Chapter 6:

A Multi-period Settlement at Bradford's Brook, Cholsey

by Angela Boyle and Anne Marie Cromarty

INTRODUCTION

Nine evaluation trenches excavated in 1992 in the field between Bradford's Brook, Cholsey (at SU 598 885) and a former branch line of the Great Western Railway (at SU 598 885), along the line of the bypass to the south and west of Wallingford (see Fig. 1.2), revealed a late Bronze Age, Romano-British and Saxon settlement (Fig. 6.1). These results prompted further limited excavation in some areas, which was supplemented by records from a watching brief maintained during the construction of the bypass, and by the results of fieldwalking.

BACKGROUND

With the exception of a lower lying area of alluvium beside Bradford's Brook to the north (see Fig. 6.1), the proposed 30–40 m wide road corridor lay on valley gravels. Within the area of the gravels it crossed a 4 m high ridge which corresponds to a change in sedimentology: north of the ridge the archaeology was sealed by colluvium or relic ploughsoil; to the south by modern ploughsoil alone. The field was under arable cultivation.

No cropmarks were known in the area prior to the evaluation, although a subsequent Royal Commission survey revealed some cropmarks in the field (RCHME 1993; see Fig. 6.1). A few sherds of early Roman and Iron Age date had been found during fieldwalking in 1985–6 to the south of Bradford's Brook around SU 595 885 (see Fig. 1.2 and Chapter 1).

EXCAVATION METHODS AND RECORDING

The evaluation trenches were machine excavated using a toothless bucket down to the archaeological horizon or the underlying natural. Trenches 7 and 8 were 20 m long; the others 30 m. All features were excavated, either by hand or, due to time restrictions, in the case of deep features, by machine, to obtain details of stratigraphy, preservation, dating and finds density. Features in the evaluation trenches were designated by a trench number followed by a feature number taken from a continuous sequence. A letter was assigned to each section in cases where more than one section was cut through a feature. A further number taken from a continuous sequence was assigned to the features' fills (eg 1/2/A/1 for trench 1, feature 2, section A, fill 1).

Since the area to the north of the ridge was stripped only as far as the colluvium during the watching brief no further features were revealed in this area. Numerous features were, however, revealed to the south. Each of these features was assigned a number from a continuous sequence; a further number from a second continuous sequence being assigned to each fill.

ARCHAEOLOGICAL DESCRIPTION

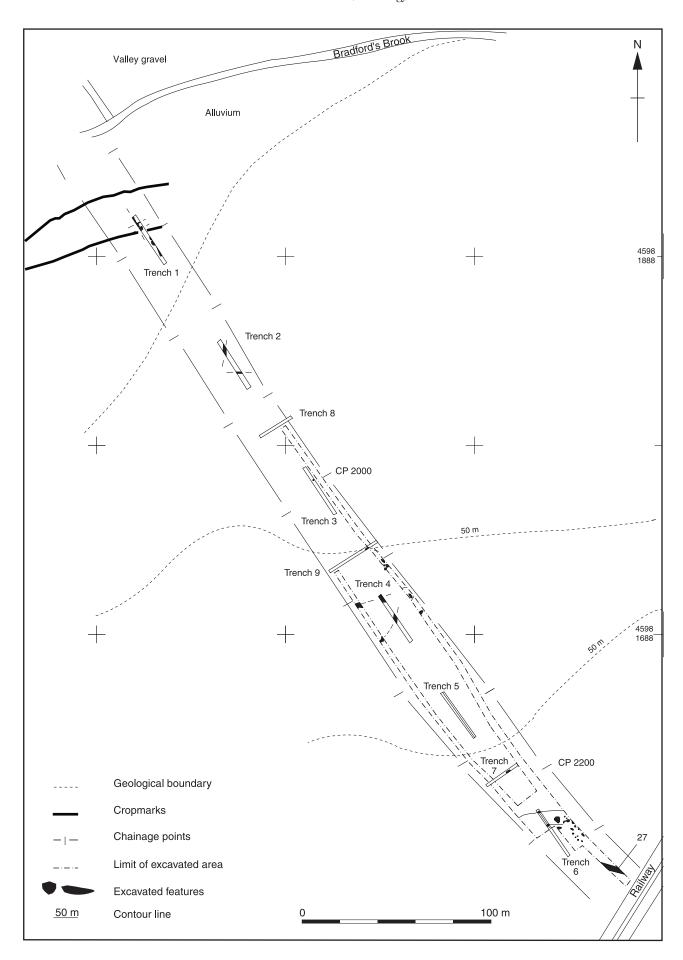
General stratigraphy and early deposits

In all the trenches the uppermost layer was a modern ploughsoil (1-9/1), and in all but trench 1 the natural was a grey chalk and gravel mix. Corresponding to the change in underlying geology, the natural in trench 1 differed, consisting of orange sand and gravel (1/5). The natural was overlain in this trench alone firstly by a dirty gravel layer 0.05 m thick (1/4) which contained some flint flakes and waste that cannot be precisely dated, and then by the remains of what may have been an old ground surface (1/8), preserved in a natural hollow. A flint scraper, possibly Neolithic in date was found in this layer (1/8). Although this deposit may well predate the late Bronze Age, possibly contemporary flintwork was found also in the layer above (1/3), and the precise date of the ground surface is uncertain.

A brown or grey alluvial clay overlay the natural in trenches 1, 8 and 9, and a layer of mid brown or grey clay or clay loam, perhaps a relic ploughsoil, was noted in some trenches (2–4 and possibly 1).

The later Bronze Age

Various features indicate activity in the later Bronze Age: a waterhole, dating from the end of the middle Bronze Age; ditches, some of which perhaps formed part of a system of land divisions; numerous postholes, some suggesting the existence of a structure; and pits. These features are concentrated at the northern and southern ends of the site. The apparently featureless gap between them may reflect only the fact that shallow features on this higher ground are likely to have been destroyed by later ploughing. Finds of pottery of this period in layer 48, near the middle of the site, hint at activity within this otherwise blank area.



The waterhole

An oval pit (1/7; Fig. 6.2), 3.4 m wide and 1.7 m deep, has been interpreted as a waterhole. Its sides were generally near-vertical, except to the southeast, where, perhaps to provide access, the side was shallower and stepped. Since it extended beyond the trench only part of the feature was handexcavated. A slot was cut by machine to reveal its complete profile (Fig. 6.3, section 1). The primary fill (1/7/A/5), a waterlogged blue-grey silty clay, contained middle-late Bronze Age pottery, a cylindrical loomweight of middle-late Bronze Age type, and seven fragments of wood 0.5 m long. Radiocarbon dates on two pieces of this wood (see Table A1.1) again suggest a middle-late Bronze Age date: 1740-1410 cal BC and 1440-1120 cal BC (95% confidence GU-5713; 3260±70 BP; GU-5714; 3050±60 BP).

The primary fill was overlain by a mid buff sandy clay also containing wood (1/7/A/4), and above that by a buff-brown sandy silt (1/7/A3) which contained a probable Neolithic flint flake (probably residual) and a cattle skull. The skull lay towards the top of this layer, face up, suggesting that it was deliberately placed. A radiocarbon date, 110 cal BC–cal AD 230 (95% confidence GU-5712; 1950±70 BP), dates the skull to the late Iron Age–early Roman period.

The final fill (1/7/A/2) was a dark grey clay. It lay immediately below a mid dark brown clay layer (1/7/A/1) which, although it appeared to cut the possible relic ploughsoil (1/3), is probably part of the same layer.

A ?field system

Two ditches in trench 1 (1/9 and 1/11) may have been related, perhaps forming part of a field system (see Fig. 6.2). Ditch 1/9 may be part of the feature identified as a cropmark by RCHME (1993; see Fig. 6.1). The area around this trench was, however, stripped down to the possible relic ploughsoil or alluvial layer (1/2) only, so the continuations of these ditches were not observed. They appear nonetheless to run roughly perpendicularly, 1/9 ENE and 1/11 NNW. Although the full width of ditch 1/11 could not be determined, both appear to have been large: ditch 1/9 being 0.8 m deep and 2 m wide, and ditch 1/11 0.75 m deep and over 0.75 m wide. They were similar in section (see Fig. 6.3, section 2). Ditch 1/9 had somewhat irregular sides which sloped from 20° to 70°, becoming steeper towards the slightly concave base. The sides of 1/11 sloped at around 30° near the top, becoming almost vertical towards its flat base. They also had similar grey or brown clay fills either mixed with, or containing lenses of, red-brown sand.

As well as residual Neolithic or early Bronze Age flint, the finds in ditch 1/11 consisted of one sherd

of late Bronze Age pottery in its middle fill (1/11/2), and a larger group of late or middle–late Bronze Age pottery in the final fill (1/11/1). A single sherd possibly of middle Iron Age date was also found in this layer; it may be intrusive from layer 1/3 above. A single sherd of middle–late Bronze Age pottery in the final fill (1/9/A/1) was the only artefact in ditch 1/9.

The stratigraphic relationship between these two ditches was unclear, but although 1/9 may have cut 1/11, the ceramic finds and other similarities suggest that the two ditches were of very similar date, if not precisely contemporary.

A third ditch (2/4) with a similar profile was located in trench 2 (see Fig. 6.2). Its sides sloped irregularly to an almost flat base. It was filled with light grey-brown compact sandy silty loams which could be divided into three distinct layers (2/41–3). The difference between these fills and those in ditches 1/9 and 1/11 is probably due to the differences in the underlying natural geology. Although it contained no artefacts, and is aligned roughly north–south in contrast to ditches 1/9 and 1/11, the similarity in size and profile suggests that all three ditches may be of similar date.

