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Neolithic and Early Bronze Age

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4.1 Introduction

The South West contains a wealth and diversity of Neolithic and Early Bronze Age archaeology, much of it of national and international significance. Its quality and character are dictated by differential survival and histories of research, as well as reflecting real variation in the nature of prehistoric activity. One of the major topographic divides is that between the Wessex chalk and the different and diverse terrains of the south-west peninsula. The complementary resources of these two major areas are reflected in diverse modes and media of exchange between them throughout and beyond this period. The uplands of the west, principally Dartmoor and Bodmin Moor, include relict prehistoric landscapes where the relative absence of later cultivation has ensured excellent survival of stone monuments, settlement features and early fieldsystems. In the region's centre, work within the peats of the Somerset Levels has produced an unparalleled range of prehistoric timber trackways and artefactual material, as well as high-quality environmental data. Rich faunal and human bone assemblages have been recovered from the alkaline limestone and chalk bedrocks of Wiltshire, Dorset, the Gloucestershire Cotswolds and northern Somerset. However, it is on the Wessex chalklands that some of Europe's most spectacular and intensively studied Neolithic and Early Bronze Age archaeology occurs. This is reflected in the inscription of the Stonehenge and Avebury landscapes onto the World Heritage List by UNESCO in 1986. Extensive exploration over the last three centuries has resulted in the archaeology of Wessex dominating synthetic and interpretive accounts of the British Neolithic and Bronze Age (for example, Barrett 1994b; J Thomas 1999).

As in other regions, the picture of the known archaeological resource is dominated by sites surviving upstanding on the higher moors and downlands. However, the richness of occupation during this period in the vales and lower ground is attested by major concentrations of lithic material and, more recently, aerial reconnaissance, extensive geophysical survey and rescue work have demonstrated that by the end of the period few areas of the region were not actively used and/or settled.

4.2 Chronologies

4.2.1 The Mesolithic–Neolithic transition

The region has one of the most securely-dated Early Neolithic structures in the form of the Sweet Track in the Somerset Levels. Dendrochronologically precise construction dates of 3807/3806 BC for the Sweet Track and of 3838 BC for its predecessor the Post Track (Coles and Coles in Hillam *et al.* 1990, 218) make it clear that Neolithic artefacts (pottery, single-piece arrowheads, an axehead of chalk flint and a jadeite axehead brought from the Alps) were already current at the beginning of the 4th millennium BC, and that the surrounding woodland was managed and, to some extent, cleared, grazed and cultivated (Coles and Coles 1986; Caseldine 1984a). The region also has one of the best-dated Late Mesolithic deposits, in the upper fill of the Fir Tree Field shaft on Cranborne Chase. Stratified above a group of rod microliths dating from the late 5th or early 4th millennium (see page 58) was a hearth, associated with Neolithic bowl pottery, domestic cattle bone and a ground flint axehead, which produced radiocarbon dates of 3960–

3710 cal BC (OxA-8009), 4050–3800 cal BC (OxA-8010) and 4250–3960 cal BC (OxA-7981, Allen and Green 1998). The first of these determinations, made on relatively short-life material will be closest in age to the deposit, the other two, on charcoal of a longer-lived species and on a disarticulated animal bone, being *termini post quos* for it.

The sequence is most readily interpreted as reflecting a fairly rapid transition from one tradition to the next. Elsewhere in Britain, dates reliably associated with Mesolithic artefacts extend into the early 4th millennium BC (Spikins 2002) and some Neolithic monuments, including long barrows and cairns, were being built from c.3800 BC on the evidence of radiocarbon measurements on the contained human remains (including some of those listed by Richards and Hedges 1999, and those from recently dated monuments, Bayliss and Whittle 2007). Dietary change at this time seems to have been abrupt (Richards 2004), although the interpretation of the results of stable isotope analysis remains contentious (Hedges 2004; Lidén *et al.* 2004; Milner *et al.* 2004). The potential for the adoption of Neolithic lifeways within a couple of generations becomes a real one, with connotations of the persuasive power of new beliefs and identities as well as new practices (Richards 2004; J Thomas 2003).

On parts of the Wessex chalklands, including the areas around Avebury, Stonehenge, Dorchester and Cranborne Chase where major monument complexes were later to develop, the relative dearth of Late Mesolithic material suggests a process of Neolithic “infill” (Whittle 1990; Richards 1990, 263; Barrett *et al.* 1991, 29; RJC Smith *et al.* 1997); perhaps close to the 5th–4th millennium BC boundary if the single date of 4050–3640 cal BC from the Coneybury Anomaly is taken as reliable (OxA-1402, Richards 1990). While dense Later Mesolithic scatters are present on the clay-with-flints of Cranborne Chase, they are absent from the chalk on which many Early Neolithic monuments were constructed (Barrett *et al.* 1991, 29–31).

In other instances, certain practices and the significance of particular places may have spanned the transition to the Neolithic. The sequence at Hazleton North, Gloucestershire, beginning with a Late Mesolithic flint scatter (see page 56), followed by Early Neolithic occupation and the construction of a chambered cairn (Saville 1990), *might* reflect repeated return to this locale by the same social group and an accruing sense of place. In Somerset surface collection around the Devil’s Bed and Bolster long barrow, Gorse Bigbury henge and the Stanton Drew stone circles has, in each instance, revealed a Late Mesolithic presence (Lewis 2005). However, the nature of the relationship, if any, between these activities and the later construction of monuments is uncertain.

On Dartmoor, 45% of all scatters of Neolithic and

Early Bronze Age lithics also contain Mesolithic material, but this may reflect periodic reoccupation of areas where conditions have subsequently proved auspicious for recovery. Lithics from a scatter currently under excavation at Batworthy Corner reveal a hiatus between Mesolithic and subsequent Neolithic and Early Bronze Age assemblages.

4.2.2 Chronology in the established Neolithic and Early Bronze Age

For parts of the region, for example around Avebury, it is now possible to create detailed sequences (Whittle 1993, table 2; Gillings and Pollard 2004, table 2). There are now useful and secure suites of dates for major Neolithic monuments in Wessex, parts of the Cotswolds and elsewhere. For the 4th millennium BC these include Hazleton North long barrow (Saville 1990; Meadows *et al.* 2007), the West Kennet long barrow (Bayliss *et al.* 2007), Fussell’s Lodge long barrow (Wysocki *et al.* 2007), Wayland’s Smithy long barrow (Whittle *et al.* 2007), Windmill Hill (Whittle *et al.* 1999), Maiden Castle (Ambers *et al.* 1991), Hambledon Hill (Bayliss *et al.* forthcoming), Raddon (Gent and Quinnell 1999) and for the 3rd millennium BC, Stonehenge (Cleal *et al.* 1995), the Beckhampton Enclosure (Gillings *et al.* 2002), the West Kennet palisades (Whittle 1997b), Flagstones, Mount Pleasant (Healy 1997, table 79) and the Dorchester timber circle (PJ Woodward *et al.* 1993). What these appear to show is that while the construction of major public monuments spans the period 3800–2000 BC, there may exist horizons of more intensive activity at c.3650–3400 BC and c.2600–2200 BC. Recently obtained dates of c.2400–2200 BC from the “Amesbury Archer” (OxA-13540, 13541, 13562, 13623) and “Boscombe Bowmen” (OxA-13542, 13543, 13598, 13599, 13624, 13681) burials put the appearance of Beaker ceramics, early metalwork and flint barbed-and-tanged flint arrowheads (the “Beaker package”) into a terminal Neolithic context, contemporary with late Grooved Ware (Garwood 1999).

It is important not to forget how long the Early Bronze Age was, and how much change and development occurred within it. The seriation of metalwork, associated finds and their contexts has led to daunting cultural-historical sub-division (for example, Burgess 1980), but with the benefit of radiocarbon dates this has been rationalised and valuable progress has been made in creating absolute internal chronologies (Needham in Randsborg 1996; Garwood forthcoming). Four “periods”, which span the mid-3rd to mid-2nd millennia BC – the conventional Early Bronze Age – have been proposed (Needham in Randsborg 1996):

- **Period I (2500–2300 BC).** The earliest phase

of metalwork, coeval with the occurrence of Late Neolithic pottery. Simple ornaments of gold and tanged copper knives found in graves (as at Amesbury and Shrewton), joined shortly by halberds, daggers, and awls. Flat axes have been found as isolated pieces (and elsewhere in rare hoards), their style suggesting an independent British metalworking tradition from the outset.

- **Period 2 (2300–2050 BC).** Graves with flexed inhumations often accompanied by Beaker and other grave goods, including daggers (for example from Yettington, Gerloff 1975) and halberds. Flat axes also occur. Significantly, there appears to have been a swift transition to the use of alloys, especially tin-bronze, seen in flat daggers with plug rivets (Butterwick type) and narrow-butted flat axes (Migdale type). The striking gold lunulae (for example, from Harlyn Bay) probably belong to this period, which correlates with the central European Reinecke A1 phase.
- **Period 3 (2050–1700 BC).** Alongside new diverse pottery traditions (late Beaker, Food Vessel, Collared Urn, and Trevisker in Cornwall) and the urned cremation burial rite, are rich inhumation graves epitomised by the Bush Barrow “Wessex 1” burial (Gerloff 1975). Grave goods include Armorico-British daggers and gold ornaments (for example from Clandon, Dorset), as well as ornaments (such as from Crewkerne) and fittings of other materials (jet, shale, amber, etc). The transition to the next phase is indicated by the bronze daggers from the primary burial at Norton Bavant, Wiltshire (Butterworth 1992). Axes, which at this stage have stop bevels and low flanges and are sometimes decorated (as at Mount Pleasant, Dorset), are not normally deposited in graves (Ridgeway 7, Dorset, and Bush Barrow being exceptional).
- **Period 4 (1700–1500 BC).** Towards the start to this period the rich inhumation burials of Wessex 1 were evolving into the cremation-dominated burials of Wessex 2, associated with the Camerton-Snowhill type of dagger and a different range of objects, including pins. It is probable that the gold cup from Rillaton belongs to this phase. Hoards include tanged spearheads and low-flanged axes in the Arretton style (such as Ashton Court, Plymstock, Westbury-on-Trym and Milverton), while the earliest palstaves (Acton phase 1) herald the profusion of new Middle Bronze Age types, equivalent to the continental Reinecke B. Beakers fade from the burial record but Deverel-Rimbury urns in Dorset had emerged before the end of this period.

Local chronologies

At an intra-regional level radiocarbon chronologies are highly variable in quality, with good coverage for certain areas, and particular horizons, such as Neolithic Wiltshire and Dorset, but less satisfactory for Somerset and Gloucestershire. However, the situation is beginning to change. Until recently the database of radiocarbon determinations for Cornwall was largely limited to those from the two tor enclosures of Carn Brea and Helman Tor (Mercer 1981; 1997). These have been augmented through programmes of AMS dating on a variety of Cornish Neolithic and Early Bronze Age sites. Earliest Neolithic dates are now available from pit deposits and structural features in the lowland zone, such as Penhale Round, Indian Queens (Nowakowski 1998) and Tregarrick, Roche (Cole and Jones 2002–3). There are very early Bronze Age dates from a sealed pit containing a Food Vessel at Metha, Newlyn East (AM Jones and Taylor 2004), and the Poldowrian pit (Harris 1979). The majority of Early Bronze Age dates from Cornwall come from round barrows and cairns (now over 50 dates, AM Jones 2006; Nowakowski forthcoming a). Determinations from single barrows such as Chysauster (G Smith 1996), Colliford (Griffith 1984), Trelan 2 (G Smith 1984; 1988b), Trelowthas (Nowakowski forthcoming b), Watch Hill (AM Jones and Quinnell 2006; AM Jones 2005) document structural changes providing, in all cases, a deeper time-depth to the individual stories of these monuments than has previously been realised (Nowakowski forthcoming a; AM Jones 2005).

Despite having numerous sites that are *thought* to be Late Neolithic or Early Bronze Age, Dartmoor has been described as a “black hole” during these periods (Caseldine 1999, 579). Until very recently there were no absolute dates for the Neolithic. Recent radiocarbon sequences have emerged from palaeoenvironmental work on peat cores (West 1997; Thorndy-craft *et al.* 2003; 2004). The only excavation of modern times with dates relevant to this period is that of the cairn group at Shaugh Moor which produced dates beginning at the end of the Early Bronze Age (Wainwright 1979b). Not far from Dartmoor radiocarbon determinations showing occupation during the Neolithic accompany structures and artefacts of the period at Hazard Hill (Houlder 1963), Marldon (Berridge and Simpson 1992) and Raddon Hill (Gent and Quinnell 1999).

Caves continued to be an important focus in the Neolithic and Early Bronze Age, with evidence for practices, including deposition of human bone, continuing into the middle of the 2nd millennium BC (see Chamberlain and Williams 2001 for summary). A number of radiocarbon determinations have been returned on material relevant to this period, mainly

on human and animal bone, from sites including Three Holes Cave, Broken Cavern, Tornewton Cave and the Kitley Caves (Chamberlain 1996; Chamberlain and Williams 2001).

4.3 Landscape

4.3.1 The impact of agriculture

The Early Neolithic sees the introduction of domesticated livestock and cereal cultivation (see Section 4.4.4 on page 88), though agrarian landscapes are a later development. While there is localised evidence for the use of ard ploughs from the 4th millennium BC, notably beneath the South Street long barrow and under the bank at Avebury (Ashbee *et al.* 1979; Evans 1972), Neolithic fieldsystems are not known in the region or elsewhere in southern England – although clearance piles associated with a cultivated surface were observed at Carn Brea (Mercer 1981). Formal land division and the creation of fields for arable farming are, for the most part, features of the 2nd millennium BC and later, linked perhaps to a shift from long to short fallow systems, and a more place-bound sense of being (Barrett 1994b).

Ploughing as an agent of landscape change is a phenomenon of the late 3rd and 2nd millennia BC, when it often seems to precede the establishment of substantial settlements and field boundaries and to fall within the currency of Beaker pottery (see Allen 1997b). In a dry valley at Bovey Lane, Beer, in Devon, the charcoal-rich lowest layer of a colluvial deposit contained Beaker and earlier material (Tingle 1998, fig 9). Beaker pottery is associated with plough-soils in the upper fills of the ditches of earlier monuments: the ditch at South Street long barrow saw an inwash of chalk rubble (Evans 1990), cultivation from the Beaker period is indicated by the ditch fills of the Amesbury 42 long barrow on Salisbury Plain (Entwhistle 1990) and ploughsoils filled the ditch tops of the long mound at Maiden Castle (Sharples 1991a, 56). There was colluviation of Beaker date at Middle Farm, Dorchester (Allen 1997b), and in Cranborne Chase the site on which the Middle Bronze Age settlement at South Lodge developed had already undergone sufficient ploughing to generate lynchets (Barrett *et al.* 1991, 146–51). Well-preserved Bronze Age fields together with plough-marks and spade marks have also been excavated at Gwithian in Cornwall (see C Thomas 1958; 1970; Nowakowski 1989; 2004).

4.3.2 Character of activity in relation to topography and “landscape zones”

Topographic zonation of activity may have been more marked in the south-west of the region (parts of Devon and Cornwall) than in the east or north

(Dorset, Wiltshire, Gloucestershire). There is, for example, little evidence of sustained occupation on the higher areas of Exmoor, though occasional lithic finds and the occurrence of a range of small stone monuments could be linked to seasonal exploitation (for example, summer grazing) and attendant ceremonial activity (Riley and Wilson-North 2001).

Activities at the Cornish Neolithic tor enclosures included the exchange of resources such as stonework and pottery, as at causewayed enclosures farther east, but this was accompanied by distinctive depositional practices and more persuasive evidence for settlement in the interiors (see Carn Brea and Helman Tor, Mercer 1981; 1997). A far more fluid relationship to places, involving smaller-scale but related practices, existed in the contemporary lowland landscape of the tor enclosures.

