Investigation of a Bronze Age mound on Thursley Common

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with a contribution by V FRYER AND PETER MURPHY

Following excavations in 1959, it was claimed that the two mounds close to the southern edge of the bog on Thursley Common were not Bronze Age turnuli, as had previously been reported, but were in fact sand dunes. It was further suggested that most such mounds on the Surrey heathlands were of similar origin. Limited reinvestigation of the western mound in 1995, however, revealed clear evidence of loose turf stack construction, for the presence of an external ditch and at least one possible primary burial. Palynological analysis of samples taken from the turves and buried soil levels indicate that the mound was likely to have been constructed in the Early/Middle Bronze Age. There is therefore no doubt that the mound is artificial and that it is almost certainly a barrow. It is highly likely therefore that the second mound, 180m to the east, is also of Bronze Age date and consequently that care should be taken before assuming that all such mounds are of natural origin.

Introduction

Two circular mounds can be found, approximately 180m apart, at the northern foot of the low east–west ridge that marks the southern edge of the raised bog on Thursley Common (fig 1). The two mounds are similar in size and shape, being approximately 23m in diameter and 2m high. Both mounds were used as marker points along the Thursley parish boundary and both are referred to in court records of the 18th century (Graham 2001, 338). L V Grinsell visited Thursley in the 1930s and recorded the mounds in his paper 'An analysis and list of Surrey barrows' (1934, 26, 59 and pl XI). The entry for the western mound, Grinsell's 'Thursley Common no 1', reads as follows: 'A typical bowl-barrow, with a definite but irregular ditch, which is 1–2 feet deep and 6 feet wide. The mound is 80 feet wide and 6 feet high.'

Since Grinsell's visit the mounds have been badly damaged, in the first instance by military training, particularly in the early 1940s, and more recently as a result of the increasing use of the common for recreational purposes. As a result the ditches, which were clearly visible to Grinsell, are now hardly discernible and the mounds themselves are slightly reduced in height and have been cut by a number of military foxholes.

Both mounds were classified as scheduled ancient monuments and shown on Ordnance Survey maps as *tumuli*, until they were de-listed following excavations carried out by J X W P Corcoran in 1959 (Corcoran 1961). Corcoran trenched both mounds – the easternmost, his mound A, by the 'quadrant method' and the westernmost, his mound B, by a trial trench 'running northwards to the centre of the mound'. Corcoran reported that neither mound showed evidence for turf stack construction, that there was no evidence for the existence of ditches and that both were 'archaeologically sterile'. His conclusion was, therefore, that both were entirely natural in origin and were, in fact, fossilized sand dunes. He went on to suggest that this was the likely origin for most, if not all, of Surrey's heathland mounds and that consequently this showed that 'Surrey was not attractive to Bronze Age pastoralists, still less to agriculturalists'.

Corcoran's report seemed to contradict Grinsell's observations and in 1995 the authors obtained permission to re-open what appeared to be the remains of his trial trench into the western mound. This had apparently not been completely backfilled at the time and showed as a narrow depression running north from the centre of the mound (fig 2, partly cut by, but mainly to the east of, trench 1), albeit not in the position described in the original report.



Fig 1 Thursley Common: location plan showing position of mounds. Contour heights in metres. (© Crown Copyright. NC/2004/33611)

The aim of the work was to establish whether or not the mound was in fact a sand dune and, if possible, to obtain pollen samples to provide a date for its formation/construction.

Having removed the backfilled sand, the edges of the new trench were extended slightly into the undisturbed stratigraphy of the mound. This clearly showed the mound as having a loosely constructed turf stack core, a subsequently recut ditch and a rectangular pit cut through the original ground surface near the centre of the mound – possibly a primary burial. The mound is therefore artificial and the pollen evidence indicates a post-Neolithic but pre-Late Bronze Age date for its construction.

Location, topography and geology

Thursley Common lies north of Thursley village and, together with the adjacent Elstead, Ockley and Witley Commons, covers an area of about 875ha in the south-west corner of Surrey (fig 1). The commons, nowadays largely under heather, birch and pine, form part of the west Surrey Lower Greensand heathlands, which stretch northwards from Haslemere. The Lower Greensand in the area under consideration in the main consists of Sandgate Beds to the north and east and Folkestone Beds to the south and west.