Smaller ditches and gullies

The large ditch 1/11 was cut by a smaller ditch (1/10), 0.65 m wide and 0.3 m deep; it ran parallel to ditch 1/9, which was 3 m to the south (see Fig. 6.2). The ditch 1/10 was filled with a grey-brown slightly sandy clay with occasional flecks of red-brown sand, within which two small sherds from a late Bronze Age fingernail-decorated jar were found (Fig. 6.7.3). These could be residual, and the date of the ditch is, therefore, uncertain. It was, however, sealed by the poorly dated layer 1/3.

A gully (1/6), 0.55 m wide and 0.13 m deep, with a rounded profile, also sealed by layer 1/3, was found in trench 1. It had the same alignment as ditch 1/11, but since its light grey-brown slightly sandy clay fill contained no artefacts, it is undated. It may be a late feature, perhaps cutting the waterhole (1/7); the stratigraphic relationship between the two could not, however, be fully examined.

A similar gully (2/5), 0.9 m wide by 0.2 m deep, again with a rounded profile, was found in trench 2. Late Bronze Age–Iron Age pottery was found in its light grey-brown very sandy clay fill. It was, however, aligned east–west, in contrast to all the other linear features.

At the southern end of the site two parallel gullies (6/5=52 and 6/4=24) also aligned east—west were found in the extended area of excavation around trench 6 (Fig. 6.4). Gully 6/5=52 was 0.5 m wide, had a gentle rounded profile 0.15 m deep, and was filled by a light grey clay with 20% chalk (6/5/1 and 52/1) which contained one sherd of late

Figure 6.1 (opposite) Trench location plan showing evaluation trenches and stripped areas

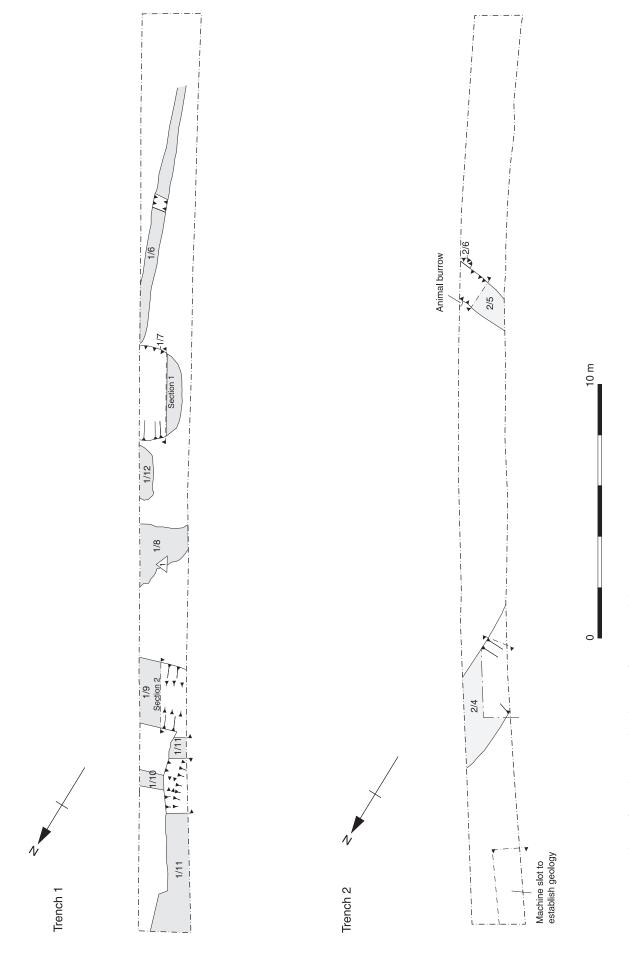
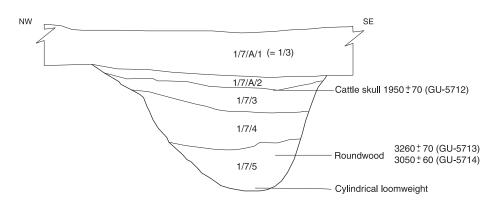
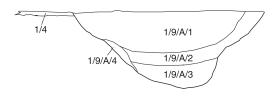


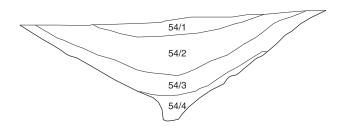
Figure 6.2 Plans of trenches 1 and 2 showing features and dug sections



Section 1: Waterhole (1/7)



Section 2 : Late Bronze Age ditch (1/9)



Section 3: Roman ditch (54)

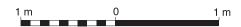


Figure 6.3 Sections: 1: Waterhole 1/7, 2: late Bronze Age ditch 1/9, 3: Roman ditch 54

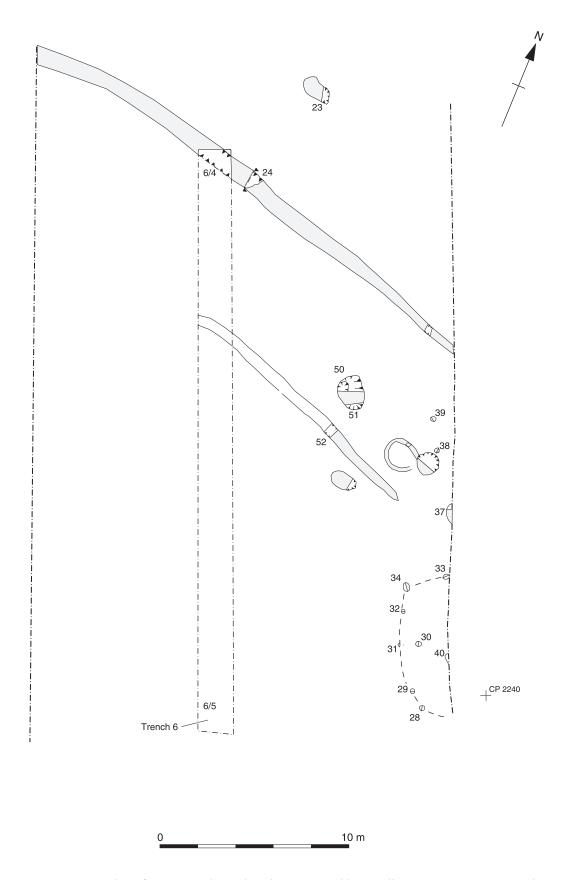


Figure 6.4 Composite plan of area around trench 6 showing possible roundhouse structure, associated pit and parallel gullies

Bronze Age pottery. Gully 6/4=24 was 0.7–0.9 m wide, had a U-shaped profile, 0.15–0.22 m deep and was filled with a mid brown clay loam containing some chalk (6/4/1 and 24/1). Although it contained no finds its common alignment with 6/5 suggests contemporaneity.

Pits

Between gullies 6/4=24 and 6/5=52, a roughly oval pit, $1.75 \,\mathrm{m} \times 1.3 \,\mathrm{m}$ wide, with a rounded profile $0.28 \,\mathrm{m}$ deep, was located. Two fills (upper $50/2 \,\mathrm{and}$ lower 50/1) were identified in the west section and one (51/1) in the east. All were brown silty clays varying slightly in colour and in the proportion of chalk and charcoal. They contained $16 \,\mathrm{sherds}$ of late Bronze Age pottery from a fingertip-decorated jar (Fig. 6.7.5; contexts $50 \,\mathrm{and} \,51$) as well as cattle, sheep-sized mammal and other unidentified animal bone and charcoal.

Within trench 1, feature 1/12, another possible pit (see Fig. 6.2), 1.7 m wide, is also tentatively dated to this phase. It was only partially within the area investigated and was not excavated. A piece of burnt flint was recovered from the top fill.

A post-built structure

Part of a possible circular post-built structure, interpreted as a house, and defined by a semicircle of six postholes (28–9 and 31–4) with a maximum visible diameter of 7.25 m, was located within an area of small, discrete features in the area immediately east of trench 6 (see Fig. 6.4). The other half of this structure lay beyond the limits of the excavation. No finds were recovered from the postholes which varied in profile and contained no evidence of postpacking. Posthole 34 was markedly larger than the others (Table 6.1). Two further postholes (30 and 40) were located within this structure and may be related. A pair of small circular postholes (38 and 39), 0.23–0.24 m wide, were located near the eastern

edge of the road corridor to the north-west of the post-built structure.

Iron Age

No features could be specifically attributed to the Iron Age, but occasional Iron Age sherds scattered through the fills of later features and layer 1/3 in trench 1 (interpreted as relic ploughsoil) indicate activity in the vicinity during this period. Layer 1/3 contained late Bronze Age, probable early-middle Iron Age, and middle Iron Age pottery. As well as overlying all the later Bronze Age features in trench 1, it also covered the final fills of the waterhole (1/7)from which the cattle skull, dated to the late Iron Age to early Roman period, was recovered, and hence is likely to be late Iron Age or later in date. How much later cannot be determined: the date of alluviation in this area is not known, but a phase of alluviation is known to have occurred in the later Roman period at Yarnton, further up the Thames Valley.

