap union will also contribute information to the HER which has only recorded a medieval spearhead and prehistoric linear cropmarks in this area.

Focussing more closely on the horse and vehicle fittings there are interesting patterns regarding the variations in the quantity of particular types of artefacts found in the different regions, and the PAS dataset

suggests that the West Midlands is certainly not a poor or marginal region. Looking at the relative proportions of lynch pin terminals (e.g. Figures 11.5–11.6) and terrets recorded in the West Midlands and Hampshire the occurrence of lynch-pin terminals outnumbers that of terrets by 3:1, whereas in the North Lincolnshire the Scheme has recorded thirteen terrets and twenty other harness-related artefacts, but no lynch-pin terminals (Worrell 2007, 378–379). This pattern is similar in the North West, Yorkshire and Welsh parts of the Scheme, where very few lynch-pin terminals have been recorded (*ibid.*, 378–379). These statistics are difficult to interpret directly, but do suggest the great potential for these data to reveal regional variations in the use of artefacts and their deposition. The high proportion of horse and vehicle fittings recorded in the West Midlands, compared to brooches, is also unusual, suggesting that horses and vehicles were equally, or more highly, decorated than the people (*ibid.*, 379).

Relating to feasting, the PAS has recorded two Iron Age tankard handles from the West Midlands (Figures 11.7–11.8). Corcoran's study (1952) of tankards and tankard handles did not record any from the West Midlands. This study includes 25 examples, of which only four are north of a line drawn from The Wash to South Wales. Since this article was written there has not been a significant increase in published finds of this type, for example Jope (2000, Plates 226–230) records 24 examples, none of which are from the West Midlands.

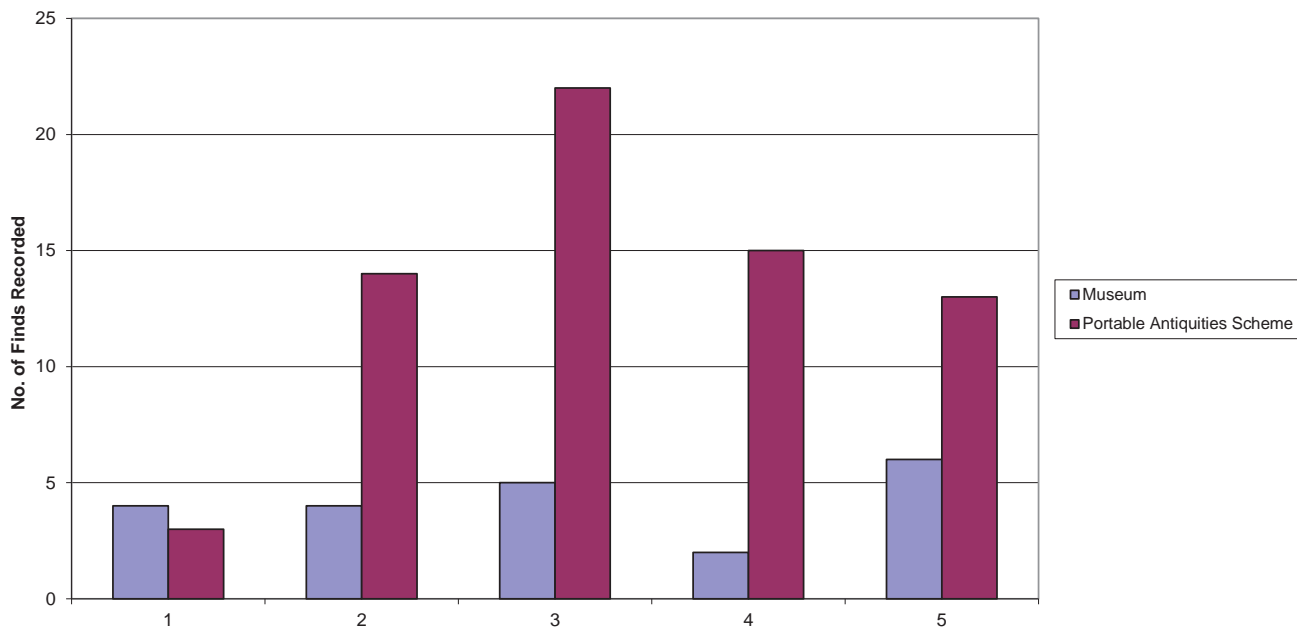


Fig. 11.2 West Midlands PAS rate of recording discoveries of Iron Age finds in years 1–5 compared to museums.

The PAS data is, therefore, extending the distribution of tankards and tankard handles.

Turning to personal equipment, the study of cosmetic sets dating to the Late Iron Age to Roman periods (Jackson 1985, 176–190) is an example of work supporting the more traditional perception of a dearth of Iron Age copper-alloy artefacts in the West Midlands. Only two of the 99 (2%) recorded cosmetic mortars and pestles catalogued by Jackson were from the West Midlands. However, the PAS material refutes this perception, as between October 1997 and April 2008 the PAS has recorded 188 cosmetic mortars and pestles (Worrell 2008, 348–349), and, of these, 22 examples (11%) are from the West Midlands (*e.g.* Figure 11.10). Again the distribution of these artefacts is being extended.

The distribution pattern of button-loop fasteners has previously focused on northern England and southern Scotland (Wild 1970), but others have since been recorded from Yorkshire, the Welsh Marches and south Wales (MacGregor 1962, 17–57; 1976, 129–134; Kilbride-Jones 1980, 159–169; Worrell 2008, 341–347). Furthermore the PAS data has now altered this distribution to include the West Midlands, East Midlands, and the Eastern region (Worrell 2008, 341).

A copper-alloy comb (Figure 11.12), found using a metal-detector in Tanworth-in-Arden (Warks.), was a significant find (Bolton 2006; Ashby and Bolton 2010). It has a semi-circular body with integral teeth along the straight edge. Nineteen teeth are intact, but originally there were twenty; the missing tooth was broken in antiquity and the comb re-shaped to hide the break. The body is decorated with cast ‘mirror-style’ decoration. The style of decoration is comparable to that found on the Iron Age mirrors from Holcombe in Devon (Fox and Pollard 1973, 16–41), Desborough in Northamptonshire (Smith 1909, 338), and Birdlip (Gloucs.) (Bellows 1880–1881, 137ff.; Jope 2000, 290). It has been suggested that these mirrors were deposited between AD 40 and 70 (Portable Antiquities Scheme 2006; Jody Joy (British Museum), pers. comm.), and the comb is

likely to be of a similar date, based on the decoration. There are other British Late Iron Age combs which are similarly decorated and have the same general shape but which are



Fig. 11.3 Iron Age strap union; Kingsbury, Warwickshire (PAS Reference: WMID410). Copyright: Portable Antiquities Scheme/Birmingham Museum and Art Gallery.



Fig. 11.4 Iron Age strap union; Cubbington, Warwickshire (PAS Reference: WMID-519897). Copyright: Portable Antiquities Scheme/Birmingham Museum and Art Gallery.

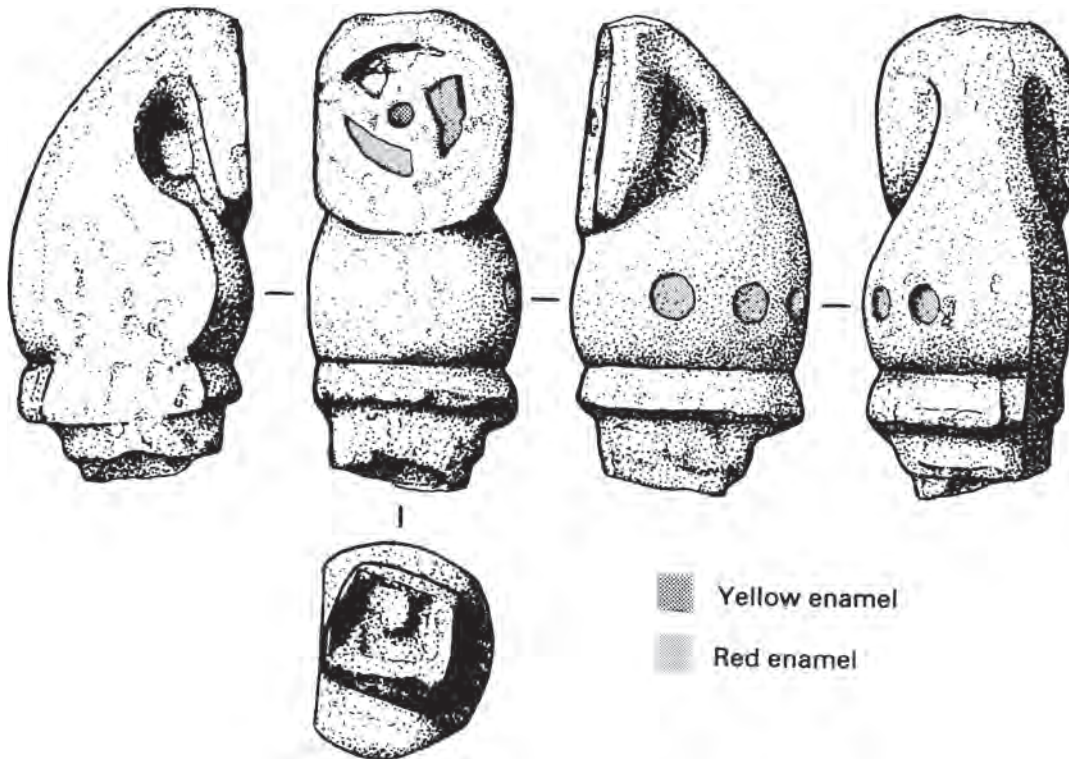


Fig. 11.5 Iron Age lynch pin terminal (length 36.9mm); Worcester, Worcestershire (PAS Reference: WAW-A7EE21). Drawn by C. Stevens; copyright: C. Stevens.



Fig. 11.6 Iron Age lynch pin terminal; Hatherton, Staffordshire (PAS Reference: WMID-947693). Copyright: Portable Antiquities Scheme/ Birmingham Museum and Art Gallery.

all made of bone rather than copper alloy. Bone combs with the most striking similarity are from Ghegan Rock, Seacliff in East Lothian, and Langbank in Renfrewshire (MacGregor 1976, 274–275). Two other combs, from Close ny Collagh, Isle of Man, and Bowermadden, Caithness (Scotland) have a more general similarity in overall shape, but they are not decorated (Raftery 1984, 212–213). There are similar combs found in Europe: 155 iron and 4 bronze combs have been found in Eastern Europe on the Fünen and Bornholm

islands situated between the Baltic and Danube (Levada 2000, 460–478), and more in Scandinavia (Ilkjaer 1993) and Estonia (Schmiedehelm 1955, fig. 26, 8).

The Tanworth-in-Arden comb was discovered on the periphery of the Iron Age mirror distribution across southern England and consequently its find-spot combined with the mirror-style decoration may suggest the comb was used for personal use along with mirrors. However, the comb may also have had an equine function, particularly considering the high proportion of horse and vehicle related artefacts recorded from the region (Bolton 2010).

