Inheritance

The subdivision of prehistory into periods has long been recognised as a mechanism for description of what is essentially a continuum of development. Yet some of the subdivisions are of much more significance than others, for example the introduction of agriculture. For the period under consideration here it is not therefore that the widespread adoption of iron which is necessary significant but perhaps 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 was considered that the onset of the Middle Bronze Age defined this in cultural terms and, more importantly in physical evidence terms (Ellison 1981). Whatever the merits of this concept for other regions, or in terms of absolute chronology, or in terms of conservatism in material culture and way of life, the study area has now provided data with which to reconsider this concept. It is considered that the transition described above is most evident from the late Bronze Age rather than the middle Bronze Age within the study area.

Chronology

The chronology of the period is not especially well documented in terms of radiocarbon dates, when considered against the relative wealth of excavated deposits in the later Bronze Age. Some of this is partly a response by earlier excavators to the nature of the radiocarbon calibration curve which is relatively flat for the Late Bronze Age and what would be considered squandering of valuable resources for a period relatively well supplied by pottery chronology. Radiocarbon dating of Iron Age deposits was also not considered a priority for scarce resources for earlier excavators.

This lack of a C14-based chronology is partly offset by the pioneering work on LBA/EIA pottery typology carried out in the late 1970’s (Barrett 1980) which drew upon several of the sites excavated at that time in the Kennet Valley (Bradley et al 1980) and, importantly, which were also radiocarbon dated to provide absolute reference dates. It was not that this work simply provided detailed of the pottery chronology and sorted out the 'gap' in the cultural sequence between the MBA and EIA following the revising and backdating of the metalwork chronology (Smith 1959) but more far reaching effects on an understanding of the nature of change and the development of the Iron Age as a whole.

There is therefore a reasonably secure chronology for the study area using the following divisions:

1700-1200 MBA (Deverel-Rimbury)
1200-850-LBA Plain post-Deverel Rimbury (11th-9th C)
850-400 BC LBA/EIA Decorated post-Deverel- Rimbury (8th-5th C)
400-100 BC Middle Iron Age
100BC- 43 AD Late Iron Age

The dates are detailed in Table 1 and have all been calibrated using the OXCal v 3.5 programme.

Landscape, landuse and settlement

Middle Bronze Age

Occupation sites of Middle Bronze Age date are rare within the study area. Typically Middle Bronze Age occupation is represented by small numbers of pits, often located on sites of later date with, for example, a pit at Aldermaston Wharf with a C14 date of 1900-1100 Cal BC (Bradley et. al. 1980, 224 and at Knights Farm where a pit provided a date of 1750-1200 Cal BC (ibid 258, 260). Similarly an isolated pit at Dunston's Park contained Middle Bronze Age pottery (Fitzpatrick et. al. 1995, 72). Several Middle Bronze pits, postholes and a midden deposit within the upper fill of a ring ditch at Old Way Lane Cippenham are probably representative of occupation in addition to burial (Ford et al 2003, fig 4.5). The most significant exception to this overview is Weir Bank Stud Farm, Bray where a settlement complex is present with a round house, small enclosures/paddocks and a droveway. (Barnes
and Cleal 1995). One radiocarbon date of 1900-1050 cal BC was obtained. An overview of the nature of Middle Bronze Age occupation sites prevalent in the 1980's was that derived from the fieldwork on the downlands of Wessex where free-standing enclosures contained houses and other evidence of occupation (Ellison 1981; Gingell 1992; Barratt et. al. 1991). Yet despite the extensive fieldwork in the Thames Valley since then, comparable evidence is lacking and a conclusion that the nature of Middle Bronze Age occupation is similar to earlier periods (ie not earthfast) rather than later ones. In this respect, it should also be considered that the presence of flint scatters (more thoroughly considered in the neolithic/early Bronze Age chapter) also includes for those of middle and late Bronze Age date. The exception to this summary, that of the site at Weir Bank Stud Farm (Barnes and Cleal 1995) is such that it might not be typical at all but is specialist or high status.

Late Bronze Age/Early Iron Age

Occupation

Occupation sites of Late Bronze Age and Early Iron Age date are relatively common within the study and are present on a range of geological and topographic outcrops (Ford 1991, table 6.15). A range of site types are recorded with a hierarchy of settlement complexity. Perhaps the lowest level of the hierarchy comprises single house sites as at Old Way Lane, Cippenham (Ford, 2003, 108) or Furze Platt (Lobb 1980) where just one or two post-built roundhouses perhaps associated with a few pits, are unenclosed and occur in apparent isolation. They may reflect relatively short-lived sites. Greater complexity is indicated by groups of houses perhaps representing small hamlets and/or a degree of permanence with settlement drift as at Knights Farm (Bradley et al 1980) and, more rarely containing substantial double post-ring houses as at Dunston's Park, Thatcham (Fitzpatrick et al. 1995). Finally more extensive complexes of occupation are also apparent as at Reading Business Park and Green Park (Moore and Jennings 1992; Brossler et al. 2004) where several house sites, with evidence for a succession of rebuilding are interlinked with an enclosed landscape. Similarly, at Harts Hill Copse, Thatcham a complex of post built roundhouses, pits and fencelines are recorded associated with iron working (Collard et al. 2006).

