

## A BRONZE AGE ROUND BARROW AND DEVEREL RIMBURY CREMATION CEMETERY AT ZIONSHILL COPSE, CHANDLER'S FORD, HAMPSHIRE

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### ABSTRACT

*The results of the survey and excavation of an earthen mound at Zionshill Copse confirmed that it was a previously unrecorded middle Bronze Age round barrow. The relatively inconspicuous appearance of the barrow was fairly typical of those built during the middle Bronze Age (c 1400–1000 BC), which seldom approach the monumental scale of their early Bronze Age counterparts. A slightly unusual feature of the barrow was the absence of a quarry ditch surrounding the mound. However, there are parallels for this form, which were constructed by scraping up topsoil and subsoil from the surrounding area. The rather mutilated mound was of a simple dump construction with a large disturbance in the top, indicating that the barrow had been 'robbed' at some time during the past. Although it had been ploughed, the mound sealed an undisturbed buried soil, or palaeosol. However, there were no features or other forms of evidence for pre-barrow activity. Sherds of Deverel Rimbury pottery were recovered from the buried soil and the mound make-up. The small assemblage from the buried soil also included a single sherd in an early Bronze Age fabric.*

*A small Deverel Rimbury cremation cemetery accompanied the barrow. This consisted of eight Barrel and Bucket Urns, which were typically grouped around the southern side of the mound. Limitations on the scale of the excavation prevented a full assessment of the extent of the cemetery, which may have continued beyond the investigated area.*

### BACKGROUND

#### *Introduction*

The proposed route for a new access road, linking two housing developments to the north and south of Zionshill Copse, threatened a well-preserved

woodland boundary earthwork and a small earthen mound. The latter was of particular interest since it resembled a round barrow, or burial mound, which could have been of prehistoric or Saxon date. In view of the vulnerability of the mound it was agreed, on the advice of the Hampshire County Archaeologist, that an earthwork survey and small-scale excavation should be undertaken to evaluate the nature, date and level of preservation of any archaeological deposits.

The results of the evaluation demonstrated beyond doubt that the mound was a small round barrow of Bronze Age date. A buried soil was preserved beneath the mound make-up and a single Deverel Rimbury urn was recovered from a small pit located just beyond the eastern edge of the mound (Weaver 1996). The pottery vessel dated at least one phase of activity associated with the barrow to the middle Bronze Age (1400–1000 BC), and raised the possibility that it was part of a more extensive cemetery grouped around the periphery of the mound. The presence of an undisturbed buried soil sealed beneath the mound added greatly to the paleoenvironmental as well as the archaeological potential of the site. Any pollen, carbonised plant remains, bone, artefacts or features associated with this layer would provide invaluable information about the environment and funerary activity that preceded the construction of the mound.

Taken together, these preliminary findings greatly enhanced the archaeological significance of the monument and for that reason the option of *in situ* preservation of the site was considered. However, the proximity of the mound to the new road cast doubt on the viability of its long-term survival, while the unknown extent of the cemetery, which was an integral part of the monument,

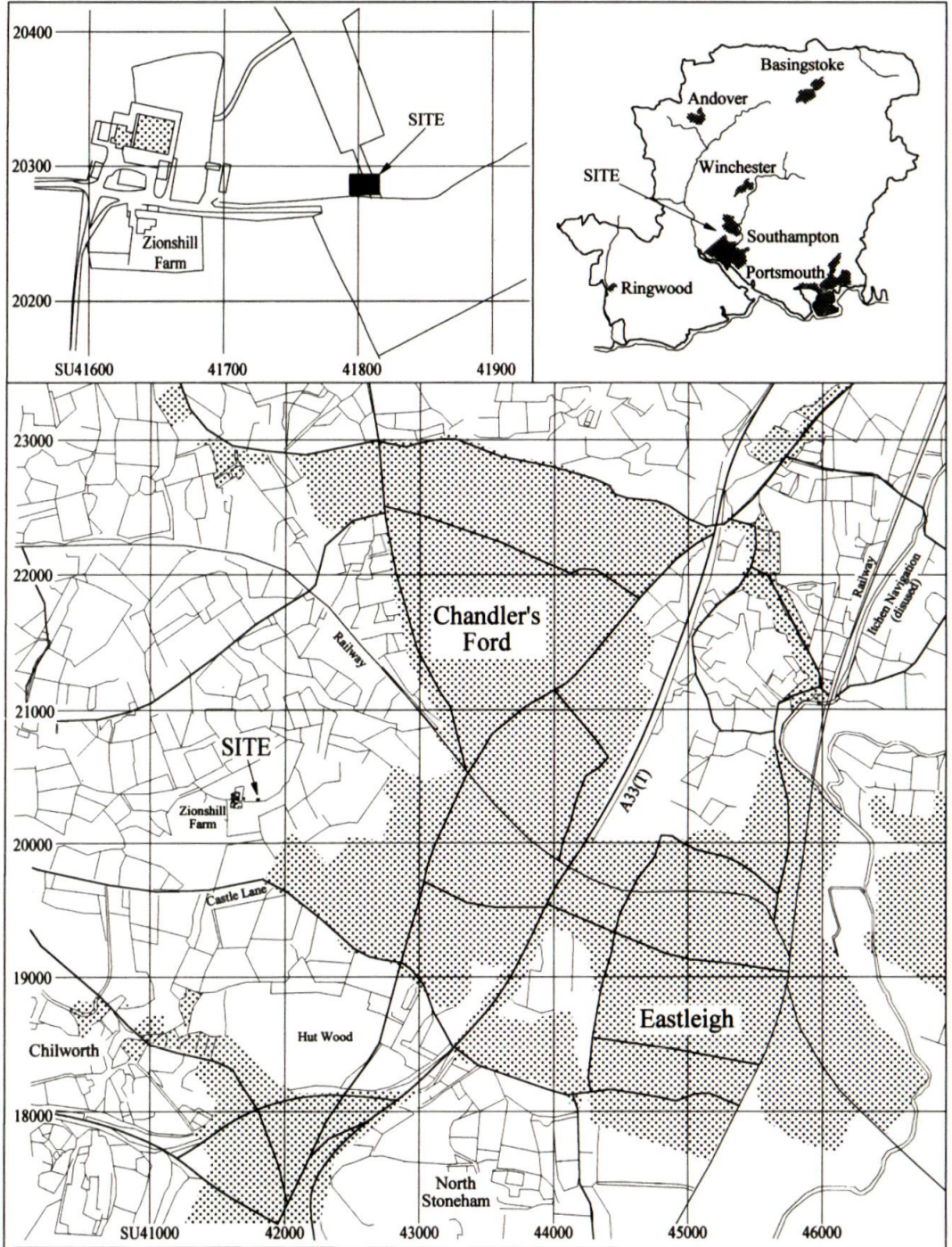


Fig. 1 Location of site within Hampshire and Chandler's Ford

added a further complication. In these circumstances, excavation was deemed to be the preferred option and to that end a proposal was prepared for the excavation of the barrow and the possible cemetery.

Provision was made for an archaeological watching brief to monitor the removal of the stretch of the woodland boundary bank adjacent to the barrow and on the line of the access road. This work involved recording a section of the bank and ditch and the excavation of any features encountered below the bank.

The survey, evaluation and subsequent full-scale excavation was commissioned by Andrew Josephs, the Senior Archaeologist of Wardell Armstrong, on behalf of Heron Land Developments Ltd. The fieldwork and report preparation were undertaken by Thames Valley Archaeological Services (site code KFCF96). The excavation was carried out during the autumn of 1996 in accordance with the Written Scheme of Investigation approved by the Hampshire County Archaeologist.

#### *Site location and description*

The site was located at the edge of Zionshill Copse (NGR SU 4180020275) and within the parish of North Baddesley (Fig. 1). The copse forms part of an extensive tract of ancient woodland known as the Great Covert, and is surrounded by banks and ditches of probable 19th century date. It occupies an area of gentle relief with a variable geology composed mostly of the Eocene marine clays and sands that make up the Bracklesham Beds. The barrow was situated on moderately rising ground at a height of 33m above OD and just inside the southern woodland margin, where it had been partly subsumed by an earthwork delineating the woodland boundary. Its position exploited the subtle relief of the area by being deliberately 'false crested' with a south facing aspect. Prior to its identification in 1996 there was no record of a barrow in Zionshill Copse. The closest known examples lay some three kilometres to the north, but they had been destroyed or were severely damaged, and aside from cursory references to their dimensions there is no other information available (SMR SU42SW 7-9, 12-16; Fig. 1).

