

Activity within the prehistoric landscape of the Surrey chalk downland, Cherkley Court, Leatherhead

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with contributions by
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During 2013 Archaeology South-East (UCL Institute of Archaeology) conducted a series of archaeological investigations at Cherkley Court, Leatherhead. The work identified an interesting and varied prehistoric landscape set within the North Downs, an area not renowned for later prehistoric activity. The estate is set within rolling chalk downland with commanding views over the Mole Valley to the west, providing a significant access route to the Thames Valley; the site is also bisected by Stane Street, the London to Chichester Roman road.

Clusters of archaeology were encountered; most of the remains dated to the Late Bronze Age and Middle to Late Iron Age with surprisingly few Roman remains found, given the proximity of Stane Street. The Late Bronze Age remains showed an open landscape delineated by large ditches and used mainly as pasture. A rectilinear enclosure in the south-east was more likely to be associated with arable farming, particularly as a series of probable grain storage pits lay in one corner. Evidence of cereal storage and processing was found in the centre of the site where a series of post-built granaries, stores and probable drying racks were located.

Some of the post-built structures as well as one of the ditches ran at right-angles to Stane Street, suggesting that a trackway, similarly aligned to the Roman road, probably pre-dated it and provided a further transport route through the North Downs. Iron Age activity, although less intensive, appeared to respect much of the Bronze Age landscape consisting of similarly aligned features and a continuation of pitting and grain processing in some areas.

Introduction

The archaeological work was carried out in 2013 in advance of the redevelopment of the Cherkley Court estate as a golf course, hotel and spa complex. The archaeological investigations focused on the golf course development where large areas of the estate were landscaped, particularly for the fairways and greens.

Cherkley Court (TQ 1813 5504) lies *c.* 2.5km south-east of Leatherhead within the undulating Leatherhead Downs, comprising grassland interspersed with areas of woodland (fig 1). The archaeological investigations took place within the open downland in the centre, north and east of the estate. The site occupies a high area of land commanding extensive views to the north and south overlooking the river Mole, which lies 200m to the west. The Mole cuts through the North Downs between Dorking and Leatherhead in a steep valley known as the Mole Gap; such valleys through the downs would have provided extremely valuable links between the Thames Valley to the north and the Weald to the south.

The undulating grassland varies in height between 80 and 150m OD; it is underlain by Upper Chalk with dry valleys filled by colluvial material. Some of these valleys have been partially infilled with modern made-ground.

HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

In comparison with the South Downs, the North Downs have previously been viewed as having moderate potential for prehistoric activity (Needham 1987, 128). As stated previously the location of Cherkley Court, overlooking the Mole Gap, would have been attractive given the value of the river as a corridor facilitating movement to and from the Thames Valley.

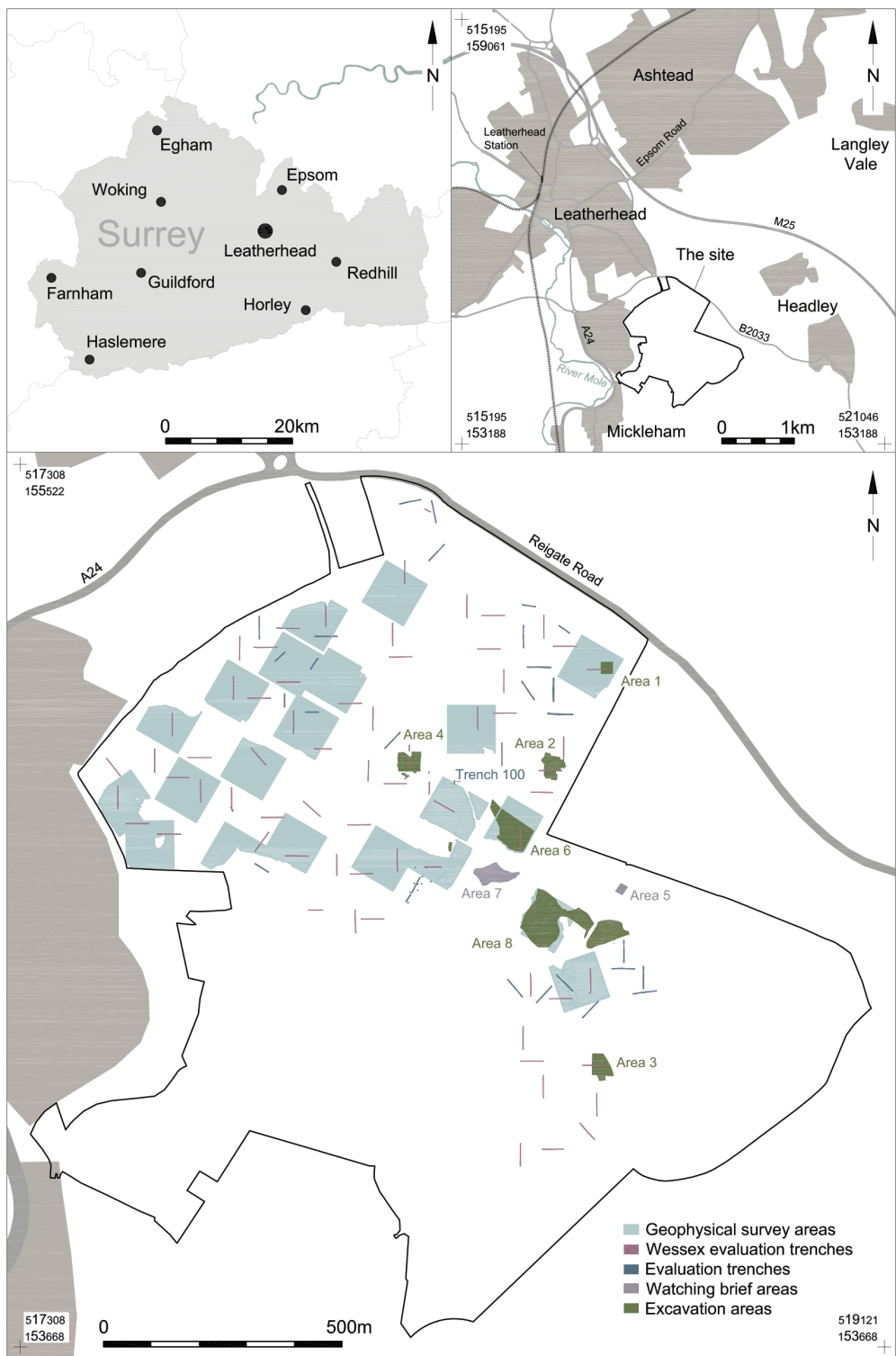


Fig 1 Cherkley Court, Leatherhead. Site location.

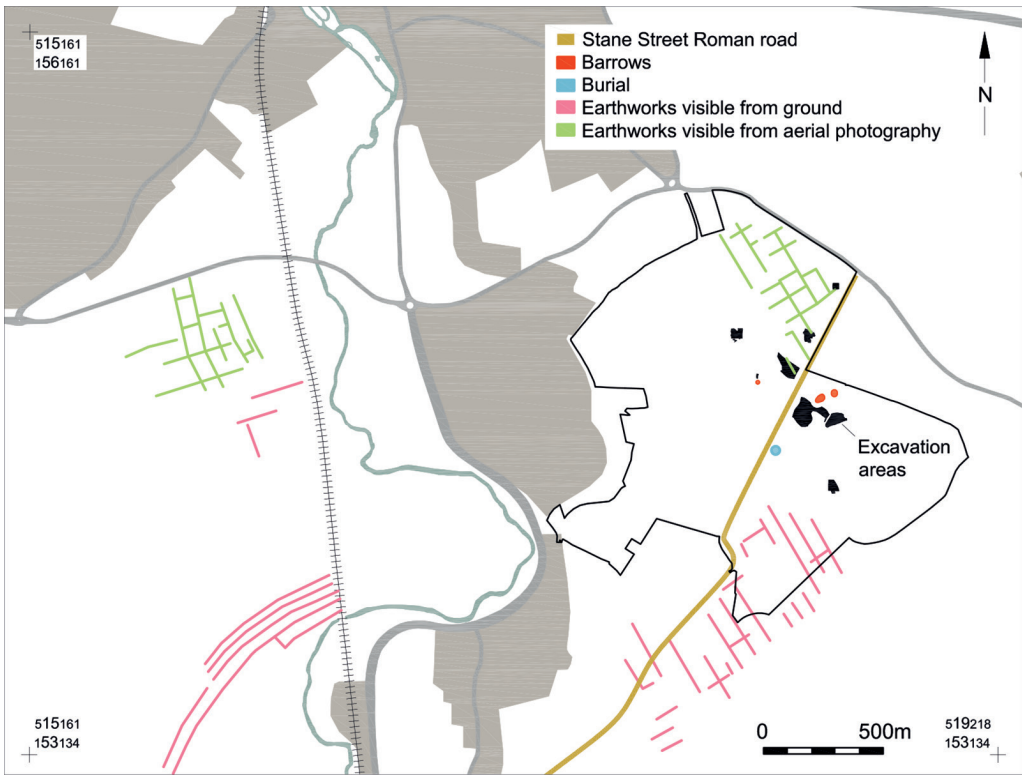


Fig 2 Cherkley Court, Leatherhead. Monuments and earthworks in the area (after English 2013).

Indeed, the Mole Valley has more recently been seen as one of the few areas within the North Downs that was extensively utilised during the later prehistoric period (English 2013, 35).

The estate contains several known historic monuments including three or possibly four barrows, which formed part of a larger group of eight or nine barrows collectively known as the Tyrrell's Wood group; only four of these barrows are now visible including two at Cherkley Court (fig 2). The barrows have long been thought to be prehistoric and possibly Early Bronze Age in date; in 1868 'sepulchral urns' were found within one of the barrows (Grinsell 1934) and could indicate beaker pottery pre-dating the monuments (Currie 2000, 16). A second possible beaker burial beneath a cairn was found in the south-east of the estate (*ibid*; 'Burial' on fig 2). Previous surveys and analysis of aerial photographs have found evidence of field systems of probable prehistoric date in the north-west and south-east of the site as well as in the surrounding area (Currie 2000; English 2013); these appear to have taken the form of lynchets. Cherkley Court is bisected by Stane Street, which ran from Chichester to London (Margary 1965, 59). The site was utilised for grazing for much of the medieval and post-medieval periods before a programme of tree planting took place in the later 19th century when the Cherkley Court estate was established. At this time the property was owned by Abraham Dixon, who had made his fortune as a wool manufacturer in Birmingham. The main house, located in the south of the site, was constructed between 1866 and 1870; it was destroyed by fire in 1893. The house was rebuilt in its current guise, and was lived in by Dixon until his death in 1900. The estate was acquired by Max Aitken in 1910 after the death of Abraham Dixon's wife. Aitken, later Lord Beaverbrook, was a media magnate, originally from Canada, who played an influential role in British political life during the first half of the 20th century and particularly during the Second World War,

when he was a close associate of Churchill. Lord Beaverbrook used Cherkley Court not just as his personal residence but also for private meetings related to both politics and business.

Following Beaverbrook's death in 1964 the house was occupied by his wife until her own death in 1994 when it became the property of the Beaverbrook Foundation, which restored the property with the aim of opening it to the public. Visitors to the estate were formally welcomed in 2007 but by 2009 the foundation decided it was not profitable and sold the house and land for redevelopment.

METHODOLOGY

The initial work comprised geophysical survey and evaluation trenching undertaken by Wessex Archaeology (Urmston 2011; Britchfield 2012). The geophysical survey covered around 20ha of the site and found little of archaeological significance. Seventy evaluation trenches were excavated, with only five containing archaeological features (not illustrated). Despite this, three areas (Areas 1–3) were identified for excavation focusing on a linear feature in the north, a group of postholes in the centre of the site, and a pit group in the south-east (fig 1). Archaeology South-East subsequently undertook evaluation trenching comprising 29 further trenches; these trenches again showed a paucity of remains with only two trenches containing tree-throw hollows overlain by colluvial deposits (Hogg 2013). The evaluation was followed by phases of excavation (Areas 1–3) on the areas previously identified, and stripping, mapping and sampling (Areas 4–8) on areas where the development would have the severest impact (*ibid*).

Archaeological results

While no Palaeolithic and little Mesolithic material was recorded on the site, the dry valleys contained thick colluvial deposits, material that has accumulated at the base of slopes through soil movement. The lower colluvium seems to have formed in the earlier prehistoric period, possibly within periglacial environments where a lack of vegetation would have led to increased soil mobility. The later colluviation was Iron Age and Roman in date, suggesting the site was largely open and at least partly devoid of trees by this time. The Mesolithic or possibly Early Neolithic remains were limited to flintwork found residually in later features and within the later colluvial deposits.