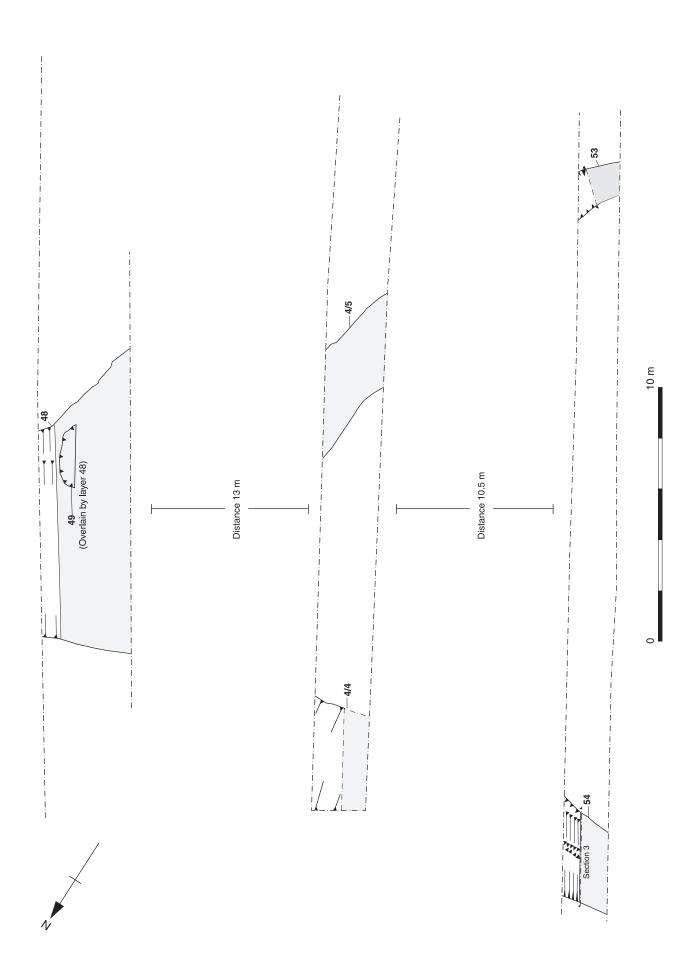
Roman

Two large ditches, dated to the Romano-British period, were identified on the top of the ridge towards the south of the site (Fig. 6.5). They contained pottery in sufficient quantities to suggest a significant level of activity around the 3rd century AD in the vicinity of the site, although there were also some residual earlier sherds and some later pot in the upper fills.

Ditch 4/5 (?same as ditch 53 identified in watching brief) was aligned NNE–SSW; it was not fully excavated but 53 had a V-shaped profile. The ditch was filled with three layers of brown silty clays. Four sherds (including one very small late Bronze Age sherd) and two flints were recovered from 53. The upper fill of ditch 4/5, however, contained a substantial quantity of Roman pottery dated to the later 3rd–4th centuries AD, one small

Table 6.1 Detail of excavated postholes (contexts 28–34)

Posthole no.	Shape	Width (m)	Depth (m)	Profile	Fill context	Colour	Composition	Inclusions
28	Circular	0.22	0.09	Rounded	28/1	Light-mid grey-brown	Silty clay	35–40% chalk; charcoal flecks
29	Roughly circular	0.26	0.06	Irregular	29/1	Mid dark brown	Silty clay	Occasional chalk & charcoal
31	Roughly circular	0.22	0.2	U-shaped	31/2 (lower)	Light grey-brown	Clay silt	Large quantity chalk
					31/1 (upper)	Mid grey-brown	Silty clay	15–20% chalk; frequent charcoal
32	Oval	0.2	0.1	Irregular U-shape	32/1	Light–mid grey-brown	Silty clay	25–30% chalk; frequent charcoal
33 34	Oval Oval	0.3 0.48	0.24 0.2	U-shaped Rounded	33/1 34/1	Light grey-brown	Silty clay Clay silt	5% chalk; some charcoal Large quantity chalk



piece of possible Roman tile and two complete iron nails, possibly also Roman.

Ditch 4/4 (?same as ditch 54 identified in watching brief), a large ditch 3 m wide, was aligned east-west along the crest of the hill in the middle of the site. Ditch 4/4 was not fully excavated, but ditch 54 had a V-shaped profile (see Fig. 6.3, section 3). It was filled with brown silty clays and produced fired clay, charcoal, an iron object and animal bones (including horse and pig). Roman pottery, mostly late 3rd century or later in date (but including some earlier) came from the final fill (54/1). Ditch 4/4 was excavated to a depth of 0.75 m within which three fills of grey or grey-brown clays were recorded. A sherd of probably residual later Bronze Age/Iron Age pottery, Roman pottery of 2nd- and 3rd- to 4th-century date, a little early Anglo-Saxon pottery and two fragments of Roman tile came from the fills. Around 30 pieces of animal bone, including cattle, sheep and fox, were also recovered.

Saxon

No features could be dated specifically to the Saxon period, but the Anglo-Saxon pottery in the top fill of ditch 4/4 and the possible Saxon glass bead recovered from fieldwalking (see below) suggest activity in the area early within the period, possibly early in the 6th century.

Undated features

A number of features could not be dated due to a lack of finds or any relationship to other datable features. They include ditches and gullies (25, 26, 27, 42, possible gullies 35, 2/6 and 9/4), pits (36, 37 and 49), postholes (summarised in Table 6.2) and tree-throw holes (7/3, 23, 41, 44–7).

ARTEFACTUAL EVIDENCE

Glass bead

by Angela Boyle

A single glass bead was recovered during field-walking at chainage 440/10.

Catalogue

Glass bead

Short-cylinder, straight-sided, opaque monochrome, pale-green colour. The bead is now squashed and distorted so measurements are approximate. Ht: 4.5 mm; W: 10.7 mm; W (of perforation) 0.5 mm. Anglo-Saxon date.

Comparable examples are known from a number of Anglo-Saxon cemetery sites in the Upper Thames Valley including Standlake Down (Dickinson 1973) and Butler's Field, Lechlade (Boyle *et al.* 1998). Dickinson describes them as instantly recognisable as 7th-century (1973, 252) although examples do occur in later 6th-century contexts (Evison 1987).

Worked flint (Fig. 6.6) by Philippa Bradley

Introduction

A small assemblage of 41 pieces of worked flint and four pieces of burnt unworked flint was found (Table 6.3). Dark brown, grey and orange flint with a white, sometimes chalky, cortex, which would have been available locally in superficial deposits, was used throughout. Flint of suitable flaking quality occurs in the gravel deposits around Dorchester-on-Thames (Gibbard 1986, 142). The only core recovered (context 48) was made on a nodule of bluish-grey, slightly granular flint with cherty inclusions and a worn cortex.

Description

Some preparation and trimming flakes were recovered indicating that primary reduction was occurring on site. Around 35% of the material was broken, perhaps reflecting its recovery from ploughsoils and later features. Only five struck pieces, including two scrapers (Fig. 6.6.1–2), were burnt.

Hard-hammer-struck flakes with prominent bulbs of percussion dominate the assemblage. Little evidence for platform preparation was noted, and hinge fractures, incipient cones of percussion and other accidents of debitage were frequent,

Table 6.2 Detail of other postholes

Posthole no.	Shape	Width (m)	Depth (m)	Profile	Fill context	Colour	Composition	Inclusions
3/4	Oval	0.45 x 0.4	0.16	Irregular U-shaped	3/4/1	Dark grey-brown	Clay	10% chalk gravel
9/3	Circular	0.26	0.04	-	9/3/1	Mid dark grey-brown	Clay loam	-
43	Oval	0.5	0.08	Rounded	43/1	Mid brown	Silty clay	5% chalk

Figure 6.5 (opposite) Composite plan of area around trench 4 showing Roman ditches 54=4/4 and 53=4/5

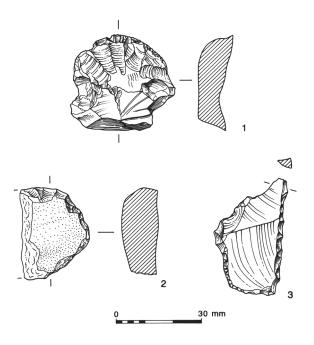


Figure 6.6 Worked flint (details in catalogue)

indicating a general loss of control during knapping (cf. Brown 1992, 92). These technological traits would indicate a mid–late Bronze Age date from this material. The retouched forms are not particularly diagnostic and include scrapers, a piercer and a possible core tool (see Table 6.3). Apart from the end and side scraper (Fig. 6.6.1) the scrapers are minimally retouched. The miscellaneous scraper (Fig. 6.6.2) may be of mid–late Bronze Age date. The piercer (Fig. 6.6.3) from the same context is quite neatly retouched, and this piece and the end and side scraper may be Neolithic or early Bronze Age in date.

A minority of pieces – including two blade-like flakes (contexts 1/2 and 45/2), a blade struck from an opposed platform core (context 1/3) and a flake

(context 1/7/A) – were soft-hammer struck, had linear or punctiform butts, and previous parallel blade scars on their dorsal faces, technological characteristics most prevalent during the Mesolithic and earlier Neolithic. Although the neatly retouched scraper and piercer (Fig. 6.6.1, 3) suggest that the blade-like material is Neolithic, there are too few pieces to assign any particular date.

Catalogue of worked flint (Fig. 6.6)

- Context 1/8, SF 1. End and side scraper, burnt. Some more recent damage around the scraping edge. Scraping angle 55–75°.
- edge. Scraping angle 55–75°.

 2. Context 1/11/A/1. Scraper, broken and burnt.

 Quite crudely retouched. Scraping angle 75–90°.
- 3. Context 1/11/A/1. Piercer, neatly retouched with a worn point. Lightly corticated.

Prehistoric pottery by Alistair Barclay

Introduction

A small quantity (46 sherds, 472 g) of later prehistoric pottery (Table 6.4, Fig. 6.7), most of either late Bronze Age or middle Iron Age date, was found. The methodology employed in their analysis is the same as that outlined for Whitecross Farm (see Barclay, Chapter 3).