The barrow was visible as a low and somewhat irregular mound, with a maximum diameter of 12m and a height of 0.6m (Fig. 2). There was no surface trace of a quarry ditch surrounding the mound, which had evidently suffered considerable damage from the roots of trees. Moreover, an irregular depression in the top of the mound indicated that it had been dug into at some time in the distant past, presumably in a search for the central burial. Other signs of disturbance were evident on the south-western side, where the mound had been mostly flattened. On the eastern side, the original profile was modified by slight terracing, giving the impression that the barrow had been subject to ploughing which had resulted in the formation of a negative lynchet. A cursory examination of the area immediately to the north of the barrow revealed several other lynchets, visible as low banks partly obscured by bracken. These may have formed part of an extensive field system which had encroached on the mound and contributed to its degraded condition.

## THE EXCAVATION

### *Methodology*

Prior to setting-out the excavation site, the barrow and its immediate surroundings were cleared of trees and under-storey vegetation. Large tree stumps were left in place since their removal would have caused excessive damage to archaeological strata. The approximate area of the excavation was cleared of leaf litter and topsoil using a JCB-type machine fitted with a toothless bucket. This work was carried out under close archaeological supervision. Following the machine stripping, a rectangular area of 15.0 × 22.5m was laid-out around the barrow mound and hand cleaned. The southern extent of the site was constrained by the bank of the woodland boundary earthwork which encroached on the barrow mound. In other directions the cleaned excavation area was extended sufficiently far beyond the mound to detect the presence of a barrow ditch and any further urns. At the eastern edge, the excavation area abutted a low bank flanked by a shallow ditch. This appeared to be a woodland en-

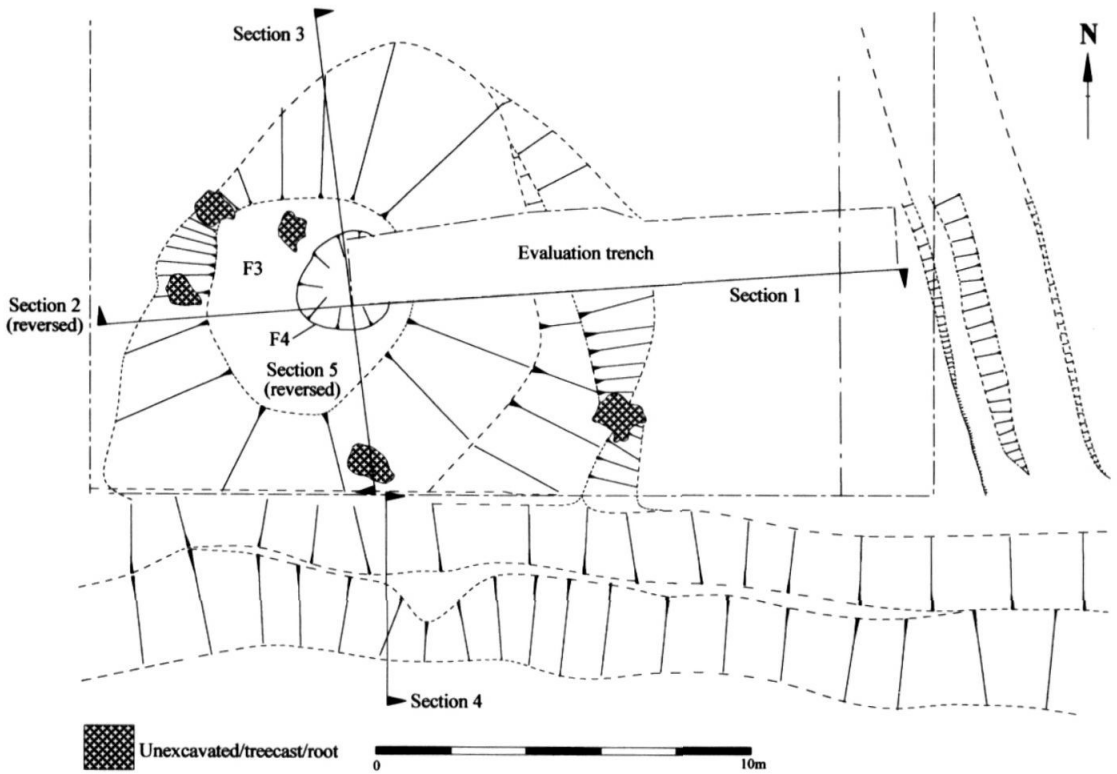


Fig. 2 Plan of barrow showing location of sections and boundary earthworks

closure earthwork adjoining the main woodland boundary bank. It was not investigated during the course of the excavations, although a short stretch was planned (Fig. 2).

The mound was excavated using a standard technique of opposed quadrants, taking the southern section of the re-opened evaluation trench as the line of one quadrant. The surface of the mound below the topsoil was cleaned carefully by hand, and the north-eastern and south-western quadrants were excavated down to the surface of the buried soil. No archaeological features were discovered cutting into the mound and the sections indicated that it was a single phase construction. In the absence of any evidence for secondary burials in the mound itself, and in view of the relative simplicity of its structure, the two remaining

quadrants were removed under strict supervision using a 360° mechanical excavator fitted with a toothless bucket. A thin layer of mound make-up was left in place to protect the buried soil from machine damage. This was subsequently removed by hand. In order to preserve a representative portion of the stratigraphy for palaeoenvironmental sampling, a block of the north-east facing section was left in place over the buried soil.

#### *The barrow earthworks*

Despite an exhaustive search to locate the barrow ditch, which had been recorded in the evaluation trench, no trace of it could be found. Re-opening and cleaning the evaluation trench revealed the

irregular hollow that had been interpreted as a re-cut ditch (Weaver 1996, features 4 and 5). These excavated features corresponded with amorphous disturbances visible in both trench sections. With the benefit of a larger area exposed, it could be seen that these, and the excavated features in the evaluation trench, had been created by tree root penetration. This was a source of difficulty across most of the site, and it was compounded by the widespread disturbance and discoloration of the clay subsoil caused by past scrub clearance and brushwood burning. Further disturbance appears to have been caused by ploughing, which affected all parts of the excavation area and had created a slight negative lynchet against the eastern edge of the mound. No direct evidence for the date of this episode was forthcoming, except that it post-dated the barrow and cemetery and pre-dated the woodland bank.

The mound itself was formed from uneven dumps of subsoil and mineralised topsoil. In the absence of a quarry ditch, this must have been scraped up from the surrounding area. The entire mound appeared to have been constructed at one time, and there was no indication of a central core formed from turfs or other distinctive material. The simple method of construction can be seen in the sections (Fig. 3), which show successive accumulations of material building outwards from the central dump (context 62). A single sherd of Deverel Rimbury pottery was recovered from context 61, which formed the topmost layer of the mound. The sherd was small and considerably abraded, giving the impression that it had been incorporated into the mound make-up after long exposure in the surrounding soil, or at its surface.

The only feature cutting into the mound was the conspicuous hollow located towards its centre (Fig. 2, 4). Hollows of this kind are a well-known feature of many barrow mounds, and they are a certain sign of an early attempt to dig out the central burial. It is not clear in this instance whether or not that attempt was successful. Had a central grave existed, the disturbance, which had penetrated through the mound and the underlying palaeosol and into the natural subsoil below, would have removed any trace of it. No pottery sherds or other archaeological finds were discovered in the backfill, though evidence of this kind

might be expected if a burial had been encountered. However, it is entirely possible that the barrow lacked a central grave. This would not be uncommon for a middle Bronze Age barrow, and examples can be cited where excavation has shown that no central burial was present (Colbury, Preston and Hawkes 1933; Woodminton, Clay 1927).

#### *The buried soil*

The mound lay directly over a thin buried soil or palaeosol (context 53) which had a maximum thickness of 0.15m under the centre of the barrow, and an abrupt interface with the overlying mound make-up (Fig. 3). The palaeosol was a pale ochreous clay loam with an undifferentiated profile that was distinguished from the unmodified subsoil by having a relatively high humic content. When fully exposed, the surface of the palaeosol was remarkably flat and uniform both in colour and texture. There were no features cut into the surface, nor any sign of burning which might indicate the presence of a funerary pyre. The only signs of pre-barrow activity were a few pieces of burnt flint, flecks of charcoal and four small and abraded pottery sherds. Three of these were of middle Bronze Age date, while the fourth was a single body sherd in a fabric which has parallels amongst early Bronze Age assemblages. Although the ceramic finds from the pre-barrow soil were few, they are sufficient to establish a broadly middle Bronze Age date for the construction of the barrow.

