

Chapter 9: Hill Farm Artefacts

PREHISTORIC POTTERY

by Emily Edwards

Introduction

A total of 1785 sherds (13,768 g) was recovered from 224 contexts. The bulk of the pottery belongs to the middle Iron Age, although smaller amounts of material dating to the early Neolithic, the middle and late Bronze Age and the early Iron Age were also recovered (Table 9.1). Condition was variable, reflecting the fact that much of the earlier pottery was redeposited within middle Iron Age features. A selection of illustrated pottery from Castle Hill Environs (see Chapter 6) and Hill Farm can be found in Figures 6.1 to 6.6; the accompanying catalogue is given in Table 6.12.

Methodology

The pottery was recorded using the system recommended by the PCRG (1997). All rim diameters, diagnostic sherd forms, vessel forms, surface treatments, decoration, firing, use wear and refitting sherds were recorded, along with the wall thickness of identified vessels. A minimum vessel count is given, where a vessel is identified by rim or any other decorated sherd which can reasonably be said to represent a vessel.

Fabrics were examined using a binocular microscope (x20 magnification). The character of each fabric is indicated by an alphanumeric code. Letters were used to indicate principal inclusions (A: sand; B: solid glauconitic sandstone; C: calcareous inclusions (not shell); D: voids; F: flint; G: grog; O: organic inclusions; P: ferruginous pellets; M: mica; Q: quartzite; S: shell). Numerical codes (Morris 2004, 60) were used to indicate size, frequency and level of sorting of inclusions (1: well-sorted temper or primary inclusion, >2 mm with any density; 2: intermediate, moderately sorted temper, <3-4 mm with <common amount; 3: coarse, poorly sorted, usually 5 mm or more and at least a common amount; 4: fine to intermediate; 5: intermediate to coarse).

Fabrics

The site is located on Greensand, overlying Gault Clay. The Wittenham Clumps, immediately to the north east, sit on Fourth Terrace gravels, lower chalk and Glauconitic Marl (thin clay bands). The wealth of resources from which potting materials could be procured is reflected in the number of fabric types used to manufacture the pottery and in the inclusion types present in the potting clays. A variation of fabrics (50) based on 17 general fabric groups were used to manufacture the pottery forming the assemblage recovered from Hill Farm, the majority of which contained sand (Table 9.2).

Procurement of resources: clays

The pottery from Hill Farm was made from a similar range of fabrics as that from Castle Hill and the 2004 excavations (Tables 9.3 and 9.4). Much contained small pebbles, ferruginous pellets and other detritus consistent with a gravel clay source. It is plausible that the clays within the gravels on the hilltops were utilised for the manufacture of much of the pottery from the assemblage, as many of the fabrics in many cases contained a very heterogeneous mix of fine and coarse inclusions.

The major difference between these sites relates to the larger quantities of middle Iron Age fine ware found at Hill Farm (71.5 %); this was manufactured from a clean clay containing moderate finely sorted sand. These fine fabrics probably derived from the local Gault, which consists of a compact, grey-brown silty clay, often containing lumps of fine grained sandstone.

A small proportion of the assemblage was represented by sherds manufactured from a calcareous clay which may derive from the Chalk Marl deposits. A fourth source of clay (a coarse shelly clay) appeared to be used exclusively for the manufacture of T-rim jars. This could be derived from river bed clays, the parent source of which are Jurassic.

Procurement of resources: inclusions

The fabrics containing lumps of fine-grained sandstone are characteristic of the locality and derive from the Upper Greensand. It is very likely that the quartzite fabrics were manufactured from crushed and added quartzite Terrace Gravel pebbles, but it is not necessarily the case that these all derived from local sources, as quartzite fabrics are ubiquitous at late Bronze Age sites in the Upper Thames Valley. The flint-tempered sherds may have been imported, as although flints have been noticed in the local gravel, they are not common. The sands (both quartzitic and glauconitic) are present within the local geology and may either be naturally occurring or added.

Forms

Table 9.5 provides a breakdown by form of the assemblage, excluding Neolithic vessels, which are discussed separately below. Although the mediocre condition of the assemblage allowed only 59 % of the 97 vessels to be allocated form types, the identified forms were largely of middle Iron Age type.

Correlation of forms with fabric shows that only two vessels were manufactured from coarse fabrics, consisting of one globular jar and one barrel-shaped jar. Globular jars and bowls were typically manufactured from fine sand fabrics, while many of the barrel-shaped jars were manufactured from an intermediate sand and calcareous fabric. The angular late Bronze Age and early Iron Age forms were also manufactured from various fine sand fabrics (Table 9.6).

Surface treatment

One late Bronze Age angular bowl sherd was roughly smoothed. The early Iron Age forms included one burnished furrowed bowl sherd and two burnished early All

Cannings Cross sherds. The B2 jars, which represented 30 % of the vessel count, were largely either roughly smoothed or burnished. The B3 barrel shaped jars, manufactured from the sand and calcareous fabrics, were generally roughly smoothed whilst the majority of the D1 bowls were burnished.

Table 9.7 quantifies surface treatment within the assemblage, excluding those sherds attributed a type form. The sherds below include positively dated middle Iron Age sherds showing no surface treatment (46 sherds), smoothed sherds (5 sherds), roughly smoothed (92 sherds) and burnished sherd (181 sherds). A large majority of the remaining sherds with surface treatments belonged to the general 'early or middle Iron Age' phase.