The land immediately to the north of the mounds in question (at SU 9080 4091 and 9109 4092 respectively), is low lying and waterlogged, forming the largest raised peat bog in southeast England. To the north-east and west of this, the ground rises gently and is cut by a number of streams, several of which were dammed to form hammer ponds for iron working in the post-medieval period. To the south, the land rises more steeply to form a range of low hills, which overlook the bog itself. It was on the lowest slopes of this higher ground that the two mounds were constructed.

The western of the two mounds, which is the subject of this report, now lies near the junction of two paths and has to the east, been partially obscured by a bank created by sand bulldozed from one of these when it was widened to form a firebreak (fig 2). The mound is, as previously stated, roughly circular in shape with a diameter of 23m and has a maximum height of about 2m. Part of its circumference is marked by the now very indistinct line of a ditch and its top has been flattened and disturbed by a number of small excavations – mostly military – though rabbits continue to burrow into the body of the mound. The most noticeable cut, however, is a trench-like depression that runs radially from the circumference to the centre of the mound, more or less in the middle of the northern flank. It is assumed that this depression marks the line of the trial trench excavated by Corcoran in 1959.

Previous evidence

Apart from the history of the mounds themselves, given in the introduction to this paper, Thursley Common and the surrounding area have produced a number of finds of Bronze Age and earlier flintwork (Graham *et al* 1999), much of it from the ridge immediately behind the mounds. A further group of four *tumuli* lie about 1.5km to the east on Witley Common, and Bronze Age metalwork has also been found in the general area (eg Graham 2000, 11–12).

The excavation

Note: while the authors have attempted to present the evidence from the excavation as accurately as possible, a number of problems have arisen and, in particular, it has not been possible to relate the pollen results precisely to individual layers in the end section. The section drawings and report are based solely on photographs taken at the time and the authors' personal recollections of the excavation, and may therefore be slightly inaccurate, particularly in the case of the long section. The professional archaeologist, who was paid to direct the excavation and undertake the recording, has, despite numerous offers of help over a period of seven years, failed to produce a report of a standard suitable for publication. The site archive, which was only made available after this report was written, was completely inadequate to resolve these problems. The current authors, who were responsible for setting up the excavation in the first place, have therefore taken the matter into their own hands, but acknowledge that, while accurate in essentials, this report regretfully falls slightly short of what should have been produced had adequate records been taken at the time.

The western of the two mounds was chosen for investigation, largely on the grounds that a narrow slit trench (trench 1) could be fitted within the line of what appeared to be the site of the 1959 excavation. A smaller second trench (trench 2) was excavated on the western side of the mound (fig 2).

154 DAVID GRAHAM, AUDREY GRAHAM AND PATRICIA WILTSHIRE



Fig 2 Thursley Common: western mound plan and east-west profile. Contour heights in metres.

TRENCH 1 (14.6 x 1.3m)

Excavated primarily within the 1959 trench, this ran from outside the apparent line of the ditch to a point just short of the centre of the mound (fig 2). The intention was to cause the least possible disturbance to any intact stratigraphy and also to avoid the centre of the mound

and any primary burials that might be present there. However, on the south and west sides the trench was cut slightly into the undisturbed body of the mound in order to expose sections from which pollen samples could be taken.

The sequence revealed in the long section (fig 3) consists of an overlying band of heathland turf cut by one recent military foxhole near the centre of the mound. The base of this feature produced a number of rifle cartridges, confirming its military origin. Elsewhere the turf line overlay a second, and presumably earlier, foxhole and, at the circumference of the mound, a deep steep-sided, flat-bottomed ditch. This is again assumed to be of military origin albeit utilizing the line of the earlier, presumably Bronze Age, ditch that was recorded by Grinsell before the Second World War. This feature was also encountered in trench 2 confirming that it is indeed a ditch and that it appears to surround the mound. At the extreme northern end of trench 1 a further cut, with the same mottled yellow sand fill as the ditch, was encountered. Given that this lay at the edge of the 1959 trench, no attempt was made to follow the feature any further and consequently its form and purpose remain unknown.