The relatively shallow profile and the apparent absence of an organic upper soil horizon in the palaeosol might be indicative of truncation by the removal of surface vegetation before the mound was constructed. However, there is no unequivocal evidence to demonstrate that this had taken place, and indeed the slight evidence provided by the pollen data seems in conflict with this suggestion. The small rise in the number of taxa from the top of the sequence appears to indicate that the sub-sample corresponds to a position close to the original soil surface. However, the relative increase is small and difficult to interpret. Other factors may have intervened, and for that reason truncation cannot be discounted entirely. On the

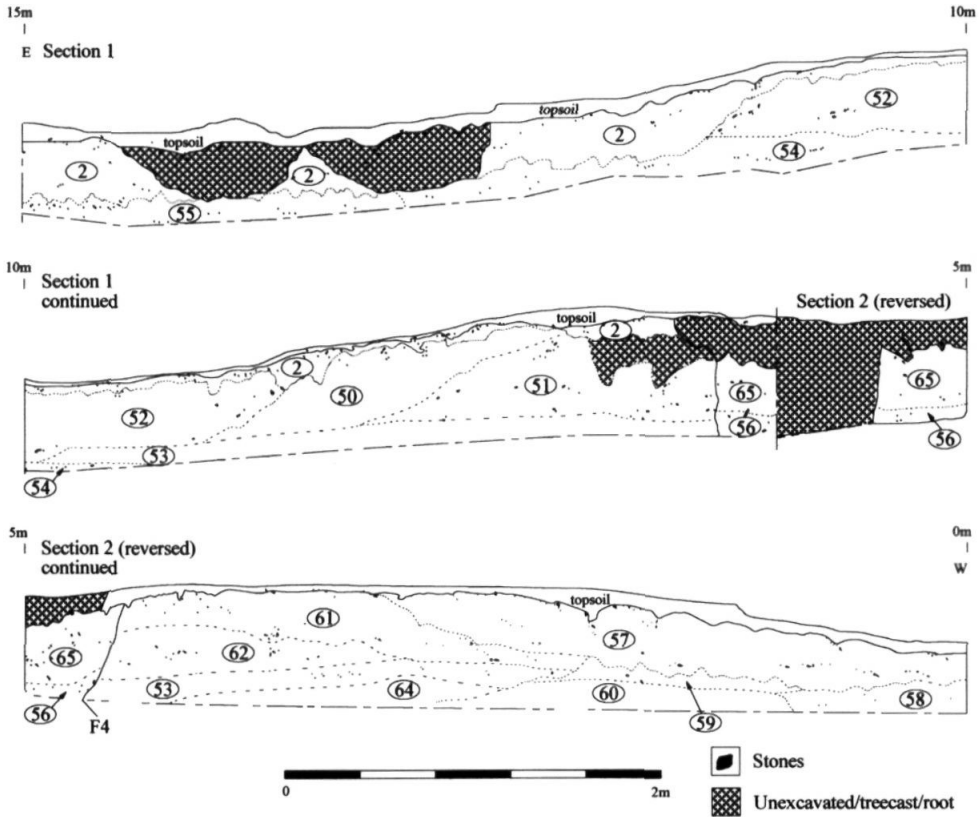


Fig. 3 Barrow sections 1 and 2

other hand, the shallowness of the palaeosol could be the result of the profile structure collapsing under the weight of the mound, following the decay of its organic component. This could amount to a reduction in the thickness of the original profile by as much as 50–60% (Evans 1972, 230).

#### *The Middle Bronze Age cremation cemetery*

In addition to the single example found during the evaluation, a further seven small pits containing Deverel Rimbury Barrel and Bucket Urns were discovered during the course of the excavations (Fig. 5, urns SF5–SF11). Each of the urns had been inserted into a pit with the base uppermost, and all had been disturbed by root penetration and severely truncated by ploughing. However,

not all of the damage to the urns was post-depositional, and in most cases it seems probable that the vessels were incomplete when placed in the ground. The pits containing the urns were positioned around the present edge of the mound, and arranged in an arc which extended from the evaluation trench to the southern side of the barrow. It is not certain if the full southern extent of the cemetery was exposed. It may have extended beyond the woodland bank, which covered three pits containing urns (10–12), and into an area that was not accessible for excavation.

Of the eight vessels making up the urn cemetery, only three contained cremated bone (urns SF5, SF6 and SF8) and not surprisingly these were the most complete examples. With the exception of the urn from the evaluation trench, the others

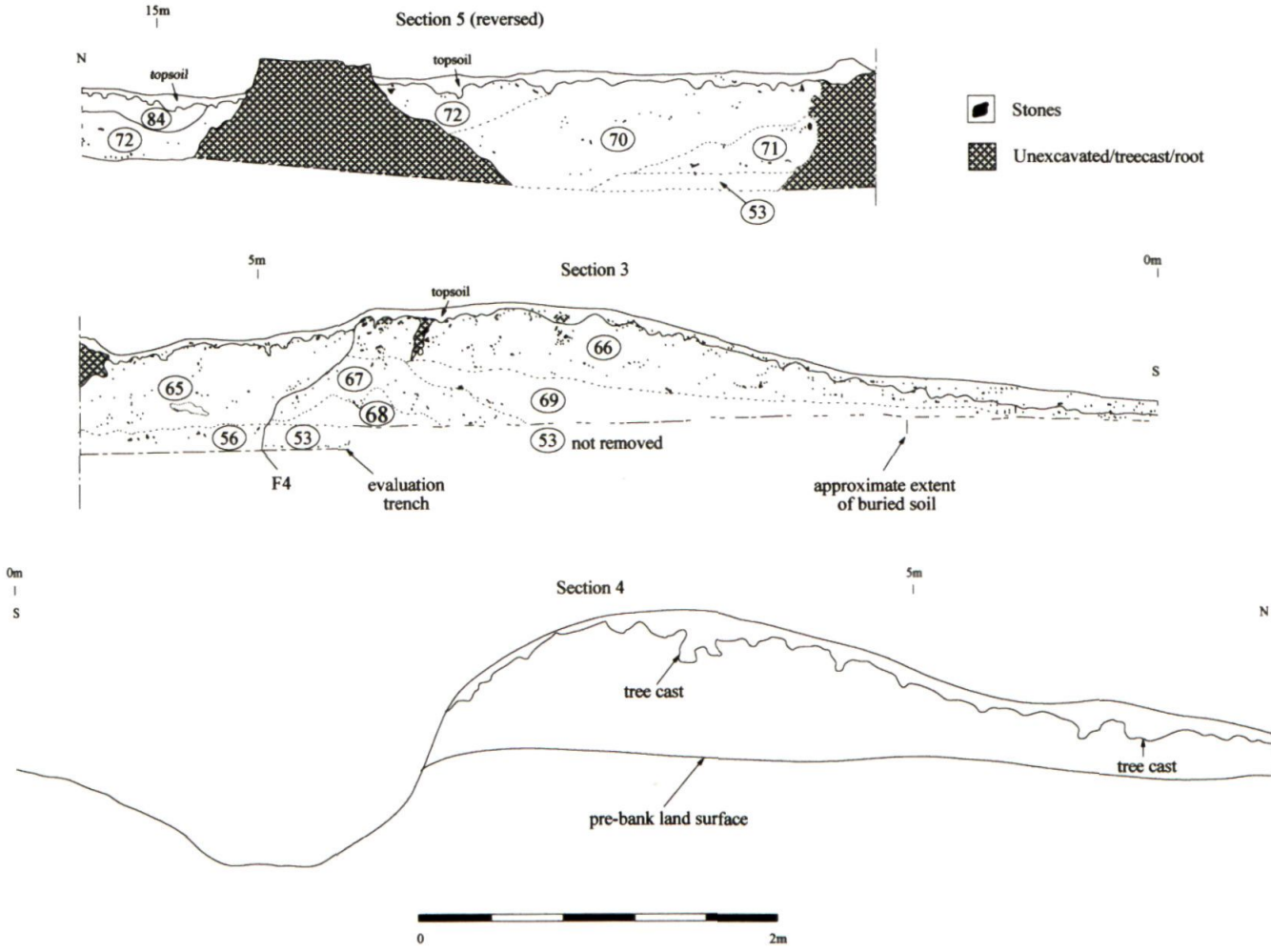


Fig. 4 Profile and section (4) of woodland boundary earthwork, and barrow sections 3 and 5

