A Bronze Age settlement, Roman structures and a field system at Hassocks, West Sussex

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Oxford Archaeology undertook a programme of archaeological work on land west of Mackie Avenue, Hassocks, West Sussex. Archaeological remains consisting of ditches, pits and postholes indicative of a number of phases of activity dating to the Bronze Age and Roman periods were revealed during these excavations. Excavated features include the remains of three post-built roundhouses of Bronze Age date, which were associated with a series of pits and possible field boundaries. A Roman rectangular structure was uncovered and this was associated with a field system. A ring-gully enclosing a number of pits, interpreted as a structure, was also excavated.

INTRODUCTION

Excavations were undertaken by Oxford Archaeology on land west of Mackie Avenue, Hassocks, West Sussex between September and October 2005 and August and November 2007. The site occupies open land to the north of Hassocks in the historic parish of Keymer on a low hilltop at the foot of the north side of the South Downs centred on NGR 5310 1163 (Fig. 1). The geology of the site consists of lower greensand over Wealden clay and the elevation of the development area varies from an average height of *c.* 41 m OD in the southern part of the site, rising to 47–49 m OD towards the northeast corner of the site.

An initial evaluation consisted of the excavation of 63 trenches and 15 test pits and was followed by the excavation of five separate areas totalling 38,056 m^2 (Fig. 2). The work was carried out on behalf of Barratt Homes Southern in advance of a housing development. The material resulting from the work at Hassocks will be archived with Lewes Castle Museum.

ARCHAEOLOGICAL BACKGROUND

Prehistoric activity is known close to the site. Mesolithic and Neolithic flint scatters are recorded as close as *c.* 60 m to the west of the site boundary (Butler 1989a) and an Early Bronze Age round barrow is located *c.* 1.5 km to the east of the site on Lodge Hill. An Early Bronze Age flanged axe is known from the south of the site (Butler 1989b) and a Late Bronze Age socketed axe has also been found 800 m to the southeast at Broadhill (West Sussex Historic environment records (HER)). During excavations at the Roman cemetery at Hassocks (Couchman 1925) prehistoric material including a Beaker and Middle to Late Bronze Age pottery were also found (Musson 1954). An Iron Age cinerary urn was found in the general Hassocks area in the 1930s, but its exact findspot is unlocated (West Sussex HER).

Two major Roman roads extend *c.* 1 km southwest of the site. These link Hassocks with London, the Weald iron production sites and the *civitas* or regional capital of Chichester (*Noviomagus Regnentium),* 30 miles to the west. A substantial

Fig. 1. Site location.

Roman-period cemetery at Hassocks Sandpit to the south of the junction of the Roman roads, was excavated in the early part of the twentieth century and in the 1950s, the finds indicating a significant local population (Lyne 1994). This cemetery appears to have been associated with a settlement in the vicinity of the crossroads at Hassocks, a possible market occupied at least during the second to third centuries AD. A villa site at Hurstpierpoint (*VCH* III, 58) is located within a mile northeast of the crossroads, although little is known about it.

The Roman cemetery at Hassocks lay immediately to the west of an Anglo-Saxon cemetery which consisted mainly of Early Anglo-Saxon urned cremations, although inhumation graves containing spearheads, shield bosses and a knife are known (Couchman 1925; Lyne 1994). Excavations at Friars Oak in 1994 identified a Saxon sunken-featured building and another possible structure *c.* 600 m west of the site (Butler 2000). Locally, the parish name Keymer is Old English for *Cy-mere* (cow mere: Ekwall 1980), suggesting a small-scale farming community here during the period. Domesday records that the parish of Keymer (*Chemere*) had a church and two mills in 1086 and that it was held by William de Waterville from William de Warenne. Late eighteenth-century maps by Yeakell and Gardner (1778) and Gardner and Gream (1795) show the area of the development site divided into small fields. Localized clay extraction is recorded on the Tithe Map of 1845.

EXCAVATION RESULTS

The initial 63-trench field evaluation revealed dispersed areas of occupation on the site, beginning in prehistory with Middle Bronze Age features (but with an absence of Iron Age activity), Roman field ditches and field boundaries, medieval field ditches and post-medieval ditches, gullies, pits and posthole structures. All the features had been truncated by ploughing. The subsequent excavation of five areas concentrated on the southern portion of the evaluation area, as the northern part was to be left as open space and preserved *in situ* (Fig. 2).

LATE NEOLITHIC/EARLY BRONZE AGE PIT

The flint assemblage from the site produced evidence of Mesolithic and, to a lesser extent, Neolithic activity in the excavation area, although only a single feature of this date was excavated on the site: Late Neolithic/Early Bronze Age pit 20073. This was located in the northwestern part of Area 1 (Fig. 2) and contained two fills. The secondary fill (20075) contained a sherd of comb-impressed Beaker and worked flint, with poorly preserved charcoal recovered from both the secondary and tertiary fills.

SPREAD OF BURNT FLINT

During initial assessment, a substantial and extensive scatter of burnt and worked flint was identified at the south end of the site. This was targeted by a series of 15 hand-excavated test pits, with a total of 13 kg of burnt flint being recovered from across the site. The scatter of flint was Bronze Age in date and initially thought to represent a burnt mound, but excavation revealed no mounded deposits or features in the test pitting area (Area 4: Fig. 2). The density of burnt flint in this area may, therefore, represent the fills of features which have been truncated by ploughing and survive only as scatters of burnt flint within the ploughsoil. Alternatively, as this part of the site lay at a break of slope, downslope of the main area of Bronze Age activity, the burnt flint may have collected in this area through the process of colluviation.

BRONZE AGE ROUNDHOUSES, PITS AND FIELD SYSTEM

Within Evaluation Trench 14 a total of eight postholes were contained by a curvilinear feature, interpreted as the drainage gully of a roundhouse. The fills of three of the postholes and the gully contained charcoal. Environmental material from the gully included broad bean, which was radiocarbon dated to 1210 to 970 cal. BC (95.4%: 2890±30 BP; SUERC-20209). A further six postholes and a ditch terminal were located in Trench 28. Here, both the ditch and a single posthole contained similar Middle Bronze Age pottery, and these features are interpreted as a second roundhouse.

A group of postholes (20909), located in Area 1 immediately to the south of Trench 28, formed a third post-built roundhouse, *c.* 6 m in diameter (Fig. 3). No finds other than large fragments of oak charcoal were recovered from any of the posthole fills, but it was located within an area of pits containing Middle Bronze Age pottery. Fragments of a large handled jar of Middle Bronze Age date

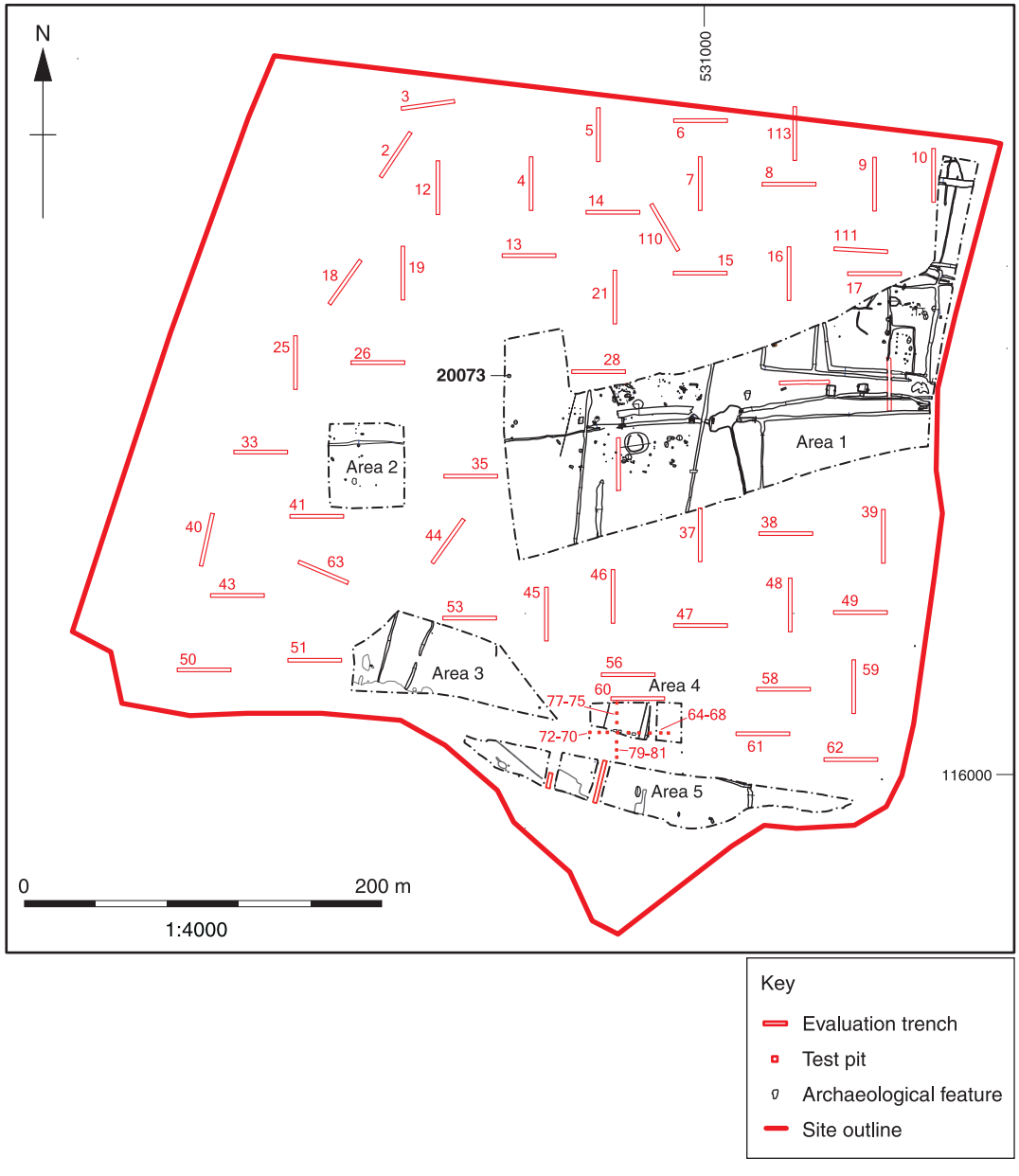

Fig. 2. Areas of evaluation and excavation.

were recovered from an associated posthole (20274), and the series of postholes and pits or truncated ditches (20135, 20230, 20251, 20340, 20342, 20344, 20246, 20249 and 20562) surrounding the structure — and possibly the remnants of a ring-ditch — all contained flint tempered pottery of Middle Bronze Age date. A large pit (20625) measuring *c.* 5 m in diameter and containing sherds of at least four Deverel-Rimbury vessels was located to the south-east of the roundhouse.

Two postholes (20059, 20071) from a group of nine (20907) south of roundhouse 20909 contained Middle Bronze Age flint tempered pottery (Fig. 4). These postholes formed a loose scatter but did

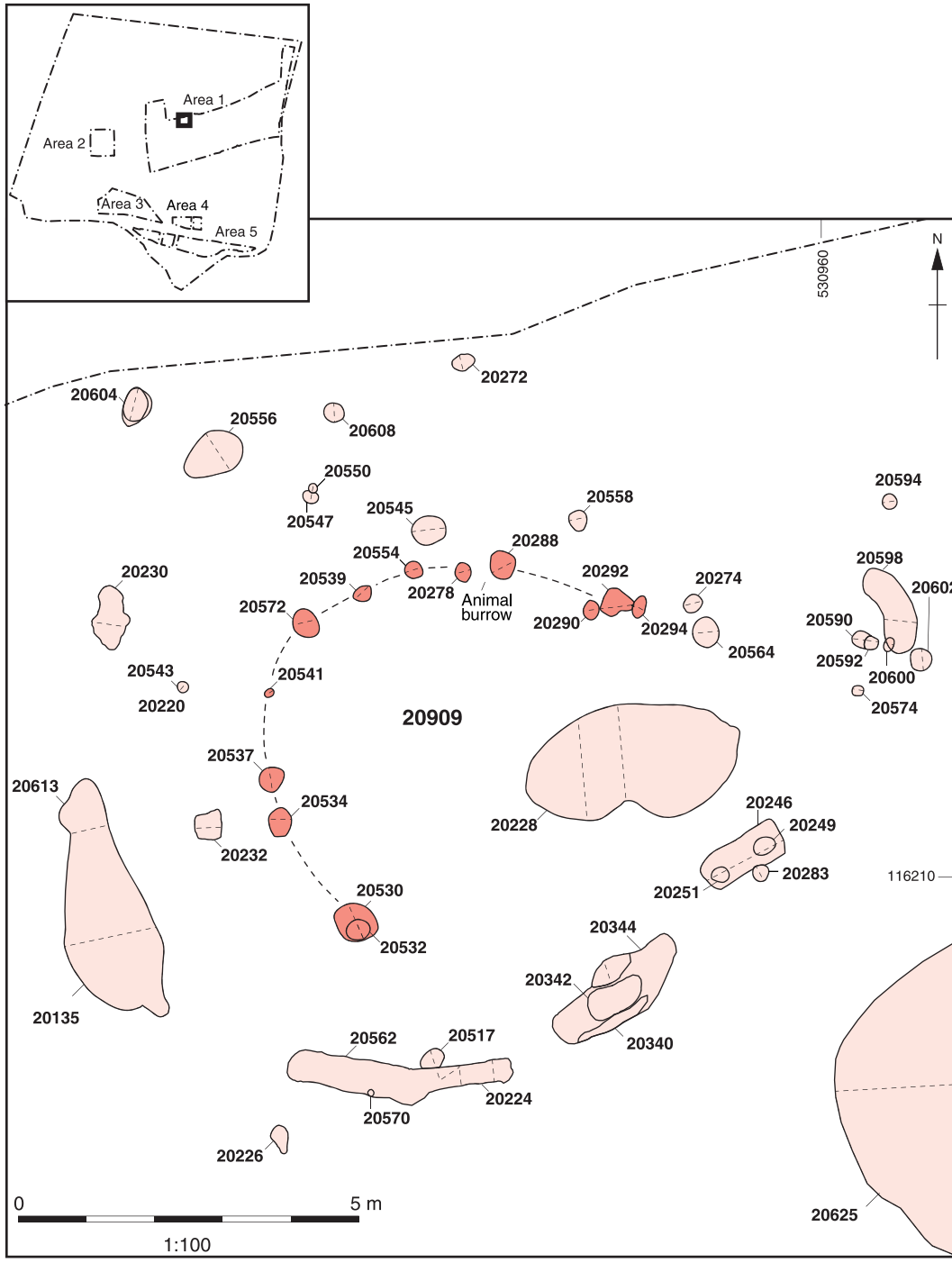

Fig. 3. Bronze Age roundhouse 20909 and surrounding features.