4.3.3 The appropriation of natural topographic features

In Devon and Cornwall, tors and distinctive hilltops may have been referenced and embedded within both the routines of everyday life, and in cosmological and mythical structures (Bender *et al.* 1997; Tilley 1995). Some were transformed through the construction of tor enclosures during the earlier Neolithic, as at Carn Brea (Mercer 1981), Helman Tor (Mercer 1997) and Stowe's Pound (Johnson and Rose 1994). Other lesser outcrops were the focus for pit depositions during the period as at Roche Rock (Cole and Jones 2002–3), while Early Bronze Age pottery has been found deposited in crevices in craggy outcrops at Treyn Dinas in West Penwith (Sharpe 1992). Tors, outcrops and *in situ* boulders also formed focal points for a number of excavated round barrows.

A type of site recently recognised is the “pseudo-quoit” or “propped stone”, found on Bodmin Moor at sites such as Leskernick and Tregarrick Tor (Tony Blackman pers. comm., AM Jones 2005), the former apparently marking a major solar event (Herring 1997a). Further examples have been recognised on Dartmoor, Penwith and the Channel Islands (Blackman pers. comm.). Similar constructions (“earth-fast” monuments), apparently of Neolithic date, are known from south-west Wales (Cummings 2002).

The limestone geology of northern Somerset incorporates caves and swallets that have seen intermittent human use from the upper Palaeolithic onwards. At least 16 caves in this region have produced evidence of Neolithic and Early Bronze Age activity (Lewis 2005). The use of these features changes between the earlier Neolithic and later Neolithic/Early Bronze Age (Lewis 2005). In the earlier period, caves were primarily used for burial of both single and multiple inhumations, some of which are dated to the 4th millennium BC (Ambers and Bowman 2003). Later activity

is more diverse, and includes the continuing deposition of human remains, but also the deposition of Grooved Ware and Beaker pottery, axeheads and fine flint items (for example at Bridged Pot Shelter and Soldier's Hole), and apparent occupation, suggested by hearths, burnt and butchered animal bone, and artefactual material (for example at Rowberrow Cavern and Sun Hole).

It was perhaps the unusual properties of swallets (water percolation, mist pockets, strange noises) that made them a focus for deliberate depositions of artefactual material, human and animal remains (Lewis 2000). The most outstanding example is Charterhouse Warren Farm swallet, a 21m deep natural shaft that contained four Late Neolithic-Early Bronze Age horizons. At the base were juvenile human bones, animal bones and a range of flint, stone, antler and bone items (including a flint dagger, and "sponge-finger stones"). Further deposits included more human and animal bone and Grooved Ware and Beaker pottery.

4.3.4 The landscape context of monuments

The relationship between monuments and topography is a complex one. Even during the Early Neolithic there is much variation on a local scale. Around Avebury, general visibility and intervisibility of long barrows seems not to have been important (Wheatley 1995) and these monuments are to be found in varied landscape locations, including hilltops (for example, Adam's Grave), in valley bottoms (such as Beckhampton Road) and on hillslopes (for example, Horslip, Pollard and Reynolds 2002, 59). In contrast, the long barrows of the Wylve valley were consistently sited in positions with views into the valley (Allen and Gardiner 2004). The frequent occurrence of traces of prior occupation, cultivation or deposition under earthen and chambered long barrows (for example at Hazleton North or South Street) suggests that siting was also driven by the histories or associations of particular locations (Darvill 2004, 92). Perhaps liminal in both setting and status, several enclosures within the region (for example Knap Hill, Rybury, Whitesheet Hill, Crickley Hill, Hembury or Hambledon Hill) are located on the junction between upland and vale, with aspects variously into and out from downland zones (Oswald *et al.* 2001, 99–102). The megalithic quoits in West Cornwall occupy high positions. Some were clearly sited with reference to both distant and near places, as at Zennor Quoit and Mulfra Quoit (Barnatt 1982; 1998).

Tilley (1999) makes a convincing argument that certain Early Neolithic monuments on the South Dorset Ridgeway represent attempts to relate to or appropriate mythological knowledges of the powers of place through a process of deliberate mimicry. Thus,

the format of the Maiden Castle enclosure referenced that of Portland, and local bank barrows that of Chesil Beach. Similar homologies between monument form and local topography may be seen to operate in the construction of the Avebury henge (Watson 2001).

Links between monuments and significant natural features were sometimes more explicit. The siting of the Priddy Circles in an area of landscape with a high density of swallet holes may be significant (Lewis 2000), while at Knowlton the Late Neolithic monument complex is sited adjacent to the River Allen, but separated from it by a river cliff and a series of possible natural shafts (Green 2000). Henges within the region and elsewhere have a frequent association with water (Richards 1996). Most famously, Stonehenge is linked to the River Avon by an earthwork avenue. The south-east entrance of Durrington Walls is connected to the same stretch of river via another avenue, and further upstream the Avon defines one side of the analogous henge enclosure at Marden. While it is not proven, the remains of the Late Neolithic dead may have been taken from henges and deposited within rivers (Parker Pearson and Ramilisonina 1998). A similar situation occurs at Stanton Drew, where stone avenues link two of the circles to the floodplain, or an earlier course, of the River Chew.

Early Bronze Age barrows and cairns are a major feature of the archaeology of this region, and this picture has recently been amplified by the addition of many barrow sites now recognisable only as ring-ditches (see, for example, Griffith and Horner 2000, fig 2.2). Barrows, ring cairns and their many complex variants form distinctive concentrations and groupings across a wide variety of landscape "zones" (coastal settings, uplands and around natural outcrops). There are significant differences in landscape siting between large barrows/cairns and other forms; large barrows are often in prominent locations although sometimes from a restricted range of viewing points. False-creeping, where the profiles of barrows are skylined from valley bottom locations, is well-attested (for example on Overton Hill). Spatial analysis of round barrow cemeteries on the South Dorset Ridgeway, around Avebury and around Stonehenge suggests that their placement was strictly regulated, each being related to earlier monument complexes and local topography, but with an underlying structural principle of circularity (A Woodward and Woodward 1996). This is seen spectacularly in the Stonehenge region, where barrow cemeteries form a visual "envelope" around the henge (A Woodward and Woodward 1996; Exon *et al.* 2000). Given that round barrows were built for many centuries, these placements would have been cumulative and are likely to reflect changing and developing structuring principles rather than fixed and static ones (Garwood forthcoming).

4.3.5 The perception and definition of place

Place (the ascription of identity to a locale) was defined in various ways, not least through the creation of monuments, the burial of the dead and the deposition of artefacts. Natural features, including hills, tors and large stones (Gillings and Pollard 1999) would also have undoubtedly constituted named and known places. Because of the striking character of the region's monuments it is easy to forget how a "sense of place" was also marked through occupation and the residues of dwelling. A striking number of sites in the Avebury landscape have extremely long if punctuated histories of activity, sometimes spanning the full Neolithic and Early Bronze Age, testimony to what J Thomas (1999, 220) has described as "the enduring significance of place".

In certain instances, as at Avebury G55 and the West Kennet Avenue occupation site (IF Smith 1965), the residues of occupation events (such as ceramics, lithics and food remains) were consciously curated to form middens and discernible refuse spreads (J Thomas 1999, 209–10). Middening can be seen to represent more than casual refuse disposal, being the product of deliberate strategies of accumulation (Needham and Spence 1997). In a context where extensive arable cultivation may not frequently have been practised, and where spatial constraints within loosely structured settlement areas were unlikely to result in elaborate refuse-management regimes, purely functional explanations for middening are probably insufficient. In one way or another their role may have been symbolic, providing, in their final form, monumental expression to the process of occupation. In their later stages they may have become symbols of occupational continuity, standing for a sense of "deep" time, and even accumulating associations with specific or generalised ancestors.

In Cornwall there is evidence for middening at Gwithian and middens are a feature of the Isles of Scilly. The importance/identity of place is clearly demonstrated by the way that locales were reworked over considerable periods of time. For example, at Stannon Middle Bronze Age settlement activity took place around an Early Bronze Age cairn group that had been in use for centuries (AM Jones 2006), and at Gwithian where fields and burials throughout the Bronze Age show an attachment to a particular place unrivalled in the county (Nowakowski 2006).

4.3.6 Settlement

There remains an expectation that if only we try hard enough or look cleverly enough in the right places, a more abundant and better preserved Neolithic settlement record will somehow emerge. (Whittle et al. 2000, 177)

For much of the Neolithic and Early Bronze Age in the region, permanent settlement and sedentism, and with it well-defined traditions of domestic architecture, were not commonplace. We must assume varying degrees of mobility, longevity and residential composition of occupations/settlements (Whittle 1997a; J Thomas 1999; Pollard 1999). Acknowledging mobility, it is not therefore surprising that the evidence for settlement is both insubstantial – consisting for the most part of lithic and artefact scatters, pits, hearths and stake- and post-hole settings that do not readily describe neat building plans – and difficult to interpret. Added to this, distinctions between ceremonial activity and occupation are not always clear cut, and it is from major monuments of the 4th and 3rd millennia BC (such as Hambledon Hill, Mount Pleasant and Durrington Walls) that some of the best assemblages of occupation material (ceramics, lithics and so forth) derive. This should occasion little surprise since such places acted as foci for large-scale gatherings of some duration. Nonetheless, our expectations of *how* the settlement record *should* manifest itself are often confounded by the evidence. Brück (1999b) emphasises that our own mindsets mislead us with the concept of the settlement as a distinct, circumscribed category – with the corollary that varying combinations of the activities which made up contemporary life were carried out at all kinds of locations, few or none of which may have been "domestic" in a modern sense.

Lithic scatter evidence

The most durable evidence for the location, extent, density and duration of settlement is provided by surface scatters of lithic and, much more rarely, ceramic material. These have been identified through both casual collecting, in some instances beginning in the late 19th century (Lewis 2005; Whittle *et al.* 2000), and more systematic programmes of field-walking. Scatters are plentiful on the chalk downlands of Wiltshire and Dorset, where major programmes of surface collection in the Stonehenge Environs and along the South Dorset Ridgeway have revealed dense concentrations (up to 210 pieces per 50m collection unit) spanning the Early Neolithic to Middle Bronze Age (Richards 1990; PJ Woodward 1991b). Some of the densest scatters, and those with the greatest chronological range, can be seen to occur around the major monument complexes of Stonehenge, Dorchester and Avebury, in part reflecting repeated occupation related to the construction and use of these monuments. It should be borne in mind, however, that because of a particular interest in such areas, field-walking is more likely to be undertaken in them than elsewhere and its results are more likely to be disseminated. It is clear that this has created an imbalance.

The accumulated collections of past decades point to a focus of activity throughout the period on the coastal plain around the mouth of the Avon in what is now the Bournemouth area, not only in an overall concentration of lithics but of fine and exotic implements (JP Gardiner 1984; Field 2004). Field emphasises the evidence for settlement of the fertile, sheltered coastal plain as a whole, as well as of river valleys, which, like the coastal plain, have seen far more attrition of earthworks by cultivation in the historic period than has the chalk downland. Field's research has also highlighted multi-period concentrations of lithics at "pinch points" likely to have seen movement between the chalkland and adjacent, lower-lying areas, notably in the Tisbury–Dinton area of west Wiltshire, where the upper Nadder provides a route between the chalk and the Blackmore Vale, and in the Warminster area of north Wiltshire, where the Wylie valley links Salisbury Plain with the fringes of the Somerset Levels.

To the north-west, dense scatters are known off the chalk on the western parts of the Mendip Hills, predominantly of Early Neolithic date (Bond 2004; 2006; in press c). Two large-scale fieldwalking projects on the Priddy Plateau, by Taylor and Smart in 1972–77, and Lewis and Mullin from 1996 to date, have revealed high densities of material around the tops of gorges and coombes and between Priddy village and the southern slopes of Mendip (Lewis 2005). It seems that Neolithic and Bronze Age scatters may extend over much of the western Mendip plateau. There is a great diversity of material from a few sites, which must be taken as indication of the range of productive tasks performed at these locations. The Priddy Hill scatter is one example, with over 600 worked flints, large amounts of waste, quern stones, quern rubbers, a polissoir, hones, broken axeheads, pebbles and burnt flint (Hack 1987). Dense lithic scatters are also recorded on the Polden Hills (Bond in Gerrard and Aston forthcoming). Here, on the lower to mid slopes of the hills, adjacent to the Sweet Track and other later wooden trackways, lithic scatters represent the signatures of seasonal visits. These are the settlement areas associated with the tracks; the lithic technology, stage of working and quantity of artefacts is best interpreted as evidence for repeated visits, not sustained long-term stays. Whittle's (1997a) tethered mobility model fits well this evidence.

In other parts of the region, multi-period scatters are known from the Cotswolds (Snashall 2002), the Forest of Dean (Saville 1986; Hoyle *et al.* forthcoming), western and southern Somerset (including sites with large numbers of flint and stone axes at Milverton and Ham Hill, Minnitt in Aston and Burrow 1982, 23), much of central and east Devon, notably the Exe valley, on Dartmoor (with major collections in both Exeter and Plymouth Museums), and Cornwall (Gould 1994; AM Jones 1997; Lawson-Jones in AM Jones 2000–1;

Lawson-Jones 2001). Certain areas have produced few lithic scatters, for example Exmoor and the Quantock Hills, though to an extent this may be a product of landuse (the predominance of grazing over arable) and levels of investigation (Riley and Wilson-North 2001; Riley 2006).

In general, earlier 4th millennium BC scatters are small and localised, often almost "lost" within the far more extensive spreads of both earlier and later periods. This is often seen as a reflection of small-scale, short-lived episodes of occupation, as is the digging and filling of isolated pits. Both practices are, for example, represented in the Dorchester (RJC Smith *et al.* 1997, 295) and Stonehenge areas (Richards 1990, 263–7; Cleal *et al.* 1995, 56–60, 473–6). The only substantial scatters of this period relate to causewayed enclosures, suggesting that the scatters may be products of aggregation: there is one immediately outside Robin Hood's Ball, Wiltshire (Richards 1990, 61–5), another on the southern slopes of Windmill Hill (Whittle *et al.* 2000), and two outside the earthworks on Hambledon Hill (Saville forthcoming; Palmer and Oswald forthcoming).

Many lithic scatters are the remnants of erstwhile middens and surface refuse spreads, which would originally have included ceramics and organic materials such as bone. Because of their soft and friable fabrics, Neolithic and Bronze Age ceramics survive only exceptionally outside the protected environments of feature fills. A more representative view of the composition of surface scatters is perhaps provided by the quantities of occupation material perhaps inadvertently included in the turf cores of Bronze Age round barrows, as on King Barrow Ridge (Cleal and Allen 1994) and at Milton Lilbourne, Wiltshire (Ashbee 1986b). The latter produced a rich assemblage of Beaker and Collared Urn, alongside quantities of animal bone and lithics.

Lithic material reflects a gamut of activities across the landscape, at varying levels of intensity, from which "settlement" can be isolated only arbitrarily. In the area of the South Dorset Ridgeway, the density and composition of lithics vary along transects, suggesting a more sustained and/or frequent presence on mid-slopes with abundant lithics and relatively high proportions of retouched forms, and a more fleeting presence on higher and lower ground (PJ Woodward 1991b, figs 18–20). The same area, centred on what would later be Dorchester, shows a relation between lithics and monuments in that, once earthwork mounds and enclosures began to be built in the interfluvium of the Frome and South Winterbourne, around the turn of the 4th and 3rd millennia BC, day-to-day living seems to have been focused to the north and south rather than in the immediate area of the monuments (Bellamy 1997). Comparable observations can be made for other monument complexes.