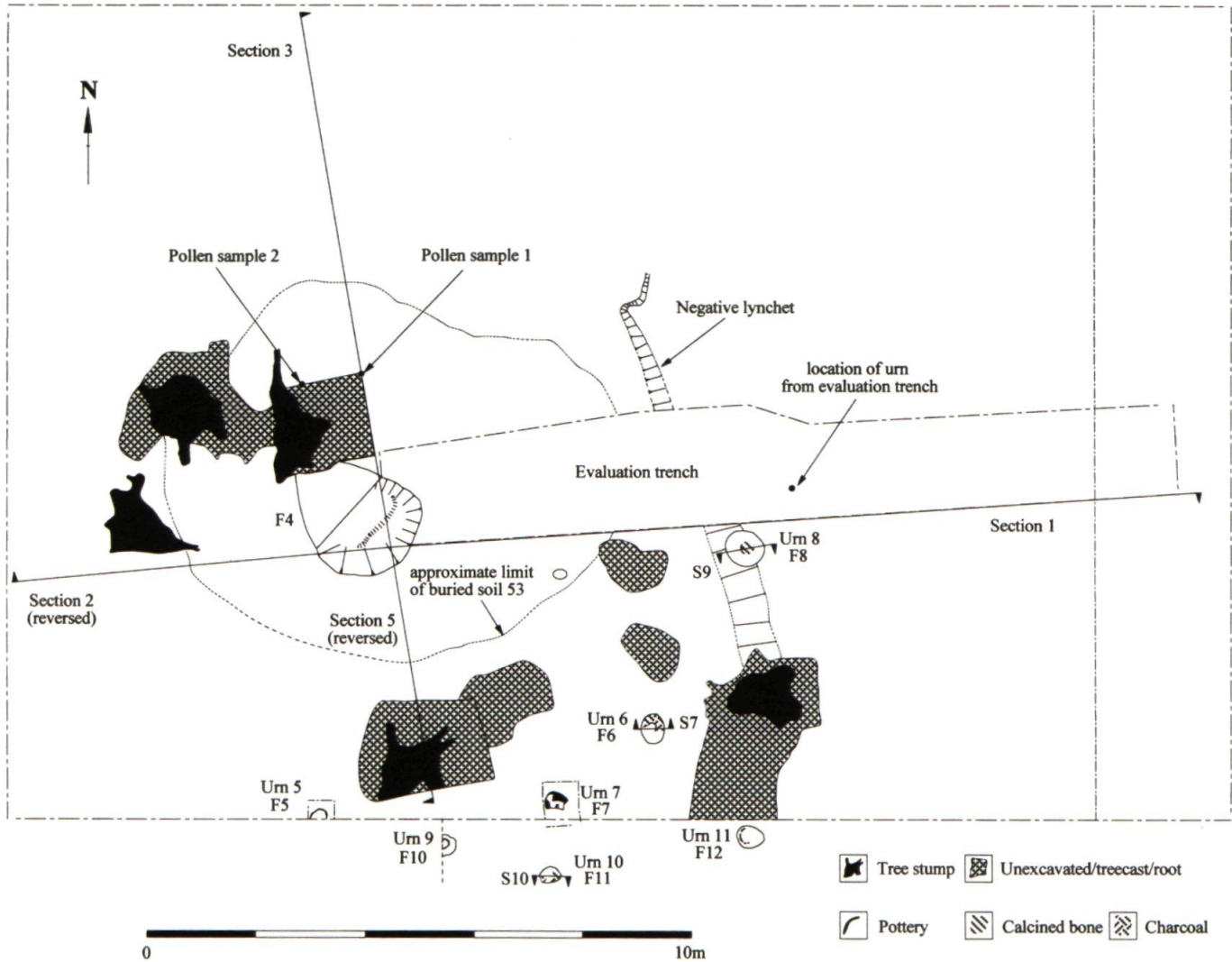


Fig. 5 Post-excitation plan of barrow showing position of urns, extent of buried soil and location of pollen samples



were in extremely poor condition and so disturbed that any cremated bone or charcoal would have been dispersed by the ploughing. However, the results from other cemetery excavations shows that not all of the vessels necessarily contained cremations. Of the 297 Deverel Rimbury urns excavated at the Simons Ground cremation cemetery in Dorset only 119, or 40%, were found to contain cremated bone (White 1982). In like manner, cremated bone was absent from a smaller though significant proportion of the vessels from the urnfield site at Kimpton in Hampshire (Dacre and Ellison 1981).

The contents of urn SF5 were removed on-site since the urn was invested extensively by tree roots, which had to be cut away as the vessel was dismantled. The cremated bone represented the remains of two individuals; an infant of indeterminate sex, aged approximately four to five years, and an adult, possibly female, whose age exceeded thirty years. Although they were badly damaged, it was possible to lift intact a large portion of urns SF6 and SF8 together with their contents. Each contained the remains of a single adult individual, aged thirty years or more. No identification of the sex was possible in the case of the remains from urn SF6, but those from urn SF8 were probably of a male.

As a consequence of the small sample size and poor condition of the urns it is not possible to identify any significant trends in the placing of cremated remains within the vessels, or in the mode of deposition. However, a few limited observations can be made. In the case of pit 8 (urn SF8), burnt soil containing comminuted charcoal appears to have been deposited before the urn and cremated bone were placed in the pit (Fig. 6, Section 9). Only 75% of the rim circumference of SF8 was present in the bottom of the pit, where it lay below the level of the later subsoil disturbance. Although post-depositional attrition cannot be ruled out entirely, it does appear that SF8 was an incomplete vessel when buried.

The cremation urn SF6 was accompanied by just under two kilograms of burnt flint in a matrix of burnt soil mixed with comminuted charcoal. The portion of the urn lying against the base of the pit was filled with re-deposited subsoil which included a few pieces of cremated bone. A similar

sediment filled the damaged base of the vessel, which was uppermost in the pit and had collapsed inwards. The cremated remains filled the central portion of the vessel, which was one of only two urns that appear to have been complete when buried. It is not clear whether the subsoil layers within the urn were the result of deliberate filling around the cremation, or simply the result of natural intrusion as the vessel collapsed under compression.

Some doubt surrounds the phasing of the urn cemetery in relation to the barrow. It was unclear whether the urns had been placed around the periphery of a pre-existing mound, or if the mound had been built over the urn burials as the final stage in the development of the cemetery. The source of this uncertainty was the attrition caused by the later ploughing and, to a lesser extent, the encroachment of the woodland boundary bank. The slightly terraced profile of the mound on the eastern and south-eastern sides, and the correspondingly abrupt truncation of the buried soil, suggests that originally it may have extended beyond its present limit to cover at least some of the pits containing the urns. The varying degrees of plough damage suffered by the urns seems to support this interpretation. In very broad terms, those furthest from the centre of the mound were the most severely damaged, which is what might be expected at the edge of the barrow, where the thinner layer of mound make-up would offer less protection from plough damage.

At best the phasing evidence is inconclusive, but there remains a possibility that the urn cemetery represents the primary phase of funerary practice, followed by the construction of the mound. There was no indication that posts or other means had been used to mark the individual urns, but had they existed it is unlikely that any trace would have survived the severe disturbance to the mound and subsoil.

