

Resource Assessment

The Neolithic and Bronze Age in Hampshire

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Inheritance

The Neolithic of Hampshire appears in the archaeological record as an abrupt change from the Late Mesolithic. This change manifests itself in the appearance of earthen monuments, technological developments in flintworking and a new range of object types, mostly in flint. In truth, as in much of the rest of the country, this dichotomy is an illusion created by the invisibility of the Mesolithic–Neolithic transition and the earliest Neolithic that we can see is undoubtedly many generations down the line from its origins. We still have little idea of what a transitional flint assemblage or site should look like – or consist of – while the repeated superimposition of Neolithic assemblages over Mesolithic ones, and the continued lack of structural and limited amount of economic and environmental evidence for the county, provide few clues.

There is no doubt that some specific aspects of ‘Neolithic’ culture were imported from the continent but the degree to which indigenous populations came to ‘settle down’ independently, and/or to interact with and absorb ideas, customs and even personnel from already ‘neolithicised’ communities, is as impossible to define here as it is for most of the British Isles. There seems no reason to suggest that one population was simply replaced by another.

From the earlier Neolithic to the earlier Bronze Age we can see a continuum of development in material culture, settlement pattern, social organisation and economy. The later part of the Bronze Age (Middle and Late in traditional terminology), however, does witness a fairly abrupt change in many aspects of life that is repeated all across southern England and indicates a relatively drastic reorganisation and realignment of society as a whole.

Chronology

Neolithic–Early Bronze Age

The archaeological record for Hampshire has done little to help us refine Neolithic chronologies. Apart from a series of long barrows and one small pit-circle, there are no positively identified, or dated, Neolithic monuments and few excavated sites or Late Neolithic–Early Bronze Age barrows.

Of 39 long barrows, only one, Nutbane, has been the subject of extensive modern excavation (with some work also undertaken at Bevis’s Grave; Rudkin unpublished) and a single radiocarbon date from a post-hole of the latest forecourt structure, of 3800–2900 cal BC (Table 1), is not very helpful (de Mallet Morgan 1959). (Radiocarbon dates cited in text have been recalibrated using Oxcal v3.9 with the datasets of Stuiver *et al.* 1998, rounded out to 10 years). Small-scale evaluation of South Wonston north long barrow (Winchester Museums Service; Gardiner 2002) did not produce any dating evidence or structural information. Long barrows come in a range of sizes and shapes and the traditional view is that, in general, long, trapezoidal mounds tend to be earlier than short, oval mounds, which sometimes have U-shaped rather than separate, parallel, flanking ditches. Hampshire long barrows cover the

entire range of sizes and shapes. Where they occur in pairs or clusters one barrow may be noticeably shorter or longer than the other(s), but there is no clear chronological pattern. However, as the recent programme of radiocarbon dating for long barrows has shown, their currency seems to be pretty much confined to the 38th–34th centuries cal BC (Whittle, pers. comm.; Whittle *et al.* forthcoming) which, at least, provides us with one chronological handle. By implication, this suggests that Hampshire had a ‘Neolithic’ by around 4000 cal BC.

There are no known causewayed enclosures in Hampshire, though at least one small (16.5 m external diameter) pit circle was discovered and excavated at Winnall Down, Winchester (Site R17; Fasham 1982) that has produced 4th millennium radiocarbon dates. The basal fills of the shallow scoops comprising the circle produced between them four red deer antlers, three of which gave dates ranging 3720–3000 cal BC (Table 1). A small amount of plain, Neolithic Bowl pottery and a handful of flints ‘longer and thinner than locally found Bronze Age flakes’ (*ibid.*, 22) were also recovered.

Neolithic pits and scoops were excavated at Burntwood Farm (Fasham 1980). Molluscan analysis by John Evans (in Fasham and Whinney 1991) on samples taken from two of the Neolithic pits indicated the presence of dry woodland at the time the pits were dug, with a clearance zone corresponding with the level dated to 3950–3050 cal BC (Table 1).

Only one group of flint mines is known from Hampshire, at Martin’s Clump, Over Wallop, just 3 km across the county boundary from the Easton Down mines in Wiltshire. There are no direct dates from Martin’s Clump but the flint assemblage is closely similar to that from Easton Down where an antler pick sealed in a gallery produced a date 3650–2700 cal BC (4480 ± 150 ; BM-190). This is late by comparison with the major Sussex mining complexes such as Cissbury and Blackpatch, but earlier than Grime’s Graves in Norfolk. Site stripping during the laying of an electricity cable here revealed the presence of at least four mineshafts and a quantity of flint waste, including roughout axes, was recorded (Fowler 1986).

Hampshire in the later Neolithic is again devoid of monuments but, in contrast to the earlier period, sees a massive increase in the number of surface scatter sites. There is no definable internal chronology to most of the evidence other than the introduction of a few typo-chronological flint tool forms that are, in Hampshire at least, only rarely associated with other forms of material culture and occasionally with burials.

Possible settlement features, including a circular structure and pits at Easton Lane (Site W29; Fasham *et al.* 1989; Fasham and Whinney 1991), were apparently associated with a considerable amount of worked flint and the only substantial assemblages of Grooved Ware and Peterborough Ware yet recorded from the county. Unfortunately there is considerable ambiguity in the dating of features at Easton Lane, for instance where a pit contained a few sherds of Grooved Ware, a ‘nest’ of flint flakes and four antler spatulae, but also six barbed and tanged arrowheads and a partial, crouched, human skeleton, while another contained both Neolithic Bowl and Peterborough Ware. The circular structure produced both Neolithic and Bronze Age pottery. The radiocarbon dates reflect these difficulties. One Grooved Ware pit produced a date of 2470–2030 cal BC (Table 1) but dates for the circular structure are

Middle Bronze Age (Table 1) and Iron Age. However, the presence of at least 16 features producing Late Neolithic pottery and the extent of the flint assemblage certainly suggest the presence here of a settlement.

Another of the M3 sites, Bridget's Farm (R5) included a closely spaced group of pits. These were devoid of artefacts but were assumed to be prehistoric and were dated in an attempt to establish their chronological position in relation to other features on the site. Three pits produced widely different dates, with that from pit 22 falling into the latest Neolithic at 2500–1900 BC (Table 1). Molluscan analysis indicated a largely wooded environment at this time (Evans in Fasham and Whinney 1991).

