Iron Age and Roman Activity at Watchfield Triangle

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SUMMARY

An area totalling 0.24 ha. was excavated by Oxford Archaeology in October and November 2000. Two successive ditch systems were revealed, dating to the late Iron Age and early Roman periods. A cluster of shallow pits may represent mid-late Roman ovens and two post-built structures may represent buildings. The ditches were interpreted as stock management features relating to a low-status rural settlement, part of which was investigated by Wessex Archaeology in 1998. Relatively large amounts of late Iron Age and Roman pottery confirmed the presence of a low-status settlement in the immediate vicinity, and suggested that the Roman Conquest had only a gradual impact upon local tastes in pottery, and by implication, food preparation.

I n March 2000, outline planning permission was granted by The Vale of White Horse District Council for the development of a triangle of land on the northern edge of Watchfield, lying immediately south-west of the junction of the A420 and the B4508 Majors Road (SU 2520 9073) (Figs. 1 and 2). Because archaeological remains of late Iron Age and Roman date were known to extend to within 15 m. of the development area on its southern side, a condition was attached to the consent, requiring that a programme of archaeological investigation should be undertaken before any groundworks proceeded. Initially, Oxford Archaeology was commissioned to excavate seven 30 m. evaluation trenches, comprising roughly 2% of the total site area of 1.48 ha., but when late Iron Age and Roman features were identified a further phase of open-area excavation was required. Both the evaluation and excavation were commissioned and funded by Denton and Gibson Ltd./Checkmore Ltd. Joint Venture, and were conducted in accordance with briefs issued by Oxfordshire County Council Archaeological Services, advisers to the local planning authority.

The site lies at 100 m. O.D. on relatively flat land on the southern fringe of the Corallian Ridge, a low ridge of limestone which separates the Vale of White Horse from the gravel terraces of the Thames Valley to the north. The underlying geology comprises interleaving sands, clays and gravels overlying Corallian limestone; the land was most recently used for arable agriculture.

ARCHAEOLOGICAL BACKGROUND (Figs. 1, 2 and 3)

In recent years, the area immediately north of Watchfield had been subjected to extensive archaeological investigation. Excavations were conducted in 1983 during the construction of the Shrivenham bypass, and subsequently in 1989, in an area some 250 m. west of the proposed development.¹ More recently, in 1998, Wessex Archaeology carried out several open-area excavations in advance of the extension of facilities at the Joint Service Command

¹ C. Scull, 'Excavation and Survey at Watchfield, Oxfordshire, 1983–92', Archaeol. Jul. 149 (1992), 128–281.

and Staff College; the areas investigated lay immediately south of the present site, 200 m. to the west and 200 m. to the east and south-east (Figs. 2 and 3).² These investigations revealed evidence for human activity in the vicinity dating from the Late Glacial period onward, although the densest remains dated to the Iron Age, Roman, and early Saxon periods. A detailed archaeological and geological background to the area was published in this journal,³ and is therefore not repeated here.



Fig. 1. Location of excavation.



Fig. 2. Location of excavation in relation to previous work.

² V. Birkbeck, 'Excavation at Watchfield, Shrivenham, Oxfordshire 1998', *Oxoniensia*, Ixvi (2001), 222–88.

³ Ibid. 223-4.



Fig. 3. Distribution of archaeological features excavated by Wessex Archaeology (1998) and Oxford Archaeology (2000).

METHODOLOGY

Archaeological features were found in three evaluation trenches, concentrated toward the centre of the development site. Consequently, an area measuring c. 40 m. x 60 m. (0.24 ha.) was mechanically stripped of topsoil, and was subject to open-area excavation in accordance with the terms of a brief produced by Oxfordshire County Council Archaeological Services. The aims of the investigation were to obtain a plan of all features present; to identify any structures or activity areas; to establish the date and duration of activity, and in particular the development of occupation through the late Iron Age and Roman periods; and to obtain both environmental and artefactual evidence for the economy and environment of the late Iron Age and Roman settlement. Archaeological deposits were excavated exclusively by hand; linear features were subject to c. 15% sample excavation, all discrete features were sample excavated, and all structures were fully excavated.

THE EXCAVATIONS

THE SITE SEQUENCE

Phase 1: Late Iron Age and Conquest period (c. 50 BC to AD 75) enclosure ditches (Fig. 4)

Late Iron Age activity was principally represented by ditches, forming either two conjoined enclosures, or a single enclosure with a central division. The enclosures appeared to continue beyond the limit of excavation to the west and south.

The eastern side of the enclosure was formed by two large ditches (1384 and 1385) separated by an entrance 6.8 m. wide, which gave access to the northern enclosed area. A possible ditch terminus (1170) was excavated at the southern limit of excavation, and might perhaps represent the beginning of another length of ditch; if so, an entrance 3.0 m. wide led into the southern enclosure. The ditches were 1.7–2.2 m. wide and 0.6–0.9 m. deep, with steep, straight sides and flat bases, or steep, stepped sides and gently rounded bases. No evidence for recutting or maintenance was recorded, with the exception of a relatively shallow recut tentatively identified where Ditch 1358 appeared to continue beyond the northern limit of excavation. Gully 1380, which extended 1.2 m. beyond the north terminus of Ditch 1385, may represent an earlier boundary on the same alignment.

Ditch 1368 divided the northern and southern enclosure elements. It was 1.1–2.3 m. wide and 0.6–0.9 m. deep, with steep, relatively straight sides and a gently rounded but narrow base. No evidence of maintenance was recorded. Sample excavation at the intersection of Ditches 1385 and 1368 demonstrated that the ditches shared the same basal fill, suggesting that they were contemporary features. Evidence recorded in plan also suggested that the southern part of Ditch 1385, beyond the intersection with Ditch 1368, was also a contemporary feature. Possible Ditch Terminus 1170 extended only 0.6 m. into the excavated area; the excavated portion measured 1.7 m. wide and 0.3 m. deep.

Ditch 1384 turned a near right-angled corner at the northern limit of excavation, suggesting the position of the north side of the enclosure; the northern enclosure thus measured at least 38 m. north-south x 24 m. east-west. The southern enclosure measured at least 24 m. north-south x 24 m. east-west. The lack of late Iron Age ditches in the northern part of the area excavated by Wessex Archaeology, some 36 m. south of the present site, demonstrated that the southern enclosure was less than 60 m. long from north to south. However, a further late Iron Age sub-rectangular ditched enclosure, measuring 50 m. x 33 m., was identified 60 m. south of the present site during the earlier excavations.

Dating. All the segments excavated through the enclosure ditches produced a consistent pattern of finds: sherds of late Iron Age pottery, dated 50 BC to AD 50, were recovered from the lower ditch fills, while sherds dated at the latest to the mid–late 1st century AD were found in the upper fills. The lower fills appeared to consist of weathering and primary silting deposits, possibly laid down soon after the ditches were cut. No clear evidence was recorded to demonstrate whether the upper fills represented continued natural deposition or deliberate backfilling; however, if the pottery recovered from ditches on the site was redeposited from the clearance of middens (see below, 'The pottery'), the enclosures may have remained in use into the later 1st century AD, perhaps being backfilled thereafter. Certainly, the complete lack of 2nd-century pottery from any excavated ditch fill suggests that the enclosure ditches did not remain partially open for an extended period. There were 24 sherds of pottery deposited between the late 3rd and late 4th centuries, which were recovered from an upper fill within the southern terminus of Ditch 1293/1374.



Fig. 4. Phase 1: late Iron Age and Conquest period features.

Curvilinear ditch north of the enclosure. A short length of curvilinear ditch was found at the extreme north end of the site (1098/1101), both ends extending beyond the limit of excavation (Fig. 4). The feature was c. 6 m. long and measured 0.5 m. wide x 0.2 m. deep with relatively steep sides and a flat base; eight sherds of pottery likely deposited between the mid 1st and early 2nd centuries AD were recovered from Segment 1098. The area within the curvilinear ditch was entirely occupied by an extensive cut feature (1196), which remains poorly understood. It measured at least 4 m. x 0.75 m. x 0.28 m. deep, with relatively gentle sides and a flat base, and contained five sherds of Roman pottery which could not be precisely dated. Feature 1096 appeared to have horizontally truncated Ditch 1098/1101, although the possibility that both were elements of a single cut was not discounted. Given the proximity of the limit of excavation, it was impossible to determine whether 1098/1105 was a ring ditch, representing the rounded corner of a larger enclosure or field ditch, or was indeed part of 1196. Feature 1196 itself must be regarded as a hollow of unknown function, or again, as the rounded corner of a ditch extending just into the excavation area. The position of Ditch 1098/1101 and the pottery recovered from it suggests that it was laid out to respect Enclosure Ditch 1384.

Postholes. Some probable postholes contained sherds of late Iron Age pottery, generally in small quantities. Three such features form a north-west to south-east alignment in the south-western part of the site (1055, 1084, 1088) (Fig. 4). The cuts measured 0.35–0.54 m. in diameter and 0.09–0.16 m. in depth. Feature 1088 contained 14 sherds of grog-tempered pottery, while the remaining two features contained single sherds of flint- and limestone-tempered pottery. It is possible that one or more of Postholes 1126, 1128, and 1132 (Fig. 4) formed a second side to the structure aligned north-east to south-west, but in the absence of dating evidence these were attributed to phase 2. Further pits/postholes on approximately the same alignment were recorded to the east of the southern terminus of Ditch 1385 (1172, 1174, 1178, 1180, 1182, 1184, 1192) (Fig. 4). Twenty-six sherds of late Iron Age pottery were recovered from Feature 1172, and smaller quantities from Features 1174 and 1184. The remaining features produced either no finds or Roman pottery sherds which were not closely datable. Postholes 1186, 1188, and 1301, the latter of which contained eight sherds of late Iron Age pottery, suggested a wall or fence extending to the north. Features 1077 and 1075 may represent a continuation of the alignment to the south-east. It remains unclear whether these postholes derived from a single fence-line, or from three or more individual structures.

A near parallel alignment of four postholes lay c. 23 m. to the north (1339, 1341, 1343, and 1345). The cuts, with vertical sides and flat bases, were closely spaced at intervals of no more than 0.7 m. Twenty-one sherds of pottery, probably deposited between the mid 1st and early 2nd centuries, were recovered from Posthole 1341, although eight sherds dated as a group to between the mid 2nd and late 4th centuries were recovered from Posthole 1345. On the basis of alignment and the pottery assemblage from Posthole 1341, the structure was tentatively assigned to this phase; however, it was unclear whether it represented one side of a rectangular building or pen, or part of a longer fence. Partial skeletons of a goat and a roe deer were recovered from Posthole 1339; both showed signs of butchery.

A further cluster of probable postholes, perhaps forming a rough circle *c*. 4 m. in diameter, was recorded west of the north end of Enclosure Ditch 1385 (Fig. 4); Feature 1281 contained a sherd of late Iron Age pottery, but other features in the group produced small numbers of Roman sherds which could not be closely dated. This structure, perhaps a hut or stock management structure, lay within the enclosure and away from the focus of later activity; it was tentatively assigned to phase 1, although a later date is possible.

Further west, isolated Pits/Postholes 1151 and 1247, neither more than 0.12 m. deep, each contained single sherds of late Iron Age pottery; Pits/Postholes 1243 and 1245 were slightly deeper and were assigned to the same phase because of their loose spatial association. No definite function can be assigned to any of these features.