Examples of enclosed settlements of Late Bronze Age date are rare. Small scale trial trenching has suggested that some enclosures on aerial photographs are of Bronze Age date and may be occupation sites as at Eton Wick (Ford 1993, 30). Very recent excavation at Wexham, Slough has also revealed a small oval enclosure of Late bronze Age date containing a roundhouse (Ford in prep). A very recent excavation at Wexham, Slough has revealed a small Late Bronze Age oval enclosure containing a post-built roundhouse (Ford in prep) and it is possible that consideration of these latter sites should also take place along side those of 'mini-hillforts' (below).

Burnt mounds

A distinctive monument of the later Bronze Age within the study area is that of burnt mounds. These heaps of fire cracked flint most often to be found close to water and traditionally considered to be (predominantly) cooking places, are most frequently encountered in highland Britain and Ireland (Fulachtai na fiadh) but with an unusually high number recorded for southern England in the New Forest (Buckley 1988; O'Driscoll, 1988) A modest number of monuments that can be considered as belonging to the general class of burnt mounds are recorded for the study area and immediately adjacent study areas and several have been excavated to provide details of their nature and dating evidence (Ford and Torrance 2003; Brossler et al 2004; Oram 2006). For example, a large mound was dated by association with Late Bronze Age pottery at Green Park, Reading but 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 (Ford and Torrance 2003, 93). A very much smaller 'mound' at Turnpike School, Newbury produced a C14 date of 1000-800 Cal BC (Pine forthcoming).

These dated sites, with their emphasis on the later Bronze Age conform to the traditionally expected chronology of these types of monument (Brindley and Lanting, 1990). However, more recent work elsewhere within Southern Britain has suggested a longer chronology from the earlier Bronze Age and even the late Neolithic (Beamish and Ripper 2000). This is demonstrated for a site within the Solent-Thames region (but just outside of this study area) where a Middle Bronze Age dates of 1454-1370 Cal BC (KIA26695) was obtained from Greywell Road, Basingstoke (Oram 2006). This suggests therefore that a wider chronology for these sites should be expected and that an important research topic for this agenda is to correctly assign these distinctive monuments to the correct period. This will almost
certainly require provision for C14 dating as there is usually a paucity of associated artefactual remains from these sites.

A second important observation to be made of the excavated sites within the study area is that few, if any, conform to the 'model' type of burnt mound site (Raymond 1987), namely to be found close to water and comprise a trough adjacent to which the burnt stone is deposited, often in a crescentic form (Oram 2006).

From a wider perspective, it has previously been considered that as a model of colonisation, this is preceded by an extension of hunting territories and that burnt mounds as places for the cooking of the proceeds of hunting expeditions may be physical evidence of this colonisation process (Ford and Torrance 2003). If this model for the development of the use of the landscape is to be reconsidered, the chronology and function of burnt mounds are topics which need further attention.

Mini-hillforts or ringworks

An uncommon monument of the Later Bronze Age with a predominantly eastern Britain distribution are defended ditched or double-ditched enclosures considered to be aristocratic residences with the term 'mini hillfort' or 'ringwork' being a workable description (Bradley 1984, 120; Cunliffe 1995). One such monument is considered to be present just beyond the study area at Rams Hill (Bradley and Ellison 1975; Needham and Ambers 1994). Within the study area, it has been suggested that an earthwork at Marshalls Hill in Reading (Whitley) originally considered to be a disc barrow, is, in fact a ringwork (Bradley 1984, 121). Sadly the latter site is now within a suburban setting and cannot at present be re-examined. A second monument within the study area, albeit neither on a hill, nor definitely an enclosure, may, nevertheless, be of a broadly similar class. Detailed examination of the aerial photographs of the Eton Wick causewayed enclosure show that the outer ditch circuit is partly overlain and reused by a ditch and palisade trench defining a substantial area of land greater than that of the causewayed enclosure. The small scale trial trenching carried out in 1985 confirmed a late Bronze Age date for this enclosure and leads to the suggestion that it is related to ringwork structures (Ford 1991, 316).

Non-hillfort, non-settlement enclosure

The archaeological literature for southern England contains references to some monuments which comprise areas of land which are defined by a simple enclosure ditch but which are of substantial larger area than settlement enclosures of the Middle Bronze Age or Iron Age. The ditches are neither of defensive proportions nor obviously linked to an extensive complex of enclosed landscape. Just a single example is thought to lie within the study area at Cow Down on the Berkshire Downs and is associated with LBA pottery (Rhodes 1950; Ford 1982a, fig. 1).

Emporia

One exceptional site, that of Runnymede Bridge (Longley 1980; Needham 1991) lies within the study area with a second at Whitecross Farm, Cholsey (Wallingford) (Thomas et al 1986; Cromarty et al 2006) just beyond the boundary to the north. These two Thames-side sites have distinctive features, namely preserved wooden revetments and presumably had landing stages for the docking of boats. The presence of landing stages for boats on the major rivers in the study area is interesting but should not be too surprising and perhaps a landing stage, presumably of utilitarian function is recorded at Anslows Cottages, Burghfield and dated to 840-410 Cal BC (Butterworth and Lobb 1992) but the most notable aspect of these sites is their wealth as evidenced by the presence of many late Bronze Age bronze objects. It is considered therefore that these sites function as emporia and are particularly important in the distribution of valuable bronze metalwork (Needham 1991). The distance between Runnymede Bridge and Wallingford is considerable (c. 60 km) with the confluences of two navigable rivers (Loddon, Kennet) in between. Many Bronze Age bronze objects have been dredged from the Thames and it is therefore possible that further such sites existed and may still exist. Sites and Monuments Record entries to wooden piles on the river bed at Reading (‘associated’ with a stone axe) and Maidenhead may be very tentative evidence for such sites.
Landscape enclosure

