Beacon Hill Wood, Shepton Mallet, Somerset (BHN07/W67060)
Middle Bronze Age Urned Cremation Burial

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with contributions by C. Barnett, L. Mepham and C. Stevens
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I. Introduction

The remains of a Middle Bronze Age urned cremation burial (4005), lifted as a block together with remnants of the grave fill immediately above and around the vessel (4002), were received for processing and analysis of the various archaeological components. The grave (F401) had been cut through the centre of an earlier barrow mound, and sealed by a large stone slab and a small cairn.

Methods

On investigation, the vessel proved to be complete but damaged. The fill was excavated (under the writer's supervision) in a series of spits to allow the details of the deposit's formation process to be investigated. The upper 0.12 m of the vessel fill (spit 1) comprised a charcoal-rich deposit containing relatively little bone, largely concentrated in the lower 0.02 m and towards one side. The next 0.06 m depth of the fill was removed in 0.02m spits (spits 2-4) and showed an even horizontal distribution of bone. During removal of spit 4 the vessel, which was badly cracked, collapsed, the fill on one side falling out of the vessel. Consequently, despite the remaining 0.03m depth of fill being collected as separate spits (spit 5 and 6), in analysis it was decided to amalgamate the two since the integrity of the deposit had been compromised. Spits 1a and 2a represent the upper 0.10 m charcoal-rich depth of material removed from outside the vessel. Spit 4a represents the small amount of material recovered from below the vessel.

Processing of the whole-earth samples thus recovered followed the standard process of wet-sieving to 1mm fraction-size and floatation using a 500 micron mesh for recovery of charred plant remains and charcoal. The sieve residues >5mm mesh size were sorted and all non-osseous material removed; the <5mm sieve residues were retained and subject to a rapid scan by the writer for the recovery of identifiable skeletal elements.

II. Cremated Bone

Methods

Osteological analysis followed the writer's standard procedure for the examination of cremated bone (McKinley 1994a, 5-21; 2000a). Age was assessed from the stage of skeletal and tooth development (Beek 1983; Scheuer and Black 2000), and the general degree of age-related changes to the bone (Buikstra and Ubelaker 1994). Sex was ascertained from the sexually dimorphic traits of the skeleton (*ibid.*). The sub-contexts created during excavation of the burial were maintained in analysis to enable details of the burial formation process to be ascertained.

Results

The grave (F401) had survived to a depth of *c*. 0.26 m. Although most of the rim of the vessel had not survived and the rest of the vessel was badly cracked (see Mepham), none of the contents had been disturbed within this sealed deposit. The upper 0.10 m of the vessel fill comprised redeposited pyre debris, the same material being recovered to a similar depth on the outside of the vessel (at least on one side). The pyre debris was clearly deposited subsequent to the burial having been made and the grave partially backfilled, possibly functioning as a 'closure' deposit over the burial prior to the grave being sealed by the large stone slab. The depth of pyre debris may have originally been slightly greater than that which survived, but the capping stone appears to have been laid almost directly over the rim of the vessel, so any further depth of deposit can only have been by millimetres.

The bone is worn and slightly chalky in appearance indicative of an acidic burial environment. Although a few fragments of trabecular bone were recovered, relatively little of the axial skeleton survived (*c*. 3% of identifiable skeletal elements); trabecular bone has been demonstrated to suffer preferential loss in acidic soil condition (McKinley 1997a, 245; Nielsen-Marsh *et al.* 2000).

The 509.4g of cremated bone recovered represent the remains of an adult, *c*.18-25 years of age, probably a female. No pathological lesions were observed and no pyre goods were recovered.

pyre technology and cremation ritual

The bone is almost uniformly white in colour, indicative of full oxidation (Holden *et al.* 1995a and b). It should, however, be noted that less well oxidised bone may have been subject to preferential loss in the acidic burial environment which clearly existed at Beacon Hill.

The weight of bone recovered represents *c*. 32% of the average weight of bone expected from an adult cremation (McKinley 1993) and falls within the median range of weights recovered from burials of this date (McKinley 1997b). The surviving weight

undoubtedly represents a minimum, however, since most of the trabecular bone has probably disintegrated post-depositionally (see above).

The maximum fragment size recorded was 71mm and the majority of the bone (*c*. 62%) was recovered from the 10mm sieve fraction. There are a number of factors which may affect the size of cremated bone fragments (McKinley 1994b) the majority of which are exclusive of any deliberate human action other than that of cremation itself. There is no evidence here to suggest deliberate fragmentation of the bone prior to burial.