Three undated postholes (1237, 1239, 1241) at the opening of the northern enclosure may perhaps relate to a structure intended to control access to or from the interior.

Pits. Two adjacent pits (1370 and 1372) (Fig. 4) were stratified below Enclosure Ditch 1386, but may be of a similar date to it. Both measured c. 1.5 m. x at least 1.0 m. x 0.3 m. deep. Pit 1370 contained a fill almost devoid of limestone, with two sherds of late Iron Age pottery. Pit 1372 contained c. 50% limestone and 11 sherds of pottery dated as a group to between the mid 2nd and late 4th centuries. The similarity in dimensions of the pits indicates an association, and the stratigraphy suggests that the late pottery within Pit 1372 must have been derived from an intrusive feature.

Phase 2: Early Roman (Fig. 5)

Ditch system. A system of enclosures or paddocks was recorded which could not have been contemporary with the phase 1 enclosures. The ditches lay on a consistent rectilinear pattern of alignments, suggesting that they belonged to a single coherent system of land organisation. Several of the features extended beyond the limit of excavation so that no complete enclosures or paddocks were present within the excavation area.

Ditches 1381 and 1386/1387 were parallel features which shared the same north-north-west to southsouth-east alignment; all three terminated in line at their northern ends. Ditches 1381 and 1386 extended to



Fig. 5. Phase 2: early Roman features.

the southern limit of excavation while Ditch 1387 was shorter, with a total length of only 9 m. Ditches 1381 and 1386 lay 16 m. apart, with Ditch 1387 a further 17 m. east of Ditch 1386. Another ditch (1086) was aligned east-west and appeared to form the northern boundary of a field or paddock to the west of Ditch 1381; the enclosed area measured at least 15 m. x 10 m., and had an entrance 2.3 m. wide in the north-east corner in a position characteristic of fields used for stock management.⁴ Ditch 1388, only 6 m. long, lay 4 m. north of the terminals of 1386/1387, but may similarly have helped to delineate the northern extent of the parcel of land between Ditches 1386 and 1387. Two further ditches lay in the area between Ditches 1381 and 1386. Ditch 1027, parallel to Ditch 1381 and 2.8 m. to the east, may have defined the east side of a droveway. Ditch 1391 shared the same east-west alignment as Ditches 1086 and 1388, and may have defined the northern extent of an enclosure lying between Ditches 1027 and 1386.

Toward the northern end of the excavation area, Ditch 1390 shared the north-north-west to south-southeast orientation characteristic of this phase, and was aligned almost exactly with Ditch 1387, 36 m. to the south (Fig. 5). Some 7.5 m. north of its terminus, it intersected with a contemporary ditch (1389) to which it was aligned at right angles. Four pits/postholes (1213, 1205, 1207, and 1203) appeared to continue south along the line of Ditch 1390; Pits/Postholes 1213 and 1205 each contained single sherds of pottery datable only to the Roman period.

The ditches ranged from 0.22 m. to 0.9 m. wide, and from 0.07 m. to 0.26 m. deep. Where sampleexcavated, the cuts often had steep sides and flat bases, but variations in profile along the length of the same ditch suggested that differences were not significant. No ditch contained more than one fill. The fills were brown, greyish brown, or similar in colour, and no significant differences in texture or limestone content were detected. No specific evidence was recovered to indicate whether the ditches had been deliberately infilled, or allowed to fill naturally.

Postholes flanking 1381 and 1027. An alignment of seven postholes was recorded on the western edge of ditch 1381 (Fig. 5); the features were a maximum of 2 m. apart, and measured 0.25–0.5 m. in diameter, and 0.06–0.25 m. in depth. Two sherds of Roman pottery, derived from the top fill of Feature 1108, constituted the only artefactual dating evidence recovered. Three of the postholes were truncated by the ditch cut, the remainder had no relationship to it. It is possible that the features represented a fence which had formed a boundary before the cutting of the ditch, although it is likely that the ditch was maintained before being allowed to fill, thus cutting through the posthole fills. The fence may have been related features.

A group of probable postholes was also found in close association with the terminus of Ditch 1027 to the east of Ditch 1381 (Fig. 5). Only Feature 1145 had a stratigraphic relationship with the ditch and it appeared to predate it; two sherds of late Iron Age pottery were recovered from its upper fill. Again, a fence which either predated the ditch or was contemporary with it is suggested.

Ditches aligned north-east to south-west. Two narrow ditches on slightly differing north-east to south-west alignments were recorded extending into the southern limit of excavation (1392 and 1073). They measured 0.5 m. and 0.65 m. in width respectively, and 0.2 m. and 0.1 m. in depth. Ditch 1392 had much steeper sides than Ditch 1073. Both produced sherds of Roman pottery, but no more closely datable artefacts. They were of similar dimensions to the phase 2 ditches, and might perhaps represent internal divisions of paddocks. Unfortunately they could not be phased with any certainty.

Dating of the ditch system. Dating presented problems, not least because the recorded stratigraphic relationships between elements of the phase 1 enclosures and features assigned to the ditch system appeared to be incompatible with the pottery recovered. Evidence recorded in section suggested that Enclosure Ditch 1385 was later than Ditch 1386; that Ditch 1385 was later than Ditch 1391; and that Enclosure Ditch 1384 was probably later than Ditch 1389. Yet, as indicated above, the enclosure ditches yielded exclusively late Iron Age pottery from lower fills, and pottery mostly predating the end of the 1st century AD from overlying fills, while the ditch system produced several assemblages dating to the 2nd century or later, including one group of sherds assigned to the late 4th century, from the north terminus of 1386. In view of the clear pottery evidence, it is considered that the ditch system must have post-dated the enclosures; the ditch system was thus assigned to phase 2.

The wide date-range of pottery assemblages derived from the phase 2 ditches suggests that they may have been a long-lived feature of the landscape, but that some elements of the system may have been maintained after others were abandoned. It seems reasonable to believe that the field boundaries were laid out by the late 1st or early 2nd century, but that the relatively short Ditches 1387 and 1388 were not maintained beyond

⁴ F. Pryor, Farmers in Prehistoric Britain (1998), 101.

c. AD 250. Ditch 1387 yielded 44 sherds of pottery, dated as a group to the late 1st or early 2nd centuries, and was cut by Pit 1161, apparently backfilled between the late 3rd and mid 4th centuries, while Ditch 1388 contained a group of five sherds of pottery of mid 2nd- to early 3rd-century date. In contrast, a small assemblage of pottery of late-4th-century date was recovered from the northern terminus of Ditch 1386, 17 m. west of Ditch 1387. It seems likely that this feature was maintained until the end of the Roman period. The date at which other ditches fell out of use cannot be established, as they produced pottery assemblages that were not closely datable (1086, 1381, 1389, and 1390) (Fig. 5).

Timber structures contemporary with the ditches. Several postholes were recorded toward the south-eastern corner of the excavation area, many of which formed alignments which corresponded with the orientation pattern of the phase 2 ditches (Fig. 5). A minimum of two parallel lines of postholes were undoubtedly present, but it is possible to identify tentatively the ground plans of two rectangular timber structures which may have been buildings.

Postholes 1349, 1305, 1250, 1248, and 1254 form one clear alignment, oriented approximately east-west (Fig. 5, Structure 1). They ranged in diameter from 0.21 m. to 0.68 m., and in depth from only 0.04 m. to 0.14 m. A single sherd of late Iron Age pottery was recovered from Posthole 1355, and three sherds from Posthole 1248. Postholes 1252, 1316, and 1256 formed a parallel alignment 2 m. to the north (Fig. 5, Structure 2). They varied in diameter from 0.18 m. to 0.36 m., and in depth from 0.07 m. to 0.14 m. A single sherd of late Iron Age pottery was recovered from Posthole 1256. While it is possible that these postholes supported two parallel fences, in the context of stock management, they may have formed the north and south walls of adjoining rectangular structures (Fig. 5). The southern putative structure (Structure 1) may have included Postholes 1311, 1089, 1226, 1198, 1194, and 1196, which ranged in diameter from 0.23 m. to 0.8 m., and in depth from 0.06 m. to 0.45 m. The overall dimensions would have been 8 m. x 4 m., with the postholes being spaced at intervals of at least 1.1 m. The shallowness of the features suggests that other shallower postholes may easily have been completely truncated by ploughing. The pottery recovered was dated to the Roman period, but no further refinement was possible; four sherds were recovered from Posthole 1311, 107 sherds were recovered from Posthole 1089, and five sherds were recovered from Posthole 1226.

The northern putative structure (Structure 2) consisted of Postholes 1320 and 1351, 1256, 1316 and 1252. The former had diameters of 0.3 m. and 0.36 m. respectively, and depths of 0.12 m. and 0.07 m. The structure likely had overall dimensions of 5 m. x at least 5 m.; again, further postholes of lesser depth may easily have been destroyed by horizontal truncation. A single sherd of pottery datable only to the Roman period was recovered from Posthole 1320.

No clear evidence was found to link the postholes ascribed to Structures 1 and 2 with the exception of their spatial arrangement. They cannot be closely dated on the basis of the artefactual evidence recovered, but the correspondence with the alignment of the phase 2 ditch system suggests that they post-date its establishment. A cluster of features attributed to phase 3 post-dated the infilling of Ditch 1387, and also seems likely to have post-dated the putative timber structures, although this cannot be established beyond doubt.

Several other pits/postholes recorded in the vicinity were attributed to phase 2 because of their proximity to Structures 1 and 2, but they could not be closely dated (1330, 1358, 1328, 1347, 1355, 1326, 1324, 1261, 1258, 1224, 1303, 1307, 1200, 1299, 1081, 1079) (Fig. 5). No other potential buildings were identified, and these postholes may have related to fences or stock management features. A winged ploughshare was recovered from Posthole 1299.

Pits. Four larger relatively widely spaced pits were identified (1356, 1069, 1041, 1235) (Fig. 5), and of these, two could be linked to the use of fire. Pit 1356 was almost square in shape, measuring 1.6 m. x 1.5 m. x 0.16 m. deep, with vertical sides and a flat base. The cut was packed with large sandstone blocks up to 0.22 m. thick and set in clay. Many of the sandstone blocks were reddened by heat, suggesting that this feature was the base of a hearth, kiln or oven. Pit 1069 was of similar shape and dimensions, measuring 1.85 m. x 1.55 m. x 0.25 m. deep, with relatively steep sides and a flat base. The fill consisted of 80% limestone fragments with a maximum diameter of 0.20 m., and a smaller component of crushed limestone. Roughly 20% of the limestone fragments were fire-reddened, although there was no evidence that this pit itself had been dug to construct the base of a hearth or similar.

The remaining pits were smaller. Pit 1041 was ovoid in plan, measuring 1.55 m. x 0.85 m. x 0.17 m. deep, with near vertical sides and a flat base; 11 sherds of pottery dated as a group to between the mid 1st and early 2nd centuries were recovered from the single fill. Pit 1235 was sub-rectangular in shape, measuring 1.0 m. x 0.8 m. x 0.39 m. deep, with near vertical sides and a flat base; a group of 50 sherds of pottery dated to the mid or late 1st century AD was recovered from the upper fill, and 15 sherds datable to the same period from the middle fill. Neither has any clear primary function, though quarrying for limestone is a possibility. The differing characteristics of the pits suggest that their approximate alignment may be coincidental.