EVALUATION

Both the initial Wessex evaluation (Britchfield 2012) and subsequent ASE phase (Hogg 2013) confirmed the absence of remains across large swathes of the site. These trenches also served to illustrate the significant thickness of the colluvium within the valleys and the potential for features to survive beneath it. Undated tree-throw hollows were recorded below the colluvium in some trenches; elsewhere both ditches and pits were overlain by these deposits.

PREHISTORIC REMAINS (figs 3 and 4)

A scattering of features of probable prehistoric date was recorded in the south-east of the site within Area 3 (fig 3). The features were all discrete, mainly comprising small pits, generally oval in shape, with uneven yet steep sides suggestive of possible root action. Pit groups G25 and G31 (fig 4) contained few finds and no datable material but were either cut by other prehistoric features or lay below Iron Age/Roman colluvial deposits. The pits may represent tree-throw hollows or possibly root-affected pits. This would explain the diversity in shape and profile as well as the apparent lack of finds (a few worked flints, burnt flint and animal bone). A group of nine postholes (fig 4: G26) was also recorded; these produced no dating evidence and appeared to form two slightly curving lines of uncertain function. They were

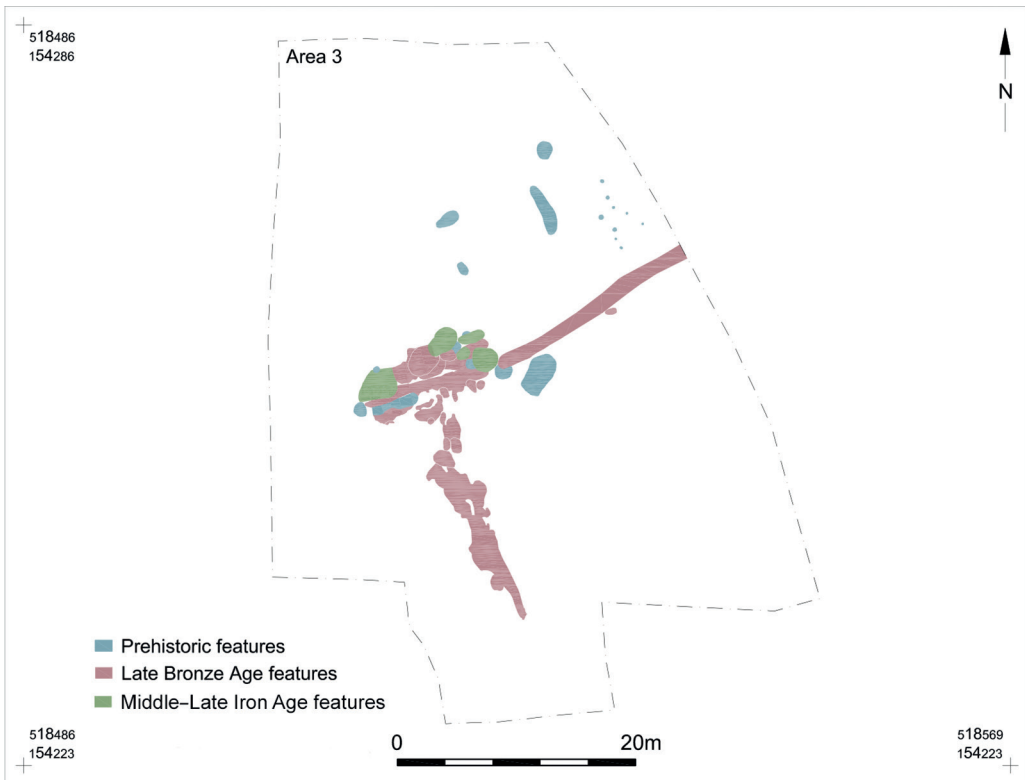


Fig 3 Cherkley Court, Leatherhead. Area 3 multi-phase plan.

phased to the prehistoric period due to their proximity to pits G25 and G31 described above; they were also overlain by Iron Age/Roman colluvium. These features existed within an open landscape apparently undivided at this time.

LATE BRONZE AGE (figs 5–10)

The majority of remains found were of Late Bronze Age date and appeared in tight clusters of features in an otherwise little utilised landscape. While most of the site showed no signs of land division, there were some exceptions including a probable rectilinear or L-shaped enclosure (E23) within Area 3 in the south-east of the site (fig 5). Only the north-western corner of the enclosure was seen; it comprised a combination of ditches and hedgelines with a narrow entrance on the northern side. The northern part of the enclosure consisted mainly of well-defined segmented ditches as well as more amorphous hedgelines at the western corner. While the ditch was clearly defined, the hedgeline was unsurprisingly rather diffuse, varying in width and depth. The western boundary appeared to have been added to and repaired during its use with further planting pits cut into the hedgeline. The portions of hedgeline that formed part of the northern edge of the enclosure may have supplemented the ditches, or more likely spread northwards, but did not survive. Such land division does not seem to have been the norm, not only on the site but in the wider area where field systems were generally marked by lynchets rather than cut features or hedgelines (English 2013). Lynchets may have formed through soil accumulation sometimes against positive features such as hedgelines (*ibid*, 13); therefore, it may simply be the case that the lynchets associated with the hedgeline in Area 3 have been horizontally truncated. The use of a ditch for delineation is notably different, perhaps representing a more definite boundary.

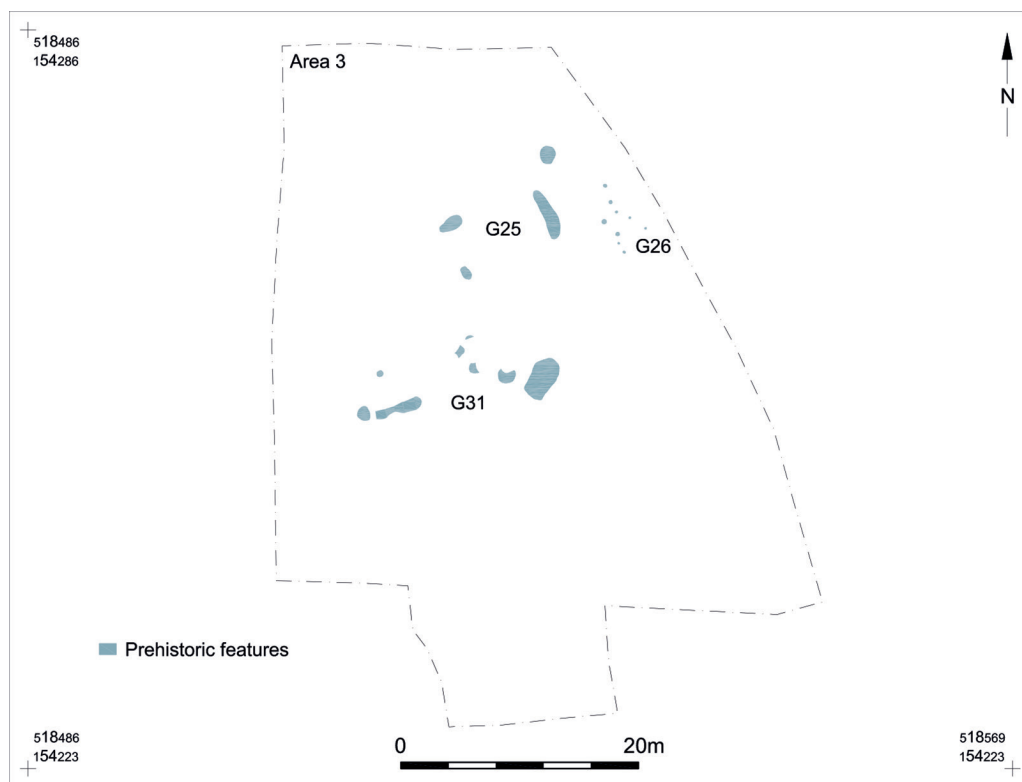


Fig 4 Cherkley Court, Leatherhead. Prehistoric remains in Area 3.

Parts of the hedgeline seem to have fallen into disuse relatively quickly, as a series of pits cut through the north-western corner of the enclosure. All these pits (G32) had vertical sides and flat bases and were sub-circular and relatively large at around 2m in diameter and 1m in depth. They were probably used for grain storage; they contained few finds – probably being cleaned out regularly and they may have been lined (Reynolds 1979, 72–3). Such pits were common methods of grain storage during both the Bronze Age and Iron Age periods. Large pits such as these have been shown to store grain more effectively than smaller ones, particularly when sealed (*ibid*).

Land division was also seen in the centre of the site with a large V-shaped ditch (G23) recorded in Area 6 and trench 100 (figs 1 and 6). This feature ran on a north-east to south-westerly alignment and meandered along its course, possibly following some now-vanished topographical features. The alignment of the ditch is significant as it ran at right-angles to the lie of Stane Street, possibly suggesting that the Roman road lay on the course of an earlier trackway or that the road followed an already established alignment within the landscape.

The ditch was rather isolated with no features nearby; the area directly north of the ditch could not be excavated as it lay on the line of an aviation fuel pipeline. While the primary fills were the result of natural infilling, the upper fills were the result of deliberate backfilling and contained pottery as well as a moderate-sized animal bone assemblage, something almost absent across the other Bronze Age remains.

A second, large V-shaped ditch (G19: fig 6) lay 100m to the west in Area 4; unlike the first ditch this was curvilinear and partially enclosed an area of land to the east. However, there did not appear to be any particular significance attached to this enclosed area as it was

largely devoid of features. The ditch did occupy a position on a high area of land, something common in the areas of activity noted on this site and within other areas of downland (English 2013, 141). This high vantage point may be one of the reasons for the presence of the ditch, possibly as a form of monumental display; the white chalk scar on the hillside would have been highly visible within the landscape.

The group of postholes in Area 2 identified during the first evaluation proved to be the most significant and archaeologically rich area of the site (figs 7, 8 and 9). Eight probable post-built structures were found, of which six were of Late Bronze Age date. Initially the structures were thought to represent a settlement comprising roundhouses and associated structures, but it soon became clear that little of the evidence usually associated with such activity was present and the absence of refuse pits, ditches or animal bone suggested another function. Some of the postholes contained reasonably large assemblages of charred cereal remains, indicating that the area was probably used for grain processing or storage. Two or more probable granaries were identified (S1 and S7) in Area 2, although the exact shape of these structures could not be ascertained as some of the postholes had been lost through horizontal truncation. The larger of the two structures (S1) comprised 27 postholes forming around six parallel lines; this structure may have been large and rectangular in shape or could have comprised a number of smaller (possibly not contemporary) four-post structures. Surprisingly, these postholes did not contain especially large cereal remain assemblages, but this is likely to be due to the poor preservation noted in most samples. Structure S7 contained a far larger environmental assemblage suggesting use as a granary; however, the form of this structure is less obvious, being roughly circular in shape.

Most of the remaining structures were amorphous; one probably formed a loose ring of postholes (S6) while two others formed tight clusters of postholes (S4 and S9). These

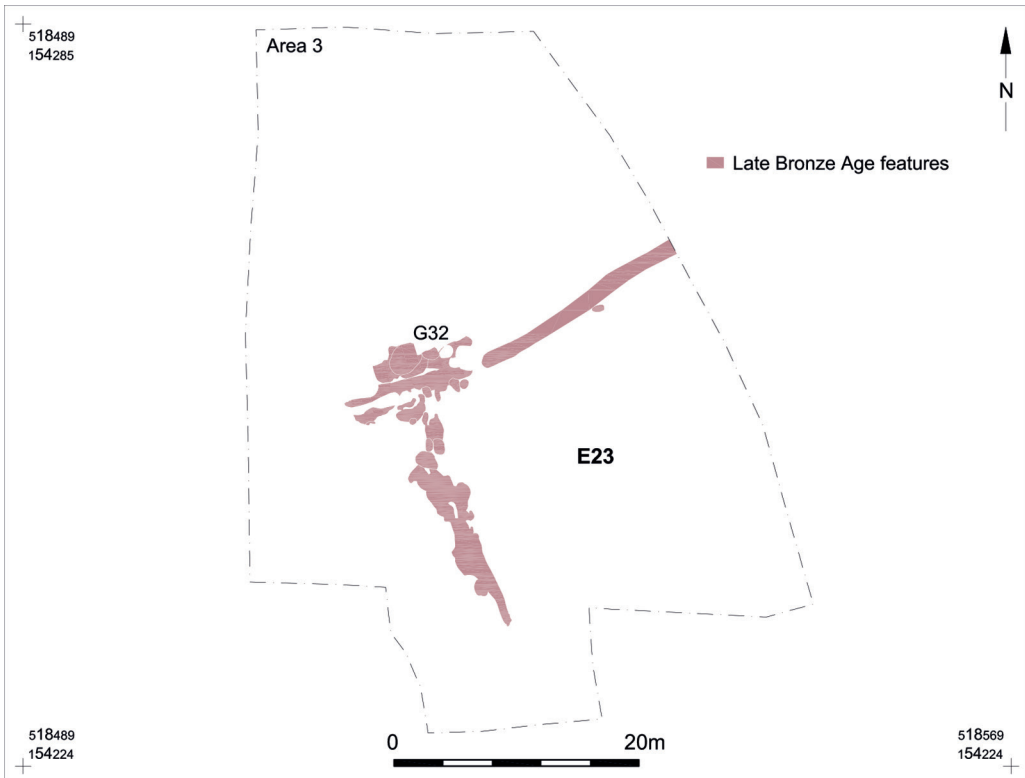


Fig 5 Cherkley Court, Leatherhead. Late Bronze Age features in Area 3.