Decoration

A total of 14 vessels were decorated (Table 9.8). These included a finger-impressed early Neolithic bowl, a possible middle Neolithic bowl decorated with a whipped cord impression, a middle Bronze Age vessel with an applied cordon, a late Bronze Age/early Iron Age vessel decorated with grooved lines, an early Iron Age vessel with a grooved design and an early or middle Iron Age sherd decorated with tool impressions. The remainder were middle Iron Age D1 bowls, decorated with grooved designs or with dots.

Evidence for vessel function

Evidence of use was noted on 25 sherds, 4 of which were middle Iron Age, 3 early Iron Age and 18 either early or middle Iron Age. Most of these sherds were covered with charred residue, although one sherd from pit 53 was covered with a calcareous deposit, with charred residue underneath.

Discussion of ceramics by phase

Early Neolithic

A total of 78 (293 g) sherds of early Neolithic 'plain bowl' pottery were recovered, 76 of them from early Neolithic pit 135 (contexts 134 and 179). The remaining two sherds were residual finds from ditch 100 (context 232). A minimum of five vessels are represented. This includes the rim and flared neck of a large (300 mm rim diameter) 'baggy' or carinated bowl with a thickened rim, one slightly thickened rim decorated with incised lines, one small squared rim, two simple rounded and upright rims and one simple rounded and flared rim. Fabrics were typical of pottery of this date, including fine to medium flint and sand, quartzite and sand. A radiocarbon determination of 3770-3630 cal BC (Poz-14321: 4890 ± 40BP) was obtained on charcoal from layer 179. The pottery from this pit is comparable to the assemblage from the Abingdon causewayed enclosure (Avery 1982).

Middle Neolithic

One residual untempered sherd (3 g) from Pit 742 was decorated with a single whipped cord impression, and may be a fragment of middle Neolithic Peterborough Ware.

Middle Bronze Age

A total of 20 sherds (247 g) of middle Bronze Age 'bucket urn' type pottery was recovered as residual material from seven later features (ditches 85, 88, 109 and 228; pits 88, 149 and 882). The assemblage consisted of thick, densely flint-tempered body sherds. All were plain, with the exception of one cordoned sherd.

Late Bronze Age

A total of 15 late Bronze Age sherds (84 g) were recovered as residual material from later features in the Visitors Car Park area. The group consisted largely of plain body sherds, with no vessel forms recognisable. The fabrics included sand, flint and some quartzite and were differentiated from the middle Bronze Age sherds through their lesser wall thickness and less dense tempering.

Early Iron Age

A total of 44 diagnostically early Iron Age sherds (371 g) were recovered, mostly from the Offices area. None of these were decorated, and there were only three vessels of recognisable form, comprising one B1 slack-shouldered jar, one C0 vessel and one C2A bowl. One sherd had a red coating. Other sherds were dated on the basis of diagnostic fabrics such as coarse shell.

Middle Iron Age

A total of 416 sherds (5773 g) of middle Iron Age pottery was recovered, mostly from contemporary deposits. The majority came from the Visitors Car Park area, but there were also significant amounts from the Offices and the drainage trenches. Given the overall chronological profile of the Hill Farm assemblage, it seems likely that most of the material dated 'early or middle Iron Age' (not discussed further) in fact also belongs to this period. The middle Iron Age pottery was dominated by sandy fabrics. Forms largely comprised B2 and B3 jars and D1 bowls.

The two largest groups of middle Iron Age pottery were recovered from ditches 100 (117 sherds) and 70 (85 sherds) in the Visitors Car Park area. Identified forms from the former included B2 jars and D1 bowls, while the latter contained B2 and B3 jars only. Two possible special deposits were found in the Offices area, comprising virtually complete jars from ring-gullies 628 (Figure 6.4, 78) and 12066 (Fig. 6.4, 79).

As discussed above, the B2 jars and D1 bowls can be finer vessels whilst the B3 jars are relatively more coarse. This could be a chronological difference rather

than one of status, however, as the rims of many of the vessels from ditch group 100 were slightly expanded upright rims, in contrast to the simple everted rims from many of the vessels from ditch group 70.

Decoration on D1 bowls included grooves beneath rims and on bellies (Figure 6.5, 83, 86 and 88); filled horizontal banding (Figure 6.5, 84); geometric designs including circular impressions (Figure 6.5, 85); and geometric design comprising grooves and impressions (Figure 6.6, 92). Similar decoration can be seen at contemporary sites elsewhere in the region at Blewburton (Collins 1947, fig. 13.1; Collins and Collins 1959, fig. 6.17), Abingdon Vineyard (Tim Allen pers. comm.), Yarnton (Hey and Timby forthcoming) and

LATE IRON AGE AND ROMAN POTTERY

by Paul Booth

Introduction

The 2004-5 excavation at Hill Farm produced only 11 sherds (114 g) of late Iron Age and Roman pottery. The pottery was recorded using the standard codes set out in the OA system for material of this date, with each context group divided in relation to fabric and form types and other characteristics as appropriate. Quantification was by sherd count and weight and rim equivalents (REs) were used to quantify vessel types. The pottery was in moderate condition - surfaces were relatively well-preserved but the material was fairly well-fragmented, with an average sherd weight of 10.4 g.