Excavation of the Great Barrow at Bishop's Waltham, on the Reading Beds close to the source of the River Hamble, recovered both a complex burial involving a cremation deposit in a tree trunk coffin and a probable inhumation accompanied by a Food Vessel, and a quantity of Neolithic flintwork and Peterborough Ware sherds. This material had probably become incorporated into the mound during barrow construction (Ashbee 1957).

In the present coastal zone, elements of a submerged forest in Langstone Harbour were recorded on an extremely low tide and provided radiocarbon dates of 3350–2910 cal BC and 2310±1940 cal BC (Table 1), both within the Neolithic (Allen and Gardiner 2000). Late Neolithic flintwork was recovered from the islands in the north of the Harbour.

Few Beaker or Early Bronze Age sites have been excavated and, though 'Beaker' surface flint assemblages can occasionally be recognised through the presence of a few diagnostic tool types, as at Worting Wood Basingstoke and Tegdown Hill (Gardiner 1988, cat. nos 239, 210), as there is otherwise little change in the flint technology it is generally impossible to isolate Early Bronze Age material from Late Neolithic flintwork. No Beaker associated or Early Bronze Ages settlement sites have been identified in the county though this may, at least in part, be a result of the masking effect of colluvium. Allen has recently demonstrated the presence of such probable settlement sites beneath colluvial deposits in Sussex, Wiltshire and Dorset (Allen 2005) and provides a topic for further consideration in Hampshire.

A few burial sites and monuments have been excavated. One of two inhumation burials, dated to 2470–2010 cal BC (Table 1), at Chilbolton was accompanied by a Beaker, gold earrings, a copper alloy dagger and other objects (Russel 1990). The burial found in pit 1017 at Easton Lane, mentioned above, seems most likely to be a Beaker burial, though no Beaker vessel was recovered.

The inventory of dated Early Bronze Age burials is very small. A pair of contiguous round barrows at Walworth Andover (Test Valley Archaeological Trust; Gardiner 2002) formed a figure-of-eight and, though disturbed by a 19th century AD robber trench, produced cremated human remains including that of a child accompanied by part of a Collared Urn. A 'rescue' excavation on the site of a new roundabout on Portsdown investigated the poorly preserved skeleton of a young female accompanied by an incense cup and a miniature urn similar to examples recovered from barrows on Hengistbury Head (Rudkin 1989; Gardiner 1987). A rather late radiocarbon date was obtained of 1410–1050 cal BC (Table 1). The find was made close to the spot where a

'Wessex' cremation burial, an undated cremation burial, a feature containing burnt flint and a pit containing a Food Vessel had previously been recovered (Corney *et al.* 1967). An unusual, probable inhumation, burial, apparently superimposed over a cremation deposit in a tree trunk coffin, in the Great Barrow Bishop's Waltham, was accompanied by a Food Vessel (Ashbee 1957). A barrow at Barnet Copse Chalton also produced a Collared Urn as did those at Twyford Down Winchester (Walker and Farwell 2000), Micheldever Wood (Fasham and Ross 1978) and Buckskin Basingstoke (Allen *et al.* 1995). Radiocarbon dates of 2300–1750 cal BC (Table 1) were obtained from overlying mound material at Micheldever Wood and of 1750–1400 for a secondary cremation post-dating the construction of the mound over Collared Urn material at Buckskin (Allen *et al.* 1995).

This rather meagre evidence is in sharp contrast to the situation on the present coastal plain around Bournemouth and Christchurch Harbours just into Dorset (formerly in Hampshire) where large assemblages of Beaker, Collared Urn and other Early Bronze Age pottery indicate the presence of extensive urnfields and, *inter alia*, settlement on the sands and gravels.

Mature Bronze Age

The mature Bronze Age in Hampshire is more clearly visible archaeologically with evidence for settlements and cemeteries as well as flint scatters and metalwork hoards spanning the Middle and Late Bronze Age. Excavations carried out in advance of road building, aggregate extraction and building developments have revealed fragments of Bronze Age landscapes but direct dating evidence is again rather meagre and has not assisted in refining the accepted sequence for southern England generally. Middle Bronze Age settlement and cemetery data is most frequently associated with Deverel Rimbury style pottery that seems to have been current in the county during the 16th–13th centuries cal BC with the majority of known sites occurring on the downs (eg, Winnall Down, Easton Lane, Kalis Corner Kimpton, and Westbury West Meon (Fasham 1985; Fasham *et al.* 1989; Dacre and Ellison 1981; Lewis and Walker 1977) with secondary use of the Twyford Down ring-ditch for both cremation and inhumation burials c 1680-1390 cal BC (Walker and Farwell 2000). A Bronze Age flint assemblage from the barrow ditch at Micheldever Wood (R4) post-dated a layer containing charcoal dated to 1890–1440 cal BC (Table 1).

Post-Deverel Rimbury pottery of the later Bronze Age has also been recovered from various locations such as Winnall Down, Popley and Twyford Down (Fasham 1985; Wessex Archaeology 2005; 2006; Woodward in Walker and Farwell 2000) as have quantities of coarse, thick-walled, pottery from the present coastal plain, notably in Langstone Harbour, where it seems to have been made, and largely used for cremation urns (Allen and Gardiner 2000). Metalworking hoards provide a typochronological framework which is occasionally complemented by scientific dating, as at Testwood where an Acton Park phase copper alloy rapier was found beneath a wooden bridge, one of several wooden structures dating to c. 1600–1470 cal BC (Wessex Archaeology in prep.). Linear Ditches of the later Bronze Age are also extensive in Hampshire, where over 800 km have been recognised (Bowen 1978), stretches of which overlie earlier field patterns.