Fabrics

Eight fabrics were identified. (Fabric codes: A = sand, C = calcareous, F = flint, P = pellet (Fe = ferruginous), Q = quartzite, S = shell.)

Sand-tempered

A1 Hard fabric with moderate coarse white guartz sand.

Table 6.3 Flint summary composition

Context group	Flakes, blades etc.	Chips	Irregular waste	Cores/frags	Retouched forms	Burnt unworked	Total
1 Modern							
ploughsoils	2	-	-	-	1 (?core tool)	-	3
2 Relic ploughsoils	9	-	-	1 (multiplatform)	-	1	11
4 Waterhole/well	1	-	-	-	-	-	1
6 Linear features LBA/1	LIA 4	-	3	-	3 (1 end scraper, 1 misc. scraper Fig. 6.6.2, 1 piercer: Fig. 6.6.3)	r: 2	12
7 Linear features RB	3	-	1	-	2 (1 end scraper, 1 side scraper)	-	6
10 Pits LBA	-	1	-	-	-	1	2
13 Tree-throw holes	1	-	-	-	-	-	1
Other (1/4, 1/8)	7	-	1	-	1 (end and side scraper: Fig. 6.6	5.1) -	9
Total	27	1	5	1	7	4	45

AP(Fe)1 As above, but with the addition of reddishbrown ferruginous pellets and voids from burnt-out organic matter.

AP(Fe)C2 As above, but with the addition of rare large subrounded limestone.

Flint-tempered

- F2 Hard fabric with <25% medium (1–3 mm) calcined flint.
- F3 Hard fabric with <20% coarse calcined flint.
- FA2 As F2, but with only 10% flint and <15% coarse quartz sand.

Quartzite-tempered

QA2 Hard fabric with <7% medium angular quartzite and <20% coarse quartz sand.

Shell-tempered

SA2 Hard fabric with <15% shell platelets (<3 mm) and <15% coarse quartz sand.

The sand-tempered and shell-tempered fabrics are likely to be of Iron Age date, while the flint-tempered and quartzite-tempered fabrics are thought to be of late Bronze Age date. Similar fabrics occur among the larger assemblage recovered from Whitecross Farm.

Forms and decoration

The assemblage includes featured sherds from six vessels. A simple rim (Fig. 6.7.2) in fabric AP(Fe)1 is probably of middle Iron Age date (cf. Harding 1972, 99–101 and pls 60–2); the remainder are probably late Bronze Age. They include part of a bipartite shouldered jar (Fig. 6.7.5) with fingertip impres-

sions on the rim and shoulder, decorated body and shoulder sherds probably from jars (Fig. 6.7.1, 3), a further plain shoulder (Fig. 6.7.4) and a base sherd (not illustrated). The late Bronze Age forms can all be paralleled among the larger late Bronze Age assemblage from Whitecross Farm.

The only decoration is impressed fingertipping on three of the late Bronze Age vessels. Such decoration is common on later late Bronze Age assemblages and indicates a probable date range between 900–750 cal BC.

Catalogue of prehistoric pottery (Fig. 6.7.1–5)

- 6.7.1 Context 1/3. LBA. Fingertip-decorated body sherd. Fabric FA2. Colour: ext. reddish-brown: core grey: int. grey. Condition average-worn.
- 6.7.2 Context 1/3. MIA. Simple rim probably from a barrel-shaped vessel. Fabric AP(Fe)1. Colour: ext. reddish-brown: core grey: int. reddish-brown. Condition average-worn.
- 6.7.3 Context 1/10. LBA. Shoulder sherd decorated with fingernail impressions. Fabric QA2. Colour: ext. yellowish-brown: core grey: int. yellowish-brown. Condition average-worn.
- 6.7.4 Context 1/11/A/1. LBA. Plain shoulder with very worn outer surface. Colour: ext. greyishbrown: core grey: int. grey. Condition worn.
- 6.7.5 Contexts 50–1. LBA. Decorated jar fragments. Bipartite with fingertipping along the outer edge of the rim and on the shoulder. Fabric FA2. Colour: ext. yellowish-brown: core grey: int. grey. Condition worn.

Discussion

The late Bronze Age pottery, characterised by a relatively small number of fingertip-decorated vessels, bipartite forms and the use of flint- or quartzite-tempered fabrics, is associated with some

Table 6.4 Prehistoric pottery: a breakdown of fabrics by context (quantification by sherd number and weight)

Context		Sand-tempered fab	rics	Quartzite-tempered fabrics	Flint	t-tempered fab	rics Si	hell-tempered fabrics	Total
	A1	AP1	APC2	QA2	F2	F3	FA2	SA2	
US 26	1,7 g								1,7 g
1/3	1, 2 g	2, 33 g		1, 1 g			1, 4 g	1, 13 g	6,53 g
1/7/A/5						1, 15 g			1, 15 g
1/9/A/A/1					1, 12 g				1, 12 g
1/10				1, 3 g			1, 1 g		2, 4 g
1/11/A/1	1,8 g			2, 32 g	1,5 g	1, 20 g			5, 65 g
1/11/A/2							1, 10 g		1, 10 g
1/4							1,8 g		1,8 g
48	2, 12 g		7, 13 g				1,6 g		10, 31 g
50							11, 178 g	5	11, 178 g
51							5, 80 g		5, 80 g
52							1, 8 g		1, 8 g
53				1, 1 g					1, 1 g
Total	5, 29 g	2, 33 g	7, 13 g	5, 37 g	2, 17 g	2, 35 g	22, 295 g	1, 13 g	46, 472 g

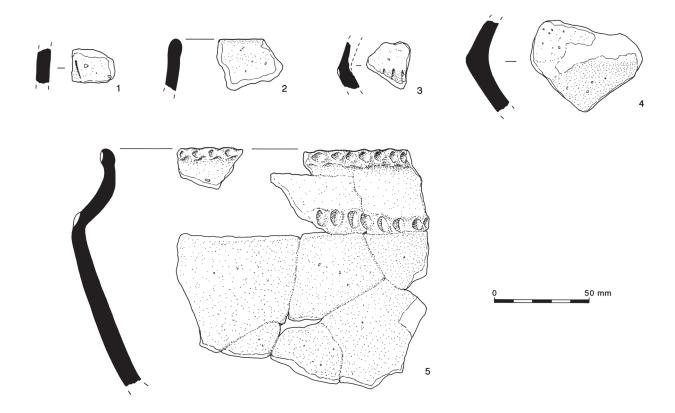


Figure 6.7 Prehistoric pottery (details in catalogue)

of the settlement features including the waterhole (1/7/A/5), a pit (fills 50–1) and some of the linear ditches (1/9, 1/10 and 1/11; see Table 6.4), although a small number of sherds were recovered as residual material in Roman features (contexts 4/4 and 53) as well as from layers interpreted as ploughsoils (1/3 and 48). Identical material occurs among the larger assemblage excavated at Whitecross Farm, and the two sites are therefore probably broadly contemporary (c 9th–7th century cal BC).

The Iron Age pottery was recovered from ploughsoils (1/3 and 48) and from the upper fill of the possibly late Bronze Age ditch 1/11. This material is thought to be of mostly middle Iron Age date, although at least one sherd in a shell-tempered fabric is more likely to be early Iron Age.

Late Iron Age and Roman pottery by Paul Booth

Introduction

The small assemblage of Iron Age and Roman pottery consisted of two sherds (6 g) of probable middle Iron Age date and 92 sherds (2033 g) of late Iron Age and Roman pottery (Table 6.5). It was generally in good condition and the Roman sherds were quite large. The pottery was analysed and recorded using methods similar to those outlined above (see Booth, Chapter 5), except that, since EVEs are unreliable with such small assemblages, rim

count was used to quantify vessel types. Here the late Iron Age material is subsumed with the Roman, and percentages are of the combined sherd total for these periods, excluding the middle Iron Age material.

Fabrics and wares

Both middle Iron Age sherds had sand-tempered fabrics, one with additional ferruginous inclusions. The remaining pottery was divided initially into major ware groups, defined on the basis of significant common characteristics (Booth *et al.* 1993, 135–6). Sherds were then assigned either to the principal subdivisions of the ware groups or to individual fabrics/wares (see Table 6.5). Common fabric names are given where appropriate.

The fabrics are all standard for the region and most (including all the O and R wares) probably originated in, or were consistent with, the Oxford industry. The source of the E ware sherds is unknown, but is likely to have been relatively local. The only significant extraregional imports were the various samian ware fabrics and black-burnished ware. The shell-tempered sherds (C11) may have derived from the production centre at Harrold in Bedfordshire (Brown 1994).

Discussion of proportions of the various ware groups is of limited value with such a small assemblage, but a few general points can be made. The representation of E wares is high enough to hint at significant late Iron Age/early Roman activity.

Reduced wares totalled *c* 50% of all sherds, a proportion more in keeping with later Roman assemblages in the region than early ones. The 'fine and specialist wares' (S, F, M, W and Q fabrics) together totalled 17% of sherds.

Forms

Sixteen vessels were represented by rim sherds. The major vessel classes present were jars (7), bowls (2) and dishes (3), with single examples of jar/bowl, cup, bowl/dish and mortarium forms. The correlation of vessel form with fabric is shown in Table 6.6,

in which specific vessel form numbers (eg from the typology of Young 1977) are given where possible.