The fabrics identified are listed and quantified below with summary descriptions including cross-reference to the national Roman fabric reference collection codes (Tomber and Dore 1998) where appropriate in bold (Table 9.9).

The assemblage derived from 6 separate context groups (1, 2, 21, 23, 567 and 801), not all of which were well-stratified. The largest group was from context 21, which produced 4 sherds giving a probable *terminus post quem* of the early to mid 2nd century. With the exception of a single sherd of Oxfordshire colour-coated ware from context 1 (of Young (1977) type C77, dated AD 340-400), all the material could have been of 1st-2nd century date. Apart from the tiny fragment of samian ware all the sherds were probably from local or fairly local sources, including the Oxford industry. The assemblage is unremarkable, although potentially of value for dating purposes.

PREHISTORIC FIRED CLAY

by Cynthia Poole

Introduction

Fired clay was recovered from the excavations at Castle Hill in 2003, from Hill Farm in 2005 and from Trenches 13-15 and 19 in between in 2004. All areas produced relatively small quantities amounting in total to approximately 400 fragments weighing 7.5 kg. Although the material is intrinsically undatable, the overall character of the assemblages is compatible with comparable Iron Age material from other

hillfort sites such as Danebury, Hampshire. The assemblages from each site have been recorded onto separate database tables. Material was visually examined, diameters of wattle impressions were measured by comparison to a standard circles template and fabrics were examined using a light-incident microscope at magnifications of x25 to x40. The use of the circles template is unlikely to be entirely accurate, as this will partly depend on how much of the impression is preserved. However it provides a useful guide to the broad size ranges of wattles.

Fabrics

The range of fabrics was limited and the same main varieties were used in all the assemblages.

Fabric A: Buff, light brown, grey, rarely red. Fine silty micaceous clay with rare fine quartz sand.

A1: a variant of A, which also contains small grits of black sandstone c. 1 mm.

A2: a variant of A mixed with high density of chaff temper.

Fabric B:

B1: Grey. Sandy clay: frequent poorly sorted medium-coarse quartz sand (rounded - angular) up to 2 mm.

B2: Fine sandy clay: low density of fine quartz sand.

Fabric C: White, cream, grey, black. Calcareous clay matrix containing chalk grits up to 20 mm, flint and marcasite c. 6 mm.

The fired clay is likely to have utilised readily available clay sources. Fabric C was possibly made from the glauconitic marl, whilst Gault clay was readily sourced in the vicinity and may have been the base for fabric A.

Hill Farm

The assemblage from Hill Farm comprised a total of 242 fragments weighing 4611 g (Table 9.10). Fabrics A, B and C had been used, of which fabric C was the most common, being used for all the larger groups of diagnostic material.

Diagnostic forms were limited to two types together with a small quantity of unidentified (amorphous) and utilised (one surface) fragments. Oven wall was the dominant form and was characterised by the presence of interwoven wattle impressions on one side and a smoothed surface, sometimes with grooves and depressions from moulding. The largest block had a distinctly concave surface with a curvature suggesting an internal diameter of c. 0.8 m and partly fired grey. One fragment with a rounded curving rim may have been part of the stokehole arch or a vent. Wall thickness ranged from 20 to 75 mm. A total of 61 roundwood wattles were identified of which 4 were positively identified as vertical sails, the remainder being the interwoven horizontal rods. The rods have a typical size range of 8-20 mm for the rods and 20-35 mm for the sails (Fig. 9.1). Two wattles measuring 27 and 29 mm grouped with the rods, could not be positively identified as sails, but from their size are likely to be vertical sails.

The second diagnostic type was in the form of a small irregular cake. Two types were found: one formed a thin flat plate with parallel surfaces and measured over 70 mm long by 15 mm thick, whilst the other was in the form of a suboval cake, with a lentoidal cross-section and the surface covered in organic impressions. The two examples of this were almost identical in size measuring 43 mm by 32 mm or more by

15 mm thick. Their function is uncertain, but most of the pieces were found in association with oven wall and they are similar in form to spacers used in pottery kilns.

Trenches 13, 14, 15 and 19

The assemblage comprised a total of 169 fragments weighing 1908 g (Table 9.11). Fabrics A, B and C had been used, of which fabric A was the most common, being used for a wide range of forms and all the larger groups of diagnostic material. The fired clay was found in four separate trenches and unsurprisingly the largest groups were associated with early and middle Iron Age occupation and structures in Trenches 15 and 19.

Oven Structure

The structural elements represented generally have a smooth surface sometimes with finger grooves from moulding and smoothing the clay surface. Some pieces may be lining for a sub-surface base or floor, but a small number of pieces with interwoven wattles on the reverse are likely to be part of upper oven wall supported on a light framework of withies. The wattle impressions indicate a range of sizes from small stems of 6 mm up to 19 mm diameter (Fig. 9.2).