In Cranborne Chase, Middle and Late Neolithic lithics are concentrated on the clay-with-flints to the north of the Dorset Cursus and nearby later monuments, with a secondary concentration of scatters close to the cursus containing unusually high proportions of polished and other fine implements (JP Gardiner 1991). On Salisbury Plain, an area south of Stonehenge and others immediately west and north-east of the Stonehenge Cursus remained virtually devoid of lithics in all periods, despite fluctuating levels of adjacent activity (Richards 1990, fig 10, 157–60).

Pits

Pits filled with occupation debris and more-evidently-selected deposits can also be taken as an index of settlement. In many instances these features were dug to receive deposits (J Thomas 1999), perhaps performed as rites surrounding the abandonment of a site or “closing” of an episode of occupation (Pollard 2001), material being drawn from a number of sources but including settlement middens. Early 4th millennium BC pit depositions include several of a massive scale, as with the Coneybury Anomaly (Richards 1990), Rowden (PJ Woodward 1991b), and Pamphill, Dorset (Field *et al.* 1964), and another on Roughridge Hill, near Avebury. Here we may be witnessing the wholesale burial of middens.

At Cadbury Castle, a series of Early Neolithic pits was found over a wide area, containing leaf-shaped arrowheads, other flint, plain bowl pottery, animal bones, antler, and human bone (Alcock 1972). A small cluster under the Hemp Knoll Beaker barrow near Avebury incorporated deposits of worked sarsen, flint and a complete but smashed pottery vessel (Robertson-Mackay 1980). Similar pit deposits are associated with the enclosures at Maiden Castle (Wheeler 1943; Sharples 1991a), Windmill Hill (IF Smith 1965; Whittle *et al.* 2000), Hambleton Hill (Mercer and Healy forthcoming), Whitesheet Hill (Rawlings *et al.* 2004) and Robin Hood’s Ball (Richards 1990), in various chronological relations to the enclosures themselves.

Pits associated with Grooved Ware often display a greater formality in terms of the structured placing of objects within them, and the occurrence of “exotics”. In Fir Tree Field, Cranborne Chase, a cluster of sixteen pits associated with Grooved Ware was divided into two groups with different combinations of material included in each (Barrett *et al.* 1991, 75–84). Selected depositions within these included arrowheads and polished implements, pig incisors, and a complete cattle skull. There existed a greater variety of material in the southern group of the two, which was situated closer to the later 4th millennium BC Dorset Cursus.

Intra-regional variability in practices may be detectable. In the south-west of the peninsula pits

generally remained small (under 1m in diameter and less than 0.5m deep) from the start of the Neolithic into the Early Bronze Age. The scale of deposition is also rather conservative here, and currently there is little evidence for increasing formality beyond changes in the ceramics selected for deposition. Deposits of charcoal, quartz pebbles (and other stones) and worked flint remain consistent throughout (for example the pits at Roche Rock and Tremough, Gossip and Jones forthcoming).

The development of “domestic” architecture

Darvill (1996) lists eight Early Neolithic and seven later Neolithic/Beaker sites in the region with convincing or possible “domestic” buildings (structures used for habitation). This excludes the large multiple timber circles, associated with Grooved Ware, such as those at Woodhenge, Durrington Walls and Stanton Drew, which are unlikely to have been roofed buildings. The remainder fall into a widespread pattern of rectilinear Early Neolithic structures and later oval and circular buildings. The former are largely concentrated in the west of the region, and include the post-built houses at Haldon, Devon (Willock 1936), Chew Park, Somerset (Rahtz and Greenfield 1977), and that discovered at Penhale, Cornwall (Nowakowski 1998). There are lighter stake- and post-built structures, perhaps of Neolithic date, within the tor enclosures at Carn Brea and Helman Tor (Mercer 1981; 1997), at the causewayed enclosure at Hembury (Liddell 1931; 1932), as well as under the chambered long barrow of Hazleton North (Saville 1990). At Penhale the rectilinear building was associated with a circular structure (Nowakowski 1998). To this list can be added small Late Neolithic structures with central hearths and rammed chalk floors discovered during excavations at Durrington Walls in 2005 and 2006 (Parker Pearson *et al.* 2006). The majority of these buildings were probably short-lived, and their status as true houses is open to debate (J Thomas 1996). Whatever their roles or residential composition, they are unlikely to represent normal components of Neolithic settlements.

Two Late Neolithic structures on Wyke Down, Cranborne Chase, highlight the interpretative ambiguities often surrounding the function of apparently domestic buildings. Both were circular with central four-post settings, and produced quantities of burnt daub, some fragments with traces of decoration (Green 2000, 73–5). Associated with Grooved Ware, they were set adjacent to the contemporary Wyke Down 2 henge. Architecturally, they are similar to Late Neolithic timber settings within the Stonehenge landscape, including the Northern Circle at Durrington Walls (Wainwright and Longworth 1971), that within Coneybury henge (Richards 1990) and

the structure under Durrington 68 (Pollard 1995), all of which might be regarded as ceremonial in nature. Perhaps it is best to think of an architectural continuum, from small stake-built shelters (as at Trelystan, Powys, Britnell 1982) through to large timber circles, though without any single functional identity. More typical, light-weight and temporary, dwellings may be represented by stakehole clusters such as those at Fir Tree Field, Cranborne Chase (Barrett *et al.* 1991, 76), King Barrow Ridge (Richards 1990, 116) and Easton Down, Wiltshire (Stone 1933).

Among the later structures are the post-built roundhouses at Gwithian site GM/XV, associated with Beaker pottery (Megaw 1976; although see Nowakowski 2004 for a reconsideration), the form of which seems to prefigure that of Middle Bronze Age roundhouses. At Brean Down, Somerset, an oval building (structure 57) dating to the Early-Middle Bronze Age was built over an earlier stone structure (Bell 1990, 31). Associated with Beaker and Biconical Urns, the oval building may have been used for craft production rather than occupation (Bell 1990, 36). There was a thin midden associated with the structure and nearby evidence for peat burning.

In Wessex, while Beaker settlements are regularly identified, often surviving as pits, artefact scatters, or both, those of the full Early Bronze Age, from c.1900 to 1600 BC (Needham in Randsborg 1996), before the emergence of Deverel-Rimbury and related pottery traditions, remain obstinately invisible. The living sites of those who built and buried their dead in round barrows and were responsible for the final phases of Stonehenge remain elusive. In fact, the largest Early Bronze Age “domestic” assemblage from Wessex is the mass of butchered animal bone, struck flint and fragmented Food Vessels and Collared Urns from the upper fills of the massive henge ditch at Mount Pleasant (Wainwright 1979b, 35–47, tables III, XII), which are indeed the by-products of living, although probably not for any length of time at that place. The key to this low visibility is that settlements of this period *have* been found in circumstances where they are well-protected, whether under the peat of the East Anglian Fens (Healy 1996; Martin and Murphy 1988) or the sand dunes of the south Welsh coast (Benson *et al.* 1990). However, in the largely plough-reduced terrain of Wessex they are near-invisible because their structures were little more substantial than those of earlier periods: pits were dug with decreasing frequency from the later 3rd millennium BC onwards, Early Bronze Age pots were made in friable, rapidly disintegrated fabrics and Early Bronze Age (as distinct from Beaker) flint working is barely distinguishable from that of the Middle Bronze Age.

4.4 The Material World

4.4.1 Material culture

The region possesses some rich assemblages of Neolithic and Early Bronze Age material culture, though these are unevenly distributed, both geographically and according to context. The excavation of major 4th millennium BC enclosures in Cornwall (Carn Brea, Mercer 1981), Dorset (for example, Maiden Castle, Sharples 1991a, or Hambledon Hill, Mercer and Healy forthcoming), Wiltshire (Windmill Hill, IF Smith 1965; Whittle *et al.* 1999) and Gloucestershire (Crickley Hill, Dixon 1988b) has produced substantial stratified assemblages of ceramics and lithics, with a chronological range that occasionally extends from the Early Neolithic into the Early Bronze Age. There are sizeable and nationally important collections of late 3rd-early 2nd millennium BC ceramics (Grooved Ware, Beaker, Food Vessel and Urn) from the henge enclosures of Durrington Walls and Mount Pleasant (Wainwright and Longworth 1971; Wainwright 1979b); to which should be added the remarkable assemblage of at least 125 fine- and coarseware Beakers from the secondary fills of the henge ditch at Gorse Bigbury (S Jones 1938; ApSimon *et al.* 1976; Lewis 2005).

Reflecting a national situation, organic components of the material culture repertoire are not well represented, though a range of wooden artefacts has been recovered during excavation of the Somerset Levels trackways. Associated with the early 4th millennium BC Sweet Track were three paddles, a dish, hazel arrow shafts, parts of three hazel bows, a small bow and “tomahawk”, yew pins, digging sticks, a mattock, a comb, toggles, a spoon fragment and wedges (Coles *et al.* 1973). We might also infer the use of skins and basketry from both the use-wear on some lithics and perhaps from ceramics, with some Grooved Ware vessels perhaps skeuomorphic copies of basket work (Wainwright and Longworth 1971, 246; Hurcombe 2000).

The intensity of barrow burial within the region, and sustained traditions of interment with grave goods, are reflected in the rich assemblages of Early Bronze Age ceramics, ornaments and metalwork recovered from antiquarian and more recent excavations (Annable and Simpson 1964; Clarke *et al.* 1985). These include several of the richest grave assemblages from the British Isles, notably the mid-3rd millennium BC “Amesbury Archer” Beaker burial (Fitzpatrick forthcoming), and the “Wessex” series burials of several centuries later from Wilsford G5 (Bush Barrow), with sheet gold lozenges, Breton daggers, flat axe and mace (Clarke *et al.* 1985, figs 4.30, 4.42), Upton Lovell G2e, Wiltshire (Clarke *et al.* 1985, figs 4.51, 4.57) and Clandon, Dorset, again with sheet gold work (Clarke *et al.* 1985, fig. 4.54). The

diversity of objects from full Early Bronze Age (i.e. c. 1900–1600 BC) funerary contexts is remarkable, and includes miniature pottery vessels (accessory cups) and metalwork (such as the halberd pendants from Preshute G1a and Wilsford G8), amber and other composite necklaces, faience, gold-covered shale and amber items, and possible imports such as Breton daggers, crutch-headed and ring-headed pins (both types with Únětice connections) and the unique fork-shaped “horse-goad” from Wilsford G58 (Annable and Simpson 1964, 1006–62; Clarke *et al.* 1985; Piggott 1973b, 357–61). Of note are the remarkable series of small handled cups from the region, in shale (Broad Down and Amesbury), amber (Clandon) and gold (the famous example from Rillaton, salvaged during the 19th century from one of the largest barrows on Bodmin Moor, Piggott 1973b, 369).

First metals

Historically, the study of prehistoric metalwork has been important for establishing a basic chronological position for certain sites within British prehistory and for demonstrating cultural links both within the British Isles and with the Continental mainland. The growth of knowledge concerning the deposition of early metalwork was inextricably linked with antiquarian interest in round barrows, because it is within such funerary contexts that the majority of early metalwork was found. Useful though this early work may have been, the standard of recording of the time was usually so imprecise as to leave open to question the actual context and association of the metalwork – the excavation of the Lockington barrow, in Leicestershire, for example, has demonstrated that the “grave goods” were not associated with the barrow but with a palisaded enclosure (Hughes 2000). Not until the middle of the 2nd millennium BC is metalwork found regularly in settlement or other earthwork contexts, probably a reflection of the degree of sedentism and concomitant permanency of settlement. To the repertoire of grave goods can be added a number of individual isolated finds and, exceptionally within the early period (and unlike the more common hoards of the late 2nd and early 1st millennia BC), the deliberate disposal of two or more items together. Bearing in mind the relative scarcity of early metal, it is questionable whether any metal object was “accidentally lost” and it is more probable that the objects reported as “isolated finds” have been separated from their true context of deliberate deposition. The modern use of metal detectors has increased the number of discoveries, but in itself has not often added to the understanding of the context or circumstances of disposal.

The study of metalwork, especially the circumstances of deposition, continues to contribute to our understanding of prehistoric societies. Although

modern excavations have considerably improved our knowledge of the contexts of early metalwork, and have led to new interpretations of the motives behind deposition, the basic perception of the pattern of deposition has not altered, namely that early metal objects were regarded as special pieces of great symbolic significance, carefully selected and purposefully positioned in their final resting place. Their deposition, therefore, continued practices established in the Neolithic, albeit that the circumstances of deposition, the cultural context and probably the prevailing philosophy had changed. The rare occurrence of axe and dagger motifs carved in stone (for example at Stonehenge), or halberd-like pendant ornaments, further demonstrates the strong symbolic role of metal objects.

The earliest dates of deposition (though not necessarily the date of manufacture) of metal objects in Britain occur in the mid-3rd millennium BC and are associated with Beaker pottery. While the idea of a “Beaker invasion” is no longer fashionable, both isotope analysis of teeth and the typology of metalwork in the grave of the “Amesbury Archer” indicate a common Central European origin, an area with an already well-established history of metallurgy. These analyses, and others, suggest a wide mobility of people and with them the spread of new ideas and techniques. The early date for mining at Ross Ireland, Co. Kerry (O’Brien 1994, 229–31), suggests that knowledgeable prospectors had already discovered the resources of the British Isles before 2300 BC.

From its earliest appearance, and throughout the period when bronze was the principal material used for tools, weapons and ornaments, metal objects were probably both utilitarian and symbolic. Like the stone of earlier Neolithic polished axes, the material itself may have been thought to possess particular potency. Form and decoration may have been equally significant and to have held particular meanings. Our own interpretations have to be carefully considered: “dagger” (an offensive weapon) has a different meaning to “knife” (an everyday tool), while “jewellery” (for the decoration of the body) has a different connotation to “badge of office” (with implied authority). Grave goods are also open to different interpretations, so that rare occurrences of gold (as in the “Wessex” burials) might be considered to represent the expensive possessions of a wealthy elite, whereas they could represent tokens presented from far flung associates, or the customs of a particular group of people. None of these explanations is, of course, necessarily mutually exclusive. However, it is clear that even from the earliest use of bronze, grave goods were selected from a broader repertoire (Needham 1988, 245), and that the adoption of metal was a significant event for the societies of south-west Britain and beyond. Needham sees Wessex in the late 3rd millennium BC as a zone of

net accumulation, receiving metal from Ireland and the continent, with the south side of the Bristol Channel, from Gloucestershire to Somerset, serving as a flow-control zone (Needham 2004).

Representative examples of Early Bronze Age metalwork are displayed in the region's museums and are noted in both published catalogues of the collections (for example, Bristol, Grinsell 1968, Devizes, Annable and Simpson 1964 and Salisbury, Moore and Rowlands 1972), and fleetingly in general county syntheses, such as those for Cornwall (Christie 1986), Devon (Pearce 1979), Somerset (Aston and Burrow 1982), Avon (Aston and Iles 1986) and Gloucestershire (Darvill 1987b). Detailed classifications of certain classes of object are given in specific typological analyses (for example, goldwork: Taylor 1980, daggers and knives, Gerloff 1975 or Beaker associations, Clarke 1970). More comprehensive treatment of the metalworking traditions of the "South West" (that is Somerset, Dorset, Devon and Cornwall) was given by Susan Pearce (1983), and the "stray finds" of metalwork from Somerset by Ian Colquhoun (1978).