Underlying the heathland turf, from the south end of the trench to the ditch, were two bands of sand, a lighter layer overlying a darker grey one and separated from it by a thin band of black sand. This black interface clearly followed the lines of root disturbance and, as elsewhere in the section, had been affected by animal burrows. The main core of the mound lay below this lower dark grey sand and consisted of a loose turf stack, now interlaced by numerous mineral-leeched bands.

The turf stack directly overlay and preserved a layer of soil which may be related to the general soil cover in the area at the time of the construction of the barrow. The soil level was traced for approximately half the length of the turf stack, but then left so as to disturb as little of it as possible. As with many other heathland barrows this layer in turn overlay a band of white sand which, in its turn, overlay a second, thicker dark organic layer. Elsewhere, for example at Minsted in West Sussex, (Dimbleby 1975, 62) it has been suggested that this lower soil layer dates to the Mesolithic period and is followed by an episode of wind deposited sand. An alternative explanation is that the lower organic band represents the Bronze Age soil level and the overlying bands represent phases in the ritual associated with construction of the mound. In any event, the phenomenon of two buried soil layers separated by a band of white sand is by no means uncommon under heathland turf stack barrows.

A small sondage was cut at the southern end of the trench, close to the centre of the mound, to test any deeper stratigraphy and this revealed a natural sequence of bands of sand finally overlying undisturbed natural sand. The only exception to this was the discovery of a shallow rectangular pit (c 0.7 x 0.4m) within the sondage. This was filled with dark grey/black sand and either underlay or cut through the buried soil levels – the exact relationship being unknown to the authors. No finds were made within the pit, nor where there any visible signs of bone, cremated or otherwise, but given its position, it may have originally contained a primary burial.

The end section (fig 4) shows a similar stratigraphic sequence and was the location from which the pollen samples were obtained.

TRENCH 2 (6 x 1.4m)

This trench was located to the west of the mound over the projected course of the encircling ditch (fig 2). In the event, the presence of the ditch, referred to above, was confirmed but as no photographs or notes were apparently taken by the director at the time, it is not possible to provide any further details.

Finds

The only finds recovered were two pieces of calcined flint from the core of the mound and one flint flake of uncertain date. The casings from several rifle bullets were found at the







Fig 4 Thursley Common: view of southern section of trench 1. The monoliths referred to in the palynological section of this report were taken vertically downwards from the '0' datum line and approximately midway across the section.

bottom of one of the later cuts, thus confirming the identification of this feature as a foxhole. No further details of the finds are available.

Palynological assessment of organic layers in barrow turf stack, by Patricia Wiltshire

INTRODUCTION

Three overlapping 50cm monoliths were obtained through the turf stack of a barrow on Thursley Common. The basal monolith contained the putative buried palaeosol. The turves were characterized by dark organic bands intercalated with friable leached sands. The gross stratigraphy gave no indication of turf orientation. It was assumed that construction turves would have been collected from near the site of the barrow which meant that spatial heterogeneity in vegetation patterning could be assessed by palynological examination of the organic layers. The palaeosol would provide information regarding the immediately local vegetation at the time of turf construction and possibly for some period before the turves were laid.

METHODS

On the whole, the leached sands were avoided in the assessment and sampling was concentrated on the dark organic bands. Samples were taken at varying intervals depending on the depth of sands but most were contiguous at either 0.5cm or 1cm depths. These samples were processed in view of the friability of the sediments and possible deterioration in storage. However, only alternate samples were assessed for palynomorphs although even so, for most, the depth interval was only 1cm.

Standard methods were used for concentrating palynomorphs from the soils and sediments (Dimbleby 1985). Samples were lightly stained with 0.5% safranine and mounted in glycerol jelly. Preparations were examined with a Zeiss phase-contrast microscope at x400 and x1000 magnification where necessary. Every pollen/spore taxon occurring in 15 traverses of each slide was noted. Microscopic charcoal occurred as isolated flecks in samples and no attempt was made to quantify them. Approximately 100–200 grains were counted in each sample. Results were expressed as a percentage of total land pollen and spores (TLPS). It must be stressed that these results must be considered with caution in view of the small numbers of palynomorphs counted but it was felt worthwhile producing pollen diagrams from the data. Nomenclature follows that of Bennett *et al* (1994), Moore *et al* (1991) and Stace (1991).