Portable Oven Furniture

Several pieces of oven plates or discs were found in Trenches 15 and 19 representing a variety of forms. Two pieces appear to derive from a typical Iron Age type of perforated oven plate with frequent organic impressions on the surfaces and pierced vertically by a perforation 27 mm in diameter. Such plates could either be built integrally with the oven structure or be formed as a portable item. A fragment of rectangular plate 27 mm thick and pieces of circular discs, one with a plain rounded rim and one with a shallow raised flange, were also found. The large perforated oven plates were well known from Iron Age sites in southern England and appeared to have formed a common structural element of oven type structures. The discs were probably smaller and thinner than the plates and a typical element found on Iron Age sites in Oxfordshire and the east Midlands.

Several fragments of triangular oven bricks were identified by the perforations piercing the side surface at an angle. Another brick 84 mm wide with a perforation was tentatively identified as rectangular in form. However none of the fragments with the perforation showed the relationship to the outer surface and so it is possible that this was part of a very large triangular brick. Such objects whether triangular or rectangular in form were probably used as pedestals within ovens. A brick 33 mm thick appeared to be of Roman date from its general characteristics and similar to the 'fired clay blocks' identified from trenches 1-3 of the Castle Hill ceramic building material assemblage. These are sometimes referred as Belgic bricks and are also likely to have formed some sort of support or pedestal in ovens.

Two small irregular sub-oval cakes with lentoidal or wedge shaped cross section had been roughly moulded and had occasional organic impressions on the

surface. Both were of similar size; the complete one measured 56x46x23 mm. These objects are generally of a size that might be moulded in the palm of the hand. They are of uncertain function but were possibly used in ovens as some sort of spacer. Such objects have frequently been found in association with structural oven daub at Danebury hillfort and Danebury Environs sites in Hampshire (Cunliffe and Poole 1991, 149).

Furnace structure and furniture

Evidence of industrial activity was limited. From a ditch 15337 of Late Iron Age-Early Roman date came fragments of furnace wall or lining. The largest fragment has an undulating surface lightly vitrified and cindered, whilst other pieces have a very smooth flat surface without evidence of high temperatures and so possibly derived from areas of the structure where heat was less intense. The fabric contained coarse organic inclusions of chaff or chopped straw, incorporated as temper, which is not a common addition for furnace structure and may imply that these are fragments from a non-industrial structure, which was overfired accidentally.

An object from a Middle Iron Age storage pit 19154 took the form of a funnel with a narrow cylindrical opening at the base. It measured 00 mm in diameter widening to 00 mm and its length was in excess of 00 mm. The rim around the narrow opening at the base was heavily vitrified (?any slaggy deposits – check), which supports the common interpretation that these objects were bellows' guards. The nozzle of the tuyère would fit into the cylindrical tube of the base and the upper part would widen to shield the bellows from excessive heat. Similar objects have been found at Little Woodbury, Wiltshire (Brailsford 1949, 160, fig.4) and the upper parts only at Danebury, Hampshire (Poole 1984a, 406-7) and at Glastonbury, Somerset (Bulleid and Grey 1911, XLIX, D30).

Briquetage

Four small fragments of briquetage were found in Trench 15. All were body sherds probably from cylindrical vessels for transporting salt and made in the same chaff tempered fabric as found at Danebury, Hants (Poole 1984b, 426-9) and probably deriving from production sites on the coast of Hampshire or Dorset.

Spindle Whorls

Two fragmentary spindle whorls were identified. One was bi-conical in form measuring 35 mm in diameter by >25 mm high and was found in the Early Iron Age midden in trench 14. The second from a pit in Trench 15 was spherical with flattened ends and measured 50 mm in diameter by 25 mm high.

Castle Hill

The assemblage from Castle Hill comprised a total of 31 fragments weighing 166 g. The mean fragment weight for the assemblage is 5.35 g, which would suggest little diagnostic material would be present. The fired clay was found predominantly in the

fill pit 3006 of early Iron Age date and pit 3019 of middle Iron Age date, with small quantities from the late Bronze Age ditch 3017, a middle Iron Age grave (3116) and pit (3109), and a Roman gully (1000) and quarry pit (3067). At the assessment stage material was described variously as structural clay, daub or amorphous, apart from one object. Without the possibility of re-examination of this material it is only possible to say that it is likely to all be derived from oven or hearth structures and utilized the same fabrics as used in the other areas excavated.

The single object was a slingshot largely complete, but slightly damaged at one end, found in pit 3006. It was made in fabric A and fired. It was in the typical pointed ovoid form, but with noticeable flattened facets, rather than well-rounded. It measured c. 44 mm long by 26 mm by 27 mm wide and weighed 24 g. The size is comparable to slingshots from middle Iron Age contexts at Danebury Hampshire (Poole, 1991, 370-1) though the weight is somewhat lighter and comparable to those found at All Cannings Cross and the Meare and Glastonbury Lake villages (Bulleid and Gray 1911). It has been suggested, on account of the light weight, that the clay slingshots were used for hunting small game or birds rather than warfare. Another use may have been herding, where the intention was move animals, not injure them. How lethal a clay slingshot would be to different sized animals is not known.

