

Excavations along the Newbury Reinforcement Pipeline: Iron Age-Roman activity and a Neolithic pit group

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SUMMARY

A programme of archaeological investigation was undertaken along the route of a pipeline between Ipsden, South Oxfordshire and Scotland, near Bucklebury, West Berkshire. Targeted excavations took place at Woodcote Road South Stoke, Oxfordshire and Enwick Shaw Pit, Aldworth, Berkshire. A programme of evaluation on the route of the pipeline was undertaken as well as a watching brief along selected parts. The earliest evidence found was a group of Neolithic pits containing assemblages of pottery, flint and environmental evidence. Iron Age and Roman activity was identified along the whole length of the pipeline, with two possible settlement foci investigated at South Stoke and Enwick Shaw Pit. In addition a small amount of Saxon activity was noted NW. of Bucklebury. Post-medieval features and Second World War defences were also recorded along the length of the pipeline.

During 2000 Oxford Archaeology (OA) was commissioned by RSK ENSR Environment Ltd. to carry out a surface collection exercise and archaeogeophysical survey along the route of the Newbury Reinforcement Pipeline.¹ The route of the pipeline runs for approximately 23 km. from Ipsden, South Oxfordshire (NGR SU 6225 8550) to Scotland, near Bucklebury, West Berkshire (NGR SU 5605 7030) through the upland regions of the Chilterns (Oxfordshire) and the Central Downlands (Berkshire), descending to cross the Thames Valley at Streatley on the boundary between the two counties and crossing the River Pang at the S. end of the route (Fig. 1).

The working width of the route was approximately 37 m. including easement and topsoil storage. The scope of the fieldwork programme was agreed with the archaeological curators of Oxfordshire and West Berkshire (Paul Smith and Veronica Fiorato). The archaeogeophysical survey was carried out in late September 2000 and late November and early December 2000 by the Bartlett-Clark Consultancy.² The survey comprised both magnetic susceptibility and magnetometer survey which revealed a number of anomalies. The surface collection exercise was undertaken by OA staff between late November and early December 2000. In general the surface collection proved less useful than the archaeogeophysical survey and where concentration of finds were encountered these usually

¹ OAU, 'Newbury Reinforcement Pipeline: report on archaeogeophysical and surface collection surveys' (Unpub. Client report, 2001).

² A.D.H. Bartlett, 'Newbury Reinforcement pipeline. Report on the Archaeogeophysical Survey of the proposed gas pipeline' (Unpub. Report prepared for OA by Bartlett-Clark consultancy, 2000).