RESULTS AND DISCUSSION

(Note: table 1 is available on the Archaeology Data Service website: see *Endnote*)

Pollen preservation was good in nearly all samples. The results are shown in figures 5(a), 5(b), 6 and 7, and in table 1.

Figures 5(a) and (b) are pie charts of the average percentage values for taxa throughout the sequence of sediments. These are crude but do give an overall picture of the vegetation dominating the area for the period represented by the sediments. Figure 5(a) gives average percentage values for trees, Ericaceae (mostly *Calluna* – common heather), Poaceae (grasses), *Typha angustifolia*-type (eg lesser reedmace), herbs, and other (minor) taxa. Figure 5(b) shows the average percentage values for the major trees and shrubs and all other taxa.

The pollen diagrams (figs 6–7) are divided into 'Bands', numbered 1–4, and sub-divided into a, b, c etc according to changes in lithology. In many instances, these changes are mirrored by variation in the pollen spectra. The bands represent the organic layers within the monolith sequence, and the stippled bars separating the pollen spectra represent intercalated friable, leached sand. Band 1 is the basal putative buried ground surface, and Band 4 is the uppermost organic layer in the sequence within the monolith.

Table 1 gives the stratigraphic description and percentage values for all minor taxa observed in the assessment. The lithology (table 1) was homogeneous in Bands 1 and 3 while it was heterogeneous and complex in Band 2. Figure 6 gives detailed percentage information for heathers, grasses, other herbs, and lesser reedmace throughout the sequence. It also gives a plot of 'woodland cover' *sensu* Heim (1962). A value of 50% trees and shrubs is taken as 50% tree cover and anything less than 50% is taken to represent open conditions. This is a rather simple concept but provides a useful comparison for the importance of trees and shrubs in adjacent sediments. Figure 7 gives detailed information for *Corylus*-type (hazel), *Alnus* (alder), *Betula* (birch), *Quercus* (oak), *Tilia* (lime) and *Ulmus* (elm).



Fig 5 Thursley Common: view of pit (possible primary burial at southern end of trench 1). Horizontal scale = 0.2m.

Band 1

This organic layer has been subdivided into (a) and (b). Band 1(a) would appear to represent the upper horizons of the old land surface upon which the barrow was constructed. The curve for woodland cover (fig 6) shows that tree/shrub cover fluctuated but, on the whole, remained at a relatively low level when compared with the arboreal record for other layers. Hazel appeared to be the most abundant woody plant, but it must be remembered that the prolific production and excellent dispersal of its pollen means that it can be over-represented in the vegetation record. Alder was well represented but was less abundant at the immediate site than birch or oak. Oak was more frequent at the construction site than at any other place from which turves had been collected. Although the percentages for lime were relatively low, they were high enough to suggest that the tree was growing close to the barrow site. Lime is insect-pollinated and its pollen is poorly dispersed, and it was probably under-represented, as was elm.

The abundance of heather and grasses, as well as a relatively diverse assemblage of herbs, indicates that although the area supported woodland, the barrow was made in a substantial clearing. There were broken soils supporting ruderal weeds such as *Rumex* (dock), Lactuceae (dandelion-like plants) and *Artemisia* (mugwort), and possibly shorter turf with *Campanula*-type (eg harebell), *Potentilla*-type (eg tormentil), *Galium*-type (bedstraw) and *Ranunculus*-type (eg buttercup). *Polypodium* (polypody fern) was frequent, and this may have been growing at the woodland margins on tree trunks or stumps, or even within raised clumps of grass.

Band 1(b) seems to represent a turf collected from a different, much more wooded, site with relatively small areas of heathers and grasses and no other herbs. Hazel, alder and birch



Fig 6 Thursley Common: pie charts showing the average percentage values for taxa throughout the sequence of sediments. Upper (a): proportions of various taxa recorded in organic bands. Lower (b): trees, shrubs and other taxa represented in turves.

were more abundant than in l(a) while oak, lime and elm were very sparse or absent. It is possible that this organic material was collected from a slightly wetter area and away from the richer soils; spores of *Sphagnum* moss were found which again suggests greater wetness.

