

## Chapter 9

# The Later Bronze Age and Iron Age: Resource Assessment

by George Lambrick

### Background

#### *Studies carried out for the Solent-Thames Research Framework*

This overview is based (with some additions and modifications) on accounts of late prehistoric period compiled on a county-by-county basis, all of which follow the project's common thematic structure. An advantage of the thematic approach is that there is scope to consider how trajectories of change differed across space and time within the area.

The study for Buckinghamshire was written by Sandy Kidd, for Oxfordshire by Tim Allen and the author, for Berkshire by Steve Ford, for Hampshire by Dave Allen and for the Isle of Wight by Ruth Waller. Environmental background was supplied by George Lambrick with input from Michael Allen.

#### *Regional and national research context*

There have been various previous reviews of different aspects of late prehistory in the area, and various conferences have outlined key research issues. Few span the full period covered here, and they all vary in geographical scope, but although some are now becoming quite elderly, they are all still useful (cf Barrett and Bradley 1980a and b; Brück 2001; Cunliffe and Miles 1984; Fitzpatrick and Morris 1994; Champion and Collis 1996; Haselgrove and Pope 2007; Haselgrove and Moore 2007; Lambrick with Robinson 2009). *Understanding the British Iron Age: an Agenda for Action* (Haselgrove 2000) is the most recent attempt at a national research framework for the latter part of the period.

It is also worth noting that under the national initiative, *Exploring Our Past*, regional research frameworks have been or are being developed for adjacent regions which adopt the same period and thematic structure.

### The Solent-Thames Area

The Solent-Thames area is an artificial modern administrative construct that spans several different geological and topographical areas, as shown on Figures 1.1-1.4 and 1.6.

Although in detail the present day landscape has been determined by relatively recent historical and modern land use, mapping of its historic character has strongly demonstrated the long-term significance of geology and topography on land division and usage through to the present day (eg Lambrick and Bramhill 1999). Modern grading of land has most of the Area as Grade 3 with significant areas of Grade 2 and more rarely Grade 1 on the main calcareous river gravels and upper Greensand bench. Much the largest area of poor soils (Grade 5) is in the New Forest, with another significant area represented by Otmoor (Oxon), while fairly impoverished (Grade 4) land occurs mostly on the tertiary sands and clays and some of the wetter clay vales.

The geographical diversity of the region can now be mapped digitally in terms of a very wide range of geological, topographical, hydrological, vegetational and historical characteristics that can be used as the basis for analysing existing archaeological data. So far, however, very few if any attempts have been made to do this.

In some respects the natural diversity of the area and its lack of a clear historical or geographical rationale has advantages, because it means that no assumptions can be made that change was uniform across the area: instead it demands consideration of sub-regional differences and contrasts. For many parts of the Solent-Thames area, patterns are likely to be more similar to those in adjacent counties beyond its limits than to other areas within it. It is much more realistic to think of the area as a transect across different geographical and cultural entities that it impinges upon than as a coherent area in itself.

A key issue for late prehistoric Britain is its varying regional character. The Solent-Thames area offers the opportunity for taking a fresh look at some of the best-studied regions for the period in terms of their diversity and differences in the trajectory of change, rather than pursuing the more usual quest for similarity of development.

### Nature of the evidence base

#### *General scale and character of investigations*

The way in which later prehistoric sites and finds are recorded in county Historic Environment Records (HER) is rather variable and it is not always easy to

Table 9.1 Numbers of later prehistoric HER records

County	Later Bronze Age	Iron Age
Buckinghamshire & Milton Keynes	144	1622
Oxfordshire	42 (but 897 gen BA)	485
Berkshire	Not provided	Not provided
Hampshire	Not provided	Not provided
Isle of Wight	31	118

extract data, so the following figures (Tables 9.1 and 9.2) give only a broad-brush indication of the scale of the known resource. To put this into perspective, the Buckinghamshire figures for the period represent up to about 10 % of entries in the HER.

Another way of looking at this is through the records of *The Later Prehistoric Pottery Gazetteer* ([www.arch.soton.ac.uk/Projects](http://www.arch.soton.ac.uk/Projects)). Compiled in 1999, this provides a breakdown of collections in the Solent-Thames area (Table 9.2).

In terms of large excavations, of 27 substantive open area excavations in Buckinghamshire, 15 have been fully published, whilst a further 9 are progressing towards publication. In Oxfordshire at least 30 major area excavations, including some complete excavations of settlements, have either been published or are very close to publication. In Berkshire there have been about 20

Table 9.2 Solent-Thames records in the Later Prehistoric Pottery Gazetteer

County	No Sites/ collections	% Published
Buckinghamshire & Milton Keynes	261	21.8
Oxfordshire*	195	33.8
Berkshire*	272	31.8
Hampshire	387	20.4
Isle of Wight	57	14

NB the low figure for Oxfordshire compared with Berkshire is because many sites in the Vale of White Horse and some in South Oxfordshire are listed according to pre-1974 county boundaries under Berkshire.

substantial excavations, the majority of which have been published. Hampshire has 14 sites with 'sizeable' collections (3,000 sherds or more) all of which are from the chalk, with all but one published, and there are some other substantial excavations with lower yields of pottery. On the Isle of Wight most excavations have mostly been small-scale though the enclosure at Knighton produced a reasonably substantial collection of pottery. Of specific sites, Danebury with 158,000 sherds is exceptional in the whole Solent-Thames area. Since this information was compiled (2008) there have been many more excavations large and small, and many publications, as the references cited indicate.

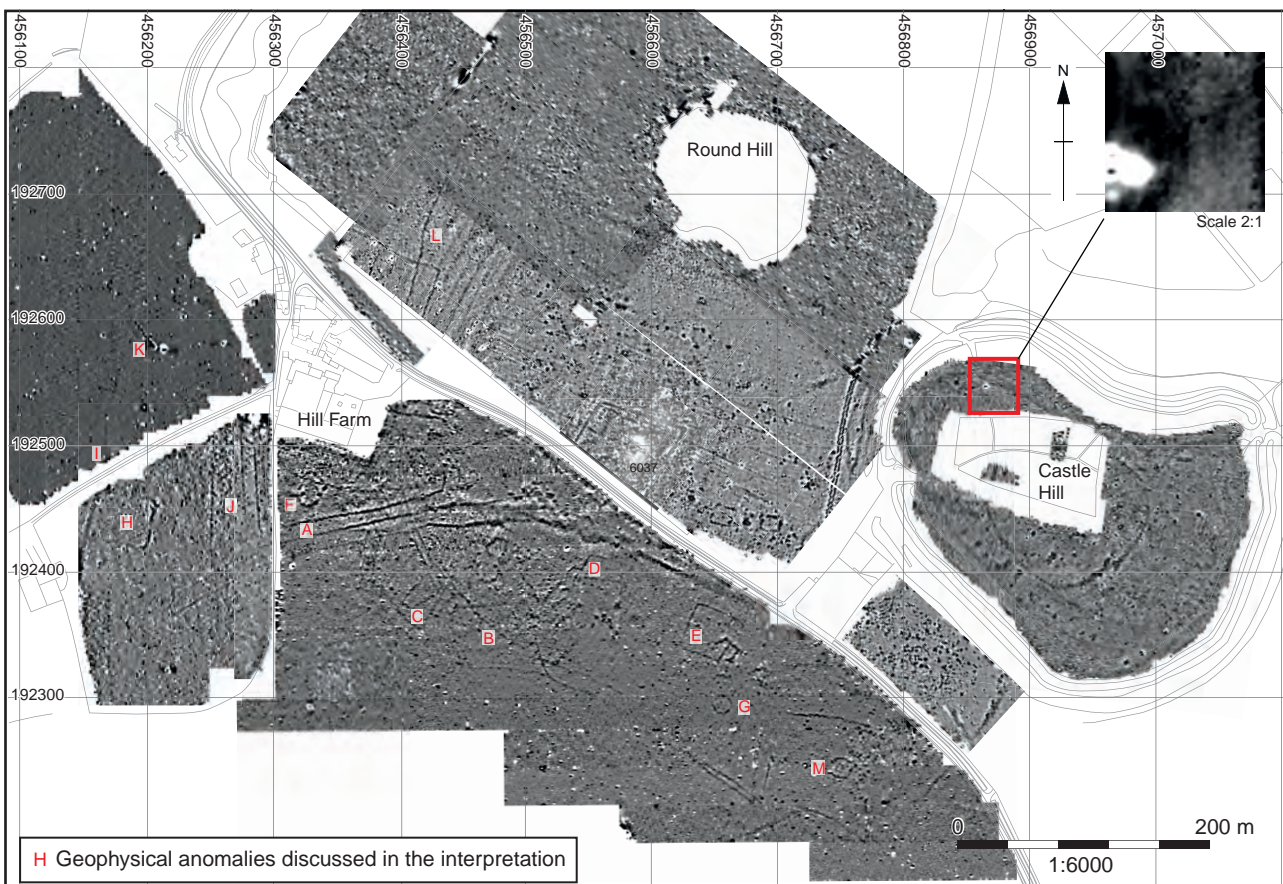


Plate 9.1 Geophysical survey in and around Castle Hill, Little Wittenham, Oxfordshire, copyright OA, with kind thanks to Time Team



Plate 9.2 Reconstruction of the settlement at Pennylands, Milton Keynes, copyright R Williams

### History of investigation

In Buckinghamshire later prehistoric sites have been recognised since the 19th century, but there was little pioneering excavation.

In Oxfordshire later prehistoric sites have been recorded since the 16th century, when Leland wrote about the earthworks on Castle Hill, Little Wittenham (Leland 1964, 120; Gelling 1974, 128). Interest and knowledge grew from the mid-19th century onwards, with the excavations of Stephen Stone at Standlake (1847) and Boyd Dawkins (1862; 1864) and Rolleston (1884) at Yarnton. There was increasing concern at the destruction of prehistoric monuments in the later 19th century, and the levelling of part of the earthworks at Dyke Hills, near Dorchester-upon-Thames became a particular cause célèbre in the campaign that led to the passing of the first Ancient Monuments Act in 1882 (Lane-Fox 1870; Cook and Rowley 1985, 18-20).

Some of Hampshire's prominent Iron Age earthworks received honourable mention in the 17th and 18th centuries from Camden, Aubrey and Stukeley, but it was not until the second half of the 19th century that excavation on an Iron Age site took place. In 1858 Augustus Franks worked at Danebury, and later Dr J C Stevens reported upon a number of 'pit-dwellings' (probably storage pits) at Hurstbourne railway station (Cunliffe 2000, 10; Stevens 1888, 25).

On the Isle of Wight much evidence gathered by antiquaries remains unreliable eg Late Bronze Age urnfields. Very little new data from this period was recovered in the intervening years.

The development of aerial photography in the 1920s and 1930s, notably by Major W G Allen in the Thames Valley and O G S Crawford in Wessex, led to an explosion of information about buried sites on the river gravels and chalk (and to a lesser extent on limestone and other free-draining soils). These pioneers were followed by Derek Riley, J K St Joseph, Arnold Baker and others. New discoveries continue to be made, even

in well-surveyed areas (Featherstone and Bewley 2000). Many undated cropmark sites are probably of later Bronze Age or Iron Age origin, though dating on purely morphological grounds is of very variable reliability.

Other non-intrusive site prospection and recording techniques (fieldwalking, earthwork survey and geophysics) have also played their part in enhancing the record.

In the late 1950s and 1960s, when magnetometry was first being developed, the use of geophysics coupled with targeted excavation was pioneered by the Oxford University Archaeological Society in a series of hillfort investigations in Oxfordshire and south Northamptonshire. In recent years a similar approach with more sophisticated modern equipment has been revived with the Wessex hillfort project (Payne *et al.* 2006) and work along the Berkshire Downs and at Little Wittenham (Miles *et al.* 2003; Lock *et al.* 2005; Allen *et al.* 2010), not to mention many other surveys of settlements and religious sites (Plate 9.1).

Approaches to excavations have also changed over the years, many early ones being small-scale trenches or salvage areas, the scale gradually increasing especially through the 1970s to 1990s. A few excavations such as Danebury and Gravelly Guy, Stanton Harcourt, reflect very complete recovery of material from large area excavations, but most reflect less complete levels of sampling, and in recent years the trend has been towards recording much larger areas with lower levels of sampling. However, there has been relatively little academic research into the pros and cons of sampling strategies since the 1980s.

### Biases in geographical coverage of investigation

In Buckinghamshire there has been a heavy bias in excavation towards the Milton Keynes area and along the Thames valley, but also more recently around Aylesbury, which remains an area of growth. Plate 9.2

For a long while the pressure of development in Oxfordshire was most evident in the gravel and sandpits



Figure 9.1 Later Bronze Age and Iron Age sites mentioned in the text

of the valleys, but development around towns like Bicester, Banbury and Didcot has provided new foci for archaeological investigation. Understanding of the Cotswolds in later prehistory still lags behind that of the valley, but has begun to be addressed (Lang 2009). While recent work along the Ridgeway and outlying chalk hills has started to redress the balance for the Berkshire Downs, this has still been of a somewhat restricted character. Recent work on the Corallian Ridge and in the Vale of White Horse has also begun to fill out the picture.

In Berkshire there has again been a major concentration of investigation on the Middle Thames and lower Kennet gravels, especially in the areas west of Reading and between Maidenhead and Slough. There has been growing investigation in some parts of the tertiary beds eg in the vicinity of Burghfield, but still only limited work on the dip slope of the Berkshire Downs compared with the recent focus of research along the Ridgeway in Oxfordshire.

In Hampshire the study of chalkland sites (around Danebury, Andover, Basingstoke, and down the M3 corridor past Winchester) has held a pre-eminent position in the study of late prehistory not only in the county but nationally. In the non-calcareous parts of the county field surveys, gravel quarrying, road building and urban development have added to the picture, although in comparatively sporadic fashion, except for the major late Iron Age regional tribal centre at Calleva Atrebatum (Silchester).

On the Isle of Wight most work has again concentrated on the central chalk ridge where most sites are

known, but there has been an increasing amount of work in recent years on the coastal areas.

An important aspect of the geographical coverage has been the interplay between development-led archaeology and university and other research projects. The latter have made a major contribution to rectifying some of the biases, and in some instances have provided the backbone of research, notably for the Cotswolds, the Chilterns, the Berkshire Downs and outlying hills, Silchester, parts of the Hampshire chalk and the coastal plain.

Taking these patterns overall, it is clear that there are substantial geographical biases in the record, but useful progress has been made in recent years to begin to redress these. The distribution of key sites is shown in Figure 9.1.

A further important feature of the Solent-Thames area as a resource for studying later prehistory is that it includes several of the most intensively studied local areas for late prehistoric archaeology in Britain. Particularly notable in this respect are the areas around Milton Keynes (Buckinghamshire); Stanton Harcourt, Cassington/Yarnton and Abingdon (Oxfordshire); the Lower Kennet valley (Berkshire); Silchester; Danebury (Plate 9.3) and its environs (Hampshire). Some other areas with a more recent history of major investigations, such as the Maidenhead to Slough section of the middle Thames valley and Frilford/Marcham and the Oxfordshire Ridgeway are emerging as further important foci of investigations. These various 'hotspots' of later prehistoric archaeology thus provide an excellent resource for comparative studies across the Solent-



Plate 9.3 Aerial view of Danebury hillfort, Hampshire, *copyright Oxford Institute of Archaeology*

Thames area, which is especially valuable in the wider context of our better understanding of its variability in settlement patterns, land use and cultural associations.

### Chronology

The dating of most sites still rests on ceramic typology as few produce other dateable finds. The chronology of the later Bronze and Iron Ages in the Solent-Thames area can be divided by broad pottery styles into the following main phases, though these are not equally clear-cut, nor necessarily contemporaneous across the area:

- i. Deverel Rimbury (globular and bucket urns) 1700–1500 to 1200–1000 BC
- ii. Post- Deverel Rimbury (plain ware) 1200–1000 to 850–750 BC
- iii. Late Bronze Age to earliest Iron Age (decorated ware akin to All Cannings Cross) 850–750 to *c.* 600
- iv. Early Iron Age (angular vessels) *c.* 600 to 400–350
- v. Middle Iron Age (slack-profiled assemblages, globular bowls and jars or saucepan pots) 400–350 to 100 to 50BC
- vi. Late Iron Age (handmade and wheel-turned vessels, especially necked jars and bowls) 100–50BC to 50AD

On current understanding these broad phases break down across the area as shown in Table 9.3.