Significant votive finds recorded by the PAS in the West Midlands include a miniature shield (Figure 11.13) discovered in Warwickshire. Miniature shields are rare items, and only fifteen were known until the Salisbury Hoard was discovered, in which a further 24 came to

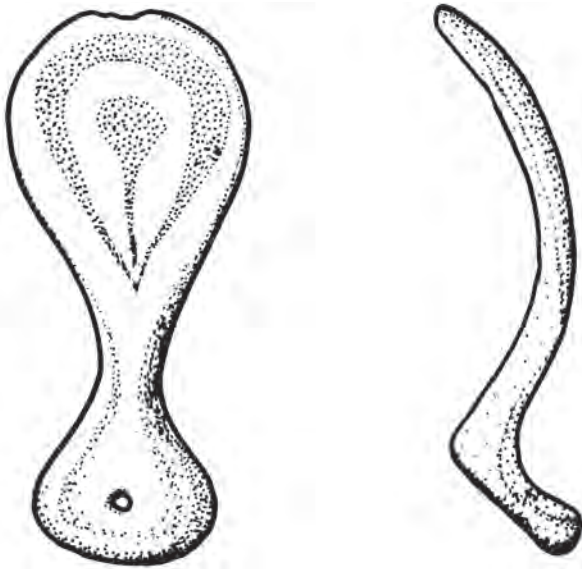


Fig. 11.7 Iron Age tankard handle (length 52.36mm); Tanworth-in-Arden, Warwickshire (PAS Reference: WMID3150). Drawn by A. Bolton; copyright: Portable Antiquities Scheme/Birmingham Museum and Art Gallery.

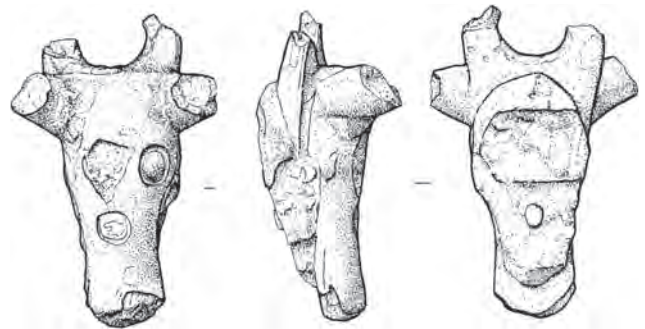


Fig. 11.9 Iron Age/Roman bucket mount (length 41.54mm); Henley-in-Arden, Warwickshire (PAS Reference: WAW-F4DF95). Drawn by C. Stevens; copyright: C. Stevens.



Fig. 11.8 Iron Age tankard handle; Hordley, Shropshire (PAS Reference: HESH-7757A4). Copyright: Portable Antiquities Scheme/Birmingham Museum and Art Gallery.



Fig. 11.10 Iron Age cosmetic mortar; Blithfield, Staffordshire (PAS Reference: WMID-1B06D4). Copyright: Portable Antiquities Scheme/Birmingham Museum and Art Gallery.

light (Stead 1991; 1998). Of the previously known fifteen shields, two were found on hillforts, five in temples and five were thought to have been ritually deposited (Stead 1991, 25). The miniature shield (Figure 11.13) was discovered by a metal-detectorist in the parish of Alcester (Warks.) from within the plough-soil. In plan the shield is an oval shape with a central circular dome (which is hollow on the reverse) representing a shield boss. Decoration on the shield consists of a single fine linear grooved border. Within this border is a series of low-relief dots. Further decoration consists of a roundel formed by a circle of low-relief dots with a single dot in the centre. The roundels appear in the field above and below the boss. Both the roundels and the boss are encompassed with a low-relief curvaceous linear border. The reverse of the shield is undecorated, but in some areas, towards the edge there are high-relief bumps from

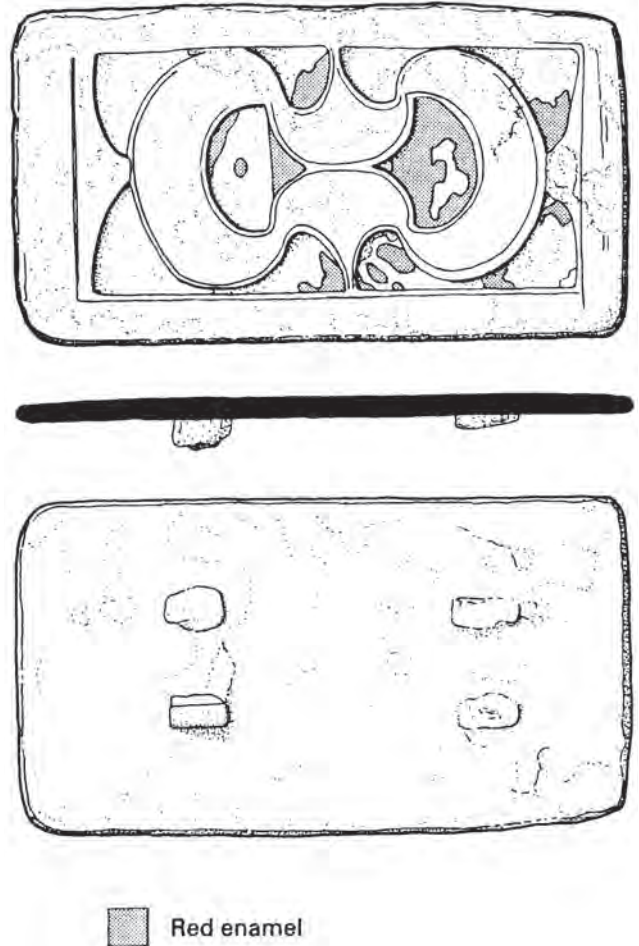


Fig. 11.11 Iron Age strap fitting (length 55.4mm); Barcheston, Warwickshire (PAS Reference: WAW-489CE1). Drawn by C. Stevens; copyright: C. Stevens.

the circular dots being impressed. In the centre, where the boss is hollow a handle has been attached. The handle is joined by two integral rivets either side of the boss. A strip of copper alloy, which has had the rivets puncture it, forms the handle, and then the rivets have been flattened. The handle in the central portion has had the two long edges folded to meet each other. The deposition of the shield, when the other excavated examples are considered, may be of a votive nature, as there is no evidence of a hillfort at the find-spot. Also the shield is important as it makes a contribution to the study of full-size shields, which may not have survived in the archaeological record due to the material they were composed of.

Until October 2009 the PAS had recorded 95 Iron Age coins in the West Midlands. Details of these coins are sent to the Celtic Coin Index (CCI). By publishing the information through the PAS database and CCI the information is being disseminated to a specialised audience (Figure 11.15). Finders often come forward with gold and silver coins, as

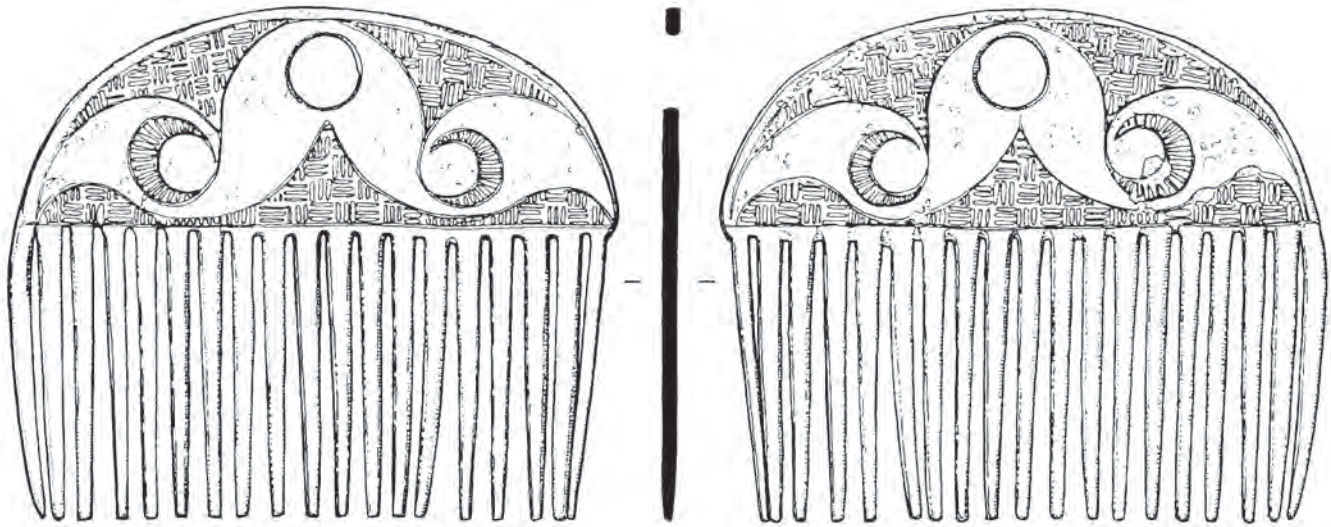


Fig. 11.12 Iron Age comb (length 63.56mm); Tanworth-in-Arden, Warwickshire (PAS Reference: WAW-250340). Drawn by C. Stevens; copyright: C. Stevens.

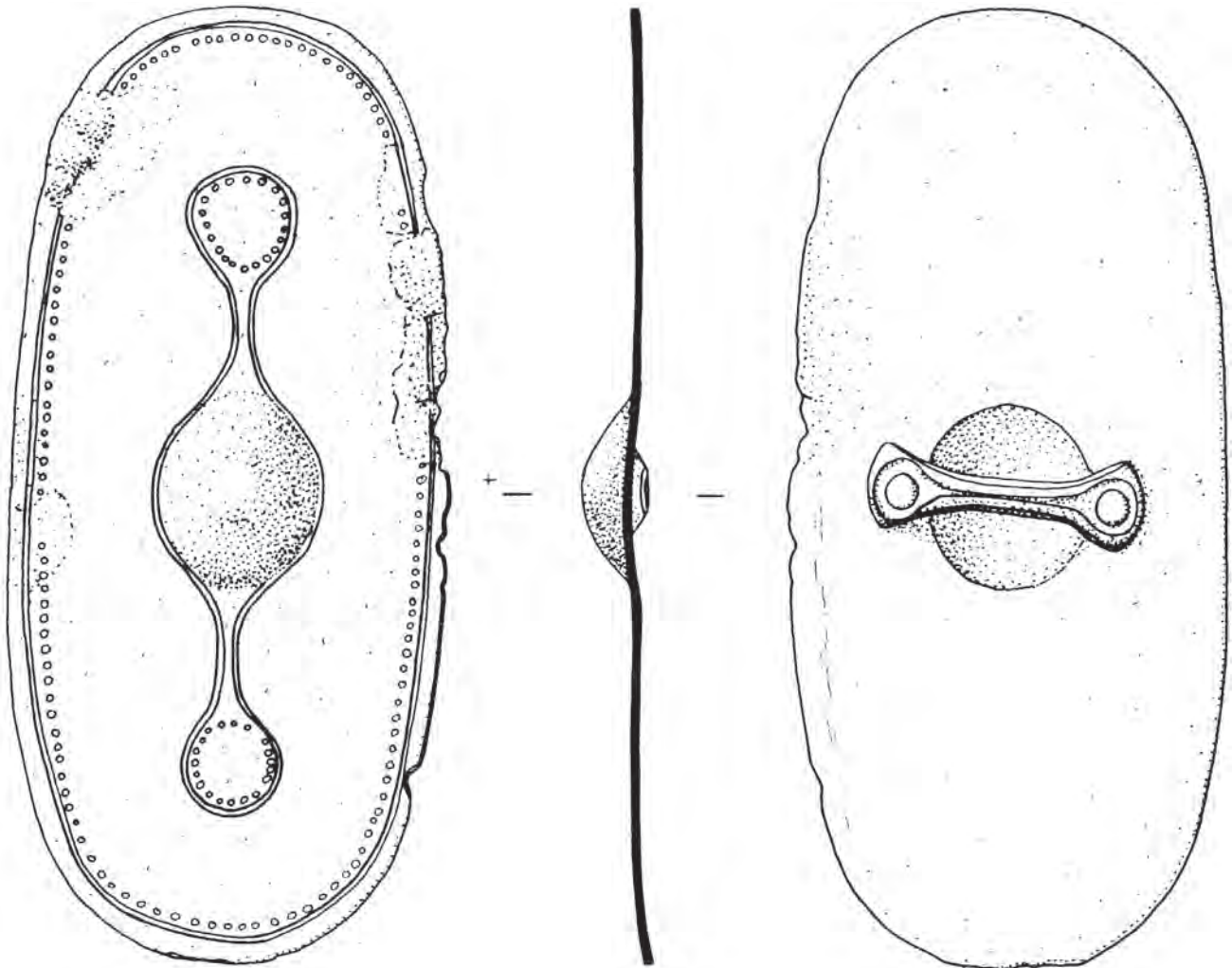


Fig. 11.13 Iron Age miniature shield (length 78.5mm); from near Alcester, Warwickshire (PAS Reference: WAW-9BB642). Drawn by C. Stevens; copyright: C. Stevens.