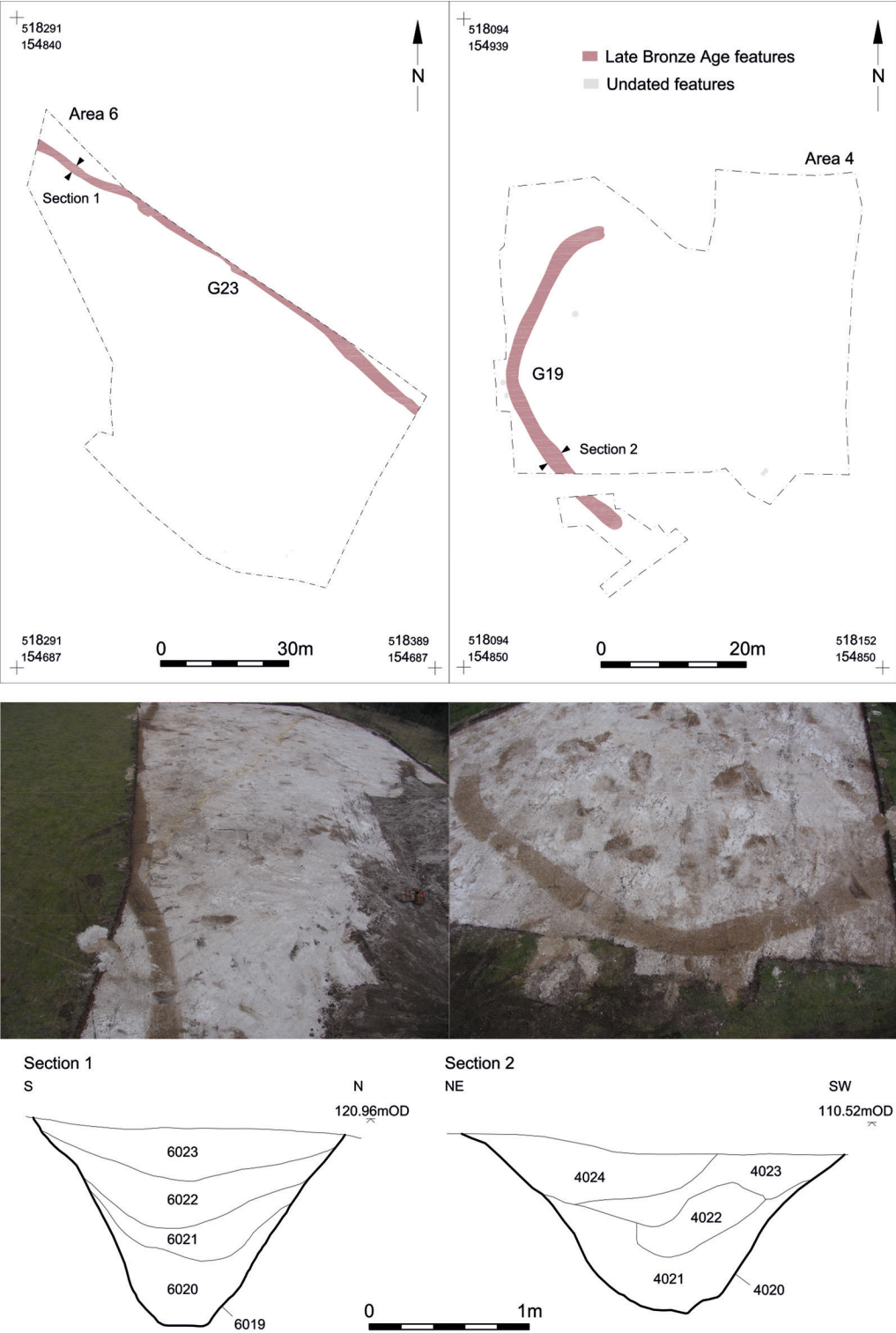


Fig 6 Cherkley Court, Leatherhead. Late Bronze Age land division.

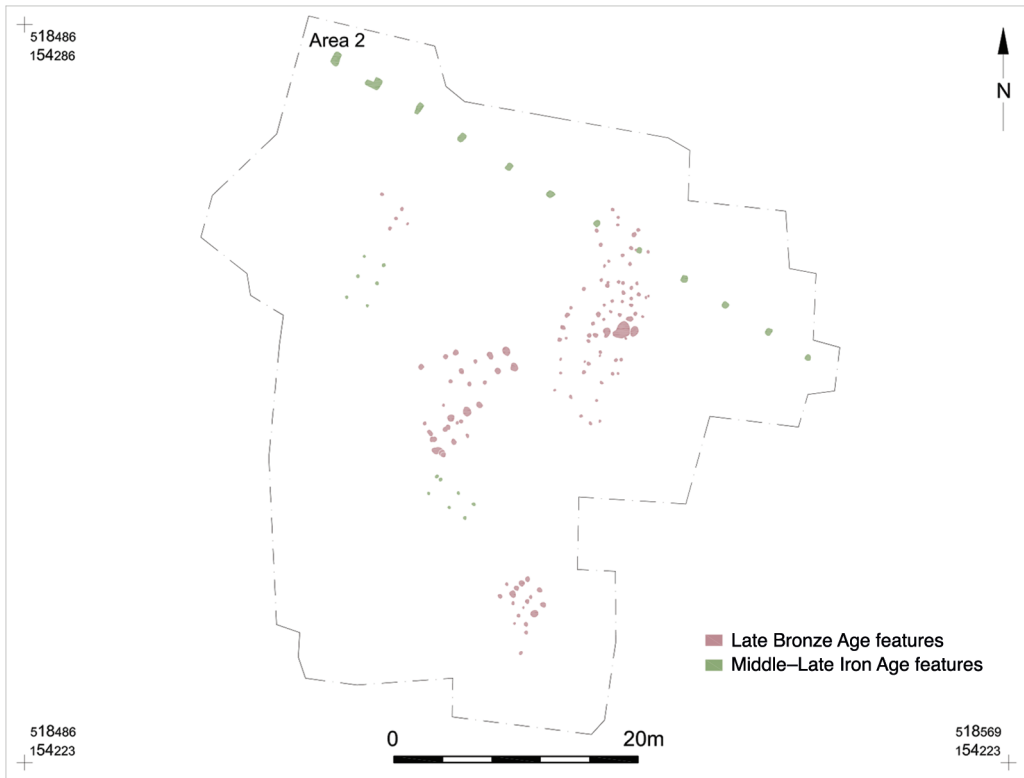


Fig 7 Cherkley Court, Leatherhead. Area 2 multi-phase plan.

structures were initially thought to be possible roundhouses but, given the lack of any other signs of domestic evidence, this idea was rejected. Given their proximity to other structures probably associated with grain processing, they most likely had an associated function, possibly as drying racks. Such structures would not have necessarily required a set or formal design and therefore could have been constructed in a rather *ad hoc* manner.

The largest and most curious structure in Area 2 comprised four concentric semi-circles of postholes (S5) surrounding two pits (figs 8 and 10); at first this was thought to be part of a series of truncated roundhouses, but on further investigation it became clear that little truncation had occurred and these were indeed lines of postholes formed in deliberate semi-circles. The longest of these lines measured some 15m in diameter and the shortest just over 4m. The entire structure appears to have been left open on its south-eastern side, perpendicularly facing the later line of Stane Street and may be interpreted as a windbreak. The two central pits were not alike; one was small and relatively deep, with multiple fills that contained large amounts of charcoal, burnt flint and pottery. The second pit was wider and shallower, with less evidence of burning. These pits probably formed a hearth, their location on the open side of the structure would have protected them from the prevailing winds to the west. The presence of grain processing in the immediate vicinity would suggest that structure S5 also had a role in this process and it seems probable that this would be as a large series of more formal drying racks, the hearth helping to dry the inner racks while the wind assisted with drying the outer lines.

Unusually for such features, over half the postholes in Area 2 contained pottery, mainly found within the upper fills and particularly from structure S1. This is suggestive of structured deposition perhaps as an act of closure for the area. The primary fills of the postholes were

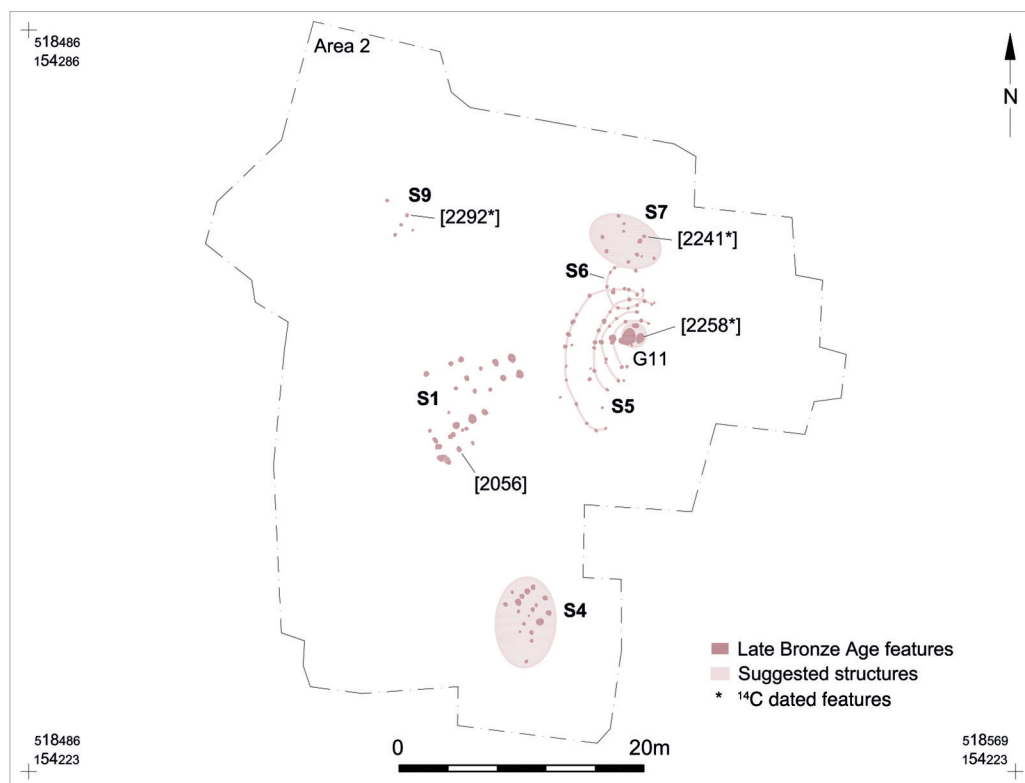


Fig 8 Cherkley Court, Leatherhead. Late Bronze Age structural remains in Area 2.



Fig 9 Cherkley Court, Leatherhead. Area 2 looking north.



Fig 10 Cherkley Court, Leatherhead. Structure 5 looking north-west.

predominantly of redeposited chalk with no visible evidence of post-pipes, indicating that the posts were removed and the postholes immediately backfilled; this lends more weight to the notion of an act of closure. The radiocarbon dates for postholes in structures S5, S7 and S9 all returned similar date ranges (between 1030 and 840 cal BC). These samples were taken from both the primary and secondary fills, suggesting the area had a relatively short period of use and also that the structures were decommissioned at the same time.