For the later Bronze Age the ceramic phasing is based on pioneering work carried out in the late 1970's (Barrett 1980a & b). This drew on several of the sites excavated at that time at Runnymede (Longley 1976) and in the Kennet Valley (Bradley *et al.* 1980), for which radiocarbon dates were available. However, while the basic identification of a later Bronze Age ceramic tradition remains unchallenged, Elaine Morris (Morris 2013) has suggested that the 'sequence' in which late Bronze Age 'plain ware' follows Deverel Rimbury pottery, and gives way to decorated late Bronze Age pottery looks increasingly dubious. In the light of many more recent radiocarbon dates, there appears to be more of an overlap of plain ware with the more distinctive earlier and later styles, between which there may have been less separation than has been supposed.

There is also significant regional variation in ceramic chronologies and the issues that arise for interpretation. In northern Buckinghamshire the model used is

generally that of David Knight (1984, 2002) which sees the Deverel Rimbury phase as somewhat later than in other parts of the area. Here there are also difficulties in distinguishing a clear latest Bronze Age/ earliest Iron Age phase, and some overlap between early to middle and middle to late Iron Age characteristics, as more up-to-date styles do not always seem to be present.

Similar issues arise for Berkshire, and for the middle to late Iron Age to Oxfordshire, where it is suspected that at some sites middle Iron Age styles may have lasted almost until the Roman conquest, even though on others late Iron Age pottery was being introduced 100 years earlier.

In Hampshire the detailed sequence at Danebury has allowed the middle and later Iron Age to be subdivided, giving six rather than three or four ceramic phases for the Iron Age (Cunliffe and Poole 1991b). It must be stressed however that the available chronological framework indicated in the table above provides only approximate dating. Danebury is exceptional and while it has greatly clarified the middle to late Iron Age ceramic sequence at least for central Hampshire, the vast majority of the Solent-Thames area has seen no systematic attempts to refine or provide secure absolute dating for the basic sequences first defined 20 years ago or more (Barrett 1980; De Roche 1977; 1978; Lambrick 1984; Saunders 1971; Knight 1984; 2002).

### Scientific dating

Over the last thirty years radiocarbon dating has been applied, mostly very sporadically, to many later prehistoric sites in the Solent-Thames area. This has resulted in a growing body of determinations from an increasingly wide range of sites and contexts, though most of them have tended to be burials and other specific deposits rather than defining sequences. For example in Buckinghamshire radiocarbon dating has been used on about 40% of open area excavations with between 2 and 4 dates per site. Amongst a growing plethora of determinations, very few significant programmes of radiocarbon dating have been undertaken, Yarnton, Eton Rowing Course, Runnymede (just outside the area in Surrey) and Danebury being the main exceptions.

The radiocarbon curve has a particularly pronounced deviation between 800 and 400 cal BC and this has severely limited the use of radiocarbon dating. However, improvements in pre-treatment of samples, the develop-

Table 9.3 Chronology of later prehistoric pottery phases

	<i>Deverel Rimbury</i>	<i>Post DR Plainware</i>	<i>LBA/EIA</i>	<i>EIA</i>	<i>MIA</i>	<i>LIA</i>
N Bucks	1500-1000	1000-800	800-300	400-50AD	50-50AD	
Oxon	1600-1100	1100-800	800-600	600-350	350-0/50AD	50-50AD
S Bucks/ Berks	1700-1200	1200-850	850-400	400-100	100-50AD	
Hants/ IoW	1600-1100	1100-800	800-600	600-350	350-100 (D)250-100	100-50AD (D)50-50AD

(D) = additional ceramic phases in the Danebury sequence

ment of AMS dating and high-precision approaches, and the dating of multiple samples have established a variety of means of reducing the error margins. The application of Bayesian statistical analysis can also significantly refine the precision of the dating where samples can be put into series. An example of effective application of such methods is the dating of the middle Iron Age cemetery at Yarnton (Hey *et al.* 1999) and the very early iron working site at Hartshill Copse, Berkshire (Collard *et al.* 2006).

Other forms of scientific dating, such as Optical Stimulated Luminescence dating, Thermo-luminescence dating and Thermo-remnant Magnetic dating, have all been used on occasion, but the accuracy of these types of dating (at best offering 5-10% accuracy, i.e.  $\pm 200$  years, and often with ranges of 500 years or so) is of rather limited value. Nevertheless, the use of OSL dating for the Uffington White Horse is a particularly interesting application (Miles *et al.* 2003).

Dendrochronology was used to date some of the repairs to the waterfront structures at Testwood Lakes, Hampshire, to the 1450s BC (Bowijk and Groves 1997; Fitzpatrick and Ellis 2000; Plate 9.4). In most cases, however, preserved timber, for example at Runnymede, the Eton Rowing Course and Whitecross Farm Wallingford, have had too few rings to allow successful dating.



Plate 9.4 Testwood Lakes wooden timbers *in situ*, Hampshire, copyright Wessex Archaeology

## Metalwork

A national programme for close scientific dating of some individual items or deposits has taken place, including some from the Solent-Thames area. This has led to a very much clearer chronology for Bronze Age metalwork, which is especially important for interpreting individual items, hoards and river finds and their wider social and economic implications (Needham *et al.* 1997; Needham 2007). There has not been a comparable effort to date Iron Age weaponry and other metalwork, not least because of problems with the calibration curve.

The scarcity of Bronze Age and Iron Age metalwork on most ordinary settlement sites, however, together with the potential for redeposition and curation as heirlooms or scrap metal, means that such metalwork is usually of only limited use for dating settlement sites. The role of brooches, potentially datable to within 50 years, has been of value in relation to Iron Age ceramics at Danebury (Cunliffe 2000, 79), but again they are not numerous on most settlements.

The development of coinage towards the end of the period presents similar issues, as very few occur in well-stratified contexts. Their chronological value is probably more in the context of the political and economic power of the new ruling elites of the late Iron Age than as routine numismatic dating evidence for this period (Gwilt and Haselgrove 1997; Creighton 2000).

## Other chronologically distinctive artefacts

There are a number of types of object that, although not especially sensitive to change over long periods, are sufficiently common to be useful chronological markers. These include the distinctively late Bronze Age perforated clay slabs which occur in the middle Thames valley, and the switch from cylindrical or pyramidal 'loomweights' in the middle to late Bronze Age to triangular ones in the Iron Age. Other distinctively Iron Age objects such as weaving combs and grooved and polished metapodials can also be helpful indicators.

## Inheritance

The period reviewed here represents the transition from 'monument-dominated landscapes and mobile settlement patterns to that of more permanent settlement and a greater emphasis on agricultural production' (English Heritage 1991, 36). It has been considered that the onset of the Middle Bronze Age defined this in cultural terms and, more importantly, in physical evidence (Ellison 1981) and this view has tended to persist (eg D Yates 2007). But there is no reason to expect such a transition to have been synchronous right across the Solent-Thames area, and there is growing evidence that it was not (Lambrick with Robinson 2009, 377-93).

## Landscape

It is clear that in many areas a relatively open landscape was inherited from the earlier Bronze Age. This is suggested by the pollen sequences from Little Marlow (Richmond *et al.* 2006), and Sydlings Copse, Oxon (Day 1993), and by pollen from peat on tertiary sands and clays in the Newbury area and New Forest. Molluscan evidence from barrows in the Ouse and Ouzel valleys at Milton Keynes indicates the same picture (Green, 1974). On the Isle of Wight pollen evidence shows large scale woodland clearance during the Bronze Age creating downland and heathland around the central and southern chalk where the barrow cemeteries were situated (Scaife 1987).

Broad patterns of clearance and landuse appear to have influenced the character of later settlement, as at Stanton Harcourt, Oxfordshire (Lambrick 1992b; Lambrick and Allen 2004). A similar respect for pre-existing sacred sites has been argued for the barrow cemetery at Radley (Allen 2000, 11-12) and at Oxford (Lambrick 2013).

Barrows were also utilised in the setting out of middle to late Bronze Age/Iron Age boundary ditches and field systems, or were given apparent 'special status' within them. Examples include Mount Farm Dorchester (Lambrick 2010) Reading Business Park (Moore and Jennings 1992), Eton Rowing Course (Allen *et al.* 2000) and a number of sites in Hampshire (Cook and Dacre 1985, 7; Cunliffe 2000, 159).

## Settlement pattern

The idea of a pattern of 'settlement' before the middle Bronze Age raises one of the most fundamental issues for the period, since there is very little evidence of permanent settlement. Life-styles were dominated by patterns of 'residential mobility' (Barrett 1994, 136-46; Brück 2000, 281-5) and the influence of such mobility on how communities interacted and shared resources is a fundamental part of the inheritance from earlier periods that is likely to have influenced how land came to be divided, enclosed and settled over the next 1,500 years in which more permanently settled farming developed.

Many later prehistoric sites produce rather ephemeral traces of earlier activity, as in the case of several later Bronze Age enclosures and settlements like Ivinghoe Beacon, Rams Hill and Taplow Court (Cotton and Frere, 1968; Brown, 2001; Bradley and Ellison 1975; Needham and Ambers 1994; Allen *et al.* 2009). Several enclosed settlements and forts in Hampshire have evidence of at least some earlier prehistoric activity.

It seems clear that major late prehistoric enclosed forts, settlements and other sites were often sited in places that had seen some significant earlier use, but major monuments tended to be avoided – and in some cases clearly respected and reused.

## Funerary and ceremonial monuments and customs

Examples of round barrows attracting Middle Bronze Age (Deverel-Rimbury) secondary burials have long been known and are now widely recognised across the Solent-Thames area (Green, 1974; Allen *et al.* 2000; Barclay and Halpin 1999, 162-3 and 167; Hamlin 1963, 7-9; Barclay *et al.* 1995, 94-5; Lambrick 2010; Butterworth and Lobb 1992; Piggott 1938; McGregor, 1962; Walker and Farwell 2000; Entwistle 2001). At Kimpton, Hampshire a standing sarsen stone (subsequently broken) was the focal point of the remarkably long-lived (2100 to 600 BC) urn cemetery (Dacre and Ellison 1981).

There is little evidence for stone and timber circles attracting particular respect or reuse in later prehistory (eg Lambrick 1988), but there may be a continuing tradition of constructing of post-circles in the Upper Thames Valley (Allen and Kamash 2008, 72-5; Lambrick with Robinson 2009, 329-31; Lambrick 2010, 24-7; see also Williams 1946-7).

Although the tradition of building major ceremonial and funerary monuments mostly died out, some earlier prehistoric ceremonial like henges and barrows continued to be respected. However, it is noticeable that cursuses were not. At Dorchester-on-Thames a field system (probably of Middle Bronze Age date) was aligned on the Big Rings henge but cut across the more ancient cursus ditches (Whittle *et al.* 1992), a pattern also evident just outside the area at Lechlade (Glos) and Staines (Surrey). It thus seems likely that whatever sacred traditions were once associated with these enigmatic enclosures, they had not survived.

Some ancient monuments that were visible as earthworks were reused at much later periods. For example some long barrows in Hampshire apparently served as *loci consecrati* for Late Iron Age and Romano-British communities (Massey 2006), and a similar phenomenon is evident at Uffington (Miles *et al.* 2003). At some Hampshire barrows large quantities of abraded Roman pottery were placed on barrows or in their ditches as votive deposits, but it is uncertain to what extent this implies continuous veneration throughout the later prehistoric period (Knocker 1963; Cook and Dacre 1985).

## The natural environment and landscape change

### Climate and climatic change

It has long been recognised that the climate changed in this period from a warmer drier climate in the Bronze Age to a wetter cooler climate in the Iron Age (eg Lamb 1981). A variety of lines of evidence has been cited to support this, including extrapolations from oxygen isotope ratios trapped in ice cores, preserved remains of fauna and flora sensitive to climate fluctuations and hydrological and geomorphological changes, including sea level change (Anderson *et al.* 2007; Needham and



Macklin 1992; Tomalin *et al.* 2012). In the case of hydrological change in river catchments, a key issue is the need to distinguish between change attributable to climate from the effects of human intervention through forest clearance and land management, which, in the Thames valley has been argued to be a more significant driver of change (Robinson and Lambrick 1984; Lambrick with Robinson 2009, 29–39).

One possible indication of late prehistoric cooling of the climate from the region comes from deposits at Yarnton and the Wilsford Shaft near Stonehenge with a high proportion of dung beetles of the genus *Onthofagus*, which are now rare or extinct in Britain but typical of mid-France. In the absence of any obvious ecological reasons for their abundance around 1600–1350 cal BC it is thought that they reflect the warmer climate adduced from other, more generalised evidence such as oxygen isotope ratios.

### General environment

Molluscs and pollen together with field systems, droveways and the large-scale land-division like the Chiltern Grims Ditch suggest extensive clearance by the middle/late Iron Age and before. The appearance of beech at Little Marlow, both as pollen and fuel, and also at Taplow (Coleman and Collard, 2005) suggests that Chiltern beech woods could have originated during the 1st millennium BC.

Pollen sequences and other biological data from the Upper Thames valley suggest that permanent clearance of forest cover was earlier on the gravel terraces than the surrounding hillsides or floodplain, and continued through the middle to late Bronze Age, but with some cleared areas on surrounding hills remaining rough grazing or heathland through the Iron Age (Lambrick with Robinson 2009, 34–51).

Based upon environmental evidence from the floodplain of the Upper Thames Valley, there is a well-established model for the chronology of increasing clearance and run-off in later prehistory leading to flooding and later alluviation by the end of the period (Robinson and Lambrick 1984; Robinson 1992a; Robinson 1992b; Lambrick 1992b), but the pattern is rather different in the Middle Thames (Lambrick with Robinson 2009, 29–34).

On the Berkshire Downs and their outliers, evidence from both Rams Hill and Castle Hill suggests cleared grassland and periodic regeneration on the chalk in the late Bronze Age (Bradley and Ellison 1975; Allen *et al.* 2010, 89–93 and 203–14). On the Hampshire chalk there is good evidence from sites like Easton Lane and Twyford Down both of clearance and some regeneration and of long-established grassland with some arable, but probably with localised stands of ancient woodland (Fasham *et al.* 1989; Walker and Farwell 2000). During the Iron Age the landscape became much more open, and was dominated by mixed farming. An issue that only some of these studies have addressed (eg Allen *et al.* 2010) is how far wider conditions of regeneration can be

extrapolated from samples derived from ditches that may have become wooded but could still have functioned as boundaries and/or barriers.

Pollen evidence from sites in the New Forest, where Bronze Age burnt mounds and barrows are numerous, indicates a rapid decline in soil fertility and onset of acidic heathland conditions (Tubbs 2001).

On the Isle of Wight pollen evidence shows large-scale woodland clearance during the Bronze Age creating downland and heathland around the central and southern chalk where the barrow cemeteries were situated (Scaife 1987). Such clearance seems to have persisted into the later prehistoric period. The midden sites and hearths on the south coast indicate use of a mix of land-based and marine resources.

### Soils, erosion and alluviation

As farming became more established and larger areas were managed landscapes (see below) there was an impact on the natural environment. This is evident in many pollen spectra, and colluvial studies have been highly profitable in determining palaeo-environmental chronologies (eg Bell 1983; Allen 1992) occasionally defining sites and whole periods of evidence not otherwise recorded in the archaeological record (Allen 2005). The most comprehensive studies of colluvium have been carried out in adjacent regions on the Sussex and Wiltshire chalklands, and relatively little comparably systematic research has been undertaken on the Hampshire, Berkshire and Marlborough Downs or the Chilterns and Cotswolds, despite the presence of important sites related to and buried by hillwash or alluvium. There are however some notable exceptions: Uffington (Miles *et al.* 2003) and Aston Clinton (Masefield 2008). Some attempts have been made to analyse the nature and quantity of erosion products in the form of colluvium, alluvium and aeolian deposits (eg Favis-Mortlock *et al.* 1997). Burrin and Scaife (Burrin and Scaife 1984; 1988; Scaife and Burrin 1992) clearly show that colluvial deposition is just one part of a larger sediment history for which both alluvial and (where relevant) marine sediment records need to be considered.

The less pronounced topography of river gravels limits the value of such colluvial deposits, but can nonetheless be valuable at terrace edges or in major features such as waterholes (Lambrick with Robinson 2009; Lambrick 2010) The environmental evidence from alluvial sites can provide the environmental context of the floodplain and its settlement and occupation parameters (eg Lambrick and Robinson 1979; Allen and Robinson 1993; Allen 2008b). The accumulation of alluvial silt provides a genuine generalisation about conditions of erosion within the upstream catchment, which may indicate a significant degree of human intervention, possibly eclipsing any climatic contribution (Robinson and Lambrick 1984; Robinson 1992b; Lambrick 1992b), but attempts to map the origin of such deposits have been disappointing (Limbrey and Robinson 1988).