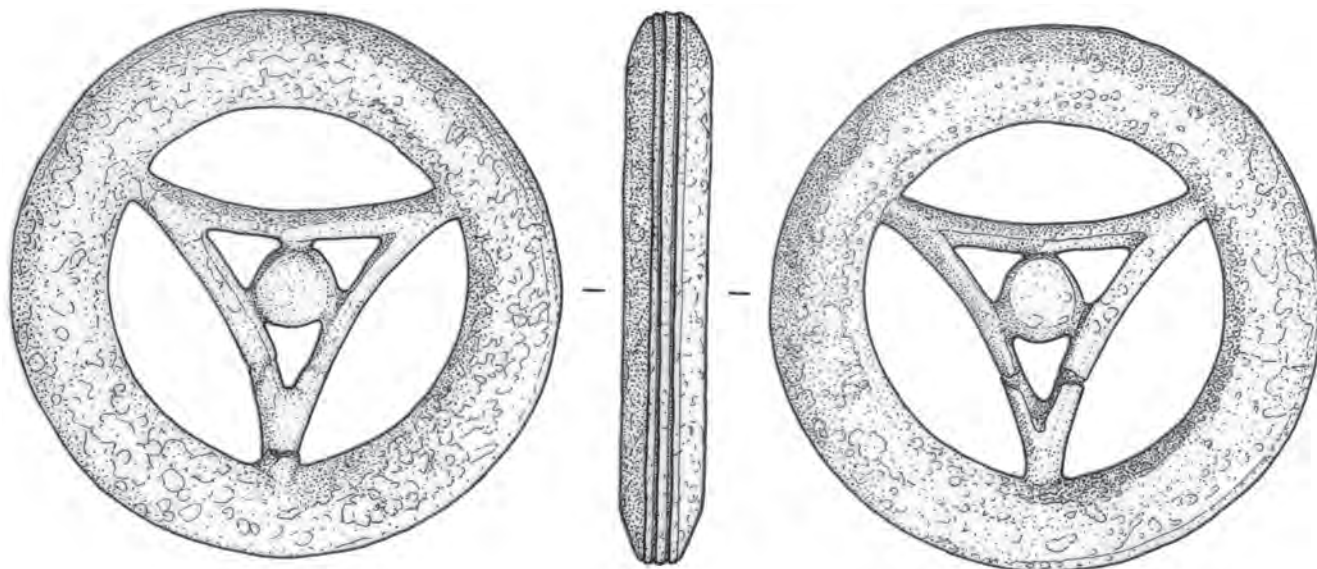


Fig. 11.14 Iron Age miniature wheel (diameter 43.8mm); Abberton, Worcestershire (PAS Reference: WAW-360062). Drawn by C. Stevens; copyright: C. Stevens.

they are immediately recognisable, and considered to be important to record by the metal-detecting community, who have long since been encouraged to provide information to the Celtic Coin Index. In comparison to the bronze and de-based silver coins, the gold and silver are also more easily identifiable. However, due to their desirability on the market is this an optimistic/realistic view of recording practices? Instead, many of the coins may be sold to dealers without being recorded by the Scheme, and might only be recorded by the Celtic Coin Index.

Most of the coins recorded by the Scheme are likely to be either individual chance loss, or perhaps votive offerings. They have all been found, according to the finders, within the plough-soil context. These coins may portray the pattern of ancient loss (Rodwell 1981, 43), but equally it should be considered that they represent modern land-use, and the areas which finders are targeting for searching. However, whilst bearing these points in mind, the recording of the Iron Age coins by the Scheme is invaluable. For example, the detailed study of the coin find-spots can suggest trading routes between different regions, and the study of die-links (Cunliffe 1981, 29) and typologies (van Arsdell 1994, 2) can further define subtleties within the coin typology series of a region. In the West Midlands there are continuing research opportunities in this field.

Discussion of the distribution of finds and methods of retrieval

The distribution of Iron Age material can be viewed in many ways, one of which is through their distribution,

but, as with all distribution plots, this should be viewed with caution. The artefacts and coins do suggest Iron Age activity in certain areas, and those coins and artefacts can contribute significantly to numismatic studies and artefact research, as well as complementing excavated and other archaeological evidence. The distribution of these items more accurately tells us where metal-detectorists who are in favour of recording their finds, are working. For example, South Worcestershire has a high density of Dobunnic coins recorded on the HER and through the Scheme, and this is mainly due to a diligent detectorist who has permission to detect on large areas of land in south Worcestershire and who records all his finds. If this detectorist detected in south Warwickshire would the existing distribution of coins be altered?

Another influence on the distribution of coins and artefacts recorded by the Portable Antiquities Scheme is land use. Metal-detectorists mainly detect on ploughed land, rather than pasture and woodland. North Worcestershire has a higher proportion of woodland than south Worcestershire, therefore providing another possible contribution to a skewed view of the distribution of material.

The PAS data, as with any finds data, are enhanced when combined with other sources of information, for example that of HERs. Unfortunately retrieving finds information from the HERs is not always at the detail required to compare particular finds or assess their classification at the time of recording. The HER data is dependent on their sources of information for detailed and accurate finds identification, and the HER Officer has often had

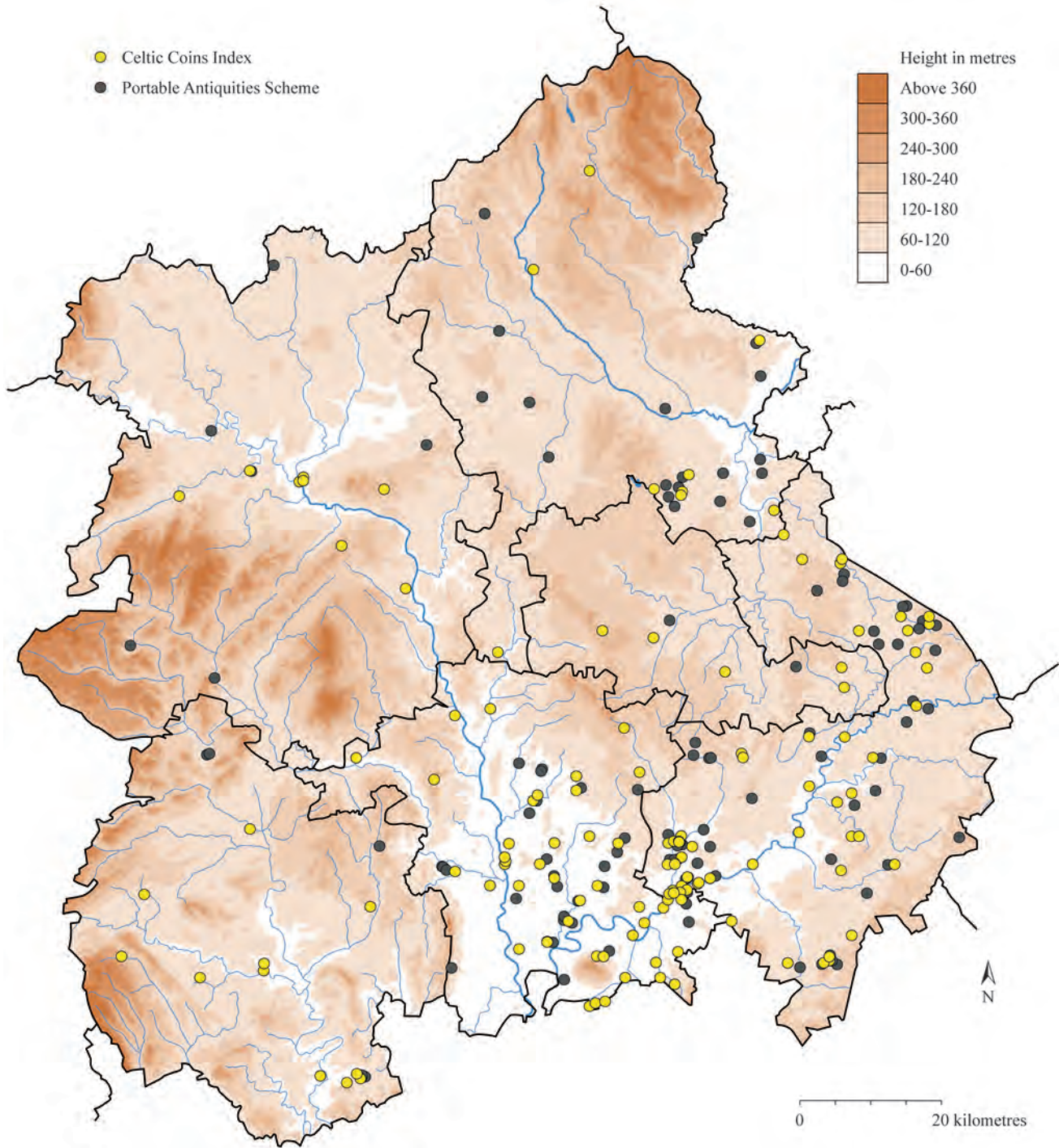


Fig. 11.15 Distribution of Iron Age coins based on combined Portable Antiquities Scheme and Celtic Coin Index data (collated October 2014).

to prioritise the level of information which composes the digital dataset of the HER. The HER in many cases has become just a gateway signposting finds data, often found in unpublished material or through museum identification services. This unpublished material is not always easily

accessible to the finds researcher. HER Officers themselves acknowledge this short-fall in the system. Perhaps, as part of the research framework, consideration of additional funding for HERs to provide a greater level of finds data should be discussed.

Conclusion

It has been demonstrated here that the Portable Antiquities Scheme is an important tool in increasing knowledge and, thereby, understanding of the archaeology of the West Midlands. The Iron Age has provided a case study to illustrate the potential contribution of the Portable Antiquities Scheme, and has clearly demonstrated the wealth of material culture from the Iron Age in our region. As more objects are recorded, it is possible to start asking more questions of the PAS finds database to explore the nature of Iron Age society in the West Midlands region and, thereby, compare it with other regions.

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Later prehistoric production and trade in the West Midlands

*Derek Hurst**

Introduction

Speaking broadly, the later prehistoric material culture of the West Midlands region presents a very variable character, and this is most pronounced in the Middle Iron Age. By that time, north Shropshire appears to have had more in common with the northern Marches, taking into account the paucity of its durable artefactual legacy, while the cultural affinities of Staffordshire were more in keeping with areas to its east (Leics., Northants.), while much of Herefordshire, Worcestershire and parts of Gloucestershire formed a potentially more distinctly cohesive area of their own. Such differences have previously been drawn to our attention by Cunliffe (1991) in his definition of regional style zones, the latter being labelled as his Croft Ambrey-Bredon Hill style (*ibid.* fig. A:18).