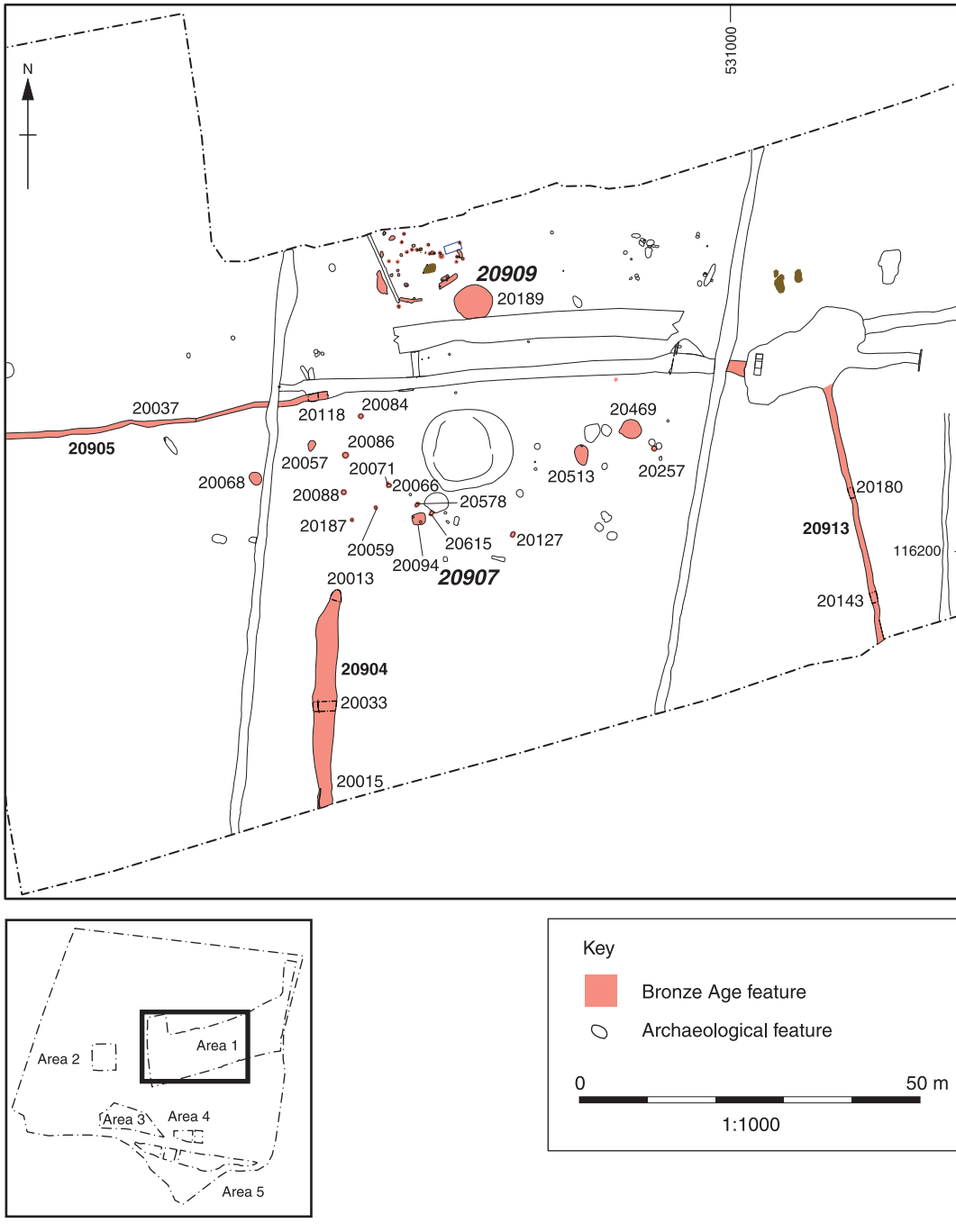

Fig. 4. Bronze Age pits and ditches.

not form a coherent pattern. Oak charcoal was recovered from their fills. Pit 20094 was located within this scatter of postholes and contained two fills, the upper of which (20095) contained pottery, oak, hazel and hawthorn charcoal, animal bone and the largest assemblage of flint (191 individual pieces) from any feature on the site. Pit 20068 was located slightly to the west of the scatter of postholes and contained two fills, both of which produced pottery. A further three pits (20127, 20513 and 20469) contained Middle Bronze Age pottery. In addition, pit 2909 in Trench 29 of the evaluation, also located in this area, contained the base of a heavily truncated Deverel-Rimbury bucket urn associated with charcoal and a small amount of cremated bone.

Four pits in Area 2 contained pottery of Middle to Late Bronze Age date. The pits also contained flint, while one contained charcoal, predominantly oak. These are similar in nature to the pits excavated in Trench 34 of the evaluation, which contained burnt flint and charcoal and formed a rough arc, *c.* 26 m in diameter.

To the south of roundhouse 20909 a group of ditches (20904) contained flint-tempered pottery of Middle Bronze Age date (Fig. 4). This feature ran north–south across the southern part of Area 1 and terminated before it reached ditch group 20905. This group extended east–west across the whole of Area 1. Just one segment, 20037, contained pottery, which was flint-tempered. Similar pottery was also recovered from fill 20182 of cut 20180, which formed part of north–south aligned ditch group 20913, running at right angles to 20905.

ROMAN STRUCTURES AND FIELD SYSTEM

The most significant features of Roman date on the site were a structure (20918) enclosed by a ditch (20917) and a smaller, sub-circular enclosure or ring-gully (20921) to the northeast. Both lay in the eastern part of Area 1 and a wider system of enclosures (Figs 5 & 6).

Feature 20917 was excavated with eight segments. These gave a width ranging from 0.24 m to 0.9 m (appearing to be wider in some unexcavated parts) and depth from 0.12 m to 0.41 m. The ditch enclosed a rectangular area measuring 26 m by 15 m (Fig. 6). A gap or entrance was located in the southwest corner. The postholes (20918) ranged from 0.3 m to 0.8 m in diameter and 0.1 to 0.7 m in depth. They were arranged in two, possibly three, north–south orientated rows and one east–west row to form a central space of *c.* 6 m by 11 m. The ditch was filled mainly in a single episode, and pottery from it suggests a date for filling in the second quarter of the third century AD. The pottery from the postholes was consistent with this, the latest pottery pointing to late second-century construction. Feature 20705 represents a possible re-cut of a terminus (20702) of 20907, although there is no evidence of re-cutting elsewhere along the ditch. Pit 20639, found within the enclosure, contained later first-century pottery, including South Gaulish samian ware and East Sussex grog-tempered ware, and may relate to a phase of activity preceding the ditch and postholes.

A small enclosure or ring-gully (20921), measuring *c.* 0.3 m wide and up to 0.3 m deep, was located immediately north of structure 20918 (Fig. 6). Two of the three excavated segments contained a single fill; the third was filled in two episodes of deposition. The latest pottery from the ring-gully dated to the first half of the third century. Two pits (20712 and 20696) within the enclosure contained pottery dated more broadly, but was nonetheless consistent with that from 20921. Pit 20696 contained a relatively large amount of over 40 fragments of ceramic building material, including corners of combed box tiles. Another pit, 20698, appeared to cut the gully, although the relationship is uncertain. A single posthole (20714) was located between pits 20696 and 20698. Other postholes (20774, 20764, 20762, 20760) surrounded the gully and may have held posts that supported a roof, although 20762 appeared to cut the filled gully, suggesting that the use of the posts was later than that of the gully and possibly contemporary with at least one pit.

Both 20917 and 20921 were located within a series of rectilinear ditches which appear to span the later first to third centuries AD (Fig. 5). Ditch 20916, which was the south ditch of a large enclosure, was also the south side of feature 20917. Ditch groups that were filled no later than second century included 20906, 20910, 20915, 20916 and 20922; ditch 20922 appears to be the earliest of these, filling by the late first century. Ditch groups 20911, 20924 and 20929 were dated more broadly, but pottery recovered from their fills was consistent with a first- or second-century date.

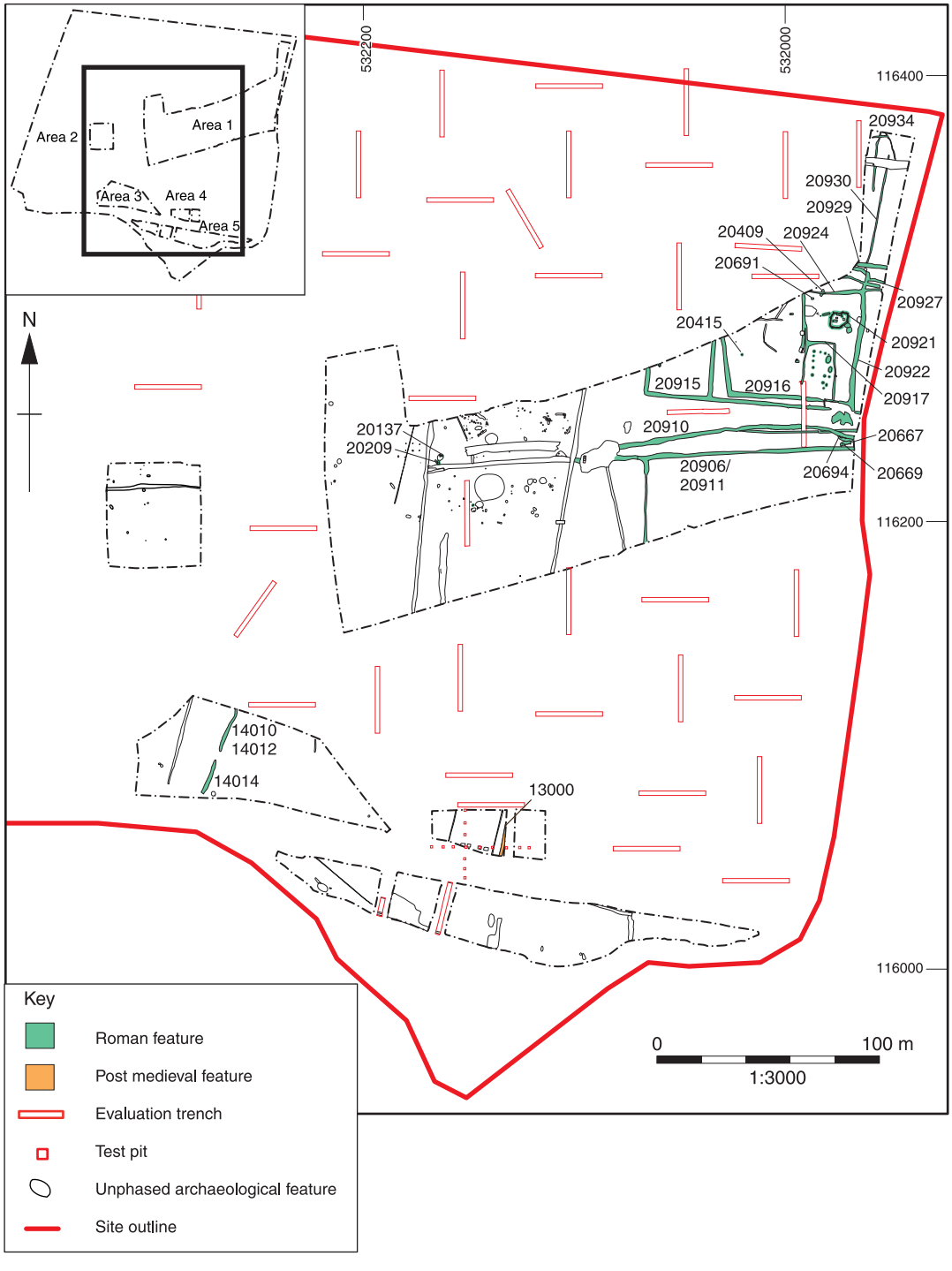

Fig. 5. Roman features.