## Farming

The emergence of permanent sedentary farming settlements has been assumed to occur across the Solent-Thames region from the Isle of Wight to Buckinghamshire by the Middle Bronze, but the dynamics of change in relation to possible variations in population growth have only begun to be explored. West of the region, research in the upper Allen valley suggests that whatever the process of field system development, there is no evidence for agrarian intensification. (M J Allen pers. comm.).

On the Thames gravels Lambrick (with Robinson 2009, 377-87) has explored the varied chronology and spatial distribution of the transition to sedentary farming; of the possible changing social basis of land management; of the emergence of specialist pastoral farming alongside mixed farms; and the possibility that some degree of mobile pastoralism still survived. The assumption that the establishment of field systems and permanent farming settlements go hand-in-hand is also challenged.

This approach to understanding the dynamics of change suggests a much more complex chronological and spatial picture than more traditional models of simple periods of major change (eg D Yates 1999; 2007) would suggest. It emphasises the need to define the farming economies of specific farm units, the land units, and ultimately to examine the possibility, if not the probability, of regional variation and specialisation, and of complex trade economies of secondary products and materials less readily seen in the material archaeological evidence.

## Fields

The chalklands of Hampshire, along with much of Wessex, saw a major transition from an open to an enclosed landscape between 1600 and 800 BC. In the middle Bronze Age, coaxial field systems were set out, with ridge-top linear ditches sometimes providing a base line. Trackways and rectilinear enclosures were also created but contemporary settlements were apparently rare and unenclosed. Molluscan evidence from the Windy Dido field system adjacent to the Quarley linear ditches indicates that they were constructed in long-established open grassland (Evans in Cunliffe and Poole 2000). Pre-existing round barrows were either left alone, presumably in areas of pasture, or employed as laying-out markers (Crawford and Keiller 1928, 154; Cunliffe 2000, 159; Cook and Dacre 1985, 7). Away from the chalk in Hampshire the background picture is less clear, but a wide range of sites and finds shows that the exploitation of heathland, river valleys and coastal fringe were significant in their own way. On the heathland soils of the New Forest enclosures and fields are rare but not unknown (Pasmore 2000).

On the Isle of Wight there are four field systems dated on stylistic grounds to the Iron Age to Roman periods and an earthwork enclosure (possibly for livestock)

dated to the Iron Age on typological grounds, but again not securely dated.

The pattern of late prehistoric land division in the river valley and vales of the Solent-Thames area tends to be somewhat different. Middle to late Bronze Age ditched field systems have been investigated in the Middle Thames and Lower Kennet and Colne valleys in southern Buckinghamshire and northern Berkshire. These include Kingsmead, Horton (Wessex Archaeology 2006), Eton Rowing Course (Allen and Mitchell, 2001) The Lea, Denham (Coleman *et al.* 2004), Weir Bank Stud Farm, Bray (Barnes and Cleal 1995), Reading Business Park and Green Park (Moore and Jennings 1992; Brossler 2004) and Moores Farm (Brossler *et al.* 2013). Parts of middle and late Bronze Age field systems are also increasingly being found in the southern part of Oxfordshire on the gravels round Dorchester, Didcot, Appleford and Radley, and also further west along the foot of the Upper Greensand bench in the Vale of White Horse (Lambrick 1992a; Ruben and Ford 1992; Mudd 1995; Hearne 2000; Booth and Simmonds 2009).

Overall, some of these rectilinear fields were established on co-axial layouts in which some subdivision appears to have taken place, but others were more agglomerative with evidence of phases of accretion. These do not seem to have undergone much development in later prehistory, though some fields (eg at Appleford and Denham) were redefined in the Roman period. There are different views as to whether such fields were entirely abandoned (D Yates 1999; 2001; 2007) or may have continued in use as hedged enclosures without their ditches being recut, which would help explain such Roman reuse (Lambrick with Robinson 2009, 80-84).

So far such fields seem to be lacking on the Corallian Ridge and on the gravels to the north, though possible early Iron Age fields have been found at Lady Lamb Farm, Fairford just outside the area (Roberts 1993). Early fields are also absent so far from clay vales, and have not yet been found on the Tertiary sands and clays of Berkshire and Hampshire. A single ditch and driveway high on the Cotswolds at Rollright hints at late Bronze Age or early Iron Age fields (Lambrick 1988), but virtually nothing is known of the potential extent or character of such field systems.

Ditched fields, paddocks and trackways are increasingly evident for the Iron Age in the river valleys and other non-chalkland parts of the Solent-Thames area, and mainly appear to be associated with pastoral farming (Lambrick with Robinson 2009, 83-90. Apart from an unusual early Iron Age driveway with attached fields at Wickham, most are middle to late Iron Age and were probably used for stock management (Williams and Zeepvat 1994; C Stevens 2004; Lambrick 2010; Birbeck 2001; Bourn 2002). Extensive paddocks also appear to be part of some low-lying middle Iron Age pastoral farmsteads at Port Meadow, Oxford (Lambrick and MacDonald 1985a; Lambrick with Robinson 2009, 87-8), and there are small paddocks or cultivation plots adjacent to some settlement enclosures (Allen and Robinson 1993; Allen 1990; Hey 1995; Cromarty *et al.*



Plate 9.5 Reconstruction of the double-ditched farmstead at Mingies Ditch, Oxfordshire, *copyright OA, drawn by Danyon Rey*

1999). By the late Iron Age large areas of rectilinear ditched enclosures, paddocks or “closes” become evident (Lambrick with Robinson 2009, 88-90; Williams and Zeepvat 1994; Parkhouse and Bonner 1997). A late Iron Age co-axial field system is known from Arborfield, south-east of Reading (Lobb and Morris, 1991-3).

In all these areas evidence of the physical form of field and paddock boundaries other than ditches or lynchets is patchy, but physical traces and waterlogged remains cumulatively suggest a variety of forms from permeable boundaries, to hedges, hedge banks, fences, hurdles and natural watercourses (Lambrick with Robinson 2009, 56-62). More tentatively, charred plant remains and snails have been cited as possibly indicating hedges (Clapham 2000; Allen in Davies *et al.* 2002). Apart from seeking to understand the appearance of the landscape, an appreciation of the possible above ground form of boundaries is often crucial to understanding the layout, use and longterm survival of enclosed areas for which the subsoil evidence provides only a very partial picture (Lambrick with Robinson 2009, 56-8).

Archaeologists have been good at defining, recording and mapping field systems especially across the chalk of southern England (Bowen 1961; Palmer 1984), but less attention has been paid to defining their use and how they operated, as for example Pryor (1996) has done in the fens, though the potential has been recognised (Lambrick with Robinson 2009, 246-9 and Figs. 7.8 and 7.9). Such information is important for understanding how farming communities managed the land. In the past it has largely been assumed, but seldom questioned, that fields were for crops, and as discussed by Lambrick (with Robinson 2009, 380-7) there are good reasons to suggest that the origin of many ditched fields on the gravels may have been to manage pasture. On the limestone and chalk hills of the region, tillage and soil disturbance clearly created lynches, but that does not necessarily reflect their origin or indicate exclusive use as arable (Allen 2008a).

Some form of rotation of arable, fallow and pasture is likely, but few if any attempts have been made to investigate this. Charred and waterlogged remains often reflect a mixture of habitats that could reflect rotation, but the complexities of different distribution and depositional (and post-depositional) processes prevent firm attribution to rotational farming. Using land snail analysis to detect and differentiate between grazed or trampled grassland and prehistoric arable habitats is not always easy, nor even always possible (Evans 1972), but improvements in species diversity indices and other statistical means, coupled with the increasing body of soil/sediment and snail data, offers some potential to explore this.

### *Large-scale land division*

While the establishment of field systems can be traced back to the middle Bronze Age, larger scale ditched land divisions are mostly later. In the Chilterns, several small linear earthworks are known on the Chiltern scarp, notably at Whiteleaf Hill (Hey *et al.* 2007; Wise 1991). By analogy with ‘cross ridge dykes’ found in the eastern Chilterns, these have been presumed to be later Bronze Age/early Iron Age local territorial boundaries (Bryant and Burleigh 1995). A possibly similar pattern of cross ridge dykes is evident on the ridge between the Kennet and Enborne to the south of Newbury, though they are as yet undated.

Large linear boundary ditches dating to the late Bronze Age are known on the Berkshire Downs, forming ‘ranch’ boundaries. Late Bronze Age linear ditches have been found at Alfred’s Castle, apparently associated with an extensive field system (Gosden and Lock 2001). A lynchet sealed by the early Iron Age rampart at Rams Hill (Bradley and Ellison 1975) is good evidence of the existence of late Bronze Age or early Iron Age arable fields on the Berkshire Downs, but most of the very extensive rectilinear and coaxial field systems are thought to be late Iron Age or Roman in origin (Bowden *et al.* 1993).

On the Hampshire chalk in the Late Bronze Age new linear ditch systems were created. These sometimes related to what already existed, either man-made features or focal points like hilltops, but sometimes cut across established fields to create new tracts of territory (Bowen and Fowler 1978; Bradley *et al.* 1994). Many of these survived into and throughout the Iron Age as new types of enclosure were established, either large as at Balksbury, Winklebury and Danebury or small as at New Buildings and (possibly) Meon Hill and Old Down Farm (Cunliffe 2000, 154). At Easton Down, a middle to late Bronze Age boundary that had been part of a field system seems to have persisted as a boundary through to the middle Iron Age (Fasham *et al.* 1989). In many other cases late prehistoric linear boundaries lasted even longer, and some still survive as parish boundaries and along trackways.

There is also increasing evidence of ditched boundaries dividing up the river valleys, including so-called

meander cut-off boundaries defining large areas of dry ground surrounded by watercourses, as at Lechlade, Culham and the Eton Rowing Course (Boyle *et al.* 1998; Allen *et al.* forthcoming). Other examples of early to middle Iron Age ditched land divisions anything from 250 to over 800m long have been found near Aylesbury, and in Oxfordshire at Bicester, Yarnton and Little Wittenham (Parkhouse and Bonner 1997; Ellis *et al.* 2000; Hey *et al.* 2011a; Allen *et al.* 2010, 266-7). These can variously be seen as demarcating areas of settlement or paddocks from more open areas, dividing areas of different intensity of landuse, or acting as boundaries between farming settlements (Lambrick with Robinson 2009, 62-8).

### Animal husbandry

For the middle Bronze Age faunal remains are generally scarce, though with isolated exceptions, and animal bones are much more common in many late Bronze Age and Iron Age assemblages than earlier ones.

Ellen Hambleton (1999) carried out a comparison of the evidence for Iron Age animal husbandry in the Upper Thames valley and on the Hampshire chalk, and a decade later reviewed the evidence for Southern Britain in later prehistory (Hambleton 2008). Her principal conclusion was that although the husbandry of sheep and pigs were similar, there was a different strategy for cattle husbandry in the Upper Thames valley (more cattle probably kept in larger herds with fewer surviving till old age for traction and secondary products). Lambrick (with Robinson 2009, 240-9) has reviewed the proportion of species representation in relation to different topographical parts of the Upper Thames valley, showing both differences over time, but also much more variation in species proportion within topographical zones than has previously been supposed, and that horse rearing may have been significant in some parts of the Thames valley.

Both Hambleton and Lambrick have noted the complexity of chronological, regional and topographical trends in herd composition and management. For example, Hambleton (2008) has commented on the correlation of herd composition with environmental factors and found an overall trend to increasing numbers of sheep over the period as a whole across southern England, but with variations within this, also finding differences in the management of animals for meat, dairy or secondary products. Lambrick has noted an increase in cattle numbers in the Iron Age Thames valley, but the topographical differences suggest that this could reflect a higher proportion of later sites being on lower-lying ground.

Throughout the period wild species such as red and roe deer are rare, except for a small assemblage at Anslow's Cottages, Burghfield, near Reading (Butterworth and Lobb 1992). They occur regularly enough in small numbers to show that their low presence declines from *c.* 5% to less than 1-2% over the period. Various birds and mammals are known, bones, feathers and fur



Plate 9.6 Bronze Age wooden structure being recorded at low tide, Isle of Wight, copyright Isle of Wight Council

as well as meat may have been utilised, if they were not casual bones from dead individuals.

Fish bones are very rare on later prehistoric settlements, and Hambleton (2008, 102-3) suggests that along with wild birds, small mammals and herpetofauna they may be 'natural chance incorporations' noting that there was probably a taboo against eating fish throughout the period (Dobney and Ervynck 2007). Nonetheless, fish bones do occasionally occur, sometimes in hillforts and/or special deposits perhaps reflecting feasting or ceremonial or religious activities (Allen *et al.* 2010, 82-4 and 255-6). That fish were sometimes deliberately caught (at least in the late Bronze Age and early Iron Age) is suggested by one of two Late Bronze Age foreshore structures at Wootton-Quarr on the Isle of Wight interpreted as a fish trap (Plate 9.6), and by another in London, where the Thames Archaeological Survey discovered part of an early Iron Age fish trap dated to 790-390 cal BC at Vauxhall (Tomalin *et al.* 2012; Cohen 2010). In general, however, there was probably a taboo against eating fish throughout the period (Dobney and Ervynck 2007).

A key issue highlighted by such studies is the need to recover sufficiently large animal bone assemblages to enable detailed analysis. This is especially relevant for later Bronze Age and many early Iron Age sites where the general occurrence of domestic debris can be relatively sparse.

### Crop husbandry

Crop husbandry has been especially well studied for the Iron Age on the Hampshire chalkland and in the Thames valley (Jones 1984; Campbell 2000; Lambrick

with Robinson 2009, 249-60). Evidence for cereals (spelt wheat, occasionally emmer and six-row hulled barley) has been recovered from a large number of settlements across the Solent-Thames area. Oats, and occasionally rye are also recorded, but seldom in sufficient quantity to suggest they were being deliberately planted and grown. The introduction of bread wheat as a main crop occurred on some sites in the late Iron Age, as shown at Barton Court Farm (Miles 1986).

In terms of other crops, flax was also found at middle to late Bronze Age settlements in the Middle and Upper Thames valley, but it does not occur in Iron Age ones, possibly suggesting a switch to wool and animal fats as the preferred sources of yarn and oils. Good evidence for other crops is scarce, but probably include opium poppy (eg at Whitecross Farm in the late Bronze Age), peas and field beans. More doubtful is the growing of brassicas (eg wild turnip), which occur in sufficient numbers on some Hampshire sites to suggest they were deliberately grown, but occur only at a low level elsewhere (Gill Campbell and Mark Robinson pers. comm.).

A striking feature of the later Bronze Age is a switch in emphasis from growing emmer to spelt wheat, which became predominant across the whole Solent-Thames area and beyond by the early Iron Age. Spelt wheat has now been found in Oxfordshire in middle Bronze Age contexts both at Appleford Sidings and at Yarnton, a grain from the latter giving a radiocarbon date of 1740–1410 cal BC.

Emmer has increasingly been found in Iron Age contexts in some regions (Carruthers 2008; Stevens 2008; 2009; Pelling 2012), but on the Hampshire chalk and in the Thames valley it is still rare in Iron Age crop residues before the late Iron Age and there has been much debate about the reasons for this, usually in the context of climate change and autumn sowing (Jones 1984; van der Veen 1992; van der Veen and Palmer 1997). Experiments by Mark Robinson suggest that the complete dominance of spelt over emmer could have arisen from recurrent autumn sowing of ‘maslin’ crops mixing the two wheats, which would have resulted in spelt producing bigger yields, quite quickly displacing emmer in the resultant resown crops (Lambrick with Robinson 2009, 258).

Other areas of ongoing debate concern the possibility of extrapolating changing trends of soil fertility and drainage from the weeds species associated with crop remains, and the extent to which it is possible to discern communities that were the main arable ‘producers’ from others who may have mainly been ‘consumers,’ (Jones 1985; Van der Veen 1987; 1999; Stevens 2003; van der Veen and Jones 2007). Much of this remains open to question (not least because of the complex taphonomic factors that influence the character of charred crop and weeds remains as found in the ground. Lambrick (with Robinson 2009, 388-9) has questioned whether the character of charred crop remains alone is sufficient to provide answers.