Discussion

The fired clay from these sites forms a typical assemblage of Early to Middle Iron date. The majority of the material is structural clay derived from oven type structures, which probably include both surface and partly sub-surface features. Most of the structural material is well fired, but is not indicative of high temperature industrial activity except for the bellow's guard and some possible furnace or hearth lining, which may indicate metalworking. The majority of the structural fired clay is likely to derive from domestic structures for baking or cooking. It is unclear whether the material is from entirely domed structures such as bread ovens or more open-topped structures for cooking in pots, though either or both could be present. The portable items suggest that some at least derive from cooking hearths. The use of woven wattle supports for the superstructure of some ovens suggest these were substantial structures and this is supported by the blocks of oven wall from the Hill Farm excavation. They may indicate that some structures were communal rather than for a single household.

Small clay objects recovered were limited to two spindle whorls and briquetage fragments. The briquetage containers indicate salt was imported, probably from the Hampshire area of the south coast.

FLINT

by Kate Cramp and Hugo Lamdin-Whymark

Introduction

A total of 79 struck flints and a single piece (1 g) of burnt unworked flint were recovered during excavations at Hill Farm in 2004 and 2005 (Table 9.12). Over half

of the assemblage (42 pieces) came from a small pit near the western perimeter of the Visitors' Car Park. This flintwork was found together with a large assemblage of Plain Bowl pottery from the same feature, and is most probably contemporary. Several flints of probable Neolithic date were also found scattered, as residual finds, across a number of Iron Age features.

Methodology

The artefacts were catalogued according to broad debitage, core or tool type. Classification of retouched pieces followed standard morphological descriptions (e.g. Bamford 1985, 73-7; Healy 1988, 48-9; and Saville 1981, 7-11). Cores were classified according to platform and removal type; complete examples were individually weighed. Chips were defined as pieces whose broadest surface was less than 10 mm², including small flakes or fragments of flakes (Newcomer and Karlin 1987, 33). In order to avoid any sampling bias, a distinction was made in the database between chips that were excavated by hand and those that were recovered by sieving.

The general condition of the flintwork was noted, along with details of cortication and flint type. The general technological appearance of the flintwork was described, particularly where such information contributed to the dating of individual pieces and groups. Evidence of burning and breakage were recorded consistently. Burnt unworked flint was quantified by piece and by weight, with further details of raw material type and degree of calcination recorded where appropriate.

The assemblage was catalogued directly onto a Microsoft Access database, a copy of which will be deposited with the archive. If possible, a digital copy of the flint database will also be made available.

Quantification

A total of 79 struck flints and one piece (1 g) of burnt unworked flint were recovered during the excavations at Hill Farm in 2004 and 2005. This material came mostly from the Visitors' Car Park (60 pieces), although a small quantity was recovered from the Offices and Boiler House area (18 pieces). Excavation of drainage trenches in the same area yielded a single backed knife. The flint assemblage from the site is shown in Table 9.12.

Provenance

Flintwork was recovered from 34 contexts, including early Neolithic pit 135 (contexts 134 and 179) and a large number of Iron Age features. Excluding the concentration of flintwork from the early Neolithic pit, the assemblage formed a low density spread across the excavated areas, with no more than two flints recovered per context; the majority of contexts containing flint had only a single piece.

Condition

The condition of the flintwork is mixed and varies by context. The collection from pit 135 is in exceptionally fresh condition, while many of the residual flints from Iron Age features display post-depositional edge damage. None of the flint is corticated.

Raw material

With the exception of a single chert blade, all the artefacts in the assemblage have been manufactured from flint nodules. For the most part, these took the form of small pebbles with an abraded cortex and a brown, grey or yellow interior. Thermal fractures were occasionally noted, but in general the raw material was probably of a reasonable knapping quality. A likely source of this flint is the river gravels south of the Goring Gap; it is also possible that the small, abraded flint pebbles contained within the gravels capping Castle Hill were used for knapping and burning purposes.

The chert blade was recovered from the fill (782) of a middle Iron Age posthole (783) exposed during the Offices excavation. This piece is a distinctive, dark greenish-grey colour with a light white speckling, although the original colour of the flint may have been altered by post-knapping burning. The fine-grained, homogeneous composition of the chert suggests that it would have been of a good knapping quality. A small area of cortex indicates that the pebble comes from a derived source, perhaps the local river gravels. While the original source of the chert cannot be confirmed, chert nodules are occasionally found in the Upper Greensand.

The assemblage

Pit 135

Pit 135 contained a total of 42 struck flints and a single fragment (1 g) of burnt unworked flint (Table 9.13). Most of the flintwork was recovered from the primary deposit (179); only five flints, including two chips, were retrieved from the upper fill (134).

The flint assemblage mainly consists of unretouched flakes; a single blade is represented. The scars of previous blade removals are, however, present on the dorsal surface of several flakes, suggesting that blades may be under-represented in the collection. The flakes had been removed using both hard hammers (e.g. quartzite pebbles) and soft hammers (e.g. antler). A certain amount of care had been exercised in the reduction strategy, with numerous flakes exhibiting platform edge abrasion. The type of technology employed is consistent with the early Neolithic date for the pit provided by the presence of 81 sherds (305 g) of Plain Bowl pottery.

No cores were recovered from the pit and only three chips were present in the sieved residues. This suggests that knapping debris was not deposited in the pit. Moreover, a brief refitting exercise failed to identify any refits, while a visual inspection of flint type suggests that the flakes derive from several different nodules. The flints may therefore have been brought to this location as individual components of a toolkit.