Phase 3: (c. AD 150-400) (Fig. 6)

Probable ovens and water tank. Fire-reddening of the cuts of five shallow pits suggests that they might represent the below-ground components of a sequence of ovens. These features were concentrated toward the southeast of the excavation area. A probable water tank was also identified.

Cut 1046 was sub-rectangular in plan, and measured 0.95 m. x 0.5 m. x 0.3 m. deep, with vertical sides and a flat base. The sides and base of the cut were heavily fire-reddened, and a single sherd of Roman pottery was recovered. A wider but shallower pit (1044) was recorded horizontally truncating Cut 1046, though Cut 1046 and Pit 1044 may have been part of the same feature. Pit 1044 was sub-rectangular in plan, with relatively steep sides and a flat base, and measured $1.2 \text{ m. x} 1.1 \text{ m. x} 0.2 \text{ m. deep; 21 sherds of pottery$ probably deposited between the mid 2nd and late 4th centuries were recovered from the basal fill, whichcontained 10% charcoal flecks. A concentration of carbonised grains of barley, wheat and unidentified cerealtogether with weed seeds were recovered from this fill. A function as an oven seems likely, therefore Feature1044 was perhaps representative of a fire-pit.

Three similar pits which lay within c. 4 m. of Pits 1046/1044 showed fire-reddening at their edges and may also be representative of ovens or related features. Ovoid Pit 1048, stratified below Pit 1044, measured 1.0 m. x 1.0 m. x 0.2 m. deep with relatively steep sides and a gently rounded base. The lower fill (1052) consisted of a deposit of fire-reddened clay 0.06 m. thick with a large block of burnt limestone resting on its upper surface. A group of 20 sherds of pottery dated to between the mid 2nd and late 3rd centuries was recovered from Upper Fill 1047. This fill was characterised by 10% fragments of burnt limestone. Pit 1051 was subcircular in plan with relatively steep sides and an irregular base, and measured 1.5 m. x 1.2 m. x 0.25 m. deep; 12 sherds of Roman pottery were recovered from Upper Fill 1049. Pit 1312 was ovoid in plan, measuring 1.85 m. x 1.1 m. x 0.16 m. deep, with relatively gently angled sides and a flat base. The fill contained 50% limestone fragments, predominantly burnt, and 12 sherds of pottery dated as a group to between the late 3rd and mid 4th centuries.

The possible water tank (1161) lay immediately north-east of these features and was cut through phase 2 Ditch 1387. The cut measured 2.5 m. x 1.6 m. x 0.7 m. deep and was roughly rectangular in shape with vertical sides and a flat base. It was lined with brownish yellow clay which was *c*. 0.15 m. deep above the base of the cut and *c*. 0.45 m. thick toward the bottom of the sides. The lower fill above the lining (1148) consisted of dark greyish green clay silt with 50% limestone fragments, some of which were burnt. These ranged in size from 0.02 m. to 0.24 m. in diameter. Seventy-three sherds of pottery dated as a group to the 3rd century were recovered, as well as a single small piece of slag and an iron ox-goad of typical Roman type. Carbonised cereal grains including wheat, barley and unidentified pieces as well as weed seeds were recovered from this fill. The colour of the fill may suggest that it accumulated during the primary use of the feature. The upper fill (1163) appeared to represent post-abandonment backfill. Twenty-five sherds of pottery probably deposited between the late 3rd and mid 4th centuries were recovered, as well as three iron nails and a hoe or spud blade used for weeding or for clearing the plough. The size of the feature is possibly indicative of a tank rather than a storage pit, and the presence of burnt limestone within the lower fill suggests that it was used not merely for storage of liquids, but possibly for dousing, cooking or bathing.

An isolated, shallow, pit/posthole lying 25 m. to the north (1332) may have been roughly contemporary; a group of 20 pottery sherds dated to between the late 3rd and mid 4th centuries was recovered from its lower fill and 18 fragments of burnt clay, probably derived from a hearth, were found within the upper fill. Although this feature may not have been a hearth, one may have existed nearby.

Three further pits of this phase showed no evidence of fire-reddening and have no known primary function other than rubbish disposal. Sub-circular Pit 1039, close to the cluster of ovens, measured 0.8 m. x 0.7 m. x 0.18 m. deep with relatively steep sides and a flat base; five sherds of pottery dated as a group to between the mid 2nd and mid 3rd centuries were recovered from the single fill. Pit 1146 was similar in shape, measuring 0.65 m. in diameter x 0.21 m. in depth. The pit was cut through the fills of Tank 1161; it had irregular but relatively steep sides and a rounded base. Its fill (1147) contained two iron nails and 177 sherds of pottery likely deposited during the mid to late 3rd century. Circular Pit 1231 lay toward the north-east corner of the excavation and measured 0.8 m. x 0.8 m. x 0.56 m. deep with near vertical sides and a slightly rounded base. It was deeper than many of the pits of this phase and the basal fill contained abundant large fragments of limestone (suggesting deliberate backfilling) as well as 9 sherds of pottery dated as a group to between the mid 2nd and late 4th centuries.

Phase 2/3: Roman period pits not closely dated (Fig. 6)

Two pits were not closely datable within the Roman period. Pit 1314 was circular in plan, measuring 0.6 m. in diameter x 0.1 m. in depth with gently angled sides and a rounded base. Pit 1322 had a similar profile but was larger; it was ovoid in shape and measured 1.56 m. long x 0.9 m. wide x 0.14 m. deep. The primary function of Pit 1314 was not apparent, but the surface below 1322 was heat-affected, again suggesting the practice of some domestic or craft activity involving fire.



Fig. 6. Phases 2/3, 3 and 4: Roman and post-Roman features.

Phase 4: Post-Roman activity (Fig. 6)

Very limited evidence for medieval or later activity was found. Three sherds of medieval pottery were recovered from Pit/Posthole 1221 in the south-east corner of the site. At least four irregularly spaced shallow furrows were also found, the broadest being 3.5 m. wide and probably representing medieval or later ploughing. The furrows were aligned north-north-west to south-south-east and lay on an orientation very similar to that of the phase 2 ditches. This suggests that the reorganisation of the landscape during the middle of the Roman period had a lasting impact on the exploitation of this area. Gully 1209 may represent another medieval or post-medieval furrow. Pit 1220 was an isolated modern feature dated by the recovery of a coach bolt and a small sherd of pottery.

THE FINDS

THE IRON AGE AND ROMAN POTTERY by Edward Biddulph

A total of 1,840 sherds of Iron Age and Roman pottery weighing 27.78 kg. was recovered. Slightly more than a third of the pottery was dated to the late Iron Age; there was little categorically earlier than this material. Most of the pottery therefore dated to the Roman period. While there were no observable gaps, the later 1st and first half of the 2nd century were well represented, as was the second half of the 3rd century. The pottery was in good condition, with many rims and large sherds present. There were no large groups from which to identify a well-defined ceramic history of the site and, generally, close dating was impossible due to the predominance of long-lived forms and fabrics.

The pottery from Watchfield Triangle (Figs. 7 and 8, Tables 1, 2 and 3), representative of a low-status insular settlement displaying few external contacts, augments ceramic knowledge of the region. Particularly comparable is the pottery from Wantage,⁵ some 13 km. east of Watchfield. Although of low status like Watchfield, Wantage was less important during the Iron Age and received a greater range of regional imports. The Iron Age and Roman site at Hatford,⁶ north of Watchfield (see this volume, page 000), provides parallels, although these are confined to the Iron Age and early Roman period. Further afield, the pottery from Standlake,⁷ Asthall⁸ and Abingdon⁹ is also useful for comparison.

The pottery was recorded using a system devised by Oxford Archaeology and standard for Iron Age and Roman sites in Oxfordshire. The pottery was sorted into fabric groups based on surface appearance and major inclusion types, and finally quantified by sherd count and weight. Where possible, fabrics have been referenced to the National Roman Fabric Reference Collection,¹⁰ and Young's Oxfordshire series,¹¹ where fuller descriptions were possible. Vessel types were identified from rims, which were quantified by vessel count and estimated vessel equivalents (EVEs).

Catalogue of Pottery Fabrics

Fabric S20 (LGF SA) South Gaulish Samian ware

Fabric S30 (LEZ SA 2) Lezoux central Gaulish Samian ware

Fabric S32 (LMV SA) Les Martres-de-Veyre central Gaulish Samian ware

Fabric S40 East Gaulish Samian ware

Fabric F30 (ROB MD) Mica-dusted fabrics

Fabric F60 Unsourced red colour-coated wares

⁵ J. Timby, 'The Pottery', in N. Holbrook and A. Thomas, 'The Roman and Early Anglo-Saxon Settlement at Wantage, Oxfordshire: Excavations at Mill Street, 1993–4', Oxoniensia, lxi (1997), 131–47.

⁶ R. Bourn, 'Manorhouse Farm, Hatford, Oxfordshire: An Iron Age and Early Romano-British Settlement', in R.J. Zeepvat (ed.), *Three Iron Age and Romano-British Rural Settlements on English Gravels* (B.A.R. Brit, Ser. 312, 2000), 1–70.

⁷ J. Timby, 'Pottery' in G. Hey, 'Iron Age and Roman settlement at Old Shifford Farm, Standlake', Oxoniensia, lx (1996), 93–176.

⁸ P.M. Booth, Asthall, Oxfordshire: Excavations in a Roman 'Small Town' (Thames Valley Landscapes 9, 1997).

⁹ J. Timby, 'The Pottery', in J. Muir and M.R. Roberts, Excavations at Wyndyke Furlong, Abingdon, Oxfordshire, 1994 (1999), 31–40.

¹⁰ R. Tomber and J. Dore, *The National Roman Fabric Reference Collection: A Handbook* (MoLAS Monograph 2, 1998).

11 C.J. Young, The Roman Pottery Industry of the Oxford Region (B.A.R. Brit. Ser. 43, 1977).



Fig. 7. Iron Age and Roman pottery. Scale 1:4.