Within the Bronze Age physical evidence for elements of an enclosed landscape are to be found, with the greatest evidence for this in the late Bronze Age. This qualification is an acknowledgement that some of the (pottery) dating is Middle/late Bronze Age and with certain evidence elsewhere for the presence of landscape enclosure in the Early and Middle Bronze Age (Cox and Hearne 1991) and even Neolithic (Caulfield 1983). However, the chronology leans towards the later Bronze Age.

An initial phase of landscape enclosure appears to be represented in the late Bronze Age by the linear ditches on the Berkshire Downs (partly now lying within Oxfordshire and extending into Wiltshire). It has been suggested that the Berkshire Grims Ditch along the crest of the downs overlooking the Vale of the White Horse to the north is a major territorial boundary (Ford 1982a) whereas other linear ditches following the generally north-south ridges on the downs to the south are smaller territorial subdivisions (Ford 1982b). A contrasting landscape enclosure is to be found on the ridge between the Kennet and Enborne to the south of Newbury. Here subdivision is presented by a series of cross ridge dykes. These are undated and mostly lost to construction of the former Greenham Common airfield but are of comparable form to Bronze Age examples elsewhere in Wessex. The claim that these monuments are of Saxon date from an intervention in the 1940’s (O’Neill and Peake 1943) seems most improbable and should not be accepted without question (cf Bradley and Richards 1978).

This type of division of the landscape seems to be restricted to the downlands of the western part of the study area. However, an unusual triple ditch monument has been excavated at Bray (Barnes and Cleal 1995, 17). This contained Middle Bronze Age and other artefacts with a radiocarbon date of 1300-200 Cal BC from the upper fill but with an unfortunately wide calibration.

The presence of more intensive landscape enclosure (field systems) in the Late Bronze Age is now firmly attested for the study area and is widely reported for zones beyond the study area and for both Britain and Western Europe as a whole (Fowler 1981). For some regions perhaps best exemplified by the Dartmoor Reaves (Fleming 1978) these field systems have a unity of layout for extensive tracts of land (measured in square kilometres) and the term ‘coaxial’ or ‘cohesive’ is an apt description of the level of organisation required to create such an ordered landscape (Fleming 1985)). Yet despite the all too frequent use of this term (and its implications for a command/organisation structure) for other regions, the only unambiguous location where such a term may be applicable within the study area here in fact describes the Roman fields on the Berkshire Downs (Ford et al 1988).

For much of the study area the evidence of field systems has been derived from extensive area excavations, most notably for gravel extraction sites but also larger development sites. For the study area the notable sites are at Reading Business Park (Moore and Jennings 1992; Brossler 2004); Weir Bank Stud Farm, Bray (Barnes and Cleal 1995) and Kingsmead, Horton (WA 2006). Also of note are extensive projects in adjacent areas beyond the study area at Heathrow Terminal 5 (Lewis et al 2006) and Eton Rowing Lake (Allen and Welch 1998). By way of contrast, this physical evidence is largely absent from other geological outcrops in the study area such as the London Clay or chalklands of West Berkshire. For the latter zone, extensive areas of ‘Celtic’ fields are recorded but have been shown to be predominantly of Roman date with but a small proportion of prehistoric fields present (Bowden et al. 1993).

The presence of these landscape enclosures are particularly important in terms of the development of the concept of value attached to the holding of land and the investment needed to physically define these features. There are several topics of interest with regard to the presence of this landscape enclosure. A particular aspect relates to the distribution of these landscape sites. These features are not ubiquitous and quite extensive excavations have not revealed their presence, for example at Field Farm; Pingewood, Aldermaston Wharf, Knights Farm, Cippenham, and Dunston's Park (Butterworth and Lobb 1992; Bowden and Johnston 1986; Bradley et al 1980; Ford et al 2003; Fitzpatrick 1995). By way of contrast Late Bronze Age occupation sites are present much more widely than the distribution of the field systems. It is possible that this is a product of survivability as some field boundaries of even Medieval and Roman date can be but a few centimetres deep and easily ploughed out in subsequent times. Yet the fact that field system sites and indeed other relatively shallow prehistoric features are still to be found at all implies that differential preservation is not a satisfactory explanation for the distribution found.

The questions that can be raised of this topic therefore emphasise this disparity in the distribution of field systems and that of occupation sites. It might be considered that this is chronological and that the isolated occupation sites pre-date the floruit of fields except that there is a suggestion that the defined fields start in the Middle Bronze Age. Do we have therefore, as seems likely, several
subsistence patterns present—isolated farms, perhaps short-lived and mobile, at one extreme with more permanent settlements with investment in landholding at the other extreme? Or, is it that the isolated unenclosed occupation sites with little investment in landscape are the norm and that the field system sites are special? Aspects of this latter topic have recently been considered by Yates (1999) who has suggested that such field systems represent intense zones of agricultural intensification.