Particularly from the Middle Iron Age onwards, the West Midlands as a whole has provided several textbook case studies for Iron Age trade/exchange in material goods: the distribution of specific types of coins (Allen 1961), briquetage (salt vessels; *e.g.* Morris 1985), pottery (Morris 1982; 1994), iron billets ('currency bars'; Allen 1968) and querns (Shaffrey 2006) have all now been plotted within this one region. Less well understood is more localised exchange in this same period, due to the tendency to focus on the more regionally distributed material. However, it is generally assumed that this would also have been on a considerable scale, since local types of artefacts (*e.g.* of pottery) also continued to be produced despite the prevalence of regional types. Presently, therefore, the evidence seems to reflect an

integrated 'economy' operating across this part of the West Midlands, that is focussed primarily on the middle Severn and mid Wye valleys (*i.e.* the more fertile floodplains), and reaching into the central Cotswolds, especially towards the headwaters of the River Thames. Though not an obvious geographical region, this takes in the Welsh Marches to the west (a natural and long-lived frontier zone with the Welsh hills to the west), interfaces with the Severn/Thames watershed to the east (*i.e.* the Cotswolds), and reaches onto the Birmingham plateau to the north. Therefore, uplands potentially seem to play a significant part in circumscribing this area.

The West Midlands generally has many hillforts, which are generally associated with areal defence/domination, though this is, by no means, the only function they may be assigned. Other factors, such as their location along established trade routes, may mean that they also played an important part in the development of the distribution patterns of goods, providing a sufficiently stable and centralised population pattern to induce trade/exchange, and for consumption to benefit from political/social developments. They may, therefore, have been instrumental in the establishment of regional patterning to any extended exchange network seen through material goods in the archaeological record. The spatially overlapping distribution of material goods from different sources, as described by reference to specific goods above, may be coterminous with some consistency in social/cultural/political organisation, and would certainly seem likely to encourage such developments. Indeed, this

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conclusion is difficult to resist, when historical sources (albeit referencing the very end of our period), sparse though they are, indicate political cohesion on some scale in this locality. Cultural identity has, therefore, figured large in some interpretations of this period, as it has been tempting to see the overlapping distributions of different materials as representing the physical semblance of a territory under a single main political control. This is manifest in the suggestion of a political territory synonymous with a ‘Dobunnic’ area (Cunliffe 1991, 170–175), especially in the later part of the Iron Age period. ‘Lower Severn/Cotswolds’, that is a more geographical terminology as applied by Moore (2007, 41–43), overcomes the presumptions implicit in the use of ‘Dobunnic’. A similar term ‘Western’, has been applied to the coins, and this less culturally/geographically deterministic approach may aptly gain wider usage in future discussions of this period.

The production systems and movement of material goods (such as those listed above), could well have been influenced by the nature of resource control across this region, acting as one of the main mechanisms governing the distribution of materials, perhaps itself not unconnected to the initial creation and maintenance of such large monuments as the hillforts. Although the exact nature of the framework and mechanisms for exchange/trade in objects is uncertain, the



Fig. 12.1 Reconstructed scene of Iron Age salt making in Droitwich, Worcestershire; based on the Old Bowling Green site.

final acts of deposition are fortunately often quite visible. This has been cogently argued by Hill (1995, *e.g.* 125–128) to be imbued with additional meaning expressing the beliefs and values of that culture, and so provides an added dimension to be unravelled. Objects seen in their intended context are also, therefore, key to the understanding of later prehistory, though reading that meaning is still also fraught with difficulty without access to the belief system that gave rise to that behaviour.

The uncertainties are not confined to the emergence of a society so concerned with such large and obvious structures that still dominate the landscape today, these structures sometimes being traced back into the Bronze Age, while others have been considered Middle Iron Age in origin. However, their demise is now becoming a little clearer in some cases. It now appears, for example, that at least some hillforts in this area entered a critical phase by the beginning of the first century BC at the latest (Conderon Camp, Worcs.; Thomas 2005, 256–257). And, at nearby Kemerton Camp, also situated on Bredon Hill, there was a catastrophic assault on a community in the mid-second–mid-first century, based on recent radiocarbon dating as part of the re-analysis of the material evidence from this site (Western and Hurst 2013).

The following discussion aims to consider a range of different goods encountered in the West Midland area, which in pure market economies might have been termed commodities, thereby forming the basis of both domestic and industrial activity. Both their production and their eventual deposition (when viewed as indicators of exchange/trade/use) are used here to flesh out the later prehistoric experience, while their potential for shedding light on more transient topics such as society, politics, status, and identity, is also examined. Industry is addressed only in broad terms such as its location and general character of its products; more detailed aspects, such as the tracing of influences that led to changing technology and the details of technological development (*e.g.* changing composition of materials), are not covered.

Goods on the move

Salt

Since the early 1980s it has become possible to trace the distribution of salt in this area in later prehistory through the presence of its containers (briquetage), principally from its production site in Droitwich (Worcs.; Figure 12.1) once the date of that production had finally been established (Rees 1986), but also from a Cheshire source (stony VCP, *viz.* ‘very coarse pottery’; Morris 1985). This salt production was based on inland brine springs, which produced a strong brine capable of reduction to salt without too much effort. Several brine-working sites have been located at Droitwich

(Woodiwiss 1992; Hurst 1997), and the salt distribution from here has been comprehensively plotted by Morris (*e.g.* 1985, fig. 6). The West Midlands distribution, based on Morris (*ibid.*, table 1), with some updating, is shown in Figure 12.2.

Some aspects of the pattern of salt distribution give rise to comment. Following a normal pattern of distribution (*i.e.* based on a fall-off in quantity with a greater distance from the source), the Droitwich salt should reach well into Staffordshire, as well as into south and central Shropshire, and would also be expected to extend northwards to a point equidistant with a production source area in Cheshire (*e.g.* Middlewich). However, the actual distribution, based on plotting its distinctive briquetage, clearly deviates from this, and reaches only about 15km northwards from Droitwich (*i.e.* still *c.*40km from Middlewich). And this compares with 85km to the south of Droitwich, where it reaches its maximum distance from this salt source, including much of that distance being overland so that transportation downstream on the River Severn cannot be the sole factor. Explaining this may well be of significance for insight into the movement of other goods, as this is the one material in the area that has a pinpointed and tightly defined source and yet was in widespread use. That the distribution pattern extends into the Cotswolds, reaching the headwaters of the Thames on the other side, is also likely to have placed it in another political region with its own means of ensuring a supply of salt. Geo-political factors do seem, therefore, potentially to be apparent, despite the resistance that has grown in some quarters to this as a means of explaining the evidence for the Iron Age.

Predictive modelling may also be used to examine these data, though it must be admitted that archaeological evidence for the production of salt in the Iron Age is imperfect, with some industries still being only partially known (*e.g.* on the Severn estuary; Rippon 1997, 69–71). Predictive analysis of salt distribution based on various sources available in western England (Woodiwiss 1992, fig. 4) models fairly closely the actual pattern observed in the archaeological record, but includes a Staffordshire source for where there is, as yet, no evidence of prehistoric production (indeed the earliest evidence points to exploitation only from the 17th century; Kettle 1967). If the latter is, therefore, removed from the equation, then the Woodiwiss predictive model would extend the Droitwich salt distribution much further northwards, thereby contradicting the actual evidence as currently known to date.

It has been suggested that salt may be especially significant as a signature for a community with an established social/political identity, as it has often carried social meaning in other cultural contexts (a familiar example being status allocated by sitting at table above or below the salt in later periods). It is possible that goods in the Iron Age, especially where they were the result of specialised production, were particularly subject to distribution via social interaction

exercised with political sanction, rather than as a result of any monetary or other value-based exchange transaction. Due to the relative rarity of its sources, the distribution of salt has particular potential, to give the best picture of any culturally coherent zone in the area in the context of the possible existence of a restricted distribution network.

Currency bars

Other specialised items that reveal a distribution pattern focussed on the middle/lower Severn valley and on the east side of the Severn estuary are spit-shaped currency bars (Cunliffe 1991, fig. 17.10). These have appeared in hoards as well as in possible ritual deposits, and a special social significance has been attached to these objects by Hingley (1990). Though a relatively rare find, this type of object, would seem to be another (potentially) culturally significant artefact type, given the limited geographical source of its raw material. The production site(s) of these items has not yet been pinpointed but presumably relates to an important location, potentially the seat of considerable political power given the marshalling of resources needed and the elaborate process involved.

Recent research into the sources of the iron exploited in the Iron Age has met with difficulties both in locating production centres (Jackson 2012) and in usefully characterising the products (McDonnell and Swiss 2004). The Forest of Dean has long been viewed as the most likely primary source of ore, and the prevalence of Roman iron working along the Severn estuary (Fulford and Allen 1992), as well as further upriver (*e.g.* on the bank of the River Severn at Hanley Castle, Worcs.; Hurst and Webster 2012), does seem to favour this configuration of the evidence. The Roman production centre at Weston under Penyard (*Ariconium*; Herefs.; Jackson 2012), which seems located to take advantage of the road network and, therefore, linked in with the military system, singularly lacks any solid evidence for a purposeful Iron Age presence, apart for during the final decades of the Iron Age when a significant concentration of coinage focusses our attention on this area. Clearly much remains to be learnt about this industry and its origins in this area, despite a more recent attempt to throw light on the subject through extensive survey (Hoyle *et al.* 2007).

Pottery

Taking Iron Age ceramics as a key indicator of social interaction, Morris (1994) has pointed out that they provide a changing picture of local versus regional supply. For the later Bronze Age and early Iron Age, production and consumption of pottery not only in this region but beyond, is considered to have been largely transacted on a local basis. In Wessex, where variation from this norm was identified, no special role was seen for the hillforts, and this, in turn, has been

taken to deny their hierarchical influence on the distribution of these finewares which have been traced travelling beyond a local sphere of distribution.

Middle Wye and lower Severn, and north Cotswolds

Earlier commentators (*e.g.* Radford 1954; see below) have observed the common regional style of stamp-decorated pottery focussed on Herefordshire, Worcestershire and north Gloucestershire. Since then the study of Iron Age pottery in the West Midlands and central Welsh Marches has been hugely assisted by the application of petrology and the excavation of more sites, which has enabled the definition of several major regional industries in this area (notably by Peacock *e.g.* 1968), as well as of the more local wares. Clear chronological trends in the Iron Age pottery production and supply of this region can now be demonstrated, although, unfortunately, one of the most important sites for characterising and expediting the sequence of wares still awaits publication (*i.e.* Beckford, Worcs.).

Pottery had clearly reached a level of production by the Middle Iron Age in some of these industries, where the pots were no longer regarded as merely localised products sufficient for their basic practical functions. Malvernian ware, first identified petrologically by Peacock (1968) as originating from the west Worcestershire area, is in this category. This plentiful ware was very well executed and generally finished to a high level both with burnishing and decoration, during the Middle Iron Age. Such qualities represent specialised production, where the potters were relatively free to develop their craft, implying, therefore, an era where food production had reached a level which allowed craft specialisation to flourish. As well as predominating in Worcestershire, Malvernian ware also extended well into Herefordshire and north-west Gloucestershire (Morris 1982, fig. 3.4), though, typically, as a lesser ware (Figure 12.2). The movement mechanism for this ware has also been the subject of analysis, and Morris (1996, 44–45) has concluded that it conforms to a ‘down the line exchange system, which probably utilised kinship alliances’. The reference to kinship may be taken to imply that culturally derived population links are relevant to the overall distribution of the pottery, potentially giving more credence to a common group affiliation coterminous with the ceramic distribution.

Broadly in contemporary use, Palaeozoic limestone-tempered ware (Peacock Group B1) is another ceramic industry working in a similar style as the Malvernian industry. It also became prolific, and, in this case, there is movement of a large volume of pots possibly from the Woolhope area (Herefs.; Morris 1982, fig. 3.3;) eastwards (*cf.* Figure 12.2, where the considerable geographical range of this ware is indicated), suggesting a reciprocal link between central Herefordshire (Wye valley) and Worcestershire (Severn valley) – and possibly iron may

have been travelling the same route. It is tempting to see the shared scale and style of ceramic production, and the overlapping distribution of these two differently located centres, as representing a period of peaceful settlement in a cohesive area. At least some of the hillforts, whatever else they represent, must surely be closely associated with the establishment of this socio-economic pattern, as represented by a merging of different strands of material culture into a common style: examples being Sutton Walls (Herefs.) with its predominantly Palaeozoic limestone-tempered pottery, and Midsummer Hill (Herefs.) and Kemerton/Conderton Camps (Bredon Hill; Worcs.) with their predominantly Malvernian wares.