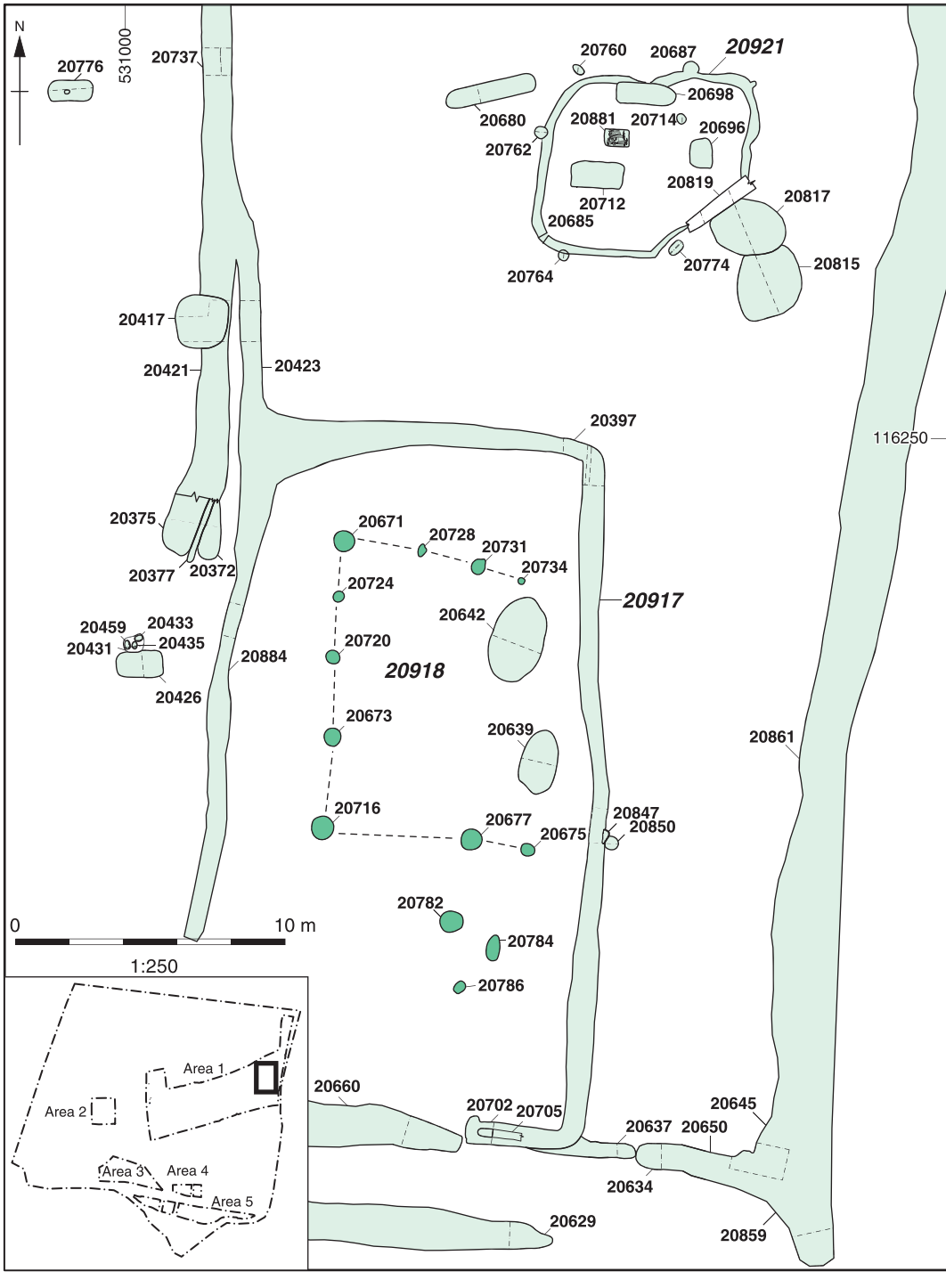

Fig. 6. Roman enclosures, ditch 20917, and ring-gully 20921.

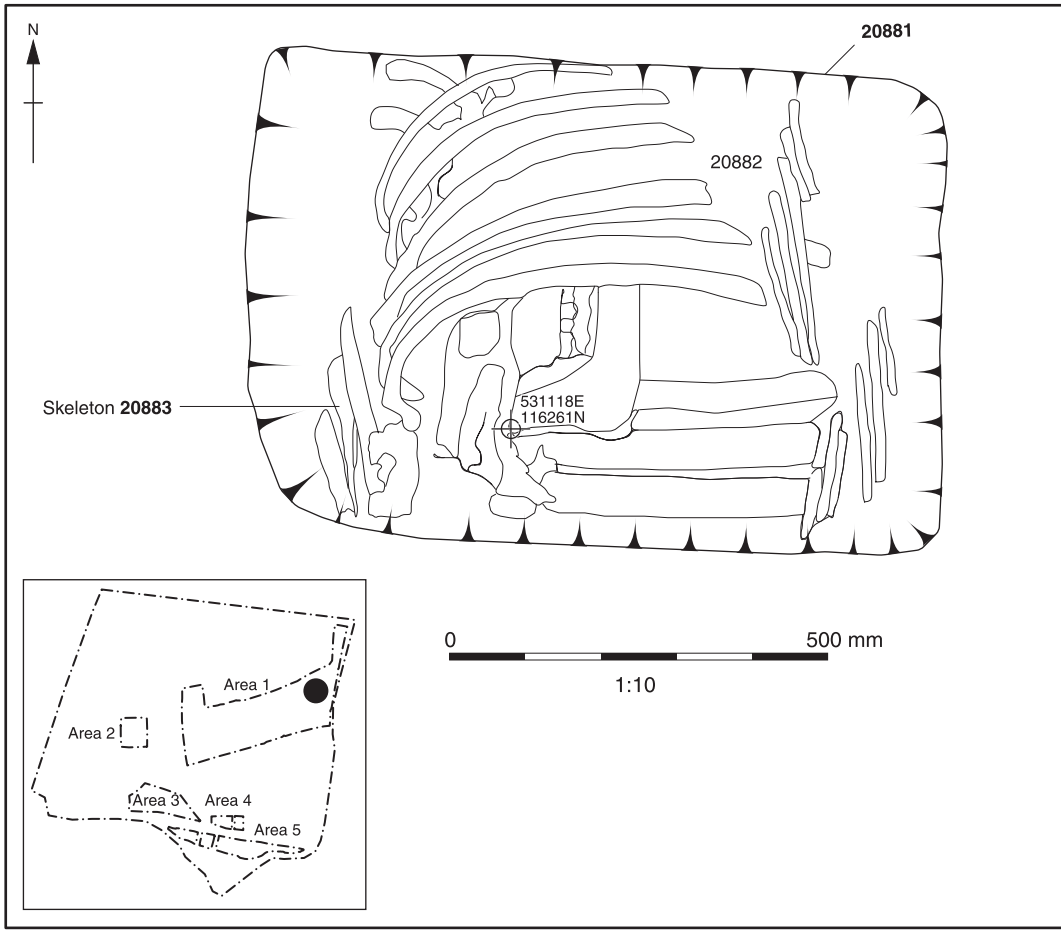

Fig. 7. Cow burial 20881.

A number of pits were uncovered throughout the area, though with seemingly little pattern in terms of location and function (Fig. 5). However, the features can be grouped chronologically. Pits 20415, 20669 and 20691 were among the earliest. Pottery recovered from them dated to the Early Roman period, favouring an AD 70–130 date range. The second century saw the main period of pit-digging, and pits 20137, 20409, 20426, 20667, 20680 and 20694 can be attributed to this period (Figs 5 & 6). Pits continued to be dug into the Late Roman period; pit 20815 (and by implication 20817, which cut 20815) was filled after AD 250. Pit 20642, which was dug within the space defined by 20917, contained an incipient bead-and-flanged dish (Fig. 10:15) and was also filled in the later third century or later. Pit 20209 cannot be closely dated.

A north–south extending ditch (14010, 14012, 14014) in Area 3, probably a boundary ditch, measured on average 1.4 m wide by 0.33 m deep. It contained pottery of early or Middle Roman date.

POST-MEDIEVAL FEATURES

Post-medieval pottery was recovered from ditches and was intrusive in a large Bronze Age feature in Area 1 (20189, see Fig. 4) interpreted as a pond. Feature 20819, which cut ring-gully 20921, was a post-medieval ploughmark. Area 3 contained only a single ditch (13000), probably associated with post-medieval/modern agricultural activity. The fill of this feature contained brick and some residual worked flint. A ditch in Area 4 was probably of similar, post-medieval date. Area 5 contained a series of post-medieval field drains,

which truncated some earlier features.

An unexpected post-medieval feature was cow burial 20881, found within ring-gully 20921 (Figs 6 & 7). This comprised an articulated skull placed within the back half of a ribcage, probably of the same animal. It was thought initially, based on the presence of pottery within the fill of the feature, to be of early or Middle Roman date. However, two radiocarbon determinations place this burial securely within the post-medieval/modern period. The cow burial is described and discussed in more detail elsewhere (Mullin & Strid forthcoming).

UNDATED FEATURES

A number of pits and postholes within Area 1 remain undated, although it is likely that these belong to either the Bronze Age or Roman period. A series of ditches in Area 5 contained no finds and their date remains uncertain. A spread of burnt flint and charcoal was also excavated in this area. It is not possible to assign a definite date to these features, but the presence of burnt flint in their fills and their location (close to the area of burnt flint noted in the walk over survey and evaluation) suggests they may be prehistoric.

THE FINDS

THE PREHISTORIC POTTERY

by Lisa Brown & David Mullin

Introduction

A total of 841 sherds (18,929 g) of prehistoric pottery was recovered from the site, of which 756 sherds (5559 g) came from the excavation and 85 sherds (13,370 g) from the 2005 evaluation. The largest component of the combined assemblage dates to the Middle Bronze Age, but fragments of a Late Neolithic/Early Bronze Age Beaker were recovered from a pit and some of a small group of sand-tempered body sherds from a ditch complex may be of Iron Age or Early Roman date.

The condition of the pottery is generally poor to moderate, with approximately 70% of sherds severely abraded. The notably high weight to sherd ratio of the combined excavation and evaluation assemblage (average sherd weight 22 g) is largely a reflection of a bias produced by the considerable size and thickness of a bucket urn base from a pit in evaluation trench 29 and smaller fragments of similar robustness in the same coarse flint-tempered ware from elsewhere on the site. The average sherd weight of the 2007 assemblage is, by contrast, only 7.5 g.

The flint inclusions of the dominant fabric reflects the proximity of the South Downs geology adjacent to the greensand and gault clays on which the site is located, and which would have been the closest source of the glauconitic fabric of the sandy wares.

Fabric and form

Over 90% of the assemblage was made up of flint-tempered wares, subdivided into four groups according to the size and density of the flint. This entire group is likely to be of Middle Bronze Age date. Two fabrics, F2 and F4 accounted for 87% by sherd count (96% by weight) of the total assemblage. Only 48 sherds of sandy ware (Q) were recorded, but apart from fragments of a Beaker, no diagnostic sherds were present within this group. The fabrics and quantities of the combined 2005 and 2007 assemblages are described in Table 1.

Late Neolithic/Early Bronze Age

Body sherds belonging to a highly abraded decorated Late Neolithic/Early Bronze Age Beaker were recovered from pit 20073. The fabric (Q2) is lightly sanded with small argillaceous fragments, possibly pale grog. The core is dark grey and surfaces pale reddish with a slightly soapy texture. The poorly preserved decoration consists of horizontal and diagonal linear comb impressions (Fig. 8:1).

Table 1. Prehistoric pottery: fabric description and quantification.

Code	Description	Sherds	Wt (g)
-	Unidentifiable	8	3
F-	Flint-tempered unidentifiable	2	2
F1	Common coarse ill-assorted white/grey/pink rounded calcined flint up to 3 mm	47	433
F2	Abundant well-assorted calcined white flint <3 mm in a finely sanded clay	101	979
F3	Fine sandy clay with abundant fe pellets/glauconite and moderate ill-assorted flint <4 mm	5	15
F4	Common coarse ill-assorted calcined white/grey flint up to 5–6 mm	630	17,336
Q-	Quartz sand-tempered unidentifiable	6	7
Q1	Coarse quartz sand, sparse glauconite, micaceous, sparse-moderate chalk and flint <3 mm	13	50
Q2	Finely sanded slightly soapy fabric with small argillaceous inclusions (Beaker)	14	25
Q3	Fine sand and abundant glauconite (handmade)	12	69
Q4	Coarse rounded quartz sand and glauconite (handmade)	3	10

Middle Bronze Age

The pottery assemblage was dominated by Middle Bronze Age flint-tempered wares, details of which are presented in Table 1. Fabric F1 is represented by only 47 sherds (433 g) of which 26 belong to a single vessel. The fabric contains distinctive shiny, highly weathered rounded white, dark grey and red/pink calcined flint pieces, clearly from a different, although not necessarily distant, source to the other flint-tempered fabric groups. F2 (101 sherds, 979 g) is a sandy clay containing generally fine, well-sorted white calcined flint inclusions. The

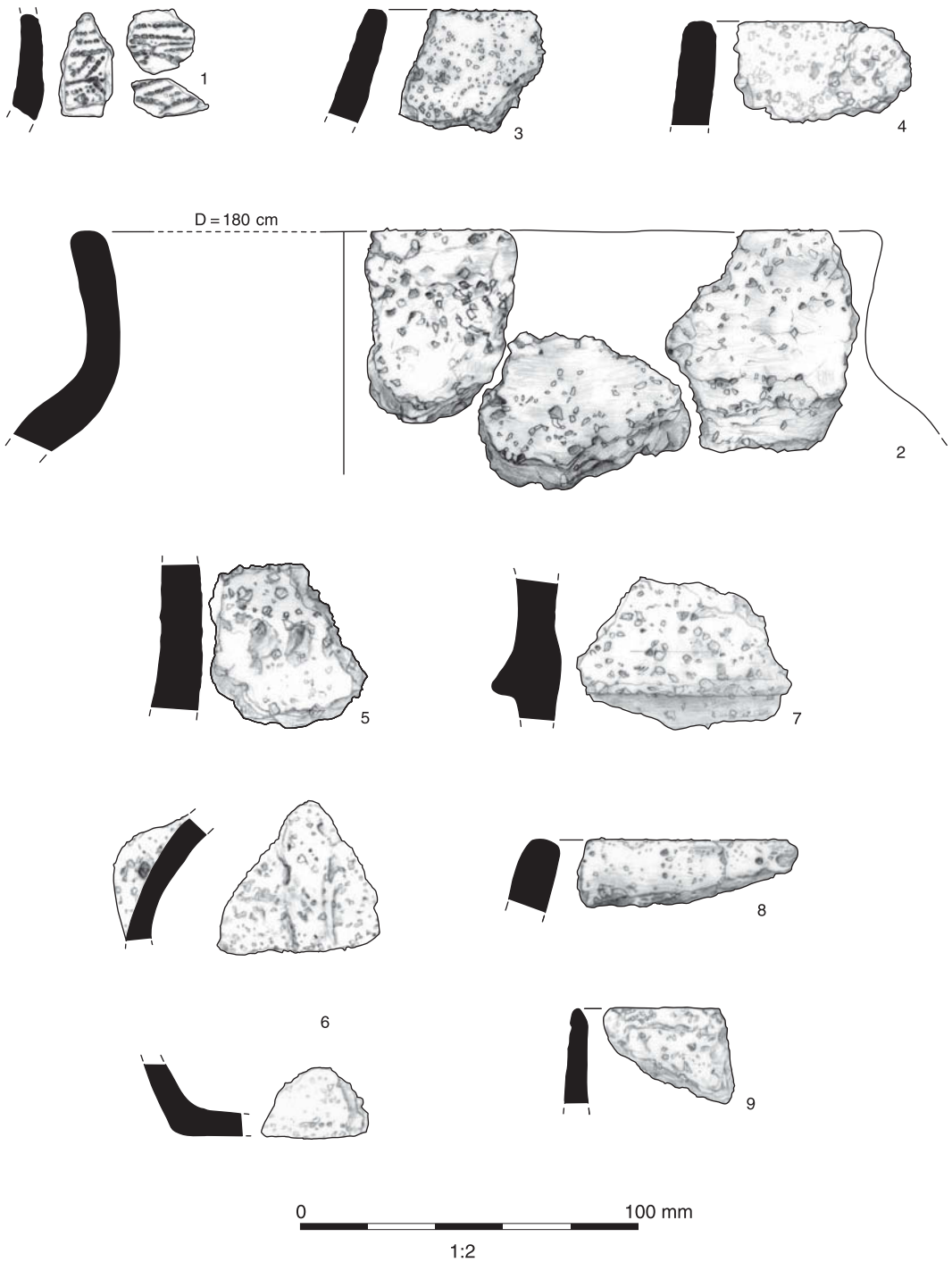

Fig. 8. Prehistoric pottery.

clay base of the 5 sherds (15 g) in fabric F3 contains a very high density of large glauconite pellets, reflective of the greensand and gault clay outcrops of the region. One sherd of this group came from pit 12031 and the remainder were residual in a Roman pit (20841). The largest fabric group, F4 (630 sherds, 17,336 g), is a relatively smooth clay containing ill-assorted white and grey calcined fragments, some measuring up to 6 mm.