Context and chronology

Apart from a single small unstratified sherd all the Roman pottery derived from two ditch features, 4/5 (?53) and 4/4 (=54). Although the latter also contained Saxon pottery, it was almost certainly Roman in origin. The secondary fill (54/3) contained five Roman sherds perhaps datable as early as the late 1st–early 2nd century AD, but later fills were of late 3rd-century date or later, despite

Table 6.5 Late Iron Age and Roman wares from Bradford's Brook

Ware	No. of sherds	Weight (g)
S20. South Gaulish samian ware	1	18
S30. Central Gaulish samian ware	1	44
S40. ?East Gaulish samian ware	1	6
F51. Oxford colour-coated ware	6	84
F53. ?New Forest colour-coated ware (Fulford (1975, 24–5) fabric 1a)	1	2
M22. Oxford white ware mortarium	1	305
W20. ?Oxford sandy white fabrics	3	15
Q21. Oxford oxidised white-slipped fabric	1	2
E30. Coarse sand-tempered 'Belgic type' fabrics	7	52
E80. Grog-tempered 'Belgic type' fabrics	1	4
O10. Fine sandy oxidised 'coarse' wares	9	292
O20. Sandy oxidised coarsewares	1	4
O80. Very coarse (usually grog-) tempered oxidised fabrics	5	201
R10. Fine sandy reduced 'coarse' wares	26	409
R20. Sandy reduced coarsewares	8	256
R30. Medium sandy reduced coarsewares	8	85
R90. Very coarse (usually grog-) tempered reduced fabrics	3	126
B11. Black-burnished ware (Dorset BB1)	6	111
C11. Shell-tempered fabrics	3	17
Total	92	2033

Table 6.6 Roman pottery: correlation of vessel form and fabric (quantification by rim count)

Form	Fabric S30	F51	M22	O10	O20	R10	R30	R90	B11	C11	Total
Medium-mouthed jar						3					3
Angled everted-rim jar					1						1
'Cooking pot type' jar									1	1	2
Storage jar								1			1
Jar/bowl (indeterminate)							1				1
Cup (Young 1977, R62)						1					1
Straight-sided bowl (Young 1977, O31))			1							1
Rounded bowl (Drag 31)	1										1
Straight-sided bowl/dish									1		1
Straight-sided dish							1		1		2
Curving-sided dish (Young 1977, C47)		1									1
Mortarium (Young 1977, M11)			1								1
Total	1	1	1	1	1	4	2	1	3	1	16

which this feature contained *inter alia* all the sherds in fabric E30, certainly assignable to the 1st century AD. The fill of ditch 4/5, which produced the bulk of the pottery (55% of sherds, 77% of weight), was also datable to the later 3rd–4th centuries.

Residual material (apart from the E30 sherds already mentioned) was present in both features. This is clearer from the vessel forms than from the fabrics, most of which were long-lived. At least five of the vessels represented by rims are assignable to the 2nd to mid 3rd centuries: those in fabrics S30, M22, O20, R10 (type R62) and B11 (the indeterminate bowl/dish, which has a rim of 2nd-century type), although of these the Central Gaulish Drag 31 could easily have been in use in the later 3rd century. The overall balance of the fabrics and forms, however, suggests a later Roman emphasis. The representation of reduced wares at about 50% of the assemblage is, as already indicated, likely to indicate a 3rd- to 4th-century date. Comparative data come for example from Wally Corner, Berinsfield, where in a site with more definitely established 2nd-century occupation (as well as later activity) reduced wares totalled c 70% of the assemblage (Booth 1995, 18), and an almost exactly similar figure is seen in a predominantly 2nd-century group from Drayton (Booth 2003). Equally the representation of fine and specialist wares, at c 17% of the sherd total, is consistent with a late Roman pattern but not an early Roman one; in the latter the great majority of rural sites in the region have less than 5% fine and specialist wares (Booth in prep. a). The number of jars, again at no more than 50% of the total vessels (including the uncertain jar/bowl type in this total), is also indicative of a later Roman date, jars being much better represented in 1st- to 2nd-century assemblages.

Catalogue of Roman pottery (Fig.6.8 – all from context 4/5)

- 6.8.1 Fabric F51. Oxford colour-coated ware bowl of Young (1977) type C47.
- 6.8.2 Fabric M22. Oxford white ware mortarium of Young (1977) type M11.
- 6.8.3 Fabric O10. Fine oxidised ware flanged bowl, cf. Young (1977) type O31.
- 6.8.4 Fabric R10. Fine reduced ware medium-necked iar.
- 6.8.5 Fabric R10. Fine reduced ware small mediumnecked jar.
- 6.8.6 Fabric Ř10. Fine reduced ware carinated bowl of Young (1977) type R62.
- 6.8.7 Fabric B11. Black-burnished ware 'cooking-pot
- 6.8.8 Fabric B11. Black-burnished ware incipient bead and flanged bowl.

Discussion

Despite its occurrence in two features essentially of late Roman date, the pottery indicates activity on or near the site from at least as early as the middle of the 1st century AD and perhaps continuously thereafter. Present evidence suggests an increase in activity in the later 3rd–4th centuries, however. The character of the material, consisting generally of quite large, unabraded sherds (even discounting the single very large mortarium sherd the average sherd weight was 19 g), indicates derivation from a closely adjacent settlement. The spectrum of fabrics and forms present suggests that this settlement utilised standard sources of material for the region at this time, but drew mostly on the local major (Oxford) industry. There were no exotica. The representation of fine and specialist wares is entirely consistent with the regional late Roman pattern for rural sites of relatively low status (Booth in prep. a).

Medieval pottery

by Lucy Whittingham

Three features on the site produced Saxon and medieval sherds: ditches 4/4, 53 and 54 all produced the same early Saxon fabric types, listed below. Ditches 4/4 and 53 also produced later medieval pottery. The methodology used is described in Chapter 5.

Fabrics

Saxon fabric 1

Moderately tempered with abundant quartz <0.1 mm, moderate subangular quartz 0.2–0.5 mm, occasional large iron oxide pellets 2–3 mm, sparse fine mica.

Saxon fabric 2

Coarse, tempered with abundant fine quartz <0.1 mm, moderate subrounded quartz 0.2–0.5 mm, occasional large rounded quartz 1–2 mm, occasional large subangular white quartz 3.0 mm, moderate red iron oxide 0.2–0.3 mm, no visible mica.

Saxon fabric 3

Coarse, with abundant subangular quartz 0.2–0.5 mm, occasional polycrystalline quartz 0.3 mm, occasional clay/grog pellets. No visible mica.

Saxon fabric 4

Fine quartz-tempered fabric with abundant quartz <0.1 mm, sparse/moderate subrounded quartz 0.3–0.4 mm, occasional rounded quartz 0.5 mm, moderate red iron oxide 0.2–0.3 mm, sparse mica, some fine organic/grass temper.

Discussion

The four quartz-tempered fabrics found at Bradford's Brook fit into the general tradition of 5th-or 6th-century Saxon pottery. Similar wares have been described in south Oxfordshire and close to the Thames (eg at Benson, Dorchester and North Stoke;

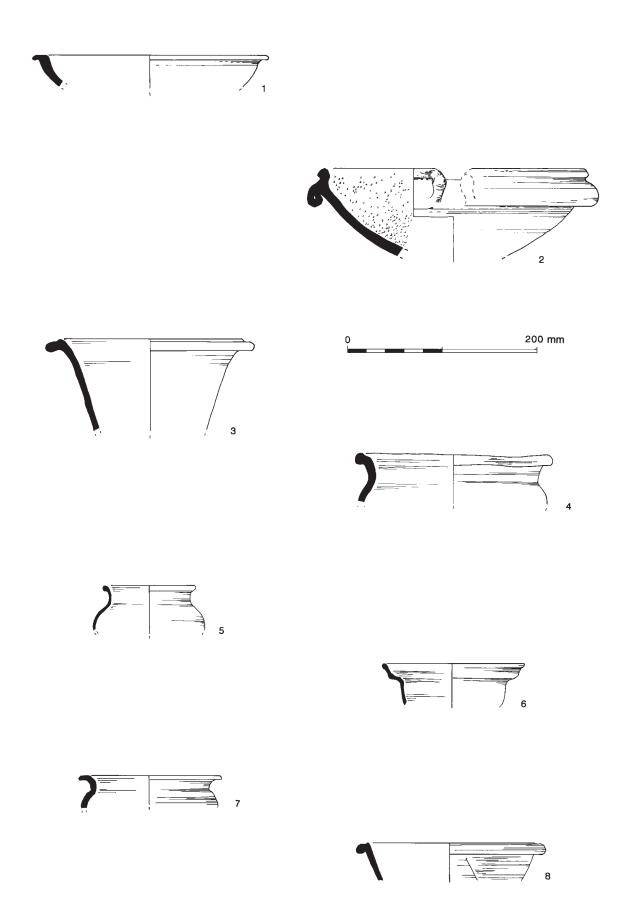


Figure 6.8 Roman pottery (details in catalogue)

Mellor 1994). It is not clear whether there is a well-defined transition between early Saxon quartz-tempered wares and later chaff- or shell-tempered wares in Oxfordshire (ibid.). At one time these wares were thought to characterise different periods; they have, however, been found in association in Oxford (ibid.) and at Dorney (Whittingham 2002).

Fired clay

by Alistair Barclay

A complete cylindrical loomweight (SF 2, Fig. 6.9) was recovered from the primary fill (1/7/A/5) of the waterhole. It weighs approximately 505 g and was made from ill-prepared clay containing abundant probable clay pellets (rather than grog; mostly 1–3 mm but some between 10–15 mm), organic matter (some of which survives as charred stems) and rare natural flint gravel. It has a maximum length of 82 mm and a diameter of 80–90 mm. The firing colour has been altered to a light, almost whitish, grey colour, probably through being deposited in the anaerobic waterlogged environment of the waterhole.