On the basis of Pearce's 1983 catalogue, it is possible to give some idea of the quantities of early metalwork then known in the region (here excluding Gloucestershire and Wiltshire): 113 axes, 95 daggers and knives, 4 tanged spearheads, 18 awls, 1 chisel, 6 pins and various other simple ornaments. Clearly, the number of finds is considerable but it is also variable in density across the region. Bronze Age metalwork distributions tend to show a concentration of finds in Wessex and, to a lesser extent, the Somerset lowlands and Mendip Hills, with notably fewer in the peninsula (Gerloff 1975, plates 28–9; Rowlands 1976, map 97). Goldwork is present in some quantity, in numerical terms at least, from both funerary and hoard contexts. The list includes some remarkable sheet gold artefacts, including the Bush Barrow ornaments and the two lunulae (of Irish influence, if not manufacture) found with a bronze flat axe at Harlyn Bay, Cornwall (Taylor in Clarke *et al.* 1985, 190, 260).

Since the operation of the Treasure Act 1996, and more importantly its extension from January 2003 to cover prehistoric base-metal associations, the number of reported prehistoric metal objects has grown (nationally from 191 in 1998 to 403 in 2003, MLA 2004). Between 1997 and 2003, 194 items of "treasure" of all periods were reported from the South West (representing nearly 13% of the national total), the greatest proportion being from Wiltshire (53 reports) and Dorset (48).

There is no doubt that the widespread use of metal-detectors has expanded the populations of distribution plots, but these are even more problematically informative than distributions of other materials. Metalwork finds reflect (imperfectly) the extent to which artefacts were buried or "drowned", not the

extent to which they were current and used. An individual may have parted with a bronze axehead by consigning it to another region by gift or exchange or to the melting pot, rather than by depositing it in a context from which it might eventually be recovered. The relevant practices and beliefs may well have varied from region to region, even from community to community within a region at any given time, with yet more scope for variation over time.

4.4.2 Material extraction and artefact production

The south-west peninsula has long been an important raw material source, with its products transported over long distances.

Stone

A wide variety of coarse-grained greenstones from the south-west peninsula were made into implements, mainly axeheads, and transported over much of Britain. They include petrological groups I, II, III, IV, XVI and XVII as well as numerous ungrouped specimens. All of these are found beyond the peninsula (Clough and Cummins 1988, maps 2–5, 15–16). Of these, Group I is one of the most abundant in Britain, and the prevalence of rocks of probable peninsular origin among the numerous ungrouped implements underscores the extent to which these artefacts were transported beyond their source area. Attempts to locate their precise sources have been unsuccessful, an experience variously attributed to rising sea levels, later quarrying and the lack of distinctive knapping debris deriving from pecking a coarse-grained rock rather than flaking a fine-grained one. The likelihood of their production from beach pebbles rather than extracted rock has been persuasively argued by Berridge (1994) and their probably diverse origins have been reinforced by Markham's investigation of Cornish dolerite outcrops, as well as of the artefacts themselves (Markham 2000).

There is surprisingly little evidence for flint-mining on the Wessex chalklands. Quarries, such as were worked at several locations on the South Downs, barely extend across the Hampshire-Wiltshire border, with one extensive example at Easton Down (Stone 1931) and a few shallow pits at Durrington (Barber *et al.* 1999, fig 1.1). Given the extent of investigation in the region, it can only be concluded that flint mines were rarely sunk in Wessex. Even at Beer Head, in Devon, an imposing chalk cliff in which good quality flint is abundant and clearly visible, no evidence has materialised for the quarrying long surmised to have taken place (Tingle 1998). Recent work by John Newberry (2002) has shown that the available flint sources in the south-west peninsula are more widespread and more complex than has often been

asserted, especially in Devon, and that in particular a wide variety of small sources of good quality chert were being exploited in this period. The extra-utilitarian aspects of flint mining have been emphasised persuasively (for example by Barber *et al.* 1999, 61–7, 73). It may be that, in contrast to attitudes and beliefs prevailing elsewhere, there was no motivation to delve into the chalk to extract flint at considerable effort and risk.

Instead, as in many other areas, there were foci for procurement, the early stages of flint working, and the production of core tools on material from superficial sources within wider spreads of lithics, reflecting a range of domestic and other activities, often over extended periods. Examples include several locations in the Stonehenge area, notably Wilsford Down (Richards 1990, 22–4, 158–71), the Bridport Road Ridge near Dorchester (Edmonds and Bellamy 1991b), and the clay-with-flints in Cranborne Chase (Barrett *et al.* 1991). These were all multi-product industries generated from superficial flint sources in essentially domestic contexts, but with an industrial facies. In the Dorchester area in the early 4th millennium BC flint axe manufacture, often associated with flint mines, was undertaken within the Maiden Castle causewayed enclosure to the exclusion of other locations which would have provided equally good raw material (Edmonds and Bellamy 1991a). It is noteworthy that ground flint axeheads or their surviving fragments are often made of different kinds of flint from the industries of which they form a part, although it is not always clear whether this entailed transport as well as careful selection (JP Gardiner 1991; Saville 1981a; Healy 2004a).

The extent to which flint from the Wessex chalk was transported westwards and north-westwards has been explored many times, with some disagreement as to the scale of the transport, but none as to its reality (Saville 1982; Healy 1988; Tingle 1998, 89–98; Bond 2004; 2005; *in press a*). However, earlier Neolithic assemblages in Somerset, Gloucestershire and the far south-west include large numbers of implements worked on nodular flint, imported into these areas from chalk sources. It seems likely that flint from the chalk may have moved in greater bulk than any other material in the 4th millennium BC, and was transported at every stage of the reduction sequence, from finished implements to unworked, fully cortical nodules.

Ceramics

In the earlier 4th millennium BC, the peninsula was in the mainstream of pottery production. It has a distinctive south-western ceramic style within the round-based Neolithic bowl tradition, characterised by trumpet, and tubular and other lugs, shallow

open bowls, deep bag-shaped pots or jars, undeveloped rims, girth cordons, and the virtual absence of scored or impressed decoration; carinated bowls are generally rare, though exceptionally frequent at Carn Brea (IF Smith 1981). Neolithic bowl pottery is frequently found in the region and the gabbroic clays of the extreme south-west were the source of particularly fine vessels which were transported over long distances (Peacock 1969b). The Peterborough Ware and Grooved Ware of the later 4th and earlier 3rd millennium BC are, however, rare in the peninsula (Mephram 1999, 211; Longworth and Cleal 1999). So too are the Beaker, Collared Urn, Biconical Urn and Deverel-Rimbury traditions, all of which abound farther east (Clarke 1970, maps 1–10; Longworth 1984, fig 42; Parker Pearson 1990, fig 12), although Food Vessel is less so (Parker Pearson 1990, fig 7). There is no obvious explanation for the scarcity of Peterborough Ware, Grooved Ware and Beakers. From the earlier 2nd millennium BC onwards, however, the development of the distinctive Trevisker pottery tradition of Cornwall and Devon was sufficiently strong to eclipse the Collared Urn, Biconical Urn and Deverel-Rimbury styles prevalent to the east. Trevisker pottery was largely made of gabbroic clay in Cornwall, and from more local sources in Devon (Parker Pearson 1990, figs 8–11), and individual vessels, some of Cornish clays, have been identified as far away as the Pas de Calais, Wiltshire, Dorset and Kent (Parker Pearson 1990; Gibson *et al.* 1997). In Cornwall, production became more and more focused on the gabbro as the 2nd millennium BC progressed, although not to the exclusion of other sources (Parker Pearson 1990). This is an exceptional expression of regional identity, especially in the context of the ubiquity of Collared Urn in the rest of Britain. It coincides with distinctive metalwork distributions in the later 2nd millennium BC, but this would have been well after the establishment of the tradition (Parker Pearson 1995, 91, 98). A link with the putative position of the peninsula in the European tin trade remains attractive but is so far unsubstantiated.

Metals

Cornwall, Devon and Somerset have between them sources of copper, tin, lead and gold, mapped by Pearce (1983, figs 3.1, 3.3, 3.4). During the earlier Bronze Age gold was probably being sourced from Ireland, but although there is currently little evidence of prehistoric exploitation, copper and tin may have been mined in Cornwall. Tin is perhaps the most significant of these, because it is rare in both Britain and continental Europe (Pearce 1983, fig. 3.2).

This rarity heightens the probability that tin from Cornwall and Devon was exploited from early in

the history of insular bronze working, in which a consistent copper/tin alloy was achieved by the end of the 3rd millennium BC (Needham in Randsborg 1996, 130). The lack of direct evidence for early tin extraction and working in the peninsula has traditionally, and reasonably, been put down to removal of evidence by mining and quarrying in the historical period. However, recent analysis of trace elements deposited in Dartmoor peats and in sediments from Dartmoor rivers has provided indirect evidence for mineral extraction here in the prehistoric period (West 1997; Thorndycraft *et al.* 2003). Increasing concentrations of copper, zinc and arsenic occur from the mid Neolithic onwards. It is likely that the low levels of trace elements encountered in the Neolithic derived from soil dust generated through local landscape disturbances. In the Bronze Age, however, two peaks occur: the first in the Early Bronze Age (c.2500 BC) and the second, a larger peak, in the Middle Bronze Age (c.1600 BC). These signals suggest either widespread burning or prehistoric metal mining, perhaps principally for tin, but also generating atmospheric pollution from other minerals (West 1997, 348).

Given the scarcity of tin sources, the use of tin *beyond* the South West from the Early Bronze Age onwards is a strong indication that south-western sources were being exploited. Particularly persuasive is a burial at Rameldry Farm, Fife, 2280–1980 cal BC (GU-9574), where a set of V-perforated buttons included one jet example inlaid, exceptionally, with tin and one example made, equally exceptionally, of the mineral lizardite which may, like the tin, have originated in the south-west peninsula, although a Scottish source is also possible (Baker *et al.* 2003). Also in the late 3rd millennium BC, traces of corroded tin were found under the rim of one of two gold armlets at Lockington, Leicestershire (Hook and Meeks 2000). A single tin-plated flat bronze axe from Barton Stacey, Hampshire (Kinnes *et al.* 1979), further reflects the transport of tin in isolation as well as in alloyed metal and echoes the far more frequent tinning of flat axes in Scotland (Needham 2004, 203). In the first half of the 2nd millennium BC, now-lost tin beads (apparently skeuomorphic of segmented faience) were placed in a burial at Sutton Veny (Colt Hoare 1812), and actual faience beads made in Britain and Ireland have a higher tin content than those made elsewhere, although this would not have improved them or altered their appearance. This can be interpreted as the conspicuous consumption of a scarce resource, more readily available in these islands than in much of mainland Europe (Sheridan and Shortland 2004). Alison Sheridan's recent work on prehistoric faience in Britain has concluded that there is evidence to support local production in coastal zones. XRF-analysis of a faience star-bead from Stannon has suggested that

Cornish sand deposits form the fabric of the paste (Sheridan in AM Jones forthcoming).

Other materials

Another major area of raw material extraction within the region, the Isle of Purbeck, seems to have been exploited on a relatively modest scale in this period. Kimmeridge shale was worked and exchanged in moderate quantities from the Neolithic onwards, as in the case of shale beads in the secondary infill of the West Kennet long barrow (Piggott 1962), and the Eyford and Notgrove long cairns in Gloucestershire (Clarke *et al.* 1985, 233–5, figs 2.9, 7.2, 7.3). It became more significant in the 2nd millennium BC, when it was used to replicate personal ornaments otherwise made in jet (Pollard *et al.* 1981) and also to make exceptional, highly crafted objects, such as the handled cup from a barrow at Farway Broad Down (Clarke *et al.* 1985, 282, fig 4.46), and the gold-inlaid mace-head from the Clandon barrow (Clarke *et al.* 1985, 274–5, fig 5.49). There is evidence for shale working (Kimmeridge sources) at the Bronze Age settlement at Gwithian (Nowakowski 2004).

4.4.3 Art

While non-ceramic art is uncommon (as indeed it is nationally), it does occur in a variety of contexts and media, both portable and immobile. The exceptional preservation of the Somerset Levels has led to the survival of an hermaphrodite wooden “god-dolly” found sandwiched between two trackways (Coles 1968, 253–7, pl XII). Dates for the two tracks place the figure in the mid 3rd millennium BC (Coles and Dobson 1989), making it so far the earliest wooden figure from Britain or Ireland (Coles 1990, 326–8).

Chalk offers itself to easy and rapid carving and engraving. Perhaps serving as votives, portable carved chalk objects (cups, phalli, “figures”) are known from 4th and 3rd millennium BC monument contexts, including Windmill Hill (IF Smith 1965, 130–4), Mount Pleasant (Wainwright 1979b, 167–71), Maumbury Rings (Bradley 1975), Stonehenge (Cleal *et al.* 1995, 399–407) and Woodhenge (Cunnington 1929, 112–3); the latter producing, exceptionally, two carved chalk axes. These are reviewed by Varndell (1991, 105–6). A recently discovered carved chalk block from the Monkton Up Wimborne “henge”, Cranborne Chase, is decorated with pecked arcs and lines in arrangements not dissimilar to Boyne passage grave art (Green 2000, 82); while the designs on the carved plaques from King Barrow Ridge and Butterfield Down, Amesbury, may draw inspiration from motifs more commonly employed on Grooved Ware (Rawlings and Fitzpatrick 1996, 22–3).

Far rarer, but perhaps not originally so, are engravings on the walls of four segments of the late 4th/early

3rd millennium BC Flagstones enclosure, Dorchester. Comprising incised arcs, multiple concentric ovals, a horseshoe motif and lattice, these were found on the lower part of the ditch sides, having been rapidly covered with chalk rubble (Healy 1997, 33–7). Other such works may have disappeared where chalk-cut ditches infilled less quickly or were cleaned out, providing more time for erosion, especially if they were as shallowly cut as the Flagstones engravings.

The axe and dagger carvings on five of the sarsens at Stonehenge are well-known, and provide one of the most dramatic examples of glyphic art in direct association with a major ceremonial monument in southern Britain (Lawson and Walker in Cleal *et al.* 1995, 30–3). Most are probably copying bronze flanged axes of Arreton type, and can therefore be placed in the full Early Bronze Age, several centuries after the erection of the trilithons. The sole parallel for the dagger carving comes from the two examples on a sandstone block from the Badbury Barrow in Dorset (Piggott 1939), while an axe carving has recently been identified on the central stone of the Boscawen-un stone circle.

Other funerary/monument associations include the cup-marked standing stone on Longstone Hill, Kilve, Somerset (Somerset HER 33283), a slab with concentric ring patterns from Knowlton and another from Winterborne Came 18b, near Dorchester (Lewis *et al.* 2000). There are also cup-marked stones in Early Bronze Age barrows at Tichbarrow (Trudgian 1976), Treligga 7 (Christie 1985) and Davidstow Moor, Cornwall (Christie 1988). Among the cup-marked and perforated stones in a rough circle beneath Davidstow barrow XXVI (22) was a slate disc pecked and incised with a unique representation of a human face (Christie 1988, 109–31, fig 78, L77). A remarkable slab decorated with seven foot-carvings, ten cup-marks and a horned device from the Pool Farm cist on Mendip (Grinsell 1971, West Harptree 8) formed part of a sealed stone cist containing two cremations dating to the first quarter of the 2nd millennium BC (Horne 1931; Coles *et al.* 2002). The motifs from Pool Farm are largely without parallel in Britain, and most similar to Scandinavian examples (for example, Bornholm), though it has been suggested that the destroyed Calderstones passage grave (Liverpool) is a comparison. Known rock art (on *in situ* rocks) is relatively insignificant and restricted to the far south-west. The earthfast cup-marked boulders at Bodrifty, Treggerthen Farm, Zennor (Nowakowski and Herring 1987) and most particularly Stithians, Cornwall (Hartgroves 1987), are rare exceptions. The fact that the last were only revealed by the action of a reservoir suggests that others may still be concealed in lowland contexts.