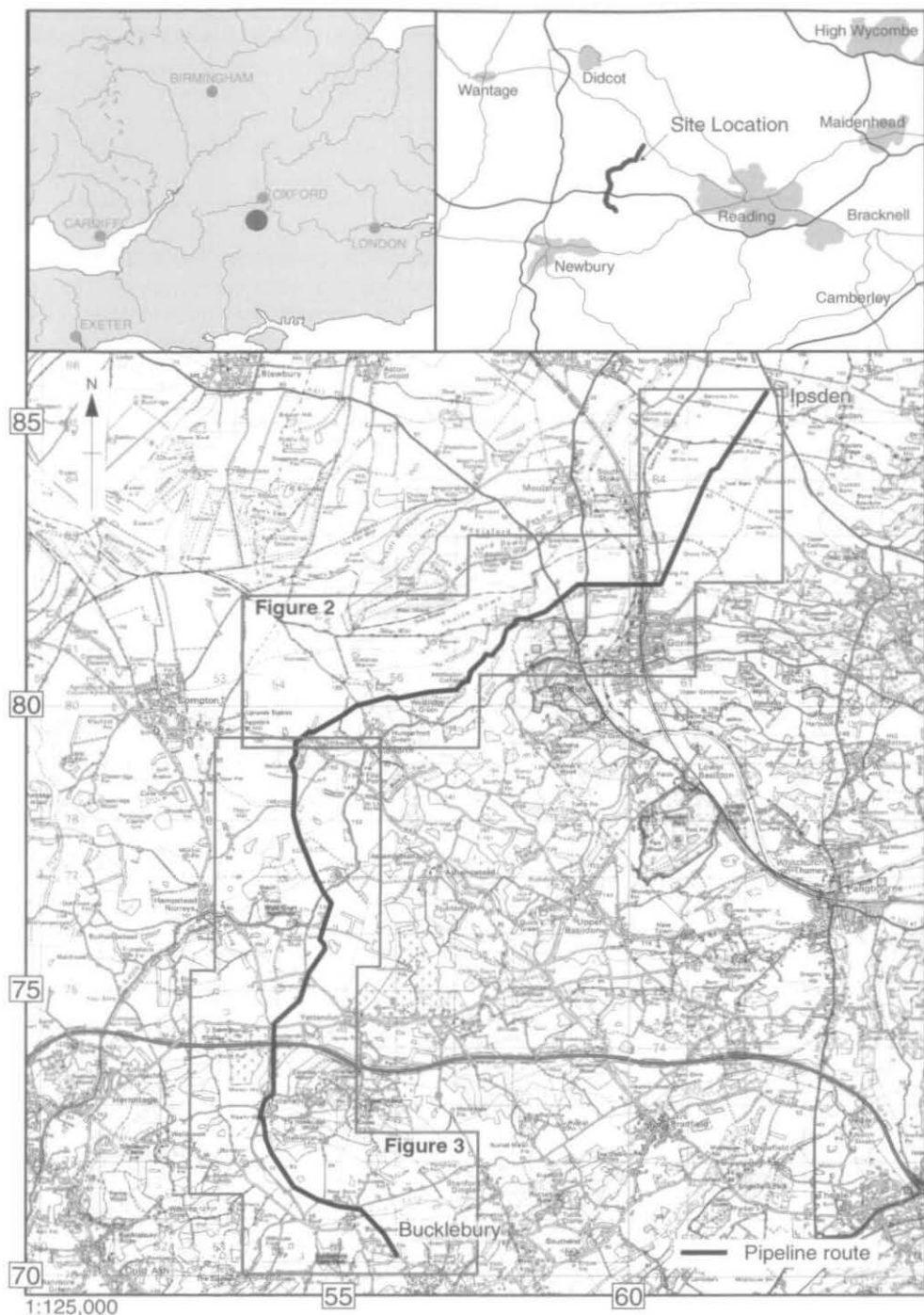


Fig. 1. Site location

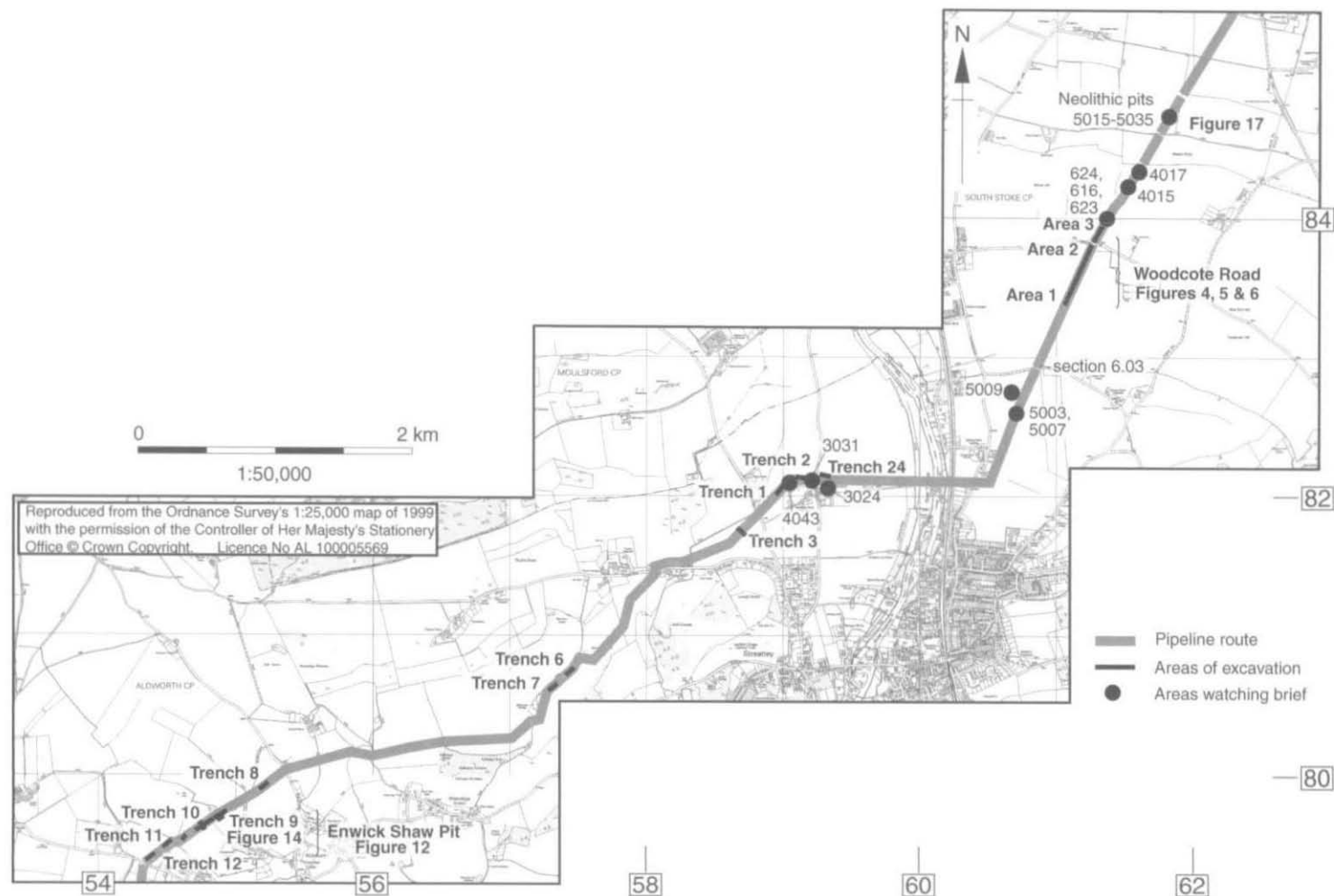


Fig. 2. Route map north

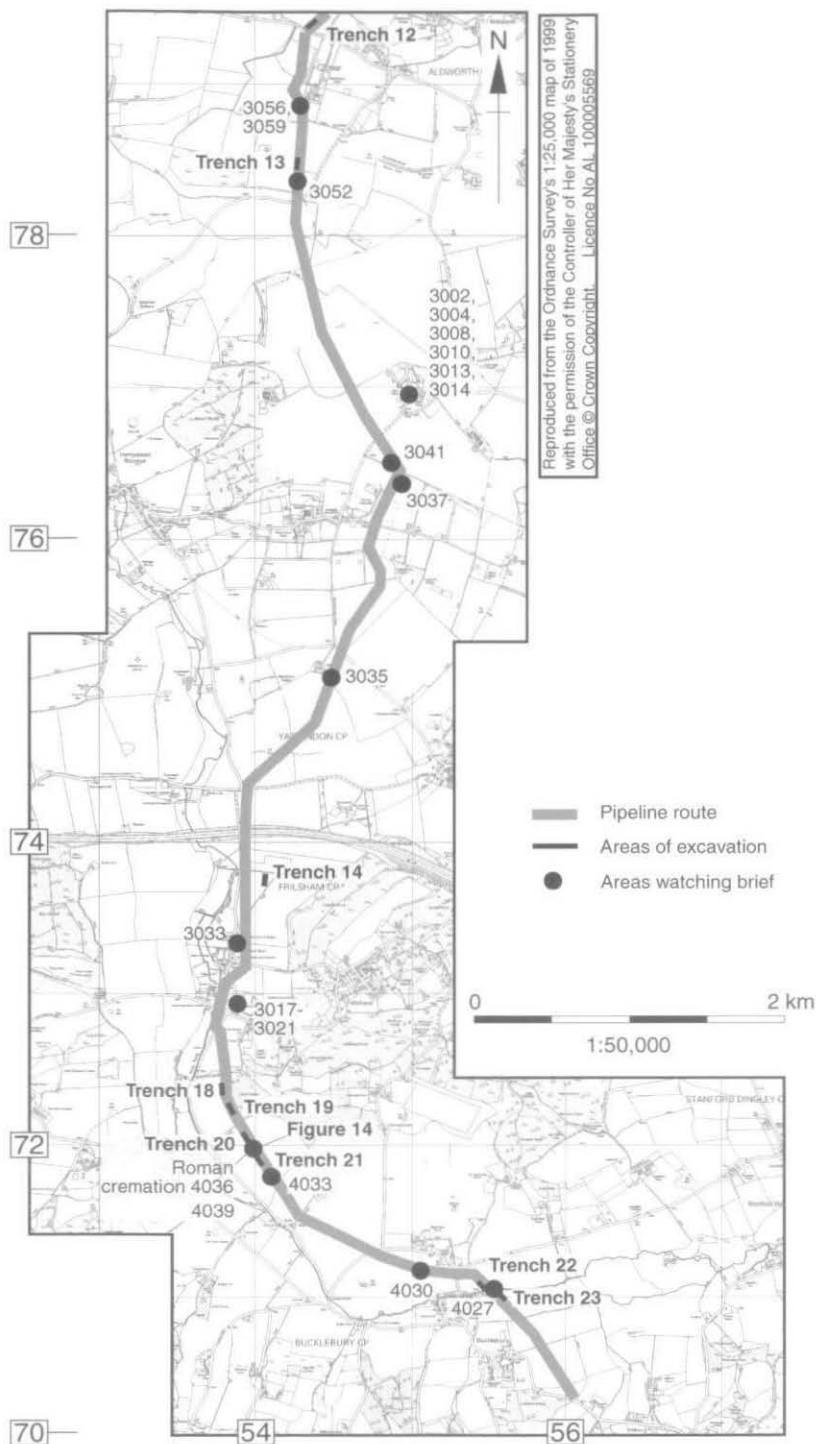


Fig. 3. Route map south

coincided with the areas of defined geophysical anomalies. Subsequently a programme of field evaluation, excavation and watching brief was undertaken from April to July 2001. Due to the restrictions imposed by the foot and mouth crisis the evaluation and excavation ran concurrently.

The two main excavation areas investigated lay SE. of Woodcote Road, South Stoke (SSWR01), Oxfordshire and NW. of Aldworth (ALEN01), Berkshire. The watching brief areas were spread out along the pipeline (NERP00) (Figs. 2-3).

The site archive for the work carried out at SSWR will be deposited with the Oxfordshire County Museum Service (Acc. No. OXCMS 2001.59). The archives for ALEN and NERP will be deposited with the West Berkshire Heritage Service (Acc. Nos NEBYM 2001.3 and NEBYM 2000.11).

GEOLOGY

The geology of the pipeline area varies along its route. From N. to S. the geology comprises: Cretaceous Lower Chalk and Middle Chalk in the area of Ipsden and South Stoke with a broad strip of Valley Gravel along the Thames Valley bordered with alluvium along both sides of the River Thames. West of Streatley and E. of Bower Farm (SU 555 803) the Cretaceous Lower Chalk, Middle Chalk and Upper Chalk outcrop again with Clay-with-Flints and Loam (overlying chalk) E. of Bower Farm between Aldworth and Yattendon, Berkshire. A strip of Valley Gravel occurs along Everington Lane (SU 540 743) in Yattendon and Cretaceous Upper Chalk along Brookes Lane. Between the point where the route of the pipeline leaves the line of Brookes Lane to the E. end of the pipeline at Scotland is a further outcrop of Valley Gravel.