A distribution plot of Droitwich salt (container) and its associated predominating regional pottery wares is shown in Figure 12.2. Commonality of access to salt and a shared pottery style, with its characteristic motifs and forms across different regional production areas, might be taken to indicate a unified ‘territory’ based around strong allegiances between certain hillforts and other communities, whether from control over production and/or via kinship/social affiliation. If so, yet this was not wholly exclusive, as examples of other regional wares, as well as local wares, generally also occur at these sites.

For many generations in the Middle Iron Age a stable pattern of regional exchange/trade was apparently maintained conveying a strong sense of community interaction, if not harmony. The fact that defences remained important is not missed here, though it is admitted these may have more to do with status projection, at least by the Middle Iron Age, rather than that fear of neighbouring groups. The point is not overlooked either that, potentially, soon after at least one catastrophic end to a hillfort (Kemerton Camp; Western and Hurst 2013) – though the extent this represents any wider trend is, of course, unknown – pottery styles may well have now changed and lost their distinctive decoration with other influences from further south also appearing (*cf.* Blackstone; Morris 2010a), though Moore (2007, 47) has suggested that Middle Iron Age styles continued unabated to the end of the Iron Age. However, Blackstone seems to be a useful exemplar of a Late Iron Age site untrammelled by residual material (Morris 2010b) and the plain character of the pottery here is quite clearly distinctively of Late Iron Age date.

Such an overall distribution of pottery in this style zone compares well with that for the contemporary pattern for Droitwich briquetage, again suggesting links across the two adjacent river valleys of Wye and Severn, while also reaching the west/central Cotswolds region. Equally, there is evidence that such a zone was not exclusively restricted and material from a different zone could permeate, for instance with flint-tempered pottery from the Thames valley occasionally reaching the Severn valley, as at Childswickham near Broadway (Timby 2004), though this

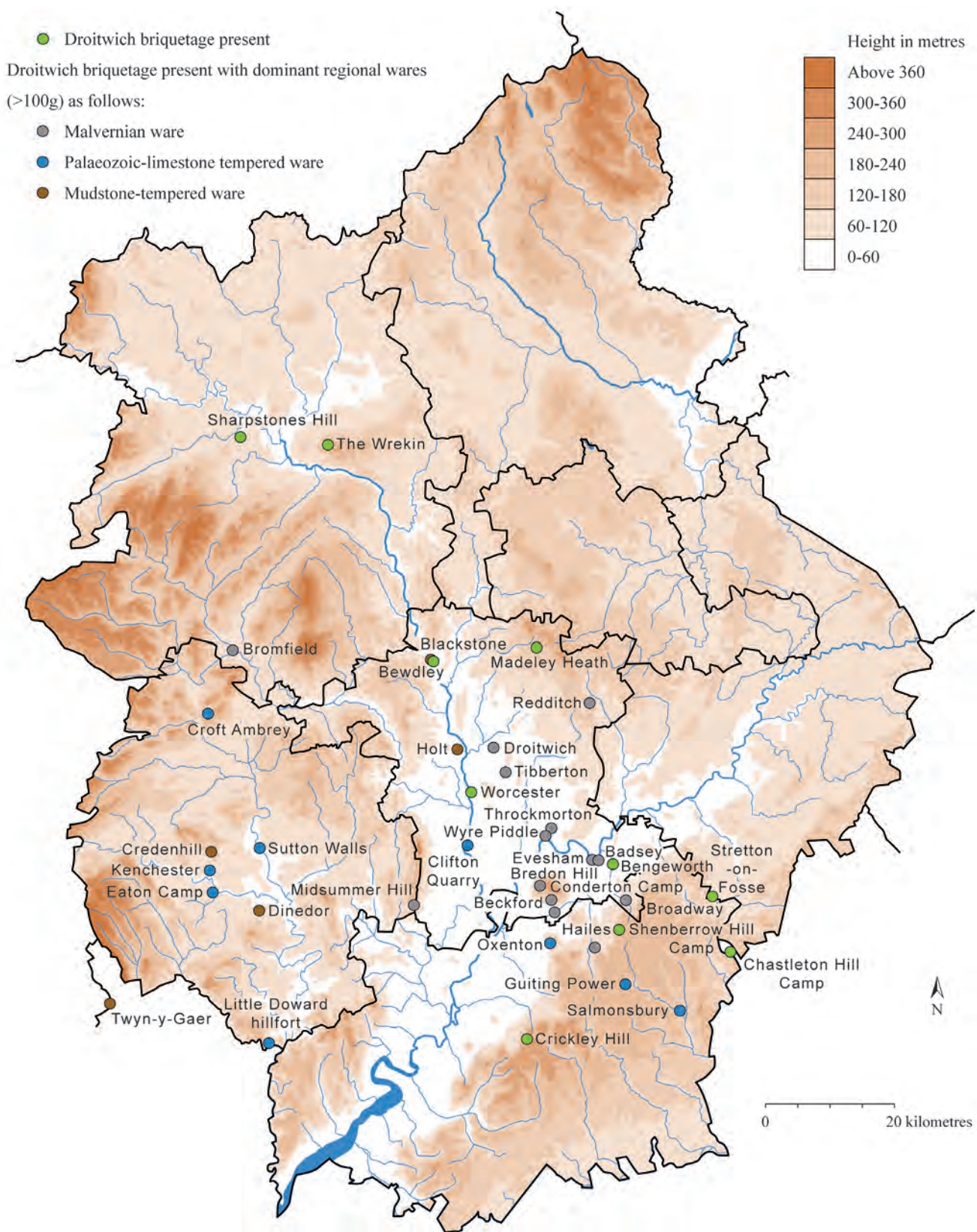


Fig. 12.2 Distribution plot of sites with Droitwich salt container (briquetage) with predominant regional pottery ware type also indicated where present >100g. Data after Morris 1983 and 1985 with some updating.

does seem to have been a rare occurrence. Combining the various ceramic distributions and, in particular, taking salt as a key indicator, the southern part, at least, of the West Midlands emerges with its own archaeological identity, surely reflecting an interconnected society, though whether this social cohesion represented a unified, single political identity throughout, remains less certain, and this is where the coins are perhaps most useful (see below).

Shropshire, Staffordshire and Warwickshire

These areas are grouped together due to their contrasting nature to the above, not because of any mutual similarities. Shropshire is little explored and has not, therefore, yielded much detailed information, even where features of the period have been encountered. Late Bronze Age/early Iron Age wares occur at hillforts (*e.g.* The Wrekin; Morris 1983), and on lowland sites (*e.g.* Sharpstones Hill site A; Barker *et al.* 1991), where the bulk of this pottery has been considered to be of local origin. Middle/Late Iron Age ceramic evidence can even be absent (*e.g.* at Calcott; Ellis *et al.* 1994, 29–30), or only present in a few sherds (*e.g.* Preston Farm; Woodward 1994). The current, albeit sparse, evidence suggests that the Iron Age pottery supply eventually signifies contacts with lower down the Severn valley, whilst salt was moved into this area both from the south and the north. Such a pattern of distribution seems to suggest that the Severn played a prominent role as a route-way in the exchange of goods at this time.

Staffordshire is also an area that has yielded little material culture, though, once again, this may be largely due to the relatively few occasions that Iron Age sites have been encountered. Where in evidence, it resembles well the range of material found further east in Leicestershire and Northamptonshire, mostly notably including scored wares (Elsdon 1992; Knight 2002). Here a regional style is present with some variation in fabrics.

In Warwickshire there are two distinct ceramic zones, one to the south marked by calcareous wares, and the other, to the north, marked by sandy wares (Hingley 1989). The fabrics consist of many variations of these principal types, suggesting that local pottery production was the norm in this area, where Iron Age sites are quite common and, therefore, population might be considered high. Warwickshire, therefore, seems to stand in strong contrast to the lower Severn/north Cotswold area just to its west/south. Perhaps the absence of dominant hillforts in Warwickshire (presumably related to the establishment of numerous alternate Iron Age sites) is a principal factor, albeit probably indirectly, in developing exchange/trade here on a more localised basis despite its connection to the Severn valley via the Avon.

Shropshire and Staffordshire are poorly served by fabric reference series for this period, unlike for Worcestershire and Warwickshire, the former being physically available

at the office of the Worcestershire Archive & Archaeology Service and with descriptions published, including on-line where accompanied by close-up photographs of fresh breaks (www.worcestershireceramics.org), and the latter partly published as short descriptions for later prehistoric fabrics (*e.g.* Hancocks 2012).

Coinage

Coins are included here under trade and industry, as representing accumulated wealth that could have derived from industry and associated movement of goods. It is acknowledged that, in an essentially non-monetised economy, the coins might well be more symbolic in use than being intended for straightforward financial transactions. Accordingly, their use might represent expressions of allegiance, and so possibly only being used for special purposes of social, political or religious significance (Allen 1976; Haselgrove 1987).

Coins in particular have given rise to the idea that they represent group territories in their distribution, so that for the few decades before the Roman conquest they would have mainly circulated within the political region from which they originated, and can hence be used to define that territory (Allen 1961) and sub-territories of the Dobunni. Accordingly, van Arsdell (1994, 25–26) has identified a territory based on a central mint at Bagendon (Gloucs.), with two other Dobunnic centres at Camerton and Bath. Outlying concentrations of coins at *Ariconium* (Weston under Penyard) and at *Viriconium* (Wroxeter) have been taken to imply trading zones (van Arsdell 1994, 24–26). This type of evidence has also been followed by Cunliffe (1991) when defining the territory of the Dobunni, in common with that of other Iron Age tribal areas. On this basis an area based on the lower Severn valley and the west Cotswolds has generally been identified as ‘Dobunnic’ territory, though in actuality none of the inscribed coins can be proven to name any leader of this specific tribal affiliation. This is not to dispute, however, that a community known as the ‘Dobuni’ was centred on ‘Cironium’ (*Corinium*, Cirencester) as recorded in the *Ravenna Cosmography* (Rivet and Smith 1979, 207).

Quite recently a major find of gold and silver coinage, representing by far the largest excavated hoard of coinage of this period ever found in England at the time of its discovery, came to light in 1993 just north of Pershore (Worcs.) on a previously unknown site. Two adjacent hoards amounting to 1,494 coins far exceeded the previous largest hoard of coins of about 250 coins from this area, as well as the total number of coins previously known (733; van Arsdell 1994, 2). Numismatic analysis of the Pershore coins has concluded that they reflect both a northerly and southerly political focus (a situation previously commented on by Hawkes 1961), reinforcing the idea that there were disparate

areas of distribution and identity rather than a unified (*i.e.* ‘Dobunnic’) territory. Significantly the adoption here of the term ‘Western’ to designate these coins (Leins 2013) reflects the desirability of moving away from a specifically unified tribal attribution for coins across this area.

Apart from the direct information from the Pershore coins themselves as objects (*i.e.* the technology they represent and their typology), the deposition of such a large number in hoards suggests that the place itself may well have held some special contemporary social/religious significance. This brings us to one of the main themes of the Iron Age where the act of deposition is intended as votive, so that the final resting place of manufactured products after their life-history of trade/exchange and use, is in a ritual context. Importantly the votive motivation would then override, and possibly even negate, the material value more usually attached to the products of exchange/trade and industry in a materialistic age such as ours (Hill 1995). While this is most evident in the case of caches of artefacts such as coins, the general principle seems to extend across a wide range of artefacts and in less than obvious contexts. Therefore, the interpretation of Iron Age finds is not always at all straightforwardly functionally based, which adds a whole new dimension to ordinary objects and what they signify.