Landscape, landuse and site distribution

Site distribution

Early Neolithic flintwork is, in Hampshire as elsewhere, notoriously difficult to identify, particularly where it may be mixed with material of other periods – a frequent occurrence on the South Downs. Nevertheless, early elements have been tentatively identified among a number of surface collected assemblages across the chalk, mainly on clay with flints, with a notable concentration on the high downs around Basingstoke. This is undoubtedly partly a reflection of the thoroughness in collection of one individual in the area (G W Willis) but it should be noted that few items of debitage (potentially the most diagnostic elements) were recovered by him. At least 11 such assemblages were examined by Gardiner (1988), of which the most convincing, from Tunworth (*ibid.*, cat. no. 215), includes several broken roughout and polished axes, an unfinished leaf arrowhead, two laurel leaves and end scrapers. An earlier Neolithic scatter was reported overlooking the Avon valley near Breamore (Light *et al.* 1995).

In an attempt to gain any indication of the physical extent of Early Neolithic activity in Hampshire, if not its nature or internal chronology, Gardiner plotted the distance of over 100 recorded leaf shaped arrowheads – one of few type ‘fossils’ – against that of long barrows. Given that the distribution of the barrows is hardly random and that a third of the total of arrowheads were found more than 10 km from the nearest long barrow, there was still a clear drop-off in numbers with distance. Arrowheads may be considered task-specific and were certainly portable and, if used for hunting as has long been assumed, then they are likely to have been carried and lost away from settlements. Nevertheless, the distribution suggests that core areas of Early Neolithic activity were indeed focused in areas with long barrows (Gardiner 1988; 1996).

The distribution of polished and flaked axes, though they had a long currency during the Neolithic and Bronze Ages, shows a major concentration across the northern downs but also indicates activity on the southern plain, the southern side of the Thames valley and into the New Forest. Very few axes have been found on the Wealden Greensands in Hampshire.

No Early Neolithic scatters have been identified south of the chalk or on the Greensands and this latter absence seems to be reflected in counties to the east. Perhaps more surprising is the lack of such material in the northern part of Cranborne Chase and adjacent downland - though it has received much less attention than the main area of the chase beyond Bokerley Dyke. Fieldwalking around Rockbourne recorded a number of flint scatters of mixed date (Avon Valley Research Group; Light *et al.* 1995).

Later Neolithic–Early Bronze Age flint scatters occur widely on the downs, most frequently associated with areas capped by clay with flints. Discussion of their nature and composition has been well rehearsed in the literature and does not require detailed consideration again here (Gardiner 1984; 1988; 1990). Analysis of more than 100 surface flint assemblages indicated to Gardiner the extensive and intensive occupation of the northern downs with flint scatters dominated by processing tools such as scrapers, piercers, fabricators and simple retouched pieces, supplemented by axes, chisels and a variety of core tools. In some areas, large concentrations of roughout

axes, picks, and heavy core tools suggest an emphasis on the initial extraction and working of flint and, though widespread, polished axes are comparatively few by comparison both with flaked axes and with adjacent counties. Pottery is, of course, lacking but excavation of a barrow at Roundwood, near Whitchurch, in 1920 revealed an old land surface from which was recovered a small amount of Neolithic flintwork, including a broken leaf arrowhead, with some possible Grooved Ware from the 'scraped up' barrow mound (Crawford 1925; Gardiner 1988, cat. no. 355).

That the northern downs, and clay with flints zone in particular, represent a principal area of domestic settlement at this time is further suggested by a survey of surface artefact scatters on County Council owned property (Boismier 1994) which indicated that Neolithic–Early Bronze Age scatters that could be characterised as representing long-term permanent occupation or multiple re-occupation were concentrated on properties in those areas.

The southern part of the downs has been less well explored by flint collectors and has experienced fewer major developments leading to site recovery. The general impression, however, is that the southern downs saw rather less intensive, and smaller scale, settlement than the northern part. Around Winchester there are a number of sites that have produced Neolithic flintwork and groups of pits associated with Peterborough and/or Grooved Ware pottery, for instance at Easton Lane (Fasham *et al.* 1989) and Itchen Abbas (Hampshire Archaeology; Gardiner 2002) but the full extent and nature of these sites has been masked by later activity. The presence of cut features may imply a different emphasis of activity than further north, though the northern sites have rarely been tested by excavation. Extensive surveys in the Meon and Avon valleys recorded numerous small assemblages of flintwork, mostly located on lower chalk and gravel spurs overlooking the rivers, but no major scatters (Schofield 1995; Light *et al.* 1995). Chris Draper's work also recorded dispersed, small scatters, often in areas that had already seen Mesolithic activity, for instance on Butser Hill, Salt Hill, Old Winchester Hill, Beacon Hill Exton, Windmill Hill Chalton and Oxenbourne Down (Draper 1957; 1968; Gardiner 1988, cat. nos 027, 176, 144, 012, 232, 145).

A less clear picture emerges away from the chalk. The East Hampshire Field Survey recorded a diffuse scattering of Late Neolithic–Early Bronze flintwork with no obvious concentrations on the eastern Greensands and lower chalk slopes (Shennan 1985). Further north, in Binstead parish, small concentrations occur on the high plateau area away from the escarpment, above the Greensand/Gault springline (Alice Holt Survey Group). This survey recorded an embanked, egg-shaped enclosure, considered to be of Early Bronze Age date, 183 m in maximum diameter, that seems to have contained an inner ring of post-holes 46 m in diameter. A late form of flint axe, copying a copper flat axe, was recovered from the bank of a stream cutting through the enclosure.

The current coastal plain seems to have seen rather more activity though it is difficult to determine what that consisted of. Flint assemblages eroding out of the intertidal zone in Southampton, Portsmouth, Chichester and, especially, Langstone Harbours include a clear Late Neolithic–Early Bronze Age element (Allen and Gardiner 2000).

Hampshire is also lacking in major concentrations of the 'fancy' barrows that frequently overlie Beaker or 'Wessex' associated burials. Only 19 'disc' barrows and around 30 'Bell barrows' were listed by Grinsell (1938–40; 1974; Fasham and Schadla-Hall 1981). The distribution of these shows some clustering, however, leading Tomalin to suggest that foci for Early Bronze Age settlement should be sought in the south of the county along the Beaulieu and Lymington Rivers and on the chalk between the upper reaches of the Test and Meon (Tomalin 1996, fig. 6). It is quite likely that early fields and, indeed, Beaker and Early Bronze Age settlements, survive under hillwash in many of the chalk valleys, as has recently been demonstrated by Allen (2005) in parts of Sussex, Dorset and Wiltshire.