4.4.4 Subsistence

Stable isotope analysis of human bone has provided direct evidence for diet during the 4th millennium BC. Samples from Hambledon Hill suggest a variable but generally high input of animal protein, whereas a more mixed plant/animal protein diet is indicated for the populations from the Cotswold-Severn tombs of Hazleton North and West Kennet (Richards 2000). For the Early Neolithic, Richards suggests “different subsistence regimes were followed in different areas by different communities and at a regional and national scale the picture is more one of a ‘mosaic’ of adaptations” (Richards 2000, 132).

Absorbed organic residues in pottery (lipids) provide further direct evidence of diet. Analysis of ceramics from Hambledon Hill and Windmill Hill conclusively demonstrates the exploitation of domesticated ruminants for dairy products as well as meat during the Early Neolithic (Copley *et al.* 2003).

Animals

The survival of faunal remains is locally varied, occurring in some quantity on the alkaline chalk and limestones of the east of the region, but being largely absent from the acidic geology of the peninsula. Since many of our best faunal assemblages derive from monument contexts or from pit deposits where character may imply selection or the generation of material through set-piece consumption events, gauging the relative ubiquity and economic significance of particular species can be difficult. However, this becomes less of a problem if we recognise the socially embedded and context-specific nature of animal husbandry and economic practices (different species operating in different regimes of value in different contexts), and avoid the search for elusive “norms”.

The early 4th millennium BC sees the introduction of domesticated cattle, pig, sheep and goat into southern Britain from as yet undetermined continental sources. Significantly, there is no evidence for autochthonous domestication of wild cattle and pig (Grigson 1999, 213) and Tresset (2003) has found close compositional and metrical similarities between animal bone assemblages from 4th millennium BC sites in Britain (including Windmill Hill and Maiden Castle) and those from contemporary or slightly earlier sites in the Paris Basin. This, along with the general dearth of wild species from 4th millennium BC assemblages, may imply the ascription of a reduced status to non-domesticated species rather than the playing out of any antithetical nature-culture distinction (Pollard 2004). The ontological and cosmological status of animals was constructed as much through an understanding of their habits, their perceived proximity to people, and their involvement in social relations

as through any kind of abstracted symbolic scheme (Whittle 2003, 78–106).

The remains of cattle dominate assemblages from the 4th millennium BC enclosures of Hambledon Hill (Legge forthcoming), Windmill Hill (Grigson 1999) and Maiden Castle (Armour-Chelu 1991) and from contemporary pit assemblages such as those from the Coneybury Anomaly (Maltby in Richards 1990, 57–61) and the slopes of Windmill Hill (Davies in Whittle *et al.* 2000). The pattern is not universal, and although a limited sample, pig out-numbered cattle in Early Neolithic contexts at Whitesheet Hill (Maltby in Rawlings *et al.* 2004), and from earliest 4th millennium BC pit deposits at Rowden, Dorset (Maltby in PJ Woodward 1991b), and Roughridge Hill, Wiltshire (Pollard 1993).

The Coneybury Anomaly is anomalous in many ways. This large early 4th-millennium BC pit produced a faunal assemblage “unparalleled in Britain” (Maltby in Richards 1990, 57–61), perhaps resulting from a major butchery episode involving at least ten cattle and several roe deer. Sheep bones were absent, and Maltby suggests that these animals may not have been present at this point in time within the Stonehenge landscape, although they do occur at a slightly later date in the pit assemblages outside Robin Hood’s Ball (Maltby in Richards 1990, 247). An indication of how selective such deposits may be is provided by the contents of the Hemp Knoll pits, near Avebury (Robertson-Mackay 1980). The assemblage here was dominated by cranial fragments, and perhaps also included individual burials of a sheep and calf (Grigson in Robertson-Mackay 1980).

There is no doubting the social value of cattle during the 4th millennium BC. In addition to providing a rich source of meat, milk and leather, a close identification was often made between cattle and people by the placing of the bones of the former within mortuary contexts (Grigson in Ashbee 1966). Cattle bones were included as deposits with the human dead in long barrows in the region (Grigson in Ashbee 1966; J Thomas 1988). At Fussell’s Lodge and other Salisbury Plain barrows, hides were draped over mortuary deposits (Grigson in Ashbee 1966), bespeaking of a containment, melding together, or absorption of ancestral bone and cattle. Ray and Thomas argue that cattle existed as a form of inalienable wealth, used in gift exchanges, as bridewealth, or in procuring alliances or settling death payments, with slaughter and consumption enacted only on special occasions (Ray and Thomas 2003, 41).

Cattle bone was also incorporated in the chambers of Cotswold-Severn tombs (J Thomas 1988, 549), though a different picture emerges from Hazleton North in Gloucestershire (Saville 1990). Here, only one cattle bone was found with human bone deposits in the chambers, but a complete perinatal sheep had

been placed in the south chamber, along with other sheep bones and the limb of a roe deer (Levitan in Saville 1990, 211–2).

While the bones of some non-domesticated animals (especially deer, wild cattle and wild pig) are occasionally present in small numbers, those of other species, such as cat, fox, wolf and brown bear, are exceptionally rare. The situation is remarkable given the heavily-wooded character of earlier Neolithic landscapes within which occupation took place, and across which such animals must have been ubiquitous. It is this kind of contradiction, among others, that must suggest our knowledge of earlier Neolithic landscapes is incomplete.

A prime feasting animal, pig is present in abundant quantities from the 3rd millennium BC ceremonial centres at Durrington Walls (Harcourt in Wainwright and Longworth 1971), Mount Pleasant (Harcourt in Wainwright 1979b) and the West Kennet palisades (Edwards and Horne in Whittle 1997b). The scale of feasting at these sites is further emphasised by the results of recent excavations outside the south-east entrance of Durrington Walls, which have revealed extensive middens and pit depositions containing feasting debris (Parker Pearson *et al.* 2006). Assemblages from other, contemporary, sites show the continuing importance of cattle. Primary deposits in the Wyke Down I henge, for example, included more cattle than pig (Legge 1991, 56–7); a pattern repeated with the pit assemblages from Windmill Hill (Davies in Whittle *et al.* 2000) and King Barrow Ridge (Maltby in Richards 1990, 248).

An indication of the range of animals present within the 3rd millennium BC landscape is given by assemblages (both incidental accumulations and deliberate deposits) from cave and swallet sites on Mendip (Rowberrow Cavern, Sun Hole, Bone Hole, Bos Swallet, Brimble Pit Swallet and Charterhouse Warren Farm swallet). In addition to domesticated cattle, pig and sheep, red and roe deer, wolf, boar and aurochs are present (Lewis 2005).

Human relations with non-domesticated animals appear complex; non-domestic species occur with greater frequency on Grooved Ware-associated sites than they do in 4th millennium BC contexts (Wainwright and Longworth 1971, table 29). In Wessex and Somerset, the bones of a wide range of non-domesticated species are found at henges, albeit often in small numbers: here we have wild cattle and pig, deer, horse, cat, wolf, fox, pine martin, badger, beaver and bird (including white-tailed sea eagle from the Coneybury henge, Maltby in Richards 1990, 153). Dog remains are also common. Fewer species are present in pit deposits, though alongside the familiar range of ungulates there are cat, fox, two important finds of brown bear from Down Farm, Cranborne Chase, and Ratfyn near Stonehenge (Legge 1991), and a “large

bird” from The Lodgers, Lechlade, Gloucestershire (Darvill *et al.* 1986).

That differential treatment could be afforded to the bones of domesticated and wild cattle and pig is illustrated by the seeming restriction of the latter to ditch contexts at Woodhenge and Durrington Walls (Richards and Thomas 1984; Pollard 1995, but see the cautionary notes in Albarella and Serjeantson 2002). The phase 2 deposits at Stonehenge are highly unusual in including the bones and even skeletons of wolf, fox and bird (including raven), placed in the same sectors of the henge ditch as disarticulated human bone and cremations (Serjeantson in Cleal *et al.* 1995; Pollard and Ruggles 2001). Overall, the proportion of wild animals from the site is unusually high (Serjeantson in Cleal *et al.* 1995, 450). Here may be a contextual link between certain wild animals, particularly carnivores, and the transformed human dead/ancestors.

In the case of red deer the distinction between animals classified as either domesticated or “wild” may even dissolve. Herds of deer were probably managed through selective culling and the creation of browse during the Neolithic (Sharples 2000). There existed high demand for antler to provide digging tools for the construction of monuments and the excavation of flint mines (Clutton-Brock 1984).

The status of horse remains ambiguous. In Wessex, small quantities of horse bone have been found in primary post-hole packing at the Sanctuary (Cunnington 1931, 331) and in other contexts at Durrington Walls, Mount Pleasant and Marden (Wainwright and Longworth 1971, 265). Seemingly no longer indigenous to Britain by the Neolithic, these animals, or at least their bones, had to be introduced; Serjeantson (1998) concludes, cautiously, that this occurred during the 3rd millennium BC. Harcourt (in Wainwright and Longworth 1971) thought the Durrington horse was wild, though if an introduced species some form of human control seems likely. They may have been kept for riding or as a source of meat.

While it is normally possible to distinguish between domesticated and wild varieties of individual species, it is much more difficult to be certain about the kinds of husbandry or control exerted over animals. Even with nominally domesticated species we can postulate different degrees and intensities of interaction with people, from close husbandry to a very loose form of management in which animals may be largely feral. Recent re-analysis of the faunal assemblage from Durrington Walls by Albarella and Serjeantson (2002, 43–4) has revealed evidence for morphologically “domesticated” pigs and cattle being shot with flint-tipped arrows. Such practices might have comprised a form of “ritualised” slaughter.

Latest 3rd to early 2nd millennia BC assemblages from the Stonehenge region show a decline

in numbers of pigs and the increasing importance of sheep (Maltby in Richards 1990, 249), though note should be taken of the large amount of cattle bone from the Beaker “midden” deposits in the Coneybury henge (Maltby in Richards 1990) which testifies to the continuing significance of these animals in special consumption events. Animal remains, principally wild mammals and birds, have been found in close association with cremated human remains in Cornish Early Bronze Age cists and barrows, for example, Trelowthas (Locker in Nowakowski forthcoming b), Highgate (Nowakowski 1998), Gunwalloe (Patchett 1944), Treligga 7 (Christie 1985) and Trebartha cist (King and Miles 1976). In Gloucestershire, at Bourton-on-the-Water, a Bronze Age ring ditch contained a pit with two dog burials (O’Neil 1977, 15–17). Assemblages from domestic sites are rare for this period, though the Early to Middle Bronze Age horizons at Brean Down contained cattle, pig, sheep, goat, deer and dog bones in quantities that varied according to phase and structure (Levitan in Bell 1990).

One of the latest occurrences of aurochs in southern Britain comes from the skeleton recovered from the Charterhouse Warren Farm swallet, dated to 1620–1430 cal BC (BM-731) and there is another late find, also from Somerset at Porlock Bay dating to 1740–1450 cal BC (AA-30681, Rob Wilson-North, pers. comm.).

Plants

Both cultivated and collected plant foods played an important role in Neolithic and Early Bronze Age subsistence practices. Initially introduced from Continental sources, cereals (emmer wheat and barley) are present from the beginning of the 4th millennium BC, featuring in early pit assemblages from the Coneybury Anomaly (Carruthers in Richards 1990, 250–2), Rowden, Dorset (Carruthers in PJ Woodward 1991b), and Penhale Round, Cornwall (Straker in Nowakowski 1998). From the mid 4th millennium BC pits on the slopes of Windmill Hill comes good evidence for the range of plant foods exploited in a single setting: emmer and emmer/einkorn wheat, naked barley, fruit and nuts including sloe, hazelnut and crab-apple together with and a rich range of other wild plants including goosefoot, dock, mint, meadow-grass (Fairbairn in Whittle *et al.* 2000). At Hambleton Hill, in addition to widespread scattered cleaned grain and hazelnut shells, some 50,000 emmer spikelets, charred before they had been dehusked, had been tipped into a mid 4th millennium BC pit (G Jones and Legge forthcoming). These authors argue that cereals are inherently under-represented in deposits of this period because the waste from them, in the form of straw and chaff, is readily burnt to nothing or eaten by livestock, in contrast to the more robust debris of

some wild plant foods, especially nuts. Querns and stone rubbers are not infrequent finds in contexts of this date, and may be seen as good proxy evidence for the preparation of cereals.

Though the evidence is somewhat ambiguous, there was perhaps less reliance on cereals and more on collected plant foods such as hazelnuts, crab apples and tubers during the later Neolithic. Cereals are known from Grooved Ware contexts (M Jones 1980), but not in the same quantities as earlier (for example at Windmill Hill, Fairbairn in Whittle *et al.* 2000), implying a more restricted or specialised dietary role. Commensurate with increased evidence for plough agriculture, the scale of cereal production noticeably rises in the latest 3rd and early 2nd millennia BC when barley, perhaps, replaced wheat as the favoured crop (Carruthers in Richards 1990, 250–2). A rich deposit of processed naked and hulled six-row barley from a Beaker/Early Bronze Age deposit in the ditch of the Coneybury henge most likely represents a deliberate deposit (Carruthers in Richards 1990) and may be seen as indicative of the increased status of cereal foods during the period.

Fishing and marine resources

Stable isotope analysis suggests a marked shift away from the exploitation of aquatic resources in coastal locations at the beginning of the Neolithic (Richards and Hedges 1999). There is also little reason to believe that freshwater fishing played a major role in earlier Neolithic subsistence practices; the brown trout bones from the “transitional” assemblage from the Coneybury Anomaly being an unusual find for the period (Richards 1990). The story is different for the 3rd and 2nd millennia BC. Marine shell, including that of the Common European Oyster and Great Scallop, is present in pits and as temper in Grooved Ware from the Stonehenge region (Cleal *et al.* 1994). Whether transported as “dry” shell or live shellfish, the nearest source for this would be from the coast c.50km to the south.

Bird and fish bones were present within Units 6 and 5b at Brean Down within the three Bronze Age structures; the earliest structure (57) produced the greatest concentrations of these remains. It is possible that deep-sea fishing was taking place, suggested by the presence of ling. Shellfish, whilst present, were not found in large quantities (Levitan in Bell 1990, 233). Contemporary deposits at Gwithian also produced large quantities of marine foodstuffs (shellfish and estuarine fish). Numbers of worked animal bone points and needles from the site give us indirect evidence for fishing, together with waisted elongated flat pebble tools which have been interpreted as line-winders. This would imply the practice of both deep-sea as well as shoreline fishing (Nowakowski 2004).

Drugs

The identification of grape vine charcoal from Hambledon Hill (Austin *et al.* forthcoming) combines with the earlier identification of a charred grape pip (G Jones and Legge 1987) to suggest that grapes may have been introduced, cultivated, and potentially converted to alcohol in the 4th millennium BC. The innovations of the period may have included mind-altering substances, additionally represented by opium poppy seeds in a waterlogged sample from near the base of an early 4th millennium long barrow ditch at Raunds, Northamptonshire (Campbell and Robinson forthcoming).

Storage of food stuffs

Ceramic vessels were probably employed for the storage of cereals and other foodstuffs. Meat may have been preserved through smoking, but in the absence of evidence during the Neolithic at least, was more likely consumed while fresh in the context of major consumption events/feasts. Preservation could also be achieved by salting, and briquetage from Brean Down represents the earliest evidence for salt extraction in Britain, indeed some of the earliest in Atlantic Europe (Foster in Bell 1990, 171). Pedestals and evaporation trays were recovered from occupation deposits associated with structures 95 and 59, and in an earlier context within Structure 57, for which there is a date of 1780–1420 cal BC (HAR-7020, Foster in Bell 1990).

