

LATE MESOLITHIC AND BEAKER ASSEMBLAGES FROM EXCAVATIONS AT LOUGHBOROUGH ROAD, ASFORDBY

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with contributions from:

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Between 2009 and 2011, archaeological excavations were carried out by University of Leicester Archaeological Services (ULAS) on a site at Loughborough Road, Asfordby, Leicestershire (SK 701 192), which revealed traces of activity dating to the Mesolithic, Late Neolithic–Early Bronze Age and Iron Age periods. The work was carried out on behalf of Jelson Ltd, in advance of and during residential development of the site. This report highlights evidence of Late Neolithic–Early Bronze Age occupation which yielded a significant assemblage of worked flint, and the largest assemblage of Beaker pottery found so far in Leicestershire, and of earlier occupation in the form of a Late Mesolithic lithic assemblage preserved in a tree throw hole. The site archive will be held with Leicestershire County Council, under the accession number X.A124. 2008.

INTRODUCTION

During excavations carried out in advance of residential development at Loughborough Road, Asfordby, Leicestershire, archaeological activity was identified from the Mesolithic, Late Neolithic–Early Bronze Age and Iron Age periods. The site is located on the north-west edge of Asfordby village, to the south of the A6006 and on the north-east side of Loughborough Road at NGR SK 701 192 (Fig. 1). It covers an area of *c.*1.8ha, which had been undeveloped pasture since the late nineteenth century. The site lies at a height of between *c.*75.6m OD at the west and *c.*78.3m in the centre-north of the site, where there is a slight crest. This crest is part of a small plateau which continues to the north and east, whereas the land below slopes down most noticeably to the west and south.

The site lies on glacial till (also known as boulder clay) overlying impermeable Mesozoic geology consisting of Blue Lias (Scunthorpe Mudstone Formation, Ordnance Survey Geology map Sheet 142, Melton Mowbray). The drift comprises a dome-shaped feature, with a core of Birstall sand and gravel (BISG) at the crest of the field which is surrounded by Thrussington till (THT) at the edges of the site area. The drift material incorporates occasional nodules of derived East Anglian flint, material suitable for flint working. McPhail reports that the soils are broadly stagnogleyic argillic brown earths (Oxpasture soil series; Hodge *et al.* 1983) formed in loamy drift (McPhail 2010).

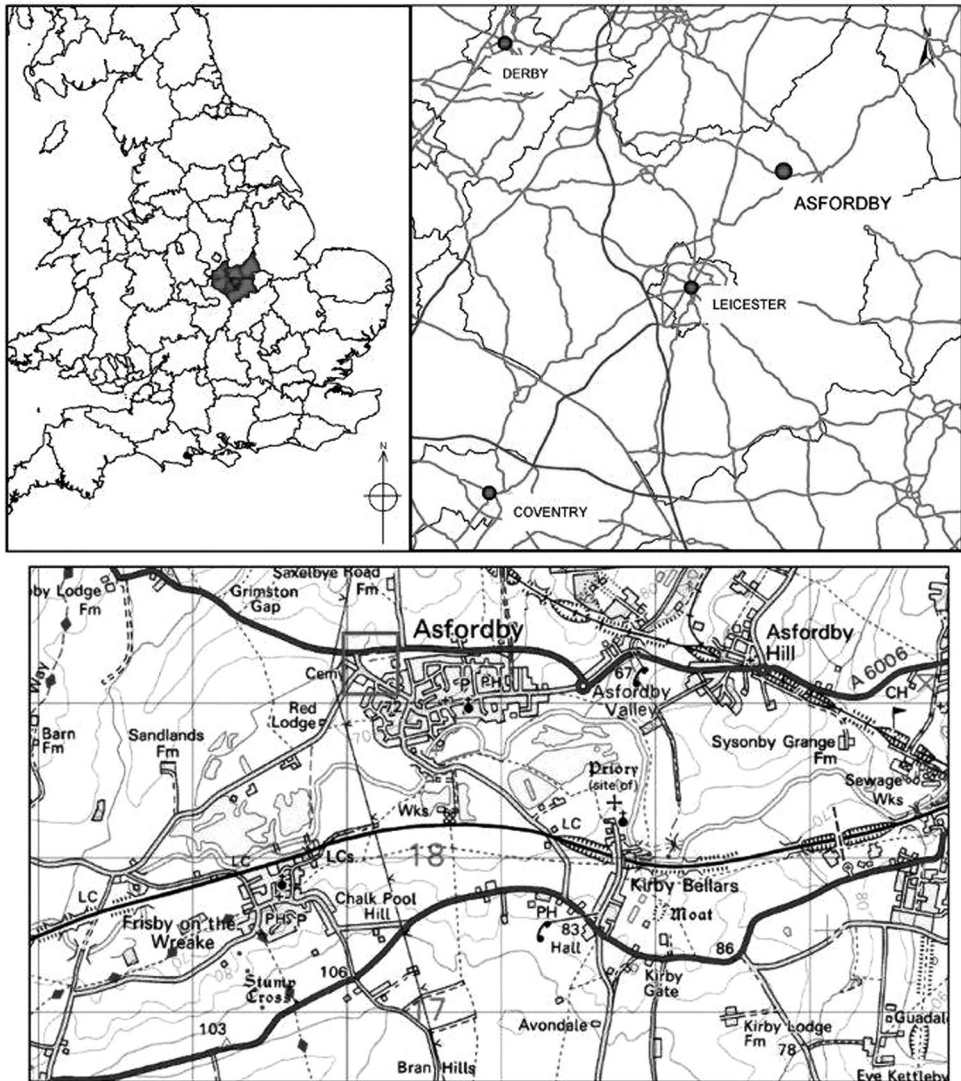


Fig. 1. Location. Reproduced from the OS Landranger 1:50,000 map 129 Nottingham and Loughborough area. By permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown Copyright 1996. All rights reserved. Licence number AL 100029495.

Following a geophysical survey (Smalley 2007) and trial trench evaluation of the site (Parker 2008), three areas of archaeological potential were identified, providing evidence of Mesolithic, Late Neolithic–Early Bronze Age and Iron Age activity (Fig. 2). Area 1, located in the west of the site, included a range of cut features associated with Beaker pottery. Area 2, located to the north-east (trench 1, Fig. 3), contained a colluvial deposit associated with a Mesolithic flint scatter potentially in a primary context. Area 3, located to the south-east, contained

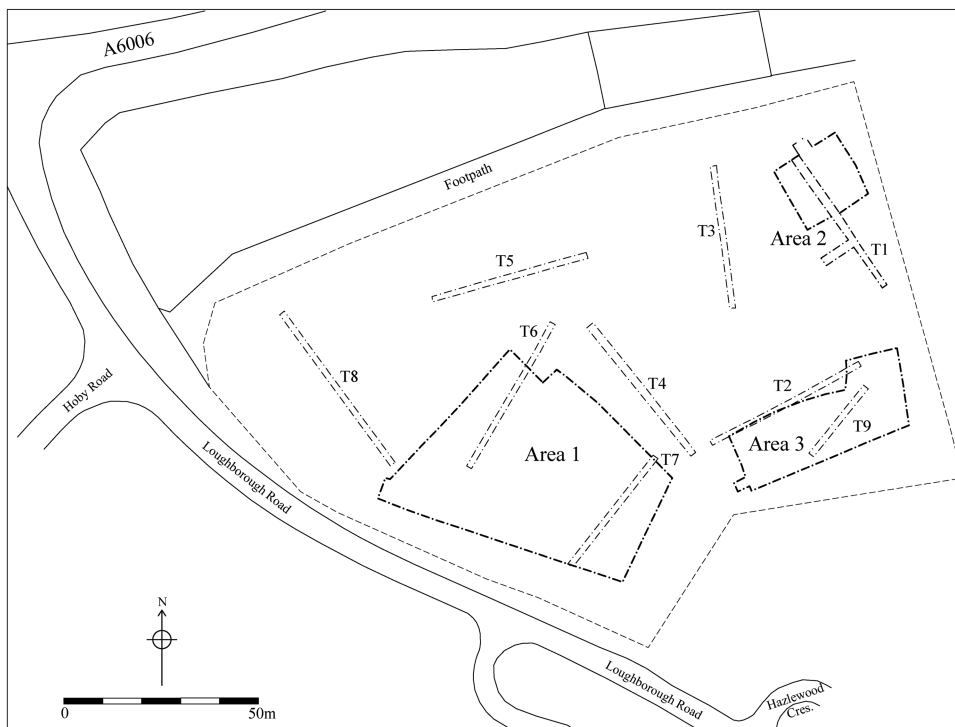


Fig. 2. Site main areas including trench numbers referred to in text.

other ephemeral features including possible tree throw holes. These three areas were subject to full excavation following the recommendations of the Principal Planning Archaeologist at Leicestershire County Council, acting as advisor to the planning authority. All areas were stripped of overburden using a 360 excavator with toothless ditching bucket. Areas 1 and 3 were stripped of both topsoil and subsoil to reveal archaeological features prior to their hand excavation. Only limited machine-reduction of Area 2 was undertaken before test-pitting, and hand excavation with 3D recording of artefacts. This method helped to identify a potential Mesolithic buried soil which survived in a shallow hollow or valley in the east of the site that was later infilled by colluvium. The full Mesolithic results from the buried soil are still in analysis and are to be published at a later stage (Cooper and Jarvis forthcoming).

RESULTS

Area 1 revealed a small rectangular structure to the north, a gully aligned east-west to the south and two pits, while to the east were further discrete features including a small cremation pit (Fig. 3). In Area 2, the colluvium was cut by a gully, pits and tree throw holes (Fig. 9), while in Area 3 two tree throw holes and a pit containing Iron Age material were revealed (Fig. 10). Cut features are referred to here in square brackets (e.g. [58]) while their fills are shown with round brackets (e.g. (251)).

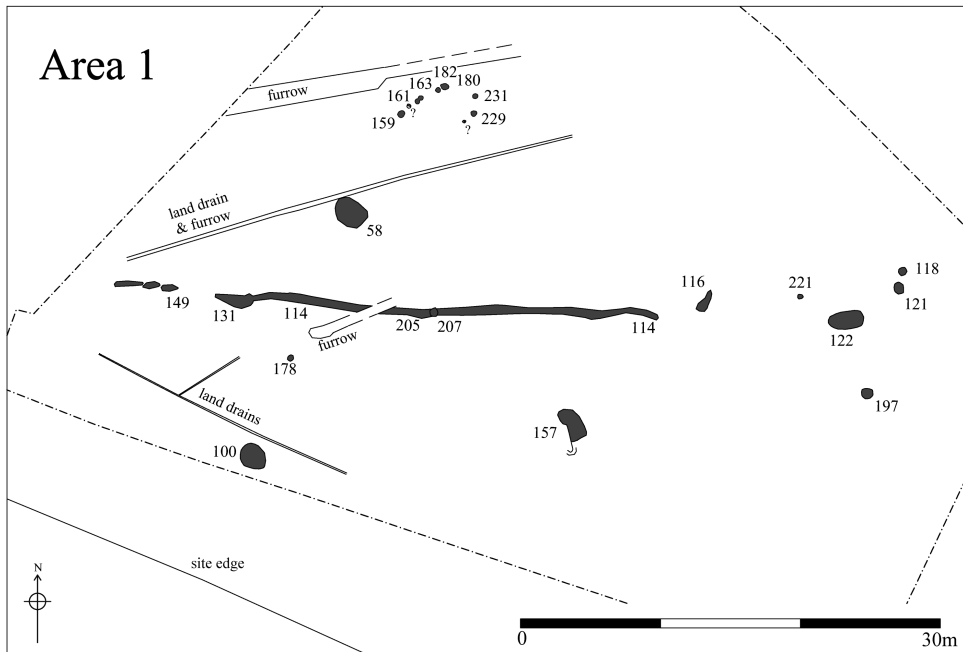


Fig. 3. Area 1 general plan showing spread of features.