- Fabric M25 (NFO PA) New Forest parchment mortarium fabric
- Fabric W20 General sandy white wares
- Fabric W30 General fine white wares
- Fabric Q20 General oxidised white-slipped wares
- Fabric E10 'Belgic-type' ware, organic-tempered
- Fabric E13 'Belgic-type' ware, organic- and grog-tempered
- Fabric E30 'Belgic-type' ware, medium to coarse sand-tempered
- Fabric E40 'Belgic-type' ware, shell-tempered
- Fabric E50 'Belgic-type' ware, limestone-tempered
- Fabric E60 'Belgic-type' ware, flint-tempered
- Fabric E80 'Belgic-type' ware, grog-tempered
- Fabric O10 General fine sand oxidised wares
- Fabric O20 General coarse sand oxidised wares
- Fabric O24 (OVW WH) Portchester 'D'/Overwey white ware
- Fabric 030 General fine-medium sand oxidised wares
- Fabric O38 Fine sand oxidised ware, occasional iron and grog inclusions, soft fabric and smooth or burnished surfaces; equivalent to R38¹²
- Fabric O39 Fine sand oxidised ware, reduced interior
- Fabric O40 (SVW OX 2) Severn Valley wares
- Fabric O51 Fine oxidised grog-tempered wares
- Fabric O80 Coarse oxidised grog-tempered wares
- Fabric O81 (PNK GT) Pink grogged ware
- Fabric R10 General fine sand grey wares
- Fabric R11 (OXF FR) Fine Oxfordshire grey ware¹³
- Fabric R20 General coarse sand grey wares
- Fabric R30 General fine/medium sand grey wares
- Fabric R37 Fine sand grey ware, occasional iron and grog inclusions, light grey core and smooth or burnished surfaces¹⁴
- Fabric R38 As R37, but with coarser grog inclusions¹⁵
- Fabric R50 Sandy black-surfaced wares¹⁶
- Fabric R90 Coarse 'storage jar' fabrics, usually grog-tempered¹⁷
- Fabric R95 (SAV GT) Savernake ware
- Fabric B10 Handmade black-burnished ware 1
- Fabric B11 (DOR BB 1) Standard Dorset black-burnished ware 1
- Fabric B20 Wheel-made black-burnished ware 2
- Fabric B30 Black-burnished-type wares
- Fabric C10 General shell-tempered wares
- Fabric C11 Late Roman shell-tempered ware

A notable aspect of this assemblage is the low level of fine wares and near absence of so-called specialist wares represented by amphorae and mortaria. Imported continental wares, which consisted exclusively of Samian ware, accounted for 3% of the assemblage by EVEs. South Gaulish Samian, probably from La Graufesenque, predominated. Central Gaulish Samian was limited to two sherds, one of which was manufactured at Les Martres-de-Veyre, whose products traditionally reached southern Britain during the early 2nd century.¹⁸ The second sherd was a Lezoux product and carries a later 2nd-century date. Importation of Samian wares into Britain generally increased from c. AD 120, and consequently Lezoux products tend to dominate most Samian ware assemblages.¹⁹ The fact that there was no such dominance at Watchfield suggests a decline in pottery supply or status at the time. There was a marginal increase of Samian ware supply from east Gaul during the

- ¹² P. Booth, op. cit. (note 8), 115-19.
- 13 cf. Young, op. cit. (note 11), fabric 4.
- ¹⁴ P. Booth, op. cit. (note 8), 115-19.
- 15 Ibid.
- ¹⁶ cf. Young, op. cit. (note 11), reduced fabric 5.
- ¹⁷ Ibid. p. 202, fabric 1.
- 18 P. Webster, Roman Samian Pottery in Britain (1996).
- 19 Ibid.

FF = Fabric	Sherds	Weight (g)	% Weight	Mean sherd wt (g)
S20	13	80	<1%	6
S30	1	1	<1%	1
S32	1	4	<1%	4
S40	2	10	<1%	5
F30	4	66	<1%	17
F60	1	10	<1%	10
M25	8	58	<1%	7
W20	7	54	<1%	8
W30	7	36	<1%	5
Q20	1	4	<1%	4
E10	7	28	<1%	4
E13	7	100	<1%	14
E30	39	402	1%	10
E40	72	904	3%	13
E50	63	416	1%	7
E60	67	660	2%	10
E80	307	4254	15%	14
O10	4	18	<1%	5
O20	54	269	1%	5
O24	2	10	<1%	5
O30	3	20	<1%	7
O38	4	156	1%	39
O39	1	34	<1%	34
O40	4	44	<1%	11
O51	14	84	<1%	6
O80	14	338	1%	24
O81	4	254	1%	63
R10	13	48	<1%	4
R11	2	18	<1%	9
R20	139	1660	6%	12
R30	199	1873	7%	9
R37	142	1022	4%	7
R38	26	1466	5%	56
R50	149	1135	4%	8
R90	245	9439	34%	39
R95	60	1508	5%	25
B10	3	18	<1%	6
B11	91	577	2%	6
B30	37	230	1%	6
C10	18	332	1%	18
C11	5	132	<1%	26
TOTAL	1840	97779		

TABLE 1. POTTERY QUANTIFIED BY SHERD COUNT AND WEIGHT

Fabric	Jars	Jar/Bowl	Beakers	Bowls	Dishes	Mortaria	Lids	TOTAL EVE	% EVE
R37	1.08		0.38					1.46	12%
R30	0.56	0.08	0.65	0.1	0.03			1.42	11%
E80	0.48	0.08		0.7			0.08	1.34	10%
R90	1.33							1.33	10%
R38	1.2							1.2	9%
O24	0.9							0.9	7%
R95	0.87							0.87	7%
R50	0.4		0.15					0.55	5%
E30	0.35	0.1						0.45	3%
B11	0.31				0.11			0.42	3%
E40	0.4							0.4	3%
S40				0.3	0.03			0.33	3%
E60	0.26							0.26	2%
R20	0.25							0.25	2%
B30					0.22			0.22	2%
E50	0.2							0.2	2%
O38	0.2							0.2	2%
C11	0.18							0.18	1%
F30				0.03	0.15			0.18	1%
O51		0.13						0.13	1%
W20				0.13				0.13	1%
O80	0.12							0.12	1%
E13	0.1							0.1	1%
O39	0.1							0.1	1%
M25						0.06		0.06	< 1%
R10			0.06					0.06	< 1%
S20				0.05				0.05	<1%
TOTAL EVE	9.29	0.39	1.24	1.31	0.54	0.06	0.08	12.91	
% EVE	72%	3%	9%	10%	4%	1%	1%		

TABLE 2. QUANTIFICATION OF VESSEL CLASS BY EVE

late 2nd or early 3rd century. Overall, the 3% Samian ware by EVEs matches the proportion reached at Wantage.²⁰ A comparative figure for Asthall was not available, but it can be seen that in terms of weight, Watchfield was the poorer of the two sites, contributing 1% Samian wares compared to 3% at Asthall.²¹

The assemblage was devoid of amphorae, which is something of a surprise. Even at low-status sites such as Standlake, which displays few external contacts,²² one sherd of amphora is expected in approximately every 300 sherds of Roman pottery. This ratio narrows as the status of the site increases. At the small town at Asthall, one sherd was found among every 80 sherds. The fact that at Watchfield none was recovered from almost 2000 sherds of Roman pottery provides some indication of its low status. Romano-British fine wares consisted of a burnt sherd in a colour-coated fabric, possibly Oxfordshire red colour-coated ware, and a micadusted bowl. The source of the latter was uncertain, though production is possible at Nuneham Courtenay.²³ White wares accounted for 8% of the assemblage by EVEs. Most sherds were presumably from sources within Oxfordshire. While the dating of these wares was not fully understood, they were likely to have belonged to an early Roman tradition,²⁴ and the occurrence of the finer fabric (W20) was consistent with this. In contrast, the coarser fabric (W30) more often occurred within mid and later Roman contexts. The supply of mortaria was restricted to one or two parchment ware vessels from the New Forest region (M25) (Fig. 8.16). Pottery from this source is regularly found within Oxfordshire, though more often by way of fine wares.²⁵ Oxfordshire mortarium fabrics were conspicuously absent. Given the presence of late Roman pottery at Watchfield, the reason is unlikely to have been entirely chronological. Status may have played some part, but the complete absence of certain Oxfordshire traded products may also indicate that the focus of supply to the site was not toward the east. The two sherds of Portchester-'D' white ware (O24), a component of the latest Roman pottery assemblage, were equally unusual, as the fabric is uncommon on sites in western Oxfordshire.

Most oxidised sherds could not be assigned to specific sources and were recorded as general sandtempered red wares (O10 and O20). These accounted for 1% of the whole assemblage by weight and were found throughout the Roman period, but concentrated in late 2nd- and 3rd-century contexts. An Oxfordshire source for some sherds is possible, particularly for the fine fabric (O10),²⁶ though a local source for most was likely, given the low levels of specific Oxfordshire products. Oxidised wares from further afield were represented, but only in extremely limited quantities. These were diverse in source, originating in Wiltshire (fabric O30), the Severn Valley (fabric O40) and Buckinghamshire (fabric O81).

Reduced 'Belgic-type' wares formed a significant proportion of the assemblage. Grog-tempered ware (E80) contributed 10% of the assemblage by EVEs and over half of all 'Belgic' wares. This category is something of a catch-all for fabrics in which grog is the principal filler. Sherds may additionally contain varying amounts of sand, calcareous or organic inclusions. Without subjecting each one to microscopic examination, it is impossible to separate sherds according to the proportions of different inclusions to a satisfactory degree. An oxidised grog-tempered ware (O51) was also present. This fabric was invariably fine and thin-walled, and although no forms were recognised, it was likely to have derived from vessels copying Gallo-Belgic beakers. Other Belgic wares included shell-, limestone- and flint-tempered fabrics (E40, E50 and E60 respectively). Of these, fabric E40 was the most important, contributing 3% of the assemblage. Wheel-turned grog-tempered wares formed an integral part of the ceramic traditions of the late Iron Age of southern Britain.²⁷ The dating of such fabrics in the Oxfordshire region remains uncertain, but they had their greatest currency during the first half of the 1st century AD. Shell, limestone and flint tempering belong to an earlier tradition, which continued to a lesser extent from the middle-late Iron Age. Without good preservation of rims, identification of middle Iron Age pottery was difficult, and sherds that may date to this earlier phase may have been placed within the E ware category for convenience.

Grey wares dominated the assemblage, taking a 55% share. Finer fabrics were particularly popular. Fabrics R30 and R37, both spanning much of the Roman period and characterised by a fine sand-tempered paste, each contributed 11% by EVEs (but only 7% and 4% respectively by weight). Fabric R37 was distinguished from fabric R30 by its blue-grey, often burnished surfaces and light grey core. This was a common fabric at sites in west Oxfordshire. At Wantage, a third of all pottery recovered was fabric R1, almost certainly identical to R37.²⁸ Booth argued for production at Cassington immediately north-west of Oxford, but allows the

- ²⁰ J. Timby, op. cit. (note 5), Table 3.
- ²¹ P. Booth, op. cit. (note 8), 114.
- 22 G. Hey, 'Iron Age and Roman settlement at Old Shifford Farm, Standlake', Oxoniensia, lx (1996), 169.
- ²³ P. Booth, op. cit. (note 8), 115.
- ²⁴ Timby, op. cit. (note 5), 134.
- ²⁵ E.g. Asthall. P. Booth, op. cit. (note 8), 113.
- ²⁶ P. Booth, op. cit. (note 8), 115.
- 27 cf. I. Thompson, Grog-Tempered 'Belgic' Pottery of South-Eastern England (B.A.R. Brit. Ser. 108, 1982).
- ²⁸ J. Timby, op. cit. (note 5), Table 3.

possibility of additional manufacturing sites.²⁹ At sites such as Asthall, Yarnton and Wilcote,³⁰ as well as at Wantage, R37 contributes between 20 and 30%+ by weight of each assemblage. The comparatively low level at Watchfield suggests that R37 was less important there. The site was peripheral to the distribution centre, which must have lain to the north or north-east. Other grey wares included coarser fabrics, such as R20 and R90. The latter, recovered from both late Iron Age and Roman period contexts, was usually grog-tempered and in the form of storage jars. Another coarse ware, Savernake ware (R95), originated in Wiltshire. More or less in common with other sites in the vicinity, such as Asthall and Wantage, R95 accounted for 5% of the assemblage by weight. As at Asthall, R95 had an early Roman emphasis, occurring mainly in later 1st-century and early to mid 2nd-century contexts.