#### *The woodland boundary earthwork (Fig. 2)*

The earthwork consisted of a low bank flanked on its southern side by a shallow 'U' shaped ditch (Fig. 4, Section 4). After the barrow excavations were completed, a stretch of the earthwork across the access road corridor was removed by ma-

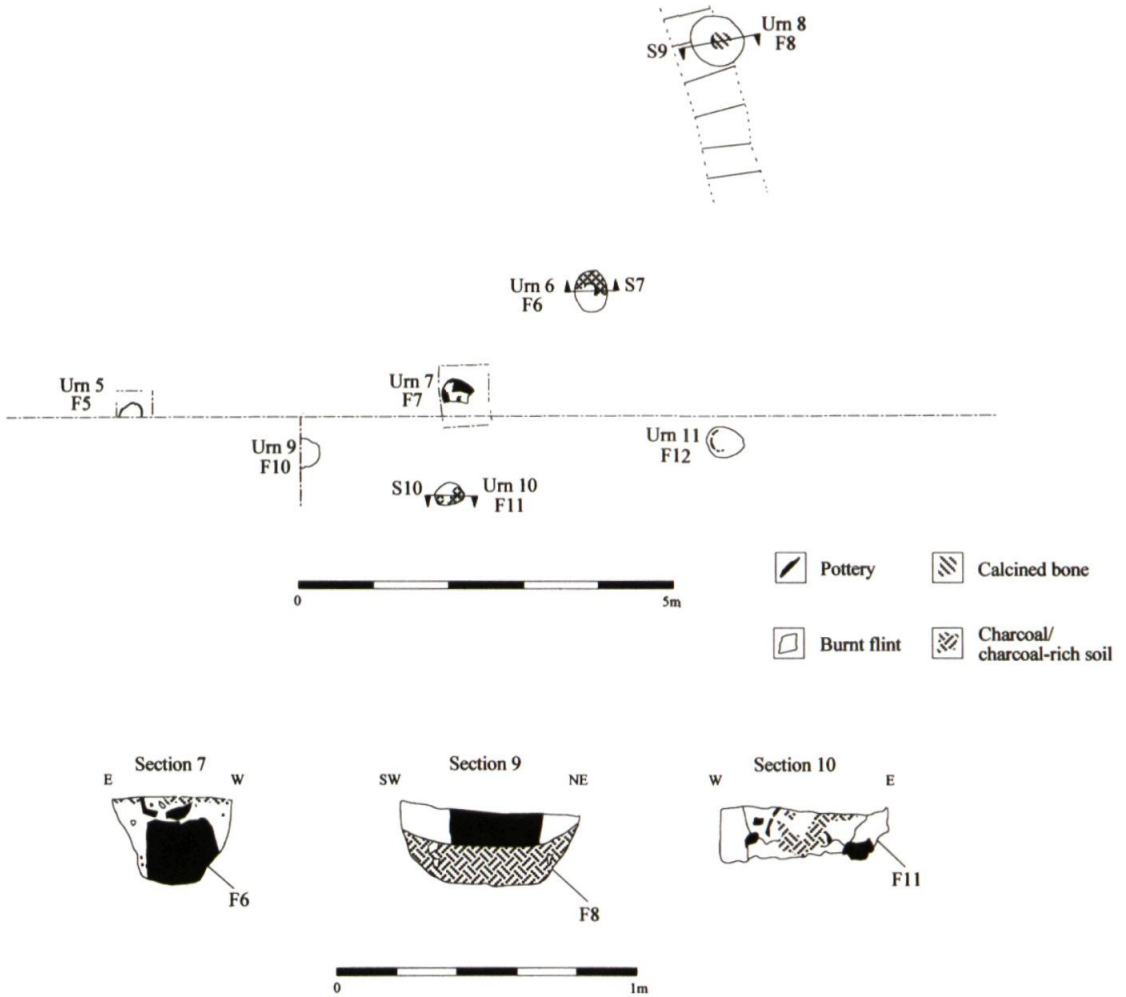


Fig. 6 Detailed plan of urns and sections of F6, F8 and F11

chine. A schematic section of the bank and ditch profile was recorded and the exposed pre-bank soil cleaned down by hand. No finds were recovered from the section, which might have provided a clue to its date. The pre-bank soil showed signs of disturbance which were attributed to ploughing, and this was reflected in the extremely fragmentary condition of the three urns which were recovered from this area (urns SF10-SF12). There was no trace of cremated bone associated with these vessels, but urn SF11 was surrounded by an

arc of charcoal which may have originated from the damaged urn or the truncated pit.

### THE POTTERY by Frances Raymond

#### Introduction

The entire assemblage dates to the middle Bronze Age, with the possible exception of a single sherd from the buried soil. It consists of the remains of

eight Barrel and Bucket Urns and three tiny sherds (weighing 3 gms) from the buried soil and the mound. None of the Barrel Urns are of South Lodge type, which would indicate that the cemetery is more likely to date to a period when the main Deverel Rimbury ceramic repertoire was well established. This would place its foundation at some stage between c 1400 and 1000 BC.

The majority of the urns are in poor condition, having been damaged by cultivation and root penetration. For the most part only the rims and upper parts of the vessels survive. Enough remains, however, to allow for the identification of stylistic traits characteristic of central Wessex assemblages. Where possible these have been classified according to the scheme devised by Ann Woodward (Dacre and Ellison 1981; Ellison 1975).

#### *The urns (Figs. 7, 8)*

Apart from the Barrel Urn recovered during the evaluation, all of the surviving heights were measured *in situ*. These are listed in full in the site archive. None of the vessels were reconstructed to the same height during the analysis. There is, therefore, a discrepancy between these measurements and the urns depicted in Fig. 7. Damage caused by tree roots, or crushing during episodes of cultivation, means that many of the fractures can no longer be joined. Furthermore, some of the fabrics are very friable and the more complete vessels would have collapsed under their own weight had full reconstruction been attempted.

1. Evaluation feature 3: Type 2B Barrel Urn with a rim diameter of 250 mm, made from fabric FS/1. A straight sided urn with a slightly expanded rim and shallow concave neck. The decoration consists of two rows of fingertip impressions, one just below the rim and one at the shoulder. Drag marks survive on the vessel interior, but there is no discernible surface treatment. The colour is variable, with dark grey and dark reddish brown being predominant. It was possible to reconstruct the urn to a surviving height of 180 mm, but only 40% of the rim circumference is present. Traces of food residue occur on the inner walls of the vessel.
2. SF5, feature 5: Type 2A Barrel Urn with a rim diameter of 260 mm, made from fabric FfeS/1. A straight sided urn with an expanded rim, a slightly concave neck and a horizontal cordon set 50 mm below the rim top. The decoration comprises two rows of fingertip impressions, one just below the rim and one on the cordon. The vessel has a fairly smooth exterior with traces of drag marks, indicating an attempt to correct the effects of post drying shrinkage. The colour is variable, with dark grey to mid brown on the upper part of the urn and yellow brown on its lower walls. Only 60% of the rim circumference is present. Food residue/charring covers large areas of the interior, extending from c 30–40 mm below the rim to c. 100 mm below the cordon.
3. SF6, feature 6: Type 3A Bucket Urn with a rim diameter of 300 mm and a base diameter of 200 mm, made from fabric F/1. A straight sided urn with an applied horizontal cordon set 95 mm below the rim top. The decoration consists of a row of fingertip impressions confined to a small length of the cordon, which is otherwise plain. The exterior has a smooth appearance, created by the addition of clay slurry during manufacture. The urn is mostly dark grey in colour, but is flushed with light reddish brown towards the base. The vessel was found in complete condition, with the base and lower body walls telescoped inside. Limited charring occurs on the exterior surface above the cordon.
4. SF7, feature 7: Type 2A Barrel Urn with a rim diameter of 320 mm, made from fabric Ffe/1. Straight sided vessel with an expanded rim, concave neck and an applied horizontal cordon. The precise position of this below the rim is uncertain, since only part of the cordon is present and the fractures are too worn for reconstruction. The decoration comprises regular diagonal impressions on the outer lip of the rim and a row of fingertip impressions on the cordon. Quite apart from the unusual decorative device on the rim, the remarkably thin walls provide a further contrast with the other vessels from the site, although thin walls are typical of Barrel Urns in general. The surface treatment is rudimentary and the colour variable with an emphasis on grey or grey brown. This vessel had a complete rim circumference, and traces of charred residue occur on the exterior surface.
5. SF8, feature 8: Type 2B Barrel Urn with a rim diameter of 280 mm, made from fabric FfeS/1. Vessel with an expanded rim and slightly concave neck. Decoration consists of a single row of fingertip impressions on the shoulder. The surface treatment and colour could not be assessed due to