The most significant features from Area 1 were two pits [58] and [100] that contained Beaker pottery and contemporary worked flint. Pit [58] was oval to sub-rectangular in plan, measuring 2.6m north-west to south-east by 1.94m north-east to south-west, and was 1.5m deep (Figs 4–6). The primary fill (251) consisted of a clean orangey grey silty-clay, probably initial silting. Above this was a pale (leached) grey silty-clay with frequent pebbles and charcoal containing worked flint and pottery (250) and (241), a grey orange silty-clay also with frequent pebbles again containing worked flint. Above these contexts, (245) was a 0.2m-thick fill of brown orange silty-clay with patches of pure clay, while (165) consisted of a mid-grey clayey silt with occasional pebbles and charcoal, containing pottery and worked flint. This was in turn sealed by (244), a pale grey silty-clay with occasional pebbles and patches of pure clay and again containing worked flint. Above this, (147) was a light grey clay-silt fill some 0.3m thick with occasional pottery, charcoal and burnt stones, other unburnt pebbles and pure clay patches towards its base. A concentration of flint was recovered from this fill. The uppermost fill was (57), a mid-grey brown clay-silt, which contained a concentration of charcoal, worked flint and pottery.

Pit [100] was located to the south-west of Area 1 and 17m to the south-west of pit [58] (Figs 4; 6–7). It was oval in shape being slightly elongated north-west to south-east and measured 1.98m north-west to south-east, 1.62m east-west, and 0.64m in depth. Therefore, although it was comparable to pit [58] in form, it was much smaller and considerably shallower. The primary fill (218) was a light reddish to greyish-brown loamy clay with frequent pebbles, and occasional charcoal.

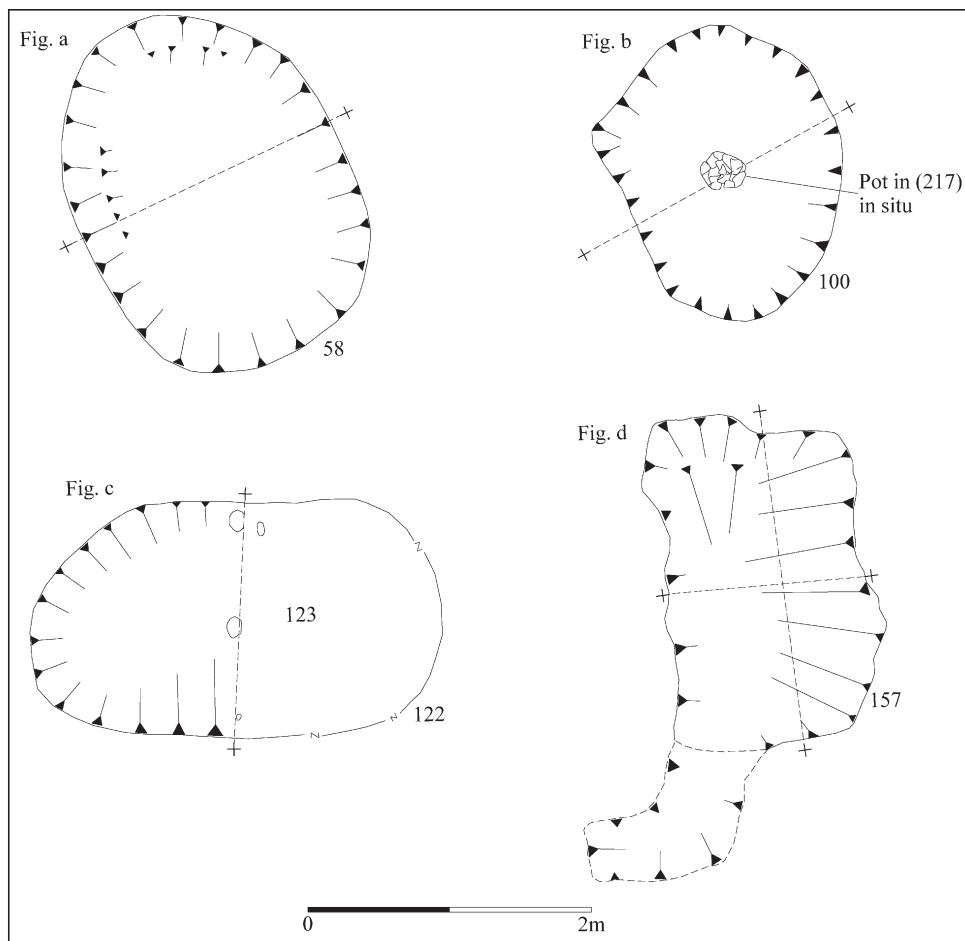


Fig. 4. Area 1 pit plans.

Above this, (216) consisted of a light greyish-brown loamy-clay with occasional pebbles and charcoal flecks. This fill contained a large rusticated beaker (Fig. 11 vessel 1, (217)) along with worked flint. A radiocarbon date of 2280–2030 cal BC (Ua-41784; $3,740 \pm 32$ BP, Table 1) was obtained from ash charcoal in this context. The uppermost fill (101) was a mid-yellowish grey to brown loamy-clay, also with occasional pebbles and frequent charcoal particularly in the central part of the fill. This context contained a significant assemblage of fine Beaker ware pottery with 15 different vessels represented (Cooper below), and additionally worked flint. Two contexts from [100] contained cereal remains with occasional grains of barley and emmer in (101), while a single indeterminate cereal grain was recovered from (216).

A series of seven probable post-holes [159], [161], [163], [180], [182], [229], [231] were identified in the northern sector of Area 1 forming a rectangular structure, aligned north-east to south-west, which although undated may be associated with the Beaker material (Fig. 8). These post-holes were very shallow varying between

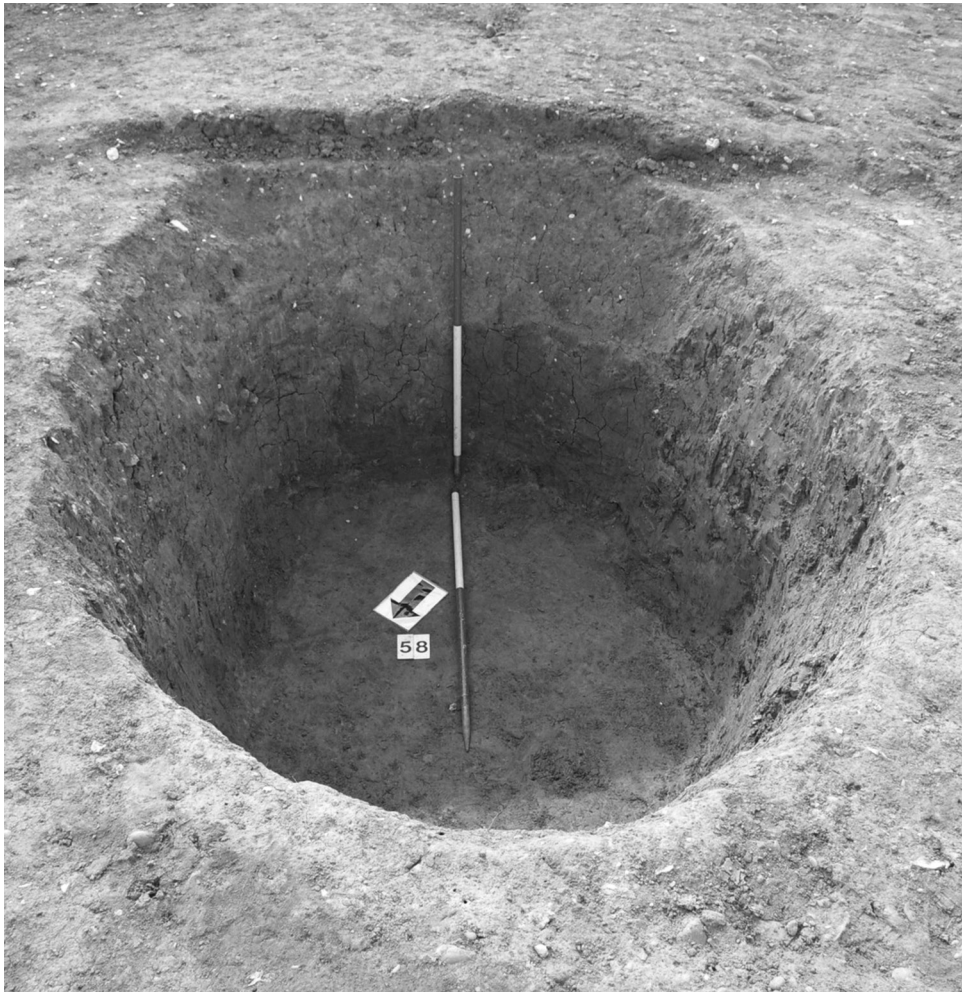


Fig. 5. Beaker pit [58] fully excavated.

0.16 and 0.34m in depth, but cumulatively they formed a reasonably coherent structure. They did not produce any dating evidence or material suitable for radiocarbon dating. Medieval furrows may have truncated the south-western extent of the structure.

To the east was a small, near-circular, steep-sided and flat-bottomed cremation pit [118]. The upper fill (108), a grey to orangey-brown, loamy clay, contained a concentration of burnt bone, with occasional charcoal and gravel. The burnt bone was in a sufficient concentration to suggest it had been kept together perhaps in an organic container that has not survived. A radiocarbon determination from the calcined bone provided a date of 2200–1940 cal BC (Ua-41782, $3,680 \pm 37$ BP, Table 1). The lower and outer fill (119) was a mid-orangey brown loamy clay with frequent gravel, containing a few bone fragments perhaps dispersed by later animal

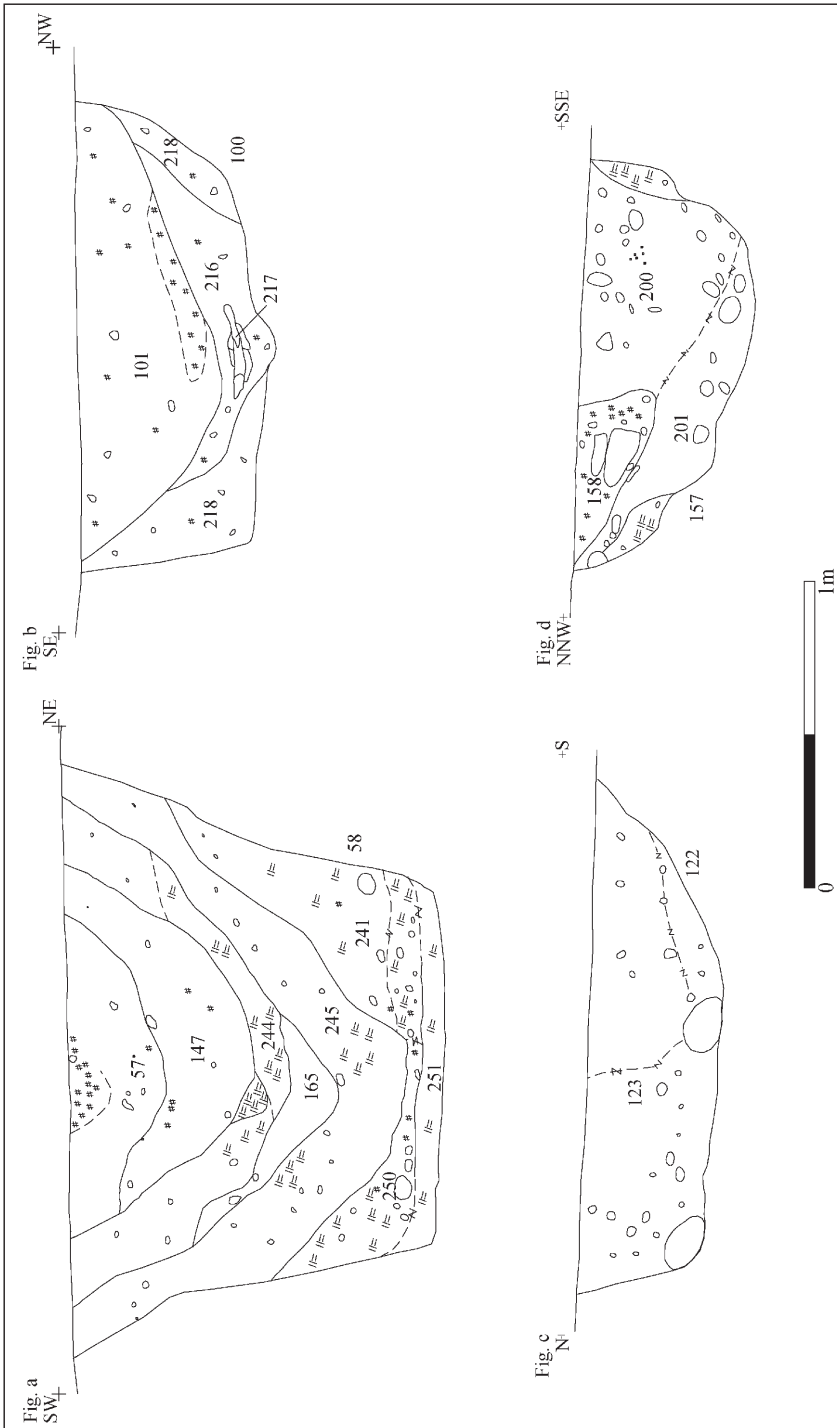


Fig. 6. Area 1 pit sections.