Black-burnished ware 1 (BB1, fabric B11) from Dorset reached Watchfield beginning in the mid 2nd century or slightly earlier. This probably represented a very early peak in terms of importation; thereafter the site received decreasing amounts. The fabric contributed 3% of the assemblage by EVEs. This was comparable to the quantity collected from Wantage. Wheel-made black-burnished-type ware (B30) was also present at Watchfield. Its source was unknown, but it arrived after the mid 2nd century, probably from a number of mainly local centres. In addition to fabric O24, later 4th-century occupation at Watchfield was attested by late shell-tempered ware (C11) which probably originated in the Midlands. Fabric C11 contributed 1% by EVEs; however, the fabric may be under-represented. The late Roman fabric is similar to shell-tempered fabrics of the late Iron Age, early Roman or late Roman periods, undiagnostic shell-tempered sherds were assigned to the general C10 fabric category. Even when combined, however, the proportion of Roman shell-tempered fabrics remained low.

The vessels

Predictably, jars were the most common vessel class, conforming to the general pattern observed in rural assemblages.³¹ Jars were produced in Belgic E wares, oxidised and reduced wares. The so-called E wares were almost exclusively available as jars. Indeed, for most of the late Iron Age, the pottery assemblage showed little sign of diversification outside the jar category and was devoid of specialised vessels such as platters and cups. Roman-period fabrics were dominated by jars to a lesser extent. The preservation of the assemblage was such that a range of sub-types were identified within the jar category. Medium-mouthed jars (type CD) accounted for 34% of jars and formed the largest single group (Figs 7.8 and 7.13). These were in use throughout the late Iron Age and Roman period and occurred in a range of fabrics. Globular and bead-rimmed jars (CG and CH respectively) followed CD-type jars in popularity (Figs 7.4 and 7.6). These were available in E wares and coarse Roman-period wares, including O38 and R95. The forms were therefore in use principally during the late Iron Age and early Roman period. Other jar forms played less important roles. Distinctive late Iron Age types (CK) were characteristically available in BB1 and late shell-tempered ware (Figs 7.12 and 8.19).

Beakers appear to have had little use until the 2nd century. Vessels dated before this were restricted to two probable butt-beakers (EA). One of these resembled a north Gaulish white ware product, although the sherd was abraded and the rim was absent, making precise identification difficult. In terms of EVEs, bag-shaped beakers (EC) were commonest within the class (Figs 8.14 and 8.15). These occurred in fabrics R30 and R37, reflecting the dependence on local manufacturers even for forms commonly exported by large-scale regional or continental potters. Certain forms within the Samian industry repertoires were not widely replicated elsewhere. One of these, a pedestal beaker (Drag. 54) from south Gaul, reached Watchfield. Though not particularly rare as a site find, this was perhaps the most exotic vessel recovered from the site.

Bowls represented approximately 11% of the assemblage. Over half of all bowls could not be separated into sub-types. The remainder included straight- and curving-sided bowls (HB and HC respectively) in Iron Age and Roman reduced fabrics, and carinated and necked bowls (HA and HD) in fabric E80 (Fig. 7.5). None of these bowls was recovered from contexts dated later than the end of the 2nd century; most were found in earlier, 1st-century AD, deposits. The exception to this was provided by two Drag. 37 Samian bowls, dated to the later 2nd century or early 3rd century. Dishes appear to have replaced bowls by the mid 2nd century; thereafter, the settlement relied on non-local sources for the supply of a specific class. The Dorset black-burnished ware industry was a principal supplier of bead- and plain-rimmed dishes, usually decorated with

²⁹ P. Booth, op. cit. (note 8), 133.

30 Ibid.

³¹ J. Evans, 'Material Approaches to the Identification of Different Romano-British Site Types', in S. James and M. Millet (eds.), *Britons and Romans: Advancing an Archaeological Agenda* (C.B.A. Res. Rep. 125, 2001), 28.

burnished lattices. These forms were secondary to the cooking-pot types (CK) which arrived from the same source but in greater numbers. A Drag. 31 dish reached the site from east Gaul, though probably via larger regional centres because the site was generally devoid of continental pottery. A mica-dusted curved-wall dish (JB) was one of the few dishes that originated locally, possibly from kilns at Nuneham Courtenay. Dishes were therefore largely absent from local potters' repertoires, which remained restricted to jars and beakers into the mid–late Roman periods.

Drinking-related vessels were mainly confined to beakers. Samian Drag. 33 conical cups from south and central Gaul, produced during the later 1st or early 2nd centuries, were added to the range, although it is conceivable that the vessels reached the site slightly later. All three examples were residual and appeared in late 3rd- to early 4th-century contexts. Just one certain flagon fragment, part of a handle in fabric R20, was recovered. Lids were also poorly represented, though this is perhaps unsurprising as the vessel class rarely contributed significantly to any ceramic assemblage. General-use lids were made in grog-tempered ware. Presumably, bungs or covers made from organic materials were more commonly used than purpose-made ceramic lids.

Catalogue of illustrated pottery (Figs. 7 and 8)

In the absence of large groups worthy of detailed study, the vessels are presented in chronological order and arranged by ceramic phase. They illustrate the typological range of the assemblage. Original archive drawing numbers may be found at the end of each entry in brackets.

Middle-late Iron Age (mid 1st century BC to mid 1st century AD)

- Fabric E40 Black surfaces and core. Type CG globular jar. Handmade. Context 1366, Ditch 1368. Middle Iron Age (30)
- Fabric E40 Dark brown surfaces, black core. Type CH bead-rimmed jar. Context 1364, Ditch 1368. Middle Iron Age (27)
- Fabric E13 Brown-black surfaces, black core. Type CH bead-rimmed jar. Handmade, slight burning on external surface. Context 1364, Ditch 1368 (28)
- Fabric E60 Black surfaces and core. Type CH bead-rimmed jar. Handmade. Context 1290, Ditch 1336 (17)
- Fabric E80 Brown-black surfaces, red-brown core. Type HD necked, cordoned squat bowl. Context 1155, Ditch 1201 (12)

Early Roman (mid 1st to mid 2nd century AD)

- Fabric 039 Orange surfaces, black core. Fine fabric, occasional mica. Type CG globular jar. Context 1232, Pit 1235 (13)
- 7. Fabric E80 Black surfaces and core. Type CG globular jar. Internal sooting. Context 1232, Pit 1235 (14)
- 8. Fabric R90 Flint- and grog-tempered fabric. Burnt after breakage. Type CD medium-mouthed jar. Context 1232, Pit 1235 (16)
- Fabric R50 Black surfaces, dark brown core. Hard-fired surfaces. Type CI everted rim jar. Context 1308, Ditch 1337 (21)
- Fabric R95 Dark grey exterior surface, light grey interior surface, white core. Type CH bead-rimmed jar. Scorching below shoulder. Context 1296, Pit 1297 (18)
- Fabric E40 Black external surface, light grey core and external surface. Hard-fired surfaces. Type CG globular jar. Context 1296, Posthole 1297 (19)
- Fabric B11 Black-burnished ware 1 cooking pot (CK). Wavy line under rim, acute lattice zone around body³². Layer 1018 (1)
- Fabric R30 Blue-grey exterior surface, light grey interior surface, orange core with grey margins. Possibly fabric R37. Type CD medium-mouthed jar, resembling a grooved grey ware jar from Bicester.³³ Layer 1018 (3)

³² J.P. Gillam, 'Coarse Fumed Ware in North Britain and Beyond', *Glasgow Archaeological Journal*, 4 (1976), 57–80, Fig. 1.1.

³³ P. Booth, 'Pottery and Other Ceramic Finds', in 'An Archaeological Excavation at Oxford Road, Bicester, Oxfordshire', Oxoniensia, lxi (1997), 75–89, Fig. 7.20.

Late Roman (late 3rd to early 4th century AD)

- Fabric R30 Grey surfaces and core. Type EC bag-shaped beaker. 'Pulley-wheel' rim, groove around girth. Context 1147, Pit 1048 (6)
- Fabric R37 Grey burnished surfaces and light grey core. Type EC bag-shaped beaker. Context 1147, Pit 1048 (7)
- 16. Fabric M25 New Forest parchment ware mortarium, no trituration grits. Context 1147, Pit 1146 (11)
- 17. Fabric R38 Blue-grey exterior surface, light grey interior surface and core. Type CG globular jar. Context 1333, Pit 1332 (25)
- Fabric R38 Orange-grey exterior surface, light grey interior surface and core. Type CC narrow-mouthed jar. Band of incised diagonal lines below the shoulder. Context 1333, Pit 1332 (26)
- 19. Fabric C11 Dark grey surfaces and core. Type CK cooking pot. Context 1163, Pit 1161 (31)

Undated Roman

20. Fabric O80 Orange-red exterior surface, black core. Type CD medium-mouthed jar. Worn interior surface. Context 1087, Posthole 1088 (5)

Discussion

Despite the dominance of chronologically bland, locally produced pottery, the range of fabrics recovered from the site nevertheless allows the broad trends in ceramic supply to be identified. The wares show that the site was occupied from a beginning in the middle Iron Age and throughout the Roman period. Within this broad span, two main phases of activity stand out. The first began in the late Iron Age and had ended by the mid 2nd century. The second main phase was shorter lived, being limited to the second half of the 3rd century. It should be noted, however, that the ubiquity of local fabrics and the paucity of closely dated products, particularly imported varieties, make the intervening periods difficult to isolate.

Pre-Roman activity at Watchfield was attested by the presence of a range of Iron Age fabrics (E wares) dominated by grog-tempered ware (E80). Gaining a more precise date, however, was problematic; the long unchanging form types and the absence of imported pottery provided few chronological landmarks. However, that some of the pre-Roman fabrics date to the early Iron Age is unlikely. In western Oxfordshire, this period was dominated by coarse shell- and limestone-tempered pottery, as shown at Wyndyke Furlong, Abingdon,34 and Hatford.35 These fabrics were present at Watchfield, but the forms indicated later manufacture. Some globular and bead-rimmed jars recovered from the site were typical of the middle and late Iron Age. The quantity of middle Iron Age pottery was unknown, but is likely to have been small. Notwithstanding the few middle Iron Age vessels present (Figs 7.1 and 7.2), fabric associations within contexts suggest a predominantly late Iron Age assemblage. In terms of weight, as much as 97% of the total amount of shell-tempered ware (E40) and 86% of limestone-tempered ware (E50) were recovered from contexts of late Iron Age date or later. The association between these fabrics and grog-tempered fabric E80 was particularly strong. Of all the contexts yielding fabric E40, grog-tempered pottery occurred in 80%. Fabric E80 occurred in 60% of contexts yielding E50. Notably, E40 appeared alone in just one context, while E50 appeared in two. These factors help to suggest that the use of shell- and limestone-tempered pottery was broadly contemporary with that of late Iron Age and early Roman pottery. Evidence from Hatford, some 10 km. north-east of Watchfield, suggested that Belgic E wares were introduced into that region during the first half of the 1st century AD.36 The evidence from Watchfield does little to contradict this, although given the higher levels of E40, E50 and E60 present there, a late 1st century BC introduction remains a strong possibility.

Wheel-thrown, sand-tempered vessels in so-called 'Romanised' fabrics, typified by reduced wares R20, R30 and R37, were introduced by the mid 1st century AD. Fabric E80 retained its dominance, however, until the end of the century. Indeed, the use of grog tempering continued well beyond this time, particularly with the production of storage jars. Additionally, the assemblage showed little sign of typological development away from the ubiquitous jars and bowls until the 2nd century. Apart from the occasional beaker, no other drinking-related vessels or table vessels, such as platters, were evident. Clearly, late Iron Age cooking and eating habits were retained during the early Roman period. The 2nd century witnessed an expansion of the typological range. However, local producers made little contribution; most new types originated at distant sources. New vessels included dishes and cooking-pot types, suggesting that food was beginning to be prepared and served

³⁴ J. Timby, op. cit. (note 9), 32.