The clays and flint of the dominant F2 and F4 groups may derive from similar sources but the sorting and selection of temper and treatment of the vessels is quite different. Sherds in this fabric are invariably thinner walled and show some attempt at surface finish. Only five diagnostic sherds were identified within this group. Four are simple rim fragments of urns (Fig. 8:3, 8 & 9) from pit 20265 and 20127. The other belongs to a globular urn with an applied small vertical lug (Fig. 8:6) from the fill of pit/posthole 20274.

Sherds in fabric F4 rarely show evidence of surface treatment, even when decorated. Diagnostic examples include two partial bases of very large thick-walled bucket urns (Fig. 8:4) including complete but shattered base from pit 2907 in evaluation trench 29. Distinctive features including a boss from a smaller urn, a fingernail impressed sherd (Fig. 8:5) from pond fill 20189 and a large, crudely formed horizontal cordon (Fig. 8:7) from pit 20625, as well as the coarse nature of the flint inclusions are typical of the Deverel-Rimbury ceramic tradition.

Sherds in fabric F1, which contains distinctive calcined grey and reddish flint temper, were recovered only from pit/posthole 12007. All probably belong to a single large barrel urn (Fig. 8:2).

Iron Age

The very small sandy ware component (Q1, Q3, Q4) of the 2007 assemblage is glauconitic and likely to be of local or near local manufacture. Unfortunately all examples are body sherds and, therefore, difficult to date precisely. Fabric Q1 contains sparse small flint and is probably related to F2. Fabric Q3 is flint free and the fabric, size and general appearance of the sherds, which are all handmade, distinctly resemble Iron Age glauconitic wares from Hampshire and elsewhere in Sussex. Of the three small sherds of the coarser Q4, little can be said except that they are handmade and probably of relatively local origin.

Catalogue of illustrated sherds (Fig. 8)

1. Beaker sherd with comb-impressed decoration. Fabric Q2. Context 20075, pit 20073.
2. Large barrel urn. Fabric F1. Context 12008, pit 12007.
3. Rim of small barrel urn. Fabric F2. Context 20128, pit 20127.
4. Bucket urn rim. Fabric F4, roughly smoothed outer surface. Context 20190, 'pond' 20189.
5. Body sherd of large urn with fingernail-impressed decoration, Fabric F4. Context 20190, 'pond' 20189.
6. Handled jar sherd. Fabric F2. Context 20275, posthole 20274.
7. Cordoned bucket or barrel urn fragment. Fabric F4. Context 20626, pit 20625.
8. Rim of bucket urn. Fabric F2. Context 20626, pit 20625.
9. Rim of small ?barrel urn. Fabric F2. Context 20626, pit 20625.

Discussion

The dominant element of the prehistoric assemblage indicates Middle Bronze Age activity, represented by two post-built roundhouses and several pits and gullies. Earlier activity is represented only by an abraded Beaker. A complete Beaker was found within the Hassocks Roman cemetery (Couchman 1925, 59–61), where it was identified as a cup, but no other occurrences of Beaker are recorded from the immediate environs of the site.

The Middle Bronze Age assemblage is one of the largest from Sussex, more pottery having been recovered only from Mile Oak Farm, Portslade, East Sussex (Hamilton 2003), where a total of 1765 sherds weighing 19 kg was associated with a series of roundhouses and field boundaries. The Hassocks material is, however, more abundant than that from Black Patch, where 1192 sherds weighing 15 kg were recovered (Drewett 1982). In contrast to both Black Patch and Mile Oak Farm, no pottery was recovered from the roundhouse postholes at Hassocks, but rather from pits and ditches associated with the houses. Assemblages of this date are not common from West Sussex. Couchman (1925) recorded six large Middle Bronze Age urns from the Hassocks Roman cemetery, and Musson (1954) noted a further eleven from Brighton, Park Brow, Lewes and Haywards Heath. The majority of the vessels illustrated by Musson (1954, fig. 6) have applied bosses, but there is a lack of applied cordons and fingernail impressions, as found in the Hassocks material.

The fabric of the Middle Bronze Age pottery, in common with that from the rest of Sussex, was tempered with flint. The flint had been burnt and, in the most common fabric type, crushed into fragments measuring up to 5–6 mm. It may be significant that burnt flint was also recovered from the southern part of the site and this may have been used as a source of raw material for the pottery. This has previously been suggested for the Middle Bronze Age pottery from Green Park, Reading (Brossler *et al*. 2004, 81), where it was noted that the transformation of flint by fire in order to cook food may have parallels with the transformation of clay by fire to create pottery. The spread of burnt flint at Hassocks may well have been used as a source of raw material for the pottery, but it is not certain if the burnt flint spread was a result of the production of burnt flint for temper, or of another activity, which was subsequently exploited as a convenient source of material.

THE ROMAN POTTERY by Edward Biddulph

Pottery supply and chronology

Almost 50% of pottery by estimated vessel equivalents (EVE) belonged to context-groups assigned to the Early Roman period (AD 43–130). The phase was dominated by East Sussex grog-tempered ware, a coarse handmade fabric in which jars — barrel or globular-bodied jars with everted rims being most popular — and curving-sided bowls were available (Table 3). The ware was made at Wickham Barn some 10 km east of Hassocks during the Late Roman period (Lyne 2001, 36), but earlier production in that region is also likely. Other grog-tempered wares included material that was consistent with continentally-derived pottery of Late Iron Age or Early Roman date, with platters and bead-rimmed or everted-rim jars among the forms identified. Sand-tempered wares formed much smaller proportions. Much of this material comprised sandy grey wares from Hardham, but included material from other sources in the Arun Valley (M. Lyne, pers. comm.).

Table 2. Quantification of Roman pottery.

Fabric	Source	Sherds	Weight (g)	MV	EVE
Samian wares					
South Gaulish samian ware	La Graufesenque	13	39	1	0.07
Central Gaulish samian ware	Lezoux	26	269	4	0.27
East Gaulish samian ware	Moselle/Rhine Valley	1	20		
Pulborough samian ware	Pulborough	2	8	1	0.04
Amphorae					
South Spanish amphora	Baetica	2	35		
Fine wares					
Central Gaulish 'Rhenish' ware	Lezoux	1	1		
Central Gaulish colour-coated ware	Allier Valley/Lezoux	2	7		
Colchester colour-coated ware	Colchester	6	49		
Miscellaneous colour-coated ware	Unknown	1	5		
Nene Valley colour-coated ware	Nene Valley	5	12		
New Forest colour-coated ware	New Forest	8	36		
Oxford red colour-coated ware	Oxford	2	3		
Mortaria					
New Forest coarse white ware mortaria	New Forest	1	23	1	0.06
Wiggonholt white ware mortaria	Wiggonholt	2	63	1	0.1
White wares					
Fine white ware	Local/Wickham Barn/?Wiggonholt	1	29		
New Forest parchment ware	New Forest	1	17		
Sandy white ware	Local/Wickham Barn/?Wiggonholt	1	16	1	0.05
Wiggonholt white ware	Wiggonholt	16	98	1	0.12
Oxidized wares					
Fine oxidized ware	Local/mid Sussex	11	182	1	1
Sandy oxidized ware	Local/mid Sussex	102	661	2	0.11
Oxidized storage jar fabric	Unknown/?local	1	102	1	0.11
Reduced wares					
Alice Holt grey ware	Alice Holt/Farnham	1	42		
Black-surfaced ware	Local/Hardham/Arun Valley	111	532	14	1.59
East Sussex grog-tempered ware	Local/Wickham Barn	1505	8881	91	7.07
Fine grey ware	Local	10	36	2	0.09
Flint-tempered ware	Local	4	95		
Grog-tempered ware	Local	183	1485	10	1.49
Late Roman grog-tempered ware	?Kent	5	68	2	0.11
Reduced storage jar fabric	Unknown/?local	2	102	2	0.09
Sandy grey ware	Local/Hardham/Arun Valley	408	2483	33	2.59
Black-burnished wares					
Black-burnished ware category 1	Dorset	2	28	2	0.08
Black-burnished ware category 2	North Kent	2	7		

Forms were confined to oval-bodied necked jars and platters. These fabrics were supplemented by necked jars in gritty black-surfaced ware, also from Hardham and local sources. Wiggonholt white ware products were more easily identified. A flagon, an industry standard, was recorded in the Early Roman assemblage. Another flagon, a mid-first-century Hofheim-type, was recorded in a fine oxidized ware. This may have been a Wiggonholt product, though the type seems a little unusual for the industry. More exotic still was South Gaulish samian ware. No rims were seen, but body sherds attest to a Dragendorff 18/31 dish and a Curle 11 bowl.

Thirty per cent of pottery by EVEs came from context-groups dated to the Middle Roman period (AD 120/30–250). East Sussex grog-tempered ware, its proportion unchanged from the previous phase, continued to predominate (Table 4). Jars remained important, with the range of forms increasing to include everted-rim and wide-mouthed jars, although curving-sided bowls or dishes were also present. Sandy grey

Table 3. Early Roman pottery, quantified by EVEs. Fabrics marked by an asterisk were present in the assemblage as body or base sherds only.

Fabric	Flagon	Jar	Beaker	Bowl	Platter	Total	% total
Black-surfaced ware		0.43		0.08		0.51	**7%**
East Sussex grog-tempered ware		3.05	0.03	0.18		3.26	**44%**
Fine grey ware				0.04		0.04	**1%**
Fine oxidized ware	1					1	**14%**
Grog-tempered ware		1.11	0.1		0.42	1.63	**21%**
Reduced storage jar fabric		0.09				0.09	**1%**
Sandy grey ware		0.57			0.14	0.71	**10%**
Sandy oxidized ware						*	*
South Gaulish samian ware						*	*
Wiggonholt white ware	0.12					0.12	**2%**
Total	**1.12**	**5.25**	**0.13**	**0.3**	**0.56**	**7.36**	-
% total	**15%**	**71%**	**2%**	**4%**	**8%**	-	-

Table 4. Mid Roman pottery, quantified by EVEs. Fabrics marked by an asterisk were present in the assemblage as body or base sherds only.

Fabric	Jar	Beaker	Cup	Bowl	Dish	Mortarium	Total	% total
Black-burnished ware category 1					0.08		0.08	**2%**
Black-burnished ware category 2							*	*
Black-surfaced ware	0.82				0.08		0.9	**23%**
Central Gaulish 'Rhenish' ware							*	*
Central Gaulish samian ware			0.08			0.06	0.14	**4%**
Colchester colour-coated ware							*	*
East Sussex grog-tempered ware	1.22	0.15		0.29	0.03		1.69	**43%**
Fine grey ware							*	*
Flint-tempered ware							*	*
Nene Valley colour-coated ware							*	*
Oxford red colour-coated ware							*	*
Oxidized storage jar fabric	0.11						0.11	**3%**
Pulborough samian ware					0.04		0.04	**1%**
Sandy grey ware	0.5	0.12			0.12		0.74	**19%**
Sandy oxidized ware					0.05		0.05	**1%**
South Gaulish samian ware					0.07		0.07	**2%**
South Spanish amphora							*	*
Wiggonholt white ware mortaria						0.1	0.1	**3%**
Total	**2.65**	**0.27**	**0.08**	**0.29**	**0.47**	**0.16**	**3.92**	-
% total	**68%**	**7%**	**2%**	**7%**	**12%**	**4%**	-	-

wares made a larger contribution in this phase, accounting for 19% by EVEs. Jars included carinated, wide-mouthed and lid-seated forms, which were joined by bead-rimmed dishes. The pottery was produced at the Hardham kilns and local sources; a flask in a smooth grey ware with a distinctive pink core arrived from a kiln in the Barcombe villa area (M. Lyne, pers. comm.). A plain-rimmed dish was recorded in black-surfaced ware — the fabric had increased its share to 23% — and other dishes were available in handmade black-burnished ware (BB1) from Dorset. Wheel-thrown black-burnished ware from north Kent also reached the site, though no forms were recognized. White ware products from Wiggonholt continued to arrive (a wall-sided mortarium was recorded) but the site now received a greater range of regional finewares. These included Colchester and Nene Valley finewares and, by the end of the phase, Oxford red colour-coated ware. Continental imports were seen more frequently, too. Amphorae arrived from southern Spain. Central Gaulish samian replaced South Gaulish products (though the latter was available as residual occurrences); a Dragendorff 45 mortarium and Dragendorff 33 cup were identified, and body sherds belonged to dishes and a jar. These may have been accompanied by 'Rhenish' ware, a fine table ware from Central Gaul, which reached Hassocks during the late second or early third century. East

Table 5. Late Roman pottery, quantified by EVEs. Fabrics marked by an asterisk were present in the assemblage as body or base sherds only.