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Archaeological evidence from the immediate environs of the pipeline indicates occupation and activity from the Palaeolithic until the present day.³ Most of the known prehistoric sites comprise earthworks of field systems, cropmarks of ring ditches, scatters of struck flint and chance finds. Palaeolithic and Mesolithic worked flint has been found in the upland region of Berkshire's Central Downland; a lower Palaeolithic handaxe and Mesolithic flints have been found at Streatley Farm.⁴ A survey carried out on the Chilterns⁵ noted an increase in struck flint from the late Neolithic and Bronze Age periods. Bronze Age pottery and worked flint have also been found in the Central Downland.⁶ Fifty undated prehistoric flints were retrieved during fieldwalking SW. of Aldworth, Berkshire, although no concentrations were identified.⁷

Utilisation of the higher ground in the prehistoric period also saw the construction of numerous barrows on the Berkshire Downs during the early Bronze Age.⁸ The region contains a number of cropmarks of the remains of barrows grouped together in cemeteries,

³ The archaeological background has been the subject of an Environmental Statement on Cultural Heritage unpub. Client report (OAU 2000).

⁴ West Berks SMR 01756.00.000.

⁵ S. Ford, 'Flint Scatters and Prehistoric Settlement Patterns in South Oxfordshire and East Berkshire', in A.G. Brown and M.R. Edmonds (eds.), *Lithic Analysis and later British Prehistory* (BAR 161, 1987), 67-81.

⁶ West Berks SMR 01305.06.000; 01305.07.000.

⁷ Fieldwalking by Pangbourne Workers Education Association during the 1940s-50s.

⁸ G. Briggs, J. Cook and T. Rowley (eds.), *The Archaeology of the Oxford Region* (Oxford University Dept for External studies, 1986), 18 and map 5.

notably a group of six ring-ditches in South Stoke, Oxfordshire, a group of three, possibly four, ring-ditches W. of the Thames and a group of five ring ditches NW. of Streatley, Berkshire.⁹ An archaeological watching brief immediately to the S. of one of the cemeteries in 1971 revealed an inhumation burial of uncertain date.¹⁰ The S. half of the pipeline route contains two cropmarks of ring-ditches. The late Bronze Age saw the appearance of defended enclosures and boundary demarcations in the uplands.¹¹ The N. section of the study corridor contains extensive earthwork remains of prehistoric (or Roman) field systems, which may date to this period.¹² Numerous finds dating to the late Bronze Age and early Iron Age have been found by chance in an area of cropmarks, or close to cropmarks, W. of the Thames.

In the early Iron Age several hillforts were constructed on the Berkshire Downs. The route of the pipeline runs to the E. of a group of three such hillforts:¹³ Perborough Castle at Compton, Grimsbury Castle at Hampstead Norreys and Ramsbury Corner at Scotland. East of these forts is an upstanding section of Grim's Ditch, an extant bank and ditch generally believed to be a prehistoric territorial demarcation. It is unclear when this monument was constructed although suggestions have ranged from a late Bronze Age/early Iron Age¹⁴ to a late Iron Age date.¹⁵ It is unclear whether the ditch originally terminated at the edge of the pipeline route or whether it continued W. It may have once formed a part of the main line of Berkshire's Grim's Ditch, c. 3.5 km. to the NW.

Roman sites occur along the entire length of the pipeline route indicating occupation and utilisation of a variety of topographies at this time. West of the river Thames, the pipeline crosses the line of the Dorchester-on-Thames to Silchester Roman road (SU 5924 8210),¹⁶ which probably follows the modern Wallingford Road between Cholsey and Streatley. Immediately to the E. of the road is an area of cropmarks, comprising a linear and rectilinear features and numerous pits.¹⁷ Several undated inhumation burials were discovered on the opposite side of the road before 1964. Roman pottery and burnt flint was uncovered during a watching brief on the construction of the M4 motorway in 1970-1.¹⁸

Other Roman sites are suggested from chance finds of pottery and metal objects.¹⁹ Five known field systems are likely to date to the Roman (or possibly prehistoric) period. Most of these survive as earthworks and are located between Warren Farm and Bower Farm, to the NE. of Aldworth.²⁰

Evidence from Domesday Book (1086) suggests that the Chiltern region of South Oxfordshire and the N. part of the Central Downlands were sparsely populated at the time of the survey. The Thames valley probably provided the focus for most of the settlement in the early medieval period, although there is no documentary evidence for such in the section of the Thames Valley crossed by the pipeline. A ditch dating to the early medieval period

⁹ Plotted by English Heritage Air Survey Unit.