³⁵ P. Booth, 'The Iron Age and Roman Pottery' in R.J. Zeepvat (ed.), Three Iron Age and Romano-British Rural Settlements on English Gravels (B.A.R. Brit, Ser. 312, 2000), 40.

36 Ibid. 41.

in different ways. The minor presence of Samian cups and bowls affords the settlement some degree of sophistication. The fact that most of it was from south Gaul is intriguing. Assuming sustained levels of occupation and normal patterns of supply, central Gaulish products should have dominated any Samian assemblage. The reason that this is not the case cannot be readily determined, but status would appear to be a compelling factor. Change was evident during the late 3rd century. The proportion of beakers increased while that of jars decreased. Several New Forest ware mortaria hint at a greater degree of Roman-style food preparation. These mortaria were not from Oxfordshire kilns, as might be expected. This is significant, as is the near absence of the form itself.

The pottery from Watchfield provides a picture of a low-status settlement heavily reliant on local manufacturers for supply. The sorts of pottery current during the late Iron Age remained so largely until the 3rd century, only occasionally punctuated by more exotic forms and fabrics. New forms were almost never supplied locally, serving to underscore the lack of innovation displayed by local producers. The pottery supply from non-local sources was erratic. Watchfield proved a reasonably stable market for the Dorset BB1 industry. The level was comparable to that at other low-status sites in the region, such as Wantage and Standlake. However, the presence of wares such as New Forest parchment ware and Portchester 'D' ware was atypical, as was the absence of regionally traded Oxfordshire products. Marketing patterns may provide some explanation. At the small town of Asthall, it was noted that the level of later Roman Oxfordshire products was relatively low, suggesting that the site lay outside intensive marketing areas.³⁷ Watchfield, located southwest of Asthall, must also have been placed outside this marketing zone. Indeed, the presence of Severn Valley ware, Savernake ware and possible Wiltshire products during the earlier Roman period suggests that the assemblage belonged to a tradition more rooted toward the west of England than Oxfordshire. This is not entirely plausible as an explanation since Watchfield also received pottery from Buckinghamshire and the south Midlands during the late Roman period. Ultimately, a combination of low status and reduced settlement activity at critical periods of Oxfordshire pottery production meant that Watchfield remained a very peripheral market.

Three over-fired and distorted waster-like sherds were recovered. Two were body sherds from the same vessel in a fine grey ware (R30), while the third was a rim from a medium-mouthed jar in a coarser fabric (R20). These provide tentative evidence for pottery production at Watchfield, a conclusion that is by no means unexpected given the predominance of locally produced pottery at the site.

Feature type	Sherds	Weight $(g.)$	Mean sherd wt. (g.)
Topsoil	21	766	36
Tree hole	4	89	22
Post pad	10	204	20
Pit	649	11121	17
Layer	230	3348	15
Unknown	82	1157	14
Posthole	172	2316	13
Ditch	635	8434	13
Gully	31	289	9
Hollow	5	44	9
Oven	1	4	4
TOTAL	1840	27772	

TABLE 3. MEAN SHERD WEIGHTS

With a mean sherd weight of 15 g., the pottery was reasonably well preserved, with a uniform sherd size within the principal feature types (Table 3). Certain pits undoubtedly received some pottery directly after breakage, and this is reflected in the slightly above average sherd size. The existence of more cross-context sherd joins in linear features than in pits was consistent with this premise. Overall, the amount of freshly

37 P. Booth, op. cit. (note 8), 134.

broken pottery thrown directly into pits was marginal, as most pits were filled in single episodes of deposition. Generally, pits and ditches received pottery of similar condition, most of which was likely to have derived from middens. Occupation layers may prove to be the remnants of these. Pits and ditches yielded the bulk of the assemblage. Quantities from both feature types were comparable and averaged 400 g. per pit or segment. There was, however, a crucial difference between them: most late Iron Age pottery was recovered from linear features. Pottery dated to the Roman period tended to concentrate in pits. The small amounts of latest Roman pottery were deposited in postholes and gullies. Clearly, this emphasises the chronological division of the main feature types. However, it also hints at possible settlement shift through time. Late Iron Age features of a more peripheral nature were replaced over time by features more closely associated with the settlement core. Despite this, there was little intercutting of features. Consequently, the pottery has not suffered from a high degree of disturbance and residuality appears to be low. Determining the level of residuality in a broadly dated assemblage is admittedly difficult, but a measure of it was gained by studying fabrics with clear chronological boundaries. Samian wares and Belgic grog-tempered ware (E80) were particularly useful indicators. Just 8% of E80 by weight was definitely residual, that is, present in contexts dated from the 2nd century onward. In contrast, 82% of Samian was residual, occurring in contexts dated to the mid 3rd century or later, though it has already been noted that the Samian assemblage was far from typical.

IRON by CHRISTINE HOWARD-DAVIS

In total, 11 fragments of ironwork were recovered. All were subjected to x-radiography and identifications were made on the basis of the x-rays.

Three items were closely associated with agriculture and were likely Roman in date, although a marginally earlier or later date has not been ruled out as ironwork encompasses a number of extremely long-lived forms. Small Find 9 (Pit 1161, phase 3) was an ox-goad of typical Roman type. Small Find 8 (Pit 1161) was a hoe or spud blade used for weeding or clearing the plough. Small Find 12 (Pit/Posthole 1298, phase 2) was a winged ploughshare. An object from Tree-Throw Hole 1216 could not be identified with confidence, but from the x-ray bears some resemblance to a stylus. As an indication of literacy at a relatively low level in society, it would not be out of place in a Roman context. Styli were also found during the 1998 excavation at the adjacent site.³⁸ A modern coach bolt was recovered from Pit 1220 (phase 4), two nails from Pit 1146 (phase 3), three nails from Pit 1161 (phase 3) and a further nail from Posthole 1239 (phase 1).

INDUSTRIAL DEBRIS AND RESIDUES by Christine Howard-Davis

A total of 35 small fragments of light, vesicular slaggy material was recovered from 14 contexts, derived from phases 1–3. The material was typical of fuel-ash slag, produced as a result of relatively low-temperature burning, for instance in a domestic hearth. There was no evidence of metalworking within the material. The contexts containing slag showed no significant spatial patterning; at least half were derived from ditch fills, indicating that secondary deposition had occurred.

STONE by CHRISTINE HOWARD-DAVIS

Thirty-one fragments of stone were recovered from the site, none of them conclusively modified. The majority were a Corallian ragstone, and a number of the fragments were reddened or blackened by heating with one or two probably heat-shattered, suggesting that they may have been used as pot-boilers. It must, however, be stressed that all fragments were small, and such an interpretation must therefore remain speculative. There was also a small number of extremely small fragments of bedded sandstone which may have derived from stone roof tiles, but again these were too small for confident identification. The material derived from contexts which encompassed the entire date range of activity on the site.

BURNT AND INCIDENTALLY FIRED CLAY by CHRISTINE HOWARD-DAVIS

A total of 44 fragments of burnt clay was recovered from 16 contexts; just over half of the material was recovered from a single small pit/posthole (1332) allocated to phase 3. The material appeared to have derived from a smooth-surfaced clay structure with straight bevelled edges, probably a hearth.

³⁸ R. Every, 'Iron', in V. Birkbeck, op. cit. (note 2), 245, Fig. 11.2.

With this exception, most of the fragments were very small, and represented a range of incidentally fired building materials, predominantly daub, and possibly ill-made brick. Although the material seemed to fall into two or perhaps three separate groups, it seemed that the extremely small amounts recovered would afford this differentiation little significance. No significant spatial patterning of the material was observed, and many of the contexts were ditch fills, indicating secondary deposition of the burnt clay.

ANIMAL BONE by ANDREW BATES

In total, 1370 animal-bone fragments (excluding unstratified material) representing 1338 bones were recovered. The excavation produced animal bone dating from the first century BC to the 5th century AD. The vast majority of the assessed assemblage was retrieved by hand collection only. A total of 572 bones was recorded in 11 soil samples. No sieving program was employed on the site with the explicit purpose of retrieving animal bone. Due to the small size of the bone assemblage, it was recorded in its entirety at the assessment stage. The methodology largely followed the method described in Halstead.³⁹ Additional recording included noting the presence of diagnostic zones, thus burnt bone was separated into charred, burnt or calcined bone.

The identification of species was completed using the reference collection held by the author and with reference to Cohen and Serjeantson, Halstead and Collins, and Schmid.⁴⁰ Separation of sheep and goat, where possible, was completed following Boessneck,⁴¹ and red deer from fallow deer following Lister.⁴² The use of tooth wear and fusion states in ageing animals, where applicable, followed Payne, Grant and Silver.⁴³

Preservation

The preservation of the assemblage was considered in terms of robustness and surface erosion (Table 4). It was not always possible to record each detail for every bone, due to fresh breaks in the bones or encrustations over the surface of the bones.

Loose teeth made up 6% of the overall assemblage; this high quantity is indicative of a poorly preserved assemblage. Where no new breaks effected fragmentation, 65.2% (n = 569) of the assemblage was represented by less than a quarter of the original anatomical part. Overall, the assemblage was considered to be in a moderate to good state of preservation, inevitably with some degree of fragmentation and surface erosion.

Taphonomic processes may have biased the assemblage in a number of ways. Larger mammals have higher bone-density values than medium-sized or small mammals and may therefore be better represented in a fragment count.⁴⁴ Recovery of animal bone by hand collection only will also bias an assemblage toward larger mammals.⁴⁵ Conversely, in a highly fragmented assemblage, bone fragments from medium-sized and smaller mammals may have a greater chance of displaying diagnostic characteristics.⁴⁶

³⁹ P. Halstead, 'Demi and DMP: Faunal Remains plus Animal Exploitation in Late Neolithic Thessaly', Annual of the British School of Athens, 87, pp. 29–59.

⁴⁰ A. Cohen and D. Serjentson, A Manual for the Identification of Bird Bones from Archaeological Sites (1996); P. Halstead and P. Collins, Sheffield Animal Bone Tutorial: Taxonomic Identification of the Principal Limb Bones of Common European Farmyard Animals and Deer: A Multimedia Tutorial (1995); E. Schmid, Atlas of Animal Bones for Prehistorians, Archaeologists and Quarternary Geologists (1972).

⁴¹ J. Boessneck, 'Osteological Differences Between Sheep and Goat', in D. Brothwell and E. Higgs (eds.), *Science in Archaeology*, 2 (1969), 331–2.

⁴² A.M. Lister, 'The Morphological Distinction between Bones and Teeth of Fallow Deer and Red Deer', *International Journal of Osteoarchaeology*, vol. 6 (1996), 119–43.

⁴³ S. Payne, 'Kill-Off Patterns in Sheep and Goats: Mandibles from Asvan Kale' in Anatolian Studies, 23, pp. 281–303; A. Grant, 'The Use of Tooth Wear as a Guide to the Age of Domestic Ungulates', in B. Wilson, C. Grigson and S. Payne (eds.), Ageing and Sexing Animal Bones from Archaeological Sites (B.A.R. Brit, Ser. 1982), 91–108; I.A. Silver, 'The Ageing of Domestic Animals', in D. Brothwell and E. Higgs (eds.), Science and Archaeology (1962), 283–303.