It would seem that Band 1 consisted of two distinct layers of organic material and that the upper one had been brought in from elsewhere. Without further analysis, the orientation of the turf cannot be ascertained.



Intercalated friable sand

Fig 7 Thursley Common: pollen diagram for woodland 'cover', heathers (Ericaceae), grasses (Poaceae), other herbs and lesser reedmace (*Typha*).



Intercalated friable sand

Fig 8 Thursley Common: pollen diagram for hazel (Corylus), alder (Alnus), birch (Betula), oak (Quercus), lime (Tilia) and elm (Ulmus).

Band 2

The layer of sand between Bands 1 and 2 possibly represents the Ea horizon(s) of the soil profiles from which the adjacent layers were obtained. Table 1 shows that the lithology of Band 2 was exceedingly complex and changes in the pollen spectra appear to reflect the lithological boundaries. There is tentative evidence to suggest that Band 2 consists of at least five organic layers, and that these appear to have been collected from various places in the local landscape. If this is the case, then the upper organic horizons of soil profiles had been skimmed off, leaving the inorganic subsoil behind. All the areas of turf collection supported extensive areas of woodland, but the canopies were either open, or there were glades dominated by grasses and heathers. Some of the layers had been collected from areas with more mesotrophic soil and where lime, elm, and alder had replaced oak, birch and, to some extent, hazel. The upper layers in this band had also been collected from the vicinity of stagnant water which supported extensive stands of reedmace; it was surrounded by hazel, lime, elm, birch and alder although, again, little oak.

Band 3

This band was also separated from Band 2 by sand, and it is clear from the pollen spectra that at least two areas had been exploited to provide this turf. Layer 3(a) had been collected from a densely wooded location where hazel and alder were most abundant but where all the other trees were also moderately well represented. The consistent presence of reedmace shows that the collection site was fairly near to a body of stagnant water, and there were open areas of grasses and heathers. *Sphagnum* spores also suggest wetter soils or the margins of wet, acidic ground.

Layer 3(b) was obtained from a much less wooded site than 3(a) and arboreal percentages were consistently less than 50% TLPS. Hazel and alder were less abundant than at other sites and oak seems to have been absent, but birch, lime and elm were present, and pine was growing in the catchment. Heathers were still well represented but the most abundant taxa were grasses and reedmace. It is possible that the grass pollen was derived from *Phragmites* (reed) rather than, or as well as, terrestrial grasses, since the abundance of reedmace pollen indicates the proximity of standing water.

Band 4

This sample represents just a part of a band which seems to have been collected in a similar place to Band 3(a).

OVERALL PICTURE OF VEGETATION

In the main, the organic bands probably consisted of sections cut from the old land surface. If, as is most likely, that the materials were collected from Thursley Common itself, the results suggest that when the barrow was constructed, the local landscape was dominated by woodland which was quite dense in places. In most pollen samples, arboreal values accounted for >60% TLPS (total land pollen and spores) and, in several instances, exceeded 80%.

Figures 5(b) and 7 show that *Corylus* was by far the most abundant woody plant (reaching values in some samples of between 50 and 60% TPLS) while *Alnus* was also an important element in the woodland. Pine was recorded in several samples at between 1.5 and 2% TLPS, and this provides evidence to refute the belief that this tree became extinct in southern England. Studies in South Wales and Sussex have shown that pollen percentages as low as 4% have been recorded within only 50m from pine plantations (personal observation). Furthermore, very many palynological studies in eastern England have recorded low levels of pine throughout the Holocene (personal observation). It is inconceivable that so many

substantial records are all due to 'long distance transport'. *Betula* was moderately well represented but *Quercus, Tilia* and *Ulmus* were less abundant. This is not surprising considering the low base status of greensand soils. However, the substantial *Tilia* record indicates a local presence for the tree, and this means that soils approximating to brown earths or brown sands were present in the catchment (Avery 1980). In fact, the woodland assemblage was comprised mostly of trees and shrubs which are, today, characteristic of mesotrophic, relatively base-rich soils, and whose litter generally forms mull humus.