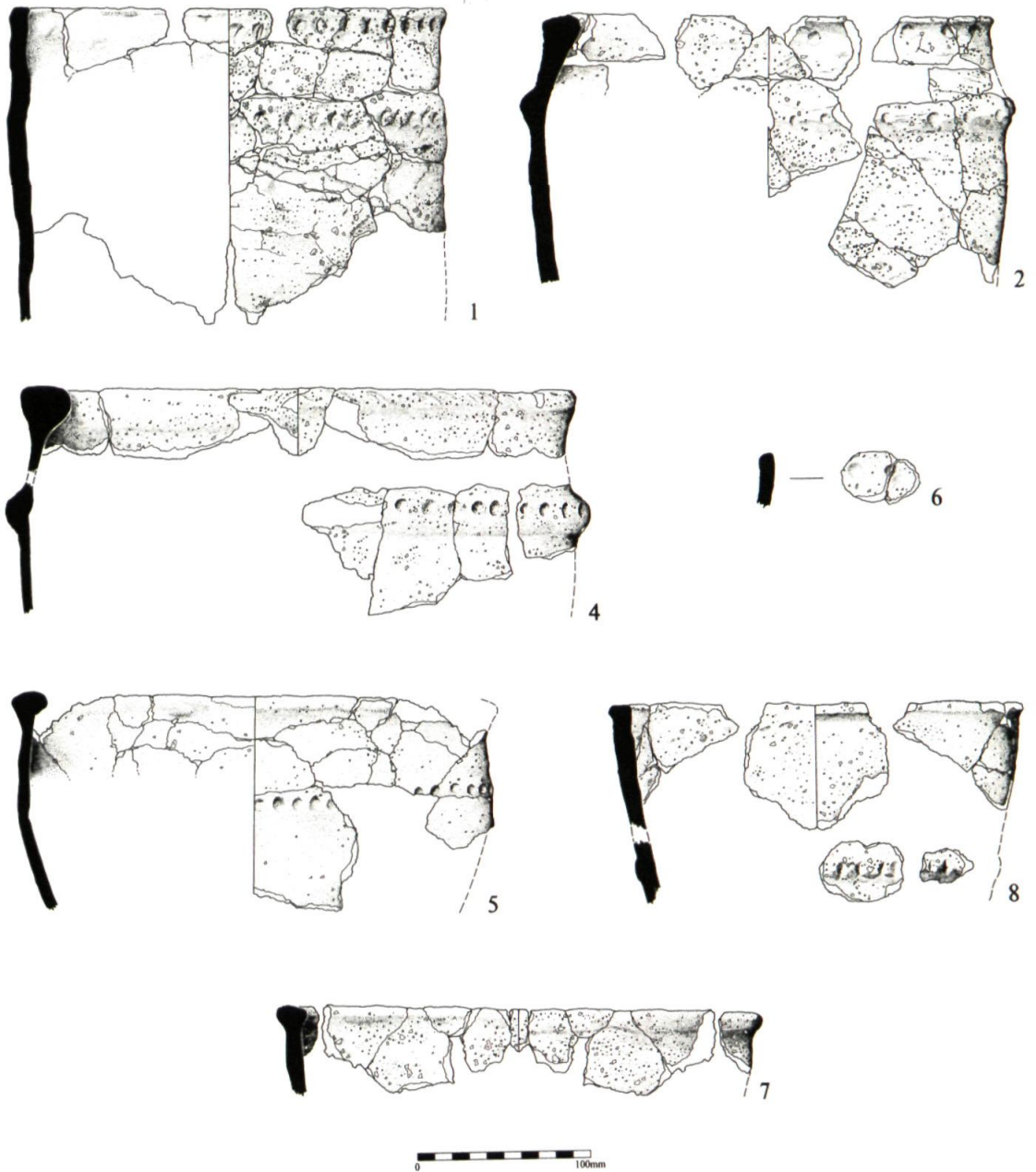


Fig. 7 Urns 1-2 and 4-8 (scale 1:4)

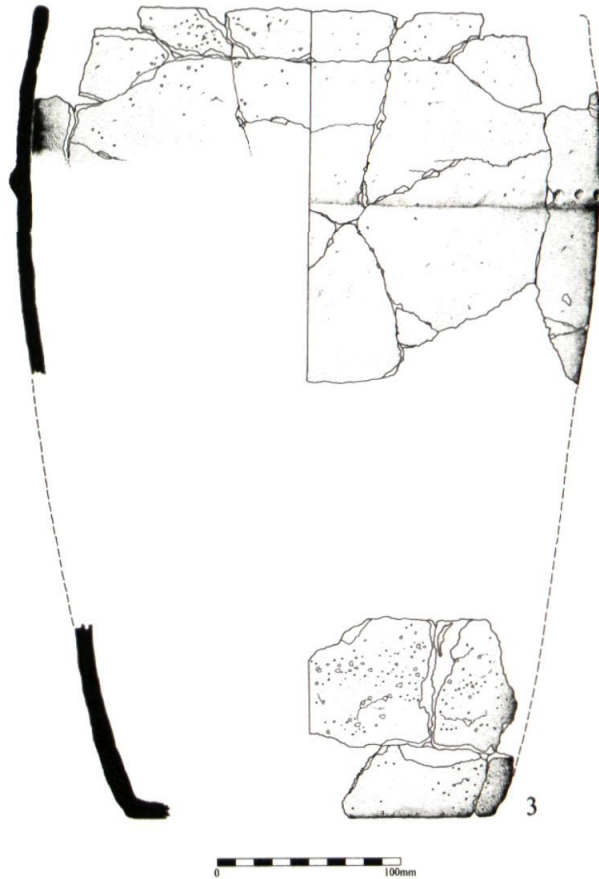


Fig. 8 Urn 3 (scale 1:4)

- the adherence of clay to the vessel walls. Only 75% of the rim circumference is present.
6. SF9, feature 10: Either a Barrel or a Bucket Urn made from fabric FfeS/2. Only one small unexpanded rim fragment survives and so the detailed form and diameter of the vessel remain unknown. The decoration consists of a row of fingertip impressions immediately below the rim. Less than 5% of the rim circumference is present.
  7. SF10, feature 11: Bucket Urn with a rim diameter of 280 mm, made from fabric FfeS/1. Straight sided vessel with an expanded rim. The rim is undecorated, but so little of the vessel wall survives that it is not possible to determine whether a row of fingertip impressions at the shoulder and/or a cordon existed. There is no discernible surface treatment and the colour is variable with light reddish brown predominating. Only 50% of the rim circumference is present.
  8. SF11, feature 12: Type 3A Bucket Urn with a rim diameter of 240 mm, made from fabric FfeM/1. Straight sided vessel with an expanded rim and a horizontal cordon in excess of 60 mm below the rim. Only two small sherds from the cordon survive and neither could be joined with the neck. The decoration consists of a row of fingertip impressions on the cordon. The surface treatment is rudimentary and the colour varies from a dark grey to a light brown. Only 45% of the rim circumference is present.

*Pottery from the buried soil and mound*

Four sherds, weighing 19 gms, were recovered from the buried soil (context 53) and the mound (context 61). Their attribution to period relies on fabric characteristics, since all are featureless fragments. The earliest sherd (weighing 16 gms) is from the buried soil and may be of early Bronze Age date. The fabric (FfeGS/1), which includes flint, grog and sand in sparse amounts, is paralleled most closely amongst assemblages of this period. Two of the remaining sherds are from the buried soil, while the third is from the mound. Although all three are extremely small (weighing 1 gm each), enough survives to demonstrate that they are made from wares typical of the middle Bronze Age in the area. In each case flint is the predominant inclusion type and it is present in high densities. The fabrics are similar to those used for the urns in the cemetery, resembling F/1 and Ffe/1, although the sherd size means that these identifications are somewhat tentative.

*The fabric descriptions*

The fabric descriptions were compiled with the aid of a binocular microscope set at a magnification of  $\times 40$ . As is usual, the fabrics were defined according to the type, frequency and size range of non-plastic inclusions. Pictograms were used as descriptive aids in the assessment of both frequency (Terry and Chillingar 1955) and shape (Hodgson 1976, fig 7).

Early Bronze Age. FfeGS/1: This is a soft fabric made from a ferruginous clay, with visible iron minerals present in moderate quantities (7%). Other non-plastic inclusions occur in sparse amounts (2%) and comprise flint (measuring up to 1 mm), grog (measuring up to 3 mm) and sand (measuring up to 0.2 mm).

Middle Bronze Age. The Deverel Rimbury wares are very similar in character, being tempered predominantly with flint which in each is very common (30–40%) and relatively coarse. All of the fabrics are soft and with the exception of FfeM/1, are friable.

The differences between fabrics, although slight, are significant, since they seem likely to in-

dicate the exploitation of two, or possibly three, different clay sources. The most distinctive is a fabric which includes moderate quantities of mica (FfeM/1). None of the other wares include this mineral and must, therefore, have been derived from an alternative source. The presence of sand in three of the fabrics (FfeS/1, FfeS/2 and FS/1) and its absence from the remaining two (F/1 and Ffe/1), may indicate the exploitation of two further types of clay, although an alternative interpretation is possible. The low frequency of sand in FfeS/1 and FfeS/2 suggest that it was already present naturally, rather than being a deliberate addition. Its absence from F/1 and Ffe/1 is either the result of the use of a distinctive sand free clay, or of the deliberate removal of this mineral, possibly through levigation. The occurrence of iron minerals has not been used to suggest the exploitation of different clay sources since these are not always visible, even under magnification.