Discussion

Earlier in the 20th century, Iron Age culture was seen as essentially native and uniform, and so part of a common culture that was under siege in the last century or so from Belgic invaders (*e.g.* this was considered a possible scenario for the demise of Kemerton Camp, Worcs.; Hencken 1938, 26). In contrast to this view, Radford (1954, 16–17) first recognised that this part of the Severn valley was a distinct region, by focussing on material culture, and noting the correspondence of a certain style of stamp-decorated pottery with the (then styled) ‘Dobunnic’ coin distribution. However, Hawkes noted that the coins covered a larger area, especially to the south of Gloucestershire reaching into Somerset and Wiltshire (Cotton 1961, 40), while Cotton (*ibid.*) went on to dismiss any association between the so-called ‘Dobunnic’ coinage and the stamp-decorated pottery. In his overview of this area Hawkes (1961) concluded that any cultural unity of the region covered by these coins did not extend as far as the region where stamp-decorated pottery was in use, as fewer coins were then known in that area, and the main centre of power was then believed to be well to the south (*i.e.* Bagendon, Gloucs.). However, once the source of Worcestershire VCP and its association with salt was determined, Cunliffe (1984, 9) observed the correspondence between Droitwich salt supply and the distribution of Malvernian pottery, and this lent itself to an even stronger assertion of the concept

of a ‘Dobunnic’ territory. However, the coinage evidence has long suggested a less straightforward scenario in the years leading up to the Roman conquest (see above), with Sellwood (1984) also pointing to a divide between north and south Gloucestershire, as now further borne out in the recent analysis of the Pershore coin hoards (Hurst and Leins 2013).

This account has concentrated mainly on the Iron Age rather than earlier, as, by that period, there are more data available. It has reviewed what has become an established viewpoint that a relatively coherent ‘Western’/Severn/Cotswolds area can be defined in the southern part of the West Midlands, and that various layers of material evidence may be taken to embody this concept. Certainly the material culture of the lower Severn and Wye valleys (effectively the fertile zone between the Welsh and Cotswold uplands) does show some common material traits, which imply (at a minimum) some concerted and prolonged social interaction. How far this extended to social cohesion, and political control as a unity, is less certain, and, of course, this might well have varied over time. Certainly the latest Iron Age evidence (coinage) tends to hint at caution on this front, as we can be easily misled, due to our inability to recognise boundaries except in a crude geographical sense. Beyond this south part of the West Midlands it is clear that there are areas that have cultural affinities with other areas outside of the West Midlands. Sometimes (*i.e.* for much of Shropshire) these seem to also be potentially based on other distinct geographical regions (*e.g.* the Shropshire/Cheshire plain).

The general co-occurrence of several artefact types from diverse sources (*cf.* Figure 12.2), overlapping in the ‘Western’/Severn/Cotswolds area, tends to overcome any arguments that it is a mere coincidence that these individual object-types were simply traded/exchanged in this way, without some other socially derived factor influencing the pattern. Whatever the cause, the outcome has resulted in shared practices of social and material exchange, which, once established, was continued over a long period, and resulted in a proliferation, and then accumulation, of goods in the archaeological record across the region. Such a pattern must surely indicate a sustained spell of peaceful conditions prevailing at least most of the time, which ironically perhaps goes against the initial impression given by a hillfort-dominated landscape. Industry in its widest sense seems to have flourished with accompanying trade/exchange setting a substantial part of this region (lower Severn and Wye valleys/Cotswolds) apart, and giving it a particular character, being materially more endowed than some of its neighbours and apparently more integrated as a community than elsewhere.

Thought should also be given to the apparent net flow of goods eastwards out of the middle Wye/Severn valleys and into the central Cotswolds, without any (obvious) reciprocal movement of goods in the other direction. Given the later prominence of the Cotswolds as an area of agricultural

prosperity based on sheep farming, it is tempting to suggest that either wool or meat were being exchanged. Therefore, some of the more invisible goods that might have formed part the economic system need to be considered as well, and this will require attention to animal bone, with stable isotope analysis offering an obvious line of enquiry for the future.

For a (material) culturally distinctive area to last so long, from c.fourth/third century BC to the first half of the first century AD, may suggest that other factors, such as some optimum distribution of major settlements, may also have contributed to its stability, and to the development of this particular patterning of trade/exchange. It is also possible that the process of regionalism itself has contributed, a factor which has been considered by some commentators as a potent, but often overlooked, force in the formation of related communities in more modern times (Wirth 1965). Our picture, however, is likely to remain incomplete for the moment, as our knowledge of the Iron Age in the region is still relatively poor, and much more fieldwork will be needed before any certainty can be injected into this debate.

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Touching the void: Iron Age landscapes and settlement in the West Midlands

*Andy Wigley**

Introduction

Traditionally prehistorians have drawn a distinction between two different types of Iron Age landscapes in the West Midlands region. In the west, the dense concentration of hillforts that occurs along the Welsh Marches was thought to form part of a larger ‘hillfort zone’, which extended from the chalk downlands of Wessex to the mountains of North Wales (Varley 1948; Cunliffe 1991). The presence of these monuments was taken to be indicative of a particular form of social organisation; namely a quasi-feudal system based around a small martial elite, which until the 1970s was thought to have invaded the region from the lands to the south and south-west (Stanford 1971; 1972; Savory 1976). Within the Marches a number of commentators extended this model by drawing direct parallels between the Iron Age and the Norman periods – analogies which appeared to be strengthened by the similarities between the distributions of hillforts and motte and bailey castles along the border. With the collapse of the Invasion Hypothesis this model was re-framed by those drawing upon, amongst other things, central place theory and the evolutionary anthropologies of Marshall Sahlins and Elman Service. As a result, hillforts were now thought to form the principle settlements of a series of redistributive chiefdoms (*e.g.* Cunliffe 1984; Gent and Dean 1986).

Moving eastwards, toward the lowlands of central England, the number of hillforts – not unsurprisingly – begins to decline. However, because of the primacy that was assigned to these monuments, this pattern was, until comparatively recently, thought to be indicative of a gradual fall in population density. This impression also appeared

to be reinforced by Fox’s (1952) theories regarding the vegetational history of this part of the Lowland Zone. A combination of aerial survey and developer-funded work is now demonstrating that the apparent dearth of sites in these areas is partly an artefact of the history of archaeological research (or lack thereof). Yet, as a number of the contributors to this volume have made clear, the impression that the eastern side of the region remained very sparsely inhabited throughout later prehistory is proving hard to dislodge in some quarters.

The increase in the quantity of available evidence, together with a number of recent trends within Iron Age studies, requires us to review this scheme, and to develop an agenda for future research. Thus, for instance, whilst we now have more material to work with, we are also beginning to consider it in its own terms, rather than interpreting it with a rearward glance towards Wessex. Deconstructing the theory behind the models briefly outlined above will be an important area for future work. However, in this paper I intend to focus primarily upon the material evidence itself, reassessing its significance and its limitations, and highlighting a number of possible ways forward.

Assessing the contribution of aerial photography

Since the 1950s, aerial survey, perhaps more than anything else, has demonstrated that this simple generalised scheme of Iron Age settlement patterns hides a more complex picture. We now recognise that many of the region’s major river valleys contain fairly dense cropmark evidence for Iron Age settlement (Webster and Hopley 1964; Smith

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1977; Hunt 1982; Whimster 1989). For example, along the terraces of the Avon the evidence mainly consists of smaller enclosures. In some cases, sites of this nature appear in complex clusters, often in association with linear boundary systems. In reference to Warwickshire, Hingley (1996) has highlighted the contrasts between the evidence from this county, and the upper Thames Valley where open settlements appear much more common.

In the upper Severn Valley there is evidence for a diverse range of smaller enclosure sites (Whimster 1989). For various reasons, aerial reconnaissance has generally tended to focus on Shropshire, but the smaller amount of work that has been done in Herefordshire has begun to reveal similar patterns (Musson, pers. comm.). A number of commentators have now made it clear that, since a reasonable portion of these sites probably date to the Iron Age, there is a much more complex settlement pattern than the older 'hillfort-focused' models allow for (Carver 1991; Jackson 1999; Wigley 2007).

The gravel river terraces of the middle Trent and lower Tame valleys have produced some very 'busy' cropmark landscapes. For example, around the confluence of the Trent and the Tame, evidence for considerable Neolithic and Early Bronze Age activity is represented by cropmark causewayed enclosures, henges and a large number of ring-ditches. Extensive cropmark field systems, together with seemingly related enclosure sites of probable Iron Age and Romano-British date, also occur across much of this part of the region. In his discussion of the comparable range of sites further down the Trent Valley, Whimster (1989) drew attention to the density of the evidence compared with that from Shropshire.

The limitations of cropmark evidence are well known, and, away from these areas, the frequency of sites often dies away quite dramatically. In Warwickshire, for instance, Hingley (1989; 1996) has noted that cropmarks are less frequent in the Feldon and Arden districts, probably due to a combination of unresponsive soils and the later histories of these landscapes. However, a number of recent discoveries have been made in these areas, demonstrating that they were inhabited in later prehistory. For example, recent excavations at Coton Park, on the Boulder Clay to the north of Rugby, revealed an extensive unenclosed Middle Iron Age settlement set within a series of linear land boundaries (Chapman 1998).

When offering broader interpretations of cropmark data it is, of course, also necessary to bear in mind the biases that are inherent within it. This point is borne out by further analysis of Whimster's work on the aerial photographs taken in part of the Welsh Marches up to 1979 (Wigley 2002). Because of the density of cropmark enclosures around Wroxeter, it has been suggested by some that this area may have represented the 'heartland' of the Cornovian territory prior to the Roman conquest (Ellis 1994, 108). However,

from Whimster's (1989, figs 5–6) study we can see that the largest clusters of cropmark sites lie within relatively close proximity to seven well-known Roman sites (the civil settlements at Leintwardine and Wroxeter, together with the military sites at Bromfield, Brompton, Craven Arms, Eaton Constantine and Forden Gaer). Examining the dates of first discovery, for example, reveals that 75% of the sites discovered during the period 1945–59 lie within 5km of one of these sites (see Figure 13.1). This falls to 53% of the sites discovered between 1960–69 but the figure is only significantly reduced to 26% for the period 1970–79, after Chris Musson started his more systematic programmes of survey.

Further evidence for this 'honey pot' is seen when we analyse the frequency with which the sites in Whimster's study have been photographed (up to 1979). Thus, all of the small number of the sites that were photographed more than 10 times between 1945–79 lie within 5km of one of these Roman sites, whilst 76% of those photographed between 6–10 times fall within the same radius (see Figure 13.2).

Identifying such trends within our data is important, if areas are to be targeted that have received less attention in the past. Beyond our region Rob Philpott's and Jill Collens' painstaking work over the Cheshire Plain demonstrates that results can be achieved from even the most notoriously unproductive soils, given repeated flying over many years. To this end, flying those areas that have less coverage, such as the eastern side of Shropshire and the fringes of the West Midlands conurbation (see also Hodder, this volume), is a key priority. Of similar importance will be the ongoing process of plotting and interpreting the cropmark data. Although some areas have now been covered as part of the English Heritage National Mapping Programme (Stoertz and Small 2004), it is important that the rest of the region is also brought up to this standard. Similarly, it is only through synthesis and review of the results of this work that it will be possible to assess the local, regional and national significance of new discoveries. A logical starting point would be to extend Whimster's 1989 study by examining areas beyond his initial study area, and/or by analysing the large quantity of data that has accumulated since 1979.