Cylindrical loomweights have a mid-late Bronze Age date range and are commonly found on settlements (cf. Adkins and Needham 1985). The rarity of this type in the Upper Thames partly reflects a lack of settlement evidence, although examples have been found at late Bronze Age settlements such as Yarnton and Eynsham (Barclay and Edwards in prep. b; Barclay 2001).

Tile

by Kate Atherton and Nick Mitchell

Two fragments of Roman tile, weighing 48 g and 21 g, were found in Roman ditch 4/4. The fabric of both is moderately hard and sandy with occasional inclusions of mica, quartz and grog, suggesting a

Roman date and that both may derive from the same tile. Three fragments of medieval or post-medieval roof-tile in two fabrics, but with no distinguishing features, were also found.

Nails

by Leigh Allen

Two complete iron nails with flanged heads and square-sectioned shanks (74 mm and 65 mm long), recovered from the Roman ditch 4/5, may be of Roman date.

ENVIRONMENTAL EVIDENCE

Animal bone

by Adrienne Powell

Of the 103 fragments of animal bone, most of which derive from the late Bronze Age pits (50–1) and ditch 1/11 (Table 6.7), only 15 were identified to species. Sheep/goat and fox (*Vulpes vulpes*) were present only in the Roman ditch (4/4=54). A sheep/goat mandible had tooth wear indicating an age of two to three years (Payne 1973). The fragmentary cattle skull of late Iron Age or Roman date (radiocarbon sample GU-5712) in the top of the middle Bronze Age waterhole (1/7) belonged to a horned adult. The maximum basal diameter of the horncore was 60.4 mm, within the range of cattle at Potterne (Locker 2000).

Macroscopic plant and invertebrate remains by Mark Robinson

Introduction

A single waterlogged sample (sample 4) from the dark grey highly organic clay loam that formed the

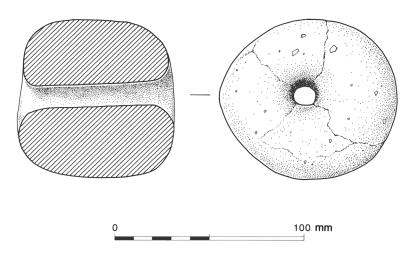


Figure 6.9 Mid-late Bronze Age cylindrical loomweight

Table 6.7 Animal bone: number of identified specimens (NISP)

Species	MBA waterhole (1/7)	LBA pits (50–1)	LBA linear (1/11)	Romano-British linear (4/4=54)	Total
Horse	0	0	1	1	2
Cattle	1	1	1	2	5
Sheep/goat	0	0	0	5	5
Pig	0	1	0	1	2
Vulpes vulpes (fox)	0	0	0	1	1
Sheep-sized mammal	0	3	0	3	6
Cattle-sized mammal	2	1	1	10	14
Unidentified	0	33	10	25	68
Total	3	39	13	48	103
% identified	33	5	15	21	15

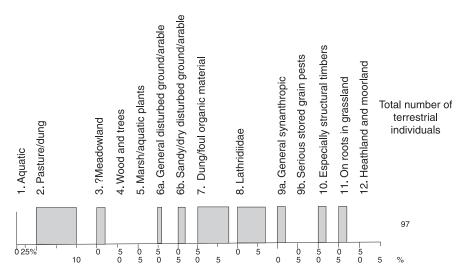
primary fill (1/7/A/5) of the waterhole was analysed (Tables 6.8–14, Fig. 6.10) using the methods outlined above for Whitecross Farm (see Robinson, Chapter 4).

The origin of the assemblage

Remains of aquatic plants, insects and molluscs were absent apart from a single example of the amphibious beetle *Dryops* sp. This suggested that the waterhole had the character of a well rather than a pond with its own autochthonous fauna and flora. The majority of the plant and invertebrate remains probably entered the deposit through natural agencies from the surrounding landscape, although crop-processing remains, both waterlogged and charred, may have been deliberately dumped.

General landscape conditions

The insects suggest an open landscape, giving evidence of grassland and disturbed-ground habitats. Species associated with trees and shrubs were absent. The waterlogged macroscopic plant remains – which, apart from those imported by humans, would have tended to have had a more local origin than the insects – were mostly from plants of disturbed and waste-ground habitats. There were some remains of shrubs but insufficient to suggest the general development of scrub. There was some evidence from the insects for the proximity of a settlement, and the macroscopic plant remains were most probably from the vegetation growing in or around the settlement.



Species groups expressed as a percentage of the total terrestrial Coleoptera (ie aquatics excluded). Not all the terrestrial Coleoptera have been classified into groups.

Figure 6.10 Species groups of Coleoptera from the waterhole at Bradford's Brook

Table 6.8 Waterlogged seeds

Table 6.8 (continued) Waterlogged seeds

Sample 4 Sample weight 1 kg	No. of s	seeds	Sample 4 Sample weight 1 kg		No. of seeds
RANUNCULACEAE Ranunculus cf. acris L.	meadow buttercup	2	BETULACEAE Alnus glutinosa (L.) Gaert.	alder	1
R. cf. repens L. R. cf. bulbosus L. R. parviflorus L.	creeping buttercup bulbous buttercup small-flowered buttercup	6 1 7	PRIMULACEAE Anagallis sp.	pimpernel	2
PAPAVERACEAE Papaver rhoeas tp.	field poppy	64	SOLANACEAE Hyoscyamus niger L. Solanum dulcamara L.	henbane woody nightshade	1
P. argemone L. P. somniferum L.	long prickly headed poppy opium poppy	24	LABIATAE		
Chelidonium majus L. CRUCIFERAE	greater celandine	8	Mentha cf. aquatica L. Prunella vulgaris L.	water mint selfheal	1 4
Capsella bursa-pastoris (L.) Med. Sisymbrium officinale (L.) Scop.	shepherd's purse hedge mustard	4 8	Galeopsis tetrahit agg. Glechoma hederacea L.	hemp-nettle ground ivy	1 3
CARYOPHYLLACEAE Cerastium cf. fontanum Baum.	mouse-ear chickweed	5	PLANTAGINACEAE Plantago major L.	great plantain	5
Stellaria media gp S. graminea L.	chickweed stitchwort	102	RUBIACEAE Galium aparine L.	goosegrass	4
Minuartia sp. Arenaria sp.	sandwort sandwort	2 13	CAPRIFOLIACEAE Sambucus nigra L.	elder	48
Spergula arvensis L. Scleranthus annuus L.	corn spurrey annual knawel	2 1	VALERIANACEAE		
CHENOPODIACEAE Chenopodium album L.	fat hen	65	Valerianella dentata (L.) Pol. COMPOSITAE	corn salad	2
Atriplex sp. LINACEAE	orache	124	Tripleurospermum inodorum (L.) Schultz	scentless mayweed	1
Linum catharticum L.	fairy flax	3	Leucanthemum vulgare Lam. Arctium sp.	ox-eye daisy burdock	1 1
ROSACEAE Rubus fruticosus agg.	blackberry	2	Carduus sp. cf. Cirsium sp.	thistle thistle	23 7
Potentilla cf. erecta (L.) Räush. P. reptans L. Aphanes arvensis L.	tormentil creeping cinquefoil parsley piert	1 34 14	Lapsana communis L. Sonchus oleraceus L.	nipplewort sowthistle	5 12
A. microcarpa (B. & R.) Roth.	parsley piert	3	JUNCACEAE Juncus effusus gp	tussock rush	23
ONAGRACEAE Epilobium sp.	willowherb	2	J. bufonius gp J. articulatus gp	toad rush rush	3 2
UMBELLIFERAE Chaerophyllum temulentum L.	rough chervil	56	CYPERACEAE Eleocharis palustris (L.) R. & S.		
Anthriscus sylvestris (L.) Hof. Aethusa cynapium L.	cow parsley fool's parsley	1 6	or <i>uniglumis</i> (Lin.) Sch. <i>Carex</i> spp.	spike rush sedge	1 3
Torilis sp. POLYGONACEAE	hedge parsley	1	GRAMINEAE		
Polygonum aviculare agg. Fallopia convolvulus (L.) Löv.	knotgrass black bindweed	116 2	Bromus S. Eubromus sp. brome grass	1	4.5
Rumex acetosella agg. Rumex spp.	sheep's sorrel dock	12 32	Gramineae indet.	grass	15
URTICACEAE Urtica urens L.	small nettle	1	Total		1442
U. dioica L.	stinging nettle	520			

Table 6.9 Other waterlogged plant remains

		No. of items of	r presence
	Sample 4	,	,
	Sample weight 1 kg		
Bryophyta indet.	- stem with leaves	moss	+
Pteridium aquilinum (L.) Kuhn	- frond fragment	bracken	1
Papaver hybridum L.	- capsule lid	round prickly headed poppy	1
Rubus sp.	- prickle	blackberry	12
Rosa sp.	- prickle	rose	1
Pomoideae indet.	- wood	hawthorn, apple etc.	+
Prunus / Crataegus tp.	- thorn	sloe or hawthorn	2
Salix sp.	- bud scale	willow	1
Triticum dicoccum Shubl.	- glume	emmer wheat	7
T. cf. spelta L.	- glume	spelt wheat	1
T. cf. dicoccum Shubl. or spelta L.	- glume	emmer or spelt wheat	29
Hordeum sp.	- rachis	barley	3
Secale or Hordeum sp.	- rachis	rye or barley	2
Bud scale indet.			1
Deciduous leaf fragment			+

Table 6.10 Charred plant remains (excluding charcoal)