F/1: This fabric was used in the production of a Type 3A Bucket Urn (SF6). Flint is the only non-plastic inclusion present and it is well sorted and of moderate size (measuring up to 3 mm).

Ffe/1: This fabric was used in the manufacture of a Type 2A Barrel Urn (SF7). It is made from a ferruginous clay with visible iron minerals present in sparse quantities (5%). The flint is well sorted, and of moderate size (measuring up to 3 mm).

FfeM/1: This fabric was used to produce a Type 3A Bucket Urn (SF11). It is made from a ferruginous clay with visible iron minerals present in sparse quantities (5%). Moderate amounts (7%) of mica (measuring up to 0.1 mm) also occur. The flint is ill sorted and coarse (measuring up to 5 mm).

FfeS/1: This fabric was used in the production of a Type 2A Barrel Urn (SF5), a Type 2B Barrel Urn (SF8) and a Bucket Urn (SF10). It is made from a ferruginous clay, with visible iron minerals present in sparse quantities (2%). The flint is ill sorted and coarse (measuring up to 8 mm). Fine sand (measuring up to 0.2 mm) is also present in sparse quantities (5%), while rare angular calcareous par-

ticles, probably chalk (measuring up to 0.5 mm), also occur.

FfeS/2: This fabric was used to produce a vessel of uncertain form, either a Barrel or a Bucket Urn (SF 9). It is identical in character to FfeS/1, apart from the smaller size of the flint inclusions (measuring up to 4 mm).

FS/1: This fabric was used to produce a Type 2B Barrel Urn (Eval./feature 3). The flint is ill sorted and coarse (measuring up to 5 mm). Fine sand (measuring up to 0.2 mm) is also present in moderate quantities (10%).

### *Discussion*

The range of ceramic styles represented within the cemetery is relatively limited. Both of the more common elements of the funerary repertoire, Globular Urns and the smaller accessory vessels, are missing. However, the pottery recovered may not necessarily reflect the original composition of the assemblage, since it is possible that the cemetery extended beyond the excavated area. Even if this were the case, the spatial distribution of the known ceramics is informative. The Barrel and Bucket Urns were placed together in the same area and this suggests the selective deposition of pottery regarded as appropriate to a specific space and by association, to a particular group of people.

Apart from the restricted stylistic repertoire, the size of the urns appears also to have been circumscribed. Although their incomplete character negates calculations of cubic capacity, the rim diameters vary only between 240 and 320 mm. The fabrics are also very similar. Such uniformity within a single small cemetery, likely to have served a related group of individuals, is not surprising. In broad terms the technology is typical of the middle Bronze Age, but the characteristics shared by different wares suggests that the potters were working according to a well-defined local tradition.

Indeed, the contrast with the unpublished urns from a group of barrows at Cranbury Common (SMR42SW 17), only 2.5km to the north-east, may indicate that there were major distinctions

between the ceramics used by separate communities. Equally, such differences could signify changes through time, or result from the selection of vessel types appropriate to specific contexts. Although there is no contextual information, the Cranbury Common urns could well have been derived from areas near the centre of the barrow mounds, particularly as these tended to form the focus of antiquarian investigation. Only four vessels, recovered in the late 19th century, survive. These include a Type 1B Globular Urn (Dacre and Ellison 1981, Tab 13); a small Barrel Urn, possibly Type 2C, although the neck and rim are missing; and two Bucket Urns. Unlike those from Zionshill Copse, both of the bucket urns have lugs and one is decorated with fingertip impressions, which cover the entire exterior surface, in a manner reminiscent of the Ardeleigh Urns of the lower Thames region.

It has been suggested that small cremation cemeteries, similar to the Zionshill Copse site, may have been used by a single community, occupying a nearby settlement (Bradley 1981). Under these circumstances, it seems likely that the burials took place over an extended time period and represent several generations, although it is also possible that they were re-interred during an act of dedication when the mound was constructed. There are a number of ambiguities surrounding the use of the pottery in the resolution of such refined chronological questions. It has been argued that in central Wessex Barrel Urns are earlier than other Deverel Rimbury ceramics (Dacre and Ellison 1981). However, in the Avon and Stour region, where Barrel Urns are found in close association with Bucket and Globular Urns, such a separation cannot be made (*ibid*). In this case, the location of the mound on the fringes of these two style zones increases the ambiguity, for it is likely that the inhabitants of this area were subject to a variety of influences. Although many of the vessels are typical of central Wessex types, SF7 displays traits reminiscent of Barrel Urns in the Avon and Stour area.

The distribution of the vessels within the cemetery cannot be used as an indicator of phasing. The number of urns is too small and the condition of some means that important stylistic elements have been lost. Even so it is possible to tease out a

number of relationships between similar vessels. The Type 2B Barrel Urns are adjacent to one another on the northern fringes of the cemetery, while the Type 3A Bucket Urns are also relatively close together. In addition, vessels with horizontal cordons, including both Barrel and Bucket Urns, form a distinctive cluster. Leaving aside the problems of small sample size and poor preservation, the interpretation of such patterns would remain ambiguous, for spatial association is not necessarily determined by chronology.

The emphasis in the discussion so far has been placed on shared stylistic and technological traits. The distinctions between the various urns may not be as striking, but they are also likely to have conveyed specific meanings to the people who made and used them. No two vessels are precisely alike. Deliberate differences appear to have been maintained by the varied positioning of motifs, and in the case of SF7, by an unusual decorative device. Contrasting practices may also have been associated with their deposition. Although each of the urns appears to have been inverted in a pit, it seems likely that most were incomplete. Only two vessels, a Type 3A Bucket Urn (SF6) and a Type 2A Barrel Urn (SF7) are represented by full rim circumferences. Clearly this may partly be an effect of cultivation, which apart from trimming vessel walls could have dragged large sherds from the pits. Incomplete urns are, however, found at other cremation cemeteries both in Hampshire, as at Kimpton near Andover (Dacre and Ellison 1981) and Daneshill, Basingstoke (Barrett 1991a, 90–93), and elsewhere (Barrett, Bradley and Green 1991). This should come as no surprise, for these are not made exclusively as funerary urns and part of their significance was acquired through use in a domestic context (cf. Barrett 1991b).

## THE CREMATED BONE

by Jacqueline McKinley

### *Introduction*

Cremated bone from three middle Bronze Age urned burials was submitted for analysis. Full details of all identified bones are given in the archive report which includes bone weights and percent-

ages by fraction size and identified skeletal element groups. The bone was generally well preserved and did not appear to have suffered undue degradation caused by adverse soil conditions. However, some of the bone from urn SF5 (context 73) was slightly worn and chalky in appearance.

### *The cremations*

The burials represent the remains of four individuals; three adults, all over 30 years old, and one infant of 4–5 years. Determination of sex was only tentative, with one possible female and one probable male being identified. It seems likely that the group does not represent the entire cemetery, either because of the constraints on the area available for excavation, or because the contents of other urns may have been lost through post-depositional damage. For that reason, it would be inappropriate to comment on the demography of this small sample. The results would indicate, however, that individuals of both sexes and various ages were interred without distinction, which would imply a 'normal' domestic cemetery.

The observed pathological lesions included osteoarthritis, osteophytes and degenerative disc disease and were all of a degenerative nature and most commonly resulting from age-related wear (Adams 1986), though there may be other predisposing factors (Rogers *et al.* 1987). None of the lesions were severe.

The bone was almost universally buff-white in colour which is indicative of efficient cremation (oxidation). The weight of bone from SF5 (context 73) and SF8 (context 8050) represents a respective maximum of 65% and 52% of the expected weight of bone from an adult cremation (McKinley 1993), probably more in the region of 41% and 32%. Such figures are within the average range for Bronze Age cremations. The majority of bone in each case was greater than 10 mm (54–63%) with a maximum fragment size of 64 mm from context 73. A number of factors may affect the size of bone fragments (McKinley 1994b), but there is nothing to indicate deliberate crushing of the bone prior to interment. A range of skeletal elements were present in each cremation and there is no indication that particular bones were being selected for burial. The double cremation burial (context 73) of an adult with an infant is one of the



more common types of combined cremations (Petersen 1981; McKinley 2000).