Iron Age settlement chronologies in the West Midlands

In combination with the evidence from a number of the region's hillforts, rescue and developer-funded excavations of a growing number of cropmark sites have significantly added to our understanding of the sequence from the later first millennium BC. As a result, it is possible to give an outline chronology for landscape development in some parts of the region.

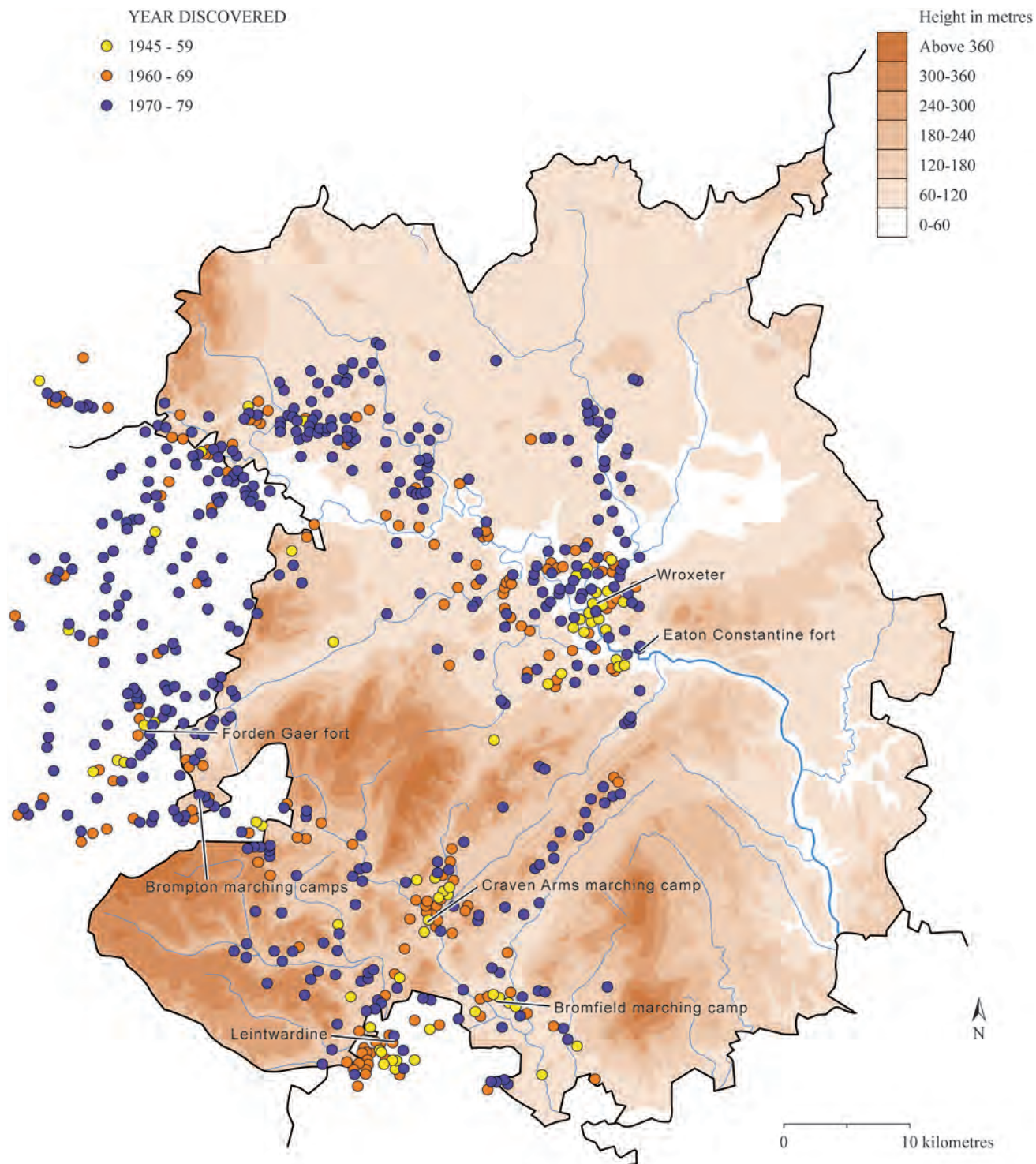


Fig. 13.1 Date of first discovery of cropmark sites identified between 1945–1979 in Whimster's study area in relation to seven key Roman sites. After Whimster 1989, fig. 5.

In very broad terms, a number of similarities can be seen across the region. The practice of constructing hillforts, which appears to have begun in the early first millennium, probably continued until perhaps the end of the second century BC. Whilst Romano-British material has now been

recovered from a significant number of sites in the region, it has yet to be established whether any of these sites were actually occupied at the end of the Iron Age. Over much of the region there is also growing evidence to suggest that the practice of constructing smaller settlement enclosures

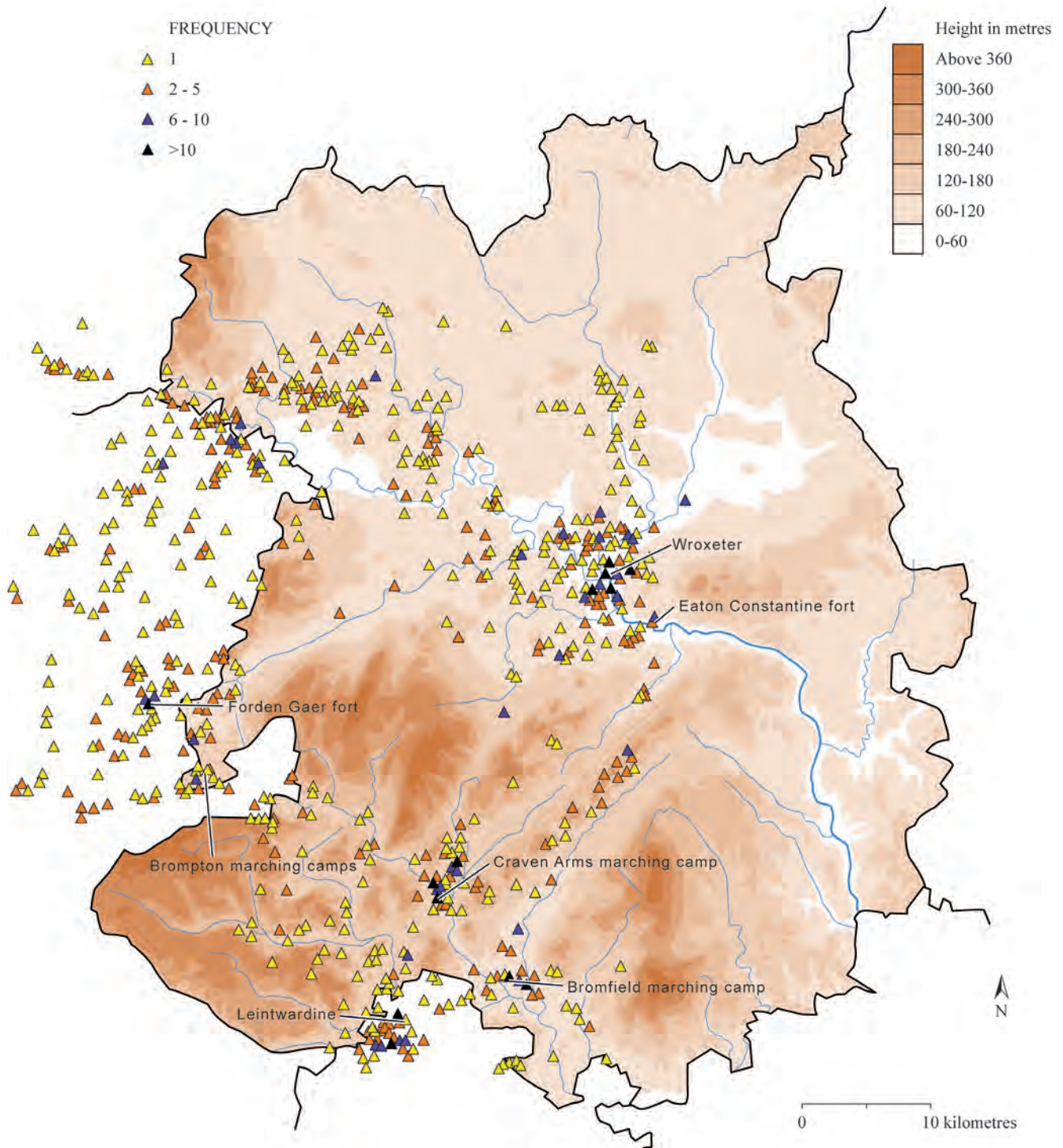


Fig. 13.2 Frequency of photography of cropmark sites identified between 1945–1979 in Whimster's study area in relation to seven key Roman sites. After Whimster 1989, fig. 6.

extended from perhaps the fifth or fourth centuries BC until at least the second century AD.

At the same time, distinct differences between the Iron Age sequences from different parts of the West Midlands are also starting to become apparent. For instance, in some

respects the evidence from the Avon Valley is similar to that from the south-eastern Midlands, particularly the Nene and the Welland valleys (Hill 2007). Enclosures were constructed in a landscape that already appears to have undergone a phase of formal land division involving

both pit alignments and linear ditches. For example, in the upper Avon Valley the important open area excavations at Ling Hall Quarry, near Church Lawford, revealed a complex series of rectilinear cropmark enclosures, which appear to have been laid out along the line of an earlier pit alignment (Palmer 2001). Elsewhere, excavations at Park Farm, Barford, examined a small rectilinear enclosure, associated with a number of roundhouse structures and small storage pits (Cracknell and Hingley 1994). This was constructed close to a Late Bronze Age linear ditch and palisade, and the remains of a possible 'open' settlement. Extensive excavations at Wasperton revealed a more complex sequence associated with a series of rectilinear enclosures, which were again constructed next to an earlier linear boundary ditch (Crawford 1981; 1982; 1983; 1984). Hingley (1996) has commented that the practice of constructing enclosed settlements of this type appears to have persisted into the Roman period. The hillforts that occur along the fringes of the Avon valley appear to be broadly comparable, in terms of their morphology, to those in the Cotswolds. However, the very limited amount of work that has been done on these sites means that it is difficult to determine how they related to the small enclosures down in the valley.

The sequence from Wasperton is reminiscent in many ways of that from the well-known, although still not fully published, site at Beckford, in southern Worcestershire (Britnell 1974; 1975; Sawle and Wills 1975; Wills 1976; 1978). At this location a complex arrangement of smaller enclosures was associated with clusters of storage pits, cobble yards and a number of roundhouse structures, which produced a rich array of finds. Again, these features appear to have been constructed over, but on the same alignment as, part of an earlier linear boundary ditch. The finds also suggested that the habitation of the site was at least partly contemporary with the occupation of the nearby hillfort on Bredon Hill, Danes Camp, and the Knolls (Britnell 1974). Elsewhere in Worcestershire, open area excavations along the course of the Wyre Piddle bypass, in the lower Avon Valley, have revealed an important sequence spanning the Middle Bronze Age to the Roman period (Worcestershire Archaeological Service 2001). Here, at George Lane, a lowlying enclosure containing evidence for at least three roundhouses was discovered, which dates, on the basis of the pottery, to the fourth–second centuries BC. In the same general area, a settlement spanning the second century BC to the third or fourth centuries AD was also excavated. This produced evidence for roundhouses, and the settlement area appears to have been bounded by a substantial ditch. Like the enclosures along the Warwickshire Avon, the sites at Beckford and Wyre Piddle appear to be significantly different to the smaller enclosures of Wessex and the open settlements of the upper Thames Valley. However, detailed analysis of the extremely important site at Beckford is

hindered by the lack of a final report, and bringing this site to publication remains an urgent priority.