Fabric	Jar	Beaker	Dish	Mortarium	Total	% total
Alice Holt grey ware					*	*
Black-surfaced ware	0.08				0.08	**5%**
Central Gaulish samian ware					*	*
East Sussex grog-tempered ware	0.49		0.04		0.53	**33%**
Fine white ware					*	*
Late Roman grog-tempered ware			0.08		0.08	**5%**
Miscellaneous colour-coated ware					*	*
New Forest coarse white ware mortaria				0.06	0.06	**4%**
New Forest colour-coated ware					*	*
New Forest parchment ware					*	*
Oxford red colour-coated ware					*	*
Sandy grey ware	0.15	0.12	0.58		0.85	**53%**
Sandy oxidized ware					*	*
Total	**0.72**	**0.12**	**0.7**	**0.06**	**1.6**	-
% total	**45%**	**8%**	**44%**	**4%**	-	-

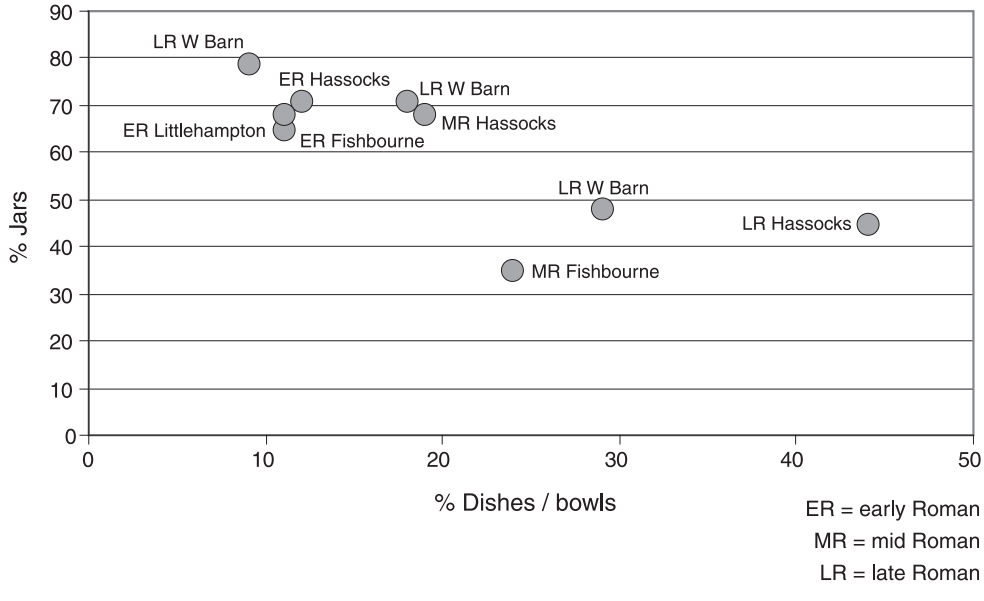

Fig. 9. Comparison between the proportions of dishes/bowls and jars. Quantification by EVEs. Sites: Fishbourne (Lyne 2003), Littlehampton (Laidlaw 2002), Wickham Barn (Lyne 2001)

Gaulish samian was recorded, as well as Pulborough samian, a locally-produced fabric made in AD 120–150. A dish base, perhaps Dragendorff 31, was seen in the former.

Relatively few context-groups were dated to the Late Roman period (AD 250/70–410); 11% of pottery was recovered from groups of this period (Table 5). East Sussex grog-tempered ware arrived in some quantity, albeit at a reduced level. Malcolm Lyne suggests that the fabric was produced at Wickham Barn, though manufacture generally is unlikely to have continued much beyond *c.* AD 300 (Lyne 1994, 80–81; 2001, 36). Forms again were restricted almost exclusively to everted-rim jars (a dish was also recorded), demonstrating a limited repertoire among potters, although some occurrences of the fabric could well be residual. Another handmade-grog-tempered ware was recorded in this phase, but its fabric and surface appearance was reminiscent of Late Roman products from eastern and western Kent (Pollard 1988, 129, 149). The form seen in the fabric — a bead-and-flanged dish — is consistent with a Kentish source. Sandy grey wares, now reaching the site from Wickham Barn, accounted for 53% of

the Late Roman assemblage by EVEs. Bead-and-flanged dishes and plain were available and replaced jars as the principal vessel class. A small amount of grey ware arrived from Alice Holt. Fine and specialist wares were provided by New Forest potters, who supplied mortaria, colour-coated ware and parchment ware; similar products were provided to a lesser extent by the Oxford industry. Fine oxidized ware included material from the mid Sussex area; a similar fabric has been recorded at Chichester (Young 1981, 289).

It is clear from the phased assemblages that pottery use and deposition was at its most intense during the Early Roman period. A decline in the level of pottery use is evident in the second and third centuries and this continued into the Late Roman period. This chronology differs from the phasing of other sites in Hassocks. At the cemetery (Lyne 1994, table 1), most pottery (60% by vessel count) was attributable to the mid Roman period. Half as much belonged to the Early Roman period, while the Late Roman period accounted for a small proportion (8%) of the total assemblage. At Crossways Barn, Talbot Field and other sites, the emphasis is also on the mid Roman period; Early and Late Roman components were much smaller (M. Lyne, pers. comm.). The cemetery pottery and much of the settlement assemblage were retrieved from the western side of the modern town, while Mackie Avenue is situated on the eastern side, the site being located *c.* 1.5 km northeast of the cemetery.

Aspects of site status and pottery deposition

Precisely what sort of settlement existed at Hassocks is still a matter of debate, although discoveries such as the cemetery, a road intersection, and pottery and building material from various interventions hint at a roadside settlement that functioned as a market and administrative centre and a travellers' staging-post (*VCH* III, 57; Lyne 1994; Russell 2006, 160). The chronological difference between the cemetery and other sites on the one hand, and Mackie Avenue on the other, may indicate a shift of settlement focus over time within an extensive area of habitation or, as is perhaps more likely given the distance between them and the archaeology of the Mackie Avenue site, reflects the different fortunes of a rural site on the outskirts of the town. The pottery casts a little more light on the character of occupation at Mackie Avenue. Steven Willis (1998, 108) points to the value of decorated samian as an index of site status; samian assemblages from military and major civil centres tend to include higher proportions of decorated vessels compared with minor settlements and farmsteads. On this basis, Mackie Avenue produced a figure of 20% by vessel count (including sherds other than rims), which is below a mean of 24.6% obtained by Willis (1998, table 3) from sites across the province and allies the site with rural sites and minor towns. Some 6% of the samian from excavations in front of the palace of Fishbourne was decorated, though Dannell (2003) notes that the samian assemblage was highly fragmented and contained a large proportion of unidentified pieces and suggests that the decorated samian was under-represented. Higher up the scale, decorated samian accounted for about 40% of the samian assemblage from Chichester's St Mary's Hospital site (Down & Rule 1971, 33–43); while this figure is not exact — casual descriptions of samian, with quantification alternating between sherd and vessel count, do not provide good data — it is nevertheless in the correct order of magnitude expected for urban sites.

Support for Hassocks' ranking is provided by the ratio between jars and dishes or bowls. This is a useful measure, since assemblages from lower-order settlements tend to have high proportions of jars and low proportions of bowls or dishes, and therefore can be distinguished from, say, urban or villa assemblages where the relationship between the two forms is more equal (Evans 2001, 26–8). During the Early Roman period, the ratio of jars to dishes and bowls at Mackie Avenue was similar to that at Littlehampton and Fishbourne (Fig. 9). The somewhat exceptional nature of the pottery assemblage from the palace front, as suggested by the samian, is given further credence here, since, by the mid Roman period, Fishbourne and Hassocks diverged as the palace acquired more dishes at the expense of jars while Hassocks remained stable. Potters' repertoires of the Late Roman period, in which dishes made increasingly important contributions, pulled sites together to some extent, although the proportions of jars continue to separate Fishbourne and Hassocks. It should be noted that Late Roman groups from Wickham Barn reveal variability within sites, suggesting that a number of assemblages from each site is required to gain a more balanced picture of vessel use. Still, an overall impression of the comparison places Mackie Avenue at the lower end of the settlement spectrum, the pottery being consistent with a rural or roadside settlement.

The majority of the assemblage was divided between linear features and pits. Structural features — essentially postholes — took the third largest share, with the remainder recovered from layers and minor features. That a large part of the assemblage was collected from structural features is due to the presence of a substantially complete East Sussex grog-tempered ware jar in cut 20687, part of the Roman-period ring-gully 20921. Its deposition may have served a ritual function, although the jar carries no obvious intrinsic qualities, except, perhaps, in terms of its contents; in any case, the absence of rim sherds meant that the form could not be identified. Layers contained pottery that was among the best preserved; its condition suggests that the pottery had been disturbed less frequently than that from cut features (possibly as a result of being deposited directly into layers as middens and left in place except to be broken up by trampling and weathering), although the 2 g difference between the features is unlikely to be significant. The relatively high mean sherd weight of pottery from the ploughsoil suggests that it was reasonably fresh when it was brought up by the plough.

Catalogue of illustrated pottery (Fig. 10)

The following pieces illustrate the typological and chronological range of the assemblage. The dates given refer to context-group dates (not necessarily identical to stratigraphic phasing), and the catalogue is ordered by this chronology.

Context 20648, fill of ditch 20645; AD *50–80*

1. Hofheim-type flagon, fine oxidized (buff) ware. Possible mid-Sussex or Wiggonholt source.

Context 20686, fill of structural feature 20685; AD *50–120*

2. Everted-rim jar, East Sussex grog-tempered ware.
3. Globular jar with slight lid-seating to rim, East Sussex grog-tempered ware.

Context 20429, fill of pit 20426; AD 70–120

4. Pulley-wheel rimmed flagon, Wiggonholt white ware.
5. High-shouldered necked jar, black-surfaced ware.

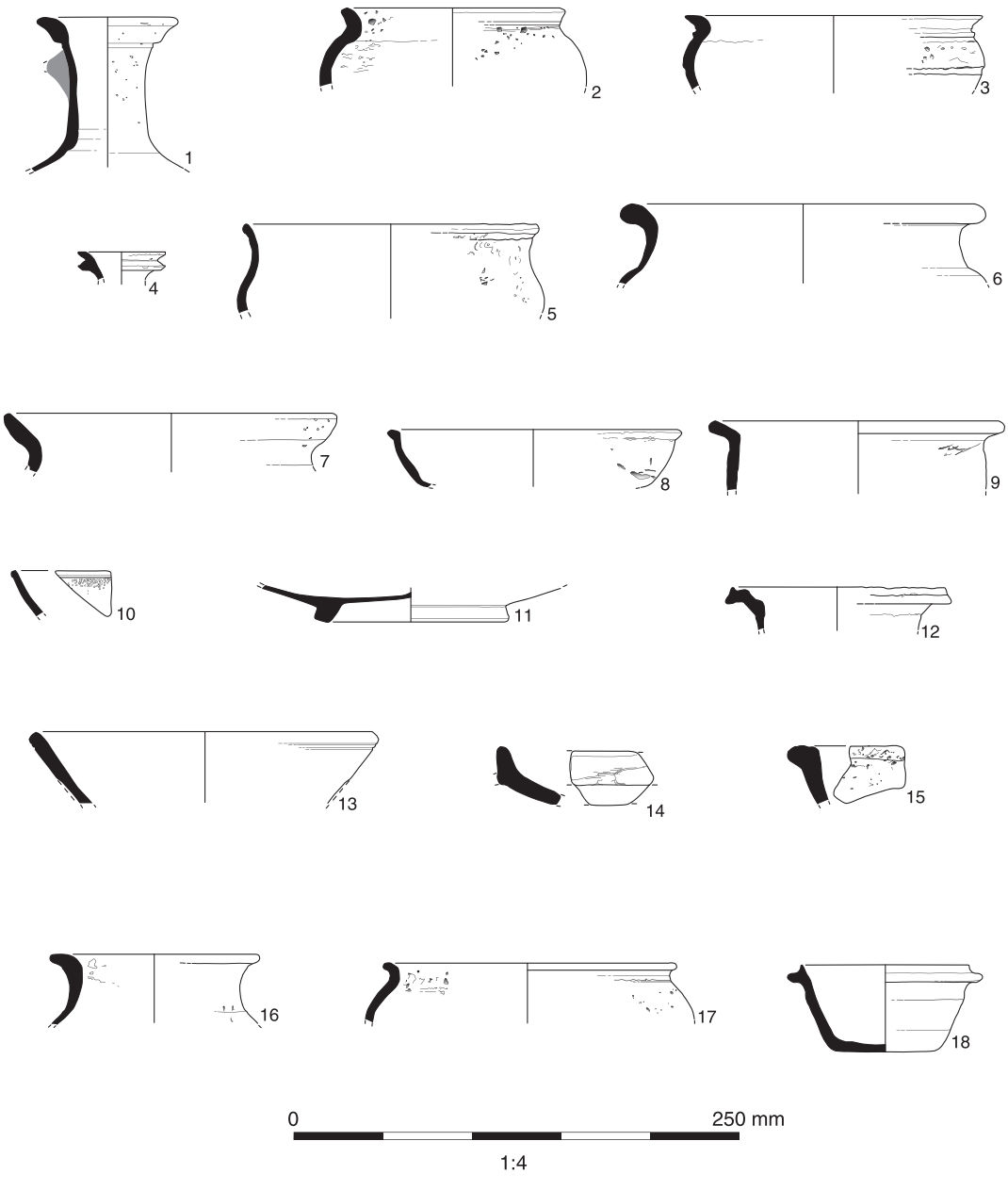

Fig. 10. Roman pottery.

6. High-shouldered necked jar, East Sussex grog-tempered ware, fired grey.
7. Lid-seated bowl, East Sussex grog-tempered ware.

Context 20416, fill of pit 20415; AD *70–130*

8. Bead-rimmed platter or dish, possibly imitating samian form Drag. 18, sandy grey ware. (3)
9. Dish or bowl with wide, flat flange, black-surfaced ware.