			No. of items
		Sample 4 Sample weight 1 kg	
Cereal grain			
Triticum dicoccum Shubl. or spelta L.		emmer or spelt wheat	1
Hordeum sp. sprouted	- hulled median grain	hulled barley	1
Hordeum sp.		barley	1
cereal indet.			1
Cereal chaff			
Triticum dicoccum Shubl.	- glume base	emmer wheat	4
T. dicoccum Shubl. or spelta L.	- glume base	emmer or spelt wheat	6
Hordeum sp.	- rachis	barley	3
Secale or Hordeum sp.	- rachis	rye or barley	1
Weed seeds			
Vicia or Lathyrus sp.		vetch or tare	3
cf. Trifolium sp.		clover	1
Rumex sp.		dock	1
Galium aparine L.		goosegrass	1
Total items			24

Table 6.11 Charcoal

		Presence
	Sample 4 Sample weight 1 kg	
Pomoideae indet.	hawthorn, apple etc.	+
Quercus sp.	oak	+

⁺ present

Table 6.12 Coleoptera

Table 6.12 (continued) Coleoptera

	Minimum no of individuals	Species group		Minimum no of individuals	Specie group
Sample 4	•	0 ,	Sample 4	,	0 ,
Sample weight 4 kg			Sample weight 4 kg		
CARABIDAE			SCIRTIDAE		
Trechus obtusus Er. or quadristriatus (Schr	:) 2		cf. Cyphon sp.	1	
Bembidion obtusum Serv.	1				
Bembidion sp.	1		DRYOPIDAE		
Pterostichus melanarius (III.)	2		<i>Dryops</i> sp.	1	1
P. cupreus (L.) or versicolor (Sturm)	1		ELATERIDAE		
Amara apricaria (Pk.)	1	6b	Athous hirtus (Hbst.)	1	11
A. aulica (Pz.)	2		Timono mituo (Tiboti)	1	-
A. bifrons (Gyl.)	1	6b	ANOBIIDAE		
Amara sp.	1	00	Stegobium paniceum (L.)	1	9a
Harpalus rufipes (Deg.)	1	6a	Anobium punctatum (F.)	2	10
Harpalus S. Ophonus sp.	1	oa	DEINIE A E		
nurpatus 5. Opnonus sp. Brachinus crepitans (L.)	1		PTINIDAE	4	_
энисниниз стериинз (Е.)	1		Ptinus fur (L.)	1	9a
HYDROPHILIDAE			NITIDULIDAE		
Sphaeridium lunatum F. or scarabaeoides (1	L.) 1		Brachypterus urticae (F.)	1	
Cercyon analis (Pk.)	1	7	2. wengprense survene (1.)	1	
C. pygmaeus (III.)	1	7	RHIZOPHAGIDAE		
Megasternum obscurum (Marsh.)	3	7	Monotoma sp.	1	
Cryptopleurum minutum (F.)	1	7	CDV (DECDVIA CVD A F		
Cryptopicurum minutum (1.)	1	,	CRYPTOPHAGIDAE		
HISTERIDAE			Atomaria sp.	1	
Acritus nigricornis (Hof.)	1		LATHRIDIIDAE		
Histerinae indet.	1		Stephostethus angusticollis (Gyl.)	1	8
CTA DAD A DADA D			Lathridius minutus gp	1	8
STAPHYLINIDAE	_		Enicmus transversus (Ol.)	1	8
Xylodromus concinnus (Marsh.)	1		Corticariinae indet.	4	8
Carpelimus bilineatus Step.	1		Corticariniae indet.	4	C
Platystethus cornutus gp	4		CHRYSOMELIDAE		
Anotylus nitidulus (Grav.)	1		Gastrophysa polygoni (L.)	1	
A. rugosus (F.)	1	7	Galeruca tanaceti (L.)	1	
A. sculpturatus gp	1	7	Phyllotreta atra (F.)	1	
Stenus sp.	3		P. vittula Redt.	1	
Sunius sp.	1		Longitarsus spp.	3	
Othius laeviusculus Step.	1		Chaetocnema concinna (Marsh.)	3	
Xantholinus glabratus (Grav.)	1		Psylliodes sp.	1	
X. longiventris Heer	1		1 <i>3y</i> 11104125 <i>3p</i> .	1	
X. linearis (Ol.) or longiventris Heer	2		APIONIDAE		
Philonthus spp.	2		Apion urticarium (Hbst.)	1	
Tachyporus sp.	1		Apion spp.	1	3
Tachinus sp.	2				
Aleocharinae indet.	2		CURCULIONIDAE	4	_
	-		Sitona sp.	1	3
GEOTRUPIDAE			Liparus coronatus (Gz.)	1	
Geotrupes sp.	1	2	Cidnorhinus quadrimaculatus (L.)	2	
SCARABATIDAT			Ceuthorhynchinae indet.	1	
SCARABAEIDAE	1	2	Gymnetron labile (Hbst.)	1	
Colobopterus fossor (L.)	1	2			
Aphodius foetidus (Hbst.)	1	2	Total	98	
A. granarius (L.)	2	2			
A. pusillus (Hbst.)	1	2	For Key to species groups see Figure	5.10	
A. cf. sphacelatus (Pz.)	2	2			
Aphodius spp.	1	2			
Oxyomus sylvestris (Scop.)	2				
Onthophagus sp. (not ovatus)	1	2			
Phyllopertha horticola (L.)	1	11			

Table 6.13 Other insects

san	A Sample 4 mple weight 4	Ainimum no. of individuals or presence kg
DERMAPTERA		
Forficula auricularia L.		1
HEMIPTERA		
Heterogaster urticae (F.)		1
Scolopostethus sp.		1
Anthocorinae indet.		1
Aphrodes bicinctus (Schr.)		1
A. fuscofasciatus (Gz.)		2
Aphidoidea indet.		1
Homoptera indet.		1
HYMENOPTERA		
Stenamma sp.	- worker	6
Hymenoptera indet.		6
DIPTERA		
Chironomidae indet.	- larva	+
Diptera indet.	- pupariur	n 2
Diptera indet.	- adult	2

Table 6.14 Mollusca

	Minimum no. of individuals
Sample 4	
sample weight 1 kg	
Carychium sp.	2
Cochlicopa sp.	1
Vallonia costata (Müll.)	7
V. excentrica Sterki	2
Vallonia sp.	4
Discus rotundatus (Müll.)	1
Vitrea sp.	3
Oxychilus cellarius (Müll.)	1
Trichia hispida gp	2
Cepaea sp.	1

Grassland

Chafers and elaterid beetles of species group 11, which have larvae that feed on roots in grassland, made up 2% of the Coleoptera from the waterhole (see Fig. 6.10). Some grassland weevils were also present including *Gymnetron labile*, which feeds on *Plantago lanceolata* (ribwort plantain). Seeds of potential grassland plants were few but included *Ranunculus* cf. *repens* (creeping buttercup), *R.* cf. *bulbosus* (bulbous buttercup), *Potentilla* cf. *erecta* (tormentil), *P. reptans* (creeping cinquefoil), *Rumex acetosella* agg. (sheep's sorrel) and *Prunella vulgaris* (selfheal).

Some of the seeds were of plants which are favoured by noncalcareous soils including P. cf. erecta and R. acetosella agg. A frond fragment of Pteridium aquilinum (bracken) was also found, although this could have been from material imported to the site for use as animal bedding. A full acid ground flora was absent, so the soil conditions were probably circumneutral to slightly acidic. Scarabaeoid dung beetles of species group 2, which feed on the dung of herbivores on pasture, comprised 10% of the terrestrial Coleoptera. They included Aphodius granarius and A. cf. sphacelatus. These results suggest the occurrence of pastureland supporting domestic animals in the catchment, although the grassland species were not so abundant as to exclude the possibility that there was also a major presence of arable.

Arable and crop plants

The cereal remains show that the products of arable agriculture were being brought to the site for processing. Coleoptera do not give such reliable evidence for the proximity of arable as they do for the occurrence of grassland. However, there was a significant presence of Carabidae, which tend to be associated with disturbed ground and arable, such as Amara apricaria and A. bifrons, species which are never very abundant in insect assemblages. It is entirely plausible that there were arable fields in the vicinity of the site. Two cereals were identified: *Triticum dicoccum* (emmer wheat) and *Hordeum* sp. – hulled (hulled barley). Unfortunately there were too few charred weed seeds to gain an indication of the type of soil being cultivated. In addition to waterlogged cereal chaff, there were also 24 waterlogged seeds of Papaver somniferum (opium poppy). They were outnumbered by seeds of two other species of poppy, P. argemone (long prickly headed poppy) and P. rhoeas tp. (field poppy). On the basis of a single capsule lid, it is possible that the latter were from *P*. hybridum (round prickly headed poppy). A somewhat similar discovery, although with a higher concentration of P. somniferum seeds, was made from the late Bronze Age eyot at Whitecross Farm, and the possibility that they were from a cultivated crop is discussed in that report (see Robinson, Chapter 4).

Many of the waterlogged seeds were from annual weeds of disturbed ground. The more numerous included Stellaria media (chickweed), gp Chenopodium album (fat hen), Atriplex sp. (orache) and Polygonum aviculare agg. (knotgrass). These species readily grow as arable weeds although it is more likely that most were from plants growing on neglected ground in the vicinity of the waterhole. Other potential arable weed seeds included species characteristic of light circumneutral to acidic soils, although none was abundant: Spergula arvensis (corn spurrey), Scleranthus annuus (annual knawel), Aphanes microcarpa (parsley piert) and Rumex acetosella agg. (sheep's sorrel).

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Conditions and activities around the waterhole

The Coleoptera from the waterhole included some species highly suggestive of settlement on the site. *Anobium punctatum* (woodworm beetle), which usually infests structural timbers, made up 2% of the total (species group 10). General synanthropic beetles (species group 9a) also formed 2% of the total. They comprised *Stegobium paniceum*, a minor grain pest that also attacks a wide range of other stored products, and *Ptinus fur*, an omnivorous beetle which flourishes indoors although it does also occur in birds' nests.