44 R.L. Lyman, Vertebrate Taphonomy (1994), 246-7.

⁴⁵ S. Payne, 'Partial Recovery and Sample Bias: The Results of Some Sieving Experiments' in E. Higgs (ed.), *Papers in Economic Prehistory* (1972), 49–64.

⁴⁶ J.M. Maltby, 'The Exploitation of Animals in the Iron Age: The Archaeozoological Evidence.' in T. Champion and J.R. Collis (eds.), *The Iron Age in Britain and Ireland: Recent Trends* (1996), 19.

Robusticity/Surface erosion	Phase 1	Phase 2	Phase 3	Total
Very poor robusticity	9 (1%)	0	36 (14.4%)	45 (3.4%)
Poor robusticity	256 (29.3)	73 (39.8%)	79 (31.7%)	408 (31.3%)
Moderate robusticity	226 (25.9%)	49 (26.8%)	34 (13.6%)	309 (23.7%)
Good robusticity	350 (40.1%)	54 (29.5%)	92 (36.9%)	496 (38.0%)
Excellent robsticity	31 (3.5%)	7 (3.8%)	8 (3.2%)	46 (3.5%)
Totals for robusticity	872	183	249	1304
Fibrous surface erosion	8 (0.9%)	0	0	8 (0.6%)
Over 50% surface erosion	213 (24.4%)	10 (10.4%)	43 (17.2%)	266 (21.8%)
Slight surface erosion	533 (61.1%)	69 (71.9%)	172 (69.1%)	774 (63.6%)
No surface erosion	118 (13.5%)	17 (17.7%)	34 (13.7%)	169 (13.9%)
Totals for surface erosion	872	96	249	1217

TABLE 4: PRESERVATION SUMMARY BY PHASE

Quantification and provenance

Table 5 shows the total fragments for each phase. Of the total phased assemblage, only 258 fragments were identified to a species level, excluding skeletons. Two partial skeletons were retrieved from one small pit (1339); these were a goat and a roe deer. The bulk of the assemblage was associated with phase 1, the late Iron Age and Roman Conquest period. The problems of residuality during the earliest phase were considered minimal.

Brief interpretation and comparative material

Phase 1. The vast majority (85%) of the assemblage from phase 1 was recovered from the enclosure ditches. The material was evenly distributed across the site. The number of animal bones represented within the assemblage was considered too small to provide a reliable proportion of species represented at the site. There was, however, a small number of neonatal sheep/goat bones recovered from this phase.

Two partial skeletons, a goat and a roe deer, were recovered from a single feature (1339). Neither was excavated as an articulated skeleton; however, only two individuals were likely to have been represented. Not all of the bone from this feature could be positively identified as belonging to either skeleton, mainly the vertebra and rib fragments.

The goat was represented by a humerus, both ulnas, radii, femurs, tibias, an astragalus, metacarpals, metatarsals and phalanges. Tooth wear and fusion states indicated an animal between 3 and 4 years of age. Two forms of pathology were present on the remains. Exostosis was visible, mid-shaft, on the posterior surface of a metatarsal and on the distal articulation of a first phalange. These enthesopathies represent the ossification of soft tissue caused by repeated stress to the limb. The left mandible also showed evidence of a chronic infection within the jaw (osteomyelitis). This also affected the jaw between the periosteum and the bone surface (periostitis), particularly on the lateral side by the first molar aveolar. This was the result of a non-specific infection causing an abscess initially within the mandible, but eventually extending to the outer bone surface in the area of the first molar.

The roe deer was represented by two humeri, one radius, fragments of pelvis and possibly one calcaneum. The biometric data shows that humeri can be paired, and one of these articulated well with the radius. Other fragments were possibly, but not definitely, associated with the same individual. Evidence of dismembering was present. The left humerus displayed a large degree of ossification around most of its shaft. This exostosis appears to have been a response to a break in the limb: the humerus was 12 mm. shorter than its counterpart, the resulting bone growth had a well resolved texture. Both individuals showed evidence of butchery, and neither were clearly deposited as complete skeletons. The goat may have been culled due to its poor level of fitness.

The posthole (1339) from which these bones were recovered represented one of a line of postholes tentatively included within this phase 1. It seems likely that these bones were deposited after the posthole went out of use, possibly an opportunistic discarding when the post was removed and a hole created. Considering the small size of the feature, 0.5 m. in diameter x 0.15 m. in depth, and the amount of animal bone recovered, it is plausible that a certain amount of filleting, decay or disarticulation must have occurred prior to disposal.

Phase 2–3. Only 39 of the 190 fragments allocated to phase 2 and 25 of the 248 fragments allocated to phase 3 were identified to a species level. The animal bone was distributed evenly across the site where features of these periods were present. These sample sizes were considered too small to be of any great value in interpreting Romano-British agricultural practices beyond indicating the presence of species. The limited biometric data does not suggest any unusual size of animals for these periods.

Species	Phase 1	Phase 2	Phase 3	Total
Horse	27 (3.1%)	2 (1.0%)	1 (0.4%)	30 (2.3%)
Cattle	53 (6.1%)	7 (8.9%)	10 (4.0%)	80 (6.1%)
Pig	16 (1.8%)	2 (1.0%)		18 (1.4%)
Sheep/goat	80 (9.2%)	17 (8.9%)	13 (5.2%)	109 (8.4%)
Sheep	1 (0.1%)			1 (0.1%)
Goat	4 (0.5%)			3 (0.2%)
Dog	11 (1.3%)			11 (0.8%)
Red deer	2 (0.2%)			2 (0.1%)
Roe deer	4 (0.5%)			3 (0.2%)
Hare			1 (0.4%)	1 (0.1%)
Cow/horse	2 (0.2%)			2 (0.1%)
Cow/red deer	18 (2.1%)	5 (2.6%)	2 (0.8%)	25 (1.9%)
Sheep/goat/roe deer	17 (2.0%)	3 (1.6%)	1 (0.4%)	21 (1.6%)
Medium mammal	150 (17.3%)	31 (16.3%)	15 (6.0%)	196 (15.1%)
Large mammal	164 (19.0%)	20 (10.5%)	55 (22.2%)	239 (18.4%)
Small mammal	15 (1.7%)	5 (2.6%)	16 (6.4%)	36 (2.8%)
Unidentified	299 (34.5%)	79 (41.6%)	125 (50.4%)	503 (38.7%)
Bird				
Gallioforme?			4 (1.6%)	4 (0.3%)
Pheasant-sized	1 (0.1%)			1 (0.1%)
Laridae sp. (gull)	1 (0.1%)			1 (0.1%)
Unidentified bird			5 (2.0%)	5 (0.4%)
Frog/toad		9 (4.7%)		9 (0.7%)
Fish	1 (0.1%)			1 (0.1%)
Total	863	190	248	1301

TABLE 5. BONE FRAGMENT COUNT BY PHASE

PALAEOENVIRONMENTAL EVIDENCE by ELIZABETH HUCKERBY (Tables 6 and 7)

During the excavation, eleven samples were collected and later assessed in the laboratory for charred plant remains. Subsequently, two samples were selected for more detailed analysis. One of these was from Fill 1148 of Pit 1161, and the other was from Fill 1043 of Pit 1044. The two pits were part of a larger group, the function of which was not obvious. Therefore, more detailed analysis of these fills was undertaken.

Methodology

The samples were floated with a modified siraf-type flotation machine. All the flots were assessed for plant remains using a Leitz/Wild stereozoom microscope. The flots and the data from them form part of the site archive. Further analysis of the two selected samples identified and recorded the numbers of all easily identifiable plant remains. The matrix components were also noted and scored on a scale of 1 to 5. The data are presented in Tables 6 and 7.

TABLE 6.	NUMBERS OF CARBONISED SEEDS RECORDED TOGETHER WITH THE MATRIX
COMP	ONENTS (recorded on a scale of 1-5 where 1= rare, 5 = very abundant, + = present)

Context number		1148	1043
Sample number		100	107
Sample size 1		40	40
Flot size ml		40	>300
Amorphous organic material		3	
Charcoal		2	4
Insect fragments		4	
Mammal bone			1
Small mammal bone		3	1
Fish bone		1	
Sand and gravel		2	2
Coal		1	
Modern roots		5	5
Brick/tile		1	1
Earthworm cases			5
Molluscs		5	5
Hordeum undiff.	Barley	6	20
Triticum sp.	Wheat	5	20
Cerealia undiff.		20	226
Cerealia fragments		+	+
Spelt glumes		4	4
Culm node			4
Avena awns		12	
Fabaceae >4mm	Legumes		1
Fabaceae <4mm	Legumes	4	
Brassica sp.	Cabbage family		1
Chenopodium album	Fat hen		3
Carex trigynous	Sedge	1	4
Galium aparine	Cleavers		17
Juncus sp.	Rush	8	
Lithospermum arvense	Field gromwell	25	21
Plantago lanceolata	Ribwort plantain		4
Poaceae<2mm	Grasses	18	188
Poaceae 2–4mm	Grasses	2	56
Polygonum undiff.	Knotgrasses		1
Persicaria lapathifolia	Pale persicaria		2
Rumex acetosa	Common sorrel		1
Rumex acetosella	Sheep's sorrel		5
Stellaria media	Common chickweed		1
Unknown 1			16
Unknown 2			4

Context number		1148	1043
Sample number		100	107
Brassica sp.	Cabbage family	1	
Chenopodium album	Fat hen	4	
Chenopodium/Atriplez	Goosefoot/orache	1	8
Cirsium sp.	Thistle	3	8
Composite undiff.	Daisy family		4
Fumaria officinalis	Common fumitory	1	
Galium aparine	Cleavers		4
Hyocyamus niger	Henbane		4
Isolepis setacea	Bristle club rush		4
Fabaceae <4mm	Legumes		4
Linum catharticum	Fairy flax		4
Plantago lanceolata	Ribwort plantain		8
cf. Medicago type	Medicks		8
Montia fontana	Blinks		8
Rumex sp.	Docks	1	
Urtica dioica	Stinging nettle	1	
Unknown	2 2	1	

TABLE 7. NUMBERS OF UNCARBONISED SEEDS RECORDED

Results

The matrix of both samples contained abundant modern roots. Both samples also contained very high percentages of mollusc shells and some charcoal, including oak. There was no evidence of any industrial activity. The size of the flot from Context 1043 was considerably greater than that from Context 1148, and this was reflected in the number of carbonised seeds identified in the samples.

Both assemblages contained cereals. Wheat and barley were recorded together with undifferentiated grains and occasional chaff remains, including some spelt wheat glumes. Spelt was the major wheat species recovered from Iron Age and Roman sites in central and southern Britain. Examples include the sites at Faringdon, the environs of Danebury and the Ashville Trading Estate.⁴⁷ The high numbers of undifferentiated cereal grains particularly from Context 1043 reflected the poor state of preservation. The tarry or 'clinkered' appearance of the grains suggests that they were burned at very high temperatures.⁴⁸ Some of the better-preserved cereal grains had germinated and others had lost their embryos. The assemblage of carbonised weed seeds include seeds from arable (cleavers *Galium aparine*, and field gromwell *Lithospermum arvense*), ruderal (fat hen *Chenopodium album*), grassland (grasses Poaceae, sorrels *Rumex acetosa* and *Rumex acetosella*, and members of the pea family Fabaceae) and damp ground communities (sedges *Carex* sp., and rushes *Juncus* sp.).