Context 20318, fill of ditch 20317; AD *120–150*

10. Drag. 18 dish, South Gaulish samian ware.
11. Base of dish, perhaps Drag. 18/31R. Central Gaulish samian ware. Surfaces are very abraded and show no diagnostic rouletting.

Context 20396, fill of ditch 20395; AD *220–350.*
12. Narrow-necked jar with corrugated rim, sandy grey ware.

Context 20738, fill of ditch 20737; AD *270–300*
13. Grooved dish, sandy grey ware. Orange core, mid-Sussex source.
14. Mortarium, Fulford 1975, type 102. New Forest (coarse) white ware.

Context 20643, fill of pit 20642; AD *270–300*
15. Incipient bead-and-flanged dish, East Sussex grog-tempered ware.
16. Necked jar, East Sussex grog-tempered ware.

Context 20778, fill of pit 20776; AD *270–300*
17. Jar with short neck, black-surfaced ware.
18. Bead-and-flanged dish, sandy grey ware.

THE FLINT by Hugo Lamdin-Whymark

Introduction

In total, 641 flints and 4777 fragments of burnt unworked flint, weighing 18.928 kg, was recovered from the evaluation and excavation. The 2005 evaluation trenches yielded 331 flints and 3727 fragments (13.230 kg) of burnt unworked flint. The area of densest archaeology identified by the evaluation was preserved *in situ*, but the targeted excavation of five areas produced a further 316 flints and 1050 pieces (5.698 kg) of burnt unworked flint; only Areas 1 and 2 yielded flint (Table 6).

The assemblage contains *c.* 50 residual Mesolithic flints, dated on the basis of technological attributes and the presence of a micro-burin; the distribution of these flints was centred on Area 2. The Neolithic/Early Bronze Age is represented by a fragmentary chisel arrowhead and a small assemblage of fresh flintwork from a possible Beaker pit (20073). The majority of the assemblage is, however, composed of hard hammer flake debitage typical of the Middle to Late Bronze Age. The latter material is broadly contemporary with some of the archaeological features, but only small numbers of flints were recovered from prehistoric phase contexts; the majority of flints were recovered as residual finds in later archaeological features.

Raw material and condition

The raw material exploited was a locally available gravel-derived flint, with a limited number of flints derived from a chalk source. The flint generally varied in colour from light to dark brown, but flakes of black, yellow and orange flint were also present. The cortex was frequently abraded and pitted, but a white cortex, up to 10 mm thick, was recorded on several flints. The raw material was available both as nodules and cobbles, but many of these flints contained significant thermal faults and were of relatively poor flaking quality.

The majority of the flint assemblage exhibited moderate edge-damage. This indicates that the flint artefacts were exposed for a considerable period of time before burial or re-deposition into later archaeological features. Pit 20073 (fills 20074, 20075) contained flints in fresh condition.

The assemblage was generally free from surface cortication, but a small number of flints exhibited a light speckled bluish-white surface or a moderate white cortication. A light to dark orange iron-staining was present on *c.* 30 flints; many of these flints appeared to date from the Mesolithic.

Table 6. The flint assemblage from the evaluation and excavation.

Category	Evaluation total	Excavation Area 1	Excavation Area 2
Flake	266	11	196
Blade	17	3	12
Bladelet	2	4	3
Blade-like	5	4	6
Irregular waste	28	1	27
Chip	2		1
Micro-burin		1	
Rejuvenation flake other			1
Other blade core	1		1
Tested nodule/ bashed lump	1		7
Single platform flake core	1		3
Multiplatform flake core	3	1	1
Core on a flake	1		2
Unclassifiable/ fragmentary core	2		2
Fragmentary transverse arrowhead			1
End scraper			4
Side scraper	1		2
End and side scraper		1	4
Denticulated scraper			1
Concave scraper			2
Awl			1
Piercer			1
Spurred piece			1
Serrated flake			1
Notched flake	1		1
Backed knife			2
Retouched flake		2	2
Fabricator			1
Fragment of burnished flint pebble			1
Hammerstone			1
Grand Total	**331**	**28**	**288**

The assemblage

The flint assemblage includes artefacts dated to the Mesolithic, Neolithic and Middle to Late Bronze Age. These flints are considered by period below.

Mesolithic

A small number of flints were of narrow proportions and exhibited technological attributes indicating they were the product of a blade-orientated industry (i.e. dorsal blade scars and platform-edge abrasion). In total, 38 flints from 24 contexts in the excavation area and *c.* 20 flints from the evaluation trenches have been assigned to this phase, but this total should be considered a minimum as less distinct contemporary debitage may also be present. Many of these flints are of blade proportions (>2:1 length to breadth ratio), measuring up to 74 mm long, and the majority had been detached using soft hammer percussion. Two blades from Roman ditch 20019 (context 20020) were in mint condition and had been struck from the same core, although they could not be refitted. These blades are therefore residual, but are unlikely to have moved far from their original place of deposition. A fragmentary crested blade was recovered from context 20077 and a blade core producing narrow blades up to 55 mm in length on the side of a flake was recovered from context 20644. A second blade core exhibiting removals from multiple platforms was recovered during the evaluation. Four retouched artefacts are considered contemporary with the Mesolithic debitage. These comprise an end and side scraper, a serrated blade, a backed knife, and an edge-retouched flake with rounded use-wear. A proximal micro-burin resulting from the manufacture of a microlith was also recovered; this artefact dates from the Mesolithic. The technological attributes and flake morphology of the other debitage is also consistent with a Mesolithic date (Pitts & Jacobi 1979).

Neolithic/Early Bronze Age

The Neolithic/Early Bronze Age is represented by a rolled fragment of a later Neolithic chisel arrowhead (context 20633) and an assemblage of 42 flints from pit 20073. The flint from pit 20073 is in fresh condition and comprises 33 flakes, five pieces of irregular waste, a tested nodule, a side scraper, a thick piecing point and a coarsely retouched flake. The debitage is of relatively thick and squat proportions and has predominately been struck using hard hammer percussion; a single flake exhibits platform-edge abrasion. This assemblage is not intrinsically datable and is most comparable to later prehistoric flake-orientated industries. No refits could be identified.

Middle to Late Bronze Age

The majority of the flint assemblage is composed of broad, thick flakes, struck using hard hammer percussion. These flakes were generally struck from plain platforms and do not exhibit platform-edge abrasion. The cores reflect a simple reduction strategy whereby short sequences of flakes were removed from nodules of flint where appropriate flaking angles were present. Several nodules exhibit only a few removals before being abandoned, whilst other cores were abandoned following the removal of flakes from a single plain platform. The multi-platform flake cores also represent a simple reduction strategy where flakes removed to a point where the core was rotated and the working face was used as the new platform; this process was repeated until it was impossible to remove further flakes. There is no evidence for the formal preparation of cores or the rejuvenation of platform edges. One flake core, weighing 159 g, was reused as a hammerstone. This reduction strategy is typical of flake-based industries of Middle to Late Bronze Age date.

The retouched assemblage is dominated by scrapers (12 examples), but also includes a limited range of other artefacts. These comprise three piecing tools, a backed knife, two edge-retouched flakes and a fabricator. The scrapers include a variety of forms, but are dominated by examples manufactured on reasonably large and thick flakes with curving semi-abrupt to abrupt edge-retouch (Fig. 11:1). Other forms include a crude denticulated scraper from Middle Bronze Age pit 20306 (context 20308: Fig. 11:2) and two concave/hollow forms with abrupt retouch at the proximal end, which in both cases has removed the bulb (Fig. 11:3 & 4). The latter scrapers were both recovered as residual finds in Roman ditches (contexts 20661 and 20844). Hollow scrapers are most commonly recovered from Middle to Late Bronze Age assemblages. The fabricator (spread 20500) is a relatively crude example measuring 28 mm long by 56 mm wide and 13 mm thick (Fig. 11:5). The tool has been manufactured transversely on a squat flake with the application of abrupt retouch around the perimeter of the artefact to create a rod-shaped form. One end exhibits heavy abrasion resulting from use, probably against iron pyrites as a strike-a-light. Fabricators are usually considered to date from the Mesolithic to Early Bronze Age, but the characteristics of the blank indicate that this example potentially dates from the Middle to Late Bronze Age.

Discussion

The flint assemblage provides good evidence for a Mesolithic presence in the landscape, particularly around Area 2, but the limited size of the assemblage and absence of diagnostic artefacts precludes accurate dating or consideration of activities undertaken. The landscape around Hassocks has previously yielded substantial assemblages of Early Mesolithic flintwork (Toms 1907; Bedwin 1978; Butler 1989a). This indicates a considerable focus of activity during the earlier prehistoric period and further highlights the preferential use of lower greensand landscapes in the Mesolithic. Neolithic and Early Bronze Age activity appears to have been relatively sparse and, with the exception of a broken chisel arrowhead, the evidence of activity is confined to a single deposit of fresh flint the possible Beaker pit 20073.

The majority of the assemblage dates from the Middle to Late Bronze Age, but few pieces are contained within contemporaneous contexts. To some degree, this reflects the deposition practices of the period, where material was commonly deposited in surface middens and on land surfaces. This material has subsequently been dispersed and redeposited in later archaeological features across the excavation area. The flake orientated reduction strategies employed and the comparatively limited range of tools, with a dominance of scrapers, is typical of the period.

Illustration catalogue (Fig. 11)

1. End scraper. Semi-abrupt distal retouch. Context 20633. Middle–Late Bronze Age.
2. Denticulated scraper. Coarse denticulated retouch along right hand side and distal edge with a possible piercing point on the left hand distal corner. Context 20308. Middle Bronze Age.

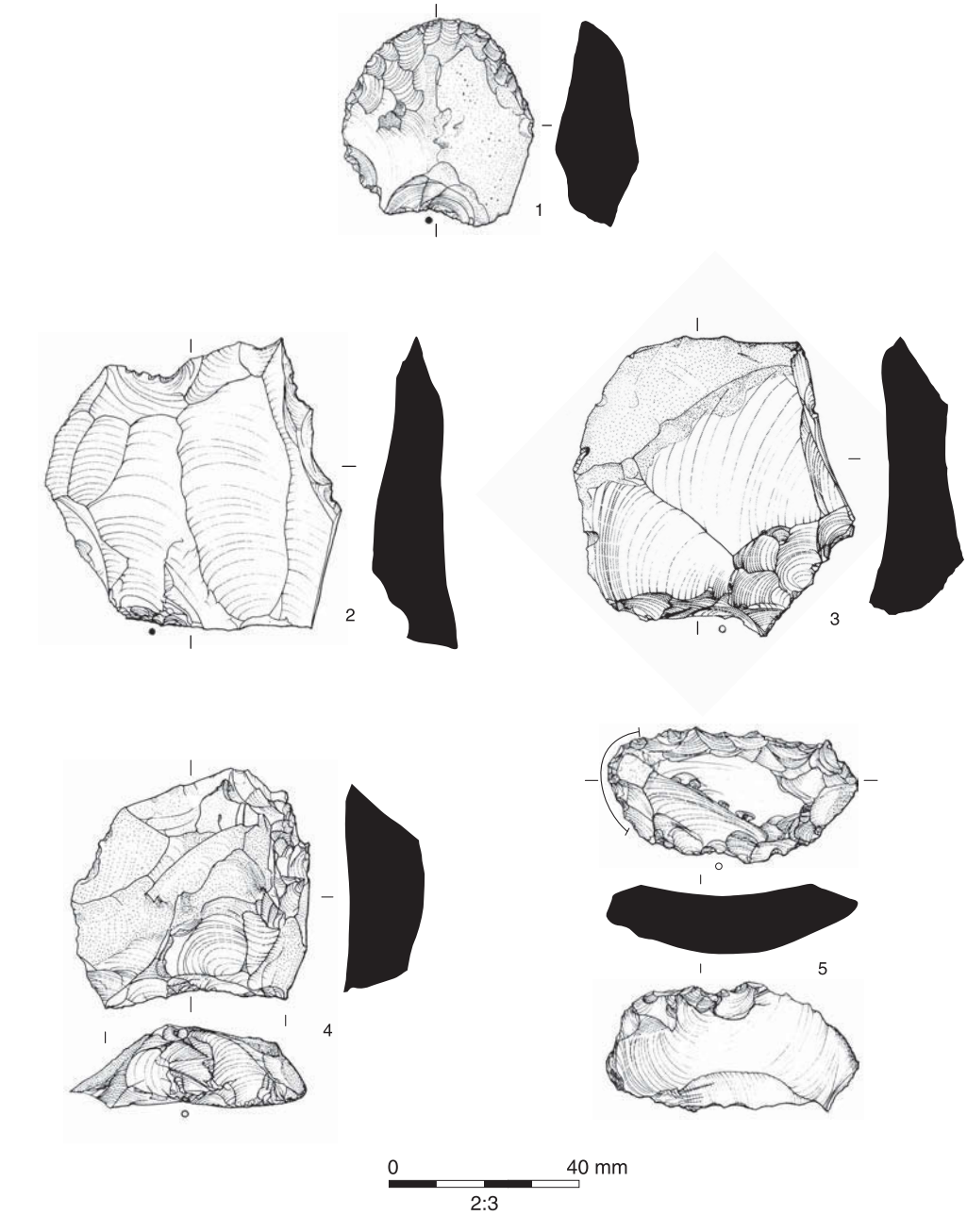

Fig. 11. Prehistoric worked flint.

3. Hollow/concave scraper. Proximal abrupt retouch has removed the bulb. The proximal left hand side also exhibits abrupt edge retouch. Residual in Roman context 20661, probably Middle to Late Bronze Age.
4. Hollow/concave scraper. Proximal abrupt retouch has removed the bulb. Residual in Roman context 20844, probably Middle to Late Bronze Age.
5. Fabricator. Manufactured on a squat flake. Rounded use-wear on the left hand side ventral surface. Layer 20500. Probably Middle to Late Bronze Age.