4.4.5 Transport

Long-distance exchange of stone axes and ceramics is well attested within the region. The identification of charred fragments of Cornish Heath (*Erica vagans*), now native in mainland Britain only on the Lizard peninsula, at Hambledon Hill (Austin *et al.* forthcoming) suggests that some of the gabbroic pottery and south-western stone axeheads buried at the site may have been transported there directly. However, evidence for land-based trackways is absent, with long-distance routes of claimed early prehistoric date such as the Wiltshire Ridgeway now considered to be Roman or Medieval in origin (Fowler 2000). The numbers of cattle driven to causewayed enclosures to be slaughtered and consumed there raise the possibility that, if they and those who brought them came from any distance, they could have served as pack animals.

Routes along rivers would surely have been a prime means of communication in the largely wooded landscape of the 4th millennium BC, and indeed later. They connected monuments and monument complexes, as reflected by the positioning of avenues and enclosure entrances in relation to the Avon at Durrington Walls and Stonehenge (Parker Pearson *et al.* 2006). Sherratt (1996) has noted that the location of Wessex

between the Channel and the Irish Sea, with rivers providing potential links between them, as well as to the North Sea via the Thames, could make it nodal to a large number of long-distance routes. Tapping into many different communication networks, the region may have enjoyed an advantageous position in relation to the movement of many different low-bulk, high value materials. An exceptional instance of long-distance movement of high-bulk items is provided by the phase 3 bluestone settings at Stonehenge (Cleal *et al.* 1995). Unlikely to be derived from nearby glacial deposits, it now seems certain that the bluestones were brought from south-west Wales (Scourse 1997), probably via the Bristol Channel and Bristol Avon. While boats must have existed during the time period considered here, none have been found.

The region's wetlands offer better evidence of non-riverine inland transport. Joining islands within the fens to adjacent high ground, at least 38 Neolithic and Bronze Age timber trackways are known from the Somerset Levels, some with associated platforms (Coles and Coles 1986; Somerset HER). The earliest, of post and rail construction, are the early 4th-millennium BC Post Track and Sweet Track, while the repertoire of later Neolithic and Early Bronze Age trackways includes corduroy (Abbots Way) and hurdle (for example, the Eclipse and Walton Heath) constructions (Coles and Coles 1986; Somerset HER).

4.5 Social life

4.5.1 Social relations

Social organisation

Throughout the 4th to 2nd millennia BC we are dealing with small-scale, non-centralised societies. Models have been created which envisage increasing social "complexity" over time and the emergence of institutionalised elites, most notably by Renfrew in his seminal 1973 paper (Renfrew 1973). Other models, produced in the 1980s, avoided uni-linear sequences of social development and instead saw change being enacted through the jostling of competing ideologies. Most explicit was Thorpe and Richards' 1984 paper on "ritual authority structures" (where status was achieved through relative seniority of descent from a founding ancestor and ritual practice directed towards emphasising the group) and "prestige goods economies" (here status was fluid and based on direct control over resources), each seen as coterminous with Grooved Ware and Beaker packages respectively (Thorpe and Richards 1984).

Few prehistorians would now support the notion of chiefdoms or similar static hierarchical social formations, for the Neolithic at least. Status divisions undoubtedly existed, and were perhaps played out and reinstated through ceremonial practices (Barrett

1994b) but these distinctions could have been fluid, contested, or structured around lines of age and gender rather than birth-right. The construction of major ceremonial monuments undoubtedly involved considerable labour input (there are estimates of three million hours in the case of Silbury Hill). Motivation to continue with these projects must have been strong, and may have come from conviction of belief as much as coercion, although the organisation of these prodigious undertakings must imply some degree of hierarchical specialisation and command of resources. Whittle talks of people being driven to emulate the achievements of their ancestors and undertaking such projects out of respect for sacred traditions (Whittle 1993, 48). In such a model labour is given voluntarily, and projects can be initiated and stimulated by charismatic individuals (Whittle 1997b, 166).

Participation in the creation and use of monuments provided small social groups with a wider sense of community, if only temporarily. However, we know very little about the make up of individual social groups. Mass deposits of human bone within some chambered and earthen long barrows perhaps indicate the existence of small, closed kin groups, but residence and family membership may have been quite fluid, as implied by the Monkton Up Wimborne multiple burial of a woman with three children, two of whom were not her own (Green 2000, 79).

Regional identities

There is a very distinctive Early Neolithic sub-regional identity in the south-west peninsula, as expressed in distinctive forms of artefacts (south-western style bowl pottery, greenstone axes, and so forth) which were being widely exchanged. In addition, tor enclosures and the megalithic traditions of chamber tombs are distinctive features within the landscape. The degree of contrast between the overall Cornish earlier Neolithic "monument suite" and those of other regions may be diminishing, however, with the recent recognition in Cornwall of a wider range of linear monuments, including a cursus, a bank cairn and long cairns (see for example, Herring and Kirkham forthcoming) and a possible causewayed enclosure at Bury Down, Lanreath (Ray 1994). Other, later, styles of monument also display a distinct south-western focus, such as the entrance graves of Scilly and Penwith, and the stone rows of Cornwall and Devon. The former may be related to similar monuments in the Irish Sea zone, and reflect interaction with communities to the west of Britain.

Equally the Bronze Age has strong traits and traditions as expressed in material culture (such as the Trevisker ceramic tradition), funerary rites, mortuary practice and ceremonial traditions.

Conflict and violence

At Crickley Hill and Carn Brea, hundreds of leaf-shaped arrowheads were found clustered around the entrances and were associated with evidence of burning. This is most readily interpreted as reflecting attack by numerous archers in the earlier 4th millennium BC (Mercer 1981; Saville 2002, 96–8; Dixon 1988b). Arrowheads were scarce at Hambledon Hill and they were thinly spread in time and space (Saville 2002; forthcoming). The most substantial of several outworks on the hill was, however, burnt for a distance of 200m after initial fine silts had accumulated, the condition of some of the charcoal suggesting temperatures of around 700°C. A chalk rubble rampart framed by a chalkfast timber substructure is not easily burnt, and the intensity and extent of the event suggest deliberate firing. At a later stage the deaths of two young men by arrowshot indicate at least one further episode of hostility (Mercer 1999). Leaf-shaped arrowheads were also the probable cause of death for individuals buried on Crichel Down (Piggott and Piggott 1944, 51, 75, fig 23: 3) and in the Wor Barrow ditch (Pitt Rivers 1898, 63), both in Cranborne Chase, as well as in the West Kennet long barrow (Piggott 1962, 25). Some individuals buried in long barrows and cairns in the region had suffered head injuries, as at Belas Knap, Gloucestershire and Fussell's Lodge and Norton Bavant in Wiltshire. These and others recorded beyond the region ranged from massive, unhealed injuries, which would have caused or contributed to death, to healed depressed fractures. Most would have been caused by a blunt implement such as a club, others possibly by antler tines, or, in one case, a flint or stone axe (Schulting and Wysocki 2002a; 2005). The whole indicates a spectrum from inter-personal to inter-group violence, although the maximum scale of the latter remains unclear.

Evidence for conflict in the later 4th to mid 3rd millennia BC is scant, though note should be made of a recent find of a Late Neolithic human femur with arrow wounds from Durrington Walls (Mike Parker Pearson pers. comm.). Palisades, as at West Kennet and Mount Pleasant, could, in part, have fulfilled a defensive role, especially since sections of both were destroyed by fire (Wainwright 1979b; Whittle 1997b). However, it is difficult to define levels of inter-personal violence during this period due to the scarcity of human remains.

The latest 3rd and early 2nd millennia BC present a curious picture. The only case of death by arrowshot in the region is a man buried near the entrance to Stonehenge, who was shot at close range by at least three arrows tipped with barbed-and-tanged points, two of which were lodged in the sternum and a rib, at least one of them having entered through his

back (Evans 1984, 13–22). The unique location and the uniquely large number of arrows strongly suggest that this was an exceptional event. Leaf-shaped and barbed-and-tanged arrowheads both occur in similarly large numbers across England and Wales (Green 1980, figs 31, 47). Both were made and used over about a thousand years and a dearth of evidence for hunting throughout suggests that both were primarily inter-personal weapons. There are many times more inhumations from the late 3rd and 2nd millennia BC than from earlier, yet, while evidence gradually accumulates for death or injury inflicted by arrows in the 4th millennium BC (Mercer 1999; Wysocki and Whittle 2000, 599–600), it remains elusive in the whole of Britain for the period of Beaker burials in which the panoply of archery is sometimes elaborated. At present it seems that the role of archery had changed by this time (Healy and Harding 2004), although more thorough examination of late 3rd/early 2nd millennium BC skeletons, for example in the course of the project *The Beaker people: diet and mobility in Britain 2500–1700 BC* being undertaken by the universities of Sheffield and Bradford, may yet prove this false.

Human mobility

Direct evidence for the distances travelled by individuals is only just beginning to accumulate, largely through the application of stable isotope analysis. A woman buried in the Monkton Up Wimborne “temple” in Cranborne Chase in the later 4th millennium BC had a high level of lead in her bones, such that the Mendip Hills were the nearest area in which she could have lived a substantial part of her life (Green 2000, 77–84). A thousand or so years later, the continental origin of the “Amesbury Archer” and the probable Welsh origins of the “Boscombe Bowmen” (Fitzpatrick in preparation) indicate far longer journeys.

An imperfect proxy for personal mobility in the 4th millennium BC is provided by artefacts and materials that were transported with relatively frequency over relatively short distances, in both respects on a different scale to rare items transported over long distances, whether gabbroic pottery or stone axeheads. Cleal's 1995 paper is a reminder of quite how much fossil shell-tempered pottery from the Jurassic ridge was transported into Wessex, not only to sites close to Jurassic outcrops, like Maiden Castle (Cleal 1991), Windmill Hill (IF Smith 1965; Zienkiewicz and Hamilton 1999) or Whitesheet Hill (Cleal 2004) but to others well into the Chalk, like Robin Hood's Ball (N Thomas 1964). The widespread dispersal of these wares, their relative high quality, and the fact that the technological problems of firing fabrics with calcareous inclusions (which are prone to spall) were successfully overcome (Cleal 1995), would all be compatible with a pottery production



Figure 4.1: Excavations in 2000 at Longstones Cove, Beckhampton, the end of the second avenue at Avebury. Photo: M Gillings, J Pollard, D Wheatley.

area on the Jurassic ridge from which vessels were transported onto the chalk. The diversity of bowl fabrics from this area (Darvill forthcoming) points to a zone of production rather than a single source. The various Jurassic fabrics at Hambledon Hill would thus have been brought there from 25–60km to the west and north west. Old Red Sandstone from Mendip, which recurs in querns and rubbers at Hambledon (Roe forthcoming), points to an area some 40–80km to the north west. Materials like these may provide an approximation to the range from which people travelled to the complex. Movement over a comparable distance may be reflected by the presence at the Hembury causewayed enclosure in Devon of bowl pottery tempered with carboniferous vein quartz from 20km or more away (Quinnell in Gent and Quinnell 1999, 38–53).

4.5.2 Monumentality

The South West contains some of the most important landscapes of prehistoric monuments in Europe, which have made its archaeology internationally famous. Hyperbole is almost inevitable. The great 4th and 3rd millennium BC ceremonial centres around Avebury, Stonehenge, Knowlton and Dorchester on the Wessex chalk represent a largely unparal-

leled concentration of monumental constructions that contain within them the largest known cursus, henge monuments, stone circles and artificial prehistoric mounds. A short distance to the west, in Somerset, geophysical survey at the Stanton Drew stone circle complex has revealed what may prove to be the largest Late Neolithic timber circle in Britain (David *et al.* 2004). The prominence of these ceremonial centres tends to overshadow other nationally important monument groups within the region, including the Cotswold-Severn long barrows of Gloucestershire, north Somerset and north Wiltshire (Darvill 2004), the stone circles and rows of Dartmoor (Fleming 1988), and the tor enclosures and chamber tombs of Cornwall and the Isles of Scilly.

There exists much potential for further discoveries, particularly through the application of systematic aerial reconnaissance, which has until the last 20 years been extremely variable across the region. At Stapleton Farm, Damerham, on the Hampshire chalk, adjacent to Cranborne Chase and in a parish which formed part of Wiltshire until the 19th century, the extent and nature of a large Neolithic and Bronze Age ceremonial and funerary complex have only recently been defined by a programme of aerial and ground survey (Martyn Barber in prep.). Off the chalk and away from the major ceremonial centres in Dorset

are recent discoveries of a Late Neolithic/Early Bronze Age palisaded and ditched monument at Chickereil (PJ Woodward 2002), and a 30m-diameter pit circle at Hinton St Mary (PJ Woodward and Martin 2001). In Devon, two major enclosures of potential Neolithic date, with a cursus and numerous ring ditches and enclosures in close association with them, have recently been identified within 15km of Exeter (Griffith 2000). In Somerset, Devon and Cornwall previously “blank” areas have been infilled and transformed by both aerial reconnaissance and, for Cornwall, the National Mapping Programme. Even long-known complexes may be far from well-understood and can produce surprising new evidence as seen with the discovery of a mid 3rd-millennium BC enclosure at Beckhampton, near Avebury, and confirmation through excavation of the existence of the often disputed Beckhampton Avenue (Gillings *et al.* 2000; 2002).

Diversity

The diversity of monument forms within the region is striking. For the earlier Neolithic there exists a range of long mounds (with and without timber and stone chambers), major stone, earthwork and tor enclosures, cursus and the so-called mortuary enclosures. For the later Neolithic and Early Bronze Age this is extended to henges, henge enclosures, palisades, stone and timber circles both enclosed and free-standing, stone rows and other settings, megalithic entrance graves, round barrows and cairns in various forms. Some monument types, such as the diminutive stone settings on Exmoor (Riley and Wilson-North 2001, 27), and “pit henge” with central shaft at Monkton Up Wimborne on Cranborne Chase (Green 2000) are without obvious analogy, and illustrate the inventive way in which constructional themes were exploited.

The region’s geology and topography predispose to the construction of timber and earth monuments in the east and stone ones in the west. But this did not exclude the exercise of choice in building material, including the choice to transport it, as is emphatically demonstrated by the contrast between the timber settings of Durrington Walls and the stone settings of Stonehenge, both on the chalk of Salisbury Plain and only 3km apart (Parker Pearson and Ramilisonina 1998). In the early 4th millennium BC one major contrast is between the construction of causewayed enclosures, which show major concentrations in Wessex and the Cotswolds and extend into Devon (Oswald *et al.* 2001, fig 1.1) and tor enclosures, so far demonstrated to be Neolithic only at Carn Brea and Helman Tor, both in Cornwall (Mercer 1981; 1997). In the 3rd millennium BC, henge monuments are well represented in Wessex and Somerset, though less so

in the peninsula. The discovery of two small rectangular Middle Neolithic enclosures – a kind of monument most often found in the river valleys of central and eastern England – in the Otter valley on the route of the Honiton-Exeter bypass (Fitzpatrick *et al.* 1999) suggests that different kinds of monument may have been built on different terrains here as elsewhere. Irrespective of the forms of individual elements, each complex had its own history and its own dynamic.