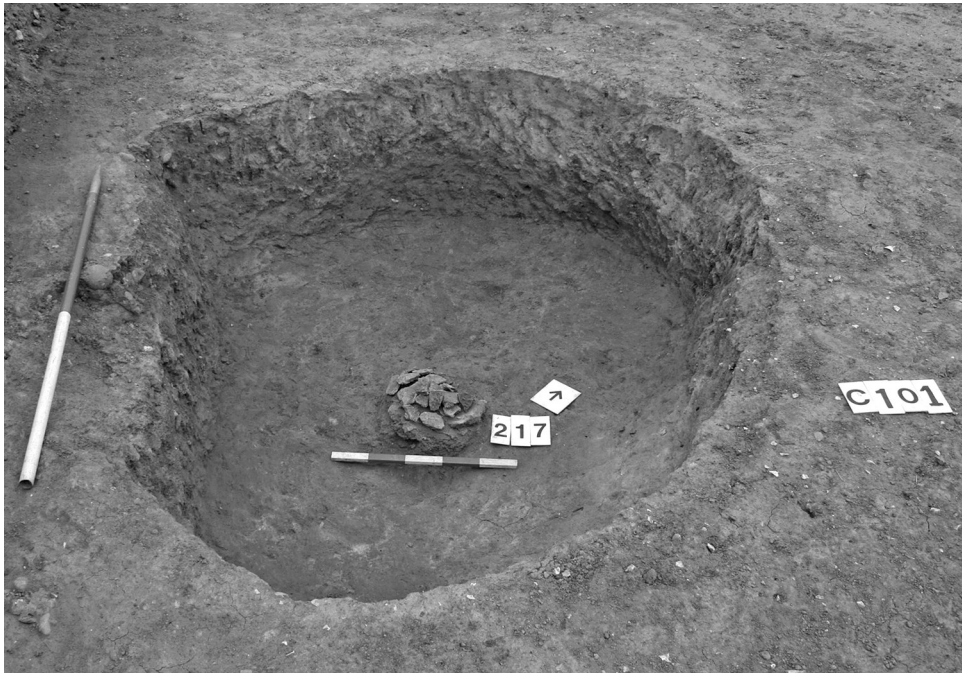


Fig. 7. Beaker Pit [100] after excavation, with pottery vessel 1 (217) still *in situ*.

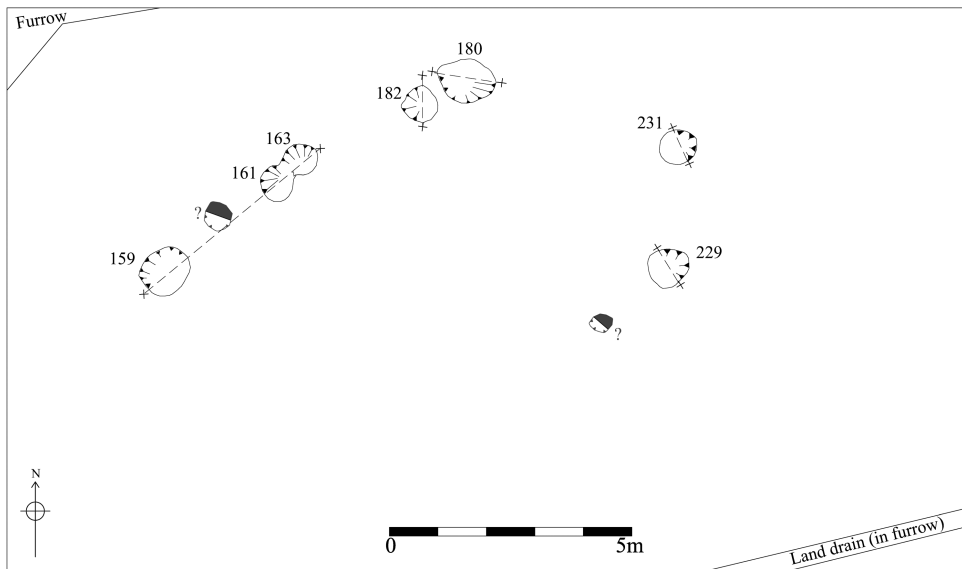


Fig. 8. Post-hole structure, north end of Area 1.

or plant activity and only very occasional charcoal fragments. The indication is that the cremation was carried out elsewhere, and that the pyre material was sorted prior to deposition.

Other pits in Area 1 did not contain any finds. Of note was a small circular pit, close to the cremation pit, with a single fill (120) comprising dark grey brown loamy-clay with occasional pebbles and charcoal. Charred plant remains from this deposit included five barley grains, glume wheat and small grass seeds. An east-west aligned gully [114] was identifiable for a length of 39m but became discontinuous at the west end. It contained one fill (115), a sterile pale yellowish brown loamy clay, which to the eastern terminal contained occasional flint and pottery, the latter probably Iron Age in date.

A tree throw hole [157] was located to the south-east of the area, with on its southern edge a concentrated charcoal-rich fill in a dark brown silty matrix (158). This fill probably represents topsoil dragged into the tree throw hole at the time of the tree fall (Moore and Jennings 1992, fig. 6, a and b; Beamish 2009, 138, fig. 58). Charred hawthorn from this deposit provided a radiocarbon date of 2210–2030 BC (Ua-41783, 3729 ± 30 BP, Table 1). A group of river worn pebbles within the fill may originally have been part of a cobbled setting.

In Area 2 a buried soil was present above the glacial till clay, sealed by later deposits which included prehistoric and later colluvia – potentially a product of ploughing and erosion, located below the medieval ploughsoil and modern topsoil. Two barbed and tanged arrowheads, Iron Age pottery and a few fragments of burnt bone were recovered from the colluvium overlying the buried soil. A pit [107] containing Iron Age pottery, a gully aligned east-west, two tree throw holes and various undated features were also located cutting the colluvium. A pit and two tree throw holes were located in Area 3 (Fig. 10); tree throw hole [102] was at the east end of the area. The substantial upper fill was a mid-greyish brown sandy-silt with a depth of 0.43m; this fill contained a large assemblage of late Mesolithic lithic material, and a single sherd of probable Iron Age pottery from the top where it was sealed by layer (248), a colluvial deposit which survived in the east end of Area 3 and can also be correlated with the colluvial layer in Area 2. Primary fill (249) was a light grey brown sandy-silt with occasional cobbles and rare charcoal, 0.30m deep. Fill (246) was similar, 0.23m deep, but only observed on the north edge of the feature. Occasional lithics of later date were recovered throughout the lower fills of this feature. This material is considered to be redeposited and probably relates to a phase of infilling of the tree throw hole; the finds are therefore not *in situ* (cf. Moore and Jennings 1992, fig. 6, e).

THE BEAKER POTTERY

Nicholas J. Cooper

A total of 422 sherds of Beaker pottery weighing 2,959g (average sherd weight 7g) and with an estimated vessel equivalent (EVEs) value of 1.1 was recovered from the fills of two pit features on the site. The material derives from at least 16 vessels, of which the profiles of three can be substantially reconstructed. The assemblage is the largest ever recovered from the county, and certainly the most significant

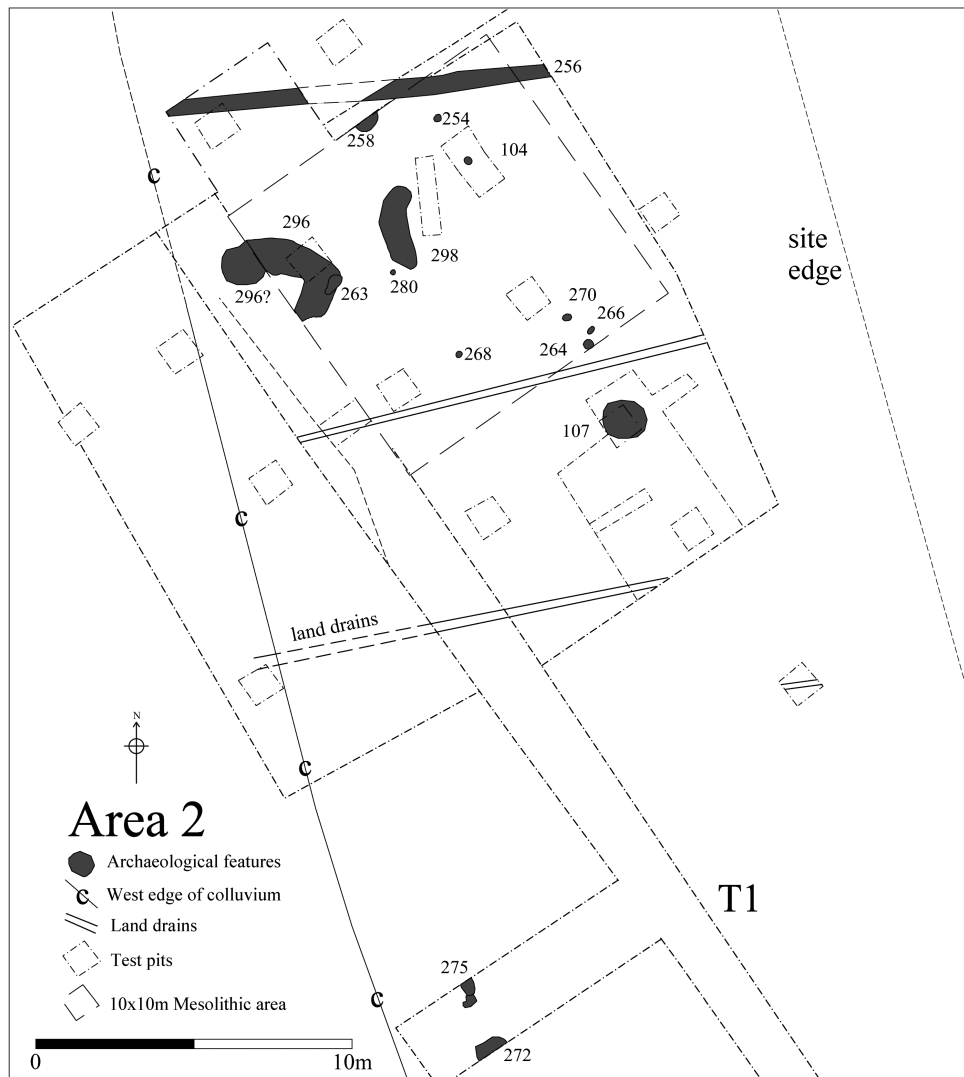


Fig. 9. Area 2 general plan showing spread of features.

from a possibly non-funerary context. The vast majority of the material came from pit [100], with the remainder, in a more fragmentary condition, coming from the nearby pit [58]. The occurrence of cross joins between sherds of Vessel 4 from fill (101) [100], and (57) and (165) [58], suggests perhaps the upper fill (101) may have been disturbed and that some material was redeposited in the fills of [58].