Broad-leaved herbaceous plants formed only a small component of the overall vegetation, and they were only frequent at the site itself. In most cases, open areas were dominated by heathers and grasses. The abundance of these, suggests that considerable areas had been cleared of trees and shrubs long enough for local brown earths (or brown sands) to have developed into podzolic profiles over the greensand. The absence of *Pteridium* (bracken) is interesting, and open areas were probably dominated by heather-infested acid grassland which could have provided poor pasture. However, some areas seemed to have supported prolific, dense stands of heather (see Band 2 (b)), and it is quite obvious that components of lowland heath had already entered the community at Thursley, although its character was very different from that at the site today.

The relatively high representation of lesser reedmace pollen provides evidence for standing water, and it is possible that at least some of the extensive acid bog present on Thursley today was open water during the Early/Middle Bronze Age.

CONCLUSION

The pollen spectra suggest that the turves represent the original ground surface of Thursley during the Early/Middle Bronze Age. The low levels of elm and relative abundance of lime indicate a post-Neolithic but pre-Late Bronze Age date.

Several of the tree and shrub taxa which made up the woodland favour relatively baserich, well-drained soils. Even alder, which performs well under waterlogged conditions, can compete favourably on richer, drier soils where nitrogen is limiting, although it could also have been fringing open water and dominating the wetter soils in the locality. There seems little doubt that there were richer soils available in the catchment than are present today and it is possible that podzolization was restricted to the very open, exposed areas. These had certainly been exploited by heathers and grasses although there is no evidence of bracken in any of the samples. In view of the existence of relatively rich soils, it is interesting that there was no record of cereal cultivation in the turves.

The common would appear to have been dominated by hazel with alder being an important component. But both these taxa could be over-represented by virtue of prolific pollen production and good dispersal. In spite of the relatively low percentages, it is likely that lime was the most abundant tree on the richer, well-drained soils and it is interesting that oak seems to have been relatively scarce even though it was moderately well represented at the site of barrow construction.

This study of the turf stack has shown that sections of old ground surface were collected from a wide (albeit unknown) area of heterogeneous vegetation and soils. The community varied according to edaphic conditions, proximity of waterlogged ground, and relative abundance of competitive species. Heathland was in the early stage of development and, in the main, the common was characterized by open woodland rather than heathland communities. The extent of open ground, and the lack of evidence for cereal production, might tentatively indicate a pastoral economy where the developing heathland provided browse and grazing.

This assessment has shown that palynomorphs are well preserved in barrow turf stacks on Thursley Common, and that a picture of a wider landscape has been gained by turf analysis than would have been achieved by a single core of sediment. This approach allows an appreciation of landscape heterogeneity for a restricted prehistoric period, and would provide 164 DAVID GRAHAM, AUDREY GRAHAM AND PATRICIA WILTSHIRE

an excellent comparison for data obtained from long sequence cores obtained from Thursley bog.

FURTHER WORK

Not all prepared samples were assessed, and sufficient are available to provide a much more detailed record of the Early Bronze Age landscape around Thursley. It is suggested that a detailed analysis be carried out and that sections from other barrows are analysed for comparison.

Assessment of a palaeosol at Kettlebury Hill (Wiltshire 1997) has given undated palynological information but the pollen spectra indicated an earlier date than is suggested for the barrow. The adjacent archaeology at Kettlebury Hill was Mesolithic (Reynier 2002) but insufficient recording means that the palynological results cannot be reconciled satisfactorily with the archaeological information. If a number of palaeosols were identified, and dated archaeologically, it would be possible to build up a three-dimensional picture of the prehistoric landscape for this part of Surrey.

Charred plant macrofossils and other remains: an assessment, by V Fryer

and Peter Murphy

INTRODUCTION

Three samples were submitted for assessment from a pit fill (sample 115), a possible buried soil (sample 110) and a turf layer (unnumbered). All three contexts were considered to be of Bronze Age date.

METHODS

The samples were processed by manual water flotation/washover, collecting the flots in a 0.5mm mesh sieve. The dried flots were scanned under a binocular microscope at low power and the macrofossils and other remains noted are listed in table 2 (see *Endnote*). Plant remains were preserved by charring unless otherwise stated. Modern contaminants including fibrous roots, seeds/fruits and arthropods were present in all samples.