The Iron Age

The mature stage of Iron Age occupation lends itself to a broad level of categorization which may reflect both a hierarchy of settlement status as well as degrees of economic specialisation by design or default.

Hillforts

Seven hillforts are now included within the county boundary at Caesar's Camp, Bracknell, Grimsbury, Hermitage, Ramsbury, Cold Ash, Bussock Wood, Chieveley, Perborough Castle, Hampstead Norris and Walbury, Coombe, Membury, Lambourn (partly in Wiltshire) with a possible example at Borough Hill, Boxford (Cotton 1962; Lobb and Rose, fig. 16). None of these have been investigated to any great extent, though many have been trial trenched and some dating evidence obtained. The new county is though ringed by hill forts with Uffington Castle, Segsbury, Rams Hill, Alfreds Castle and Blewbury (as an outlier) located on the crest of the Berkshire Downs and hillforts on the north bank of Thames at Bozedown, Taplow and Medmenham.

Most of the new county, by and large, lies beyond the hill fort dominated zone of the Wessex/Sussex chalkland and the Marches (Cunliffe 1978, 285). The three forts on the opposite bank of the Thames including the recently discovered fort at Taplow (Allen and Lamdin-Whymark, 2000) provide a marked contrast for eastern Berkshire where, despite apparently similar topographic settings, no corresponding hillforts are recorded. Whether the discovery of the new fort at Taplow should act as a spur to examine (or re-examine- doubtless several generations of archaeologists have looked previously) closely locations such as Ashley Hill, Maidenhead is not known. At face value it seems to emphasise the Thames as major territorial boundary (Wait 1985). The hillfort at Caesars Camp seems an oddity, especially as located on the poor heathland soils of south east Berkshire but has been previously suggested that this site owes its existence to exploitation of iron deposits to be found on the tertiary geological outcrops nearby (Ford 1987, 80).

Enclosure

A discussion of 'enclosure' necessarily needs some working definitions of the terms to be used as three concepts of spatial organisation are considered below.

The first term is that of free standing enclosures. These can be considered to define settlement areas such as the long recognised Iron Age 'banjo' enclosures or the Deverel-Rimbury (Middle Bronze Age) enclosures of Wessex (Bersu 1942; Pitt-Rivers 1898) and which one function can be to separate living areas from stock. As a contrast, unoccupied enclosures may be to used to contain stock within occupied areas or arable areas in adjacent areas (Taylor 1997). In any event, as a summarising tool, they are a monument type that can be readily identified within the study area. Less clear cut are settlements with occupation zones amongst areas of enclosure. The occupied areas are not physically defined but lie within a general area of what can be described as paddocks with trackways, fences and very small enclosures, perhaps correctly ascribed as animal pens. For want of a better term enclosure complex is used. Finally, we have enclosure of the landscape as a whole (landscape enclosure), which at one extreme is that produced by the creation of linear earthworks and at the other by the creation of fields.

Free standing enclosure

A number of discrete enclosed Middle and Late Iron Age occupation sites have now been extensively investigated as at Wood Lane, Cippenham (Ford et al 2003), Thames Valley Park, Reading (Barnes et al 1997), Robin Hood Arbour, Maidenhead (Cotton 1961) and Harts Hill Copse, Thatcham (period 3) with 5th century BC radiocarbon dates (Collard et al 2006). These enclosures appear to be free standing, in that they are not associated with field systems or enclosure complexes. They contain variously round houses, four-post structures, pits, waterholes, etc. A number of other enclosures of
similar plan are visible from the air and are certainly or possibly of Iron Age date as for the trapezoidal enclosure overlying the causewayed enclosure at Eton Wick (Ford 1993).

More distinctive enclosures recorded from the air are those with antennae ditches (banjo enclosures) and which are more likely to be of Iron Age date (at least in the beginning in contrast to the than other less distinctive forms. Most ALL of these are recorded for the downland of West Berkshire (Richards 1978, figs 22, 23)

**Enclosure complexes**

The second type of enclosure is represented by enclosed areas of land where occupation zones are surrounded by further areas of enclosure as fields or paddocks and with ancillary features such as trackways. These are exemplified by extensively excavated sites as at Old Way Lane, Cippenham (Ford et al. 2003), Wickham Fields, Reading (Crockett 1996) and Park Farm, Binfield (Roberts et al. 1995).

**Landscape enclosure**

Physical evidence for landscape enclosure within the Iron Age is quite limited. This is particularly noteworthy with regard to the development of an ordered and enclosed landscape from the preceding later Bronze Age. If one assumes a progression with time, one finds an impasse in the presence of physical data. Whilst the presence of later Bronze Age landscape enclosure (field systems) are recorded for several locations within the study area and in adjacent regions there is still a conspicuous absence of Iron Age landscape enclosure (Yates 1999, 158). This leads to two conclusions; either there is a continuation of the enclosed landscape setting established in the Bronze Age, or that use of physical definitions of the land (by ditches) are obsolete.