Methodology

The material was analysed by form and fabric (using low power microscopy) with reference to the Leicestershire Prehistoric Pottery Fabric Series (Marsden *et al.* 2009;

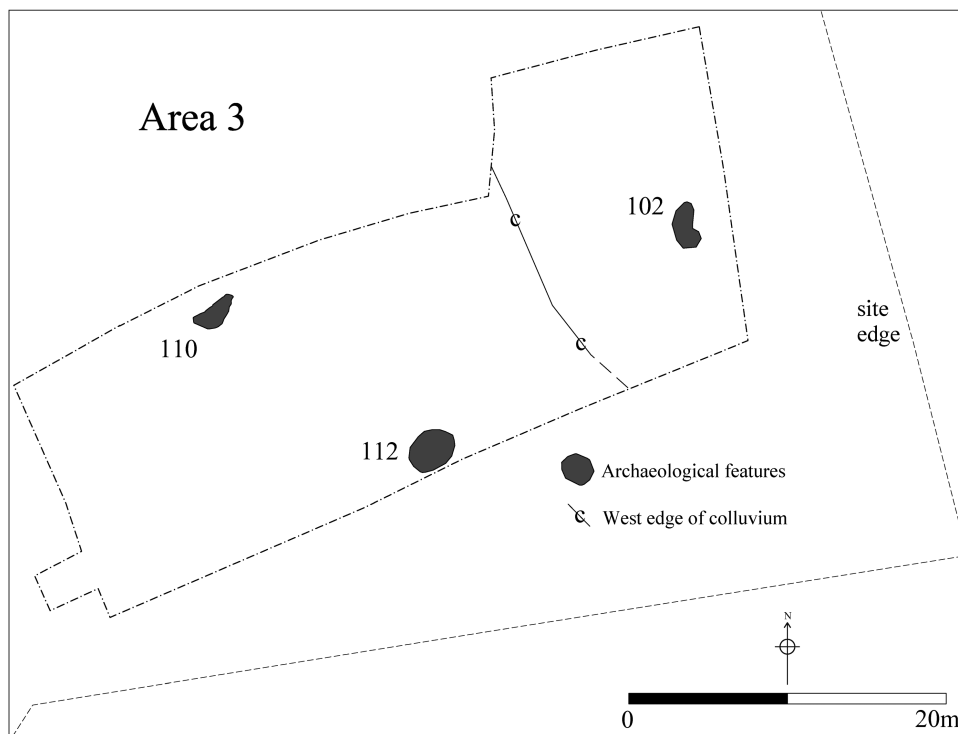


Fig. 10. Area 3 general plan showing spread of features.

Marsden 2011, 62, Table 1) and the Prehistoric Ceramic Research Group Guidelines (PCRG 2010), and quantified by sherd count, weight, EVEs using both rims and bases, and minimum vessel count. Sherds were initially sorted into vessel groups, and then reconstructed to allow illustration and comparison with other published examples. The vessels are described in detail below alongside their illustrations. Undiagnostic sherds with geometric decoration, but unassigned to specific vessels, have been grouped together and quantified by context, and include material extracted from environmental bulk samples. Terminology relating to vessel form and decorations is taken from the Clarke corpus (1970).

All the vessels described below derive entirely from fill (101) of [100] except where indicated (e.g. Vessel 4). The crushed remains of Vessel 1 were assigned their own context number (217) within fill (216) below (101).

Vessel 1 (217) within (216) below (101) (Fig. 11)

This is a very large vessel of long-necked form with an upright or slightly flaring neck, 260mm in diameter and a bulbous body. The top of the rim is flattened and slightly T-shaped and decorated with rusticated finger tip ‘pinches’ of varying depth and orientation. The pinch decoration also extends down the inside of the rim for two rows. The vessel was manufactured by coiling from iron-rich clay containing

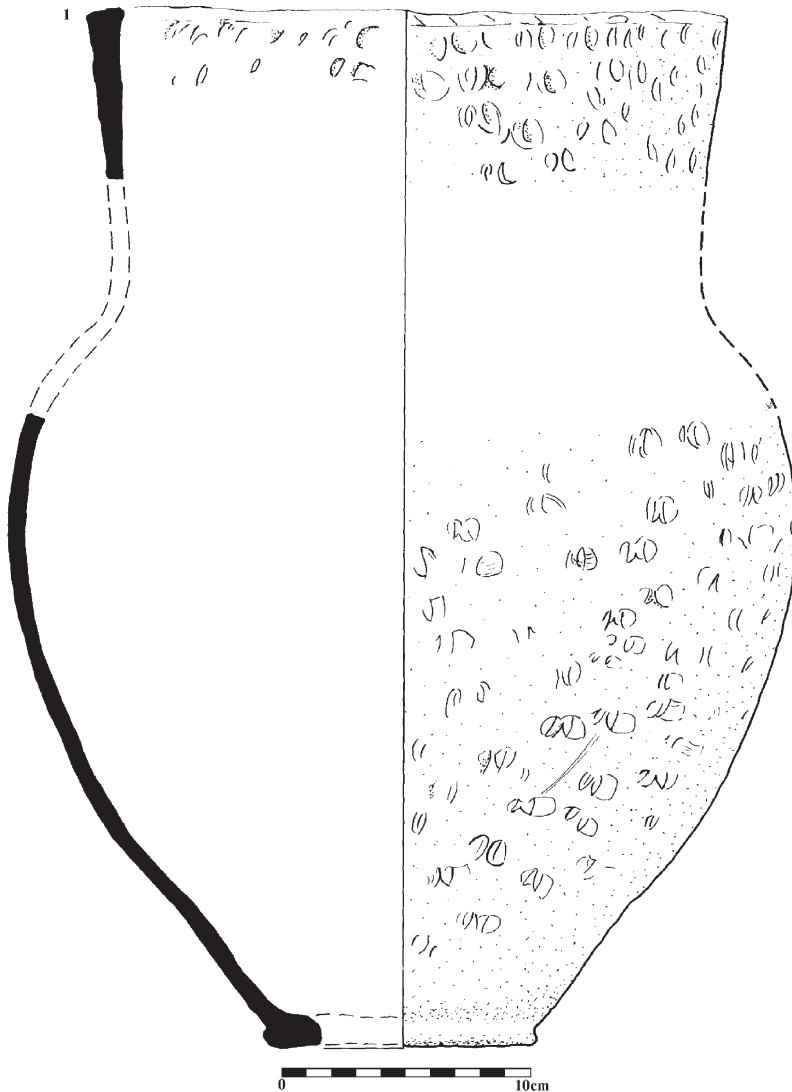


Fig. 11. Prehistoric pottery, vessel 1, scale 1:3.

dark grey/black grog. Clay matrix contains sparse rounded/sub-rounded quartz grains $<0.2\text{mm}$, which are probably naturally occurring in the clay. The majority of external surface is oxidised orange in colour through to the external margin and core in thin-bodied parts. Core, internal margin and internal surface are reduced grey. Higher up the vessel, including the rim, the external and internal surfaces, and internal margin, are reduced grey, whilst external margin and core are oxidised.

Rusticated decoration occurs all over the external surface which, immediately below the rim at least, is arranged in horizontal rows of 'pinch' motifs formed

by squeezing thumb and index finger together (from the size would appear to be female), creating two joining crescents of clay with two flanking crescentic hollows formed by the finger nails. Motifs are mostly vertical in orientation and appear to have been executed from above, with the narrowest part at the bottom. Parallels for the vessel are discussed in detail in the discussion below.

Vessel 2 (not illus.)

This comprises two joining body sherds from a rusticated vessel decorated with closely set paired thumb and index finger nail impressions or 'pinches', but with little or no clay raised between the finger tips. The vessel is manufactured in a fine fabric, oxidised orange/buff throughout and with occasional rounded grains of quartz and other rock of 1–3mm. The vessel body thickness is 9mm.

Vessel 3 (not illus.)

A shoulder and four other sherds from a rusticated vessel decorated with close-set paired thumb and index finger nail impressions or 'pinches', with clay raised between. The vessel fabric contains grog and moderate, poorly sorted rounded quartz 1–4mm, naturally occurring in the clay. The external surface, margin and core are oxidised orange, whilst the internal surface and margin are reduced black. The vessel body thickness is 7mm.

Vessel 4 (101), (57) and (165) (Fig. 12)

Rim sherds and numerous joining body sherds from an intricately decorated geometric beaker with a long neck of 160mm in diameter and a bulbous body. Significantly, joining rim and body sherds from the same vessel occurred in adjacent pit cut [58] from fills (57) and (165). A highly abraded sherd retrieved from (57) during the evaluation also appears to be from this vessel, but perhaps from a different, probably basal, decorative zone.

The fabric contains light-coloured grog and moderate, poorly sorted, fine, sub-rounded quartz and other rock from 0.1mm to 0.5mm, which is probably naturally occurring in the clay. The fabric is oxidised orange/buff on the external surface, external margin and core. The internal margin is reduced grey with light grey-buff internal surface.

The form and decoration of the vessel is very similar to one from Biddenham Loop, Bedford (Allen 2008a, 113 and fig. 6.14 P8). The form appears to be long-necked, the rim is upright or slightly incurving at the mouth, the neck tapering to the waist, where there is a very slight horizontal ridge defining the lower limit of the top zone of decoration and giving way to a rounded belly which expands to 160mm in diameter, matching the rim. The middle or belly zone of decoration is 65mm deep. No base was preserved, but a third zone of decoration is suggested by body sherds close to the base.

The decoration of the beaker is also similar to that from Biddenham Loop in that the separate zones are demarcated by horizontal bands comprising two offset

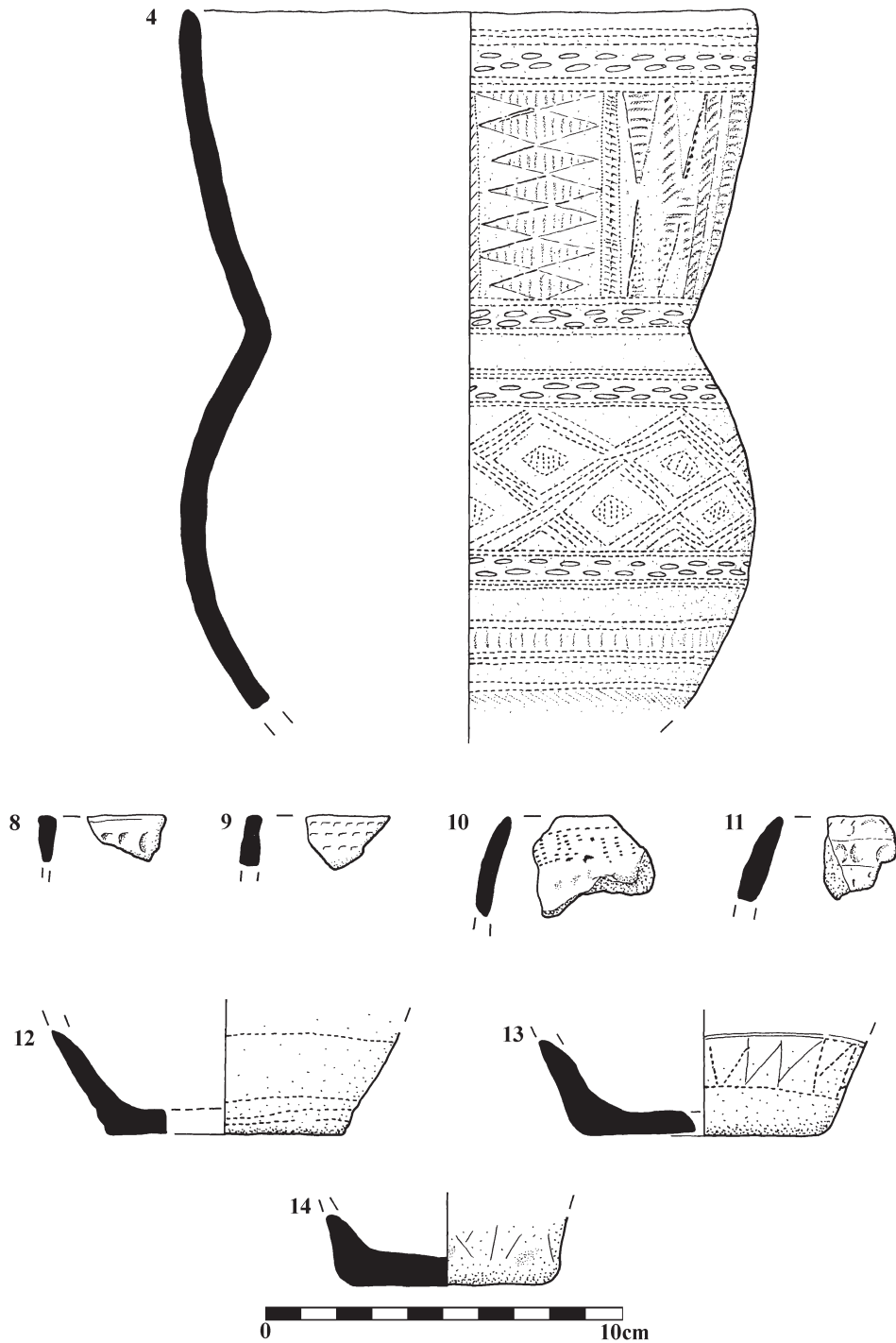


Fig. 12. Prehistoric pottery, vessels 4, 8-14, scale 1:2.