MIDDLE-LATE IRON AGE (figs 11 and 12)

The Middle–Late Iron Age remains show some continuity in spatial function from the Bronze Age, although no evidence of earlier Iron Age activity was recorded on the site. Area 2 contained evidence of continued activity with two six-post structures associated with grain processing or storage as well as a long fenceline with substantial posts (fig 11: G35). The two rectangular six-post structures S2 and S3 were radiocarbon dated to the Middle Iron Age (370–180 cal BC); the postholes themselves were otherwise very similar to the later Bronze Age features showing some evidence of structural deposition. It is possible these were Bronze Age structures only backfilled during the Iron Age, but this seems unlikely given the timespan between use and abandonment. Such structures probably served similar purposes as the four-post structures noted across much of southern Britain during the Iron Age. They have been variously interpreted as small granaries (Gent 1983), grain stores (Ellison & Drewett 1971) and as cereal-drying racks (David Dunkin, pers comm; Ellison & Drewett 1971, 183). The six-post structures contained some of the largest cereal remains assemblages found on the site. It seems very likely that they served similar purposes to their Bronze Age counterparts; the environmental samples from these features generally contained a high percentage of burnt cereals, suggesting cereal storage rather than processing. In comparison with the Bronze Age structures, the Iron Age cereal processing appears to have been on a far smaller scale.

The Late Bronze Age structures S6 and S7 were cut by a line of fifteen large rectangular postholes forming a fenceline (fig 11: G35) running at right-angles to Stane Street. The size of these features suggests that this fence was a significant boundary and mirrored the earlier ditch alignments indicating that land division during the Middle Iron Age continued

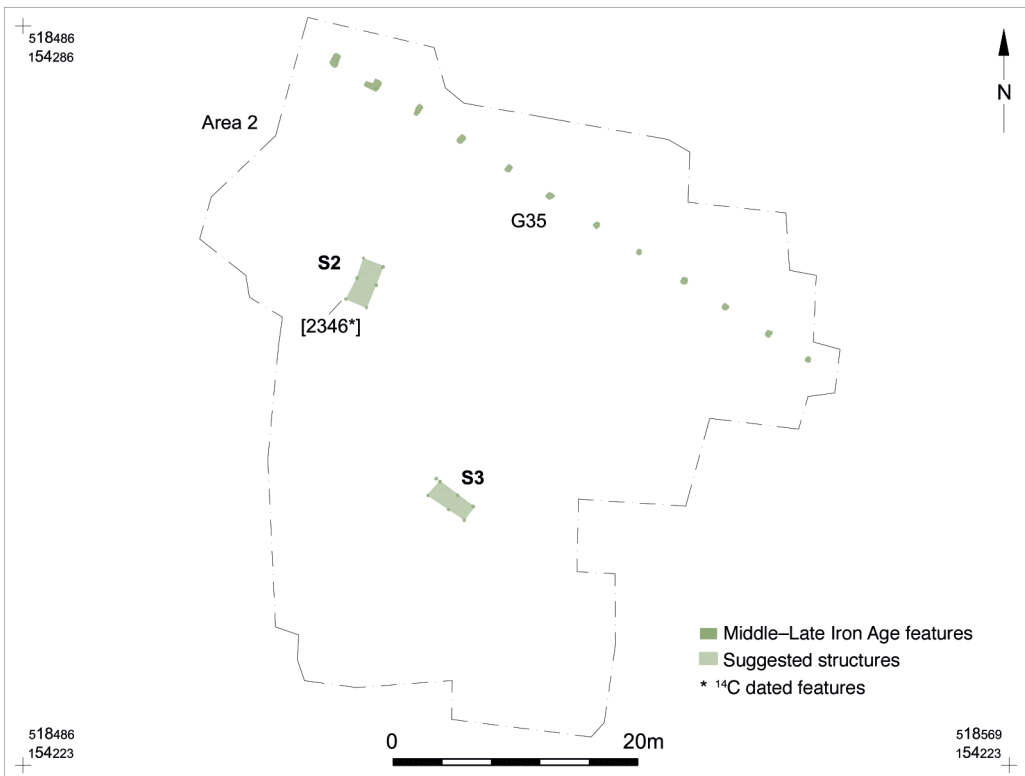


Fig 11 Cherkley Court, Leatherhead. Iron Age features in Area 2.

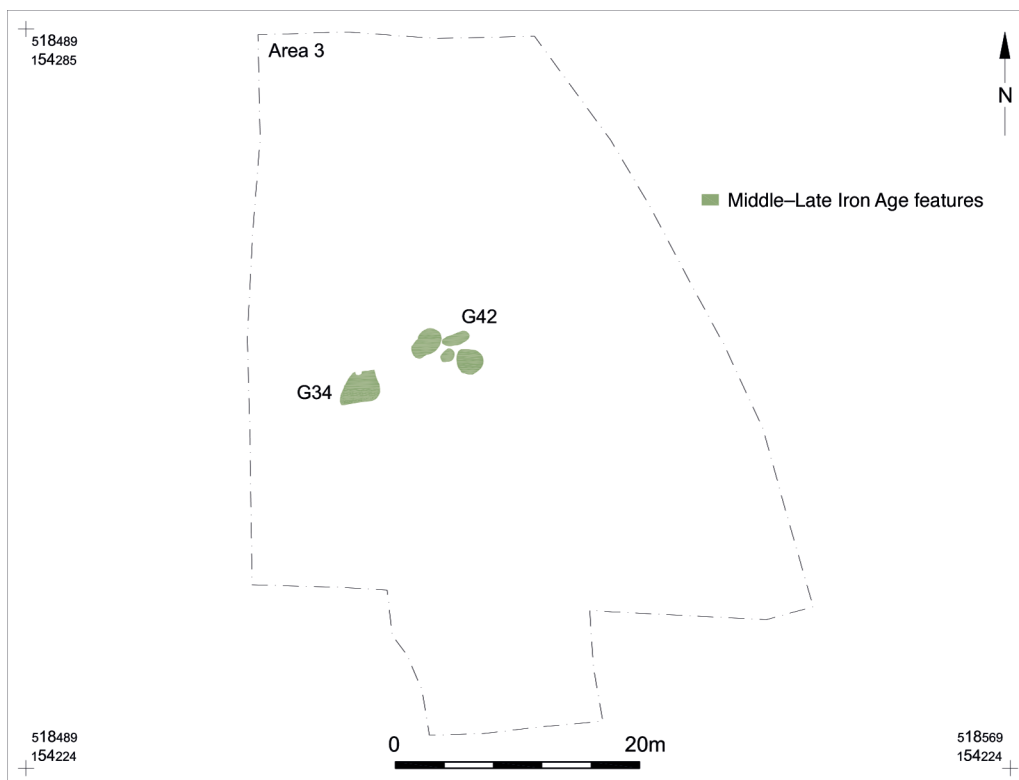


Fig 12 Cherkley Court, Leatherhead. Iron Age pitting in Area 3.

to reflect the alignment of a possible precursor to Stane Street. While the presence of cereal storage suggests some continuity from the Bronze Age, a distinct change can also be seen in the fenceline cutting through some of the largest and most significant Bronze Age structures in Area 2.

In Area 3 the Iron Age remains again showed a continuation of land use with some distinct changes. The Bronze Age enclosure E23 was abandoned with a series of pits cutting through the ditch (fig 5); while two of these pits (G42: fig 12) were similar to the Bronze Age storage pits in the same area (G32: fig 5), most of the remaining pits (G34: fig 12) were shallower than their Bronze Age counterparts, perhaps suggesting some small-scale chalk quarrying. The features again contained few finds – the storage pits probably being cleaned out prior to backfilling.

ROMANO-BRITISH

The Roman road Stane Street bisected the site on a south-south-west to north-north-easterly alignment now marked by a bridleway. Despite this, a notable lack of Roman remains was recorded on the site; Areas 6, 7 and 8 all bordered Stane Street and none of these areas contained any features of Roman date. The only Roman material found was a single rim sherd dated to AD 120–400 retrieved from colluvium in Area 8. This deposit was similar to the upper colluvial deposits that overlay the Iron Age features in Area 3, indicating that this phase of colluviation occurred during the Roman period. This also suggests that the site was open rather than wooded during this time and was possibly used for pastoral purposes.

The finds

THE PREHISTORIC POTTERY, by Anna Doherty

A modest-sized assemblage of Late Bronze Age pottery, totalling 442 sherds and weighing 4.18kg was considered well stratified in features assigned to the Late Bronze Age. It was predominantly found in the postholes associated with structure S1 and, to a lesser extent, in other similar post-built structures from Area 2. Although only a limited amount of diagnostic material was present, the assemblage appeared characteristic of the undeveloped plain ware phase of the post-Deverel-Rimbury (PDR) tradition.

The pottery was examined using a x20 binocular microscope. Fabrics were defined according to a site-specific fabric series, formulated in accordance with the guidelines of the Prehistoric Ceramics Research Group (PCRG 2010). The assemblage was quantified by sherd count, weight and Estimated Vessel Number (EVN) on *pro forma* records and in an Excel spreadsheet.

Site-specific fabric descriptions

CLAY1: A poorly-mixed, untempered clay matrix. Very fine linear voids <10mm in length appear but are probably caused by lamination of the clay rather than any leached or burnt out inclusions. Some red iron-rich inclusions also occur.

FLIN1: Sparse/moderate, moderately/well-sorted flint of 0.5–2mm in a dense matrix lacking visible quartz at x20 magnification. Some examples include rare clay pellets <1mm.

FLIN2: Moderate, moderately-sorted flint of 0.5–2.5mm in a silty background matrix with sparse/moderate larger quartz grains of 0.1–0.4mm.

FLIN3: Moderate/common poorly-sorted flint of 0.5–3mm in a silty background matrix. Some examples include rare red iron-rich inclusions.

FLIN4: Common to abundant, fairly well-sorted flint of 0.5–1.5mm in a silty background matrix. Often has burnished surfaces.

FLIN5: Sparse flint of 0.5–1.5mm in a silty background matrix. Often has burnished surfaces.

FLIN6: On a continuum with FLIN3 but with a larger size range of flint (*c* 0.5–4.5); however, generally speaking most examples still tend to be <3mm.

QUAR1: Moderate well-sorted quartz of *c* 0.2–0.4mm; rare flint of <1mm may occur.

QUGL1: Moderate, moderately-sorted quartz of 0.2–0.7mm with moderate glauconite in a smaller and better sorted range (0.2–0.3mm).

SHEL1: Common shell of 0.5–2.5mm (possibly of a fossil shell source). No other significant inclusion types noted.

Fabrics

Apart from one unusual untempered vessel, described below (fabric CLAY1), the Late Bronze Age assemblage is almost entirely flint-tempered (table 1). The majority of sherds and *c* 40% of estimated vessels are of a single fabric type, FLIN3: a moderately to coarsely flint-tempered ware. A similar but coarser ware, FLIN6, makes up the next largest group of sherds but these represent less than 10% of estimated vessels. Other fabric types include moderately coarse fabrics, FLIN1 and FLIN2, and fine wares FLIN4 and FLIN5.

A few fragmentary sherds in quartz-rich, glauconitic and shelly fabrics (QUAR1, QUGL1, SHEL1) were recovered from deposits assigned to the Late Bronze Age. All these come from features in Area 3, which have complex intercutting relationships with later features. These fabrics are considered intrusive since such wares are very atypical of the Late Bronze Age but have been identified in Iron Age assemblages from the local area, including in well-dated Middle Iron Age features from Hawk's Hill House, Leatherhead (Rayner in prep).

Pottery from Iron Age features has been omitted from detailed discussion here but comprises just fifteen undiagnostic body sherds. These include several probable residual Late Bronze Age flint-tempered fabrics found in Area 2 structure, S3, which also produced one Late Bronze Age radiocarbon date on a residual cereal grain. Of the sherds recovered from deposits assigned to this period in Area 3, nearly all were associated with the quartz-rich fabric, QUAR1.

Late Bronze Age forms (fig 13)

Only eleven Late Bronze Age rim sherds were recovered and several of these are too fragmentary to be certain of the overall form type. Of some interest is an unusual small vessel *c* 50mm in diameter (and probably of a similar height) (fig 13, P1). This is made in untempered and poorly prepared clay that has laminated on drying/firing (CLAY 1). The vessel has a simple neutral profile with crudely formed plastic decoration made by a row of pronounced pinches just below the rim. This appears to have been made by an inexperienced potter and resembles the sort of 'thumb-pots' that might be made as a first experiment in pottery classes today. The pinched decoration has clearly been made by someone with small fingers, perhaps an adolescent. This may then represent a practice piece, or an object made for creative enjoyment rather than for practical purposes. The vessel is not typical of any particular prehistoric period although the pinched decoration bears a passing resemblance to Middle Bronze Age decorated applied cordons and to the finger-tipping seen on later PDR forms of the 1st millennium BC. Given that the vessel was found alongside a broken but semi-complete Late Bronze Age form (fig 13, P2) in one of the best-dated structures (S1), it seems likely that it is contemporary, since the fabric of the vessel is so fragile that it is unlikely to have survived repeated redeposition.