Chronology

Chronological precision has been achieved very unevenly. The application of Bayesian analysis to sequences of rigorously selected samples has refined the chronologies of Stonehenge (Bayliss *et al.* 1997) and the Hambledon Hill complex (Healy 2004b; Bayliss *et al.* forthcoming), in both cases leading to reinterpretation of the monuments and their social implications. Otherwise, absolutely dated sequences have developed piecemeal, and less satisfactorily, as in Cranborne Chase and the Dorchester area. The chronology of individual monument types has been a focus in several cases. Cursus have been reviewed by Barclay and Bayliss (1999), a particular challenge because they are finds-poor. Recent projects on long barrows (Bayliss and Whittle 2007) and on causewayed and other Early Neolithic enclosures (Whittle *et al.* 2004) are both investigating many sites in the region and are delivering exciting results which change existing interpretations. They are, however, more effective in the Cotswolds and on the Wessex Chalk than in the peninsula. This is because largely acidic burial environments often preclude the dating of articulated bone, one of the sample types most likely to be contemporary with its context rather than redeposited. This gap can be closed, for example, by the increasingly routine recovery of short-life charred plant remains, by the dating of cremated bone (Lanting *et al.* 2001) and of superficial carbonised residues on pottery, and by the development of experimental techniques for the dating of lipid residues in pottery (see for example, Copley *et al.* forthcoming). Currently available dates from Early Neolithic enclosures and settlements in the peninsula, for example, are few and of limited value, often because they were made on bulk and/or unidentified charcoal samples capable of including material of diverse ages and/or because they were made early in the history of radiocarbon dating and have very large standard deviations. Some monument classes remain almost entirely undated. A notable example in the South West is that of the stone rows of the upland moors, for which no reliable dates have yet been achieved.

Early Neolithic contexts and developments

The region sits in an interesting position at the junction of two traditions of monument construction. Long barrows and earthwork enclosures ultimately constitute the legacy of central European *Linearbandkeramik* and post-LBK traditions, while the megalithic dolmens and passage-grave style monuments of the South West are an element of an Atlantic Early Neolithic that represents a fusion of local, Late Mesolithic practices and external Neolithic influence – Kinnes’s “impact zone” (Kinnes 1992, fig 2.1.1).

In the Mendip Hills and Cotswolds it may be possible to define a sequence that runs from portal dolmens, rotunda graves and simple passage graves to long mounds of the Cotswold-Severn group (Darvill 2004, 46–66). At least seven rotunda graves are known from Gloucestershire, and some of these, such as Sale’s Lot and Notgrove, were later incorporated into long mounds (Darvill 2004). The simple open boxed chambers of Cornish megalithic quoits might also be early, though there are no secure dates.

Earthen and stone chambered long mounds are well represented in the region (Kinnes 1992; Darvill 2004): the former largely in the east, and the latter in the west and north, though their distributions overlap in the Mendip Hills and North Wiltshire Downs (Lewis 2005; Pollard and Reynolds 2002). Those of the Cotswold-Severn group seem to fall within the period c.3800–3400 cal BC (Darvill 2004, 81); earthen mounds may begin at broadly the same time, but probably have a longer currency.

Several earthen long barrows in Wiltshire have been the subject of extensive excavation over the last 50 years: Horslip, South Street, Beckhampton Road (Ashbee *et al.* 1979), Fussell’s Lodge (Ashbee 1966), Kingston Deverill G1 and Woodford G2 (Harding and Gingell 1986). Significantly, of these, only Fussell’s Lodge and Woodford G2 produced mortuary deposits, illustrating the non-funerary associations of many of these constructions, although many previously excavated examples did indeed contain burials (Kinnes 1992). Constructional elaboration is evident at Amesbury 42 and at Millbarrow, Winterbourne Monkton, both with successive sets of flanking ditches (Richards 1990, 96–109; Whittle 1994), and at Wor Barrow with an early phase of ditch and mound (Barrett *et al.* 1991, fig 2.9). The mounds themselves are often of complex construction, with internal fence divisions and dumps of different soils (for example, Thickthorn Down, Drew and Piggott 1936); features also seen in many Cotswold-Severn tombs (Saville 1990).

At the extreme end of the scale are the little-understood bank barrows of Maiden Castle, Long Bredy and Broadmayne in south Dorset (PJ Woodward 1991b, 131). All are set on ridge crests,

that at Long Bredy associated with two cursus-style monuments, and that at Maiden Castle being superimposed on the earlier enclosure (Wheeler 1943). Allington Avenue, Dorchester, may be a further example (Davies *et al.* 2002), as may a monument on Pen Hill, Mendip (Lewis 2005).

Loosely allied to long mounds are other 4th millennium BC linear constructions such as cursus and mortuary enclosures, both possessing a wide distribution across the region. In Gloucestershire, the Lechlade Cursus is one of the most westerly of a significant concentration along the Thames valley, and is paired with another, to the south, at Buscot Wick on the opposite side of the Thames in Oxfordshire (Barclay *et al.* 2003). Although no dating evidence was obtained from primary levels, Peterborough and Grooved Ware was recovered from the middle ditch fills, and the monument provided a focus for pit digging and subsequent Beaker burials. Secure mid-4th millennium BC dates are available for the Lesser Cursus, near Stonehenge (Richards 1990), and the 10km long Dorset Cursus which bisects Cranborne Chase (Barrett *et al.* 1991, 46). Both were constructed in two stages. The Dorset Cursus displays a close relationship with (pre-existing?) long barrows, especially at the Thickthorn Down and Martin Down terminals where barrows are aligned on the cursus ends (Barrett *et al.* 1991, 47).

The scale of the Dorset Cursus is striking, and in an Early Neolithic context only matched by the complex of enclosures on Hambledon Hill, 10km to the west. Hambledon (Mercer and Healy forthcoming), like many of the region’s enclosures – both causewayed and “tor” – has been the subject of excavation, here and at Crickley Hill (Dixon 1988b), Carn Brea (Mercer 1981) and Windmill Hill (Whittle *et al.* 1999) on an extensive scale. These sites and others, such as Knap Hill (Connah 1965) or Whitesheet Hill (Rawlings *et al.* 2004), have produced evidence for episodic aggregation, if not more sustained occupation, and a remarkably full range of activities which included feasting, lithic production, ancestor and mortuary rituals and possibly exchange (Edmonds 1999). Their sitings may often have been marginal – at the edge of regions, away from major areas of contemporary occupation and in woodland – but their roles seem central to mid 4th-millennium BC social life.

Oswald *et al.* (2001) list two certain and 12 possible “tor enclosures”, and 11 certain and 11 possible causewayed enclosures within the region. Their scale and complexity (as defined by number of ditch circuits and outworks) varies immensely, with the largest (enclosing an area 600m across) occurring in the far east of the region at Crofton, Wiltshire (Lobb 1995), set in an interesting position straddling the valley of the River Dunn. However, its exceptionally large size and unusual location raise the question of whether or not this is a causewayed enclosure.

Late Neolithic contexts and developments

Both drawing upon an established architectural repertoire and reflecting innovation perhaps brought about by new bodies of belief, the origins of henge monuments are likely to be complex (Harding 2004). Within the region, the three enclosures at Stonehenge (Cleal *et al.* 1995), Flagstones (Healy 1997) and Beckhampton (Gillings *et al.* 2000; 2002), look to be “transitional”, combining features common to both earlier causewayed enclosures and 3rd millennium BC henges. Dates for both Stonehenge I and Flagstones place them within the Middle Neolithic, c.3300–2900 BC (Bayliss *et al.* 1997; Healy 1997, table 79), a period during which the intensity of monument construction seems to have considerably lessened. On Cranborne Chase, there are other constructions that can be placed within this horizon, including the anomalous Monkton Up Wimborne pit circle and shaft (Green 2000, 77–84) and the early round barrows of Handley 26 and 27, adjacent to Wor Barrow (Pitt Rivers 1898; Barrett *et al.* 1991, 84–7). Gloucestershire round mounds with stone cists containing multiple burials at Soldier’s Grave, Frocester (Clifford 1937a), and The Waste, Hawling (O’Neil and Grinsell 1960), may represent Middle Neolithic developments, on the basis of sherds seemingly in a Peterborough Ware fabric from the former (Darvill 2004, 219).

Henges and “hengiform” monuments occur in several parts of the region, notably on the Wessex chalk (Harding and Lee 1987). This is a loose category of monument, displaying considerable variation in scale, structural complexity, participation and use. Small hengiforms, such as those on Conygar Hill, Dorchester (RJC Smith *et al.* 1997), are likely to have acted as family shrines, while the massive henge enclosures of Avebury (Gillings and Pollard 2004), Marden (Wainwright 1971), Durrington Walls (Wainwright and Longworth 1971) and Mount Pleasant (Wainwright 1979b) represent collective undertakings on a scale that must have required labour from many groups both within and outside the area. Even these four sites display marked differences in format, landscape setting (from hilltop to valley bottom), internal features (stone circles, coves, timber circles and so forth), and the range of contemporary activities (such as Avebury being remarkable “clean” and Durrington Walls containing vast quantities of feasting debris).

In Somerset, the four Priddy Circles are highly unusual in their striking similarity and linear setting (Lewis 2001), though in this respect they invite comparison with the Thornborough henges in North Yorkshire (Harding 2004, 90–9). The stone circles at Stanton Drew are now known to be set within henge earthworks and may replace earlier timber settings (David *et al.* 2004), a process of “lithicisation” seen at other monuments such as Stonehenge (Cleal *et al.*

1995), the Sanctuary (Pollard 1992), Site IV, Mount Pleasant (Wainwright 1979b), and perhaps from earth to stone at Beckhampton (Gillings *et al.* 2002).

The range of 3rd millennium BC monument forms is considerable and, in addition to henges and stone or timber circles, includes palisades at, for example, Dorchester (PJ Woodward *et al.* 1993), West Kennet (Whittle 1997b) and Mount Pleasant (Wainwright 1979b), earthwork and megalithic avenues, for example, at Stonehenge (Cleal *et al.* 1995) and Avebury (Gillings and Pollard 2004), and a series of enigmatic large mounds associated with henge enclosures at Silbury Hill (Whittle 1997b), Marden (the Hatfield Barrow), Knowlton and Mount Pleasant (Conquer Barrow). Combinations of these different monument forms are commonly found within the same locality, forming ceremonial complexes of great longevity.

Regional traditions are evident. In Dorset, earlier interest in chalk-cut shafts, both natural and artificial, seems to continue with the pit-circle henges of Cranborne Chase (such as Wyke Down 1 and 2: Barrett *et al.* 1991, 92–106; Green 2000, 87–8) and the remarkably deep shafts cut into the base of the ditch at Maumbury Rings, Dorchester (Bradley 1975). At 5.5m deep, the ditch of the southern henge at Knowlton may be of a similar character (see Burrow and Gale 2006). Within the pits/shafts at Wyke Down and Maumbury Rings were deposits of human bone, carved chalk and antler. On the upland landscapes of the peninsula, especially Dartmoor, Bodmin Moor, Penwith Moor and Exmoor, are a series of “open” megalithic constructions (stone circles, rows and other configurations) that may well begin in the later Neolithic and which certainly extend into the early 2nd millennium BC. Single, double and triple stone circles can all be found and Barnatt (1982) has shown that many Cornish stone circles are smaller than those elsewhere. Very few have been investigated in modern times; the 1930s excavation by Radford at The Hurlers (Radford 1938) revealed a quartz pavement, while limited investigation at Leskernick recovered material that produced a radiocarbon date of c.1700 cal BC (Barbara Bender pers. comm.).

The free-standing timber circle at Boscombe Down may well provide a “lowland” equivalent to stone circles, though the metaphorical qualities of constructional materials should be taken into account (Parker Pearson and Ramilisonina 1998), and with it differing concepts of durability and relevance to ontological domains. It should be noted that the pit circles at Norton Fitzwarren, Somerset (Ellis 1986; Riley 2006) now appear more likely to have been a Second World War barrage balloon tethering site (Chris Webster, pers. comm.).

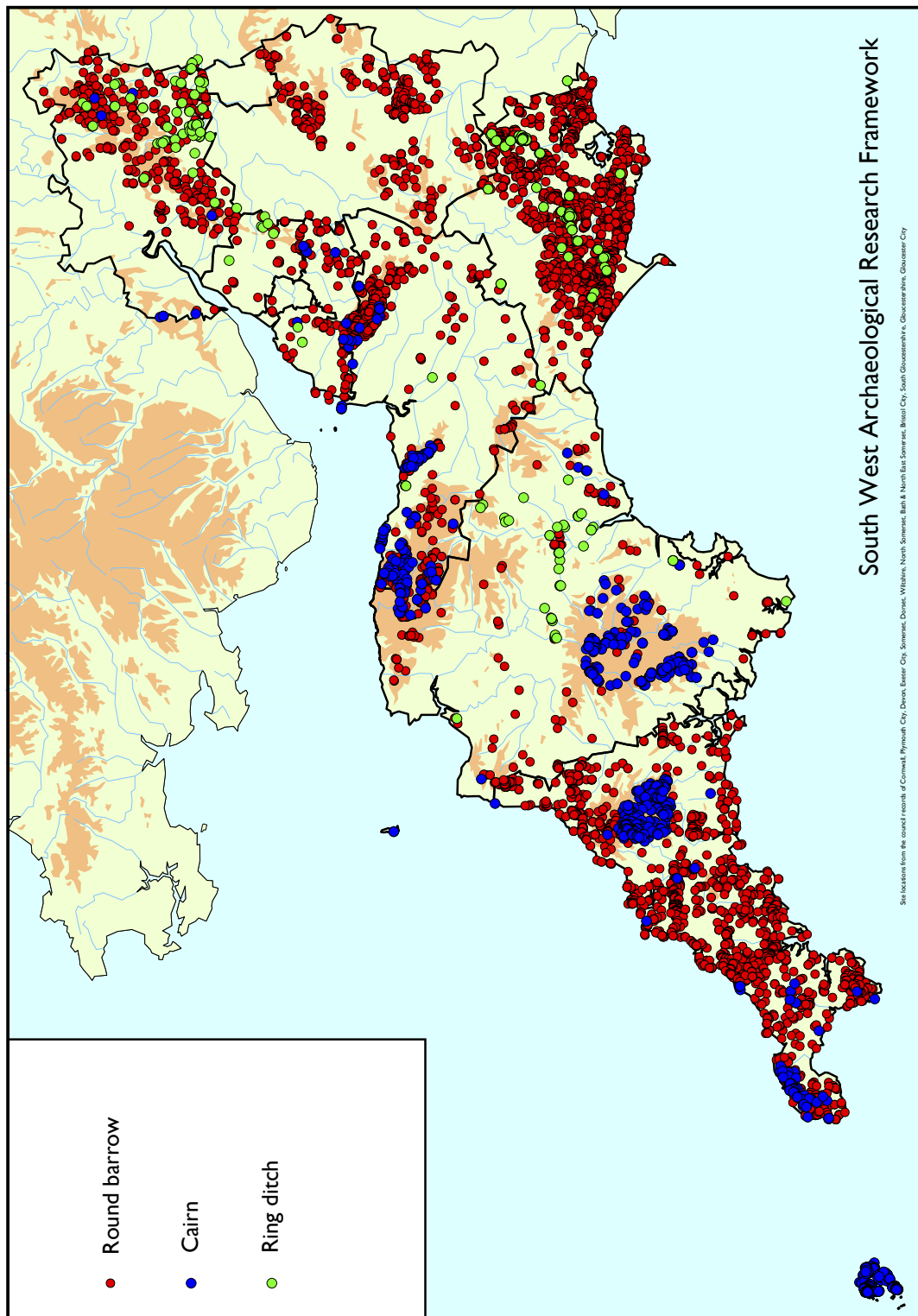


Figure 4.2: Distribution of round barrows, cairns and ring-ditches across the region as recorded in HERs.

Early Bronze Age contexts and developments

Traditions of megalithic tomb construction and use may extend into the Early Bronze Age in the far south-west. Although their chronology is poorly understood, and Ashbee (1982) has argued for a Mesolithic origin, most of the finds from excavated Entrance Graves in the Isles of Scilly and West Cornwall date to the Early Bronze Age (O'Neil 1952). The Try menhir cist (see below) has now produced a radiocarbon date of 1880–1600 cal BC, the first from a burial context in Cornwall or Devon (AM Jones and Quinnell forthcoming). Over 80 of these monuments are recorded on Scilly, as opposed to only nine in West Penwith.