rows of elongated impressions with pairs of comb impressed lines above and below (Clarke 1970, Appendix 1.4, Motif Group I.6) and with a blank band between; otherwise, all of the decoration is executed with toothed comb impressions. The neck zone comprises horizontally arranged lozenges with vertical infill and plain alternating. These panels alternate with panels of vertically arranged elongated lozenges similar to Clarke's 1970 Southern British Motif Group 4.29–31. The belly zone comprises two interlocked rows of horizontal lozenges each with a central, vertically-filled lozenge within, similar to Clarke's 1970 Motif Group 4.33ii. The basal zone appears to comprise two horizontal bands filled with vertical and oblique lines (Clarke 1970, Motif Group 2.12 and 15), surmounted by a multiple zig-zag band of six toothed lines.

Vessel 5 (Fig. 13)

Comprises rim sherds and linked sections of profile from a geometric beaker. The quality of decoration is noticeably inferior to Vessel 4. The fabric comprises fine grog and moderate quartz sand and other rock up to 1mm, probably naturally occurring in the clay. The fabric is oxidised orange on the external surface and margin, with a reduced grey core, internal margin and surface.

Form appears to be long-necked; flat rim diameter tapers from 180mm at the mouth to 160mm lower down the neck. Width at waist 160mm. Belly expands to 170/180mm, to match rim and then constricts to 140 towards base. Possible base sherd indicates 100mm diameter.

Decoration on the neck zone comprises three horizontal toothed lines (but looks like incised due to depth), below flat rim, with vertical toothed lines crossing the first. Below is a poorly executed row of three zig-zag lines with alternate vertical infill to create rows of filled and unfilled lozenges in the manner of Clarke's 1970 Southern British Motif Group 4.33i (lower). This is separated by another three horizontal lines below by a panel of alternate filled and unfilled triangles (Clarke 1970, 427, Motif Group 4.29). Moving towards the bottom of the neck there are a further two horizontal lines below which is a repeat of Motif Group 4.33i (lower) or one line of it, at which point the profile begins to expand, and coincides with a blank zone separating it from the belly zone which continues the bands of poorly-executed lines, dashes and a single Motif 4.33i again, with a series of lines below before break occurs for basal zone, which repeats the pattern again.

Vessel 6 (Fig. 14)

Comprises a single rim sherd from the slightly incurving mouth of a long-necked geometric beaker, 180mm in diameter. The fabric is grog-tempered, with occasional fine sand in the clay. The external surface, margin and core are oxidised buff, whilst the internal margin and surface are reduced grey. Decoration comprises three bands of horizontal toothed lines (Clarke 1970, Motif Group 1.1), separating a panel of vertical lines and Motif Group 1.5, below, a band of alternating filled and unfilled triangles (Clarke 1970, Motif Group 4.29).

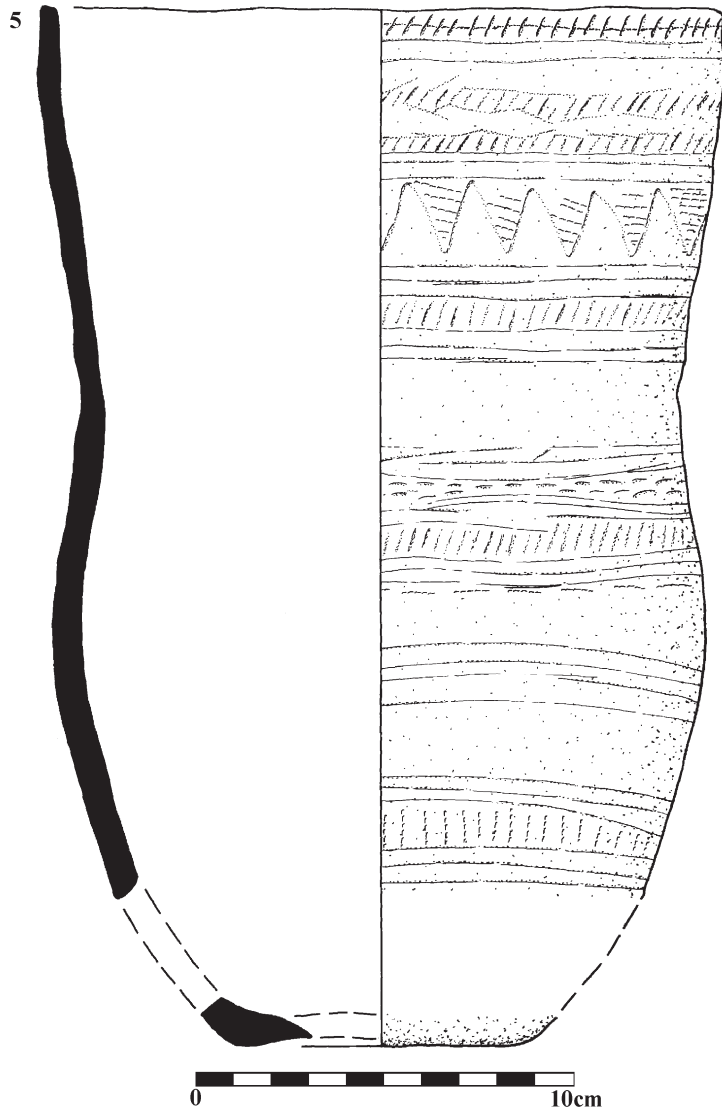


Fig. 13. Prehistoric pottery, vessel 5, scale 1:2.

Vessel 7 (Fig. 14)

Two flattened rim sherds and a number of joining and other sherds from geometric vessel of 150mm diameter. The fabric is tempered with dark grog. The surfaces and margins are oxidised orange, whilst the core is reduced grey. The top of the flat rim is decorated with transverse combed lines. The beaded rim is decorated with a line of stab marks executed from the right-hand side with an implement with a D-shaped section, such as a bird bone. Decoration on the neck comprises bands of two or three toothed lines separating panels of stab marks in two off-set rows, using the

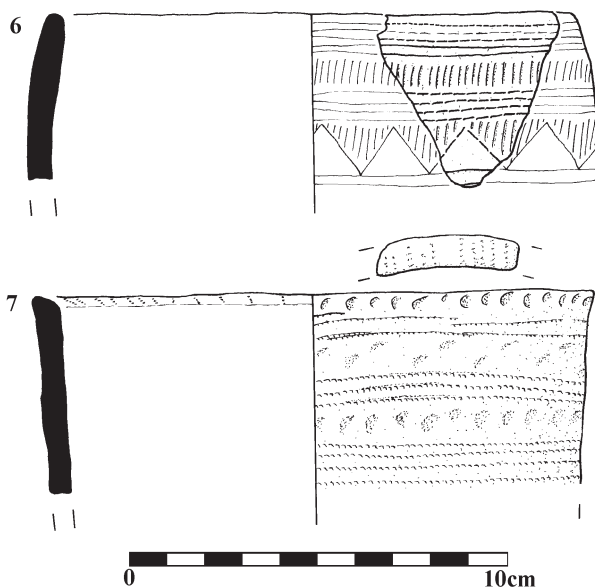


Fig. 14. Prehistoric pottery, vessels 6–7, scale 1:2.

same implement as below the rim but front-on. The base sherd suggests a diameter of 120mm.

Vessel 8 (Fig. 12)

Flat rim similar to vessel 7 above with stabbed or fingernail impressed decoration from vessel of 110mm diameter. Fabric tempered with fine grog and sand. The body is oxidised orange except on the internal margin.

Vessel 9 (Fig. 12)

A flat rim with three toothed lines below from very thin-bodied vessel. Diameter is estimated at 180mm. The fabric is grog tempered and the body is oxidised orange except for internal margin and surface.

Vessel 10 (Fig. 12)

Rounded rim with toothed geometric pattern of Motif Group 1.5 below. Grog-tempered fabric which has an oxidised external surface and margin with reduced core and internal margin and surface.

Vessel 11 (Fig. 12)

A very narrow, tapered rim with (very small) fingernail impressions separated by horizontal lines. The fabric is grog tempered and the body is oxidised orange throughout.

Vessel 12 (Fig. 12)

Coil-built base of 70mm diameter decorated with band of three horizontal lines (Motif 1.1) at bottom above, which is a space and evidence of a second band above. Oxidised orange external surface and margin; rest reduced grey.

Vessel 13 (Fig. 12)

Base of 70mm diameter decorated with single zig-zag line enclosed by horizontal lines (Motif Group 1.7). Grog and sand-tempered; external surface and margin oxidised.

Vessel 14 (Fig. 12)

A narrow, poorly formed, base of 60mm in diameter, with a crudely incised zig-zag line around the base. Sandy fabric; external surface and margin oxidised.

Vessel 15 from evaluation [58] (57) (not illus.)

This comprises a single body sherd, probably from lower wall of a vessel of 7mm thickness. The fabric is oxidised orange with light brown inner margin and dark grey core, inner margin and internal surface. The fabric is fine sandy with rounded quartz up to 0.5mm, but with occasional red ferruginous pellets (naturally occurring in the clay) and plate-like surface voids indicative of sparse shell fragments up to 2mm. The decoration comprises faint single-line toothed motif impressions forming an open lattice work of 8mm side (Clarke 1970, Motif Group 1.7), not recorded on any other vessel.

Vessel 16 (not illus.)

A single, grog-tempered body sherd decorated with narrow band of acute lattice (Motif Group 2.14) unrecorded on any other vessel, but paralleled on vessel from Knipton, Leicestershire (Clarke 1970, fig. 955).

Discussion and Dating

The assemblage can be divided stratigraphically between [58] which contained about 10 per cent by sherd count (42 sherds 235g Av. Sh. Wt. 5.6g) and the remaining 90 per cent from [100] which can itself be divided between the remains of Vessel 1 at the bottom of the pit (216)/(217) (187 sherds 1,605g Av. Sh. Wt. 8.6g) and the more fragmentary remains of 15 vessels in the upper fill (101) (193 sherds, 1,119g Av. Sh. Wt. 5.8g).

The higher average sherd weight for Vessel 1 emphasises its greater completeness and lack of abrasion. The deposition of rusticated beaker, Vessel 1, at the bottom of the pit [100], appears to have been a single event (Fig. 7). The vessel appears to have been empty and was then crushed *in situ* by overburden, without any further

disturbance. The breaks and surfaces appear fresh and unabraded, and sherds of the vessel do not occur anywhere else in either pit. However, the fact that only about one-third of the vessel seems to have been recovered from the deposit indicates that it was already incomplete at the time of deposition. The vessel is unusual not only in terms of its rusticated decoration but also its large size; the rim diameter is estimated at 260mm and the maximum girth of the body is estimated at 320mm, giving a very large potential volume (cf. Case 1995). A number of rusticated vessels are included in Clarke's corpus (e.g. Clarke 1970, figs 790, 791, 796, 803 and 806), and in general they appear to be smaller and often thicker-bodied than geometric beakers. The Asfordby vessel with its thin body, fine grog-tempered fabric and large size therefore appears atypical.