Elements from all four skeletal areas are represented within the burial, with the expected low proportion of axial skeletal elements reflective of the acidic burial environment. Tooth roots (nine) and the small bones of the hands and feet (three) are fairly well represented. These elements are fairly common within burials of Bronze Age date and may be reflective of a collection procedure which, rather than being undertaken via hand collection of individual fragments, involved the raking-off the upper levels of the burnt-out pyre to recover the bone which would enhance the ease of recovery of such small bones (but see below).

The deliberate inclusion of pyre debris in the fill of Bronze Age cremation graves is frequently observed. Generally these deposits were made after the burial, around or – as in this case - above it (McKinley 1997b). As has been observed elsewhere (McKinley 1997b; 2000b; Walker and Farwell 2000), its inclusion is likely to indicate the close proximity of the pyre site to the place of burial even where no evidence for the pyre site survives. In this instance a substantial proportion of the bone from the grave (*c*. 26%) appears to have derived from the pyre debris outside the vessel rather than the burial itself. Cremated bone is a frequent inclusion within pyre debris, and while such relatively large quantities are not common they are not unknown (McKinley 1997b). The range and proportion of skeletal elements from this material is similar to that from the burial itself, though it is noteworthy that most of the tooth roots (five of the nine) were recovered from the pyre debris. The maximum fragment size (40 mm) is substantially smaller than that from the burial, and a smaller proportion of the bone (*c*. 55%) was recovered from the 10mm sieve fraction. These observation may simply demonstrate the known additional protection offered to the very brittle cremated bone by deposition within an urn (McKinley1994b) and/or the higher levels of manipulation of the pyre debris compared to the bone collected for burial and its consequent greater degree of fragmentation.

The surviving bone was fairly evenly distributed throughout the vessel fill, though its preference for one side in the upper-most spit may indicate the vessel was laid/tipped slightly to one side during deposition of the bone within it. The proportion of skull in spit 4 is particularly high but this is not believed to be of any significance. Skeletal elements from all areas of the skeleton were distributed throughout the fill indicating no particular ordered deposition.

III. The Pottery

by Lorraine Mepham

Introduction

All the pottery recovered from the grave (F401) appears to derive from a single vessel, a cremation urn of Middle Bronze Age date. In total there are 87 sherds (2360g), which includes, apart from the main part of the vessel, a small quantity of sherds subsequently recovered from the vessel fill and from the charcoal-rich grave fill immediately around the vessel (4002) collected asa soil sample.

The vessel appears to have been deposited intact, although the very top of the rim around most of the circumference had been removed or abraded away, possibly due to the placing over the top of a large stone slab. Some fragmentation had occurred in antiquity, probably due to pressure of soil and the weight of the overlying stones, combined with the friable nature of the clay fabric of the vessel. After lifting, during controlled excavation of the vessel fill (see above), the vessel disintegrated. Many of the sherd breaks appear worn, and abrasion has also affected raised decorative elements on the body. The vessel has not, at this stage, been reconstructed, but sufficient sherds were identified in order to recreate a full profile (Figure 00).

Fabric and form

The vessel is in a coarse, grog-tempered fabric with a soft, soapy texture (grog inclusions <5mm in a coarsely wedged clay matrix). The exterior of the vessel is fairly evenly oxidised, to a pale orange-brown colour; the internal surface is patchily oxidised, and the core is unoxidised (dark grey-brown).

The vessel is between 255 and 260mm in height and is of gently convex form, with a rim diameter slightly larger than the base. The maximum girth is *c.* 200mm and the (external) rim diameter *c.* 170mm. Vessel wall thickness averages *c.* 10mm, but the rim has a slight internal bevel, reducing wall thickness here to *c.* 8mm. The vessel is relatively well finished, and traces of finger wiping and smearing are visible, particularly on the external surface of the upper part of the vessel.

Decoration is simple, consisting of a finger-impressed cordon, applied at the point of maximum girth, with several vertical cordons, also finger impressed, extending upwards from the shoulder cordon towards the rim, but apparently terminating just short of the rim (although surface abrasion may account for this). At least seven of the vertical cordons were identified, and they appear to be arranged at approximately equal intervals around the rim. It was apparent that they had been applied before the horizontal girth cordon. In addition, the top of the rim carries finger nail impressions.