The main landscape enclosure features of Iron Age date to be considered comprise a series of larger linear earthworks (to differentiate them from the smaller Late Bronze Age ones, see above) and pit alignments. As one large linear earthwork at Aldworth is of early Roman date (Ford 1982b), a degree of caution has to be applied when including undated monuments in any discussion. The majority of the linear earthworks are located in the higher part of the Thames Valley and seem to lie at regular intervals perpendicular to the Thames. Just one of these earthworks at Oxford Road, Reading, (Taylor 2005) has been partially investigated within the study area but without providing close dating evidence. Two of the series beyond the study area to the north at Moulsford (Ford 1990) and the South Oxfordshire Grims Ditch at Mongewell (Cromarty et al 2006) are of Iron Age date. In East Berkshire an earthwork in Maidenhead Thicket has also been dug and is of Iron Age date (Bowden et al. 1983). It is considered that the Thames itself is a major territorial boundary (Wait 1985).

A large earthwork at Padworth (Grims Ditch) has been investigated but is not conclusively dated though may relate to the Pre-Roman fortifications at Silchester (Astill 1980; Boon 1974).

Three pit alignments are recorded, two from aerial photography only and assigned an Iron Age date on morphological grounds alone. A third pit alignment at Horton (Ford and Pine 2003) is more likely to be of early Roman date.

**Unenclosed occupation**

Unenclosed occupation sites are quite rare within the study area, though again the larger number of partial investigations recorded within the sites and monuments record may include further examples of these. These unenclosed sites comprise either groups of ring gullies as at Fairclough Farm, Warfield (Torrance and Durden 2003), or single ring gullies as at Staff College Bracknell (Lowe forthcoming) with a single radiocarbon date of 357-117 Cal BC, and Baird Road, Arborfield (Hammond, forthcoming) which has three radiocarbon dates with a date range of 390-200 Cal BC. This latter site might be unusual as it included evidence for Iron smelting. It seems likely that these settlements should be regarded as the basic farmstead unit (contra Cunliffe 1984, 34).
Ceremony, ritual and religion

Middle Bronze Age

The ceremonial component for the Middle Bronze Age is primarily concerned with either the burial record and the deposition of metalwork in wet places. The burial record comprises three forms: A small number of round barrows are recorded with secondary cremation burials (‘urnfields’) as at Lambourn Seven Barrows mound 1 where 112 cremation burials (and one child inhumation) were recorded (Case 1956) though this number of burials is unusually large. More frequent are several flat cremation cemeteries perhaps exemplified at Shortheath Lane, Sulhampstead (Lobb 1992). Less than 20 such sites are recorded within the study area (Ford 1991, fig 6.12). Some of the cremation burials are not burials sensu-stricto but are token burials with pyre debris.

Satellite burials, ie single burials on the margins of ring ditches of Middle Bronze Age date are also recorded as at Heron’s House, Burghfield (Bradley and Richards 1979).

A number of single urned cremation burials are recorded as at Green Park, Reading which produced a C14 date of 1220-890 Cal BC (Brossler et. al. 2004, 16), and Old Way Lane, Cippenham (Ford et al 2003, 105) along with stray finds of Middle Bronze Age pottery which might derive from disturbed cremation burials (Ford 1991, fig 6.12). It is considered possible that some if not all of these do reflect a burial practice of deposition of single burials away from other burials or monuments. For many of the recorded examples, there is some doubt as to how certain the individual burial is isolated. However, recent large scale evaluation at Egham in Surrey repeatedly encountered isolated urned burials indicating that this practice may be common (Taylor 2003). Many open area excavations encounter undated cremation burials which might be of Bronze Age date as of any other.

Burial deposits specifically dated to the Late Bronze Age or Early/Middle Iron Age are very rare from a national perspective (Brück 1995) and none present in the study area. Burial deposits (cremations) of Late Iron Age date are recorded on occasion and a miscellany of human bone is recovered from occupation contexts where bone survival is good.

A particularly noteworthy activity, best considered under the term ceremony/religion is the deposition of Middle and Late Bronze Age metalwork in the major rivers of the study area, but especially that of the Thames. This topic has been exhaustively studied by others (eg Needham and Burgess 1980). In summary, the material often having been recovered by dredging is usually in good condition and includes high value items such as intact swords, which are particularly rare finds from dry land contexts. It is most improbable that such finds are a product of the erosion of river bank settlements (but note the comment on emporia above) and is most likely to represent votive deposition. Less frequently recovered are human remains, some of which are of later Bronze Age date (Bradley and Gordon 1987) and together they may represent a burial practice. This pattern of votive deposition appears also to be present within the Iron Age (and beyond) again with the recovery of material such iron swords which are rarely recovered from dry land contexts.

Economy

Middle Bronze Age

Economic evidence for the Middle Bronze Age, as for preceding periods, is limited by the relative paucity of suitable contexts for the accumulation of faunal and botanical remains. In effect, the only site where a range of contexts were present is at Weir Bank Stud Farm, Bray (Barnes and Cleal 1995). For the faunal remains, the exploited animal species list is of the usual domesticated animals with cattle, sheep and pig as the main three species. Cattle (56%) dominates both the number of bones recovered and also the meat weight. Sieving for charred plant remains recovered a range of plant species with emmer, spelt and club wheat present along with barley and rye. Flax was also present and is of note as species of economic importance.
Later Bronze Age/Early Iron Age

Economic data for this period is more extensive and is a direct result of the greater number of sites with suitable contexts for material to be preserved. Some differences in assemblage compositions can be observed and which might represent real differences in husbandry practice for which topics such as social status, land suitability, chronology, and specialisation might be applicable. The data set for the study area though is not sufficiently large to examine this complexity in detail. As above, for faunal remains, the exploited animal species list is predominantly of cattle, sheep and pig as the main three species. Horse is present in very small amounts (<5%) as are wild species such as red and roe deer and, on occasion, various birds. Of note is that neither fish bones nor shell fish are reported.