THE CERAMIC BUILDING MATERIAL

by Leigh Allen

Forms and function

Though relatively small, the assemblage includes a variety of tile types. Roof tile in the form of tegula and imbrex fragments are not well represented; only one fragment from a tegula and three fragments of imbrex were recovered. The fragments from box flue tiles identifiable by their characteristic combing pattern (which acts as a key for plaster) were more numerous. A total of 26 fragments were found, of which 22 came from pit 20698. A single fragment from a box voussoir was also found. It had tapering sides (varying in width from 160–173 mm) and a heavily applied combing pattern. Box tiles and box voussoir are both forms of cavity walling designed to allow heat from a hypocaust system to pass into the space behind walls. Box voussoir are more specifically designed to carry heat across an arch. Floor material in the form of large flat tiles and bricks are also represented in the assemblage. Fragments of large flat tile were recovered; one piece was decorated with three inter-cutting shallow finger grooves running across the upper surface. Brick fragments were also recorded, although some fragments are probably post-Roman. In addition, a small collection of roughly-cut blocks recovered from context 20647 could be evidence of tesserae.

The remaining fragments are either small and plain (with a measurable thickness) but with no complete dimensions present are not identifiable to type. The assemblage also included fragments of post-Roman roofing material and modern field drain.

Distribution

The bulk of the ceramic building material was recovered from Roman ditches and pits located close to structure 20918. Identifiable forms included imbrex, box tile, a box voussoir fragment, and possible tesserae. These are likely to have derived from structures with a tiled roof, a hypocaust system and tessellated floor.

FIRED CLAY by Cynthia Poole

A total of 33 fragments (956 g) of fired clay was recovered from ten contexts within the excavation. The majority was found in Roman-period pits and ditches. The condition of the material was moderately to highly abraded. The assemblage provides evidence for the use of triangular bricks, probably as oven or hearth furniture. Though traditionally regarded as loomweights, evidence for such a function is conspicuously lacking, while an association with kilns or oven debris has been noted (Poole 1995). One of the fragments was found with burnt debris in shallow pit 20736 (which was cut into ditch 20922). The floor of the pit was burnt, suggesting that the brick was directly associated with an oven base. Non-diagnostic fragments of fired clay are all likely to derive from hearth floors or oven-type structures of a domestic or agricultural character.

METALWORK AND METALWORKING

by Kelly Powell & Luke Howarth

Of the metal finds recovered from Roman features, only two were copper alloy. A screw from pit 20665 was clearly modern and therefore intrusive. This may also be true of a small circular perforated object resembling the eyelet from a laced shoe from spread 20191.

A total of two lead items were found including an irregular lump, possibly industrial waste from pit 20417, and a small sub-circular weight from pit 20817. The latter, weighing 11 g, was somewhat irregular and not well-finished, with a tapering hole and a flat underside

The ironwork from Roman features comprised fragments of nails or similar structural fittings and was recovered from ditches, pits and postholes. In general, these were very fragmentary and corroded. Posthole 20677 and pit 20691 both contained a single hobnail. Other iron finds include a curved rod, possibly a hook corroded onto a further fitting from pit 20776, and a rectangular-sectioned object, possibly part of a blade, from posthole 20731.

Two contexts produced material identified as slag. Late Roman pit 20815 contained two fragments of fuel ash slag. Unfortunately, these are is not very informative, as fuel ash slag can be produced via a number of processes, not necessarily relating to metalworking. Three fragments of a smithing slag cake recovered from ditch 20910, however, suggest that metalworking was carried out to a limited extent within the excavated area.

THE ANIMAL BONE by Lena Strid

The Mackie Avenue animal bone assemblage consisted of 61 burnt fragments from fills of pits and ditches and a partial cattle burial (context 20883). None of the burnt fragments could be identified any nearer than large or medium mammal. The burnt fragments are probably mostly prehistoric, whereas the cattle burial has been dated the post medieval or modern period. Apart from the cattle burial, no unburnt bone was recovered.

THE CHARRED PLANT REMAINS by Wendy Smith

Introduction

A total of ten samples, ranging in volume from 3 to 10 litres, were sampled from the 2005 evaluation (Griffiths & Robinson 2005). A further 70 samples, ranging in volume from 5 to 40 litres, were assessed after the subsequent excavation. The assessment of these and the evaluation samples established that only one sample (sample 30, context 1423) was suitably rich to merit further analysis (Griffiths & Robinson 2005; Smith 2008). Sample 30 was collected from a heavily truncated ring-gully associated with a Bronze Age roundhouse recorded during the evaluation and was 40 litres in volume. The deposit was provisionally dated to the Bronze Age on the basis of the pottery recovered; which was confirmed by the AMS dating of the charred broad beans. Nomenclature for the plant remains follows Stace (1997) for indigenous species and Zohary and Hopf (2000) for cultivated species.

Results

Table 7 lists the taxa identified from sample 30. The plant remains were charred but also had a somewhat mineralized

Table 7. Charred plant remains from a Bronze Age ring-ditch at Hassocks (sample 30, context 1423). Key: + = <5 items, ++ = 5–25 items. +++ = 25–100 items.

Sample number	**30**	
Context number	**1423**	
Context type	**round house gully fill**	
Phase	**Middle–Late Bronze Age**	
Sample volume	**40 litres**	
Flot volume	**80 ml**	
Seeds per litre of sediment	**2.2**	
Proportion of flot/heavy residue sorted	**100% flot**	**100% 10–14 mm HR**
Cereal chaff		
Triticum sp. — indeterminate rachis node	1	
Pulses		
Vicia faba L. var. minor (complete with hilum intact)	10	
Vicia faba L. var. minor (detached hilum — counts not included in calculations)	1	
Vicia faba L. var. minor (complete but hilum not preserved)	37	1
Vicia faba L. var. minor (cotyledon fragments counted as whole beans)	6	1
Vicia spp./*Pisum sativum* L.	4	
cf. *Vicia* spp./*Pisum sativum* L. — fragments counted as est. whole	25	1
Weed/Wild		
Chenopodium sp.	1	
Indeterminate (minute frags <2 mm most likely also *Vicia* spp./*Pisum sativum* L.)	+	
Fungal bodes	+++	
Total identifications each fraction	**84**	**3**
Total identifications	**87**	

appearance. Broad bean (*Vicia faba* L. var. minor — also known as field bean, horse bean or Celtic bean) was dominant. In total, 55 beans were identified, accounting for 97.6% of the assemblage. The beans were remarkably well preserved, ten of which had an intact hilum (the point where the bean attaches to the pod) present. One indeterminate rachis node of wheat (*Triticum* sp.) was recovered. This had broken quite low on the node, but had clearly woody glumes and the point of attachment for the next internode was also relatively pronounced, which may suggest this is derived from emmer (Triticum dicoccum Schübl.) or spelt (*Triticum spelta* L.). One goosefoot (*Chenopodium* sp.) seed was also recovered.

Discussion

The deposit of broad beans recovered from Hassocks is relatively pure, but unfortunately, given the truncated nature of the ring-gully feature encountered, it is not possible to determine if this was some form of special deposit. This also is a relatively small assemblage with only 87 identifications made from 40 litres of processed sediment (e.g. a density of 2.2 seeds per litre). Although it is tempting to suggest there is some ritual significance to this deposit due to the purity of the assemblage and its location, it could just as easily be derived from a much more prosaic event, such as the disposal of accidentally burnt food.

The recovery of broad bean from Bronze Age deposits is not unknown in Britain, but appears to be restricted to a few sites in southern England, including Black Patch, Lewes, East Sussex (Hinton 1992), Brean Down, Somerset (Straker 1990), Downsview, Coldean, East Sussex (Hinton 2002b, 196–7), Mile Oak Farm, Portslade, East Sussex (Hinton 2002a, 68–9) and Rowden, near Dorchester, Dorset (Carruthers 1991). Large quantities of broad beans have also been recovered from Bronze Age horizons at Le Pinacle, Jersey (Carruthers 2001). Three of these sites are relatively close to Hassocks (Black Patch, *c*. 16 km away, Downsview, *c*. 19 km away, and Mile Oak Farm, *c*. 15 km away), and there could plausibly be cultural or agricultural reasons for the early adoption of broad bean into cultivation in this region, such as its use in a particular foodstuff or use as an animal feed. There are obvious benefits to arable soil if legumes are grown in rotation with cereals or other crops.

THE CHARCOAL by Denise Druce

The results of the charcoal analysis by fragment count (full analysis) and scale of abundance (scanned samples) are shown in Tables 8 and 9. Eight taxa were positively identified, including four to species level. The taxonomic level of identification varied according to the biogeography of the taxa and the state of preservation. In many cases the fragments could only be taken to an approximate level of identification, that is, to family level, as some of the key diagnostic features that were needed to distinguish the species were not observed. In other cases the level of identification was limited due to the anatomical similarities of species within a family or sub-group, for example Maloideae (referred to as hawthorn-type in text), which could be hawthorn, apple, pear or one of the whitebeams. In general, the preservation was fair, although a large proportion of the fragments tended to be less than 4 mm in size. The fragments categorized as indeterminate

Table 8. Charcoal from the Middle Bronze Age samples. Fragment counts are shown for fully analysed samples and a scale of abundance is given for scanned samples. Key: + = present (<5 items), ++ = frequent (5–25 items), +++ = common (26–100 items), ++++ = abundant (>100 items).

		Fully analysed samples			Scanned samples		
Feature type		**Posthole**	**Posthole**	**Pit**	**Pit**	**Pit**	**Pit**
Sample number		**1000**	**1001**	**1004**	**1008**	**1020**	**1083**
Context number		**20061**	**20072**	**20095**	**20081**	**20265**	**12014**
Volume floated (litres)		**5**	**10**	**40**	**40**	**10**	**20**
% flot identified/scanned		**100%**	**31.25%**	**50%**	**25%**	**25%**	**25%**
Acer campestre	field maple						+
Corylus avellana	hazel		1		+		+
Alnus/Corylus	alder/hazel		2	4	+		+
Prunus sp.	blackthorn, wild cherry		1		+		
Quercus sp.	oak	77	105	78	++++	++++	++++
Salicaceae	willow/poplar				+		+
Indeterminate		14	14	26			
Total		**91**	**123**	**108**			

Table 9. Charcoal from the Roman samples. Fragment counts are shown for fully analysed samples and a scale of abundance is given for scanned samples. Key: + = present (<5 items), ++ = frequent (5≠25 items), +++ = common (26–100 items), ++++ = abundant (>100 items).

		Fully analysed samples			Scanned samples			
Feature type		**Pit**	**Pit**	**Posthole**	**Pit**	**Pit**	**Pit**	**Pit**
Sample number		**1033**	**1075**	**1093**	**1034**	**1035**	**1076**	**1078**
Context number		**20410**	**20744**	**20672**	**20429**	**20427**	**20777**	**20796**
Volume floated (litres)		**40**	**30**	**10**	**40**	**40**	**40**	**40**
% flot identified/scanned		**50%**	**9.375%**	**62.5%**	**100%**	**25%**	**25%**	
Acer campestre	field maple		5					
Alnus glutinosa	alder	7						
Corylus avellana	hazel	3	10		++	++	++	
Alnus/Corylus	alder/hazel	85	57	35	++	+++	++	++
Fraxinus excelsior	ash	6		3	+	+	+	+
Maloideae	hawthorn, apple, pear etc.	2						
Prunus sp.	blackthorn, wild cherry						+	+
Quercus sp.	oak	25	23	49	++	++	++	+++
Salicaceae	willow/poplar		5		+++	+++	++	++
cf. Salicaceae	willow/poplar	1						
Indeterminate wood		5	10	20				
Indeterminate diffuse porous wood				8				
Indeterminate-bark fragments				3				
Total		**134**	**110**	**118**				

were not identifiable because of poor preservation, the fragments coming from twisted/distorted wood or being heavily mineralized. Heavy mineralization of many of the alder (*Alnus glutinosa*) and hazel (*Corylus avellana*) fragments in particular, made differentiation between these two taxa difficult in many of the samples.

The fully analysed Bronze Age samples, which came from two posthole fills (contexts 20061 and 20072) and a pit fill (context 20095) are all dominated by oak (*Quercus* sp.) charcoal, as are the three scanned samples, which all came from pits (contexts 20081, 20265 and 12014). A number of other species were identified, including field maple (*Acer campestre*), hazel, blackthorn/wild cherry (*Prunus* sp.) and willow/poplar (Salicaceae). However, the number of fragments of each of these taxa was very low (less than 5).

The samples taken from the Roman contexts, which include six pit fills and one posthole fill, contain a similar range of taxa as the Bronze Age samples. However, they appear much more mixed and are generally dominated by alder/hazel. Many of the alder/hazel fragments from the Roman

Table 10. Summary of radiocarbon determinations.

Reference	Identification	Result BP	Calibrated determination
SUERC-20209 (GU-17197)	Charred seed: *Vicia faba* var. minor	2890±30 BP	1210–970 cal. BC (95.4%)
SUERC-21047 (GU-17681)	Bone: *Bos domesticus*	110±30 BP	cal. AD 1720–1820 (49.3%)
SUERC-20210 (GU-17198)	Bone: *Bos domesticus*	165±30 BP	cal. AD 1800–1940 (65.5%)

samples could not be differentiated and, as both taxa were positively identified in one of the Roman contexts, this means that either could be represented. The only Roman fill with dominant oak charcoal was from the single posthole (context 20672). However, this context also contained abundant alder/hazel and a few ash (*Fraxinus excelsior*) fragments. Many of the fragments in this sample were poorly preserved having lost their cellular structure or were very heavily mineralized.

Context 20410 contained the most diverse range of taxa, including oak fragments, alder, hazel, and hawthorn-type. A few fragments of ash were recorded in most of the Roman samples. Willow/poplar appears to be better represented than in the Bronze Age samples, especially in the scanned samples.

Discussion

It is likely that much of the charcoal from Hassocks represents either fuelwood, which was subsequently redeposited, or the burnt remains of structural material. It is also possible that some of the charcoal comes from fuelwood used for industrial activity. However, there was little direct evidence for this having taken place at the site.

All the Bronze Age samples were dominated by oak charcoal, which suggests that oak wood was easily available during this period and that it was possibly being used for a range of functions. Gale and Cutler (2000) suggest that oak was the favoured wood for structural material since the prehistoric period and it is certainly possible that the oak charcoal present in the two Bronze Age postholes (contexts 20061 and 20072) represents the remnants of burnt posts. However, given that context 20072 also contained other wood taxa, it is also possible that, in this context at least, the material represents domestic debris that entered the void of the post if it had been removed. The presence of blackthorn/wild cherry in this and one of the Bronze Age pit fills (context 20081) may also indicate areas of scrub nearby.