Discussion

The Beacon Hill Wood vessel finds its closest parallels, in terms of form and decorative traits, within the Middle Bronze Age Deverel-Rimbury tradition of Wessex and areas to the east (e.g. Annable and Simpson 1964, nos. 570-80). In this it is

unusual, since most Middle Bronze Age pottery hitherto recovered from Somerset belongs to the Trevisker style of south-west England. The use of grog temper might be considered to be a 'cross-over' trait, since Trevisker assemblages from Somerset are frequently dominated by this fabric type, for example, at Norton Fitzwarren and Brean Down (Woodward 1989; 1990), while the Deverel-Rimbury vessels of Wessex are more commonly flint-tempered. However, grog temper is commonly used for Deverel-Rimbury style vessels in southern Dorset (Cleal 1997, 88), where the Beacon Hill wood vessel finds parallels for form and decoration amongst the cemetery assemblage from Simons Ground (White 1982). It has also been identified within assemblages of a stylistically mixed nature (displaying traits of both Deverel-Rimbury and Trevisker styles) from the Dorset/Somerset border, for example at Chard Junction, Thorncombe (Machling 2004; H. Quinnell pers. comm.). The Beacon Hill Wood vessel therefore serves to reinforce the picture of Somerset (and the neighbouring parts of Devon and Dorset) as a cultural cross-roads, incorporating ceramic influences from more than one area.

IV. Charcoal

by Catherine Barnett (neé Chisham)

Introduction

Three samples were retrieved from the grave (F401) including one from within the remains of the urned burial (4005) and two from the grave fill immediately adjacent to the urn (4002). All proved rich in charcoal and probably derive from the same cremation pyre debris

Methods

Fragments >2mm were prepared for identification according to the standard methodology of Leney and Casteel (1975, see also Gale and Cutler 2000). Each was fractured with a razor blade so that three planes could be seen: transverse section (TS), radial longitudinal section (RL) and tangential longitudinal section (TL). The pieces were mounted using modelling clay on a glass microscope slide and examined under bi-focal epi-illuminated microscopy at magnifications of x50, x100 and x400 using a Kyowa ME-LUX2 microscope. Identification was undertaken according to the anatomical characteristics described by Schweingruber (1990) and Butterfield and Meylan (1980). Identification was to the highest taxonomic level possible, usually that of genus and nomenclature is according to Stace (1997).

Results

As shown in Table 1, the three samples were all heavily dominated by or comprised solely oak (*Quercus* sp.) charcoal. That the three are consistent in terms of species composition suggest they are from a single deposit as suggested stratigraphically. Oak is perhaps the most commonly identified pyre fuel from British archaeological deposits of all periods including the Bronze Age (see for instance Late Bronze Age Stotfold,

Barnett 2007, Bronze Age-Iron Age West Malling, Chisham 2007). Not only is it a readily available fuel source but the wood is dense and produces the prolonged high temperatures necessary for cremation.

Assuming the single piece of hazel (Corylus avellana) wood charcoal from sample 3 is not intrusive, it may represent a placed object or kindling used to help ignite the pyre.

Context	**4002**	**4005**	**4003**
Sample	*1*	*2*	*3*
Weight (of unextracted flot)	76g	108g	100g
Comments	Rooty, large fragments. Material from above/ immediately around urn)	Rooty, medium-small fragments. Vessel fill	Clean, larger fragments. Material from immediately around urn
Quercus sp.	98	62	146
Corylus avellana	-	-	1

Table 1. Wood Charcoal Identifications

V. Charred Plants

by Chris Stevens

Charred plant remains were observed (scanned under a x10 – x40 stereo-binocular microscope) in all three samples from the grave (Table1). Those from samples 2 and 3 contained some modern roots, while that from sample 3 contained generally few modern roots. Such roots are generally indicative of the degree of soil disturbance.

All three flots contained several fragments of roots and tubers. Several could be seen to be from the basal culm rootlets of large grass, although no tubers of false-oat grass (*Arrhenatherum elatius* var. *bulbosum*) were recorded. Several of the other tubers were much larger *c.* 10 mm long by 5 mm wide and must have come from more woody herbaceous species. No other plant remains were recovered other than these.

Most of the tubers came from the pyre debris within the grave fill with lesser amounts from the upper urn fill. Such a distribution is consistent with the pyre debris being incorporated within the grave fill after the burial had been made.

The finding of plant tubers is commonplace within Bronze Age cremation burials (e.g. Godwin 1975). In the case of tubers of false-oat grass they are usually regarded as potentially having been used as tinder, as they are readily uprooted (Robinson 1988; Moffett 1999), while finds of pignut (*Conopodium majus*), that must be dug up, have led to the suggestion that they may represent food offerings (Moffet 1991). The finds of many of the roots and tubers here, being neither of false-oat grass or pignut, are best interpreted as material removed and used as tinder during the creation of a fire-break. This would require the breaking of the ground and so the loosening and removal of the whole plant including the roots from the soil (Stevens in press). That many of the tubers probably came from more woody herbaceous stems, may indicate that the ground was relatively overgrown prior to clearance, although no

seeds were found that might provide clearer indication of the specific species present. Such an absence may be due to taphonomic reasons; for example charring, or that the vegetation may have been cut prior to breaking of the ground and removal of the basal part of the plant, or that the pyre was constructed in winter or early spring when seeds and fruits are often absent.