More generally, the assemblage is characterised by simple undecorated coarseware jar forms including bipartite jars (eg fig 13, P2), simple open forms (eg fig 13, P4 and P5) and other necked jar profiles (fig 13, P6). Just one fine ware form was identified, a simple hemispherical bowl with well burnished surfaces and a very slightly bevelled rim (fig 13, P3).

Dating and parallels

In terms of form and decorative elements, a single residual body sherd featuring an applied decorated cordon (not illustrated), from posthole [2090], part of structure S1, probably belongs to the Middle Bronze Age Deverel-Rimbury tradition. In the main, the assemblage

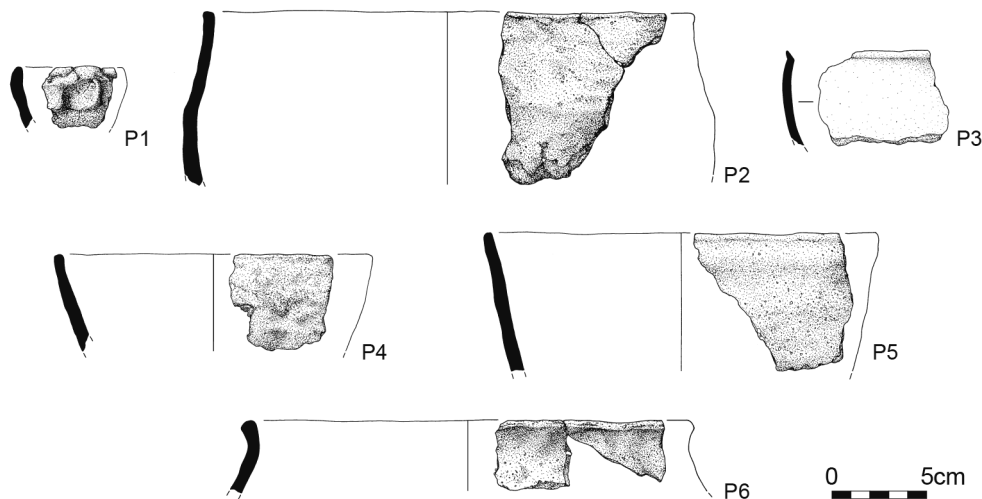


Fig 13 Cherkley Court, Leatherhead. Late Bronze Age pottery.

is typical of the earlier undeveloped plain ware phase of the PDR tradition, understood to date to around 1150–950 BC (Barratt 1980; Needham 1996a). The radiocarbon evidence would indicate a date towards the end of – or even slightly beyond – this range. Almost all the dates from the Late Bronze Age features fall between the late 11th to mid-9th centuries cal BC and most have a high probability of lying in the 10th century cal BC (see table 2).

Despite this, there are few direct associations between diagnostic pottery and radiocarbon-dated material. Postholes forming structure S5 contained 46 sherds that are broadly characteristic of the Late Bronze Age assemblage as a whole, including illustrated vessels (fig 13, P4 and P5). The former was directly stratified in the same posthole with the dated charcoal and charred plant remains, SUERC-77701 and SUERC-77702, calibrated to 1010–840 cal BC and 1030–840 cal BC respectively at 2 Σ confidence (and both very probably pre-dating 891 cal BC at over 89% confidence). The other radiocarbon-dated Late Bronze Age structures, S7 and S9, contained fewer than ten sherds each. These include vessel P6 (fig 13) from structure S7, which produced the date SUERC-77703, calibrated to 1010–840 cal BC.

Table 1 Quantification of Late Bronze Age pottery fabrics

Fabric	Sherds	Sherds (%)	Weight (g)	Weight (%)	ENV	ENV (%)
CLAY1	2	0.5	18	0.4	1	0.5
FLIN1	23	5.2	132	3.2	22	11.8
FLIN2	49	11.0	342	8.2	38	20.4
FLIN3	221	50.0	1950	46.6	74	39.9
FLIN4	37	8.4	414	9.9	23	12.4
FLIN5	7	1.6	52	1.2	7	3.8
FLIN6	82	18.6	1240	29.6	18	9.7
QUAR1	16	3.6	12	0.3	1	0.5
QUGL1	1	0.2	22	0.5	1	0.5
SHEL1	4	0.9	2	<0.1	1	0.5
Total	442	100.0	4184	100.0	186	100.0

In this period, ceramic traditions appear quite uniform over a wide swathe of southern Britain, and there are strong similarities to assemblages from the Sussex Downs and coastal plain to the south and the Upper Thames Valley to the north. In both of these areas, it has been noted that there is a tendency for flint-tempered fabrics to become finer and sandier over time (Longley 1991, 163; Seager Thomas 2008, 41). Though few contemporary assemblages are published from the North Downs area, the fairly coarse, quartz-free nature of the flint-tempered wares at Cherkley Court is one of the best indicators of a relatively early date within the PDR tradition. Many form elements of the current assemblage have good parallels in PDR assemblages from the Thames gravels: for example, at Runnymede Bridge, Queen Mary's Hospital, Carshalton, Coombe Warren, Kingston Hill, Caesar's Camp, Heathrow and Perry Oaks, Heathrow. These include: bipartite jar P2 (fig 13) (Adkins & Needham 1985, fig 4, no 10, fig 9, no 314; Field & Needham 1986, fig 3, no 12; Longley 1991, fig 82, 74; Needham 1996b, fig 62, 669; fig 63, 670–1); hemispherical bowl P3 (fig 13) (Longley 1991, fig 88, 178; Grimes & Close-Brooks 1993, fig 29, 70; Needham 1996b, fig 70, 707; Leivers 2010, ill 71); simple open jar profiles P4 and P5 (fig 13) (Adkins & Needham 1985, nos 31, 38; Field & Needham 1986, fig 3, no 17; Longley 1991, fig 89, 215; Grimes & Close-Brooks 1993, fig 26, no 21; Needham 1996b, fig 67, 680); and necked jar P6 (fig 13) (Adkins & Needham 1985, fig 11, 330; Longley 1991, fig 82, 76; fig 88, 192).

In contrast to the current assemblage, pottery from Runnymede Bridge, Queen Mary's Hospital, Perry Oaks and Caesar's Camp includes some elements of decoration, indicating continuing occupation at least in the developed phase of the PDR plain ware tradition and perhaps beyond. Taken together, the relatively early fabric composition, the absence of decoration and the fairly limited range of forms probably suggest a relatively early attribution for the Cherkley Court pottery when compared with these other assemblages. In this respect, it may be most comparable to the assemblage from Coombe Warren (Field & Needham 1986).

Pottery deposition

Structure S1 was the only major land use element to produce a sizeable assemblage of pottery with well over half of the assemblage recovered from its postholes. Posthole [2056] S1 (fig 8), a feature of about 0.3m in diameter and depth, contained over 1kg of pottery, including one vessel that appears fragmented, but almost half complete (fig 13, P2). It seems improbable that the pottery here represents packing material because low-fired ceramics would be easily crushed. Instead, the pottery was distributed throughout the fill with no visible post-pipe, strongly suggesting that it was deposited after the removal of the post. Equally, it seems unlikely that such a small feature would represent the most pragmatic receptacle for the disposal of domestic waste, the act of packing pottery sherds into the posthole would surely signify a more labour-intensive process than simply leaving rubbish where it was abandoned or trampling it into the ground.

There are many examples of pottery and other finds from later Bronze Age house sites, which appear to have been deposited at the point of abandonment or decommissioning. This has been repeatedly observed on hut-platforms from the Sussex Downs (eg Hamilton 2002; Hart *et al* 2015). It has been argued that this apparent persistent ritual behaviour may have served to draw metaphorical connections between cycles of decay, burial, fertilisation and renewal in the agricultural process and in the lifecycles of individuals, families and households (eg Brück 1999, 152–5; 2006, 298–305). It is worth noting that archaeological objects deposited in this way were once the possessions of individuals or groups and may have had particular meaning or even served to represent themselves (Woodward 2008, 84) – in this context the small crudely formed finger-impressed vessel (fig 13, P1) seems a particularly personal object.

Although evidence for structured deposition around Bronze Age buildings often comes from pits or general infilling layers, there are also good parallels for similar styles of deposition within decommissioned postholes. A few examples include: the *in-situ* base of a pottery vessel from Hartshill Copse, Berkshire (Collard *et al* 2006, 374); eight complete or partially-complete loomweights from Manor Farm, Burgess Hill, West Sussex (Wallis 2012), and a large collection of cereal-processing tools from an amorphous group of possible postholes at Scarcewater, Cornwall (Jones 2015, 34–5). This last example is perhaps particularly relevant here because it represents structured deposition in direct association with a building and working area involved in grain processing rather than in a more obviously domestic building.

Roman pottery

The only evidence of Roman activity was a partial rim of an everted jar of Alice Holt/Farnham ware recovered from the later colluvial deposits in Area 8. A single sherd of possible Roman greyware was also recovered from 20th century deposits. The paucity of Roman material is perhaps surprising given the proximity of Stane Street, but as this route appears to have been established since at least the Late Bronze Age, perhaps the decline in activity recorded during the Iron Age continued and the area was used merely as pasture.

OTHER FINDS

Despite the preponderance of prehistoric remains, a total of only 39 pieces of struck flint was recovered from both the Bronze Age and Iron Age features. Similarly, only a single fragment of Lower Greensand quern and no *in-situ* metalwork was recovered. This distinct lack of domestic finds suggests that any settlement lay some distance away and reinforces the unusual or special nature of the pottery deposition in Area 2.

The animal bone assemblage (table 2) came mostly from pits within Area 3 and the two large ditches G19 and G23. Interestingly, the postholes in Area 2 produced no fragments of animal bone. The assemblage itself was in very poor condition and contained relatively little sheep, cattle or pig bone (Ayton 2013), indicating that any butchery and meat processing took place elsewhere.

Table 2 NISP (Number of Identified Specimen) counts

Species	Prehistoric	Late Bronze Age	Middle–Late Iron Age
Cattle	8	–	–
Sheep/Goat	20	–	–
Pig	10	–	–
Horse	–	1	2
Dog	–	1	–
Hare	5	–	–
Leporid	29	–	–
Mus.	10	–	–
Rodent	1	–	–
Small mammal	6	–	–
Medium mammal	20	2	–
Large mammal	4	1	12
Anuran	11	–	–
Total	124	5	14

THE ENVIRONMENTAL REMAINS

The environmental remains generally showed a poor level of preservation, probably the result of unsuitable post-deposition conditions; this made species identification difficult. Plant macrofossils from the prehistoric features also were generally poorly represented within the samples with only a few specimens of barley and wheat present. Preservation was not sufficient to determine whether the wheat was emmer or spelt. The exceptions to the poor representation were six samples from the structures in Area 2; these contained larger assemblages of plant remains. The plant macrofossil assemblages from structure S7 contained a mixture of grains, chaff and weeds probably indicating that this structure was a granary. Interestingly, both the primary and secondary fills of the associated postholes contained similar assemblages, suggesting an attempt to include cereals during the later structural deposition. The samples from S9, an amorphous cluster of postholes, contained higher percentages of grain probably suggesting grain storage or drying. Unfortunately, preservation was not sufficient to determine whether the grain had been processed prior to these activities. One of the six-post Iron Age structures S3 contained a similar assemblage.

The charcoal assemblages showed a similar level of paucity to the majority of the plant macrofossils. What charcoal was present suggested it had been procured from oak-dominated woodland with remains of cherry or blackthorn, suggesting some exploitation of hedgerow species.

The environmental assemblage was not deemed to be significant enough to warrant further analysis after the initial assessment; the full report and associated tables can be found in the post-excavation assessment (Hogg 2013).

RADIOCARBON DATING, by Tony Krus

Despite the paucity of macrobotanical remains and charcoal some were still suitable for radiocarbon dating in an attempt to define the chronology, particularly of the remains in Area 2. Seven radiocarbon measurements from archaeological contexts were available from the Late Bronze Age structures in Area 2. Single-entity samples (Ashmore 1999) of wood charcoal and charred plant remains were submitted to the Scottish Universities Environmental Research Centre (SUERC) Radiocarbon Dating Laboratory. The samples were pretreated following the protocols described in Dunbar (*et al* 2016). Graphite targets were prepared and measured following Naysmith *et al* (2010).