DISCUSSION

The assemblages were very small with an extremely low density of charred plant macrofossils. Stem and/or capsule fragments of indeterminate Ericaceae (heather family) were present in small amounts throughout and fragments of other charcoals and charred root, rhizome and/or stem were moderately common in all samples. Two fragments tentatively identified as *Corylus avellana* (hazel) nutshell were noted in sample 115. A single badly puffed fruit, possibly of *Eleocharis* sp. (spike-rush), with two indeterminate grass seeds were recovered from the turf sample. Other materials included rare fragments of black porous 'cokey' material and black tarry droplets, both probably the residue of the combustion of organic material at a very high temperature. Porous ferrimanganiferrous concretions were also present in the flots.

CONCLUSIONS

The very low density of material within the samples precludes the identification of any specific activity on the site, but the presence throughout of Ericaceae capsules and stem suggests that the site was situated within, or in proximity to, an area of heathland.

Discussion

The excavation established that, at least the western of the two mounds on Thursley Common is of loose turf-stack construction with an encircling ditch and is in all probability a bowl barrow, dating on pollen evidence to the Early/Middle Bronze Age. Though no material evidence survived in the rectangular pit found close to the centre of the mound, it may have contained a primary burial despite the lack of any visibly surviving remains. Any bone originally present, cremated or otherwise, is perhaps unlikely to have survived in the acid conditions of the local sands.

The presence of reedmace pollen indicates that in the Early/Middle Bronze Age Thursley bog contained areas of open water and therefore that the barrow(s) may have been constructed on the edge of, what was then, a shallow lake. Owing to inaccuracies in the original section drawing, uncertainty has arisen as to the exact nature of the two buried soil levels which underlie the mound. By analogy with other sites such as Minsted (Dimbleby 1975), the lower should represent an earlier, possibly Mesolithic phase, separated from the Early Bronze Age soil by a band of windblown sand. However, it may equally be the Bronze Age soil level with the overlying white sand and upper band of soil formed part of the construction process of the barrow. In the case of Thursley, however, because of the problems mentioned above, it is not possible to assign pollen results with any certainty to the particular bands shown on the section. Nevertheless, there seems little doubt that at the time the mound was constructed the heathland was at least in the process of formation, though the high quantities of hazel and other tree pollen indicate a more wooded habitat than is present today.

In conclusion, and despite the problems associated with the excavation, it is quite clear that Corcoran was wrong in asserting that the western mound, and probably by inference the eastern as well, are sand dunes. Under the circumstances, Corcoran's further suggestion that large areas of Surrey were unattractive to Bronze Age peoples seems unlikely to be sustainable. Mounds on the heathlands should not automatically be dismissed as sand dunes, though doubtless some are, and Corcoran's other conclusion that the absence of visible barrows on the better soils indicates a lack of Bronze Age activity, should also be viewed with caution. It seems more likely that barrows on the better soils have been ploughed out, leaving in the main only those on the poorer, less exploited, soils visible today. Both mounds have now been reclassified as Scheduled Monuments (no 31381) by English Heritage. The photographs of the excavation will be deposited with the Surrey Archaeological Society.

Endnote

Table 1 (Minor taxa) and table 2 (Macrobotanical and other remains) are available on the Archaeology Data Service website (http://ads.ahds.ac.uk/catalogue/library/surreyac/v91.cfm). Copies of this material will also be deposited with: the Society's library, Guildford; Surrey History Centre, Woking, and the Surrey Sites and Monuments Record, Kingston. Photocopies can also be supplied by post – enquiries should be addressed to the Hon Editors, Surrey Archaeological Society, Castle Arch, Guildford GU1 3SX.

ACKNOWLEDGEMENTS

The authors would like to thank English Nature and the site manager Simon Nobes for permission to carry out the excavation and for funding the macrofossil report. Surrey Archaeological Society and Waverley Borough Council also kindly provided funding and support for the work. We are grateful to V Fryer and Peter Murphy for the macrofossil report and to Dave Attryde, Mike Borrell, Ian Dormor, Judie English, Rachel Gray, Martin Little, Ray Newton, Mike Rubra and Geoff Stonehouse, all of whom helped on the site. Dr David Bird, Principal Archaeologist, Surrey County Council, kindly visited the site and gave his advice. Finally, Elizabeth Whitbourn assisted with the topographical survey of the site.

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