VI. References

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Cremated Bone Archive Report

See Table A1 for bone weights by spit, sieve fraction and skeletal element, and maximum fragment sizes.

context 4002 (spits 1a, 2a and 4a) and 4005 (spits 1-6)

4005: Remains urned burial (vessel complete and intact but cracked and with damage to very upper levels) within grave F401 (*c.* 0.22m deep). 4002: charcoal rich material outside vessel – apparently deposited after burial made and grave partially backfilled.

?from outside vessel (in separate bag on receipt)
SKULL: Mandibular incisor root fragment; mandibular molar root fragment.
Fragments min. 2 other I/P roots. ?left anterior body fragment with 3 I-P sockets. ?maxillary molar root fragment.
Vault; 13 fragments
AXIAL SKELETON: Thoracic; articular process fragment.
Rib; shaft fragment.
Innominate; fragment ilium with crest metaphysis.
UPPER LIMB: Fragments humerus (6), radius (2), and ulna (3) shaft.
LOWER LIMB: Fragments femur (10), tibia (4) and fibula (5) shaft.

spit 1: upper 0.10m depth fill. Bone conc. to one side in lower levels.
SKULL: Fragments left petrous temporal. Left postglenoid tubercle and external auditory meatus margin fragment. Fragment articular tubercle.
Vault: 16 fragments.
AXIAL SKELETON: Thoracic; 2 fragments articular process. lamina fragment.
Rib; 2 small fragments shaft.
Innominate; fragment greater sciatic notch, tending obtuse (2-3)
UPPER LIMB: Fragments humerus (4), radius & ulna shaft.
LOWER LIMB: Femur; 4 fragments shaft. Distal articular surface fragment.
Fragments tibia & fibula shaft.

spit 2: 0.02m deep. Fairly even distribution of bone.
SKULL: small maxillary molar root fragment.
Fragment left malar process.
Left mastoid fragment, process min. medium sized & is foramen (extra-sutural).
Vault; 13 fragments.
AXIAL SKELETON: Thoracic; articular process fragment.
UPPER LIMB: Scapula; fragment right acromion neck.
Humerus; 2 fragments shaft.

LOWER LIMB: Fragments femur (1), tibia (1) and fibula (3) shaft.

spit 3: 0.02m deep. Even distribution of bone.
SKULL: Dorsal fragment right petrous temporal.
Vault; 11 fragments. 1a = 5.5mm.
AXIAL SKELETON: ?cervical lamina fragment.
UPPER LIMB: Clavicle shaft fragment.
Fragments humerus (2) and radius (2) shaft.
LOWER LIMB: Femur; 7 fragments shaft, linea aspera slight.
Fibula; 2 fragments shaft.
Metatarsal base with shaft fragment.

spit 4: 0.02m deep; even distribution of soil
SKULL: Mandible – anterior body fragment with incisor root *in situ*.
Vault; right parietal fragment. ?lambdoid open-half fused, sagittal half-three-quarters fuse. 1a = 5.43mm. 24 fragments vault.
AXIAL SKELETON: Rib; 3 small fragments.
UPPER LIMB: Humerus; 4 fragments shaft.
Radius; head fragment. 2 fragments shaft inc. distal with articular surface fragment.
Metacarpal shaft fragment.
LOWER LIMB: Femur; 6 fragments shaft, slight linea aspera.
Patella anterior surface fragment.
Tibia; shaft fragment.

spit 5&6: vessel collapse, lower 0.03m depth amalgamated
SKULL: Very small molar root fragment. Fragment premolar root.
Vault; 16 fragments.
AXIAL SKELETON: Thoracic; articular process fragment
Rib; 4 fragments shaft.
Innominate; fragment ilium; fragment greater sciatic notch (cannot see angle.
UPPER LIMB: Scapula; fragment left acromion neck.
Humerus shaft fragment.
?1st metacarpal head with shaft fragment. Middle phalanx head with shaft fragment.
LOWER LIMB: Femur; fragment left neck (smallish). 8 fragments shaft.

spits 1&2a; outside vessel, upper 0.10m depth charcoal rich
SKULL: Canine root fragment.
Vault; 3 fragments.
AXIAL SKELETON: Rib; 2 fragments shaft.
UPPER LIMB: Ulna shaft fragment.
LOWER LIMB: Fragments femur (6), tibia (1) and fibula (1) shaft.

spit 4a: below vessel
UPPER LIMB: Humerus shaft fragment.

AGE: adult *c*. 18-25 yr.
SEX: ?female
CONDITION: Worn, chalky appearance