At sites such as Runnymede Bridge (Longley 1980) the (Late Bronze Age) enclosure overlying the causewayed enclosure at Eton Wick (Ford 1991-3) and Green Park, Reading (Brossler 2004), cattle bones predominate in both absolute numbers (59%, 76% and 66% respectively) as well as meat weight. This though contrasts with sites such as Pingewood (Bowden and Johnson 1986) where pig is dominant (52%) and cattle (21%) is represented less than sheep (52%). The cattle, though, still contributes the majority of the meat weight.

Where sieving by floatation has been extensively used, charred plant remains in addition to wood charcoal have been recovered from the majority of sites. It is disappointing to report, though, that by and large the volumes of material recovered is usually small with many features devoid of such material. This is exemplified at Harts Hill Copse, Thatcham where 90% of the 2289 charred plant remains recovered came from a single context (Collard et al, 2006, 378). The species represented within the study area appear to be fairly typical for the later Bronze Age in general and comprise cereal grains of emmer, spelt and less commonly bread wheat along with barley and much less commonly oat and rye. Other wild plant foods such as hazelnuts and crab apples are also reported on occasion. Some sites note the presence of crop processing waste and the economic species flax. For a few sites, where larger amounts of charred plant remains have been recovered, the composition of species can be examined such as at Aldermaston Wharf where barley comprised 80% of the assemblage and wheat just 20% (Bradley et al 1980, 247), whereas the single sample from Harts Hill Copse listed above comprised at least 50% wheat (Collard et al, 2006, 378). Many more similar assemblages would need to be recovered to fully consider any patterns observed in terms of land suitability, chronology, and specialisation.

Iron Age

Economic data for from the Iron Age proper is not especially well represented within the study area, with relatively few sites having been extensively dug and those examined, not prolific in surviving remains.

The small faunal assemblage recovered from the enclosure site at Wood Lane, Cippenham (Ford et al, 2003, 90) revealed a recurrence of the pattern identified for earlier periods, namely the dominance of cattle followed by sheep, but with and pig and horse as a minor species. At Thames Valley Park, Reading (Barnes et al 1997, 70) only one context produced more than a few fragments of bone. This sample was dominated by cattle with some sheep present and represents deposition of carcass processing waste.

For charred plant remains the two summaries of the earlier periods presented above could equally apply to the Iron Age. Where sieving has been employed, a modest amount of plant remains have been recovered with the usual range of species represented as for Early Iron Age contexts at Wickham Fields, Reading (Crockett 1996, 160) where spelt wheat, barley and chaff was present and the Middle Iron Age contexts at Thames Valley Park, Reading (Barnes et al 1997, 73) where spelt, emmer and bread/club wheat, barley, oat and chaff were all recorded.

Warfare

The trappings of warfare, are widespread with artefactual remains, such as swords and daggers from both the Bronze Age and Iron Ages. There is though a distinct absence of archery equipment. A small number of sites (such as Runnymede Bridge) have provide horse equipment and it is possible that these can be considered as being of military significance. There are also sites capable of defence, namely the
hillforts. One such fort, that at Taplow (Allen and Lamdin-Whymark, 2000) has been partially excavated and showing that the rampart had been burnt down, presumably as a hostile act.

**Craft, trade and industries**

**Metalworking**

With no natural outcrops of either copper or tin ores, it is not to be expected that evidence for bronze production would be found within the study area. Yet evidence for recycling is present in the form of hoards containing scrap material and it is also likely that hoards of standardised tools are to be regarded as ingots perhaps as a standard measure of trade/exchange (ref???). Yet several sites contain evidence of bronze metalworking with items such as a casting drip and unused rivet at Weathercock Hill on the Berkshire Downs (Bowden et al 1993), crucibles, mould fragments and a possible tuyere at Aldermaston Wharf (Bradley et al 1980, 244), a spearhead mould at Reading Business Park (Moore and Jennings 1992, 87) and a range of material with casting drips, ingots and a mis-cast razor still in its clay mould from Runnymede Bridge (Needham 1991).

**Iron working and Iron production**

The tertiary geological outcrops of the London Basin, which form the geological substrate of much of Berkshire, are certainly or potentially rich in iron deposits (Salter and Ehrenreich 1984). Some form of iron working in the form of small amounts of iron slag are to be found on several Iron Age sites but appear only to represent small scale metal working such as smithing. However, five sites have produced evidence for large amounts of slag and other material which appears to represent iron production. Two of these are in fact of traditional late Bronze Age date. At Baird Road, Arborfield a single Iron Age ring gully structure with this evidence of iron production produced 3 radiocarbon dates with a range of 390-200 Cal BC. (Hammond, forthcoming). Nearby, at Whitehall Brick and Tile works a more extensive site with substantial volumes of iron slag and furnace linings continued from late Iron Age times into the Roman period (Pine 2003).