Elsewhere, the region includes dense concentrations of round barrows and round cairns, surviving as upstanding monuments in many upland areas (see Figure 4.2 on the preceding page). With over 6,000 in Wessex (mostly Wiltshire and Dorset, Grinsell 1958, 93), at least 745 in Somerset (Grinsell 1969; 1971) and 3500 in Cornwall, these represent the most prevalent category of prehistoric monument in the South West. Their distribution is far from even, occurring both in relative isolation, or as part of bigger cemeteries. There are notable concentrations on Mendip (especially around the Priddy Circles, along the South Dorset Ridgeway (spreading over 16km), and around the pre-existing ceremonial centres at Stonehenge and Avebury (A Woodward and Woodward 1996). Aerial reconnaissance is radically altering the distribution pattern of such monuments in the plough-levelled lowlands.

Complete excavations have revealed that many Cornish barrows have complex site histories and that the incorporation of human remains may be just a small part of the barrow tradition. The list of complete barrow excavations is steadily increasing, and includes work at Crig-a-Mennis (Christie 1960), Davidstow Moor (Christie 1988), Tregulland (Ashbee 1955–1956; 1958), Watch Hill (Miles 1975a), Caerloggas (Miles 1975a), Gaverigan (Nowakowski 1995; 1998; forthcoming a), Highgate (Nowakowski 1998), Trenance (Miles 1975a), Chysauster (G Smith 1996) and Stannon (Harris *et al.* 1984). Such work demonstrates the tremendous variety in size and structure of these monuments, ranging from large turf-built ditched mounds to small stone cairns. Excavations of groups of Early Bronze Age barrows such as the Davidstow Moor campaign in the 1940s (Christie 1988), Colliford (Griffith 1984) and Stannon (AM Jones forthcoming) have provided insights into the diversity of ceremonial practices not directly linked to disposal of the dead. Analysis has shown that specific zones on individual sites and even within even larger (local) landscapes may have performed particular roles in ritual practice (see Owoc 2001; Nowakowski forthcoming a; AM Jones 2005; 2006).

This highlights the danger of regarding barrows solely as the physical depositories for human remains.

A feature of the barrows and cairns of the peninsula is their longevity and complexity, with many monuments revisited and remodelled over many generations. Their form may develop, for example, from flat cemetery to ring-cairn to platform cairn to end in conventional round barrow form, a fact that should be borne in mind when analysis is made of these features in their final visual form. In many cases “round barrows” also shade into other forms such as henges and stone circles: for example the “multiple stone settings” at Shovel Down and elsewhere on Dartmoor show relationships with both barrows and stone circles, while being intimately connected with the stone rows of the complex.

Similar structural complexity is evident among round barrows on the chalk. There has been a series of major cemetery/barrow group excavations, both in the first half of the 20th century at, for example, Crichel Down and Launceston Down (Piggott and Piggott 1944), and especially following post-war arable intensification and military activity, as at Wilsford cum Lake (IF Smith 1991), Winterbourne Stoke (Gingell 1988), Shrewton (Green and Rollo-Smith 1984), Milton Lilbourne (Ashbee 1986b), Amesbury (Ashbee 1985) and Snail Down (N Thomas 2005). While some barrows follow simple ditch and mound formats, others show successive enlargements (for example, Amesbury 71, Christie 1967), and the presence of ring cairns (West Overton 6b, IF Smith and Simpson 1966), stake circles, turf cores, mound platforms, and so forth. Earliest Beaker barrows are generally quite small, but often provided the focus for the creation of extensive linear cemeteries that continued to be used into the middle of the 2nd millennium BC. By the full Early Bronze Age there is a wide repertoire of barrow formats, including bell, saucer, disc and pond varieties, some perhaps with specific gender associations.

Arguably of Early Bronze Age date, circular hilltop enclosures are known in the west of Cornwall that appear to encircle ring-cairns and other monuments, for example at Bartinney and Caer Bran (Herring 1995; Lawson-Jones and Herring 1997). In the east of the county a spur top enclosure at Liskeard was recently radiocarbon dated to the Middle to Late Bronze Age (AM Jones 1998–9b), but much of its interior had already been removed by development. Standing stones (menhirs) – single, paired and in rows – are also a feature of the Cornwall and the Isles of Scilly. Some have been investigated by antiquarians, such as Blind Fiddler in West Penwith where a deposit of bone chips and ashes were found by Borlase in the late 19th century (Borlase 1872). At Try, Gulval, a large menhir was associated with a stone-lined cist containing a multiple deposit of animal bone, cremated

human bone, a rare handled Beaker and fragments of Trevisker pottery (Russell and Pool 1964). The cist now has a radiocarbon date of 1880-1600 cal BC (AM Jones and Quinnell forthcoming). Try shows us that these types of sites can have long histories.

4.5.3 Mortuary Practices

The same geological conditions leading to the differential preservation of animal bone across the region also apply to human remains, unburnt bone especially. From sites on the chalk of Wiltshire and Dorset and the limestone of Mendip and the Cotswolds come important mortuary deposits that have been the subject of investigation since the early 18th century (for example, Stukeley 1740; Colt Hoare 1812). By way of contrast, to date, there are no identified human remains for the entire Neolithic in Cornwall.

Early Neolithic practices

Collective deposits of semi-articulated and disarticulated human bone are seen as characteristic of mortuary practices associated with 4th millennium BC long barrows and chamber tombs. There is much anecdotal detail of these deposits from antiquarian explorations: for example William Cunnington and John Thurnam's work on South Wiltshire long barrows revealed multiple disarticulated burials (such as at Bowl's Barrow), chambers with smaller numbers of articulated individuals (Knook 5) and also "crematorium" formats (see Kinnes 1992, 98-106). More useful are the results of 20th century excavations at sites like Hazleton North (Saville 1990), West Kennet (Piggott 1962), Lanhill (Keiller and Piggott 1938) and Fussell's Lodge (Ashbee 1966). Human remains were found in varied states of articulation and disarticulation in the chambers at West Kennet and Hazleton North; the final phase "flintknapper" burial at Hazleton being fully articulated (Saville 1990, 250). This strongly suggests a practice of successive interment of complete bodies, which then underwent a process of decay, with occasional resorting of the bones (Piggott 1962, 22-3). The process may have been quite different at Fussell's Lodge, where the relative lack of small bones and ribs, the unevenly matched numbers of long bones and over-representation of skulls, implies the introduction of fully disarticulated bone into the deposit (Brothwell and Blake in Ashbee 1966). Complete, articulated burials are also not uncommon in Cotswold-Severn tombs (Saville 1990, 260-1), and deposits of cremated bone are known from Hazleton North (Saville 1990), West Kennet (Piggott 1962, 21-4) and several Somerset long barrows (Lewis 2005).

Numbers of individuals interred within Cotswold-Severn tombs vary considerably, but rarely exceeded 50 (Saville 1990, 261). Estimates for Hazleton North suggest between 35 and 42 individuals (Saville 1990)

and for West Kennet, the largest tomb of this group, 36 (Bayliss *et al.* 2007). Adults, adolescents, infants and even neonates are present, implying little restriction on those who could be included. However, at Hazleton North, as at many other Cotswold-Severn tombs with the exception of West Kennet, there exists an apparent preponderance of males over females (Rogers in Saville 1990, 198). The sorting of bodies according to age, and to a lesser extent sex, has been noted in several Cotswold-Severn tombs (J Thomas and Whittle 1986; Darvill 2004, 153-6). From later 4th millennium BC earthen long barrows come mortuary deposits with fewer, and largely articulated, burials (as at Wor Barrow, Pitt Rivers 1898). Grave goods, if they can be considered as such, are limited to pottery vessels, flint implements and rarely other items such as beads.

It must be remembered that barrow burial was chronologically limited and certainly not the normative rite during the full course of the 4th millennium BC. Human bone is a common find within contemporary enclosures; both single and multiple disarticulated bones are known from pit deposits, as at Cadbury Castle, Somerset (Alcock 1972, 110), and Handley Hill, Dorset, (Pitt Rivers 1898). Individual inhumations with bowl pottery from the cave sites of Tom Tivey's Hole and Chelm's Combe, hint at other traditions of burial (Lewis 2005).

Excarnation and the manipulation of defleshed human bones have long been recognised as a part of 4th millennium BC practice. It is becoming increasingly clear that active defleshing played a part in this process, as at the West Tump long barrow (MJ Smith and Brickley 2004) or Hambledon Hill (McKinley forthcoming). Manipulation of the fleshed human corpse, as well as of defleshed bones, may have been far more prevalent than it has so far appeared.

Late Neolithic practices

Middle and Later Neolithic funerary practices are not well represented, and we must assume the existence of rites that are archaeologically invisible. A number of latest 4th to early 3rd millennium BC inhumations from Cranborne Chase provide a hint of rites that must have been rare and socially restricted. The Handley 26 and 27 round barrows covered inhumations, one with a jet belt slider, while two articulated male inhumations (one with an arrowhead) had been placed in the ditch of the adjacent Wor Barrow (Pitt Rivers 1898; Barrett *et al.* 1991, 84-7). Four individuals had been buried in an oval scoop cut into the wall of the central pit of the nearby Monkton Up Wimborne "temple" (Green 2000, 78-80). That they were fully articulated implies contemporaneous death, and perhaps a rather unusual set of circumstances surrounding the burial.

Our best evidence for Late Neolithic mortuary treatment comes from the cremation cemetery associated with Stonehenge 2 (Cleal *et al.* 1995) and cave and swallet sites in Mendip (Lewis 2000).

Early Bronze Age practices

Traditions of single burial (inhumation and cremation) are intimately linked to the widespread appearance of round barrows and round cairns at the beginning of the Bronze Age. In general, the sequence might be seen to run from inhumation, especially with Beakers, to cremation, though the reality is much more complex, and likely to vary across the region. Cremations and inhumations are found together, for example at Durrington 7 (Richards 1990, 171–84) – even with Beakers as at West Overton 6b (IF Smith and Simpson 1966) and the Lousey Barrow (Christie 1985). Inhumations are frequently crouched or flexed, but rare instances of extended burial are known, as at Bush Barrow (Colt Hoare 1812). Bodies were sometimes placed in stone cists, dug-out tree-trunk coffins (as at West Overton 1, Winterbourne Stoke 5 and 9, Piggott 1973b, 357) or contained within pitched-roofed timber mortuary houses (for example, Amesbury G15, Piggott 1973b). Grave goods frequently accompanied burials, signifying and helping to constitute networks of relationships and constructed identities (J Thomas 1991; Brück 2004) as much as lived status.

Possibilities exist for mummification, and that burial did not always follow on immediately from death is seen with the deposit of disarticulated and weathered bones from three individuals within a grave pit under Amesbury 61a (Ashbee 1985). At Sutton Veny, an adult male inhumation with Food Vessel, contained within a timber coffin placed on a bier, looked to have been dismembered before burial, or subsequently disturbed (Johnston 1980). Several Beaker burials on Crichel Down were also disturbed following interment (Piggott and Piggott 1944), though whether this represents grave robbing or more purposeful extraction of skeletal elements remain unclear.

Not all burials were marked by mounds. Beaker flat graves are common in certain parts of the region, for instance around Avebury, where many were covered by sarsen slabs or placed at the feet of standing stones (Pollard and Reynolds 2002, 128–30). It is notable that the richest, that of the “Amesbury Archer”, seems to be unmarked.

It is clear that only a small proportion of the Early Bronze Age population received barrow burial. Many people may have been subject to excarnation, with bones being circulated and deposited in a variety of locations. Human bone has been found in Units 6 and 5b at Brean Down (Bell 1990, 257), in the ditch of the Avebury henge (Pollard and Reynolds 2002,

127) and in Mendip caves and swallets. At Charterhouse Warren Farm swallet, disarticulated human bones from Horizon 2 had cut marks near their articulation points, suggesting defleshing. This horizon produced a date of 2460–2030 cal BC (OxA-1559) and contained Beaker pottery (Levitan and Smart 1988, 391).

4.6 Radiocarbon dates

Table 4.1: Details of radiocarbon dates used in the text. Calibrated ranges are at 2σ (95.4%) and were calculated with OxCAL 3.10 (Bronk Ramsey 2005) using the probability method and the IntCal04 calibration curve (Reimer et al. 2004).

| Lab. Ref. | ^{14}C age BP | Cal BC | Site | Context | Reference |
|-----------|------------------------|-----------|---------------------------------------|---|---|
| AA-30681 | 3300±55 | 1740–1450 | Porlock Marsh | Aurochs bone | Vanessa Straker, pers. comm. |
| BM-731 | 3245±37 | 1620–1430 | Charterhouse | Aurochs bone | Burleigh and Clutton-Brock (1977) |
| GU-9574 | 3725±40 | 2280–1980 | Warren Farm swallet Rameldry, Fife | Skin from dagger sheath in burial | Baker et al. (2003) |
| HAR-7020 | 3310±80 | 1780–1420 | Brean Down sandcliff | Bulk sample of unidentified charcoal from Early to Middle Bronze Age structure | Bell (1990) |
| OxA-1402 | 5050±100 | 4050–3640 | Coneybury “Anomaly” | Animal bone from primary deposit | Richards (1990) |
| OxA-1559 | 3790±60 | 2460–2030 | Charterhouse Warren Farm swallet | Disarticulated human bone from cave entrance shaft | Levitan and Smart (1988); Chamberlain (1996) |
| OxA-7981 | 5250±50 | 4250–3960 | Fir Tree Field shaft | Disarticulated pig femur layer 6a hearth | Allen and Green (1998) |
| OxA-8009 | 5045±45 | 3960–3710 | Fir Tree Field shaft | Charred <i>Clematis</i> roots from layer 6b | Allen and Green (1998) |
| OxA-8010 | 5150±45 | 4050–3800 | Fir Tree Field shaft | <i>Fraxinus</i> charcoal from layer 6b hearth | Allen and Green (1998) |
| OxA-8011 | 5355±45 | 4330–4050 | Fir Tree Field shaft | <i>Corylus</i> charcoal layer 8 (below microliths) | Allen and Green (1998) |
| OxA-13540 | 3877±33 | 2470–2230 | Amesbury Archer | Boar tusk | Andrew Fitzpatrick pers. comm. |
| OxA-13541 | 3895±32 | 2480–2280 | Amesbury Archer | Articulated human bone | Andrew Fitzpatrick pers. comm. |
| OxA-13542 | 3955±33 | 2570–2340 | Boscombe Bowmen | Human bone | Andrew Fitzpatrick pers. comm. |
| OxA-13543 | 3822±33 | 2460–2140 | Boscombe Bowmen | Articulated human bone | Andrew Fitzpatrick pers. comm. |
| OxA-13562 | 3829±38 | 2460–2140 | Amesbury Archer's companion | Human bone | Andrew Fitzpatrick pers. comm. |
| OxA-13598 | 3889±30 | 2470–2280 | Boscombe Bowmen | Human bone | Andrew Fitzpatrick pers. comm. |
| OxA-13599 | 3681±30 | 2200–1960 | Boscombe Bowmen | Human bone | Andrew Fitzpatrick pers. comm. |
| OxA-13623 | 3866±28 | 2470–2200 | Amesbury Archer | Boar tusk | Andrew Fitzpatrick pers. comm. |
| OxA-13624 | 3845±27 | 2460–2200 | Boscombe Bowmen | Human bone | Andrew Fitzpatrick pers. comm. |
| OxA-13681 | 3825±30 | 2460–2140 | Boscombe Bowmen | Human bone | Andrew Fitzpatrick pers. comm. |