The material from the upper fill of the pit (101) contained the remains of Vessels 2 to 16, comprising sherds from two further rusticated vessels (Vessels 2 and 3) and 13 vessels with geometric decoration executed with toothed combs of varying width (Clarke 1970, 10, fig.1). In the case of Vessels 4 and 5 the decoration appears to have been arranged in three zones, incorporating complex patterns. The quality of the decoration on Vessel 4 in particular was exceptionally fine, whilst that on Vessel 5 was poor by comparison. Enough of the rim and neck of Vessels 6 and 7 were preserved to suggest they too were long-necked forms with complex zones of decoration lower down the body. A small number of complete or restored beakers are known from Leicestershire and Rutland; Clarke (1970, 485–6) lists nine records in all. For example, one, thought to be from nearby Melton Mowbray, and another from Knipton (Clarke 1970, figs 762 and 955 respectively), are long-necked forms with complex geometric decoration in zones similar to Vessels 4–7, whilst two linear decorated examples (the complete one bell-shaped) came from the Beaker burial at Smeeton Westerby in 1975 (Rutland 1975–6, 65, fig.1), and have affinities with the decoration on the bases of Vessels 13 and 14.

The vessel fabric across the assemblage consistently incorporates very fine grog with varying amounts of fine sub-rounded quartz sand and other rock fragments, which are probably naturally occurring in the clay and may have been supplemented depending on the atmospheric conditions when potting. This ties in with the fabrics for Beaker material from elsewhere in the county as well as from Willington, Derbyshire (Fabric Gr2, Marsden *et al.* 2009, 101, fig. 49) and from Biddenham Loop, Bedford (Allen 2008a, 113), and contrasts sharply with the coarse white pebble quartz tempered fabric used in production of the Middle Neolithic impressed ware in Leicestershire, for example.

Ash charcoal from (216), the lower fill of Pit [100] which contained the substantially complete rusticated beaker Vessel 1, has been dated to 2210–2030 cal BC (91.1 per cent probability; Ua-41784; see below), and assuming the pit was filled relatively quickly, it would be safe to postulate that the other 15 vessels also fall within this date bracket. The assemblage would appear to belong to the tradition of long-necked beakers with zoned decoration, which are considered by Needham to date to between about 2200 and 1900 cal BC (Needham 2005, 195); and this broadly agrees with dating from other sites locally, where more fragmentary assemblages have been recovered. For example, two decorated Beaker sherds were recovered from a pit containing the primary cremation from Barrow

2 at Cossington, lower down the Wreake Valley, dated to 2140–1930 cal BC (SUERC-11277; 3660 ±35BP) (Allen 2008b, 28, fig. 32.1–2). Further afield, the assemblage from Biddenham Loop, Bedford, derived from a series of pits, shares decorative motifs with Vessels 4 and 5, and also includes a rusticated vessel and other fingernail decorated sherds, is considered to date to after 2100 cal BC (Allen 2008a, 113 and fig. 6.14, P8–P14).

The occurrence of largely complete or fragmentary Beakers in pits, rather than in overtly funerary contexts, is gradually being recognised as widespread and the realisation that these are not simply ‘domestic rubbish’ deposits, or that there is not always a clear distinction to be made, is slowly dawning. Notably, the occurrence of two semi-complete vessels alongside bronze and gold objects in a pit at Lockington, Leicestershire has been cited to support the notion that ritual deposition of Beakers is not confined to burial contexts (Allen 2008a, 115).

THE LITHICS

Lynden Cooper

There were some 1,303 pieces in the collection which does not include the Mesolithic material from the primary deposit in the Area 2 buried soil or the upper levels of the tree throw hole feature in Area 2.

The raw material was generally a brown semi-translucent flint, most of which was likely to be from the local till or fluvio-glacial deposits. Most of the flint in the underlying natural deposits was frost shattered, but some small nodules were of good knapping quality, so this is a likely source. There were a few pieces of Lincolnshire/Yorkshire Wolds flint including two large artefacts (Fig. 16.18, Fig. 18.30).

The unstratified material showed a trend for Mesolithic activity in Area 2, based on the higher bladelet technological component.

Tree throw hole [296] would appear to have contained mostly residual Middle Mesolithic lithics derived from the Mesolithic primary deposit in this area. However, there is a single flake with pressure flaked retouch that may be Neolithic or Bronze Age.

Tree throw hole [102] also contained a significant Mesolithic component, based on the bladelet component and microlith forms. The microliths comprised a Sauveterrian point (edge blunted on two sides, Fig. 15.3), four straight-backed bladelets (Fig. 15.5–8) and two scalene triangles (Fig. 15.2, 4). They were notable for being smaller than the microliths from the Mesolithic primary deposit in Area 2. While the Sauveterrian point had very slight patination the other microliths were unpatinated. The lack of patina would seem to be a chronological marker, a pattern observed at many sites in the region (Cooper 2004, 26). The remaining four tools are difficult to assign to period, although the two scrapers are of types often seen in later Bronze Age contexts. The Area 2 colluvial deposits and later prehistoric gully yielded a mixed assemblage of Middle Mesolithic and later lithics, including two fragments of ‘fancy’ barb and tanged arrowheads.

The two Early Bronze Age pits with Beaker pottery provided a rare glimpse of a domestic lithic assemblage in the East Midlands. The débitage was typical for later

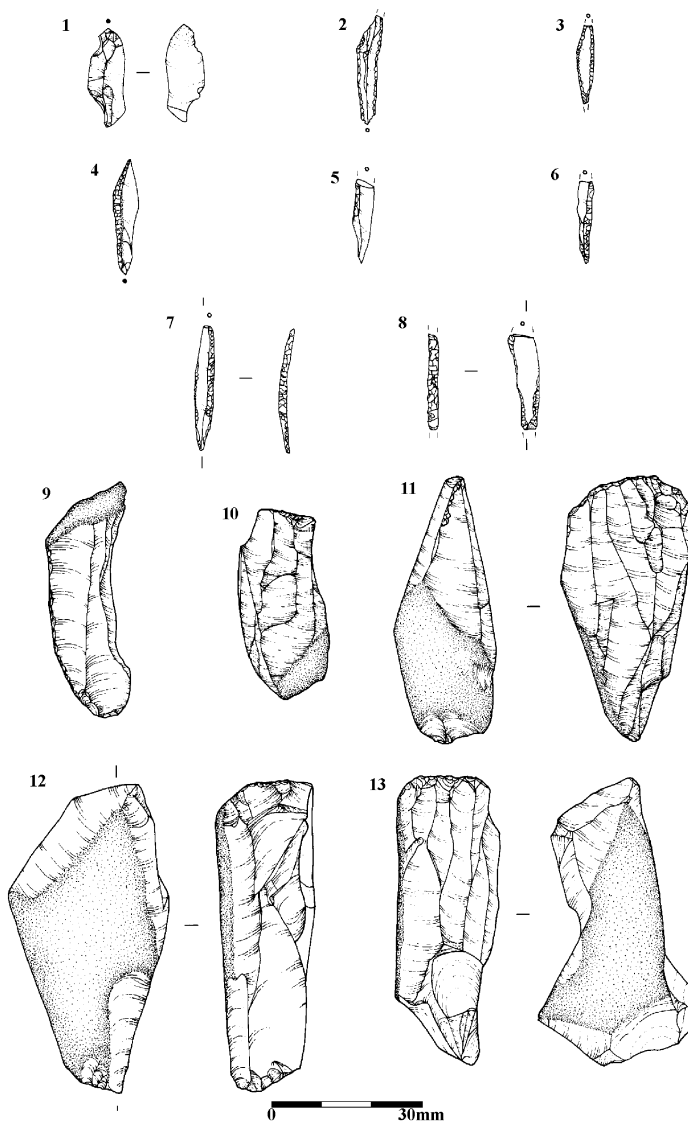


Fig. 15. The lithic material (1-13), scale 2:3.

1 Microburin, slight patination, unstratified. 2 Scalene triangle (239). 3 Sauveterrian point, slight patina (103). 4 Scalene triangle, slight patina (103). 5 Microlith, straight-backed fragment (103). 6 Microlith, straight-backed fragment with ancillary retouch (103). 7 Microlithic, straight-backed, on anvil backing (103). 8 Microlithic, straight-backed fragment with ancillary retouch (249). 9 Retouched blade, white patina (237).

10 Bladelet core, single platform, slight patina (103). 11 Bladelet core, opposed platforms, sf 119, unstratified. 12 Bladelet core, opposed platforms (117). 13 Blade/bladelet core, single platform (117).

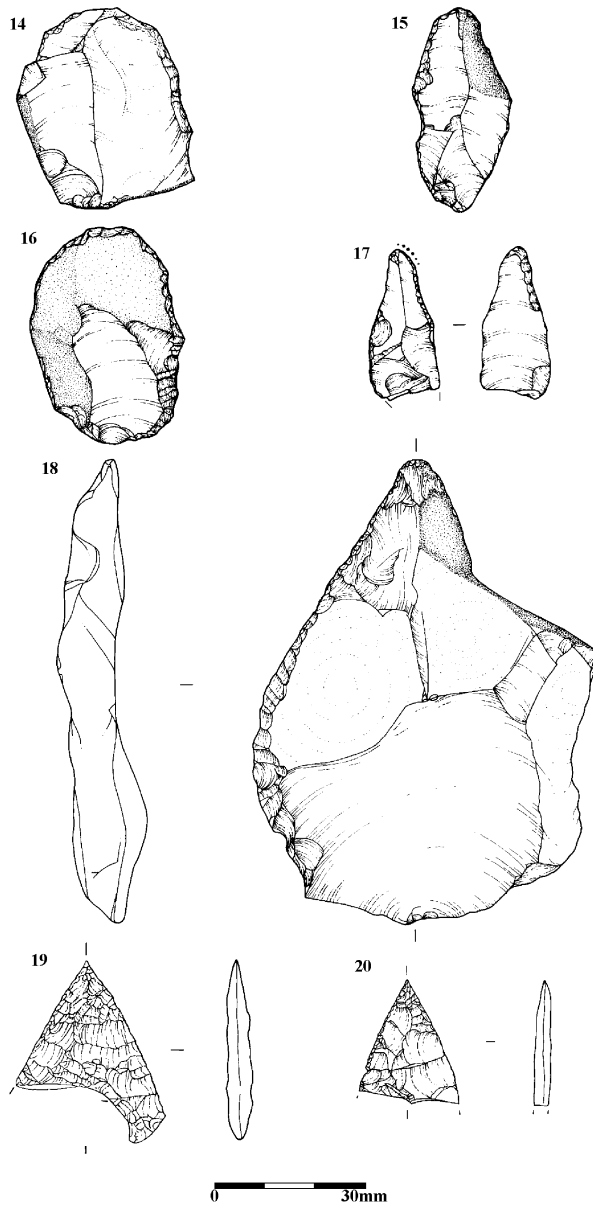


Fig. 16. The lithic material (14–20), scale 2:3.

- 14 Scraper, straight-edged on natural potlid (103). 15 Retouched flake/knife (103). 16 Scraper (103). 17 Awl (103). 18 Scraper, Wolds flint (101). NB the retouch is shallow so may have functioned as a knife. 19 Barbed and tanged arrowhead, fancy type, sf 960 (314). Missing barb and tang but probably Conygar Hill Type 1 (Green 1980). 20 Arrowhead tip, sf 963 (314). The retouch is very fine, good quality and straight, so probably a fancy barbed and tanged type.