## PALYNOLOGICAL ASSESSMENT OF THE BURIED SOIL by Patricia Wiltshire

### *Introduction*

A buried soil (context 53) was exposed on both east-facing (sample 1) and north-facing (sample 2) sections of the barrow mound 3 (Fig. 5). It was considered worthwhile to locate the surface of the buried soil and to assess its palynological content with the aim of reconstructing the environment contemporary with the barrow. At both locations, the palaeosol itself was distinguished from the unmodified subsoil by virtue of its relatively high humic content. The mound deposits were very shallow and penetrated by woody roots.

The results are fully recorded in the site archive. In virtually all of the sub-samples, palynomorphs were so sparse that any attempt at counting would have generated meaningless results. It is obvious from the results that there has been a massive loss of palynomorphs through decomposition, and it is notable that most of the sub-samples contained *Polypodium* fern spores. This is one of the most resistant palynomorphs and its relative abundance in soils and sediments is invariably an indicator of differential decomposition.

### *North-facing section (sample 2)*

It is obvious that most of the palynomorph load has decayed and only resistant individual grains were preserved. The sub-sample at 120 mm had no palynomorphs, while that at 20 mm contained only *Polypodium*. Other sub-samples contained occasional grains of *Quercus* (oak), *Betula* (birch), *Corylus*-type (hazel), *Pinus* (pine) and *Alnus* (alder). Also present were *Poaceae* (grasses), *Plantago lanceolata* (plantain), *Pteridium* (bracken) and monolete Pteropsida (other ferns).

It is often the case that some pollen and spores are preserved in microsites within the soil fabric where microbial decomposition and oxidation are inhibited. However, at 5 mm preservation was marginally better and those palynomorphs found in the 20 traverses were counted. Interpretation of

such a sparse assemblage must be made with great caution and the results do little more than suggest that *Quercus*, *Corylus*, *Betula*, *Alnus*, *Poaceae*, *Plantago lanceolata*, and *Pteridium* were growing in the catchment. These taxa contain palynomorphs which are considered to be vulnerable to decomposition as well as those more resistant (Havinga 1971), and there is little likelihood of them having been derived from contamination of the profile since a much greater diversity might be expected. It is probable, therefore, that the assemblage shown here represents true components of the Bronze Age vegetation. The relative abundance of taxa at the surface of the sequence also suggests that the sample was taken from near the surface of the original buried soil.

Whether there had been truncation of the soil profile is exceedingly difficult to assess with such poor preservation. The paucity of palynomorphs at 5 mm might indicate a loss of pollen and spores from a soil surface through decomposition; it could also indicate that the sub-sample represents an older horizon within a bioactive soil where the surface had been removed before barrow construction.

### *East-facing section (sample 1)*

The range of taxa present in this section is even smaller than in the other profile. It is possible that the sample at 60 mm might represent an horizon near the palaeosol surface. The sub-samples from 80–140 mm represents subsoil and from 5–40 mm represents up-cast subsoil which constituted the mound.

### *Conclusion*

The data presented here are exceedingly sparse and interpretation in terms of vegetation composition would be invalid. However, it is possible to say that both trees and grassy areas were probably present in the vicinity of the barrow at some time before its construction.

## THE CHARCOALS by John Letts

Twenty-five flotation samples were received and these are catalogued in the site archive. These

were re-floated in the laboratory to remove the clay from any carbonised plant remains. None of the samples contained charred seeds, and none produced sufficient charcoal for a standard radio-carbon assay. However, many of the samples contained small fragments of charcoal (maximum of 5 mm) which would be suitable for accelerator dating. The fragments were too small for species identification using conventional comparative methods, and further analysis would need to be carried out by a specialist experienced in the identification of finely fragmented material.

### CONCLUDING DISCUSSION

Interpretation of the excavation results has been significantly affected by the generally poor condition of the barrow and urn cemetery, and the uncertainty surrounding the presence or absence of a central burial. Although the mound survived to a height of 0.6m, there was clear evidence for considerable disturbance, which seems to have resulted from ploughing and may have reduced the mound significantly. While it is not possible to date this episode, the effects were clearly reflected in the varying degrees of truncation sustained by the cremation urns. Further disturbance had been caused by scrub and tree clearance at some time during the past. The combination of the two caused considerable difficulties, both in terms of locating features and determining the stratigraphic relationship between the burials and the barrow mound.

Although a well-preserved buried soil survived beneath the barrow mound, there were no features which might indicate a pre-barrow structure, and the scant evidence of finds gives no clue to the nature of any other activity. Evidence for the pre-barrow environment proved similarly elusive. Flecks of charcoal were present throughout the buried soil, but they were sparse and the individual fragments too small for species identification. The pollen data provide some detail, but the poor preservation and paucity of taxa severely limit their interpretative value. However, they do indicate that birch, oak, pine, alder and hazel were present in the area, along with bracken and grasses, at some time prior to the construction of the barrow.

In its general form, the barrow was typical of the small burial mounds dating to the middle Bronze Age. The absence of a ditch is by no means unusual for barrows of that period, and the technique of building mounds from scraped-up material is well documented (Preston and Hawkes 1933, 428–43). Several proven examples have been reported in Wessex (Grinsell 1941, 107), and more recent work has increased their number (barrow 23, Green and Rollo-Smith 1984; Woodford G13, Gingell 1988). Unlike the ditched forms, ditchless barrows appear to be associated with single graves, and were constructed by scraping up the surrounding soil to form the mound (Ashbee 1960). Examples of ditchless barrows without a grave are known, and several of these had middle Bronze Age cremation cemeteries below the mound (Ellison 1980).

Since it had been 'robbed', there is no way of knowing if the Zionshill Copse barrow originally had a central burial, nor is it possible to say with confidence whether the urn cemetery lay outside the mound, or partly under it. Erosion of the mound, especially at its edges, had been responsible for destroying crucial stratigraphic relationships, and for that reason the burial sequence can be interpreted in different ways. It is possible that burial on the site began with the urn cemetery, although the arrangement of pits in an arc might indicate that they were positioned around an existing burial, or central cremation. Such flat cemeteries represent a common form of middle Bronze Age funerary practice (Ellison 1980) and some appear to have developed around foundation burials, whereas others seem to lack an obvious focus. Some of these cemeteries were subsequently covered by an earthen mound, and this may have been the sequence of events at Zionshill Copse. On the other hand, the evidence is equivocal and it could be argued that the barrow was built first, possibly over a central grave, and afterwards served as a focus for the small urn cemetery surrounding the mound.

Either way, the pottery recovered from the buried soil beneath the mound, and from the mound itself, shows that the barrow and cremation cemetery both belong to the middle Bronze Age Deverel Rimbury tradition (1400–1000 BC). The absence of grave goods accompanying the cremation buri-

als is characteristic of the period, and it has been suggested that this reflects a lack of differentiation in social rank (Bradley 1981). Both male and female adults and an infant were represented amongst the cremated remains at the Zionshill Copse cemetery, and in common with other Deverel Rimbury cemeteries in southern England, there was no correlation between vessel style and the age or sex of the cremations (Ellison 1982).

It is not clear whether the small number of burials represents the full extent of the cemetery, or only a part of it. The number of cremations found at Deverel Rimbury funerary sites varies widely, but just over half contain fewer than twelve burials, and in the larger cemeteries the cremations often formed discrete clusters of ten to thirty burials (Ellison 1980, 117). The Zionshill Copse barrow cemetery falls at the lower end of the size range for Deverel Rimbury cemeteries, but that might indicate use by a small community, or the burial of a few individuals selected irrespective of age or sex. The absence of any evidence for cremation pyres has parallels at other sites (White 1982), and this indicates that the cremation rite was carried out elsewhere, possibly near the settlement.

Despite the uncertainty over the true extent of

the Zionshill Copse cemetery, the structure of the burial population does reflect these general trends which seem to indicate that Deverel Rimbury cemeteries were the burial places for small family groups. Where the settlements of these groups are known, they are usually small and occur mostly at a distance of 50 to 300m away from the cemetery (Bradley 1981). There is no certain record of Deverel Rimbury settlement in Zionshill Copse or the surrounding area, although flint scatters, perhaps of Bronze Age date, with undiagnostic prehistoric pot have been recorded 300m to the south (WA 1996). It is possible further traces of occupation may await discovery under the dense woodland.

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