These two sites lie within an area of south east Berkshire where a number of iron slag mounds are recorded (Ford 1987, fig. 38) though none have been excavated or are dated. It has been previously noted that the presence of these iron working sites also lies close to the only Iron Age hillfort in this area (Caesar's Camp) prompting the suggestion of an association. This association may be carried through into Roman times with a substantial settlement at Wickham Bushes perhaps replacing the hillfort.

Of particular note and of national importance are the late Bronze Age ironworking sites at Dunston's Park and Harts Hill Copse, both in Thatcham (Fitzpatrick, 1995; Collard et al 2006). Both these sites lie on or close to tertiary geological outcrops. At Harts Hill, a complex of post built roundhouses, pits and fencelines are recorded associated with iron working in the form of iron slag and hammerscale (Collard et al. 2006). The earliest iron working activity (phase 2) has been securely dated to the 10th century BC with 17 radiocarbon dates and pre-dates previous evidence for ironworking in the British Isles by some 3 centuries (op cit, 406). A second phase of activity within an enclosed settlement also produced iron slag and hammerscale and was dated by 11 radiocarbon dates to the 5th century BC. Further areas of ironworking nearby are also dated within the 5th century BC and are represented by the presence of in-situ smelting hearths. At Dunston's Park, to the south of Harts Hill Copse, iron slag and smelting was dated to the 7th century BC and found at two locations, one of which was found during evaluation and not subsequently excavated.

On a related topic the Sites and Monuments Records note several findspots of currency bars- sword shaped iron bars thought to be ingots (Cunliffe 1978) and of late Iron Age date. It is not known if these finds reflect local iron production.

**References**


Boon, G C, 1974, Silchester, The Roman Town of Calleva, Newton Abbott
Bradley, R J and Richards, J C, 1979, 'The excavation of two ring ditches at Herons House, Burghfield', Berkshire Archaeol J 70, 1–8
Bradley, R and Gordon, K 1987, 'Human skulls from the River Thames, their dating and significance', Antiquity, 62, 503-9
Brossler, A, Early, R and Allen, C, 2004, Green Park (Reading Business Park), Phase 2 excavations 1995 – Neolithic and Bronze Age sites, Oxford Archaeology, Thames Valley Landscapes Monogr 19, Oxford
Buckley, V (ed), 1990, Burnt offerings: International contributions to burnt mound archaeology, Dublin
Crockett, A, 1996, 'Iron Age to Saxon settlement at  Wickhams Field, near Reading, Berkshire', Dorset Natur Hist Archaeol Soc Monogr 9
Cromarty, A M, Barclay A and Lambrick, G and Robinson M, 2006, 'Whitecross Farm, Chelsey: A late Bronze Age waterfront site., in A M Cromarty, A Barclay, G Lambrick and M Robinson, The
archaeology of the Wallingford Bypass 1986-92, Oxford Archaeology Thames Valley Landscapes mongr 22, 9-156

Cunliffe B 1978, Iron Age Communities in Britain, London (2nd ed)


Cunliffe B 1995, Iron Age Britain, Batsford


English Heritage, 1991, Exploring our Past; Strategies for the Archaeology of England


Ford, S, 1982a, ‘Excavation and fieldwork on the Berkshire Grims ditch’, Oxoniensia, 47, 13–36


Ford, S, 1987, East Berkshire Archaeological Survey, Berkshire County Counc Dept Highways and Planning Occas Pap 1, Reading


Ford in prep, ‘Excavation of a Late Bronze Age enclosure, Roman features and Saxon halls at Wexham Road, Slough, Berkshire’ (Thames Valley Archaeological Services project 07/55, Reading


Hammond, S, (draft), The excavation of a Middle Iron Age occupation and iron smelting site at Baird Road, Arborfield (TVAS monograph 9)


Lobb, S J, 1992, ‘Excavation at Shortheath Lane, Abbots Farm, Sulhamstead’, in C A Butterworth and S J Lobb (eds), Excavations in the Burghfield Area, Berkshire, Wessex Archaeol rep 1, Salisbury, 73–8


Lowe, J, forthcoming, ‘Middle Bronze Age and Middle Iron Age occupation and post-medieval limekilns at RAF Staff College, Broad Lane, Bracknell, Berkshire’, draft publication report, Thames Valley Archaeological Services, Reading


Moore, J and Jennings, D, 1992, *Reading Business Park: a Bronze Age landscape*, Thames Valley Landscapes: the Kennet Valley, vol 1, Oxford Archaeol Unit


Pine, J forthcoming, ‘A Late Bronze Age burnt mound and other prehistoric features, and Roman occupation at Turnpike School, Gaywood Drive, Newbury’, (Thames Valley Archaeol Monogr series)

Pit Rivers, A, 1898, *Excavations in Cranbourne Chase* 4, privately printed


Smith, M A, 1959, ‘Some Somerset hoards and their place in the Bronze Age of southern Britain’, *Proc Prehist Soc* 25, 144–87


Taylor, A, 2003, Whitehall Lane, Egham, Surrey, an archaeological evaluation, Thames Valley Archaeological Services report 03/93, Reading

Taylor, A, 2005, Land at 885 Oxford Road, Reading, Berkshire, an archaeological evaluation, Thames Valley Archaeological Services report 05/09, Reading