While there is much to debate about the detailed interpretation of relatively rich charred plant

assemblages, an even more fundamental issue is the great variability in the concentration of cereal remains found on settlement sites, which varies both in time and geographically across the region. In general, concentrations are higher on Upper Thames Valley sites, excluding the floodplain, than on sites in the Middle Thames Valley but not as high as on settlements on the Hampshire Chalk. In contrast, although cereals were used in the Bedfordshire Ouse Valley, concentrations are very low and occur in company with wild food plant remains, producing assemblages that resemble Neolithic charred assemblages from the Thames Valley (Robinson, unpublished). On some later Bronze Age and Iron Age sites charred crop remains are very rare, and occasionally are more like earlier prehistoric samples than typical Iron Age ones. Many features are devoid of such material with only occasional concentrations, as at Hartshill Copse where 90% of the 2289 charred plant remains recovered came from a single context (Collard *et al.* 2006, 378). A near-absence of charred crop remains seems to persist well into the Iron Age in some areas (eg Powell *et al.* 2010, 93) and this seems commonest in the Middle Thames valley where querns are also relatively infrequent. One possibility is that earlier practices of crop husbandry on a small horticultural scale for family consumption may have persisted for some farming communities long after larger-scale farming had taken off in parts of the Upper Thames gravels and Hampshire chalk. These latter areas may have acted as the breadbasket of a wider region.

### *Subsistence and surplus*

There have been some attempts (eg Lambrick and Allen 2004; Cunliffe and Poole 2000a, b) to use experimental and other data coupled with indicators of land availability to try to model whether farming settlements are likely to have been self-sufficient in agricultural terms or would have been generating a surplus. This approach is seldom feasible where settlements are incompletely excavated and there is little or no way of estimating the extent and character of the land they farmed; however, the overall indications from current evidence are that while the exchange of prestige goods (and perhaps livestock wealth) was an important economic driver in the late Bronze Age, the production and exchange of an agricultural surplus derived from mixed farming became a much more important driving force in the Iron Age.

## **Settlement patterns and social organisation**

### *Regionalism*

The idea of regional cultural identity in later prehistory has been a topic of much debate, stemming partly from ideas prevalent in the middle of the 20th century about different waves of continental immigrants. Cunliffe (1974 onwards) has long propounded the concept of

more home-grown ceramic ‘style zones,’ and while this approach has been questioned and challenged (eg Collis 1994; 1996; Hill 1995), no alternative models for regional variation in the development of ceramic traditions have been developed. There are also hints at more localised differences in stylistic design that may be relevant (Lambrick 1984), and fabric analysis has shown a number of chronological trends or preferences that are consistent from one site to another in particular areas. These reflect broad preferences (eg in the use of calcined flint or quartzite or broad character of filler) as well as differences in local geology, but the possible complexity of how recurrent variation may reflect ‘regional’ variation at very different geographical and cultural scales has not been fully explored.

Some other indications of regional variation, such as the distribution of ‘banjo’ enclosures, have been altered by subsequent survey, but still show regional clustering (Lang 2009). The clearest indication of regional cultural entities comes from the distribution of late Iron Age tribal coinage, but here again there are significant complexities in the interpretation of the economic and political role of coinage at this period and the extent to which they reflect cultural, tribal, economic or political regions – or how far back any regional divisions can be traced (Haselgrove 1989; Creighton 2000).

### *The emergence of permanent settlement*

During the late prehistoric period scattered farmsteads and sometimes villages increasingly came to replace much more ephemeral traces of domestic and farming activity, but rather little attention has been paid to quite how, when and why the emergence of settled farming communities came about – or over how long a period and whether or not it was synchronous across different areas. Lambrick (with Robinson 2009, 384-7) has suggested that in the Thames valley the transition from earlier Bronze Age residential mobility to later prehistoric farms, settlement groups and villages may have occurred quite gradually and by no means synchronously, and was not obviously associated with the enclosure of land into fields. Initially the coalescing of domestic occupation may have taken the form of recurrent but highly scattered occupation across extensive areas (both within and separate from enclosed field systems), which in due course gave way to more compact, organised settlement forms (eg at Reading Business Park, Berkshire, or Cassington West, Oxfordshire). By the early to middle Iron Age compact tightly constrained settlements, often indicative of more permanent year-round settlement, were typically located on topographical and/or landuse divisions.

In the middle Iron Age the integration of settlement and landuse was even more strongly emphasised in the appearance of pastoral farmsteads on low-lying land (see Plate 9.5 above), occasionally including short-lived seasonal occupation of regularly inundated floodplain, as at Farmoor (Lambrick and Robinson 1979). Some slight traces of late prehistoric domestic activity not

dissimilar to earlier periods may indicate that residential mobility never really died out. On the other hand, the emergence of compact farm units closely integrated into landuse management may reflect a transition (occurring at different times up and down the valley) from an essentially family-based form of agriculture to one that was rather more communal in character.

While ideas about the development of late prehistoric settlement in the Thames valley have been coloured by the emergence of open settlements along the valley floor, those concerning the chalk south of the Thames valley have been equally coloured by the focus on how major communal enclosures (late Bronze Age hilltop enclosures and hillforts) developed together with enclosed settlements. Many of the latter began in the middle Bronze Age. Nonetheless, the character of widely scattered sparse middle Bronze Age occupation over large areas, such as that at Chalton, as compared with more compact forms of settlement that emerged later in the Iron Age, may reflect a similar pattern. Similarly, the presence of low levels of later Bronze Age occupation on the sites of Iron Age enclosed settlements, which in some cases also exhibit quite sparse levels of occupation, suggests a sequence of change in the basic character and permanence of settlement that has yet to be fully unravelled.

### *Settlement forms and hierarchies?*

Traditionally, defensive enclosures, enclosed farmsteads and open settlements have been seen as reflecting a hierarchy of settlement forms reflecting different social status and/or relationships. However, the role of defensive enclosures as settlements is clearly very variable and a more pertinent way of looking at this may be the extent to which the need for communal labour and its organisation reflected social groups and hierarchies controlling supply of labour. For example interesting issues have been raised in the case of Alfred’s Castle, Oxfordshire, which has ditches like those of a hillfort, but in size and location is much more like an settlement enclosure (Gosden and Lock 2001).

Across the Solent-Thames area as a whole there is considerable variety in the distribution and character of late prehistoric enclosures. For example, they are much commoner on the Hampshire chalk and the Cotswolds than in the Thames valley. Some have very little trace of settlement activity, others were clearly permanent farms of some importance. They differ greatly in date, size and form, some being very simple, others much more substantial. For example two large rectilinear enclosures in the Test valley, at Flint Farm (Cunliffe and Poole 2008) and Fir Hill, Bossington (Brown 2009), were earlier than the ‘Danebury Environs’ model of settlement change would have predicted. In addition, the Bossington site, sited on clay-with-flints, included an unusual early Iron Age triple-ditched enclosure c. 25m in diameter that was not known from the air photographs.

Although morphologically some particularly distinctive ‘types’ of enclosure occur, detailed analysis has

repeatedly shown that even the most obvious of these (such as ‘banjo’ enclosures) are seldom as clear-cut as first appears from the crude snapshot impressions of form provided by air photography.

There has been much discussion about the socio-economic and cosmological symbolism of enclosure ditches round settlements (eg Hingley 1984a; 1984b; 1999; Hill 1995; Collis 1996), and also whether the apparent increase in such enclosures from around 400 cal BC is indicative of a change in social relationships (T Moore 2006; Hill 2007). However, the idea that physical boundedness in the form of ditches was especially indicative of social relations is problematic. Sharply-defined boundaries not marked by ditches are evident in some open settlements (Lambrick and Allen 2004), and the character (and even presence or absence) of settlement within enclosures is very variable. In some cases enclosed settlements had unenclosed phases. Some sites like banjo enclosures with highly developed ditch systems attached (eg Featherstone and Bewley 2000) are much more elaborate than very simple forms.

While ditches are archaeologically rewarding features that can reveal abstract concerns about boundaries as well as practical needs, it can be argued that archaeologists’ fixation on their symbolic meaning has distracted attention from the great variability in size, permanence, longevity and form (or absence) of settlement that they enclose. These variations may have been much more significant socially than the increasingly tired and over-simplistic distinction between ‘enclosed’ and ‘unenclosed’ forms.

### *Social hierarchies within settlements*

Material evidence of status is ambiguous and does not seem to correlate much with settlement form. For example the quality of pottery and other finds from Watkins Farm (Allen 1990) contrasts with that from the otherwise similar enclosed farmstead nearby at Mingies Ditch (Allen and Robinson 1993), and is more like the large open settlement at Gravelly Guy (Lambrick and Allen 2004). Especially large or elaborate round houses can occur within defensive forts and both enclosed and open settlements at various periods (eg Bancroft, Milton Keynes; Dunston Park, Thatcham), and may reflect a variety of social significances, in some cases probably as much communal as individual.

### **The role of communal earthworks**

One way in which some distinction can be made in site hierarchies – though this does not equate to settlements – is that some entailed large scale earthworks, best seen as communal undertakings. To some extent this is a relative consideration: what may have been a large undertaking for a small late Bronze Age community would have been trivial for a more populous Iron Age one, but nonetheless their construction would have demanded significant resources and had political

meaning symbolising the authority of leaders over their communities.

### *Territorial land division*

Major ditched boundaries were a new feature of late prehistory, reflecting growing concern with control of land as a resource. Such boundaries have variously been interpreted as political/communal boundaries and/or connected with large scale stock management. The major linear earthworks on the Chilterns collectively known as Grims Ditch form a major land boundary running for c. 27.5km on high ground between Bradenham and Pitstone in three discontinuous sections. Limited trenching has produced small fragments of Iron Age pottery, and some evidence of grassland. The Berkshire Grims Ditch along the crest of the Downs overlooking the Vale of the White Horse probably acted as a similar territorial boundary (Ford 1982a), whereas other linear ditches following the generally north-south ridges on the downs to the south may have been smaller community subdivisions (Ford 1982b). The so-called ‘Wessex Linear’ ditches in Hampshire and Wiltshire are similarly thought to be concerned with defining rather than defending territory (Cunliffe 2000).

A new stage of constructing large-scale dyke systems marking territorial areas is evident in the late Iron Age. The South Oxfordshire Grims Ditch crossing the end of the Chilterns east of Wallingford, and the Aves Ditch east of the Cherwell are thought to be late Iron Age territorial boundaries (Cromarty *et al.* 2006; Sauer 1999; Sauer 2005a), and their locations bear some correspondence to the distributions of Late Iron Age coins (Sellwood 1984; Allen 2000; Lambrick with Robinson 2009, 361-75). The Grims Ditch at Aldermaston may be another territorial boundary of this date, possibly related to the nearby *oppidum* at Calleva Atrebatum (Silchester), or could be post-Roman, but recent investigation failed to provide good dating evidence.

### *Communal and defensive enclosures*

Cunliffe (2005) has suggested that a communal enclosure or hillfort is best thought of as “*an enclosed place constructed in a highly-visible location to serve as a focus (if sporadic) for communal activity.*” As such, they share common characteristics of enclosure, visibility and communal functions, but may fulfil very different roles, which can include:

- \* The act of building as a demonstration of group cohesion
- \* Enclosure used for communal pastoral activities
- \* Defined space for social/religious interactions
- \* Storage for communal surplus
- \* Settlement for a community on a cyclic basis
- \* Settlement for a community on a permanent basis
- \* Settlement for elite and entourage
- \* Focus for redistribution and production

- \* Defence in time of unrest
- \* Territorial marker

For Wessex, Cunliffe (2005) has summarised the evidence as follows:

- \* Most of the hillforts built in the 6th to 5th centuries BC continued to be developed to the 2nd century BC, although this need not imply continuous use
- \* Many of the hillforts built in the 5th–4th century BC were short-lived
- \* There appears to have been a period in the early 3rd century BC when forts with two gates had one blocked
- \* The few distinctive late hillforts, of the early 1st century BC, did not develop from earlier forts (although in the case of Bury Hill 2 it occupied part of the site of a long-abandoned early fort)

The results from excavation and the Wessex Hillfort geophysical surveys suggest that five broadly defined arrangements of internal can be identified:

- \* No recognisable activity
- \* Limited pit scatters usually clustered in discrete areas
- \* Dense, even pit scatters
- \* Zones of pits interspersed with circular structures
- \* Complexes of enclosures associated with circular structures and pits

But in the northern part of the Solent-Thames area – including the Berkshire Downs – the pattern is not so clear, and in particular there is very little evidence for similar patterns of ‘developed hillforts’ and dense organised patterns of internal activity. This may well be because the trajectory of social economic and political development was rather different, with the broad characteristics of the earlier forms lasting longer.

#### *Late Bronze Age hilltop and valley enclosures*

The late Bronze Age hilltop enclosures at Rams Hill and Castle Hill Little Wittenham, both in Oxfordshire) and at Taplow Court in Buckinghamshire (Plate 9.7), all lie within later, early Iron Age, hillforts. A Late Bronze Age date has also been suggested for the early palisade at Blewburton Hill (Harding 1976b) but is not proven, while much of the pottery from Chastleton appears to belong to the latest Bronze Age or earliest Iron Age. In Buckinghamshire it is possible, but by no means certain that the late Bronze Age settlement at Ivinghoe Beacon was within a defensive enclosure.

Reconsideration of the radiocarbon evidence suggests that Rams Hill originated in the last quarter of the 2nd millennium cal. BC, with Phase 2 between 1070 and 890 cal BC, whereas the dating from Castle Hill lies between 1050 and 900 cal BC (Needham and Ambers 1994; Allen *et al.* 2010). Both Rams Hill and Taplow



Plate 9.7 Excavation at Taplow Hillfort, Buckinghamshire, *copyright OA*

consisted of a series of palisades and dump defences (Allen *et al.* 2009). The enclosure at Castle Hill has contemporary settlement 200m away on the plateau below the hill, and a similar situation may exist at Taplow (Coleman and Collard 2005). In both cases concentrations of contemporary metalwork have been recovered from the reaches of the Thames that they overlook. It would not be at all surprising if there were not other comparable sites (Windsor being an obvious potential example) but the evidence for the much quoted possible example of Marshall’s Hill, Reading (Bradley 1984, 121) is dubious (see Seaby 1932).

The possibly palisaded island midden sites at Runnymede and Whitecross Farm might fall into a similar category of enclosures on the valley floor, while Ford (1991-3, 316) has suggested one at Eton Wick, though this is far less clear.

The late Bronze Age hilltop enclosures at Rams Hill, Castle Hill and at Taplow Court are all quite small enclosures of *c.* 1ha (as are the riverine sites). In contrast, the possible example at Bozodown (Berks) and those in Hampshire such as Balksbury, Danebury (outer enclosure) and Walbury, were much larger enclosures of over 10ha. The Balksbury enclosure was constructed in the 9th or 8th century and continued in use for about 200 years, with at least two refurbishments, but with only very sparse evidence of fourposters and possible roundhouses inside. There is so far no evidence for Late Bronze Age hilltop enclosures in The Isle of Wight.





Plate 9.8 View of excavations at Aylesbury, showing the hillfort ditch, copyright Mike Farley

Late Bronze Age hilltop enclosures were probably not permanently occupied though they often have evidence of at least some domestic occupation with a thin scatter of pits, roundhouses and four posterns. At Balksbury and Ivinghoe (if it was enclosed) there were rich midden deposits but this need not indicate permanent occupation (see below). Both Rams Hill and Winklebury have evidence of periodic remodelling or refurbishment, possibly with intervening periods of abandonment, and at Rams Hill, Castle Hill and Balksbury the late Bronze Age enclosures seem to have been abandoned before they were replaced by the much larger Iron Age fortifications.

### Hillforts

In Buckinghamshire seventeen 'hillforts' can be identified with confidence whilst a further five possible examples are known (8.5 to 1 hectare). There are three possible undated valley forts. Two forts are definitely early (Ivinghoe and Taplow Court) with evidence of occupation; some others are suspected. The hillforts at Aylesbury (Farley and Jones 2012), Cholesbury (Kimble 1933) and Danesfield, Medmenham (Keevil and Campbell 1991) were occupied during the middle Iron Age but only Cholesbury has late Iron Age occupation (Plate 9.8). The nature and scale of internal occupation is nowhere clear due to the limited internal areas investigated and somewhat disappointing results from geophysical survey.

In Oxfordshire there are about 27 Iron Age forts. A scatter of them occurs on the Cotswold dip slope and on the Corallian ridge and chalk outliers within the valley south of the Thames. The greatest concentration is to be found along the scarp of the Berkshire Downs and outlying hills, with one fort at Bozodown east of the Thames. There are also valley forts at Burroway Brook and Cherbury Camp, as well as the late Iron Age enclosed *oppida* at Cassington Big Ring, Abingdon and Dyke Hills, Dorchester-on-Thames.

Including those which superseded late Bronze Age defensive enclosures, most investigated hillforts in Oxfordshire appear to be of Early Iron Age origin. Blewburton, Castle Hill and Segsbury clearly continued in use into the Middle Iron Age, and Cherbury and Madmarston (near Banbury) may only have been created in the Middle Iron Age. Most are around 6 ha in size, but Bozodown Camp, Segsbury Camp and Cherbury Camp are much larger, *c.* 10 ha. Segsbury may have post-dated the earliest Iron Age hillforts on the Ridgeway, possibly reflecting the emergence of a larger community than the more numerous but smaller early sites (Lock *et al.* 2005, 140-141).