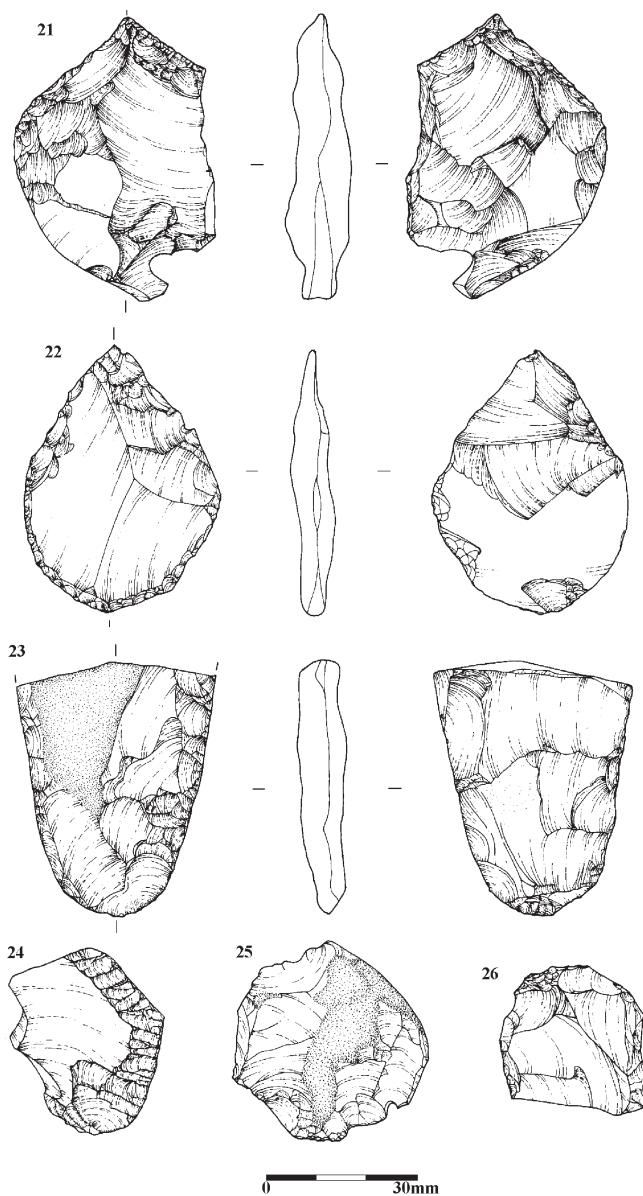


Fig. 17. The lithic material (21–26), scale 2:3.

21 Bifacially retouched flake, fine black flint (165). 22 Projectile point made from re-used end scraper, sf 185 (147). 23 Axe/chisel butt (57). 24 Scraper, NB inverse pressure retouch (165). Shallow angle of retouch suggests that it may have functioned also as a knife. 25 Flake core, single platform (57). 26 Flake core, single platform (57).

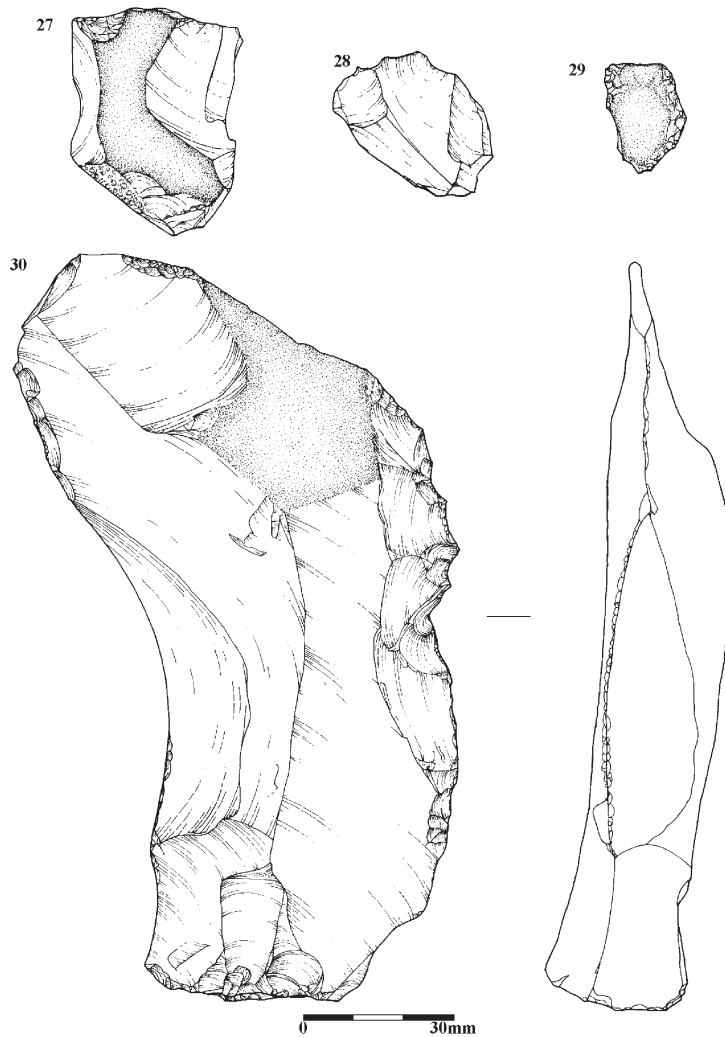


Fig. 18. The lithic material (27-30), scale 2:3.

- 27 Flake core, multiple platforms (57). 28 Scraper, straight-edged on a potlid (57).
 29 Thumbnail scraper (147). 30 Denticulated, retouched and bruised flake (57).

prehistoric domestic contexts showing flake technology based upon hard hammer percussion. The tools included a discoidal knife and a denticulated flake with additional retouch and bruising made from a Wolds flint (i.e. mottled grey-white opaque). There was no débitage of this material. Similarly, there was no débitage from the finishing of arrowheads nor axe suggesting that these tools were imported to the site. The suggested projectile point shows a differential surface condition, suggesting that it is a re-used piece.

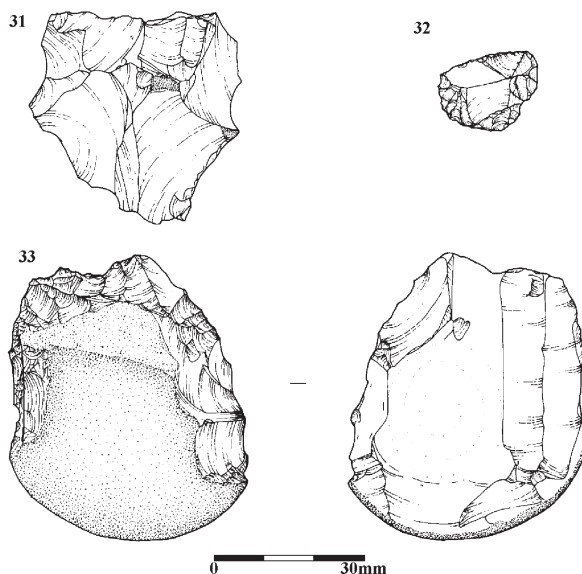


Fig. 19. The lithic material (31–33), scale 2:3.

31 Flake core, multiple platforms (241). 32 Thumbnail scraper (127). 33 Side scraper, re-used bladelet core (130).

Conclusion

The assemblage includes material from the Middle Mesolithic, Late Mesolithic and Early Bronze Age. The Middle Mesolithic material is to be considered further in the proposed analysis of the primary Middle Mesolithic assemblage. The Late Mesolithic material suggests some degree of re-occupation, and that the area may have been a ‘persistent place’ (Barton *et al.* 1995). Another ‘persistent place’ seems to have been at Eye Kettleby (Cooper 2011), also within the Wreake valley. It is feasible that the whole valley may have been conducive to Mesolithic occupation given that the landscape ecotones are marked and focussed within a narrow valley system.

The Early Bronze Age occupation is a rare glimpse of non-funerary activity for this period. The lithics suggest limited knapping activity and domestic occupation.

THE CHARRED PLANT REMAINS

Angela Monckton

Introduction

Extensive sampling was carried out for the recovery by wet-sieving of flints and organic remains, which may provide evidence of the environment, human activity and material for radiocarbon dating. Samples included systematic grid samples

taken from buried soils containing lithics in Area 2, spot samples of charcoal and bone seen during excavation, and environmental samples from all types of deposit for the recovery of charred plant remains and bones which can give evidence of diet, or activities on the site in the past. The recovery of charcoal or bones for radiocarbon dating was a priority.

Sampling

Environmental samples were taken from features with the potential to contain charred plant remains and from all types of deposit encountered to represent the areas of the site. Samples from 11 contexts were processed in 23 parts, each part being *c.*10 litres in size. These samples were then assessed for the presence of plant and animal remains and are the subject of this report below.

Methods

Processing: Samples were wet-sieved in a York tank using a 0.5mm mesh with flotation into a 0.3mm mesh sieve. The residues were air dried and the fraction over 4mm sorted for all finds which are included in the relevant sections of this report. The fractions of the residues below 4mm were all scanned for remains, but little was present. The flotation fractions (flots) were air dried and packed carefully in self-seal polythene bags.

Assessment: All the flots were examined and sorted using a $\times 10$ –30 stereo microscope, and any plant remains were removed to glass specimen tubes. The plant remains were identified by comparison with modern reference material and noted with an estimate of quantity and tabulated below (Table 1). The plant names follow Stace (1991).

The residues were scanned for any other remains, but nothing was seen except small charcoal fragments.

Results

Charcoal was recovered from seven of the samples and was identified by Graham Morgan, and some specimens selected (e.g. short-lived species where possible) and submitted for radiocarbon dating. Oak charcoal was present in pits [58], [100] and tree throw holes [157], [272] and [296]. Ash was present in [58] and [100], hazel in [296] and hawthorn in [157].

Charred plant remains were present in six of the 11 contexts sampled, although only in single numbers. Grains of barley (*Hordeum vulgare*) were present, but were covered in concreted sediment so could not be identified further. Wheat grains were recovered, some of which were of glume wheat, including some of emmer type (*Triticum dicoccum*), while others were of an indeterminate type. Other grains could only be identified as indeterminate cereals. No chaff fragments were recovered to confirm the identifications. A few charred seeds were recovered of smaller grasses

(Poaceae), possible dead-nettle family (Lamiaceae) and a fragment of a medium-sized legume, possibly an edible type.

Most of the samples contained some modern roots and many contained uncharred seeds mainly of goosefoots (*Chenopodium* sp.), probably as modern contamination because occasional fragments of earthworm egg cases were present. Occasional snail shells of *Vallonia* sp., an open country snail, and *Pupilla muscorum*, a snail of disturbed ground, were observed, but too few to provide any conclusions.

Area 1

Most of the samples were from pits and four of the contexts contained cereal remains, with most from sample 17 pit [121] context (120) of which barley grains were the most numerous with some glume wheat grains. Tree throw hole [157] sample 13 (158) contained a few wheat grains including emmer. Two contexts from Beaker pit [100] contained cereal remains; sample 14 (101) contained occasional grains of barley and emmer, while a single indeterminate cereal grain was recovered from sample 16 (216). Other samples were from a cremation pit [118] (108), and a gully [114] (117) only contained small charcoal fragments.

Area 2

Sample 639 from tree throw hole [296] (277) contained abundant charcoal and a single cereal grain fragment. Sample 744 (295) from a redeposited fill in a tree throw hole contained three grains of emmer.

Discussion

Cereal remains were recovered mainly from four contexts in three pits in Area 1, with emmer and barley both present with very few weed seeds but no chaff. The remains show the use of the cereals and possibly suggest waste from food preparation nearby, but there are too few remains to provide further evidence.