The mature Bronze Age sees a continued emphasis on the chalklands. Enclosure settlements such as those found in Dorset and Sussex have not been identified on the ground or from the air in Hampshire. With a lack of upstanding earthworks it is not surprising, therefore, that comparatively few settlements have come to light unless large-scale site stripping has been required in advance of development. Such programmes of work have shown that open settlements do survive though traces of field systems have mostly been obliterated by ploughing. Hut circles and associated postholes, pits, burial monuments and, occasionally, fields have been excavated at various sites around Winchester in advance of road construction (see, for instance Fasham and Whinney 1991; Fasham *et al.* 1989), at Popley Basingstoke (Wessex Archaeology 2005; 2006) and elsewhere in the central and south-eastern downs, for instance at Westbury, West Meon (Lewis and Walker 1977) and Chalton (Cunliffe 1970). An extensive field system associated with later Bronze Age Linear Ditches was investigated as part of the Danebury Environs Project around Cholderton Hill (Cunliffe and Poole 2000).

Most of these sites are associated with Deverel Rimbury and related ceramics. It seems likely, however, that later settlements utilising post-Deverel Rimbury wares may be more frequent than they so far appear as early excavators are likely to have mis-identified these ceramics which were only clearly described by Barrett in 1980. The recently examined settlement at Popley, for instance, produced a sizeable assemblage of post-Deverel Rimbury pottery alongside settlement features with Deverel Rimbury wares, as did the settlement that post-dated the Deverel Rimbury burials at Twyford Down (Walker and Farwell 2000). It is likely that many more settlement sites remain to be uncovered. Flint scatter sites also occur widely scattered on the downs but with a continued emphasis on the high downs (though again this may be partly a collection bias).

While the extensive Middle Bronze Age systems that are to be expected on the downs seem to have only rarely survived the plough, Linear Ditch systems, a consistent feature of the southern English chalklands generally, are extensively present on the Hampshire downs too indicating that a similar organisation of landuse took place here as elsewhere in the later Bronze Age. Most of those that survive lie in a band running across the central downs (Bowen 1978, fig. 2) but it is not clear if this is a real pattern or the result of modern agricultural practices and urban development in the north of the county.

Away from the downs, aggregate extraction sites and methodical field surveys provide the best opportunities for recording Bronze Age settlements, though few have

yet come to light. At least 12 hectares of Bronze Age landscape, including at least one settlement, were recorded in fieldwalking and trial trenching at Rookery Farm, Kingsley (inf. Wessex Archaeology).

The present coastal plain has produced a wealth of Bronze Age flintwork and metal hoards. At least 10 hoards of Middle Bronze Age palstaves, some of them accompanied by scrap metal, are recorded though later hoards are generally found away from the coastal plain. While it seems probable that little actual settlement occurred in this area, there seems to have been considerable activity, especially burial with urned cremation deposits made in flat grave cemeteries (Allen and Gardiner 2000).

The distribution of barrows, most graphically indicated by Fasham and Schadla Hall (1991, fig. 12) indicates that most parts of the county were used for burial, even if settlement evidence is scattered or so far unknown (see below).

Landscape and landuse

By contrast with, but extending the trends observed towards the latter part of the Mesolithic, Neolithic settlement in Hampshire seems to have strongly favoured the chalk downlands and does not show the bias towards the major river valleys that was observable in the distribution of Late Mesolithic sites. The Greensands and lowland tertiary deposits reveal only general, diffuse scatters of largely undiagnostic material which seems to indicate that they were no longer a focus of long-term or repeated, intense, occupation. Many factors are likely to have combined to effect or necessitate this apparent shift of settlement emphasis, amongst which we might include: natural vegetational changes resulting from climatic change; the degeneration of fragile sandy soils following initial clearance episodes; the discovery of deep, cultivable soils and development of rich grassland following clearance of the deciduous woodlands of the chalk; an increasing need for good supplies of large, quality flint nodules leading to exploration and occupation of the high downs; and increasing population.

The current coastal plain does not, so far as we can now tell, seem to have been heavily populated. During much of the Neolithic period it seems to have supported a mixture of open deciduous woodland, alder carr, and grassland. Seasonal waterlogging and possibly some tidal influences are indicated by pollen evidence from peat sequences in Langstone Harbour (Allen and Gardiner 2000, 205-6). The flintwork from Langstone revealed a restricted range of forms and led Bradley and Hooper (1974) and, later Gardiner (in Allen and Gardiner 2000) to suggest that this assemblage was essentially non-domestic in character and probably represented seasonal, short-term grazing and associated activities. As such it should be considered peripheral but not marginal to main areas of occupation at this time. Boismier's study of flint assemblages from County Council owned properties (1994) in the south of the county reached a similar conclusion.

The emphasis of occupation on the chalk seems to have continued into the mature Bronze Age. Settlement sites are less visible in this county than in other areas of southern England, where enclosed settlements and field systems defined by lynchetts have better survived the intensive ploughing of the last 200 years. Nevertheless, where they do survive it is clear that they are of broadly similar character to those

familiar elsewhere and that many are associated with burial monuments containing multiple cremation burials and occasionally mixed rite cemeteries.

A limited number of sites have been sampled for land snails and the results are tantalising. Molluscs from the settlement and associated features at Easton Down (Allen in Fasham *et al.* 1989) indicate a long period of stable open grassland with some arable while the nearby barrow (R7), with its mixed rite burials, was apparently constructed in open grassland with some woodland regeneration following, and then further clearance. Only small scale clearance was indicated at the Twyford Down ring-ditch (Allen in Walker and Farwell 2000) in the earlier Bronze Age where, even though more extensive clearance is indicated by the time that the Deverel Rimbury burials were made there still seems to have been localised stands of ancient woodland. Lynchets from fields associated with the Late Bronze Age settlement here showed an increase in grassland with a gradual change to predominantly arable. Animal bone assemblages are also few, but cattle, sheep/goat, pig and horse were all recorded from mature Bronze Age contexts at Easton Lane (Maltby in Fasham *et al.* 1989) and the Twyford Down settlement (along with dog and red deer; Powell *et al.* in Walker and Farwell 2000) and it seems not unreasonable to assume that a mixed arable/pastoral regime pertained over most of the chalkland during the 2nd millennium BC.