In Berkshire seven hillforts are now included within the county boundary but none of these has been investigated to any great extent. Their distribution, mainly across the better soils of West Berkshire is largely what might be expected, and the hillfort at Caesars Camp on the poor heathland soils of south east Berkshire may be connected with the exploitation of iron deposits found in Tertiary geological outcrops nearby (Ford 1987a, 80).

There are about 40 hillforts in Hampshire (Hogg 1979), of which 10 have seen some form of excavation. Although the combined work at all the others would comfortably fit within the 2.5ha investigated at Danebury, significant areas have been examined at Winklebury, Balksbury, Woolbury and Bury Hill. Most appear to have been built by the 5th century BC and they display a significant range of diversity in terms of chronological development and internal settlement and other features, with Danebury acting as a type site in displaying all the stages of development and yet being unusual in doing so. The Danebury Environs and Wessex Hillfort projects have done much to demonstrate the great variety of sequence and levels and kinds of internal occupation (Cunliffe and Poole 2000 a-d; Cunliffe 2005).

On the Isle of Wight remains of a possibly unfinished Iron Age hill fort, including an earthwork rampart and ditch, survive at Chillerton Down; a possible defensive-double ditch has been identified at Yaverland; and at Castle Hill, Mottistone the earthworks of a possible small defensive site (*c.* 55m x 58m across) have been identified (Basford 1980; Currie 2003).

### Valley forts

Forts in valley floor locations include Burroway on the Thames floodplain, with evidence of a timber-framed rampart and of early Iron Age origin, and Cherbury,

probably of early/middle Iron Age origin, on a spur of land defined by two streams on the Corallian dip slope at Pusey.

Valley locations become a key element of major defensible sites in the middle to Late Iron Age in the Upper Thames area, with Abingdon Vineyard (*c* 25ha) and Dyke Hills, Dorchester (33ha) on the Thames and Salmonsbury (22.5ha) on the Windrush just outside the area (Allen 1991; 1993; Allen in Henig and Booth 2000; Dunning 1976). Cassington Big Rings is a fourth, smaller enclosure (*c* 10ha) of rather different character and probably unfinished (Case 1982b). The dating of the defences at Salmonsbury is probably middle to late Iron Age, Abingdon later middle Iron Age to early Roman and Cassington late Iron Age to very early Roman. The dating for Dyke Hills is still uncertain. In Hampshire the site of Oram's Arbour predating the Roman town at Winchester (Whinney 1994), overlooked by the earlier fort on St Catherines Hill, bears some resemblance to the sequence of Castle Hill, Little Wittenham followed by Dyke Hills preceding the Roman town at Dorchester on Thames. No exactly comparable sites are identifiable in Buckinghamshire, Berkshire or the Isle of Wight.

#### *Internal activity in forts*

Geophysical surveys have now been carried out upon a wide range of hillforts in the Solent-Thames area, pioneered in the early days of magnetometry at Madmarston and Rainsborough (Fowler 1960; Avery *et al.* 1967, Appendix 1) with more recent systematic surveys at other forts on the Cotswolds, at Cherbury on

the Corallian Ridge, at Castle Hill, Little Wittenham, various Chiltern forts, several along the Ridgeway and a significant number on the Wessex chalk (Lang 2009; Wintle *et al.* 2009; Allen *et al.* 2010; Gover 2000; Payne, Corney and Cunliffe 2006).

These surveys together with aerial photography suggest that most of the Oxfordshire hillforts did not contain very dense internal activity, although Segsbury has a fair concentration of pits towards the centre of the interior, together with a spread of penannular ditched enclosures, as does the valley fort at Cherbury. At Ivinghoe there remains an issue of whether the fairly dense late Bronze Age and early Iron Age occupation is actually an earlier open settlement (Brown 2001).

In Hampshire the very dense pit clusters and lines of four-post structures of so-called 'developed hillforts' like Danebury contrast with other (often earlier) sites with much sparser indications of settlement (Plate 9.9). Most forts within the Danebury study area were short-lived, whereas Danebury itself was refortified at various stages up until its abandonment in the late middle Iron Age, by when its interior had become a dense mass of pits, houses and other features respecting clearly established roads. It is thought that it may have developed a 'special relationship' with the New Buildings complex, where the limited evidence of internal use despite substantial defences suggests a different role for some forts, perhaps with the developed Danebury acting as a stronghold, massive communal store and political centre surrounded by more symbolic territorial markers (Cunliffe 2000). One of the results of the Wessex Hillfort project has been to show that rather few forts had such densely occupied interiors as Danebury (Payne *et al.* 2006).



Plate 9.9 Excavation within Danebury hillfort, Hampshire, copyright Institute of Archaeology, Oxford

It has long been recognised that Iron Age forts (and perhaps some of their late Bronze Age predecessors) were also sacred places where a good deal of ritualistic communal activity took place. At Castle Hill a very large early Iron Age pit was found containing evidence of feasting, and there was a high occurrence of human remains, including complete bodies, partly mutilated remains and single placed bones (Allen *et al.* 2010). While the fort was largely abandoned in terms of occupation, the ramparts, interior and the immediate surroundings remained a place of burial into the Roman period. At Uffington aspects of the probable communal use of the fort in association with the maintenance of the White Horse may well have been the foundation of traditions that lasted into the modern era. At Blewburton, the burial of a man with a horse, associated with a pot split above and below the burial with an adze-hammer beneath, were found in the hillfort ditch (Collins 1952-3). At Aylesbury a remarkable complex of human burials associated with the remains of kids and lambs has been recorded (Farley and Jones 2012). Danebury has produced a very considerable number of human burials, both complete, partial, mutilated and fragmentary, as well as possible shrine structures.

The richness of this evidence and related results from large scale excavation of Danebury together with a few other forts like Winklebury and various enclosed settlements has formed the basis of several important individual research projects, and a very extensive long-running debate has developed about the interpretation of the evidence, much of which goes to the heart of the nature of Iron Age society (eg Hill 1995, 1996; Collis 1996; Cunliffe 2005)

The substantial achievements of mainly non-development led archaeological research projects like Danebury, Danebury Environs, Wessex Hillforts, Uffington and the Ridgeway and the Wittenhams, together with smaller scale projects, make the Solent-Thames area a particularly rich resource for hillfort studies. The results have begun to show both similarities and great variety in how hillforts developed and were used, both chronologically and regionally; the sheer richness and variety of the evidence now available, however, leaves a great deal still to be learnt about what this tells us of late prehistoric society.

### *External settlements close to hillforts*

A missing ingredient in most investigations of hillforts, which has only recently started to be rectified, is the role of external settlements. A number of forts in the northern half of the Solent-Thames area are now known to have significant external settlements, as at Madmarston, Castle Hill and Cherbury in Oxfordshire and perhaps Taplow in Buckinghamshire. Only those at Castle Hill and Taplow have been investigated by excavation. The Castle Hill external settlement at 700 m long and 200-300 m wide, is one of the largest late prehistoric settlements known in the Thames Valley, with evidence of extensive pits, paddocks, four posterns and roundhouses (Allen *et al.* 2010; see Plate 9.1).

However, the extent to which Iron Age forts had external settlements may well be under-estimated since surveys such as the recent Wessex Hillfort project (Payne *et al.* 2006) seldom cover external areas as thoroughly as interiors. Where they did, there are some indications of external activity, though not necessarily on the scale of the examples such as Castle Hill.

### **Middens**

The most notable aspect of these late Bronze Age and Iron Age sites, which mostly occur either on hilltops or floodplains, are the thick deposits of artefact-rich dark soil that sometimes cover significant areas and often (though not always) share distinctive characteristics of high status objects, human skull fragments, animal bone suggestive of meat consumption and many late Bronze Age bronze objects. There is much debate about their possible roles as trading emporia engaged in the distribution of valuable bronze metalwork or, probably more likely, ceremonial gathering places engaged in communal recycling of material culture (Needham 1991).

Runnymede Bridge (Longley 1980; Needham 1991) located on a former island in the Thames on the eastern-most edge of the Solent-Thames area, was surrounded by wooden revetments and perhaps a palisaded enclosure, possibly with landing stages for boats. Whitecross Farm, near Wallingford seems to have been similar, but on a much smaller scale.

Outside the hillfort at Castle Hill, Little Wittenham (Oxon) is an extensive midden of late Bronze Age to early Iron Age date, up to 0.4m deep and at least 50m (possibly 100m) across, with a chalk and pebble platform, clay spreads and postholes forming an horizon within it (Rhodes 1948; Wessex Archaeology 2004b; Allen *et al.* 2010). Lambrick (with Robinson 2009, 340-1) suggests that the rich late Bronze Age to middle Iron Age site at Woodeaton 0.15 to 0.4m thick and perhaps up to 120m or more across is likely to be a similar sort of site (cf Harding 1987), and is unusual in extending well into the middle Iron Age (possibly after a break in use) and subsequently becoming the site of a Romano-celtic temple.

In Buckinghamshire, the late Bronze Age occupation horizon with an important collection of late Bronze Age metalwork at Ivinghoe may be a similar kind of deposit. In Hampshire the accumulation of rich colluvial deposits at Balksbury and possibly Winklebury may arguably be equated with these types of late Bronze Age/Early Iron Age 'midden' deposits. On the Isle of Wight the Undercliff, on the south east coast, has a number of midden deposits ranging in date from Bronze Age to the medieval period (Sherwin unpubl.; Preece 1986). A possible late Bronze Age midden site has been investigated at Binnel, and Iron Age material from Gills Cliff (Trott and Tomalin 2003).

Apart from Runnymede, no middens are yet known that compare in size with the major midden sites like All Cannings Cross, Potterne or Chisenbury in the Vale of



Plate 9.10 Reconstruction of the late Bronze Age eyot at Whitecross Farm, Wallingford, Oxfordshire, copyright OA

Pewsey, Wiltshire, which are up to 3m thick (Lawson 2000; McOmish 1996) or even the substantial midden at Whitchurch, Warwickshire 300m x 175m and 0.75m thick (Waddington and Sharples 2010). Nevertheless they share a number of similar characteristics, and the more recent though small scale excavations at Whitecross Farm and Castle Hill have produced significant palaeoenvironmental evidence (Plate 9.10). However, the scale of these sites and richness of deposits is very variable, and it is not yet clear how far there is a sharp distinction between them and the more regular occurrence of smaller scale midden-like deposits within and around settlements. These are often 'trapped' within the backfill of large features such as waterholes, as at Green Park (Brossler *et al.* 2004), and sometimes as general settlement edge deposits as at Cassington West (Lambrick with Robinson 2009, Fig. 4.8).

### Burnt mounds

These heaps of fire cracked flint are most often found close to water and are often thought to be cooking places utilised by mobile transhumant groups, though many other possible uses (including saunas and cloth-making) have been put forward. Their function may vary over time, and more application of lipid residues and other chemical analyses might help define, or negate various potential practices.

A large burnt mound was dated by association with Late Bronze Age pottery at Green Park, Reading and sealed a pit with a C14 date of 880–860 cal BC (Brossler *et al.* 2004, 39) and at Barkham Square, Wokingham the mound was dated by two C14 determinations of 1400–800 and 810–410 cal BC (Torrance and Ford 2003, 93). A very much smaller 'mound' at Turnpike School, Newbury produced a C14 date of 1000–800 cal BC (Pine 2010).

At least 300 Burnt Mound sites are recorded in the New Forest, (Pasmore and Pallister 1967; O'Driscoll, 1988; Pasmore 2000), and they also occur elsewhere, as at Harbridge in the Avon Valley (Shennan 1999) and Hatch near Old Basing (Oram 2006). Few seem to conform to the 'model' type of burnt mound with a trough surrounded by a crescent-shaped heap of discarded burnt stone (Raymond 1987; Oram 2006). Mainly late Bronze Age, a middle Bronze Age date of 1454–1370 cal BC (KIA26695) was obtained from a burnt mound deposit at Greywell Road, Basingstoke (Oram 2006) and there is increasing evidence for burnt mounds from the earlier Bronze Age and even the late Neolithic (Beamish and Ripper 2000; Allen *et al.* 2013). The availability of improved radiometric dating and Bayesian modelling should enable the chronology and longevity, and even the sequence of activity of burnt mounds to be established.

Burnt flint is also significant at some burial sites, including Mount Farm near Dorchester and Field Farm,

Burghfield, and has been found with Deverel-Rimbury vessels at Langstone Harbour (Allen and Gardiner 2000) and on Twyford Down (Walker and Farwell 2000).

### The built environment

The ground plans of hundreds of buildings of the later Bronze Age and Iron Age have been excavated across the area, and a number of studies have reviewed their form and possible practical and cosmological reasons that underpinned their design (Allen *et al.* 1984; Fitzpatrick and Morris 1994; Brück 1999; Parker Pearson 1993; Oswald 1997; Pope 2007; Lambrick with Robinson 2009, 143-49).

A number of broad chronological trends appear to apply to most of the Solent-Thames area, with relatively straightforward, simple post-built roundhouses (occasionally with porch/vestibule structures marking their entrances) evident from the middle Bronze Age onwards, eg at Yarnton, Weir Bank Stud Farm Bray and Chalton (see Fig.9.1). Post-built houses become much commoner in the later Bronze Age and into the early Iron Age across the region, and include some larger examples, as at Bancroft, Stanton Harcourt and Cassington, Dunston Park, Balksbury, Old Down Farm and Winnall Down (see Fig. 9.1). The Bancroft example, 18.6m across with three post-rings surrounded by a drainage gully and structured deposits of late Bronze Age ceramics, a saddle quern and pig bones, is exceptional (Williams and Zeepvat 1994).

In the middle Iron Age there appears to be a wide range of variation both in construction type (post-built,

stake- and plank-walled and probably turf-constructed) and the more common provision of drainage gullies or small enclosures surrounding them. The sequence of especially well-preserved buildings stratified within the Iron Age quarry hollows at Danebury remains exceptional for the detail revealed of different construction methods including the possibility of impermanent, basket-built construction (Cunliffe 1984b). For the most part this is within a more restricted size range, but with much less regular evidence of earth-fast posts (Plate 9.11). Since there is no good evidence of this arising from any particular technical invention, it seems to be part of a change in fashion in which posts ceased to be as decoratively or symbolically important.

The large number of ground plans now available offers the potential for more insights into stylistic or symbolic fashions and details of design. For example some houses have axial or paired posts, and Lambrick (with Robinson 2009, 139) has noted how some later Bronze Age houses have entrances that taper outwards, whereas most Iron Age ones are splayed outwards suggesting rather different social indications of privacy or welcome. Apart from structural evidence, there is increasing evidence from the distribution of artefacts and small pits etc how the use of buildings reflect both cosmological and practical aspects of design. This is especially striking for example at Hartshill Copse (Collard *et al.* 2006; see also Plate 9.16 below). There is also growing evidence of external as well as internal living, as at Mingies Ditch and Weir Bank Stud Farm.

In the Thames valley a number of large rectangular buildings, some with over a dozen postholes have been identified, as exemplified from recent work at Cassington



Plate 9.11 House without posts at Danebury, Hampshire, copyright Oxford Institute of Archaeology

(LBA), Yarnton (E/MIA) and Radley (IA) (Hey *et al.* 2011a, Fig. 3.4; Cotswold Archaeology 2004). Possible D-shaped structures of late Bronze Age and Early Iron Age date have been identified at Yarnton (Hey *et al.* 2011a, Fig. 3.5); also semicircular ones there and at Farmoor (Lambrick with Robinson 1979) and Little Wittenham (Allen *et al.* 2010, 125-6). Nevertheless, rectangular buildings are still very unusual in later prehistory and it is by no means certain what they were used for.

In the late Iron Age the normal form of buildings is still far from certain. Although there is quite good evidence for the continuation of roundhouses, eg at Park Farm Binfield, Berks (Roberts 1995), any evidence of houses is far less common than earlier in the Iron Age. The possibility that there was more use of rectangular sleeper beam construction is one possibility, as revealed by the admittedly exceptional case of Calleva (Silchester).

The number and diversity of four-post structures continues to grow; various examples with differing numbers of posts have been identified at Hill Farm outside Castle Hill, Little Wittenham (Allen *et al.* 2010). Lambrick (with Robinson 2009, 272-4) has observed that a number of probably pastoral settlements in the Upper Thames valley such as Mingies Ditch and Groundwell Farm have a particular form of four-post structures with very large postholes (denoted as 'mega-posters'). The postholes are sometimes linked by trenches, and at Groundwell Farm, Wiltshire, these are very similar to rectangular sets of parallel trenches, though it is not clear what they were for. The use of four-posters remains somewhat uncertain, and while some are associated with charred crop remains, their very common association with settlements that have an emphasis on pastoral farming suggests that they were certainly not always granaries. Bradley (2005) has indicated the variety of roles, both functional and symbolic, that such structures have long performed.