The collection includes five retouched flints, which provide 12.8% of the total assemblage. The retouched group consists of three serrated flakes/blades (two with silica gloss) and two edge-retouched flakes. The serrated flakes may reflect plant

processing activities. Evidence of use in the form of micro-scarring was also noted on numerous unretouched edges.

Other contexts

A total of 37 struck flints were recovered from various Iron Age deposits across the excavation area. Many of these flints share the same general technological characteristics as the flintwork from pit 135 and may, therefore, be broadly contemporary.

The overall composition of the residual flint assemblage is also comparable to the collection from pit 135. The proportion of retouched tools is high at 17.6% and, with the exception of a single flake core, there is little evidence for on-site flint knapping. It is perhaps significant that, while serrated flakes dominate in the pit assemblage, a different range of tools is represented by the assemblage from the surrounding area. This group includes three scrapers, one notched flake and one backed knife fragment. Given the low numbers of artefacts, however, it cannot be confidently established that this discrepancy results from genuine differences in activity.

Discussion

The flint assemblage from Hill Farm provides an important insight into Neolithic activity in the Castle Hill environs. The majority of the flintwork was recovered from a contemporary early Neolithic feature, the first so far identified in the excavations. It is perhaps significant that a light background scatter of technologically similar material was also present in this area, a scatter that did not extend into the 2004 excavations. Hill Farm was, therefore, a focus for activity at some point during the Neolithic, but not necessarily for an extended period judging by the identification of only a single pit and the generally low-level of background scatter.

The backed knife fragment from the drainage trenches can be dated to the late Neolithic or early Bronze Age. Given the presence of middle and late Bronze Age pottery on site, it is also possible that some of the flintwork in the assemblage belongs to the later Bronze Age.

Chapter 9 Hill Farm finds

WORKED STONE FROM HILL FARM

by Fiona Roe

Introduction

A dozen stone artefacts came from the Hill Farm excavations and these are summarised in Table 9.14, with more detailed descriptions in the catalogue. The ranges of both artefacts and materials are for the most part comparable to those from the hillfort and the settlement around Castle Hill, showing a continuity of traditions

into the middle Iron Age. However, while saddle querns were made from the same local materials as before, a notable innovation was the use of imported Lodsworth stone for an Iron Age rotary quern. No whetstones were recorded. Only one object, a worn cobble thought ultimately to have been used as flooring material, came from an early Iron Age context, a pit. The other eleven objects came mainly from middle Iron Age pits or ditches, but also from a gully and a post hole. A small ball of marcasite was retrieved from the fill of a Roman ditch, but could be redeposited. Burnt stone amounted to 189 fragments and is summarised in Table 9.15, while further details can be found in the archive.

Ball

A piece of marcasite (178) is in the form of a naturally shaped ball some 24 mm in diameter and was recovered from the fill (176) of a Roman ditch (177). It is probably rather small for use with a flint blade as part of a strike-a-light kit and shows no evidence for such utilisation. It may simply have been collected as a plaything, having been found in the chalk, or perhaps in the local river gravels.

Hammerstone

The flint hammerstone (711) would, when complete, have been a good deal larger than the five examples from the settlement below Castle Hill. It is well battered and must have been used as a heavy duty hammerstone before breakage. It was then re-used as packing in posthole 713, part of a middle Iron Age post-built structure situated towards the northern edge of the Offices site.

Loomweight

A single loomweight fragment (98) came from the fill of middle Iron Age pit 97 and was made from local chalky greensand, the same variety of stone that was used for the loomweights from the settlement below Castle Hill (Chap 6). However at Hill Farm a change in loomweight style had taken place and this loomweight is of the variety usually referred to as triangular, while those from the settlement are of the variety known as pyramidal. Triangular loomweights are common on later Iron Age sites, but it is unusual for them to be made from stone, even from chalk which could be shaped easily enough. Instead fired clay was the preferred material. Triangular loomweights of fired clay were found in some number at Gravelly Guy, Stanton Harcourt, Oxfordshire (Barclay & Wait 2004, 377 & fig 8.12) while closer to the Wittenhams they are known from Wyndyke Furlong at Abingdon (Barclay 1999, 42) and from Appleford (Hinchcliffe & Thomas 1980, 26 & Fig 8,5).

Paving stone or smoothers

Three pieces of stone with worn surfaces may have been used or re-used as paving stones. Such utilised stone is not easy to interpret, because it may originally have been put to other purposes and only when broken been relegated to re-use as flooring material. Three such pieces from the settlement below Castle Hill consisted of worn chalky greensand (Chap 6) and a similar fragment (138) came from gully 174 at Hill Farm. A worn cobble of Lower Calcareous Grit (754) was found in pit 742 and a worn fragment of Corallian limestone (631) came from ditch 620).