A realignment and reorganisation of farming is indicated by the construction of the Linear Ditches, in harmony with a similar phenomenon elsewhere on the chalk. How far this reflects pure necessity in the face of diminishing agricultural returns on soils that had already been subject to hundreds of years of cultivation, or to what extent it was just one result of a major shift in social organisation and economy, is currently impossible to gauge. Gardiner commented (1988, 478–9) that there seems to be general drift away from the traditional clay with flints areas onto slightly lower, ‘bare’ chalk soils and valley slopes, which may indicate waning fertility in the long-farmed areas. Colin Bowen’s distribution map of Hampshire Linear Ditches (1978, fig. 2), based on RCHME plotting, shows clearly that these ditch systems mostly occur in the central part of the downs, which seems to support this idea, though how far this is a reflection of survival rather than actual distribution is difficult to assess. There are clearly some ditch systems with later Bronze Age origins in the northern downs around Danebury (eg Windy Dido and Quarley; Cunliffe and Poole 2000). The nature and distribution of the later Bronze Age farming pattern is a topic that deserves further targeted consideration.

Pollen evidence from sites away from the chalk, predominantly in the New Forest where Bronze Age settlement evidence is sparse but barrows quite numerous, indicates a rapid decline in soil fertility and onset of acidic heathland conditions. Whether this was the result of a gradual colonisation and use of this area that has not been archaeologically visible, or represents a short term attempt at cultivation is not known.

The present coastal plain has provided limited evidence for activity other than burial (of both people and metalwork). The extensive flint assemblage from Langstone Harbour, which, on North Binness Island was accompanied by at least one hearth and a ditch, suggests the continued use of increasingly wet and brackish grassland essentially for grazing rather than settlement (Allen and Gardiner 2000).

Social organisation

Unlike most of the counties that surround it, Hampshire has very few Neolithic monuments. Apart from its long barrows and just a couple of excavated, small, interrupted pit circles and ring-ditches producing Neolithic bowl pottery, it lacks the auspicious earthworks, such as causewayed enclosures, henges and cursuses, that so dominate the landscapes of Wiltshire, Dorset and, to a lesser extent, Sussex.

The long barrows are not randomly distributed but cluster in Cranbone Chase (where they extend the ostentatious complex of Neolithic–Bronze Age monuments focused on the Dorset Cursus), and in various prominent areas of the chalk, with outliers in the central chalklands, the north-east and on Portsdown. The general paucity of other unidentified Early Neolithic material makes it difficult to comment on their significance, other than to say that they are, of course, a well known phenomenon of the period that here, as elsewhere, imply a degree of social organisation that can only belong to a mature, rather than a pioneering, Early Neolithic stage. As such they also indicate that a broadly similar system of social organisation operated in Hampshire as elsewhere in southern England. The lack of causewayed enclosures may imply a less, or more slowly, developed social order than elsewhere or, perhaps, simply a smaller and more widely dispersed population.

The Late Neolithic in southern England saw the rise of a new social order in which individuals were able to acquire status through, most noticeably, the manipulation of production and consumption of luxury and exotic items. A shared system of beliefs and networks of exchange were established over large areas and this can be seen in the distribution and context of specific artefact types and in the construction and use of new types of monuments. In Hampshire there are, so far as we know, no such monuments and a comparatively small selection of luxury items. The range and quantity of high status goods, such as polished flint tools, fancy knives of various forms and imported stone objects, is very low by comparison with neighbouring counties like Sussex and Dorset (Gardiner 1984; 1988; 1990; 1996). There are also very few recorded sites with pits containing pottery and evidence for structured deposition and, in the later Neolithic and Early Bronze Age, comparatively few richly furnished individual burials. Yet, at the same time, there is a vast array of surface flint scatters implying a fairly large resident population. This seems to further suggest that Hampshire, for reasons completely unknown to us, was something of a cultural backwater for much of the Neolithic but was, nevertheless, part of a much wider system that operated over much of the country.

Although it is less well documented in Hampshire than in other counties of southern England it is clear that the mature Bronze Age saw a dislocation in traditional lifestyle. All across the South Downs, by the second half of the 2nd millennium BC there is evidence of extensive soil erosion and the accumulation of deep deposits of colluvium. The tilth that had been so productive for so long began to break down and to be washed into valleys and away from the traditionally farmed areas. Although the effects would only have been felt gradually, eventually a drastic reorganisation in landuse was necessary in order to bring the land back to productivity. In Hampshire we see the rise of permanent open settlements with post-built structures and associated burial mounds containing multiple burials. We can assume, though we can rarely see them any more, that these settlements were accompanied by carefully laid

out and managed fields which, in time, were superceded by a system of land division that was based on extensive Linear Ditch complexes.

A mixed farming regime in which animal husbandry may have eventually taken precedence would be in keeping with clearer evidence elsewhere and the production, distribution and consumption of 'secondary products' – textiles, wool, leather, meat and milk products for example – would have enabled the development of an expansive and varied economy. At the same time there were major changes in many aspects of material culture and the introduction of new technologies, skills and materials, particularly metals. In combination these reflect a significant shift in social organisation and the balance of power, with a new system that was based on the control of land and what it could produce, directly or indirectly, and on the large-scale production and exchange of tools and equipment, weapons and ornaments, rather than of a limited range of exotic high-status objects.

Settlements

There are no Neolithic structural remains indicative of settlements in Hampshire. The circular structure recorded at Easton Down was only ambiguously associated with Late Neolithic pottery and its radiocarbon dates indicate that it belongs with the later, Bronze Age, activity on site (Fasham *et al.* 1989; Fasham and Whinney 1991). Neolithic pottery is comparatively rare in the county and has virtually all been found in pits or accidentally during barrow excavations (eg, Ashbee 1957), though the incidence of such features is, again, very low by comparison with other counties of southern England. A few instances of Early Neolithic pottery in possible domestic contexts are (poorly) reported from Broom Hill, Michelmersh (Percival and Piggott 1934) and Corhampton (Piggott 1954) but the only recent finds are from probable non-domestic contexts (see below). Both Peterborough Wares and Grooved Ware have been recorded, usually on the same site (but in different features), as at Easton Down (*ibid.*) and Itchen Abbas (Hampshire Archaeology; Gardiner 2002), and at several locations in the south of the County.