Thomas, R, Robinson, M, Barrett J, and Wilson, R 1986 ‘A Late Bronze Age riverside settlement at Wallingford, Oxon’, *Archaeol J* 143, 174–200


WA 2006, Kingsmead Quarry, Horton, Berkshire, parts of extraction phases 4-7, psot-excavation assessment report, Wessex Archaeology, report 54635.03, Salisbury

Wait, G A, 1985, Ritual and Religion in Iron Age Britain, BAR 149 (Oxford)

<table>
<thead>
<tr>
<th>Site</th>
<th>Date (BP)</th>
<th>Calibrated dates (OxCal v3.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2 sigma (95.4%)</td>
</tr>
<tr>
<td><strong>Burial</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Herons House bucket urn</td>
<td>3060±100 (HAR 2754)</td>
<td>1550-1000</td>
</tr>
<tr>
<td>Clearance horizon</td>
<td>3040±90 (HAR 2749)</td>
<td>1500-1010</td>
</tr>
<tr>
<td>Field Farm collared urn</td>
<td>2890±60 (HAR 9143)</td>
<td>1270-900</td>
</tr>
<tr>
<td>Field Farm D-R urn</td>
<td>3690±120 (HAR 9140)</td>
<td>2500-1750</td>
</tr>
<tr>
<td>Green Park D-R urn</td>
<td>2857±60 (NZA 9422)</td>
<td>880-840</td>
</tr>
<tr>
<td>Knights Farm ring ditch</td>
<td>2820±110 (BM1596)</td>
<td>1400-750</td>
</tr>
<tr>
<td>Harts Hill cremation 448</td>
<td>3070±50 (GRA236384)</td>
<td>1320-1120 (weighted mean)</td>
</tr>
<tr>
<td></td>
<td>2945±35 (GRA23746)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2979±30 (OXA 12731)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3002±32 (OXA 12578)</td>
<td></td>
</tr>
<tr>
<td>Shortheath Lane urnfield</td>
<td>3340±60 (HAR 9141)</td>
<td>1770-1450</td>
</tr>
<tr>
<td><strong>Occupation sites</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harts Hill phase 2</td>
<td>17 Late Bronze Age dates</td>
<td>weighted mean 10th century BC</td>
</tr>
<tr>
<td>Harts Hill phase 3</td>
<td>7 Early Iron Age dates</td>
<td>weighted mean 5th century BC</td>
</tr>
<tr>
<td>Green Park pit 1518</td>
<td>2859±58 (NZA9412)</td>
<td>880-860</td>
</tr>
<tr>
<td>Bray (occupation)</td>
<td>3204±138 (UB-3513)</td>
<td>1900-1050</td>
</tr>
<tr>
<td>Triple ditch</td>
<td>2612±193 (UB3514)</td>
<td>1300-200</td>
</tr>
<tr>
<td>Aldermaston Wharf</td>
<td>3240±135 (BM1592)</td>
<td>1900-1100</td>
</tr>
<tr>
<td></td>
<td>3000±40 (BM1590)</td>
<td>1390-1110</td>
</tr>
<tr>
<td></td>
<td>2785±35 (BM1591)</td>
<td>1010-830</td>
</tr>
<tr>
<td>Knights Farm</td>
<td>3195±95 (BM1594)</td>
<td>1750-1200</td>
</tr>
<tr>
<td></td>
<td>2515±250 (BM1597)</td>
<td>1300-0</td>
</tr>
<tr>
<td></td>
<td>2240±120 (BM1595)</td>
<td>800-50</td>
</tr>
<tr>
<td></td>
<td>3050±90 (HAR1013)</td>
<td>1500-1020</td>
</tr>
<tr>
<td></td>
<td>3000±100 (HAR2929)</td>
<td>1500-900</td>
</tr>
<tr>
<td></td>
<td>2690±80 (HAR1011)</td>
<td>1050-500</td>
</tr>
<tr>
<td></td>
<td>2550±80 (HAR1012)</td>
<td>830-410</td>
</tr>
<tr>
<td>Baird Rd, Arborfield</td>
<td>2235 ±30 (KIA18801)</td>
<td>390-200</td>
</tr>
<tr>
<td></td>
<td>2210 ±30 (KIA18802)</td>
<td>380-180</td>
</tr>
<tr>
<td></td>
<td>2270 ±25 (KIA18803)</td>
<td>320-200</td>
</tr>
<tr>
<td>Staff College, Bracknell</td>
<td>2168±26 (KIA33859)</td>
<td>557-117</td>
</tr>
<tr>
<td><strong>Burnt mounds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barkham Square</td>
<td>2890±80 (BM2845)</td>
<td>1400-800</td>
</tr>
<tr>
<td></td>
<td>2540±50 (BM2846)</td>
<td>810-410</td>
</tr>
<tr>
<td>Turnpike School</td>
<td>2739 ±42 (KIA16420)</td>
<td>1000-800</td>
</tr>
<tr>
<td>(Green Park) overlies pit 1518</td>
<td>2859±58 (NZA9412)</td>
<td>(880-860)</td>
</tr>
<tr>
<td>Anslows Cottages landing stage</td>
<td>2570±70 (HAR9186)</td>
<td>840-410</td>
</tr>
<tr>
<td>Runnymede Bridge</td>
<td>43 Late Bronze Age dates</td>
<td></td>
</tr>
</tbody>
</table>