The sequence from Shropshire and Herefordshire has much in common with that from Powys. A range of smaller settlement enclosures often existed in relatively close proximity to much larger hillforts. Whilst the origins of many of the hillforts may lie in the earlier first millennium BC, the evidence from the relatively small number of excavations suggests that activity at many of these sites continued well into the Iron Age. As in southern England, the scale, intensity and duration of occupation appears to have varied between different sites, producing an immensely varied class of monuments. At some sites, such as Croft Ambrey in northern Herefordshire, the repeated rebuilding of four-post structures, and the deeply stratified deposits in the main quarry ditch, indicate that, during some phases, occupation was probably fairly intensive (Stanford 1974; Jackson 1999). However, the recent re-analysis of the insect macro-fossils from Buckbean pond on the Breiddin, suggests that, in other cases, occupation may have been more localised and/or episodic than was previously suspected (Buckland *et al.* 2001). Much more work is clearly required, and the sequences from a number of key sites – Croft Ambrey being a prime example – would repay detailed reassessment. In the case of this site, for instance, a number of lines of evidence suggest that Stanford's chronological framework requires major revision.

Excavations of a growing number of smaller settlement enclosures in both Shropshire and Herefordshire again suggest that the tradition of constructing such monuments extended into the early Roman period. It is evident from the sites that have been investigated in Shropshire, such as Sharpstones Hill Site A near Shrewsbury (Barker *et al.* 1991) and Hay Farm near Erdington (Hunn 2000), that some enclosures were positioned in relation to pre-existing boundary systems. In the majority of cases the enclosure ditches appear to have been re-cut on at least one occasion, which implies that, once established, these sites were used for extended periods of time. Evidence for circular buildings and four-post structures has also been found, although storage pits appear to be largely absent. Excavations at Huntsham in Herefordshire produced evidence for an open settlement component associated with a pair of sub-rectangular enclosures (Ray 2001), highlighting the importance of examining the areas beyond the boundary ditches. Firm evidence for open settlement is at present lacking elsewhere in this part of the region. However, the unusual cropmarks at Domen Castell on the floodplain of the Severn in north-eastern Powys (Whimster 1989, fig. 37.2), and the unenclosed settlement and 'Celtic' field system at Black Knoll on the end of the Long Mynd (Ainsworth and Donachie 1995), hint at a greater variety in the settlement pattern in these counties.

Within the middle Trent and lower Tame valleys, the sequence appears to be slightly different, showing many similarities with that from areas to the north-east (Knight 2007). Although much of the complex cropmark evidence remains undated, a number of key excavations together with smaller scale evaluations are beginning to reveal details of the Iron Age landscapes of this part of the region. Work at Whitmoor Haye, Catholme and Fisherwick (Staffs.) suggests that the networks of linear ditches and pit alignments that occur in this area probably date to the Iron Age. Excavations of smaller enclosures at both Fisherwick and Whitmoor Haye, in the lower Tame valley, revealed evidence for a number of roundhouse structures, which had been replaced on at least one occasion (Smith 1977; 1978; 1979; Coates 2002). In both cases the enclosure ditches had also been re-cut, again suggesting that occupation at these locales had persisted for some time. At Fisherwick, Smith (1979) has suggested that the habitation of the site extended from the third century BC to the first century AD, although the enclosures at Whitmoor Haye appear to have been abandoned by the Late Iron Age. Excavations at Catholme revealed a settlement that had been occupied from the Late Bronze Age until the later Iron Age, and which had been constructed over the remains of an earlier round barrow (Losco-Bradley and Kinsey 2002). As at Whitmoor Haye, however, the site appears to have been abandoned before the Roman conquest, as the focus of occupation shifted to a location beyond the excavated area.

Elsewhere in Staffordshire knowledge of the Iron Age sequence is less clear. The six definite, and five potential hillforts that are currently known in the county are fairly evenly distributed across the landscape (see also Wardle, this volume). Only two of the sites (Castle Ring on Cannock Chase and Alton Towers) have been subject to any form of excavation, neither of which produced much additional information. However, detailed analytical earthwork surveys of a number of hillforts in Staffordshire were conducted by the former RCHM(E), which have made a very significant contribution to our understanding of the construction sequences and reworking of these monuments. Other than the hillforts, field systems and settlements of potential Romano-British date that survive as earthworks have been identified in the Manifold Valley and other parts of the southern Peak District (Makepeace 1998). As with similar sites elsewhere in the Peak, their chronology remains poorly understood and, when excavated, it is possible that many may turn out to have prehistoric phases (Bevan 2000).

This chronological framework is, of course, both partial and provisional and will be subject to much revision as more data becomes available. Building a more comprehensive scheme will be a long-term process and future work must give due regard to chronological considerations. Again, the published research agenda for the British

Iron Age (Haselgrove *et al.* 2001) makes a number of recommendations regarding best practice, which must be adopted in this region.

Towards archaeologies of inhabitation

The various kinds of settlements that existed in different parts of the West Midland region did not exist in isolation, but formed components of a wider landscape. Understanding how these different kinds of sites functioned, and how they related to one another, requires examining the structure of landscape as a whole. In other words, archaeologies of landscape inhabitation need to be constructed, which seek to understand how past human communities were held together by the various activities (both ritual and routine) that their members engaged in across the landscape. Such actions are always made in relation to the monuments and relics of earlier generations, and with reference to a series of understandings of what their consequences will be. These strategies are also transformative because, as people act upon their world, for example by building settlements or laying out field systems, they create new sets of material conditions, which they and their descendants must then confront. As Barrett (1999, 257) has argued:

‘... an archaeology of inhabitation [is one] in which the material no longer represents the consequences of process which we need to discover but becomes instead the historically constituted and necessary conditions of a world inhabited, interpreted, and acted upon.’

Such an archaeology demands that fieldwork methodologies are adopted that examine the spatial and temporal patterning of these different practices across the landscape, and how they related to the residues left behind by earlier generations (see Andrews *et al.* 2000).

Inter-site studies of Iron Age depositional practices and spatial organisation in other regions indicate that straightforward, functional interpretations do not provide an adequate explanation of the evidence from the settlements. For example, research on the orientation of Iron Age buildings and settlement boundaries suggests that they may have been laid out in relation to ideological and cosmological concerns (Parker Pearson 1996; Oswald 1997). Similarly, the deposits of artefacts which we find within pits and ditches can no longer be viewed as random dumps of rubbish, since different kinds of artefacts were often placed in discrete areas (Hill 1995). Such work suggests that life in the Iron Age operated in relation to a different set of understandings about the world to those we hold today. However, gathering information that will enable us to address these issues in our region will depend upon us generating enough data to make comparisons between different sites meaningful. In practice

this is much more likely to involve the smaller enclosures, since it is these kinds of sites that are usually threatened by development and agriculture. The open area excavations in the Trent and Avon Valleys are important in this respect because they have involved the investigation of much larger areas of the sites concerned. For various reasons, it has been more common in the Marches to investigate smaller samples of enclosure boundaries and internal features. Interventions of this nature can provide some information about phasing and occasionally dating. However, they are much less informative when it comes to interpreting the nature of the practices that occurred at these sites.

For most people within any Iron Age community, life would have been dominated by the demands of the agricultural cycle. Moving beyond a site-based approach to a landscape scale of analysis is extremely important, if the character of the routines that shaped people's lives, is to be investigated. This is also necessary in order to understand how the different elements in Iron Age landscapes related to one another, and how these patterns of inhabitation changed over time. In this sense, achieving a better understanding of the nature of Iron Age settlement in the West Midland region is dependent upon exploring the wider landscape. Again, the excavations at Fisherwick and Whitemoor Haye are important in this respect because they combined the investigation of the residential locales, land boundaries and palaeoenvironmental evidence. As a result, it has been possible to construct an understanding of the structure of the wider landscape. Although the scale of these projects aided this work, smaller scale investigations of 'non-settlement' features, such as field systems, should be possible. There is also a need to place a greater emphasis upon the collection of archaeobotanical and archaeozoological evidence wherever possible, so that a picture of Iron Age husbandry practices can be built up. Similarly, the West Midlands presents us with many opportunities to recover high quality pollen sequences and geoarchaeological evidence, which will allow the development of a greater understanding of long-term changes in the structure of the landscape.

The results of the Danebury Environs Programme demonstrate how working at the landscape scale can provide a highly detailed understanding of an Iron Age landscape (Cunliffe 2000). It demonstrated, for instance, that the enclosures within the vicinity of Danebury operated as nodes within a wider regional production system, such that the nature of the practices conducted at individual sites varied on both a seasonal and longer-term basis. Similarly, it also allowed the relationship between these sites and the neighbouring hillforts – and Danebury in particular – to be investigated. Although this project was exceptional in many ways, it should be possible to assemble the evidence from sites that have been investigated in a more piecemeal fashion, if steps are taken to ensure that the data exist.

Conclusion

To conclude, this paper has briefly reviewed some of issues relating to the Iron Age landscapes and settlement patterns in the West Midland region, highlighting where some of the strengths and weaknesses lie within the data. It has also been argued that variations can be recognised in long-term traditions of landscape inhabitation, both within the West Midlands itself and in relation to other parts of the country. These patterns stand in contrast to traditional notions of Iron Age settlement in this region. In this sense, it is possible to recognise that the political construct that we refer to as the West Midlands did not exist in the later first millennium (see also Sharples, this volume). However, the fact that it does exist today provides an opportunity to investigate a broad range of Iron Age landscapes. Exploring these different scales of regionality will undoubtedly form a key theme in future research. In this contribution a number of ways have been outlined in which methodologies can be developed, so that we can move beyond the rather limited models of Iron Age society with which we began. These can be summarised as follows (see also Haselgrove *et al.* 2001):

Aerial reconnaissance

- a) Survey – targeting of previously under-flown areas, in conjunction with ongoing work in better-known areas.
- b) Initial data processing and interpretation – processing of the results of surveys to produce rectified plots (and supporting data) in those areas not yet covered by the National Mapping Programme. Ongoing review of the material from those areas that have been subject to such work in the past.
- c) Analysis and synthesis – further analysis of the rectified data to identify trends and patterns within it. Synthesis and interpretation of survey results at the local and regional scales.

Chronological considerations

- d) Routine application of absolute dating techniques – application of radiocarbon and other absolute dating techniques wherever, and whenever, possible.
- e) Review of the dates from key sequences – 'dating audits' of existing chronological frameworks, as advocated by Haselgrove *et al.* (2001). Re-investigation of the sequences from key sites through archive working and/or selective re-excavation.

Settlement locales

- f) Application of minimum sampling of features during excavation – Haselgrove *et al.* (2001, 10) recommend a minimum 20% sample should be obtained from enclosure ditches and roundhouse gullies. This should

- be combined with a detailed investigation of the intersections between key features.
- g) Sampling of the areas beyond settlement boundaries – selective investigation of the areas beyond settlement boundaries, in order to detect unenclosed settlement components.
 - h) Selective targeting of poorly dated monument categories – in order to gain a greater understanding of the full variety of Iron Age settlement forms.
 - i) Non-invasive survey – greater use of analytical earthwork and geophysical survey on sites where excavation is unlikely to occur in the foreseeable future.
 - j) Increased sampling for botanical remains – in order to increase our understanding of the nature of the practices that occurred at settlement locales.

Landscapes

- k) Adoption of ‘landscape approach’ – use of methodologies and interpretive perspectives that view settlements as part of a wider landscape rather than as sites in isolation. The question should not be ‘How do we understand this site?’ but ‘How did the occupation of this site relate to the other activities taking place in the surrounding landscape?’
- l) Greater emphasis upon the excavation of ‘non-settlement’ features – these should include land boundaries, field systems and other ‘non-domestic’ features.
- m) Wider use of palaeoenvironmental and geoarchaeological evidence – collection of such data will enable the establishment of a greater understanding of the structure of the wider landscape.

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