Conventional radiocarbon ages (Stuiver & Polach 1977) are presented in table 3. Calibrated date ranges were calculated using the terrestrial calibration curve (IntCal13) of Reimer *et al* (2013) and OxCal v4.3. The date ranges in table 3 have been calculated using the maximum intercept method (Stuiver & Reimer 1986) and quoted with the endpoints rounded outward to 10 years. The probabilities shown in figures 14–16 were calculated using the probability method of Stuiver and Reimer (1993). Multiple radiocarbon measurements used to date the same archaeological contexts were subjected to chi-square tests to further assess their consistency (Ward & Wilson 1978). All contexts with paired radiocarbon measurements pass the chi-square tests, with the exception of posthole [2346] in S2, suggesting the dated samples in these contexts were deposited over an extremely short period of time.

Samples of roundwood charcoal (*Prunus* sp.) and cereal grain (*Triticum* sp.) from the secondary fill [2260] of the central pit [2258] of the semi-circular structure (S5, GP11), were submitted, yielding two radiocarbon measurements (SUERC-77701, SUERC-77702). A cereal grain (*Hordeum* sp.) sample from the secondary fill [2243] of a posthole [2241] part of a possible granary (S7, G17) was submitted, yielding a radiocarbon measurement (SUERC-77703). Cereal grain (*Triticum* sp. and *Hordeum* sp.) samples from the primary fill [2293] of a posthole [2292] within a possible granary (S9, GP18) were also submitted, yielding two radiocarbon measurements (SUERC-77707, SUERC-77708). Additional samples of cereal grain (*Triticum* sp.) and tuber (*Arrhenatherum*) from the primary fill [2347] of a posthole [2346] part of a six-post structure (S2, G9) were submitted, yielding two radiocarbon measurements (SUERC-77709, SUERC-77710). All the radiocarbon calibrations are within the Late Bronze Age, except for the measurement (SUERC-77710) from the tuber, which calibrates (370–180 cal BC, 95% confidence) to the Middle/Late Iron Age (table 2). The radiocarbon result (SUERC-77710) from the tuber suggests that the corresponding six-post structure may have been constructed in the Middle/Late Iron Age and that the dated cereal grain (*Triticum* sp.) (SUERC-77710) from the same primary posthole fill [2347] may be residual.

A Bayesian approach has been applied to the interpretation of the Area 2 chronology (Buck *et al* 1996). The chronology of this activity can be estimated not only by using the absolute dating derived from the radiocarbon measurements but also by modelling the relationships between samples and their archaeological contexts. The technique used is a form of Markov Chain Monte Carlo sampling and has been applied using the program OxCal v4.3 (<http://c14.arch.ox.ac.uk/>). Details of the algorithms employed by this program are available in Bronk Ramsey (1995; 1998; 2001; 2009) or from the online manual. The algorithm used in the models can be derived from the OxCal keywords and bracket structure shown in figures 15–16. In this case, the Late Bronze Age radiocarbon dates have been put into unordered phases corresponding to their archaeological context. Boundaries were used in OxCal to estimate the start and end dates of the overall unordered group.

There is good agreement between the model assumptions and the radiocarbon dates ($A_{\text{model}}=133.1$). Late Bronze Age activity in Area 2 started in 1040–915 cal BC (95%

probability; fig 15; start Area 2 LBA activity). Late Bronze Age activity in Area 2 ended in 980–845 cal BC (95% probability; fig 15; end Area 2 LBA activity), spanning 1–160 years (95% probability; fig 16; Area 2 LBA activity span).

Table 3 Radiocarbon and stable isotope results from Area 2

Lab ID	Context ID and description	Material	Radio-carbon age (BP)	$\delta^{13}\text{C}$ (‰)	Calibrated date (95% confidence)
SUERC-77701	Secondary fill (2260) of the central pit [2258] of the semi-circular structure (S5, GP11)	Roundwood charcoal (<i>Prunus</i> sp.)	2788 \pm 26	–24	1010–840 cal BC
SUERC-77702	Secondary fill (2260) of the central pit [2258] of the semi-circular structure (S5, GP11)	Cereal grain (<i>Triticum</i> sp.)	2800 \pm 30	–23.4	1030–840 cal BC
SUERC-77703	Secondary fill (2243) of posthole [2241] part of a possible granary (S7, GP17)	Cereal grain (<i>Hordeum</i> sp.)	2775 \pm 30	–22.9	1010–840 cal BC
SUERC-77707	Primary fill (2293) of posthole [2292] part of a possible drying rack (S9, GP18)	Cereal grain (<i>Triticum</i> sp.)	2799 \pm 30	–23.8	1030–840 cal BC
SUERC-77708	Primary fill (2293) of posthole [2292] part of a possible drying rack (S9, GP18)	Cereal grain (<i>Hordeum</i> sp.)	2829 \pm 30	–23.8	1090–900 cal BC
SUERC-77709	Primary fill (2347) of posthole [2346] part of six-post structure (S3, GP9)	Cereal grain (<i>Triticum</i> sp.)	2774 \pm 27	–22.5	1000–840 cal BC
SUERC-77710	Primary fill (2347) of posthole [2346] part of six-post structure (S3, GP9)	Tuber (<i>Arrhenatherum</i>)	2191 \pm 27	–25.8	370–180 cal BC
SUERC-77701	Secondary fill (2260) of the central pit [2258] of the semi-circular structure (S5, GP11)	Roundwood charcoal (<i>Prunus</i> sp.)	2788 \pm 26	–24	1010–840 cal BC
SUERC-77702	Secondary fill (2260) of the central pit [2258] of the semi-circular structure (S5, GP11)	Cereal grain (<i>Triticum</i> sp.)	2800 \pm 30	–23.4	1030–840 cal BC
SUERC-77703	Secondary fill (2243) of posthole [2241] part of a possible granary (S7, GP17)	Cereal grain (<i>Hordeum</i> sp.)	2775 \pm 30	–22.9	1010–840 cal BC
SUERC-77707	Primary fill (2293) of posthole [2292] part of a possible drying rack (S9, GP18)	Cereal grain (<i>Triticum</i> sp.)	2799 \pm 30	–23.8	1030–840 cal BC
SUERC-77708	Primary fill (2293) of posthole [2292] part of a possible drying rack (S9, GP18)	Cereal grain (<i>Hordeum</i> sp.)	2829 \pm 30	–23.8	1090–900 cal BC
SUERC-77709	Primary fill (2347) of posthole [2346] part of six-post structure (S3, GP9)	Cereal grain (<i>Triticum</i> sp.)	2774 \pm 27	–22.5	1000–840 cal BC
SUERC-77710	Primary fill (2347) of posthole [2346] part of six-post structure (S3, GP9)	Tuber (<i>Arrhenatherum</i>)	2191 \pm 27	–25.8	370–180 cal BC

OxCal v4.3.2 Bronk Ramsey (2017); r:5 IntCal13 atmospheric curve (Reimer *et al* 2013)

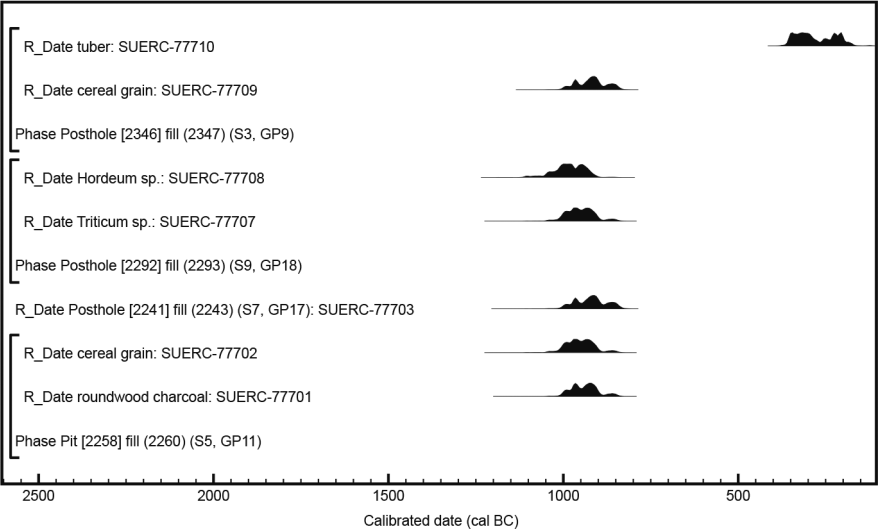


Fig 14 Cherkley Court, Leatherhead. Calibrated radiocarbon dates. Calibrations were calculated using the terrestrial calibration curve (IntCal13) of Reimer *et al* (2013) and the probability method of Stuiver & Reimer (1993) with OxCal v4.3 (Bronk Ramsey 2017). Radiocarbon dates are grouped into their corresponding sample type.

OxCal v4.3.2 Bronk Ramsey (2017); r:5 IntCal13 atmospheric curve (Reimer *et al* 2013)

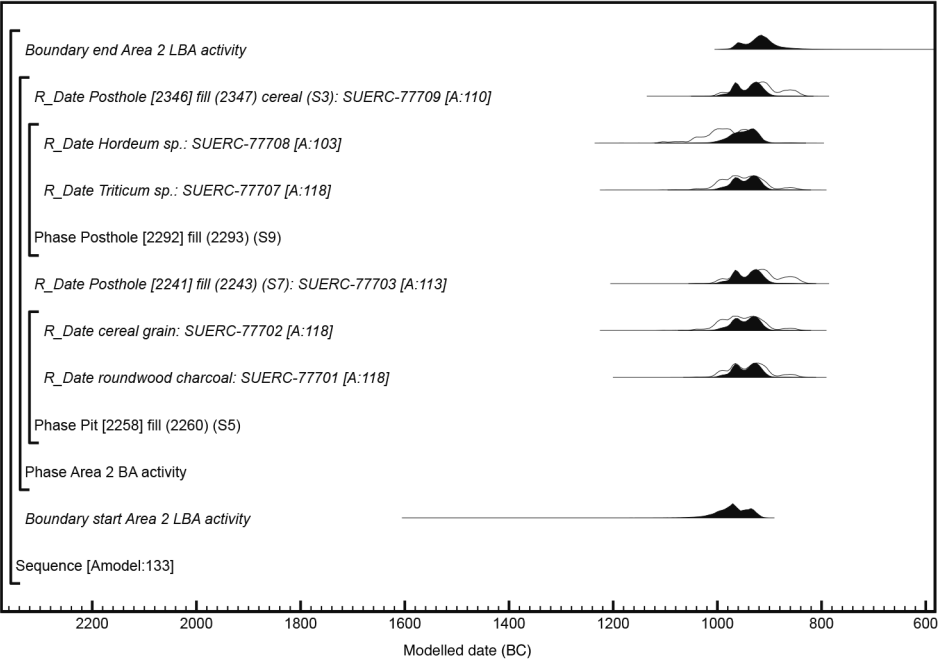


Fig 15 Cherkley Court, Leatherhead. Results and structure of the Bayesian model. For each of the radiocarbon measurements two distributions have been plotted, one in outline, which is the result.

OxCal v4.3.2 Bronk Ramsey (2017); r:5 IntCal13 atmospheric curve (Reimer *et al* 2013)

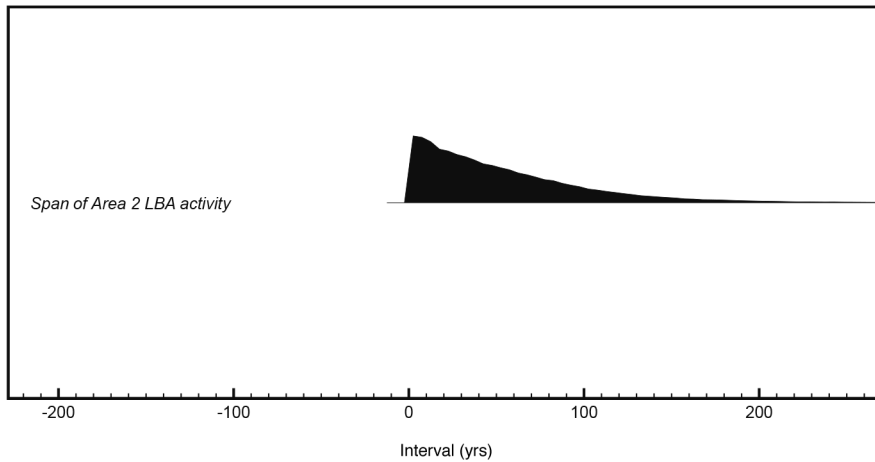


Fig 16 Cherkley Court, Leatherhead. Estimated span of Late Bronze Age activity in Area 2.