### Funerary customs

Over the period the means of disposing of the dead varied, with rites involving cremation becoming uncommon by the early Iron Age, and recurring in the late Iron Age mainly as a result of new cultural influences alongside older ones. However, although this is archaeologically distinctive, it is not clear that it was a primary consideration in how the human remains were treated compared with other factors such as where remains were disposed of, whether or not deaths were natural, and the likelihood that most dead people were not accorded formal burial. For much of the Iron Age it is suspected that most bodies were exposed and may have been scattered into the environment and if this was partly concerned with the removal of corruptible flesh the apparent contrast with cremation may have been less significant than first appears. The complexities of interpreting human remains that are found are thus compounded by relative ignorance about how the majority of dead people may have been treated and what superstitions and beliefs were paramount.

### Funerary monuments

A small number of round barrows are recorded with secondary cremation burials ('urnfields') such as Mound 1 in the Lambourn Seven Barrows where 112 cremation burials (and one child inhumation) were recorded (Case 1956b), and Standlake, with mostly unurned cremations. However these are unusually large, and smaller groups of half a dozen cremations and/or inhumations, as at Field Farm Burghfield, Stanton Harcourt, Mount Farm, Dorchester, and Eton Rowing Course are more typical (Lambrick with Robinson 2009, 294-8). Amongst the latest instances of continued use of earlier funerary monuments are some late Bronze Age burials at Barrow Hills (Barclay and Halpin 1999).

Satellite burials, i.e. single burials on the margins of ring ditches of middle or earlier Bronze Age date are also recorded, as at Mount Farm (Lambrick 2010), Heron's House and Field Farm Burghfield (Bradley and Richards 1979; Butterworth and Lobb 1992), and Eton Rowing Course (Allen *et al.* 2000).

Over the northern part of the Solent-Thames area very few barrows were newly-built in the Middle Bronze Age, but a number are known for Berkshire and south Buckinghamshire, notably a small 1.8m high barrow at Sunningdale with 25 urned cremations, and ring ditches of possible middle Bronze Age origin at Cippenham near Slough, Field Farm Burghfield and Eton Rowing Course (Lambrick with Robinson 2009, 298-300). In general barrows with primary Deverel Rimbury burials are very much commoner closer to the Deverel Rimbury heartland in Dorset and South Wiltshire, and to some extent Hampshire.

### Flat cemeteries

Several middle Bronze Age flat cremation cemeteries are known from the Solent-Thames area, mostly southwards from the Middle Thames (Ellison 1980). A middle Bronze Age cemetery of about 15 Deverel Rimbury urned cremations at Stokenchurch is one of the most northerly. Some are old finds of large cemeteries such as Dummer, Hants, with over 70 inverted urns (Ellison 1980), medium sized groups like Sulham Berks with 17 surviving of a potentially larger group (Barrett 1973), but others were only very small, as with the five urns at Shortheath Lane, Sulhampstead (Butterworth and Lobb 1992). Some of the cremations are not burials as such but are token deposits of pyre debris. A noticeable feature of later Bronze Age urnfields is that almost all large ones were late nineteenth or early twentieth century discoveries, suggesting some bias in discovery processes (Lambrick and Robinson, 2009, 303).

In Hampshire both Easton Down (R7) and Twyford Down have revealed mixed rite cemeteries. At Easton Down the sequence is unclear but at Twyford Down two phases of burial could be distinguished, both involving cremation and inhumation burials associated with Deverel Rimbury pottery (Walker and Farwell 2000). On the Isle of Wight known later Bronze Age urnfield

sites (groups of 40, 70 and 11) show a different distribution from earlier barrows with only Rew Down on the Middle to Upper Chalk.

Iron Age cemeteries are very much rarer than Bronze Age urnfields, but a small number have been found in recent years, including a middle Iron Age example of 35 individuals at Yarnton in Oxfordshire (Hey *et al.* 1999). In Hampshire 18 early Iron Age burials (mostly adolescents and children) occurred in clusters at Winnall Down; 28 middle Iron Age burials were found in an Iron Age quarry at Suddern Farm; and at Owslebury 16 mainly late Iron Age burials were found in a cemetery that continued in use into the early Roman period (Fasham 1985; Cunliffe and Poole 2000, vol 2, pt 3, 153-74; Collis 1994, 108). The reasons for these unusual cemeteries are obscure, though for Yarnton it is suggested that they might be victims of disease. The Winnall Down burials were in small clusters around the settlement and small groups of burials are known on other sites, such as three close to a boundary between two areas of settlement at Berwick Salome (Oxfordshire) (Wilson 2008).

The occasional use of Iron Age buildings as formal burial places is suggested by three associated with a post-built roundhouse at Spring Road, Abingdon (Allen and Kamash 2008) and two in the stake-walled building at Frilford (Harding 1987).

#### *Isolated burials and human remains within fields and near boundaries*

A significant number of single urned cremation burials have been recorded across the Solent-Thames area (Ellison 1980), one recent example being at Old Way Lane, Cippenham, Slough (Ford *et al.* 2003, 105). Apparently isolated late Bronze Age and Iron Age burials also occur, such as the recent find of a bagged or bound body at Sutton Courtenay south of Abingdon (Gill Hey pers comm).

These cases may reflect a practice of disposing of human remains in small clusters in open areas or in and around fields, as was apparently the case with small urnfields at the Eton Rowing Course and at Appleford Sidings. Individual isolated examples are known at Weir Bank Stud Farm, Reading Business Park and Green Park, Reading in Berkshire, and at The Lea, Denham in Buckinghamshire (Lambrick with Robinson 2009, 306-11). A cluster of late Bronze examples were associated with ditches adjacent to a palaeochannel at Marsh Lane East on the Maidenhead-Windsor flood channel (Allen *et al.* forthcoming). At Twyford Down some of the cremation vessels were arranged in two alignments at regular intervals (Walker and Farwell 2000), which might be suggestive of an association with an above ground hedge or fence line.

Iron Age inhumations in or close to ditches outside settlements have been recorded just outside the area at Roughground Farm, Lechlade and Horcott in Gloucestershire. At Watchfield (West Oxfordshire) a double inhumation of a woman and child was placed

within a funnel entrance area of a field system, with another burial of a young woman and perinatal infant close to one of the boundaries (Birkbeck 2001).

#### *Burials in and around settlements*

Apart from the relatively clustered groups of burials occurring as cemeteries, or more isolated burials associated with boundaries, human remains were often disposed of in and around settlements, often in a manner that suggests a degree of ritualistic behaviour.

Burials in or close to the boundaries of enclosed settlements and hillforts are well-attested (cf Hill 1995), and some such as a possibly severed head at Aylesbury and a double burial of a woman and child at Cassington Big Ring could be foundation sacrifices. The collection of human and animal skeletons associated with the hillfort at Aylesbury (Farley and Jones 2012) is without parallel in the region (Plate 9.12), although the remarkable burial of a man and a horse with a ritually broken pot and an adze hammer at Blewburton, which might be a closing deposit (Lambrick with Robinson 2009, 324-5), has similarities on a smaller scale.

Both the occurrence and character of these remains suggest that activities connected with disposal of the dead were especially associated with communal enclosures, some hillforts like Danebury, Aylesbury and Castle Hill being particularly prolific (Cunliffe 1995). These include cases of mutilation and very possibly ritual killing. However, none of this was confined to such places.

Double inhumations, often of women and children (conceivably mothers and their offspring), which could reflect ritual killings have been found in a variety of contexts, including pits within hillforts at Castle Hill Little Wittenham (Allen *et al.* 2010, 257) and Danebury (Cunliffe and Poole 1994, 421), in the ditch of Cassington Big Ring (Case 1982b) and in two graves associated with a field system at Watchfield (described above). Other double or multiple burials include infants or adults and infants at Old Down Farm and Winnall Down (Wait 1985, 372-3, 376-83).

The practice of disposing of human remains in and around ordinary farming settlements can be traced back at least to the late Bronze Age, with cremations and inhumations occurring for example at Cassington West and Reading Business Park. There are a few instances of early Iron Age cremations associated with houses at Yarnton, but for the most part Iron Age remains found in settlements are a mixture of single bones, partial bodies and complete inhumations. The extent to which some individual bones represent accidental deposition (eg of curated fragments from excarnated bodies) is debatable; the placing of some (especially skull fragments) was clearly deliberate.

The rate of occurrence of human remains within farming settlements is highly variable in the Upper Thames valley, sites like Gravelly Guy, Mount Farm and Bourton on the Water (just into Gloucestershire) having much greater densities of human remains than comparable sites such as Ashville, Yarnton or Coxwell



Plate 9.12 Human and animal bone deposit at Aylesbury, *copyright Mike Farley*

Road Faringdon (Lambrick with Robinson 2009, 313-5). In Buckinghamshire such pit burials have not so far been found, despite the extent of work at Milton Keynes, suggesting some regional variation in the practice. Elsewhere the practice seems to have become commoner through the early to middle Iron Age, but is much less common in the late Iron Age.

Detailed burial practices were examined by Wait (1985) demonstrating a substantial degree of variation in detailed practice (including for example whether graves were dug and how bodies were disposed of on the bottom or within the fill of storage pits or ditches and how they were oriented).

#### *Late Iron Age high status burials*

Grave goods are only rarely found in the burials of the later Bronze Age and Iron Age, but in the late Iron Age social differentiation began to be manifested through the grave goods accompanying burials. High status late Iron Age burials are rare within the Solent-Thames region, but include the warrior inhumation burial at Owslebury, Hampshire (Collis 1994). Other inhumation burials at Owslebury were accompanied by pots, and in one case a wooden box. A cremation burial with a bucket was found at Blagden Copse, Hurstbourne Tarrant (Dewar 1929) and there were early finds described as bucket fittings from Silkstead near Winchester, although their provenance and identification is now regarded as uncertain (H Rees pers. Comm.). In Buckinghamshire a rich cremation burial at Dorton was found that had contained three amphorae, two flagons, a carinated cup, an iron hoop and timbers (possibly from a chest) and a

decorated bronze mirror (Farley 1983; Plate 9.13). This is the only Welwyn-type burial in the region, so-called after a group of rich burials found in Hertfordshire. Another mirror burial, whose cremation was otherwise accompanied by only a single pedestal pottery jar, was found at Latchmere Green, near to Silchester in



Plate 9.13 The late Iron Age mirror from Dorton, Buckinghamshire, *copyright Prehistoric Society*



Hampshire (Fulford and Creighton 1998). Late Iron Age cremations accompanied by pots are more widespread, and at Brooklands, Milton Keynes, these may have included another burial accompanied by one or more substantial metal objects, as one of the graves was robbed by nighthawks before excavation could take place (D Stansbie pers. Comm.).

### *Human remains in watery places*

Langstone Harbour was demonstrably used as a flat cremation cemetery, most cases utilising urns that were large and heavy and probably made more or less on the spot. Several urns containing only burnt flint were found in soft mud on the foreshore, and other scatters of burnt flint could represent remains of funerary pyres and which was used as temper for the urns (Allen and Gardiner 2000, esp. Fig. 64).

Bradley and Gordon (1988) reviewed the evidence of human skulls recovered from the Thames, of which nearly 300 survive and several more were reported with original finds of metalwork. It is noticeable that while animal bones had been retained there were very few other human bones, including mandibles or cervical vertebrae, suggesting that the skulls had been selected already in a defleshed, disarticulated condition, for deposition in the river. There was a bias towards prime adult males aged between 25 and 35. Four out of six skulls that were radiocarbon dated were late Bronze Age.

Excavation of a former Thames channel at Eton Rowing Course has shown that complete pots, human and animal skulls and other bones were being placed on sandbanks within the river not far from a location traversed by a sequence of wooden structures. In this case the human bones included long bones that had perhaps been cracked to extract marrow, possibly suggesting cannibalism (Allen *et al.* 2000).

Other associations of human remains with watery places include several instances of usually fragmentary bones being found in the backfilling of waterholes. One of the most unusual examples is the whole skeleton of a young woman in a later Bronze Age waterhole at Watkins Farm, Northmoor, Oxon (Allen 1990).

### *Wider interpretations and social attitudes*

Since Whimster (1981), Wilson (1981) and Wait (1985) undertook their various reviews of Iron Age burial practice the amount of data available has grown enormously. Although on the whole their conclusions have stood the test of time quite well, a good deal more can now be gleaned than was then the case. There has been much discussion of how Iron Age burial practices reflect social and religious attitudes meaning, but the ways in which concerns for the environment and social groups rather than the prestige of individuals was expressed has generally been reinforced in recent years, including more instances of grave goods that may relate to the manner in which people were buried, but also more examples of double inhumations, mutilations and

smashed or butchered bones with which to explore issues of human sacrifice and possible evidence of cannibalism.

There is now more indication that the preferred normative rite was for the body and spirit to be released into the environment, perhaps with some watery places being specially appropriate for commemorating a warrior elite. The social opposite of that prestige may be reflected in some of the evidence of how people buried in and around settlements were treated, their bodies not released into the wider environment, but at least sometimes the victim of sacrifice. The amount of data on health and stature now available has yet to be explored fully, but Lambrick (with Robinson 2009, 321-3) has tentatively suggested that those chosen for burial in settlements were socially and perhaps economically disadvantaged, with more evidence of poor nutrition and an undue proportion of women and young adults.

There is also more scope for re-examining the detailed positioning of burials, how this varied regionally, and whether for example the association with storage pits is related to fertility and renewal (related to crop storage), or waste and discard (related to possible secondary use as latrines). In addition, there is now better evidence upon which to explore cultural trends in terms of the continuance of traditional practices alongside new influences, both through the later Bronze Age cremation rite persisting into the early Iron Age, and pit burials persisting into the Roman period.

### **Ceremony, ritual and religion**

The construction of ceremonial monuments had largely ceased by the middle Bronze Age, though many were at least respected. In the later Bronze Age and Iron Age major communal enclosures and forts would have acted as major communal ceremonial and religious centres. From what is known of late prehistoric religion a good deal of importance was attached to natural features and groves that are difficult to identify archaeologically.

Amongst later Bronze Age ceremonial structures are a possible group of post rings in the upper Thames valley (at Spring Road, Abingdon, Standlake and perhaps at Gravelly Guy and at Langford Down, Lechlade (Lambrick with Robinson 2009, 330 Fig. 9.1). More impressive is a pair of diagonally crossing palisade screens associated with the early ironworking site at Hartshill Copse (see Plate 9.16 below). At Yarnton ditches and rows of slots may have been aligned on a sacred tree. All of these are notable as odd structures rather than having clearly associated votive deposits

At Danebury there was a succession of four rectangular structures interpreted as successive shrines in the middle of the hillfort, though they were not directly associated with votive offerings.

Iron Age shrines have been suggested as predating Romano-British temples at Frilford and Woodeaton near Oxford; the evidence at Woodeaton is circumstantial, relying principally on a possible pre-Roman palisade temenos and suitable finds. Recent unpublished

geophysical evidence and the recognition of the site as an important midden has increased the likelihood of an Iron Age religious centre here, but it is far from proven. The case for Frilford was questioned (having previously been accepted) by Dennis Harding (1987) but the presence of a votive ploughshare in a curious set of post holes, and two burials in the stake-walled house, both beneath Romano British structures, is still highly unusual. The absence of late Iron Age material is not an objection to Roman reuse of a site known to be sacred (Lambrick with Robinson 2009).

By far the most convincing case of an Iron Age shrine predating a Romano-Celtic one is Hayling Island, where an Iron Age circular structure 8m in diameter was centrally placed within a courtyard 22m square defined by a ditch and lengths of palisade or hedge (King and Soffe 1994; 1998). This predated a well-built Roman temple building of similar form. Post holes and a central pit that could have held some sort of object of veneration were found, and within the courtyard there were patches of burning. Unlike other possible examples there were numerous objects such as horse gear, weaponry, brooches and currency bars, many showing signs of deliberate breakage. The almost complete absence of cattle bones in the faunal remains suggests that they were deliberately excluded.