Querns

Fragments from 5 querns were found at Hill Farm. Four pieces are from saddle querns and as at Castle Hill and the settlement below the hillfort, these are made from two local quern materials. However they are better preserved than the finds from the earlier seasons of work at the Wittenhams. Culham greensand seems to have been the preferred saddle quern material, as was also noted of the querns from the settlement below Castle Hill. Part of a saddle quern ((316); Fig 9.3.1) came from a pit (318) revealed during the Visitors' Car Park excavations. Another saddle quern (761), now in fragments, came from the lower fill of pit 769, while a large rubber ((760); Fig 9.3.2) which could have belonged with the lower stone, was found in the upper fill. This pit was within a ring gully in the south east corner of the Offices excavation. Lower Calcareous Grit is represented by part of a saddle quern (536) found in the fill of a ditch (535) that lay adjacent to the western boundary of the Staff Car Park site. There is no problem in finding parallels for the use of these two quern materials, since they have been found on virtually all Oxfordshire Iron Age sites, including a number of sites in and around Abingdon.

At some stage during the Iron Age occupation at Hill Farm, rotary querns began to come into use. Traces of this changeover are often of a fragmentary nature and the evidence from Hill Farm was no exception. Some 15 burnt fragments from both the upper and lower stones of a rotary quern ((68); Fig 9.4) came from a secondary deposit, one of a complex series of deposits within Iron Age pit (41) in the Visitors' Car Park. The pieces include three refitting rim fragments (Fig. 9.4), which give an approximate diameter of 320 mm and show the tooling work used to shape the quern. This quern was made from Lodsworth stone, a variety of the Lower Greensand which was brought to Little Wittenham from Sussex, from known quern quarries situated between Midhurst and Petworth. These quarries and their products have been described in some detail in a valuable paper by David Peacock (1987).

Rotary querns made from Lodsworth stone are found relatively frequently on Roman sites in Oxfordshire but there have been other instances of Lodsworth stone from Iron Age sites. There is a little evidence that the initial arrivals of goods from Sussex may have been in the form of saddle querns. At Gravelly Guy, Stanton Harcourt part of a re-used saddle quern of Lodsworth stone was found in the topmost layer of a middle Iron Age pit, while fragments of the same stone were also found in the topmost layers of two early Iron Age pits (Bradley *et al.* 2004, 368 & Fig 8.10). At Appleford a saddle quern which is now missing may also have been made from Lodsworth stone (the geological description is the same as for two Lodsworth rotary querns from Roman contexts here) (Hinchcliffe & Thomas 1980, 60 & Fig 24 No 5). At Abingdon Vineyard further finds from two middle Iron Age pits include a rotary quern lower stone (Allen, in prep). The proximity of the river Thames to all four of these sites could account for the distribution of this particular quern material.

The pit (41) that contained the Lodsworth rotary quern has been radiocarbon dated to the later part of the middle Iron Age, 200 BC to 1 AD at 95 % confidence (see Chapter 10). This date seems unlikely to relate to the first use of either a rotary quern or Lodsworth stone at the site. Although there are as yet no firm dates for the initial use of rotary querns in Oxfordshire, they do seem in general to have been in operation somewhat earlier than the time range of this date. For instance rotary querns were found at Fairfield Park, Stotfold, Bedfordshire, where the Iron Age settlement has been dated to around the 5th – 4th centuries BC (Webley *et al.* 2007, 89-90).

Spindlewhorl

A bun-shaped spindlewhorl ((38) SF 39) may have broken before the hole was completed. Like the examples from Castle Hill (Chap 3) and the settlement below the hillfort (Chap 6) it is made from the local chalky greensand.

Burnt stone

As with previous seasons, the largest part of the assemblage consists of burnt stone, amounting to 189 fragments, which are summarised in Table 9.15 and listed more fully in the archive. It is all of local origin, with a range of materials comparable to that of the burnt stone from the 2003 fieldwalking and the 2004 excavations.

WORKED BONE

by Rosemary Grant

A total of three worked bone objects were recovered from Iron Age contexts at Hill Farm, Little Wittenham. The assemblage comprises a toggle and two unidentified objects, all of which came from the Visitors' Car Park site.

The toggle (Fig. 9.5) was recovered from the fill (76) of a Middle Iron Age pit (94), and is very similar to one found at the excavations at Danebury (Sellwood 1984, 378-80, Figure 7.32, No. 3.57). It is cylindrical in shape with an ovoid section and is hollow through the centre. This example has a single perforation through one wall. Decoration consists of a single incised groove around each end. It is generally assumed that toggles were used as fasteners.

The first of the unidentified objects is a section of large mammal metapodial sawn at one end and shaped and smoothed along the length. It was recovered from the fill (69) of an Iron Age pit (41) containing burnt stone and charcoal. The second unidentified object is a section of sheep/goat metatarsal. The bone, which has been burnt, has been thinned in two places and is very highly polished. It is unclear whether this polishing took place before or after the episode of burning (Coles 1987, 145-50, Figures 3.61-2). The piece was recovered from a phase of deliberate infilling of redeposited chalk (147) within a Middle Iron Age pit (149) containing a fragment of human skull from a young adult male

Catalogue

1 Toggle (Fig. 9.5)

Cylindrical shape with ovoid section and hollow through centre, with a single perforation through one wall. Decoration consists of a single incised groove around each end. Middle Iron Age. Length = 32 mm. Visitors' Car Park. Pit 94 (context 76).

2 Unidentified object

Large mammal metapodial sawn at one end; shaped and polished along the length. Iron Age. Length = 109 mm. Visitors' Car Park. Pit 41 (context 69).