Discussion

The apparent paucity of later prehistoric remains from the North Downs is notable and somewhat curious, particularly in view of the extensive prehistoric landscapes of the South Downs and the Thames Valley. Other areas of chalk downland in southern Britain have been utilised domestically, agriculturally as well as monumentally; this may have been due to increased population pressure or the need to raise crop yields leading to the farming of downland previously thought unsuitable for use (English 2013, 140). By the Late Bronze Age, the South Downs landscape contained extensive ditch-and-field systems as well as numerous small farmsteads and barrows (Drewett *et al* 1988, 96). The use of Wessex chalk grassland has been discussed at great length (Bradley *et al* 1994) and shows that it was possible to make such areas agriculturally productive. The North Downs, despite its geological similarities, appears to have been more sparsely populated. The main population centres seem to have been within the Thames Valley and at the foot of the downs in locations such as Carshalton (Needham 1987, 120); such sites have been found to be major production centres.

The chalk downland stretching from Farnham to Dover would have been a significant natural barrier between the fertile, well-populated Thames Valley to the north and the Weald to the south with the South Downs beyond. The natural access route provided by the Mole Valley was one of a number of possible routes through the downs, mainly in the form of river valleys. Even taking into account the poorly populated landscape, the routes of these rivers and the adjacent downland would surely have presented an attractive location given the trade possibilities they offered. It has also been postulated that the Mole Gap possessed further attractive features in the form of swallow holes (English 2013, 36); these geological features are thought to have attracted attention during the prehistoric period and are known to have been the subject of deliberate deposition of objects, such as at Charterhouse-on-Mendip (Levitan *et al* 1988), while barrows were seen in association with swallow holes at Bronkham Hill, Dorset (Tilley 1994).

It seems that routes through the North Downs were not limited to valleys; the Bronze Age and Iron Age ditch and posthole alignments at Cherkley Court reflect the later alignment of Stane Street, and at the very least indicate that the Roman road followed a well-established alignment within the landscape. Indeed, it seems likely that Stane Street was the successor to a trackway established in prehistory. Stane Street lies on a relatively level spine of land in contrast to the steep undulations of the surrounding area. No evidence of a precursor to Stane Street has previously been noted in the area, but such a trackway has been postulated

for a portion of the road running through Sussex (Pope *et al* 2012, 82), although again no direct evidence of a trackway was recorded. It would be most unlikely that an earlier trackway lay along the entire course of Stane Street, but the Roman road construction could have utilised portions of trackways that were suitably located and aligned. The reuse of prehistoric routes during the Roman period is well known, although difficult to prove conclusively, mainly relying on secondary evidence from aligned field systems or settlement location (Bishop 2014, 2–5).

The position of the postulated precursor to Stane Street, on high ground close to the Mole Valley, could suggest some seasonality in its use. Potentially the route would have been a good alternative to the Mole during winter when the valley would have been more difficult to navigate. There also appears to be some potential association between the barrows and the line of Stane Street, which runs close to them, although it remains unclear whether the trackway was deliberately located near the barrows or *vice versa*.

The suggested dual access routes through the downland would have made the site an attractive location. The Mole Valley appears to have been something of an exception within the North Downs in that it has evidence of preserved late prehistoric/Romano-British field systems; while little evidence of settlement has been recorded, traces of field systems in the form of lynchets have been recorded at Mickleham to the south of the site (Frere & Hogg, 1944–5), at Norbury Park (Dyer 1996), at Headley Court just to the north of the site (Currie 2000), and indeed in the north-west and south-east of the site itself (fig 2). Few of these field systems have been securely dated but their form is similar to that of others of later Bronze Age date; a Late Bronze Age hoard was found beneath a flint cairn overlying one of the lynchets in Norbury Park (Williams 2008, 293–301), suggesting that these field systems were established by the Late Bronze Age.

In the broadest terms the remains at Cherkley Court suggest mixed-use agriculture, something seen extensively in the South Downs usually as small farmsteads (Drewett *et al* 1988, 96–110). Much of the site appears to have lain as open land; the large ditches are suggestive of pastoral farming, something for which the open grassland and thin chalky soils would have been well suited. Some of the larger animal bone assemblages came from these ditches (Ayton 2013), with all three major domesticates represented. However, the ditches may also have separated the pastoral activity from the cereal processing and storage in Area 2 to the north; the cereals for processing would most likely have come from the local area, perhaps from the field systems thought to surround the site.

It has been noted before (Currie 2000; English 2013, 140) that the lynchets of the Bronze Age field systems in the area were largely recorded only as earthworks; virtually no traces of cut features associated with these field systems have been recorded. These field systems most often took rectilinear form such as those seen in the Mole Gap. English (2013) proposed that at least some of these systems were replaced by smaller aggregated fields. Such field systems have been proposed in the north-western and south-eastern corners of the Cherkley Court estate based mainly on aerial photography. It has already been noted that lynchets are not readily visible during excavation, appearing perhaps merely as a slight thickening of the overlying soils. The geophysical survey found no evidence of field systems, but it did not extend into the areas of the proposed field systems. It is worth observing, however, that some of the proposed field systems extend across the bases of deep dry valleys in the north-west of site that were partially filled with colluvial deposits of probable Bronze Age and later date.

While the enclosure in Area 3 does not readily fit into either of the categories outlined above, it does follow the alignment of those field boundaries seen to the south and to the north (fig 2). The environmental samples from the ditch and hedgeline did not contain evidence of agriculture, but given the paucity of these remains from the whole of Area 3 it may simply be the result of very poor preservation. Potentially then, field systems, or at least an enclosure associated with them, may have extended onto the south-eastern portion of the site, although it seems they did not extend further north as no evidence of them was recorded within Area 8. It could be that the enclosure in Area 3 marked the northern extent of the

field systems. Certainly, the enclosure E23 ceased at the point where the lower colluvial deposits possibly indicated less cultivation of these soils.

Further disparity between the northern and central portion of Cherkley Court and the surrounding area can be seen in the presence of the barrows on the site as well as further nearby barrows, both extant and destroyed. These monuments are thought to be of Early Bronze Age date and comprise nearly half the barrows known within the Mole Gap. The location of these barrows is similar to that of many others, being on the high sides of a valley and close to a water source, in this case overlooking the Mole and perhaps swallow holes. The barrows would have been sited to be visible within the landscape as white discs when freshly built. It is also thought that boundary ditches such as those in Areas 4 and 6 were also in part designed to be visible. This concern for visibility in turn suggests that part of the site was open during the 2nd millennium BC – a suggestion supported by the sequence of colluviation recorded within the valleys during the evaluation (Hogg 2013, 37). The field systems identified on either side of the Mole Gap are thought to have been laid out with only limited woodland clearance beforehand (English 2013, 37), which could be seen as being consistent with the low population numbers proposed for the North Downs.

Taken as a whole, this evidence points to a deliberate separation of the northern and central Cherkley Court landscape from that of the surrounding field systems. The site appears to have been cleared deliberately, possibly first for monumental display of the barrows, then kept open in the Late Bronze Age by using the area as pasture. It would also have been sensible to separate livestock from arable farmland to avoid damage to crops and the escape of animals. The location of grain storage and processing in Area 2, close to the barrows, could therefore also be seen as a deliberate attempt to utilise an important and visible area rather than locating these features closer to the fields supplying the cereals.

The location of both the field systems and the grain-processing structures is consistent with the use of the Mole Gap as an important route to the Thames Valley and the Weald. The valley, allied to the possible trackway that preceded Stane Street, would have provided sufficient means to export processed cereals. The arable landscape seen in the surrounding area and the remains in Area 2 may have been created at least in part because of the presence of these routes. The field systems seen in the surrounding area follow mostly the contours and line of the Mole Valley (fig 2); the lynchets east of the Mole all lay on the same north-west to south-east alignment, a notably different alignment to Stane Street.

The large ditches in Areas 4 and 6, lying as they do in relative isolation, were probably associated with pastoral farming; while few similar features have been recorded in the North Downs, such activity has been noted in Wessex (Cunliffe 2004) where large ditches stretched for considerable distances to form what have become known as ‘ranch boundaries’. These boundaries have been seen as part of large-scale land division perhaps as a result of population pressure or changes in ownership structure; on the South Downs ‘cross ridge dykes’ may have served a similar purpose. The ditches at Cherkley Court certainly do not stretch as far as the features just described but they appear to represent part of the same process of land division. Ownership of land and indeed of livestock would have become an increasingly important issue as population increased, particularly on the thin downland soils.

As discussed above, the structured deposition seen in the postholes of Area 2 was similar to that encountered on a number of other sites in southern Britain. At Cherkley Court it appears that all posts had either been removed or had decomposed; the lack of any packing or post-pipes may suggest the removal of both post and packing before the deposition of other material or the pottery. Similar structured deposition is usually associated with houses and domestic activity (Hamilton 2002; Hart *et al* 2015); however, this ritual activity draws parallels to cycles of life and death, fertility, agriculture and seasonality (Williams 2003). On this basis an area given over to cereal processing seems common to many of these notions and a suitable location for such ritual closure. The work involved in removing the posts and placing pottery within the postholes shows the importance that the cereal processing and storage area must have held for the local populace. The presence of the probable practice

vessel within the structured deposits shows that the cereal processing area held strong personal links for at least one individual, possibly someone who worked extensively within the area.

The intensity of the activity particularly in Area 2 would suggest the presence of a settlement in the vicinity, something that would be both unusual and significant within the North Downs. However, the location of a settlement remains elusive, as it has throughout much of the chalk downland in the area. No direct settlement evidence was found at Cherkley Court, though some of the posthole groups in Area 2 were initially thought to represent roundhouses. However, this seems unlikely given the lack of domestic features or finds usually associated with settlements. The animal bone assemblage did not contain a preponderance of the three main domesticates and no signs of butchery were found. As discussed above, the environmental samples show evidence for cereal processing but little else that could be described as domestic in nature and the pottery assemblage from Area 2, though reasonable in size, shows evidence of structured deposition rather than domestic activity. Though some Bronze Age settlements did exist in the wider area around Cherkley Court (English 2013, 26), none lie on the chalk of the North Downs. In the South Downs, settlement sites are well known, if not common; sites such as Black Patch (Drewett 1982) provided evidence of terraced farmsteads located within field systems. Such settlements appear to have comprised only a few families who probably worked the surrounding land. The location of settlements within systems of fields may have been advantageous agriculturally, allowing easy access, but downland farmstead locations would have often had to forgo shelter from the elements and easy access to water sources. If such a settlement was located near Cherkley Court, easy access to the cereal processing area would have been very advantageous; a settlement near Area 2 would also lie within the group of barrows perhaps adding further allure to the location. Clearly the structures in Area 2 had some significance to the people of the settlement given the structured deposition found within the postholes.

Any settlement need not have been particularly substantial. Pastoral farming that probably occurred on the site may have comprised only transitory occupation during the Late Bronze Age; moving stock across the landscape could indeed have had a number of advantages such as maintaining fresh pasture. Such farming would have led to a high level of seasonality that would not have required any significant settlement construction. The excavation of the large ditches seen in Wessex and the South Downs as well as those at Cherkley Court points to more importance being placed on delineating areas of pasture than on settlement.

The Iron Age activity at Cherkley Court is somewhat tantalising, suggesting some degree of continuity from the Bronze Age with features located in similar areas and alignments oriented with Stane Street. However, it is also obvious that there was a decline in activity; the large boundary ditches as well as enclosures fell out of use and the activity in Area 2 diminished, although it must be noted that cereal storage appears to have taken place in pits in Area 3 and the six-post structures in Area 2. Cunliffe (2004) argues that more value was set on control of cattle than of crops during the Iron Age and this would seem to be the case at Cherkley Court. The site appears to have remained open, suggested by colluvial deposits of probable Iron Age and Roman date overlying some of the Bronze Age features. This open landscape was delineated by a large post-built fenceline seen cutting through the Bronze Age structures in Area 2. The open Iron Age landscape probably continued to be bisected by a trackway along the line later taken by Stane Street and this feature continued to hold some importance.