The most numerous waterlogged seeds from the waterhole were from *Urtica dioica* (stinging nettle). There was also a range of nettle-feeding insects: *Brachypterus urticae, Apion urticarium, Cidnorhinus quadrimaculatus* and *Heterogaster urticae*.

Seeds of *Sambucus nigra* (elder) were also well represented. Nutrient-rich waste or neglected ground was probably a feature of the settlement. Scrub species such as *Rubus fruticosus* agg. (blackberry) were becoming established. Other members of this community included *Chelidonium majus* (greater celandine) and *Chaerophyllum temulentum* (rough chervil). Areas of more frequent disturbance had probably been colonised by the annual weeds listed above.

The only activity for which there was evidence was crop-processing. The cereal remains were mostly debris from the de-husking of *Triticum dicoccum* (emmer wheat).

Discussion

The waterhole dates from the end of the middle Bronze Age, just predating the eyot at Whitecross Farm. A possible reflection of this was the occurrence of both emmer and spelt wheat at the eyot, whereas only emmer wheat was found at Bradford's Brook. The results indicate an open agricultural landscape with evidence for both arable and the grazing of domestic animals. They largely fall into the pattern shown by late Bronze Age sites in the region including the eyot (see Robinson, Chapter 4) although there was less thorn scrub than at Eight Acre Field, Radley (Robinson 1995, 49). The environmental evidence from Bradford's Brook perhaps enables the origin of the organised agricultural landscape of the region to be taken back to the end of the middle Bronze Age.

Waterlogged wood

by Maisie Taylor

Seven pieces of wood were recovered from the waterhole (1/7/A/5).

Catalogue of wood (not illus.)

 Roundwood (Sambucus sp. – elder). Trimmed one end/one direction. L: 470 mm; Dia.: 118 mm. Very fibrous. GU-5714; 3050±60 BP.

- 2–5. Roundwood four pieces (Pomoideae). One piece possibly trimmed. Dia.: 70–95 mm. GU-5713; 3260±70 BP.
- 6. Timber, half split. L: 288 mm; W: 150 mm; Th.: 110 mm.
- 7. Timber (*Fraxinus excelsior* ash), half split. L: 512 mm; W: 182 mm; Th.: 79 mm.

With such a small wood assemblage it is difficult to draw any meaningful conclusions. Although Robinson's study (above) of the macroscopic plant remains suggests that trees and shrubs were largely absent from the surrounding landscape, all the wood could have originated in hedges or from regenerated woods or scrub on cleared land. There is evidence for Pomoideae and elder seeds from the waterhole, supporting the idea that the wood originated in the immediate area. The elder trunk is quite large, at 118 mm, but elder grows very quickly, and the fact that the trunk is trimmed hints at continuing clearance of agricultural land. The ash wood is more likely to have been brought in, but, as it is not particularly large, it may have originated in regenerated wood or coppice.

All the wood from the waterhole would have been available locally and, although it could have been used for fences or hurdles, it could also be debris from scrub clearance or hedge cutting. None of the wood is of high quality, and none is large enough or of good enough quality to have derived from buildings. It is most likely, therefore, that the wood just happened to be lying around when the waterhole went out of use and was filled in.

DISCUSSION

Earlier prehistoric activity

The only indication of Neolithic activity in the vicinity is worked flint within some of the fills; no features can be dated to this phase.

The later Bronze Age

Later Bronze Age features make up the main component of the archaeology. They consist of a series of ditches, perhaps forming part of a system of land divisions; several shallower gullies, perhaps either smaller divisions within the larger system of boundaries or slightly later features; a group of postholes, possibly forming a roundhouse; and a possible waterhole.

The waterhole

Features similar to the waterhole, with its stepped side, have been found at other sites within the Thames Valley such as Eight Acre Field, Radley (Mudd 1995), Mount Farm, Dorchester-on-Thames (Barclay and Lambrick 1995) and Yarnton floodplain (Hey in prep.). The Bradford's Brook example was cut below the water table, as is shown by the

waterlogged remains in its primary fill, and seems, on the basis of the biological evidence, to have functioned as a well. It seems to have been located near a settlement, in a landscape of grassland with some disturbed ground, possibly arable fields. Its stepped side would have allowed access from the south-east. The limited extent of excavation did not reveal the nature and location of this settlement, but it may have been located to the south-east, possibly on the edge of the gravel terrace. The waterhole could have been for domestic use or have been used to water cattle, as was suggested for the examples at Eight Acre Field (Mudd 1995, 58). Cattle bones dominate the animal bone assemblage at Bradford's Brook as they did at Eight Acre Field, although the assemblage at Bradford's Brook is too small to allow definite conclusions. A cattle-based pastoral economy seems, however, very plausible on the basis of the biological data and the ditched field system, with this waterhole at the junction of the field boundaries.

The middle Bronze Age date for the primary use of the waterhole, established by both radiocarbon determinations and the loomweight, compares well with the radiocarbon date of 1680–1420 cal BC obtained on a piece of wood from a similar waterhole at Eight Acre Field (Mudd 1995, 55), and is only slightly earlier than the dates of 1500–900 cal BC and 1290–820 cal BC obtained on waterlogged material from the substantial waterhole at Mount Farm (Barclay and Lambrick 1995). A second waterhole at Eight Acre Field was, however, somewhat later, dating to 1020–800 cal BC (Mudd 1995, 55).

How long the waterhole at Bradford's Brook remained open after the middle Bronze Age is unclear. If the cattle skull in the upper fill is regarded as being related to its closure, the period would be substantial. An inverted cattle skull placed on top of a small tripartite bowl in the secondary fill of the later of the two waterholes at Eight Acre Field (feature 156, Mudd 1995) may have been associated with a closure ritual. The early Iron Age date of the bowl suggests that the feature at Eight Acre Field was open for only a few hundred years. No bowl or other offering was found with the Bradford's Brook skull, however, and the very much later radiocarbon date of the skull - implying that the feature was open for at least a millennium suggests that the skull relates to chance reuse of an already long-abandoned, and largely filled, feature. The deposition of the skull may relate more closely to the ritual depositions in waterholes, wells and shafts cited by Webster (1997), which could occur as reuse of a feature after it had dried up or been fouled. Few of these are considered to be much earlier than the Roman conquest.

?A field system

The late Bronze Age gullies and ditches at Bradford's Brook also have parallels at Eight Acre Field where there were hints of middle–late Bronze Age landscape organisation (Mudd 1995, 62). It is clear from other sites in this area of the Thames Valley – such as Mount Farm, Dorchester-on-Thames (Barclay and Lambrick 1995) and Wallingford Road, Didcot (Ruben and Ford 1992) – that field systems begin to appear in the middle Bronze Age (Barclay *et al.* 1996). It is possible that the ditches at Bradford's Brook were contemporary with the waterhole, but remained open into the later Bronze Age. Given the limited extent of excavation, the interpretation of the ditches at Bradford's Brook as a field system can, however, only be tentative.

The post-built structure

The post-built structure is within the size range of, and the postholes are no less uniform than, those in the late Bronze Age settlement at Reading Business Park (Moore and Jennings 1992), The Bradford's Brook example appears to be a very close match for some of the larger and later late Bronze Age structures at Yarnton, where the later posthole groups that form such structures are usually irregular circles, often with one flat side, in contrast to the more regular earlier examples (C Bell pers. comm; Hey in prep.).

At Yarnton the middle and late Bronze Age post-built structures often lie only 30–40 m away from their accompanying waterholes, much closer than the 400 m that separate the Bradford's Brook structure and waterhole. The confines of the road corridor did not allow a large enough area to be excavated to reveal the whole structure at Bradford's Brook, far less any surrounding contemporary features, so it is impossible to take this comparison very far. It nonetheless seems unlikely that these two features were contemporary. On the basis of the pottery found within the probably associated pit 50–1, and as the comparison with the structures at Yarnton suggests, the post-built structure is likely to be late Bronze Age.

Iron Age activity

Although the Iron Age pottery clearly indicates activity in this period, very little can be said about it. It is possible that the waterhole went out of use during the early Iron Age as part of a change in the whole system of land use. Nothing was found during these excavations to indicate that the field boundaries established during the Bronze Age were maintained during this period. Activity could have been centred slightly to the east where abundant Iron Age pottery, animal bones and possible hearths were recorded when a new gas main was constructed in 1948 (Collins 1948–9, 65; although it is possible that this pottery is of late Bronze Age date, see Barclay, Chapter 3). A probable middle Iron Age rectangular enclosure was partially excavated by Moorey (1982) 0.5 km to the east (at SU 603 888).

Roman and later activity

Similarly, little can be said of later periods. The Roman ditches indicate that there was Romano-British activity in the surrounding area as is also suggested by various Roman finds recorded on the county SMR. Given the limited extent of excavation, the quantities of finds suggest that this activity was quite nearby. It could have been focused along the line of the Roman Dorchester–Silchester road which may pass around a kilometre to the west. The ditches were probably part of a system of land division, the nature of which cannot be determined.

The major ditch (4/4=54) followed the crest of the ridge, perhaps indicating that it formed a division between separate units on either side of this hill, one to the north-west around Bradford's Brook, and the other to the south-east closer to the River Thames. This large ditch seems to have existed as a depression into the 6th century when it was finally completely silted up.

No more can be said of the Anglo-Saxon period other than that the pottery and glass bead indicate some activity in the vicinity early in the period.