3 Unidentified object

Section of sheep/goat metatarsal. Burnt and highly polished, in uncertain sequence. Middle Iron Age. Length 35 mm. Visitors' Car Park. Pit 149 (context 147).

METALWORK

by Ian Scott

This site produced 18 pieces of metalwork, the majority of which came from contexts of middle Iron Age date. Among the finds from middle Iron Age features are a hobnail, which is probably Romano-British in date, from ring gully 174 (context 490), and a small, machine-rolled object of modern date from ring gully 175 (context 477). Both these pieces are very small and can be explained as intrusions.

Twelve pieces from context 68 (posthole 67) comprise fragments of copper alloy edge binding, rolled from thin sheet (Fig. 9.6, 1). The longest fragment is curved and measures 52 mm long; the next two longest both measure 32 mm long and are slightly curved. The remaining nine pieces all measure less than 14 mm in length. Unfortunately, there is little evidence to give a clue as to what these fragments bound. The longer fragments are slightly curved, and there are no nails or pins to secure the bindings; they may have been glued.

A piece of copper alloy strip rounded at one end and folded (Fig. 9.6, 2) was recovered from context 62 (posthole 61). Again, its function is uncertain. A roughly triangular block of iron came from ring ditch 700 (context 829). Perhaps the most interesting stratified object was the fragment of a small iron blade (Fig. 9.6, 3) from the secondary fill (144) of a middle Iron Age pit (recut 146). Whether this was a weapon or a tool is not clear. The blade fragment is slim, straight and double-edged. Most knives and tools of Iron Age and Romano-British date have blades with single cutting edges and of triangular cross-section. The Wittenham blade cannot be precisely paralleled.

Other finds from middle Iron Age contexts include two small irregular iron fragments and a small piece of iron plate with two possible rivets from posthole 337 (context 338), along with four irregular flat iron fragments from enclosure ditch 871 (context 890).

Apart from the stratified finds, the single most interesting piece is a fragment of a so-called 'Nauheim derivative' brooch (Fig. 9.6, 4) from a topsoil layer (context 2). This form of brooch, although found in pre-conquest contexts, becomes more common around the middle of the 1st century AD and continues in use until the Flavian period (Olivier 1988, 38; also Bayley and Butcher 2004, 147).

Catalogue of illustrated pieces (Fig. 9.6)

1. Edge binding

Twelve fragments. Formed from rolled thin sheet. There are no clear joins between the fragments. Some of the longer fragments are slightly curved. There is no evidence for pins or nails to secure the bindings, which may have been glued or simply by being pinched in. Copper alloy. Length = 52 mm, 32 mm (x 2), & under 14 mm (x 9). Visitors' Car Park. Middle Iron Age posthole 67 (context 68). Sfs 11-15.

2. Strip, rounded at each end and bent double

Pierced by a nail/rivet hole. Copper alloy. Length 22 mm. Middle Iron Age posthole 61 (context 62). Sf 10. Compared examples from Braughing (Olivier 1988, 36-8 & fig. 17, no. 3) and Baldock (Stead 1986, 109 & fig. 40, nos 15-17).

3 Blade fragment

With lenticular cross-section, and possibly a slight mid rib on one face. The blade is slightly asymmetrical in outline, with a rounded point. Function uncertain. Iron. Length = 84 mm. Visitors' Car Park. Middle Iron Age pit 146 (recut of pit 149; context 144). Sf 42.

4 Simple one-piece brooch

Or so-called 'Nauheim Derivative'. Originally it would have had a four-coil spring and internal chord and plain catch plate. Comprises broad upper portion of bow with zig-zag chasing down the centre. Catch plate and pin lost. Copper alloy. Length = 38mm. Staff Car Park. Unphased subsoil (context 2). Sf 2.

IRON SLAG AND OTHER DEBRIS

by Lynne Keys

Introduction

A very small quantity of slag (315 g) was recovered by hand during excavation. The slag was visually examined and categorised on the basis of morphology alone. No more detailed analysis was judged appropriate. Each slag type in each context was weighed but the smithing hearth bottom was weighed separately and measured to obtain its dimensions for statistical purposes. Additionally a magnet was run through the soil in bags to detect micro-slags such as hammerscale. Quantification details are given in Table 9.19.

Discussion

The smithing hearth bottom is the most characteristic bulk slag of smithing. It formed during smithing activity as a result of high temperature reactions between the iron, iron-scale and silica from either a clay furnace lining or the silica flux used by the smith. The iron silicate material from this reaction slag dripped down into the hearth base forming slag which, if not cleared out, developed into the smithing hearth bottom. One example came from middle Iron Age ditch 70 on the Visitors' Car Park, but on its own it is unlikely to be of much significance and may even be re-deposited.

Fuel ash slag is a very lightweight, highly porous, light coloured (grey-brown) residue produced by a high temperature reaction between alkaline fuel ash and siliceous material such as a clay lining or surface. It can be produced by any high temperature activity where these two constituents are present including domestic hearths, accidental fires, and even cremations (for further discussion on the subject the reader is referred to Bayley 1985, 41: and Henderson, Jannoway and Richards 1987a and 1987b). The fuel ash slag from this site is typical of that often found on Iron Age sites and probably represents the burning down of houses.