There are a number of other possible shrine-like structures, such as a late Bronze Age to early Iron Age (1300 BC–500 BC) site on Aston Clinton bypass (Buckinghamshire) which revealed a substantial 4-post structure surrounded by a gully with a single entrance. Pits around this structure contained human bone and unusually shaped ‘concertina pots’ thought to mimic bronze beakers. A skull was radiocarbon dated to the middle Bronze Age, several hundred years older than the other finds. The site is interpreted as a roofed shrine or mausoleum on which remains of the dead were exposed. The skull could have been a treasured relic (Masefield 2008). A rather similar arrangement, but of late Iron Age date, was found at Smiths Field, Hardwick-with-Yelford, Oxfordshire (Allen 2000, 20, fig. 1.11). Here a shallow penannular enclosure 20m in diameter enclosed a deep, vertical-sided slot forming a square c.10m across with a cow burial at one corner. This in turn surrounded a setting of posts 4m square with a small pit or scoop set off-centre within it (Allen, 2000, 20, fig 1.11).

## Warfare, defences and military installations

### *Weaponry and trappings of war*

That “heroic” behaviour and conflict was part of the image of the elite in late prehistory can hardly be doubted, but there is little physical evidence for large-scale warfare. The trappings of warfare are widespread, with artefactual remains such as swords and daggers from both the Bronze Age and Iron Ages, and late Iron Age coins show the local Atrebatian rulers striking a fine pose as mounted warriors. The River Thames has been

an especially rich source of late prehistoric weaponry as a result of ritualistic deposition.

Jill York’s analysis of bronze objects from the Thames (York 2002) showed that many were damaged, and some of that damage was probably the result of fighting, as in the case of the bronze shield from Clifton Hampden punctured by a Bronze Age spear. But much of the damage (bending and breaking swords and spears etc) was probably ritualistic and symbolic – in effect ‘killing’ the weapon. Similar evidence has emerged from analysis of bronze sword blades in Hampshire, which has suggested that some were used in hand to hand combat, though the examples in the Andover (Varndell 1979) and Blackmoor (Colquhoun 1979) hoards appear to have had a ritual beating before their deposition.

To a large extent such river deposition was symbolic, and it is doubtful if any was the direct result of battle or combat, though at Dorchester-on-Thames (close to Clifton Hampden) a male human pelvis was found with a late Bronze Age spearhead embedded in it (Ehrenburg, 1977). At Danebury there were numerous skeletons with sometimes lethal wounds from weaponry, but the context of their death (warfare, personal combat or sacrifice) is not entirely clear.

Most Iron Age weaponry (swords, daggers, sheaths, spearheads and shields in the Solent-Thames area come from watery deposits (Fitzpatrick 1984) but there are also some from burials in pits or graves (eg Lambrick and Allen 2004, 232, 362, Fig. 8.7; Collis 1994). Their occurrence on settlement sites with no obvious ritualistic connotations, as at Pennylands (eg Williams 1993, 23, Fig. 16 and 99-100, Pl. 13, Fig. 54) is much rarer.

There is a distinct absence of archery equipment, but slingstones would certainly have been used as projectiles in human combat. Apart from the well-known slinger’s position in the main entrance to Danebury and a cache of 11,000 slingstones (Cunliffe 1984), there are some other hillforts with numerous slingstones including caches ready for use (Hirst and Rahtz 1996, 48; Lock *et al.* 2005, 122-3; Miles *et al.* 2003, 112, 185-6; Allen *et al.* 2010, 30, 266; Ralston 2006). Although slingstones occur quite commonly in very small numbers on settlements, where they could have been used for hunting or for personal protection, there is a distinction between this and the hundreds or thousands found on some defensive sites.

A small number of sites from the late Bronze Age onwards have produced horse equipment and there is sparse evidence for chariots, though their actual use in warfare is not directly evident. There is evidence from Bury Hill for use of the later fort as a possible ‘chariot school’ (Cunliffe and Poole 2000b), and late Iron Age coins depict local Atrebatian rulers as mounted warriors.

### *Iron Age defences and evidence of possible use in warfare*

Whatever the other copious evidence for the complex roles of hillforts, they were designed at least in principle and almost certainly in practice to be defensible. But it is important to appreciate that this may have been both



Plate 9.14 The White Horse and hillfort at Uffington, Oxfordshire, *copyright OA*

symbolic and practical. For example, so-called ‘guard chambers’ at the entrances to some hillforts may have had multiple roles, and their use for military purposes, rather than symbolic or general use in relation to the comings and goings through hillfort entrances, has been questioned by Avery (1993).

Most Buckinghamshire hillforts have only a single rampart and, so far as is known, simple gateways. Ivinghoe and Taplow show evidence of timber-framed phases that in the latter case was augmented by a dump rampart.

In Oxfordshire timber-framed or revetted box-ramparts are known from Uffington Castle, Segsbury and Blewburton on the Berkshire Downs, and at Burroway Brook in the valley (Plate 9.14). On the limestone stone-faced ramparts occur at Rainsborough (Northants), Bladon Castle, and Cherbury, while on the chalk sarsen revetments are known at Uffington and Segsbury. Simple dump ramparts typically followed the timber-framed phases at several sites and a simple dump rampart is

known from Madmarston. Entrances have been investigated at Rainsborough, at Cherbury, Blewburton Hill and to some extent Uffington, and on a number of Hampshire hillforts, most notably Danebury (Cunliffe 1984b; 2000; 2005). Multivallate defences like those at Cherbury (probably middle Iron Age) and Rainsborough (unusually early Iron Age) are rarer than in the ‘developed’ hillforts of Wessex. Broadly speaking these patterns of development follow much the same pattern as that of the more numerous and varied forts of Wessex, where the major excavations at Danebury and its environs have allowed the development of a general model for how defences developed (Cunliffe 2005) (Table 9.4):

While arguments about the role of a developed hillfort like Danebury will continue, there is evidence, in the form of weapons, skeletons with wounds and gates destroyed by burning, to suggest that the elaborate fortifications were not just for show. Particularly striking is the pit with 11,300 sling stones (River Test pebbles) found near the east gate (Cunliffe 1984b).

Table 9.4 Scheme of development of hillfort defences in Wessex

<i>Enclosure type</i>	<i>Characteristics</i>	<i>Ceramic phase</i>	<i>Date</i>	<i>Example</i>
Early 1	vertical faced rampart	cp 2 3	6th–5th BC	Bury Hill 1
Early 2	glacis rampart	cp 3	5th–4th BC	Quarley Hill
Developed 1	entrances modified	cp 4/5 6	4th–3rd BC	Beacon Hill
Developed 2	one gate; ramparts and gate enhanced	cp 7	3rd–2nd BC	Danebury 5
Late	circular and multivallate	cp 7	late 2nd BC– early 1st AD	Bury Hill 2

There is a growing number of hillforts in southern England where wholesale burning appears to have taken place. These include Rainsborough (just outside the region), Taplow, Bladon Castle (Oxfordshire) and (from the extreme magnetic signature of a section of its southern rampart) possibly Perborough Castle (Berkshire) (Lambrick with Robinson 2009, 360-1; Payne *et al.* 2006). The valley fort at Burroway Brook (Oxfordshire) has a charred corduroy of timbers underlying an entire circuit of collapsed reddened gravel and soil ramparts that had once been timber-laced. While it is unclear if the cause of such burning in each case was the result of attack, slighting or accident, these must have been major events and the vulnerability of timber-laced ramparts to fire might have been a factor in their eventual abandonment in favour of dump ramparts of *glacis* form.

### Material culture

Within settlements, the evidence of day-to-day material culture in the form of pottery and craft objects show a significant degree of variation in quality of materials, finish and decoration that suggest important differences in the social roles that material objects played that are familiar today. Deliberate deposits of groups of objects such as querns, occasionally pots, 'loomweights' and spindlewhorls are not especially common, but nevertheless occur on many ordinary settlement sites. The extent to which these should be regarded as special votive deposits or caches of valued material hidden for later recovery is often difficult to tell.

There is good evidence of structured deposition and special deposits that variously include animal skeletons, skulls and limbs, querns, spindlewhorls, metalwork, pottery and other objects, burnt stone and chalk lumps and (at least in waterlogged deposits), wooden objects (Plate 9.15). The variation and contexts of such deposits, and their occasional association with human remains, presents a highly complex picture reflecting a mixture of the rituals and beliefs that may have directly resulted in such deposits. Depositional processes range from deliberate votive placement to relatively random discard of waste from special activities, or to hoarding for later recovery (Wait 1985, Hill 1995; Lambrick and Allen 2004, 488-91).



Plate 9.15 Wooden ladle from Reading Business Park, Berkshire, *copyright* OA

Middle to late Bronze Age metalwork has been found across the whole area in the form of isolated finds, a few hoards and site finds. A number of summaries of classes of objects and reports on hoards have been published for Buckinghamshire (eg Farley 1972; 1973; 1991a), and for Hampshire (Lawson 1999), but Oxfordshire Berkshire and the Isle of Wight lack up-to-date reviews.

Excavations of hoards include a late Bronze Age hoard of 2 gold torcs and 3 gold bracelets found in a Post-Deverel Rimbury plainware pot dated 1150-800BC at Monkston, Milton Keynes (Needham, 2002) and a middle Bronze Age hoard of gold torcs and bracelets at Crowdown, Berks (Varndell *et al.* 2007). Neither of these was in association with any obvious contemporary activity. In contrast, a late Bronze Age hoard of socketed axes was found at the entrance of a roundhouse at Tower Hill, 5km south-west of Rams Hill (Miles *et al.* 2003). The late Bronze Age Petters Sportsfield hoard lies just outside the Solent-Thames area near Runnymede.

Iron Age hoards are generally less common and have not received so much attention. However, Hingley (2006) has reviewed the occurrence of iron currency bars in hoards, including several across the Solent-Thames area, and has suggested that they often occur in association with boundaries. Individual hoards include the remarkable 'Salisbury hoard' of votive miniatures from Hampshire (Stead and Renfrew 2000). Others include a number containing horse gear, such as pairs of bits from Wytham and Hagbourne Hill, Oxfordshire (Lambrick with Robinson 2009, 228-9).

A great deal of evidence of highly valued objects comes from those deposited in watery places, most notably the Thames, but also some coastal contexts. There have been several studies of or including this material, which have discussed at length the complex issues concerning the character of the material found (often weaponry) and the possible circumstances and meaning of its deposition (Ehrenberg 1977; Wait 1985; York 2002; Bradley and Gordon 1988; Bradley 1990; R Thomas 1999). With the exception of Bradley's (1990) wide ranging study of such deposition across NW Europe, however, these studies have almost all been confined to particular periods (Bronze Age, Iron Age or subdivisions between them). There has thus been relatively little detailed consideration of the phenomenon from a more general prehistoric perspective.

### Crafts, trade and industry

#### Workshops

To a large extent craft would have been carried to in ordinary houses – but in some cases house-like buildings were perhaps built as workshops. For example at Hartshill Copse there is very good evidence of different stages of metal working being carried out in two adjacent roundhouses which also had complementary characteristics in terms of the quantity and character of

other finds (Collard *et al.* 2006). In general, however, it is very difficult to distinguish purpose-built workshops. There are a number of cases of D-shaped post built structures in the Upper Thames valley that have been interpreted in this light, and this might also apply to some rectangular structures and west-facing roundhouses, but as Lambrick has noted, these are seldom associated with craft objects or residues, Hartshill Copse being a notable exception (Lambrick with Robinson 2009, 153-5; Collard *et al.* 2006). Recently a most unusual sunken-floored sub-rectangular building supported on four posts and measuring 3m long and 2m wide, has been found at Ewe Farm, Newington (Lambrick with Robinson 2009, 181-2). It had an entrance ramp at one end and pitched stone hearth cells or ovens overlying an original hearth at the other. It was associated with large pieces of perhaps 10-12 early Iron Age angular vessels, but there is no firm evidence of what craft activities it may have been used for (T Allen and P Booth pers. comm.)

### Metalworking

An increasing number of ordinary Late Bronze Age settlement sites, as well as high status ones, contain evidence of bronze metalworking. The items range from casting drips, an unused rivet, crucibles and mould fragments (usually for spearheads and axes), to a possible tuyere and occasional casting failures (Bowden *et al.* 1993; Bradley *et al.* 1980, 244; Moore and Jennings 1992, 87; Needham 1991). At Runnymede Bridge a mis-cast razor was found still in its clay mould. Apart from the character of hoards like that at Tower Hill (Miles *et al.* 2003), there are possible hints of the existence of itinerant craftsmen from parts of syenite moulds for a typically south-western 'Sugoursey' style axe. One fragment was recently found at Castle Hill Little Wittenham, and was similar to an earlier find from Petters Sports Field, Surrey.

There is good evidence of bronze working continuing on settlement sites into the Iron Age (Northover 1984; 1995), though by then bronze metalwork had ceased to have the economic importance it had enjoyed in the late Bronze Age (Needham and Burgess 1980; Needham 2007). Nevertheless, the high technical craftsmanship in La Tene weaponry, horsegear, mirrors and other objects, emphasises the continued value of metalwork as prestige goods. An unusual later indication of metalworking linked to high status exchange is the late Iron Age evidence of manufacture of silver bars (or ingots) and other silver and gold smelts on the Isle of Wight.

The late Bronze Age ironworking site on tertiary geological outcrops at Hartshill Copse Upper Bucklebury is of international importance, enhanced by evidence of an early Iron Age site nearby at Coopers Farm, Dunston Park (Collard *et al.* 2006; Fitzpatrick *et al.* 1995, 89-92). At Hartshill, 17 radiocarbon dates securely date the earliest iron working activity to the 10th century BC, pre-dating previous evidence for ironworking in the British Isles by three centuries. A pair



Plate 9.16 Reconstruction of the precocious iron-working site at Hartshill Copse, Berkshire, copyright Cotswold Archaeology and West Berkshire Council

of post-built roundhouses/workshops, respected by ceremonial fence lines, were associated with slag and hammerscale, revealing clear differences of work areas (Plate 9.16). A later enclosed settlement dated to the 5th century cal BC also produced iron slag and hammer-scale. Further areas of ironworking nearby at Coopers Farm, Dunston Park were dated to the 7th century BC.

In the mid to late Iron Age various sites south and south-east of Reading in Berkshire have produced evidence of iron production (Lobb and Morris 1991-3; Hammond 2011; Pine 2003a), prompting the suggestion of an association between these ironworking sites and the fort at Caesar's Camp, Crowthorne, on the outskirts of Bracknell.

In Buckinghamshire the most substantial (but still limited) excavated evidence for iron smelting and smithing comes from Aston Clinton Bypass from late Iron Age contexts (Masefield 2008). There is an old, somewhat doubtful reference to evidence of smelting at Cholesbury hillfort.

While evidence of Iron Age iron smelting is now less rare than it was at the time of Salter and Ehrenreich's (1984) review for central southern England, their observation that almost all domestic settlements had some evidence of smithing has if anything been reinforced. However, there needs to be some qualification to this because it has become increasingly clear that slag-like material that might in the past have been taken to indicate smithing can arise from other high tempera-

ture activities or events such as structures being destroyed by intense fires (eg Salter 2004). Sampling for hammer scale and higher density slags, which are more reliable indicators of smithing activity, has become more routine in recent years.

### Pottery

Direct evidence for pottery production in terms of firing sites and wasters remains largely elusive until the very end of the Late Iron Age, when the first small temporary kilns appear eg in the Upper Thames Valley at Yarnton, Cassington and Hanborough. Distorted, over-fired, spalled and cracked pottery occurs fairly frequently (and flawed pots were often used as funerary urns) but it is very seldom possible to pinpoint on site pottery manufacture (though at Runnymede it has been suggested that there is evidence of querns being used to prepare calcined flint as pottery temper).

The ability to control firing temperatures is shown by fineware vessels of both the early and middle Iron Age, some using inlay and slip decoration for the first time in many centuries, suggesting a reasonably high level of craftsmanship. In the Iron Age there is considerable variability in fabrics in many parts of the Solent-Thames area, suggesting that a wide variety of clays were exploited on a fairly opportunistic basis, but these distributions and trends through time are mostly not well understood, though the potential is clear (Morris 1994b; 1997).

### Stone working

Quarrying, in particular to obtain stone used as 'pot boilers' and also to win stones suitable to make into querns and rubbers would have been a significant craft. Making objects from stone was also noteworthy (eg Cunliffe and Poole 1991, 382-404). While querns may have been finished at the quarry, roughout spindle whorls (eg of Malmstone at Little Wittenham, shale or coal at Bourton-on-the-Water in the Cotswolds and of chalk at Gravelly Guy, Stanton Harcourt) show how stone was both procured locally and transported over long distances in a relatively robust state to avoid breakage before being worked into more delicate objects (Lambrick with Robinson 2009, 205-11).