Conclusions

The archaeological remains at Cherkley Court shed light on the prehistoric utilisation of the long-undervalued North Downs landscape, showing that mixed-use agriculture occurred on the slopes of the Mole Valley. Despite the thin downland soils, the area was fertile enough to support a specialised cereal processing and storage area, which held some degree of significance for the local populace. Much of the site appears to have already been cleared of

woodland at least by the time of the construction of the barrow cemetery; the attractiveness of this landscape would have been increased by the nearby Mole Valley providing a valuable route through the downs. The posited precursor to Stane Street would have provided a further access route through the downs, one that passed directly through the barrow cemetery – whether deliberately or by chance. The location of most of the prehistoric remains, either close to the trackway and cemetery or overlooking them, was clearly significant.

The importance of the prehistoric remains found at Cherkley Court can be seen not only in the comparative lack of similar sites within the North Downs chalk but also in the ritual placement of the pottery within the Bronze Age postholes.

Archive

The archive is currently held at the offices of Archaeology South-East and will be offered to Leatherhead Museum for deposition (site code CCL13).

Endnote

For further details on the site, the finds and environmental assemblages, can be found in Hogg 2013. This is available from Archaeology South-East upon request and will be available online in due course via the Archaeology Data Service reports library (<https://archaeologydataservice.ac.uk/library/>).

ACKNOWLEDGEMENTS

The author would like to thank the client CgMs Consulting for commissioning the work and the Surrey County Council Archaeology team for monitoring the excavations. Thanks go to all archaeologists who worked on the project, also to David Dunkin and Judie English for all their assistance with this work. The fieldwork was managed by Darryl Palmer and the post-excavation process by Jim Stevenson. Lauren Gibson produced the figures for this article. Specialist assessment was undertaken by Gemma Ayton, Luke Barber, Trista Clifford, Anna Doherty, Karine Le Hégarat, Dawn Elise Mooney and Sue Pringle. The initial editing of the article for publication was by Andrew Margetts.

BIBLIOGRAPHY

- Adkins, L. & Needham, S., 1985 New research on a Late Bronze Age enclosure at Queen Mary's Hospital, Carshalton, *SyAC*, **76**, 11–50
- Ashmore P.J., 1999 Radiocarbon dating: avoiding errors by avoiding mixed samples, *Antiquity*, **73**, 124–30
- Ayton, G. 2013 Animal bone, in Hogg 2013, Archaeological excavations at Cherkley Court, Leatherhead, Surrey: a post-excavation assessment and updated project design report, ASE unpubl rep (see *Endnote*, above)
- Bishop, M.C., 2014 *The secret history of the Roman roads of Britain*. Barnsley: Pen and Sword
- Bradley, R., Entwistle, R., & Raymond, F., 1994 *Prehistoric land divisions on the Salisbury Plain. The work of the Wessex Linear Ditches Project*, English Heritage Archaeol Rep, **2**
- Britchfield, D., 2012 Land at Cherkley Court, Leatherhead, Surrey. Archaeological evaluation report, unpubl Wessex Archaeology Report no 78571.01
- Bronk Ramsey, C., 1995 Radiocarbon calibration and analysis of stratigraphy: The OxCal program, *Radiocarbon*, **37.2**, 425–30
- , 1998 Probability and dating, *Radiocarbon*, **40.1**, 461–74
- , 2001 Development of the radiocarbon calibration program, *Radiocarbon* **43.2A**, 355–63
- , 2009 Bayesian analysis of radiocarbon dates, *Radiocarbon*, **51.1**, 337–60
- , 2017 *OxCal v4.3*. Oxford: Oxford Radiocarbon Accelerator Unit
- Brück, J., 1999 Houses, lifecycles and deposition on Middle Bronze Age settlements in southern England, *Proc Prehist Soc*, **65**, 145–66

- , 2006 Fragmentation, personhood and the social construction of technology in Middle and Late Bronze Age Britain, *Cambridge Archaeol J*, **16.3**, 297–315
- Buck, C E, Cavanagh, W G, Litton, C D, 1996 *Bayesian approach to interpreting archaeological data*, Chichester: John Wiley and Sons, Ltd
- Collard, M, Darvill, T, & Watts, M, 2006 Ironworking in the Bronze Age? Evidence from a 10th century BC settlement at Hartshill Copse, Upper Bucklebury, West Berkshire, *Proc Prehist Soc*, **72**, 367–421
- Cunliffe, B, 2004 Wessex cowboys? *Oxford J Archaeol*, **9**, 323–36
- Currie, C K, 2000 An archaeological and historical survey of Mickleham Downs proposed ASHLV, near Leatherhead, Surrey, unpubl rep for Surrey County Council and Surrey Archaeological Society
- Drewett, P, 1982 Later Bronze Age downland economy and excavations at Black Patch, East Sussex, *Proc Prehist Soc*, **48**, 321–400
- Drewett, P, Rudling, D, & Gardiner, M, 1988 *The South East to AD 1000*, London: Longman
- Dunbar, E, Cook, G T, Naysmith, P, Tripney, B G, Xu, S, 2016 AMS ¹⁴C dating at the Scottish Universities Environmental Research Centre (SUERC) Radiocarbon Dating Laboratory, *Radiocarbon*, **58.1**, 9–23
- Dyer, S, 1996 Norbury Park, Fetcham, Leatherhead and Mickleham: the Surrey County Council Countryside Estate archaeological survey, unpubl rep
- Ellison, A, & Drewett, P L, 1971 Pits and postholes in the British early Iron Age: some alternative explanations, *Proc Prehist Soc*, **37**, 183–94
- English, J, 2013 *Pattern and progress: field systems of the second and early first millennium BC in southern Britain*, BAR Brit Ser, **587**
- Field, D, & Needham, S, 1986 Evidence for Bronze Age settlement on Coombe Warren, Kingston Hill, *SyAC*, **77**, 127–51
- Frere, S S, & Hogg, A H A, 1944–5 An Iron Age and Roman site on Mickleham Downs, *SyAC*, **49**, 104–6
- Gent, H, 1983 Centralised storage in late prehistoric Britain, *Proc Prehist Soc*, **49**, 249–68
- Grimes, W F, & Close-Brooks, J, 1993 The excavation of Caesar's Camp, Heathrow, Harmondsworth, Middlesex, *Proc Prehist Soc*, **59**, 303–60
- Grinsell, L, 1934 An analysis and list of Surrey barrows, *SyAC*, **42**, 26–60
- Hall, A, 2008 The archaeological evidence for the route of Stane Street from Mickleham Downs to London Road, Ewell, *SyAC*, **94**, 225–49
- Hamilton, S, 2002 The Mile Oak pottery assemblage – its stratigraphic context, forms, fabrics, chronology and regional significance, in D Rudling (ed), *Downland settlement and land-use: the archaeology of the Brighton bypass*, London: Archetype Publications in association with English Heritage, 36–54
- Hart, D, Doherty, A, & Anderson-Whywark, H, 2015 Non-funerary deposition associated with buildings, in D Hart, *Around the ancient track: archaeological excavations for the Brighton and Hove Waste Water Treatment Works and adjacent housing at Peacehaven, East Sussex*, SpoilHeap Monogr, **10**, 140–1
- Hogg, IJ, 2013 Archaeological excavations at Cherkley Court, Leatherhead, Surrey: a post-excavation assessment and updated project design report, ASE unpubl rep (see *Endnote*, above)
- Jones, A M, 2015 Ritual, rubbish or everyday life? Evidence from a Middle Bronze Age settlement in Mid-Cornwall, *Archaeol J*, **172.1**, 30–51
- Leivers, M, 2010 Prehistoric pottery, in Framework Archaeology, *Landscape Evolution in the Middle Thames Valley, Heathrow Terminal 5 Excavations*, vol 2, Framework Archaeology Monogr, **3** (CD-Rom)
- Levitan, B M, Audsley, A, Hawkes, C J, Moody, A, Moody, P, Smart, P L, & Thomas, J S, 1988 Charterhouse Warren Farm Swallet, Mendip, Somerset: exploration, geomorphology, taphonomy and archaeology, *Proc Univ Bristol Spelaol Soc*, **18.2**, 171–239
- Longley, D, 1991 The Late Bronze Age pottery, in S Needham, *Excavation and salvage at Runnymede Bridge 1978, The Late Bronze Age waterfront site*, London: British Museum Press, 162–209
- Margary, I D, 1965 *Roman ways in the Weald*, 3 edn, London: Dent
- Naysmith, P, Cook, G, Freeman, S, Scott, E M, Anderson, R, Dunbar, E, Muir, G, Dougans, A, Wilcken, K, Schnabel, C, Russell, N, Ascough, P, & Maden, C, 2010 ¹⁴C AMS at SUERC: improving QA data from the 5 MV tandem AMS and 250 kV SSAMS, *Radiocarbon*, **52.2**, 263–71
- Needham, S, 1987 The Bronze Age, in J Bird & D G Bird (eds), *The archaeology of Surrey to 1540*, Guildford: SyAS, 97–137
- , 1996a Chronology and periodisation in the British Bronze Age, *Acta Archaeologica*, **67**, 121–40
- , 1996b The Late Bronze Age pottery: style, fabric and finish, in S Needham & T Spence, *Runnymede Bridge Research Excavations*, vol 2: *refuse and disposal at Area 16, East Runnymede*, London: British Museum Press
- Pope, M, Wells, C, Rudling, D, Doherty, A, Pringle, S, Rayner, L, & Tomber, R, 2012 Commanding position: high-status Late Iron Age and Romano-British occupation of a Wealden ridge at Beedings Hill, West Sussex, *Sussex Archaeol Collect*, **150**, 71–94
- PCRG, 2010 *The study of later prehistoric pottery: general policies and guidelines for analysis and publication*. Prehistoric Ceramic Research Group, Occas Pap, **1** and **2**, 3rd edn (http://www.pcrgrg.org.uk/News_pages/PCRG%20Guidelines%203rd%20Edition%20%282010%29.pdf; accessed 26 May 2019)
- Rayner, L, in prep The prehistoric pottery from Hawk's Hill House, in J Stevenson, & G Priestley-Bell, *The Iron Age occupation of the Chalk Downlands: recent excavations at Hawk's Hill House, Leatherhead and Otway's Lane, Ashted, Surrey*, SpoilHeap Publications

- Reimer, P J, Bard, E, Bayliss, A, Beck, J W, Blackwell, P G, Bronk Ramsey, C, Grootes, P M, Guilderson, T P, Haffidason, H, Hajdas, I, Hatte, C, Heaton, T J, Hoffmann, D L, Hogg, A G, Hughen, K A, Kaiser, K F, Kromer, B, Manning, S W, Niu, M, Reimer, R W, Richards, D A, Scott, E M, Southon, J R, Staff, R A, Turney, C S M, & van der Plicht, J, 2013 IntCal13 and Marine13 Radiocarbon Age Calibration Curves 0–50,000 Years cal BP, *Radiocarbon*, **55.4**, 1869–87
- Reynolds, P J, 1979 *Iron Age farm: The Butser experiment*. London: British Museum Publications
- Seager Thomas, M, 2008 From potsherds to people: Sussex prehistoric pottery, *Sussex Archaeol Collect*, **146**, 19–52
- Stuiver, M, & Polach, H A, 1977 Reporting of ^{14}C data, *Radiocarbon*, **19.3**, 355–63
- Stuiver, M, & Reimer, P J, 1986 A computer program for radiocarbon age calibration, *Radiocarbon*, **28.2B**, 1022–30
- , 1993 Extended ^{14}C data base and revised CALIB 3.0 ^{14}C calibration program, *Radiocarbon*, **35.1**, 215–30
- Tilley, C, 1994 *A phenomenology of landscape*, Oxford: Berg Publishers
- Urmston, B, 2011 Land at Cherkley Court, Leatherhead, Surrey. geophysical survey report, Wessex Archaeology unpubl rep
- Wallis, S, 2012 Middle/late Bronze Age occupation at Manor Road, Burgess Hill, West Sussex: an archaeological excavation, Thames Valley Archaeological Services South unpubl rep 10/93c
- Ward, G K, & Wilson, S R, 1978 Procedures for comparing and combining radiocarbon age determinations: a critique, *Archaeometry*, **20**, 19–31
- William, D, 2008 A Late Bronze Age hoard from Norbury Park, Mickleham, *SyAC*, **94**, 293–301
- Williams, M, 2003 Growing metaphors: the agricultural cycle as metaphor in the later prehistoric period of Britain and North-Western Europe, *J. Social Archaeol*, **3**, 223–55
- Woodward, A, 2008 Bronze Age pottery and settlements in southern England, *Bronze Age Review*, **1**, 79–96