Other Bronze Age deposits with plant remains in Leicestershire and Rutland are few in number and plant remains were mostly sparse (below two items per litre of soil), as found associated with pits at Stamford Road, Oakham, Hallam Fields, Birstall, Rearsby (site 6), and from ditches at Humberstone (Monckton 2011a). The remains were probably from a scatter of food preparation waste burnt in hearths and dumped or accumulated in features. Early cereal evidence has been found from Late Neolithic pits at Eye Kettleby near Melton Mowbray, where wheat and barley were present with hazel nutshell (Monckton and Gale 2011), and Castle Donington, where cereals with hazel nutshell and numerous crab apples were found (Monckton, 2004, 156). Emmer and barley were also found with Early to Middle Bronze Age cremations at Eye Kettleby (Monckton 2011b). At Lockington emmer was found in Early Bronze Age deposits (Monckton 2000), while at Ridlington a round-house post-hole contained abundant barley grains dated to the Middle Bronze Age interpreted as evidence of stored grain (Monckton 2005).

RADIOCARBON DATING

Wayne Jarvis, Matthew Beamish, Göran Possnert and Ingela Sundström

Three samples were submitted for dating by Accelerator Mass Spectrometry (AMS) at the Angström Laboratory, Tandem Laboratory, Uppsala Universitet, Sweden. All the samples were single entity samples (Ashmore 1999): one sample was of cremated human bone, and two samples were selected on the basis of being short-lived charcoal.

Objectives

The samples were selected with the objectives of providing a *terminus post quem* for the Beaker pottery deposit in Pit [100], to date the cremation burial [Pit 118] and establish if the burial could have been contemporary with the Beaker period activity, and to establish if the charcoal and stone deposit recorded in tree throw hole [157] was contemporary with the Beaker period activity.

The cremated bone was a primary context, and the date of this material reflected the period when the individual represented lived. Neither Beaker pit context (216) nor tree-throw hole context (158) were primary deposits, and the charred material in both contexts could have been derived from other sources before deposition. These determinations could therefore represent only *terminus post quos* for the deposits in which they were found. The age of material found in the infilling of a tree-throw hole is fraught with potential problems, as the processes by which these features become filled is complex and may include evidence of activity preceding, contemporary with, and post-dating the fall of a tree.

The results are given in Table 1, and are quoted in accordance with the international standard known as the Trondheim convention (Stuiver and Kra 1986). They are conventional radiocarbon ages following Stuiver and Polach (1977). All have been calculated using the calibration curve of Reimer *et al.* (2009) and the computer program OxCal (v4.1.7) (Bronk Ramsey 1995; 1998; 2001; 2009). They are quoted in the form recommended by Mook (1986), with the end points rounded outward to 10 years on the basis of the error terms.

The ranges quoted in plain type in Table 1 have been calculated according to the maximum intercept method (Stuiver and Reimer 1986).

The three measurements are statistically consistent ($T'=1.6$; $v=2$; $T'(5\%)=6.0$) and could therefore be of the same actual age.

THE CREMATION

Harriet Anne Jacklin

The analysis of the cremation included the assessment of age, sex and pathology. Cranial and post-cranial metrics, non-metric traits and stature were not recorded due to the fragmentation of the skeletal material. All cremated material was processed and divided into fragment sizes of 2–5mm, 5–10mm and 10+mm to aid analysis, after McKinley and Roberts (1993).

The cremated remains weighed 598g and there was no duplication of skeletal parts. The surviving cremated bone represents one individual aged approximately

Lab No.	Context	Cut	Sample No.	Feature Type/ Material	Radiocarbon age BP	$\delta^{13}\text{C}$	Calibrated Date Range (95% confidence)
Ua- 41782	108	118	5	Cremation pit/ burnt human bone	3,680 ± 37	-23	2200–1940 cal BC
Ua- 41783	158	157	13	Tree throw hole (Area 1)/ Hawthorn charcoal	3,729 ± 30	-26.6	2210–2030 cal BC
Ua- 41784	216 (=217)	100	16	Beaker pit/Ash charcoal	3,740 ± 32	-25.8	2280–2030 cal BC

Table 1

15+ years. A precise estimate is not possible due to the lack of age indicators. An estimation of sex could not be attempted due to the lack of viable indicators. No pathology or age-related changes were found. The cremated material reached a temperature of >c.600°C (full oxidisation).

DISCUSSION

The excavation has revealed evidence of prehistoric activity from the Mesolithic, Late Neolithic–Early Bronze Age and Iron Age periods. The earlier Mesolithic material is to be considered further in the analysis of the primary assemblage in Area 2 (Cooper and Jarvis forthcoming); however, concentrated assemblages of Middle and Late Mesolithic lithics were found redeposited within tree throw holes in Areas 2 and 3. The Late Mesolithic material perhaps suggests re-occupation and that the area may have been a ‘persistent place’ (Barton *et al.* 1995). The Wreake valley may have been conducive to Mesolithic occupation and another re-occupied area may have been at Eye Kettleby (Cooper 2011). The tree throw holes indicate the former presence of woodland, but tree collapse could have occurred either naturally or by human agency, so their presence does not provide evidence of deliberate forest clearance, without any other indicators (Beamish 2009). Soil instability and erosion as indicated by the colluviated deposits on site would have occurred after forest clearance, whether the land was ploughed or not. Arable activity would further exacerbate these effects and is perhaps indicated on site by a low density scatter of cereal remains from the Bronze Age features.

Later, a long sequence of ploughing is indicated, with probable Iron Age, Roman and medieval activity, and with further colluviation occurring. Long term, this would cause erosion of the ground on the hill, and it is probable that any features to the west of the colluviated area (and particularly on the crest of the hill) would have been truncated; it is this area of site that is now devoid of archaeological features. Only downslope to the south and west do features survive, but it cannot be assumed, however, that features were originally more widespread across the site – it may simply be that the south-facing slope in the west of the site was a preferred area for activity in the ‘Beaker period’. It is here that the pits containing the significant Beaker pottery and worked flint assemblages were located: [58] and

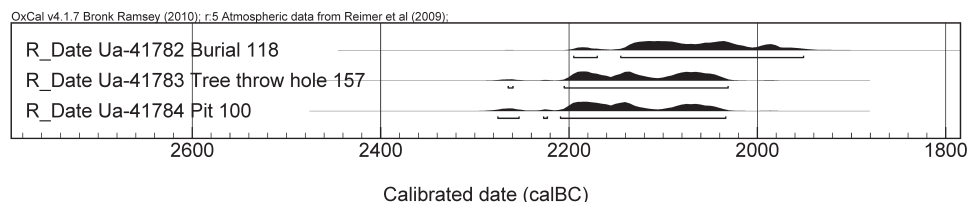


Fig. 20. Probability distributions of the radiocarbon dates from cremation, pit and tree hole deposits.

[100]. The Beaker pottery assemblage is the largest by far discovered in the county. An ephemeral post-hole structure is situated close to the larger of the Beaker pits and could also potentially be of this date. In the east of the site an east-west aligned gully, and a cobble-filled pit, may also be of this date. Iron Age activity is recorded in the vicinity, however, and a pit contained pottery of this date in sufficient quantity to indicate nearby domestic activity, perhaps just beyond the site edge to the east. Other Iron Age pottery was recovered from the colluvia in this area and occasional finds from features elsewhere on site add to this later prehistoric evidence. These features include a thin scatter of pits, and an east-west gully in the west of the site may also be of Iron Age date.

Whilst the Beaker pits may have had some immediately ‘practical’ or secular function – pit [58] being deep enough to have functioned as a water pit, for example – there was no evidence for any original purpose for either of them. However, their finds assemblages – with fine worked flint artefacts, and deposits of only partial Beaker vessels – has parallels on other sites and suggest a deliberate structured deposit. At the nearby Eye Kettleby site (Finn 2011), two pits were excavated that produced worked flint of Late Neolithic date. These were much larger pits in plan than those at Asfordby (up to *c.*4m across), although they were comparatively shallow being 0.63–0.78m deep. Their flat bottoms allowed the director to suggest that they *may* have originally held crouched burials, with the lack of surviving bone being due to the soil acidity. A cremation pit containing sherds of Early Bronze Age Food Vessel at the Eye Kettleby site, measuring 0.35m across and 0.15m deep (NB smaller in plan but a similar depth to the Asfordby cremation pit), was dated to 2140–1940 cal BC (95 per cent; OxA-9712 3,680 ± 38BP; OxA-9713 3,700 ± 45BP) (Finn 2011, 37–8), broadly contemporary with the Asfordby activity. At a site at Ridlington, Rutland, 25 sherds of Beaker pottery, most likely representing four different beakers, were recovered (Beamish 2005, 18). These sherds all came from a single feature, a shallow and irregular pit some 1.65m across and just 0.12m deep, probably indicating occupation rather than a Beaker burial context. At Lockington, two vessels, both probably Beakers, had been placed in a pit in an incomplete state. These were found in association with two gold armlets and a copper dagger in an organic scabbard (Hughes 2000). These artefacts were deposited in a small pit 0.7m × 0.5m across and just 0.15m deep, and with no funerary associations, although several hundred years later the area was reused as a site for a barrow mound which sealed a thin spread of cremated bone. Other Beaker vessels are more commonly and convincingly associated with funerary deposits; for

example, in the county there are sites at Cossington, Knipton, Noseley, Glaston and Smeeton Westerby (Hughes 2000, 98; Marsden 2005, 18). At nearby Cossington the occurrence of two sherds of Beaker of probable long-necked forms was in a burial context and represented the earliest cremation activity on site (Thomas 2008). The Cossington cremation was probably deposited in an organic container, within a pit measuring 1.1m × 0.75m and 1m in depth. The radiocarbon date for the cremation dated to 2140–1930 cal BC (SUERC-11277; 3,660 ± 35BP) would fit in well with a long-necked Beaker context (Allen 2008b, 28), and also agree with the dates from the current site. The Asfordby pits contained a small amount (a ‘token’ deposit?) of burnt bone, and the dating evidence indicates these features could be contemporary with the nearby cremation pit [118]. The nearby Knipton Beaker context was recorded as a ‘pit-burial’ and produced a fine geometric Beaker with a decorated bronze armlet (Clark 1970, Hughes 2000). Close to both this site and Asfordby, a rusticated Beaker was recovered during ironstone extraction at Harston (*ibid.*). It may be significant that there seems to be a concentration of Beakers in the north-east of the county.

Parallels to the Asfordby assemblage are two pits encountered on the Biddenham Loop excavations, Bedfordshire (Luke 2008; pits L23 and L206). These were sub-circular in plan and c.0.5m deep, and both contained pottery sherds from several Beaker vessels along with worked flint, charred plant remains and animal bone. Pit L23 contained sherds from at least four different vessels, all more or less thin-walled and unlikely to have had a domestic function (Allen 2008a). The vessels had been broken in antiquity and only token sherd numbers were deposited. Although they were all finely decorated, one example (P14) had fingernail decoration comparable to material found on ‘domestic’ sites. The other pit, L206, had two finely decorated partially complete Beaker vessels, one being placed at the base of the pit, the other also broken in antiquity and scattered through the pit fill. Along with these fine vessels were parts of three other Beaker vessels, six non-Beaker sherds, a large quantity of struck flint and a rich faunal assemblage. This is clearly similar to the Asfordby assemblages, where at least one partially complete vessel (Vessel 1, pit [100], Fig. 11) was deliberately placed, and the pits contained a series of incomplete vessels including fine geometric Beaker sherds. Whilst the latter material is typically found on high-status sites and particularly in direct association with burials (Allen 2008a), the above-mentioned examples and the Asfordby material indicate that this is not always the case, and that ‘fancy’ Beakers (complete or not) are also found deliberately deposited with more ‘everyday’ vessels in a structured way. The finer vessels may have imbued the less obviously high-status material with a special significance, with an act of deposition being carried out as part of important site ceremonies. The presence of just one or two sherds from other vessels is also important. The suggestion that these sherds were treasured heirlooms is also relevant, as they are often abraded and clearly of some age (Woodward 2000, 58). Woodward has noted that pottery vessels of this date are more ‘concerned with personal identity than with community activities at the household, settlement or regional level’ (*ibid.*, 58). The bringing together of personal heirlooms, perhaps from separate families or groups, into one context of deposition had a ceremonial significance, perhaps maintaining some individual identity whilst also strengthening

cross-group ties. Clearly future work will add to this corpus, but it is intriguing that the Beaker phenomenon cannot just be divided between obviously funerary or domestic contexts.

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