### Bone and antler working

Bone and antler working was ubiquitous and was a principal source of tools for other crafts. Techniques developed to some extent, eg through use of drills and saws in the Iron Age. Lambrick (with Robinson 2009, 225) has suggested that the degree to which antler combs and spindlewhorls were shaped, polished and decorated to make tools (as compared with unshaped bobbins etc) may say something about the role of the implement as a symbol of social status in families, personal relationships and, perhaps, in the symbolic role of the crafts for which they were used.

### Leather, cordage and textiles

Although many later prehistoric implements are thought to be associated with these crafts, in only very few cases (eg spindle whorls, needles and perhaps bobbins) is their function clear. The use of combs for teasing wool, weaving, skin cleaning, personal toiletry or other activities in later prehistory is still a matter of debate. While there seems to be little question about the function of later Bronze Age cylindrical 'loomweights' the theory that Iron Age triangular 'loomweights' were really 'oven bricks' (Cunliffe and Poole 1991b) is beginning to be quoted as unquestioningly as their former attribution, though this is not yet fully accepted. The use of the highly distinctive and quite common polished and grooved sheep medapodials remains as obscure as ever.

Finds of cordage (as opposed to objects that clearly required it) are very rare indeed. Likewise, there are only very few finds of later prehistoric leather from the area, and they are not well preserved (eg Allen 1990). Actual textiles are also still very rare, as is evidence for aspects of their fabrication such as fulling and dyeing.



Plate 9.17 Ard share from the Eton Rowing Course, Buckinghamshire, *copyright OA*

### Woodworking

The range of woodworking tools became wider in the late Bronze Age and Iron Age with the introduction of chisels, saws, drills and files. There is also a growing plethora of preserved worked wood and woodworking debris, both from riverbed and foreshore structures and preserved objects such as wooden bowls. Significant preserved structures have been found at Whitecross Farm, the Eton Rowing Course, Runnymede, Anslows Cottages (Berkshire) and Testwood Lakes.

An increasingly wide range of bowls and other wooden objects have been found in recent years, including one of the earliest wooden ard shares in Britain from the Eton Rowing Course (Plate 9.17). However, this still does not compare with the richness of finds from sites like Glastonbury and Meare in the Somerset levels, or Fengate in the Fens of East Anglia.

### Markets, centres of exchange and trade

The existence of 'markets' or centres of exchange in prehistory has been a matter of debate, especially in relation to hillforts and midden sites as 'redistribution centres' or 'entrepôts.' While the quantity, range and quality of objects found is often suggestive of high status, it is much less clear exactly what this means in terms of why objects were brought to these sites, and to what extent forts like Danebury acted as massive stores for redistribution of agricultural produce (Cunliffe 1984a). Hill (1995, 1996) has questioned whether this interpretation of Danebury is overstated, and it is clear that many hilltop enclosures and hillforts do not have such evidence; many contain settlements no more elaborate or dense than some contemporary non-defensive enclosed and open settlements – and some less so (Cunliffe 2005). It is increasingly clear that some artefacts that might be taken to be indicative of a more central market role (such as being centres for specialist crafts like metalworking) are not always present and do not occur much more than on some ordinary settlements.

Needham has similarly argued that, contrary to tempting theories, there is rather little to suggest that riverside midden sites were primarily entrepôts for river trade. He sees them more as high status communal meeting places, involved with the recycling and processing of material brought in, but not specifically related to river traffic (Needham and Spence 1996, 242-8).

The function of defensive and communal sites as centres of exchange thus seems to have been variable, and is probably better seen as a by-product of their wider communal role than as their primary *raison d'être*. In the later Iron Age, with more indication of centralising economic political and social power, the role of enclosures and *oppida* in controlling trade and exchange may have become more overt, as reflected in the wide range of traded goods that tend to occur on these sites. This is perhaps clearest of all in the case of Hengistbury Head where the defended headland clearly acted as an important port (Cunliffe 1987).

The principal indication of trade and exchange is the distribution of objects that came from distant sources. In Buckinghamshire, for example, there are later Bronze Age ornaments of continental origin, as there are across the Solent-Thames area (Rohl and Needham 1988). Dorset shale, Wealden greensand querns and some late Iron Age ceramics all indicate regional exchange networks. In Oxfordshire work by Fiona Roe has found that querns were both produced locally and were coming from the Derbyshire, the Welsh Marches, the Forest of Dean, the Downs and Sussex (Lambrick with Robinson 2009, 207-11). Although some of these materials may have been transported by river, there is some evidence that the Thames acted more as a boundary than a conduit of exchange. Briquetage from Droitwich (along with Malvernian pottery) is found almost exclusively north of the Thames and west of the Cherwell, whereas briquetage from Hampshire and Dorset reached areas south of the river, such as Abingdon and Castle Hill (Morris 1981; 1985; 1994a; Allen *et al.* 2010, 166-7).

In Berkshire and Hampshire broadly similar trends apply, with querns travelling significant distances (eg from Lodsworth, East Sussex) even though sarsen, a perfectly good local material, was often available. Shale roughouts and finished objects, briquetage, metal objects and ceramics again all point to well-developed extensive trading networks, in which agricultural produce is likely to have been a key basis for exchange.

On the Isle of Wight tantalising glimpses of social, economic, maritime trade and other linkages are revealed by Iron Age coinage and currency bars. There is evidence of trade in ceramics, including typical Glastonbury wares, pottery in the St Catherine's Hill/Worthy Down tradition, imported Gallo-Belgic finewares and amphorae and other material comparable to pottery from Hengistbury Head.

As the commonest material that reflects origins beyond the immediate vicinity of its discovery, pottery can be a very useful indicator of trade and exchange and of possible social affiliations. Cunliffe's ceramic 'style zones' have been very influential in considering these issues (Cunliffe 1974 to 2005) and the interpretation has gradually evolved, especially in Hampshire where the Danebury team reviewed pottery from sites within a study area of 450 km<sup>2</sup> and further afield. The ceramic differences observed coupled with intensive radiocarbon dating changes (Orton in Cunliffe 1995) suggested territorial transitions – particularly a shift from east to west (Cunliffe 2000, 162). The pottery has also been studied from a petrological and production point of view (eg Morris 1994b; 1997) and there are alternative interpretations of its significance and the validity of the 'style zone' approach propounded by Cunliffe (eg Collis 1994, Hill 1995).

Elsewhere in the Solent-Thames area, especially the Upper Thames valley, the ceramic evidence has also revealed a complex picture, albeit with much less tight chronological control and petrological evidence. Lambrick (1984; with Robinson 2009, 203-5) has suggested that while the 'style zone' approach may have

some validity in the Thames valley, the picture is complex: the sources of pottery can vary considerably at a local level from one site to another (notably Mingies Ditch and Watkins Farm); there are possible local variations of stylistic motifs within supposed 'style zones'; and pottery fabrics also vary significantly in local and distant origins, but not correlating closely with such 'zones'.

Distinguishing the influences of simple fashion, socially defined stylistic identity, and the organisation of pottery production and distribution is thus a complex challenge of multivariate analysis, not restricted to pottery alone, that still leaves many unanswered questions.

### Transport and communication

As evidenced by trauma on cattle bones first noted at Ashville, Abingdon (Wilson *et al.* 1978) oxen or steers were probably the main draft animals on the farm and for transporting goods. However, the evidence of prestige attached to horses and horse gear, and possibilities of horse breeding areas in Oxfordshire and Milton Keynes, suggest that horse riding and horse-drawn vehicles were a relatively high status forms of transport. Recent work by Bendrey (2007) has revealed new diagnostic evidence for horse biting which may give these animals a wider role. Cart and chariot fittings (nave rings and linch pins) and harness gear are familiar finds from a range of sites and increasingly objects such as terret rings are reported to the Portable Antiquities Scheme. Finds of pairs of Iron Age horse bits, such as those at Wytham and Hagbourne Hill, Oxfordshire, are also indicative of horse-drawn vehicles (Lambrick with Robinson 2009, 228-9). In Hampshire, possible vehicle and harness fittings come from a number of sites, including the putative 'chariot school' at Bury Hill (Cunliffe and Poole 2000b). The high quality craftsmanship involved, including bimetal working and elaborate decoration on some of these objects, is good evidence of the prestige attached to equine transport.

Physical remains of transport routes tend not to survive well except in localised places where hollow ways, causeways or waterlogged remains of bridges, jetties or landing stages have been buried in conditions conducive to survival. Structures have been discovered in the Rivers Test (Testwood, Hampshire), and Kennet (Anslows Cottages, Berkshire), and in the Thames at Runnymede, Eton Rowing Course and Whitecross Farm (Fitzpatrick *et al.* 1996; Lambrick with Robinson 2009, 229-35). Others have been found in current intertidal locations such as Langstone Harbour, Hampshire (Allen and Gardiner 2000). Such riverine and marine environments have high palaeo-environmental potential to elucidate detailed site chronologies and reconstructions.

Amongst the main prehistoric trackways in Southern England, the traditional explanation of Icknield Way as a route alongside the chalk escarpment from Wessex to East Anglia has been questioned (Harrison, 2003). At Aston Clinton no trace of it was found, and there was nothing to say that it might not be a post-medieval

creation (Masefield 2008). Although such routeways might be better understood as loosely defined 'zones of movement,' the emerging pattern of territories seems to be better defined by regularly spaced hillforts, trackways and cross-ridge dykes running perpendicular to the Chiltern scarp. Bull (1993) suggested that a 'bi-axial' pattern of roads and trackways across the Chilterns and north Buckinghamshire may have pre-dated the Roman road network, and similar networks have been noted in the Hertfordshire Chilterns extending into Buckinghamshire (Williamson 2002).

Very similar issues arise for the Ridgeway, the best known of all 'prehistoric' trackways in Britain, running along the scarp of the Berkshire and Marlborough Downs. Very comparable cross-ridge hollow-ways and boundaries link the Vale of White Horse to the Berkshire Downs, but as yet have not been shown to have prehistoric origins. There is growing evidence of ditches crossing its course, not only at Uffington (Miles *et al.* 2003), but also at several other points along its route. These are often revealed by deep rutting and occasionally by exposure in recent ditches or as crop- or soilmarks— as has also been observed at the southern end of the Ridgeway at Avebury. However, Gary Lock and colleagues have found that several Iron Age hillforts lie on a line defining the most theoretically efficient route along the Ridgeway, which in several cases (including Uffington) is not the present day course of the Ridgeway (Miles *et al.* 2003, 131-3).

Another celebrated ancient trackway crossing the Solent-Thames area is the Harroway crossing Hampshire, linking Salisbury Plain with the Downs of Surrey and Kent (Williams-Freeman 1915, Hawkes 1925, Crawford 1960, 78).

At a more local level, throughout the Solent-Thames area there was almost certainly a more extensive network of tracks and droveways linking fields, farmsteads and communal gathering places than is evident from the ditches (and presumably hedges), hollow ways and lynchets that survive as archaeological features. These are often best preserved either under floodplain alluvium or colluvial hillwash, including a 'lost' trackway of Iron Age origin traced along an historic parish boundary perpendicular to the Chilterns between Aylesbury and Chesham (Green and Kidd, 2006). A late Bronze Age road metalled with flint gravel which incorporated a gate or barrier has been investigated at New Buildings, Hampshire (Cunliffe 2000, 19), a pre-Roman ford crossing the Padbury Brook at Thornborough in the Ouse valley (Johnson, 1975), and various causeways crossing the Upper Thames floodplain have been investigated at Yarnton, Farmoor and Thrupp near Abingdon (Lambrick with Robinson 2009, 229-235). The former Thames channel at the Eton Rowing Course was crossed by six wooden pile-built bridges and two possible jetties, which dated between the middle Bronze Age and the middle Iron Age (Allen and Welsh 1997; Allen *et al.* forthcoming). Piles embedded in a silted channel at Whitecross Farm, Wallingford may either have been for two successive bridges or jetties (Cromarty *et al.* 2006). A late Bronze Age possible landing stage dated to



840–410 cal BC was found at Anslows Cottages, Burghfield (Butterworth and Lobb 1992). Other cases of revetted river banks, as at Lower Bolney, Oxfordshire (Campbell 1992) may be similar.

The use of the Thames and its tributaries for river transport may be suggested by traded goods, and there are possible 19th century discoveries of log boats attributed to the Bronze Age at Marlow and Wooburn (Clinch, 1905), but there are no modern confirmed cases of prehistoric river craft.

Other potential causeways have been noted in Langstone Harbour (Allen and Gardiner 2000), and waterlogged remains of timber bridges and causeways dating from 1600 to 1450BC have been found at Testwood Lakes, Totton, where one find of special significance was a cleat from a plank boat capable of cross-Channel journeys (Van de Noort 2006).

Sea crossings in the early part of the period can be inferred from finds such as the numerous bronze hoards of northern French type (Lawson 1999). By the Iron Age, trade with the Continent was well established with Christchurch Harbour and Hengistbury Head having an important role (Cunliffe 1987; Cunliffe and de Jersey 1997). The Isle of Wight was also well placed to play a role in both the Atlantic and Central European trade routes, but the available evidence has not been reviewed in recent years.

## Legacy

Much of the Solent-Thames area was intensively settled and farmed by the end of the Iron Age, though some areas like the middle Thames gravels may only have been gradually re-colonised after a relatively stagnant period of development at the end of the late Bronze Age (Lambrick with Robinson 2009, 379). To the north-east and south-east there were emergent kingly rulers who had sought a peaceful and prosperous relationship with Rome; there is little evidence for Roman military activity in these areas. Silchester was probably deliberately created as a major centre that had already adopted the trappings of a Roman town and its manners, but more generally many late Iron Age sites continued to be occupied into the Roman period. Even in the less overtly pro-Roman tribal territories, such as that of the Dobunni to the west, the same pattern of uninterrupted development seems apparent. So far as there was any major disruption of settlement it had been in the late Iron Age, and was to occur again in the mid Roman period, not at the time of the conquest.

In Buckinghamshire evidence from the Roman nucleated sites is variable: Fleet Marston has some mid 1st-century occupation which probably pre-dates the conquest (Cox 1997) whilst at Magiovinium a pre-conquest field system was found on a different alignment to Watling Street and the later fields (Neal 1987).

Within the area of Atrebatian influence in Hampshire both Winchester and Silchester developed from major

late Iron Age settlements. In Oxfordshire, on the putative border between three major tribal areas, the same is true of the probable Roman small town at Abingdon, while at Dorchester the Roman fort and town was established a short way from the Dyke Hills enclosure. The massive territorial area defined by the North Oxfordshire Grims Ditch was probably never completed, but was nevertheless notable for a cluster of early villas which may indicate some special legacy of land rights (Copeland 1988; Lambrick with Robinson 2009, 363–8).

Many of the practices of pit burials and disposal of bodies in and alongside boundaries and within settlements continued well into the Roman period alongside more Romanised rituals. Early Roman cremation rites (eg at Bancroft, Thornborough and Wendover) developed from the Aylesford-Swarling culture, indicating a continuity of belief also found with the worship of ‘Taranis’ at Wavendon Gate (Williams *et al.* 1996). Similar continuity of burial rites is evident also in Hampshire.

Except at Danesborough (Buckinghamshire), Alfred’s Castle and Tidbury (Hampshire) there is little evidence for Roman use of hillforts, though both at Uffington and Castle Hill some tradition of religious use seems to have survived, as reflected in the presence of Roman cemeteries immediately adjacent (Allen *et al.* 2010), which is also suspected for Tidbury and Ashley’s Copse in Hampshire. Saxon reuse is likewise less common than in western Britain, but the high status burial within the Taplow fort, which at that stage was still a prominent earthwork, is a notable exception (Allen *et al.* 2009). Saxon activity is also well-attested at Uffington where the traditions of scouring the White Horse lasted well into the post-medieval period (Miles *et al.* 2003), while in Buckinghamshire the reuse of hillforts as the location of a number of medieval churches has been noted (Kidd 2004).

Longer-term legacies can also be suggested by the survival of the co-axial patterns of trackways of the Chilterns into modern times, and perhaps even by the evidence for supposed Roman or earlier origins for early medieval multiple estates (Reed 1979, 71–77). Many prehistoric boundaries seem to have survived as later parish boundaries on the chalk.

The biggest legacies of all from this period were perhaps less directly tangible, yet far more substantial. It was in the late prehistoric period that the first fields and fully settled farms emerged within an almost fully managed landscape, and it was also the first time that a kind of politics that would be relatively familiar in modern terms emerged out of a kind of social interaction that would have seemed very odd to us now. Although subsequent periods also saw major transformations, it is becoming increasingly clear how much can be traced back to this early emergence of a society in which control and management of land and territory had become so important. In a few places it is even possible to see what may be real living legacies like the common grazing of Port Meadow just outside Oxford and the enduring symbol of identity that the White Horse has become.