There is a corresponding lack of environmental evidence that might indicate principal episodes of woodland clearance, cultivation or husbandry practices. Animal bone assemblages are lacking though domesticated cattle and pig are recorded from Easton Lane (Maltby in Fasham *et al.* 1989; Serjeantson 1996), where red deer antler were also reported. An aurochs horn-core was found with Neolithic pottery during excavation of a septic tank pit at Corhampton (Grigson and Smith 1985). Plant remains are few (Murphy 1977) and recent large-scale excavations with full sampling programmes have added little information – a few battered cereal grains came from Neolithic contexts at Easton Lane (Fasham *et al.* 1989; Allen 1996). Molluscan evidence from various of the M3 sites Andover, suggest a largely wooded environment with localised clearings at this time (Evans in Fasham and Whinney 1991; Allen in Fasham *et al.* 1989; Allen 1996); while that from beneath the Early Bronze Age barrow at Buckskin indicated localised but fairly long-term clearance of deciduous woodland in the later Neolithic with possibly some vegetation regeneration before the barrow was built (Allen *et al.* 1995).

Hampshire has so far failed to reveal the enclosed Bronze Age settlements that are found elsewhere on the South Downs but seems instead to have supported mainly open settlement sites that included most of the elements seen elsewhere – post-built

round-houses and other amorphous structures, pits, fencelines, and ditches (eg Easton Down, Winnall Down, Twyford Down and Popley; Fasham *et al.* 1989; Fasham 1985; Walker and Farwell 2000; Wessex Archaeology 2005; 2006). Environmental information from Easton Down is slight but with all the major domesticates represented and a few poorly preserved cereal grains that included 6-row barley (Maltby and Carruthers in Fasham *et al.* 1989). The molluscan evidence indicated open grassland and arable (Allen in Fasham *et al.* 1989). A few bones of cattle and sheep/goat and a single grain of barley were recorded from later Bronze Age contexts at Winnall Down (Fasham 1985). Wheat and barley were reported from the Late Bronze Age settlement at Twyford Down where cattle, sheep/goat, horse, pig, dog and red deer were represented by small numbers of bones (Stevens and Powell *et al.* in Walker and Farwell 2000).

Molluscan evidence from the Windy Dido and Quarley Linear Ditches indicates that they and an associated field system were constructed in long-established open grassland (Evans in Cunliffe and Poole 2000).

Although considerable quantities of later Bronze Age flintwork, metalwork and pottery are known from the present coastal margins these do not generally seem to represent permanent settlements (see Allen and Gardiner 2000 for a recent discussion). The northern parts of what are now the Solent harbours were probably becoming increasingly wet and saline at this time supporting saltmarshes that would have provided rich grazing and also game for fishing, hunting and fowling. The area seems to have been liminal in terms of settlement but was a zone of manufacture (pottery and metal objects and possibly salt) and deposition – of human burials, pots and metal hoards. Slightly further inland, on lowlying but drier ground, there is some evidence for more permanent settlement at, for instance, Creek Field Hayling Island, Gosport and Havant (Allen and Gardiner 2000; Hall and Ford 1994; Crosby 1993) as well as in similar locations in East Sussex (eg Bosham; Gardiner and Hamilton 1997). Allen and Gardiner presented a model of landuse for the various topographic zones in the hinterland of Langstone Harbour (2000, fig. 67).

Ceremony, ritual and religion

The Neolithic in Hampshire is remarkable in southern England for its lack of monuments and of clear indications of ritual or ceremonial activities, apart from its long barrows. Even the few sites producing ceramic associated pits reveal but little evidence of structured deposition in their contents. At the same time, there is no evidence to suggest that the Neolithic population of Hampshire was significantly *different* in terms of its belief system.

Excavated Beaker and Early Bronze Age burials are rare in Hampshire. Excluding those from locations that are now in Dorset, Clarke (1970, appendix 6) listed only 22 finds of Beakers from Hampshire (as compared with 89 from Dorset and 183 from Wiltshire, for instance) and Grinsell recorded only 19 ‘disc’ barrows and around 30 ‘Bell barrows’ (1938–40; 1974; Fasham and Schadla-Hall 1981). The Bell Beaker accompanied inhumation at Chilbolton (Russel 1990) was also furnished with two pairs of gold ‘earrings’ and a gold bead, an antler spatula, 50 stone beads, a copper alloy dagger and flintwork. This burial had been placed in a pit covered by a wooden mortuary chamber and surrounded by a ditch, presumably marking the perimeter of a barrow. A second, slightly later, individual was accompanied by two flint flakes and a

pot decorated with fingernail impressions. The partial crouched burial in a pit at Easton Lane contained no Beaker but the presence of a 'nest' of flint flakes including a fabricator, four antler spatulae, a bone awl and six barbed and tanged arrowheads strongly suggest that it should be considered to be a Beaker burial.

A 'Wessex' cremation burial accompanied by what was probably a composite necklace composed of over 100 discoidal shale and 16 amber beads and a gold-covered shale button was excavated on Portsdown (Corney *et al.* 1967), with further finds of Food Vessel and a second burial accompanied by an incense cup and a miniature urn similar to examples recovered from barrows on Hengistbury Head (Rudkin 1989; Gardiner 1987), where another 'Wessex' burial was recorded. Occasional 'outliers' of 'Wessex' burials occur in isolated positions away from their main focus in Wiltshire and parts of Dorset. These are most frequently individual cremation burials, often of adult females, and usually accompanied by a food vessel and/or other miniature vessel such as an incense cup, with few other grave-goods. The Portsdown burial(s) fits this pattern.