The range of taxa in the single Roman posthole (context 20672) suggests that, as with context 20072, at least part of the assemblage may represent domestic debris, which became incorporated into the feature once the post was gone. All the scanned Roman samples contained frequent to common willow/poplar fragments. The rods may have been incorporated into the structure of the aisled building, which is likely to have been a wattle and daub construction (cf. Rackham 2003; OA 2008). However, no appreciable amounts of small round-wood fragments were observed in this or any of the other contexts from Hassocks, suggesting that the material came from either trunk wood or larger branches.

The most evident pattern to emerge from this study is the difference in the nature of the assemblages between the two phases of occupation. The Bronze Age samples are very much dominated by oak wood, whereas the Roman samples are much more mixed with a large non-oak component. This pattern may reflect a change in the surrounding landscape from oak (and hazel?) dominated woodland, to a much more open wooded landscape with ash (a light-demanding tree) and scrub or hedgerows, where alder and willow may have grown on wetter ground to the south. Similar conditions were evident at a Roman site at Burgess Hill, where the presence of light-demanding trees and scrub was interpreted as representing a surrounding environment of secondary woodland/scrub with abundant oak (Seel 1999).

Evidence for landscape changes during the last 4000 years in the southeast of England is lacking due to the scarcity of organic remains and pollen sequences (Waller & Schofield 2007). However, the established view is that widespread clearance of woodland took place during the Middle to Late Bronze Age (Waller & Schofield 2007). Molluscan work on sediments excavated in advance of the Brighton Bypass also indicated increased clearance and colluviation during the Late Bronze Age as a result of increased settlement and agricultural exploitation (Wilkinson *et al*. 2002). It is likely, therefore, that the difference between the Bronze Age and Roman charcoal assemblages from Hassocks may very well reflect a change in the surrounding woodland flora and locally available resources between these two periods.

As well as providing information on the type of woodland being utilized for fuelwood and possible structural material, the Hassocks charcoal assemblages have provided useful comparative datasets taken from two distinct phases of occupation at the site. Given that the current evidence indicates widespread clearance and occupation in the area during the Middle and Late Bronze Age, it is feasible that the Middle Bronze Age occupants at the site cleared and utilized the primary oak woodland, which is likely to have still been fairly intact in the area at this time. By the Roman period, however, the evidence is consistent with other sites in the area and suggests that a much more open wooded landscape with scrub and/or hedgerows existed.

THE RADIOCARBON DATES by David Mullin

Three samples were submitted to the Scottish Universities Environmental Research Centre for AMS dating. These were a single broad bean from sample 30 (context 1423) and part of the nasal bone of the cattle burial (20883). A second sample from the rib of (20883) was submitted subsequently (Table 10).

DISCUSSION

BRONZE AGE OCCUPATION by David Mullin

Activity during the Mesolithic, Neolithic and Early Bronze Age is indicated by the unstratified flint assemblage and pit 20073. Flint has been collected from the Hassocks area throughout the twentieth century, and Butler (1989a, b) has catalogued Mesolithic and later finds to the west of the Mackie Avenue site. The lithic material suggests intermittent occupation in the area during earlier prehistory.

The main period of prehistoric occupation at the Mackie Avenue site, however, appears to have been the Middle Bronze Age, when at least three roundhouses, associated with pits and field boundaries, were constructed. Roundhouse 20909 was located to the south of the two Middle Bronze Age roundhouses found in the 2005 evaluation. As no features of this date were found in the areas excavated in the south of the site, Bronze Age activity was probably focused to the east and north of Area 1. The nature of the activity here is likely to have been a settlement, although apart from the remains of broad bean from a single context, no evidence for its economic basis was recovered from the excavation. Some 20 settlements of similar date are known elsewhere in Sussex, and these have produced evidence of metalworking, cloth and leather working and possible grain processing (Drewett 1979; Rudling 2002; Hamilton 2003, 70). There appears to have been widespread clearance of woodland and the establishment of agricultural farmsteads during the Middle to Late Bronze Age in the area (Gardiner 1990) and Dunkin (2001) has also noted that settlements of this date show a degree of spatial organization, frequently being associated with burnt mounds and deposits of metalwork on lower ground, with the main focus of settlement on adjacent rising ground. If this were the case at Mackie Avenue, the main settlement focus would be located to the north of Area 1, in the area preserved *in situ*.

The burnt flint spread across the south of the site may be the result of colluviation, but might alternatively represent caches of material used in the production of pottery. All the Bronze Age pottery from the site was flint-tempered, the flint being frequently burnt and crushed. The spread of flint in Area 5 may be the by-product of the preparation of flint for pottery temper. Elaine Morris (2004, 81) noted a similar possible relationship between deposits of burnt flint and flint-tempered pottery at Reading Business Park, although Jo Brück (2007, 35) has remarked on the general lack of evidence for pottery production at Bronze Age settlement sites. Interestingly, the only material to be recovered from the roundhouses was oak charcoal and no pottery was present in any of the features associated with these structures. A large number of broad beans were, however, recovered from features associated with the houses.

The quantity of broad beans recovered from Mackie Avenue is remarkable and represents one of the richest assemblage from a single deposit recovered for the Bronze Age in southern Britain. Small amounts of broad beans were recovered from Black Patch (Drewett 1982), but these were not directly radiocarbon dated. Other material from Black Patch suggests abandonment in the Late Bronze Age. Other sites which have produced *Vicia faba* include Unit 5b at Brean Down, Somerset (Bell 1990), where a total of three beans, which were not directly dated, occurred in later Bronze Age occupation deposits, and Rowden in Dorset, where a dump within a roundhouse produced a significant number of beans. These were not directly dated, but charcoal from a post of the roundhouse returned a radiocarbon date of 2920±80 BP (Carruthers 1991). The closest parallel to the treatment of the beans at Mackie Avenue comes from Frog Hall Farm, Fingringhoe, Essex (Brooks 2002), where carbonized beans were found in a pit adjacent to a roundhouse, along with Late Bronze Age pottery. The beans were directly dated to 2760±80 BP and the deposit was interpreted as having been deliberately placed within the pit.

THE ROMAN SETTLEMENT

by David Mullin & Edward Biddulph

The field boundaries at Mackie Avenue mainly date from the early to mid Roman period and a number of pits of this date were also excavated at the site. The full extent of the site remains unknown, although it is likely to continue to the west, east and north of the excavated area. Other Roman farmsteads in Sussex appear to have practised mixed farming with evidence for wheat and barley cultivation and the raising of cattle and sheep, as well as the processing of their products such as cheese and wool (Rudling 2003a, 117).

Ditch 20917 and posthole group 20918 mark the outline of a building. Pottery recovered from the features suggests that the structure was

built between the late second and early third century. What kind of structure the components represented is a matter of debate. It is possible that the ditch served as a wall trench, while the internal postholes defined the central nave and outer aisles of an aisled building. In this respect, the structure resembled aisled buildings from Great Holts Farm, Boreham in Essex. The earliest (building 416), erected in the early third century, was defined by a wall trench less than 1.2 m wide and 0.3 m deep (Germany 2003, 33), which is comparable to ditch 20917 at Hassocks. The second (368) was built in the late third or early fourth century and, at 24 m long by 12 m wide, was almost identical in size the Hassocks structure (Germany 2003, 41). The northeast corner and the south side of ditch 20917 is problematic, however, since these elements were incorporated into much larger enclosures. In addition, the arrangement of postholes does not compare well to definite aisled structures, including the two at Boreham. A more convincing interpretation is that the postholes represented the structure alone, which was set within a small enclosure. The structure may have been open-sided along the east side (E. Black, pers. comm.). Boreham again offers a parallel. A narrow ditch formed an enclosure (E22) *c.* 20 m by 12 m that surrounded a number of seemingly haphazardly-arranged postholes. These were interpreted as structures used for stock-keeping or horticulture (Germany 2003, 219; fig. 23). A small building excavated at Middleton-on-Sea (Barber 1994) may provide another parallel. That structure dated from the first to second centuries AD and, like the building at Mackie Avenue was probably constructed with wattle and daub. Little evidence for the function of the Hassocks structure was uncovered during the excavation. Like enclosure E22 at Boreham, it could have served as a barn for livestock or crops. It may have served as a workshop or domestic structure, or was indeed multi-functional, but the building lacked the evidence — for example, hearths, drains, surfaces and partition walls — to show how the space within it was organized (cf. Smith 1997, 26).

The ceramic building material suggests that a building existing in or near the excavation site was equipped with a tiled roof, tessellated floor and a hypocaust system. Traditionally these have been regarded as a the attributes of high-status buildings, essentially villas and rich town-houses, but there is increasing evidence to show that structures built of timber, wattle and daub, which might otherwise be interpreted as lower-status residences or work buildings, could take a similar appearance. This is well illustrated by the two adjoining aisled buildings from Boreham. Both structures were predominantly constructed of timber (a necessity in a region lacking good building stone), but the complex was firmly identified as a villa (Germany 2003, 54–5). Similarly, a Late Roman rectangular timber building from Little Canfield, again in Essex, yielded large quantities of ceramic roof tiles and box-flue tiles and is also likely to have had a hypocaust, despite its farmhouse-like appearance (Biddulph 2007, 112). Returning to Hassocks, it is a stretch of the evidence to equip the structure represented by posthole group 20918 with a tiled roof, ceramic flooring, hypocaust; the quantity of roof tile recovered seems too small in view of what was undoubtedly a large area covered by the postulated roof, while no trace of a sunken floor, flue, mortar or any other elements of a hypocaust installation was found. However, it is not impossible that tiles, either on the roof or the floor, had been incorporated into parts of the building. If so, then it would not be an isolated example. Buildings found at Park Brow near Worthing (Wolseley *et al*. 1926) were of a similar size to that at Mackie Avenue and produced evidence of window glass, painted wall plaster and a tiled roof. The remains of a tessellated floor were found within two of three end rooms of an aisled building (albeit with masonry foundations at Barcombe villa (Rudling & Butler 2004, 19 and fig. 2; Russell 2006, 171) and a bath-suite was inserted into the aisled building at Batten Hanger, again with masonry foundations (Magilton 1991, 27).

The use of the smaller Roman enclosure or ring-gully (20921) is even more puzzling. At about 7 m across its widest extent, the structure is adequately-sized for a domestic roundhouse. Roman-period roundhouses cannot now be regarded as unusual, even in southern Britain and adjacent to rectangular structures, for example at Barcombe and Beddingham villas (Rudling 2003c). At Hassocks, the postholes around the outside edge of the gully and the probability that they were dug when the gully was filled seems to argue against an interpretation as a domestic structure. The size and number of postholes brings to mind an open structure, covered only across the top. None of the pits within the structure contained any significant

material, with the exception of pit 20698, and there was no evidence for burials (except the intrusive cow burial) or industrial or domestic activity. It has been noted that the substantial remains of a grog-tempered ware jar found in one of the postholes may have been inserted for ritual purposes, hinting that the structure served as a small shrine. Circular shrines are known in Sussex, but none provides exact parallels. While the slightly polygonal nature of the gully at Hassocks recalls (albeit faintly) the shrine at Chanctonbury Ring (Rudling 2003a, fig. 9.8), the Early Roman shrine at Lancing Down is perhaps the most useful parallel, since its square structure was surrounded by a ring of postholes (Bedwin 1981; Rudling 2008). Pits located within a circular temple at Muntham Court contained ox skulls (Bedwin 1980, 192), but given the dating of the cow burial 20881, these do little to aid the interpretation of the Hassocks structure. It is entirely possible that the gully and postholes were not in fact associated, the gully being an earlier feature replaced by a structure defined by postholes and with storage pits inside.

The main period of occupation of the Roman settlement at Mackie Avenue, probably representing a farm outside a larger market centre, is in the early to Middle Roman period, with limited evidence for Late Roman occupation. This seems a common pattern across Sussex, with the decline of villas near the coast in the third and fourth centuries and the reorganization of other sites during this period (Rudling 2003a, 121). The villa at Barcombe, 8 km to the east of Hassocks, appears to fit this pattern, having been abandoned in the late third or early fourth century. The cemetery at Hassocks was in use during the late second to early third centuries (Lyne 1994), a period which overlaps with the main occupation at Mackie Avenue. It is not clear how large the catchment area for this cemetery was, as it is one of only two substantial cemeteries known from the county (the other being Seaford), but it may have included Mackie Avenue. A sequence of Bronze Age and Roman settlement similar to that at Mackie Avenue has been found at Barcombe, where a Roman villa was built over an abandoned Bronze Age field system (information from http://www.msfat.com; Rudling 2003a, 121). Late Bronze Age and Roman occupation is also known from Knapp Farm, Bosham (Gardiner & Hamilton 1997) and from Eastwick Barn, Brighton (Barber *et al*. 2002), but little or no Iron Age material was recovered from either of these sites, or from Mackie Avenue itself.

Acknowledgements

Oxford Archaeology is grateful to Barratt Homes Southern for funding the excavation and subsequent analysis and publication programme. The fieldwork was directed by Richard Brown; the post-excavation work was managed by Alex Smith and Edward Biddulph. The authors and project managers would like to thank the following field staff for their significant contribution to the project: J. Aikin, Peter Gane, Andrew Ginns, Vickie Jamieson, Alex Latham, Kevin Moon, Gemma Stewart, Stuart Townsend and Helen Webb; Dave McNicol supervised the fieldwork. The illustrations were prepared by Markus Dylewski, Amy Hemingway and Sarah Lucas. Wendy Smith would like to thank Allan Hall (University of York) for providing details from the Archaeobotanical Database of Bronze Age finds of broad bean in the UK. Denise Druce thanks Dana Challinor for her assistance with some of the identifications and for commenting on the text. Edward Biddulph is grateful to Malcolm Lyne and Luke Barber for their guidance on the pottery of Roman Sussex. The principal authors are grateful to Ernest Black and the anonymous referees for their comments on the text, especially with regard to the interpretation of the Roman structures. Any errors remain the responsibility of the authors and contributors.

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