Both flots contained a number of non-carbonised seeds. It was necessary to exercise caution with regard to modern contamination. Additionally, in non-waterlogged environments, the data from non-carbonised seeds is likely to be skewed as only the more robust seeds are generally preserved. However, like the carbonised seeds, the non-carbonised seeds originated from a variety of plant communities. Additional arable

⁴⁷ R. Pelling, 'The Charred Plant Remains' in J. Cook, E. Guttmann and A. Mudd, 'Excavations of an Iron Age Site at Coxwell Road, Faringdon' (this volume of *Oxoniensia*, 266); G.V. Campbell, 'Plant Utilisation: Evidence from Charred Plant Remains' in B. Cunliffe (ed.), *The Danebury Environs Programme: The Prehistory of a Wessex Landscape*, vol 1 (2000), 45–59; M. Jones, 'The Plant Remains', in M. Parrington (ed.) *The Excavation of an Iron Age Settlement, Bronze Age Ring Ditches and Roman Features at Ashville Trading Estate, Abingdon (Oxfordshire) 1974–76*, Oxford Archaeological Unit and Council for British Archaeology (1978), 93–110.

⁴⁸ R.N.L.B. Hubbard and A. al Azm, 'Quantifying Preservation and Distortion in Carbonised Seeds; and the Investigation of the History of Friké Production', *Jnl. of Archaeol. Science*, 17 (1990), 103–6. and ruderal weeds included common fumitory (Fumaria officinalis). Grassland types included henbane (Hyocyamus niger) and fairy flax (Linum catharticum). Blinks (Montia fontana) and Bristle Club Rush (Isolepis setacea) were suggestive of damp, acidic soils.

Conclusions

The analysis of the two samples proved informative as to the function of the pits from which they were recovered. The plant assemblages and the nature of the matrix suggested that both pits were most likely used for domestic, rather than industrial, purposes. The high concentration of burnt grain in the sample from Fill 1043 of Pit 1044 indicated that the material was derived from the oven below and was in fact part of that feature.

The evidence for the possible function of Pit 1161 with Fill 1148 was less conclusive. The more limited records of carbonised cereal grains and weed seeds together with insect and bone fragments may suggest use for rubbish disposal and not for industrial purposes, although slag was recovered from the excavation. It is also unlikely that Pit 1161 was a cess pit as there was no obvious evidence of any faecal material; for example, there were no fig seeds, blackberries or other fruit with abundant pips. The absence of industrial and faecal material suggests that Pit 1161 was most likely used for rubbish disposal.

The lack of any significant quantities of chaff in either sample possibly indicates that cereal crops were not processed in the immediate vicinity of the pits. The carbonised seed record, supported by that of the non-carbonised seeds, suggests that the cereals were grown on dry calcareous soils close to grassland despite the indications that there were some areas of damp and acidic soils.

GENERAL DISCUSSION

Although a relatively small area was investigated, totalling only 0.24 ha., the other excavations previously conducted in the vicinity of Watchfield Triangle allow for the interpretation of the project results in the context of the surrounding landscape over a considerable period.

PHASE 1: LATE IRON AGE

There is no doubt that the phase 1 late Iron Age enclosure was broadly contemporary with the rectangular enclosure discovered 60 m. to the south during 1998 (phase 4, area 10).⁴⁹ The alignment of the two enclosures varied, and it cannot be demonstrated that they were open at precisely the same time, yet the dimensions of both sets of ditches were very closely comparable, and both contained assemblages of pottery evidencing Belgic influence and dominated by jars in grog-tempered fabrics. No unequivocal evidence for buildings of this phase was recovered during either the 1998 or 2000 excavations, and the precise function of the two enclosures remains uncertain. It is possible that ephemeral evidence for structures without deep foundations may have been removed by ploughing, but the discovery of postholes during this excavation indicates that structural features did survive, perhaps suggesting that further structural features may never have existed. Thus, these may be stock-management enclosures rather than the boundaries of enclosed settlements. If this was the case, the volume of pottery and bone recovered from the late Iron Age ditches during both the present excavation and the 1998 excavations⁵⁰ nevertheless suggests that a settlement focus lay in the immediate vicinity. The number of cross-context joins between pottery sherds from ditches suggests that occupation debris may have been redeposited in ditches after primary deposition elsewhere.

49 V. Birbeck, op. cit. (note 2), 232-3, 235, Fig. 7.

⁵⁰ V. Birbeck, op. cit. (note 2), 234.

The postholes attributed to phase 1 cannot be interpreted with certainty, but those toward the south of the 2000 excavation area form a rough north-west to south-east alignment which may represent a single fence line rather than separate structures. Some of the features contained small amounts of Roman pottery, therefore the structure(s) may have post-dated the enclosure. The cluster of postholes within the northern enclosure element, measuring c. 4 m. across, was again enigmatic, but may be more readily explained as a stock-management structure than as a building.

The 1998 excavation suggested that the enclosure to the south of the present site represented part of a single or extended family settlement, albeit dispersed, or possibly two contemporary settlements.⁵¹ The discovery of another enclosure of very similar character, but again with no clear settlement core, and in view of the fact that a late Iron Age ditch and postholes were recorded 250 m. further east,⁵² shows that features of this period covered a considerable but undefined area. The presence in the vicinity of a relatively low-status agricultural settlement is highly probable, but as evidence for buildings was lacking, it seems premature to speculate as to the number of households represented. The relative importance of pastoral and arable agriculture remains unknown, although cattle as well as sheep and goat appear to have been important to the local domestic economy. The partial skeletons of a goat and a roe deer were recovered from a phase 1 posthole. These were butchered and then deposited in a relatively small feature, perhaps indicating some lapse of time before final deposition. It seems likely, given their condition, that these bones represent rubbish disposal rather than a more formal deposit of butchered bone.

PHASE 2: EARLY ROMAN

The phase 2 ditches were again broadly contemporary with features excavated immediately to the south. Two phases of enclosures were identified during the 1998 excavations. These were 30 m. from the present site and continued northward beyond the 1998 limit of excavation. The enclosures were dated to the immediate post-Conquest period and the late 1st or early 2nd centuries AD.53 Unfortunately, the ditches excavated in 2000 could not be dated with sufficient precision to allow a direct correlation with either of the 1998 subphases. All the ditches contained single fills, and the pottery recovered inevitably related to the date of infilling rather than to the date at which the ditches were cut. The coherent layout suggests that many of the ditches originated at the same time. The varied pottery assemblages recovered perhaps reflect the length of time for which individual cuts were maintained. Bearing this in mind, a date of construction in the later 1st or early 2nd century is suggested, which would allow contemporaneity with either the phase 5a or phase 5b enclosures to the south. The morphology of the ditch system did not allow the dating to be further refined. The spacing of Ditches 1381, 1386 and 1387 was closely paralleled by three phase 5a linear features aligned roughly east-west in the southern area, yet there was also a possibility that Ditch 1386 was the continuation of phase 5b Ditch 1028.

The phase 2 ditches were relatively closely spaced, and laid out on a rectilinear pattern, as were the approximately contemporary features recorded to the south. In form, they appear to represent stock-management features or paddocks, although the south-west corner of what may have been a surrounding rectangular enclosure was recorded in 1998.⁵⁴

⁵¹ V. Birbeck, op. cit. (note 2), 236.

⁵² V. Birbeck, op .cit. (note 2), 235, Fig. 7 Phases 5a and 5b, 236-7.

⁵³ Ibid.

⁵⁴ V. Birbeck, op. cit. (note 2), 235, Fig. 7 Contexts 1132/3.

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The ditches themselves were relatively shallow, and may have been dug primarily to provide banks on which to plant hedges. Their alignment suggested that the landscape may have been divided in transects leading from the Corallian Ridge to the Vale of White Horse to the south, giving each farm or estate access to a variety of land of differing suitability.

As in phase 1, there was little direct evidence for domestic occupation over much of the excavation area, but a concentration of postholes in the south-east corner, between Ditches 1386 and 1387, suggests the possible presence of two rectangular timber buildings. Their alignment suggests possible contemporaneity with the phase 2 ditches, although a later origin during phase 3 cannot be discounted. No evidence was found to indicate whether these should be regarded as domestic, craft or agricultural structures, although Pits 1356 and 1069 lay relatively nearby and contained fragments of fire-reddened limestone. This suggested that a craft activity using intense heat was carried out in the vicinity. Thus, although a cluster of structural features was found and comparisons may be made with the previously excavated area to the south, it would be unwise to assume that the focus of early Roman settlement has been found. The putative buildings may represent a small farmstead, but large areas of the landscape remained unexcavated and contemporary features may extend over a much larger area than is currently recognised.

Despite the comprehensive reorganisation of the landscape implied by the cutting of the phase 2 ditches, the pottery assemblage provided no evidence for any hiatus in occupation between phases 1 and 2. The early Roman material lay within the first of two main concentrations of pottery identified, dated to *c*. 50 BC – AD 150, and the types of pottery current during the late Iron Age remained important after the Roman Conquest. Until the 2nd century, few forms were current other than jars and bowls, suggesting that the local inhabitants had conservative tastes in pottery arrived, the vessels were regional imports and not local products, perhaps suggesting genuine conservatism in this area rather than a complete lack of access to traded goods. The animal-bone and macrobotanical assemblages similarly presented no clear sign of any major change in the agrarian economy since the late Iron Age.

PHASE 3: MID-LATE ROMAN

Phase 3 activity was represented primarily by a cluster of pits, interpreted as ovens and a water tank, one of which was dug after phase 2 Ditch 1387 was filled. Although the putative tank was clearly backfilled during the 3rd century, a lack of close dating evidence meant that it was unclear whether the ovens were the product of concentrated activity during the 3rd century, or whether their use spanned the mid 2nd to late 4th centuries. In any event, the earlier presence in the vicinity of a large hearth and pit containing burnt limestone (phase 2, 1365 and 1069), suggests that craft activities were conducted over a considerable period of time. The nature of these activities remains obscure; the small quantities of fuelash slag recovered from the site were not concentrated in the ovens and may have derived from domestic hearths.

As in earlier phases, the location of any settlement core remained elusive. Occupation of the area to the south, investigated in 1998, stopped during the early 2nd century. This led the excavator to suggest that the settlement was abandoned, with further occupation possibly centred on the Roman building identified 800 m. further east during the 1930s.⁵⁵ The

⁵⁵ V. Birbeck, op. cit. (note 2), 288.

current excavation suggests that this was not the case. Although the phase 3 pits do not demonstrate domestic settlement, the relatively large quantities of pottery recovered from their fills suggests habitation nearby; moreover, the larger sherd size of the pottery recovered from pits as opposed to ditches may even suggest that the settlement core was nearer during phase 3 than in earlier phases. Carbonised barley and wheat were also found in phase 3 features, although there was no evidence to suggest that crops were processed in the vicinity.

Pottery dated to the 3rd century showed increased diversity of forms, with a small number of New Forest mortaria sherds hinting at a more Roman style of food preparation. While there was no observable break in occupation between phases 2 and 3, the pottery assemblage contains a concentration of late 3rd-century sherds, suggesting heightened settlement activity in the vicinity at that time. Although several features contained small assemblages of pottery whose probable date range extended into the 4th century, there was little explicit evidence for 4th-century occupation. Later activity appears to have been largely confined to medieval or post-medieval ploughing.

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