Few Early Bronze Age burials have been excavated either. As one of few examples, area excavation at Easton Lane recorded several groups of pits that contained the remains of cremation and inhumation burials with Collared and bipartite urns (Fasham *et al.* 1989). Given the small number of excavated barrows, it is perhaps significant that several of them have proved unusual in terms of sequences of construction and/or deposition. A pair of contiguous round barrows at Walworth Andover (Test Valley Archaeological Trust; Gardiner 2002) formed a figure-of-eight and produced cremated human remains including that of a child accompanied by part of a Collared Urn. Two inhumation burials and that of a complete cow were also found, as were Beaker sherds. The unusual, 'linked' nature of these barrows is not unknown and is, for instance, reminiscent of a linked pair at Thomas Hardye School, Dorchester (Gardiner *et al.* forthcoming). Those monuments were also associated with Collared Urn burials but overlay a flat, Beaker cemetery and also incorporated the fragmentary remains of a probable 'Wessex' cremation burial with a composite stone and shell bead necklace.

The Great Barrow, Bishop's Waltham was built over a central pit which contained the remains of a burnt tree-trunk coffin containing a cremation deposit, probably of a young adult, accompanied by a copper alloy Camerton-Snowhill type dagger and a knife dagger associated with decayed plant fibres suggesting the placing of straw in the coffin. Separated from the cremated bone and coffin base by a layer of clean sand was a roughly anthropomorphic 'silhouette', apparently a crouched inhumation, and a crushed Food Vessel (Ashbee 1957).

A Buckskin, no primary burial was recovered though the barrow was built over the site of a cremation burial, of which little survived, and a constructed turf platform with two concentric stake rings possibly indicating wickerwork or hurdle fencing. A further cremation burial and (not necessarily associated) sherds of Collared Urn were found outside the enclosed area while a single sherd of Peterborough Ware, several Beaker sherds and a quantity of Late Neolithic–Early Bronze Age flintwork including an oblique and two barbed and tanged arrowheads were recovered from pre-barrow contexts. The presence of bonfires and of a structured animal bone assemblage (cattle

and sheep/goat) suggesting cooking and feasting added to a complex sequence of building, ceremonial, burial and refurbishing activities (Allen *et al.* 1995).

At both Easton Down (R7) and Twyford Down mixed rite cemeteries were encountered. 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). The possibility of complex, sequential Bronze Age burial monuments associated with a range of ceremonial and burial rites is a theme that deserves further exploration.

Another ‘oddity’ of Late Bronze Age burial, or possibly land division, in Hampshire has been observed at Twyford Down and Langstone Harbour where urned cremation burials were found, but other, similar, urns also occurred which were either empty or contained quantities of burnt flint and very little or no human bone. A Twyford Down at least eight such vessels were arranged in two alignments at regular interval (Walker and Farwell 2000). One of these contained burnt flint. In Langstone Harbour the bases of several urns were excavated from soft muds on the foreshore that contained only heavily burnt flint. As their recovery was entirely fortuitous it is not possible to comment on their relative positions, but the harbour area was demonstrably used as a flat cremation cemetery – in most cases utilising urns that were large and heavy and probably made more or less on the spot. Vast quantities of burnt flint were recorded that could easily represent the actual funerary pyres and which was used as temper for the urns (Allen and Gardiner 2000; esp. fig. 64). Previous records indicate that urned cremation burials may be found all across the present coastal plain.

Finally, one further example of ritualised activity may be indicated by a cleat from a plank boat that was found associated with one of the wooden structures at Testwood Lakes, Totton. Van de Noort (in press) indicates that all four known boats or boat fragments dating to the period 1500–1000 cal BC are directly or spatially closely related to riverside structures or crossings, either by reuse or deposition, and with ritual deposits – in this case a bronze rapier.

Material culture

With the exception of a few small assemblages of Neolithic bowl, Peterborough Ware and Grooved Ware, material culture from the Hampshire Neolithic is restricted to flint artefacts and occasional stone tools. There is a very wide range of flint tool forms present but it is noticeable that there are comparatively few of the ‘fancy’ tools of the later Neolithic and Early Bronze Age that might be considered high status (Gardiner 1990) and these are almost exclusively restricted to plano-convex knife forms. Perhaps significantly, one of only two flint sickles from the county, a dagger and two discoidal knives have all come (as stray finds) from Southampton. Imported stone axes, on the other hand, though not particularly numerous, are widespread and most surface scatters seem to produce at least one, usually fragmentary, example (Gardiner 1988, 421–2). Petrologically identified Grouped rocks account for only around 25% of those recovered with Cornish sources best represented. Groups VI (Langdale Tuff) and VII (augite granophyre) also occur and there are several jadite axes (Jones *et al.* 1977).

Surface flint scatters seem to be essentially domestic in character across the downs, though sites on the northern downs include a significant proportion of heavyweight,

core tools (mean of 17.4% compared with, for instance, 6.6% for the eastern Hampshire/western Sussex downs; Gardiner 1988, table 9.3), indicative of 'industrial' and extractive activities probably focused on the recovery and initial working of surface flint sources.

The few Neolithic and Bronze Age burials that have been excavated have, unsurprisingly, produced the most varied assemblages with, in addition to pottery vessels of various forms, small personal items and jewellery made from gold, copper alloy, shale, amber and bone.

The repertoire of Bronze Age objects, other than those found in bronze hoards, is also largely confined to a limited range of flint artefacts – indeed, one of the defining flint assemblages from the period comes from a barrow in Micheldever Wood (Fasham and Ross 1978). The Deverel Rimbury associated settlement at Chalton produced probably the widest range of objects so far recovered from a settlement site in Hampshire, though only in small numbers. Objects included a knife, whetstone, awl, palstave, decorated bronze disc and a loomweight (Cunliffe 1970).

Settlement sites such as Easton Down, Winnall Down and Twyford Down have produced a very small number of obviously Bronze Age objects and these are confined to bronze awls and an arrowhead, bone gouges and awls, clay loomweights and beads, coral beads, occasional quern fragments, and, at Winnall Down, a dump of burnt clay in a Late Bronze Age pit (Fasham *et al.* 1989; Fasham 1995; Walker and Farwell 2000).

Bronze metalwork found in Middle Bronze Age hoards is dominated by palstaves, with a few ornaments such as torcs, which occasionally also occur as stray finds. Weapon hoards have not been found though some, late, palstave hoards also contain broken tools and weapons (eg Bentley, Hayling Island I; Lawson 1999). Other late hoards include socketed axes (eg Colden Common, Owlesbury and Lymington) and a variety of other socketed tools, such as gouges and chisels, as well as ingots. Weapon hoards include spearheads and swords.

Crafts, trade and industries

Flint and stone axes

Flaked and polished flint axes had a very long currency from the Early Neolithic until well into the Bronze Age in southern England, but the main period of production at the flint mine complexes on the South Downs falls within the earlier part of the Neolithic. The distribution of over 300 polished and 500 flaked axes in Hampshire, where only one flint mining site is known, shows an overwhelming concentration on the northern downs. More than half of the flaked axes are unfinished roughouts and these show clearly that the clay with flints that is prevalent in this area was a major source of raw material (Gardiner 1990). Imported stone axes include, most numerous, Greenstone axes from Cornwall, as well as examples from Cumbria, and north Wales, with unidentified sources represented by examples in dolerite, jadeite, slate and limestone. The generally fragmentary condition of most of these suggests 'down-the-line' exchange rather than direct trade (Gardiner 1988, 421–2).

Andrew Lawson has recently presented a comprehensive discussion of Bronze Age hoards from the county (1999). Middle Bronze Age metal hoards, of which at least 19 are known, are dominated by palstaves of various forms (86% of identified objects), some of which find their closest affinities in northern France (Lawson 1999). Most of these occur on the present coastal plain - a distribution that may reflect both the location of indigenous manufacture of metalwork (away from the main areas of settlement), contact with northern France, and the well-rehearsed association of bronzes with liminal, especially 'watery' places (see Bradley 1998 for a recent discussion). It may be significant that several of the large urns found in the Langstone Harbour area also have close parallels in the Armorican peninsula (ApSimon in Allen and Gardiner 2000). Other hoards include three ornament and two mixed examples. It is probably significant that these hoards occur on the chalk, in the Weald and New Forest. No purely weapon hoards are reported.

Mixed hoards containing palstaves and Late forms such as socketed gouges, chisels, ferrules, ingots and conical objects as well as swords and daggers also occur. Whether these are truly 'founders' hoards intended for recycling or represent the symbolic destruction and deposition of certain items is unclear. They also occur on the coastal plain. Truly Late Bronze Age hoards again include mostly weapons but also what may be imports or items influenced by northern French objects, such as winged axes. Their distribution is markedly different to the earlier hoards (Lawson 1999, fig. 11.8), mostly on the lower chalk dip slope and tertiary beds with very few on the coastal plain or in the Weald. This distribution may be a further indication of settlement drift.

Transport and communication

We can probably assume that Hampshire's river valleys continued to be principal communication routes during the Neolithic and Bronze Age. Movement of people, material and objects is apparent from the presence of imported stone and metal items even if direct evidence is slight.

Water transport by both rivers and the sea is indicated for the mature Bronze Age at least at Testwood Lakes, Totton. Here, waterfront structures and probably two bridges or causeways dated to 1540–1500 cal BC and 1600–1470 cal BC (Table 1) have been found, with repairs dated by dendrochronology to the 1450s. A cleat from a plank boat was associated with one of these structures and this type of boat is considered by van de Noort to have been used for seafaring as well as river transport (in press), though he sees the reuse of such fragments as being indicative of the actions of local communities rather than of specialist traders from afar.

Another possible causeway, running between the Northney on the north coast of Hayling Island to the mainland, close to the existing Wadeway, was recorded as close alignments of oak timber stakes associate with 'an area of wattle' and a radiocarbon date on one of the timbers said to be of 1320-820 cal BC (no lab reference or BP determination cited in original report; Williams and Soffe 1987; Allen and Gardiner 2000)

Table 1: Neolithic and selected Bronze Age radiocarbon dates from Hampshire
(all dates on charcoal unless otherwise stated)

<i>Site</i>	<i>Context</i>	<i>Material</i>	<i>Lab Ref</i>	<i>BP determination</i>	<i>Date cal. BC at 2 sigma</i>
Burntwood Farm 'Late Neolithic' occupation	pit cut by lynchet	animal bone	HAR 1384	4750±140	3950-3050
Nutbane long barrow	post-hole of latest forecourt structure		BM-49	4680±150	3800-2900
Winnall Down R17	basal scoop 1146 under ring-ditch	red deer antler	HAR 2196	4800±80	3720-3360
	basal scoop 1379 under ring-ditch	"	HAR 2202	4680±90	3650-3250
	basal scoop 1211 under ring ditch	"	HAR 2201	4650±110	3650-3000
Easton Lane W29	Late Neo pit with Grooved Ware	animal bone	HAR 8882	3800±70	2470-2030
Bridget's Farm R5	Pit 10	hazelnut & charcoal	HAR 1695	3790±100	2500-1900
Chilbolton	Beaker burial	human bone	OxA 1073	3780±80	2470-2010
Langstone Harbour	forest	oak stump	NZA- 10970	4431±70	3350-2910
	forest	oak branch	NZA- 10940	3735±60	2310-1940
Micheldever R4	W. mound, Collared Urn assoc. barrow		HAR 1042	3670±80	2300-1750
	2ndry silt ditch below flint assemblage		HAR 1044	3370±90	1890-1440
Buckskin	2ndry cremation post-dating Collared Urn under mound		HAR 8371	3280±80	1750-1400
Kimpton Kalis corner	MBA cemetery		HAR 4316	3560±180	2500-1450
			HAR 4572	3110±90	1650-1050
Daneshill	Urned Deverel Rimbury burial		HAR 9108	3230±90	1740-1300
Charlton site 78	hut floor with MBA metalwork		BM 583	3193±69	1630-1300
Portsdown	Wessex burial	bone	BM 1119	3009±57	1410-1050
Easton lane R7	inhumation, round barrow		HAR 1023	3160±70	1610-1250
	ring-ditch above primary fill		HAR 1413	2980±90	1420-970
Easton Lane W29	'Late Neolithic' pit	antler	HAR 6115	3350±100	1890-1410
	'Neolithic structure 3918		HAR 6121	3090±90	1530-1040
	'Early Bronze Age' inhumation		HAR 6122	2960±80	1400-970
Twyford down	Deverel Rimbury		weighted	3305±15	1680-1650

	associated inhumation		mean of UB 366-7		
	Deverel Rimbury associated inhumation	bone	UB 3865	3314±19	1520-1390
Langstone	hearth 1702		OxA 7366	2995±60	1400-1040

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