¹⁰ Oxford SMR 15344.

¹¹ Ibid. 45.

¹² Op. cit. note 9.

¹³ A. Cotton, 'Berkshire Hill Forts', *Berkshire Archaeol. J.* 60 (1962), 32 and fig. 1.

¹⁴ S. Ford, 'Fieldwork and excavation on the Berkshire Grims Ditch', *Oxoniensia*, xlvii (1983), 35.

¹⁵ M. Henig and P. Booth, *Roman Oxfordshire* (Stroud, 2000), 105.

¹⁶ I.D. Margary, *Roman Roads in Britain* (London, 1967), road no. 160c.

¹⁷ Op. cit. note 9; West Berks SMR 01248.00-06,000/200/300.

¹⁸ Maidenhead Archaeological and Historical Society; West Berks SMR 02451.00.000.

¹⁹ West Berks SMR 01247.01.000; 02476.00.000; 03639.00.000 and 022414.00.000.

²⁰ Op. cit. note 9.

was discovered W. of the Thames in 1998²¹ perhaps indicating settlement in the vicinity. The pipeline route crosses through the centre of, and along the edge of, a number of ancient parishes that are likely to have formed from estates (manors) mentioned in Domesday Book. The exact location of settlement within each of the manors is uncertain although it is likely that the historic centres of existing villages formed the focus for the early medieval settlement. There are four Domesday settlements along the route of the corridor in Berkshire: Aldworth, Wyld, Frilsham and Bucklebury.

The OS 1" map of 1830 and the OS 1st edition 6" maps of 1878-83 show that the area was thinly populated. The settlement pattern is unlikely to have changed since the later medieval period, although the later medieval landscape may have been more sparsely populated. Place-name evidence indicates that four existing farmsteads may be located on or beside the sites of secondary settlement established in the medieval period: Bowers Farm,²² Pibworth Farm,²³ Turville Farm and Haw Farm.²⁴ Excavation of earthworks between Pibworth Farm and Woodrows Farm in 1963 revealed a medieval enclosure ditch and sherds dating to the 12th-13th centuries.²⁵ These may represent the remains of the deserted medieval settlement of Pibworth or Woodrows. It is possible that other existing isolated farms shown on the OS 1" map of 1830, but for which there are no early documentary references, are also located on the sites of medieval settlements. Other later medieval sites include the remains of lynchets,²⁶ areas of ridge-and-furrow²⁷ and a fishpond complex at Bucklebury.²⁸ The OS maps show that in the post-medieval period the area was essentially rural in character with a scatter of isolated farmsteads, most of which are still occupied. Notable sites include two groups of post-medieval water meadows, visible as cropmarks, along the River Pang. The other significant site dating to this period is Hampstead Norreys airfield (SU 5450 7705) dating to the Second World War. Around the airfield are a number of pillboxes and other structures relating to its original use.

EXCAVATION METHODOLOGY

An archaeological watching brief was maintained during both the topsoil stripping and the excavation of the pipe trench. Features were investigated by hand where encountered and recorded according to OA guidelines.²⁹ A series of 20 evaluation trenches were excavated along the length of the pipeline and easement (Figs. 2-3). Trench 25 consisted of a number of geo-technical test pits. Due to foot and mouth restrictions, the original estimation of 25 trenches was reduced to 20. Trenches that were not dug were later examined as excavation areas or watching briefs. These were targeted to investigate archaeological features initially picked up during geophysical survey or fieldwalking. All trenches were hand cleaned and, where present, a sample of features was excavated and recorded. In two areas (Woodcote Road, South Stoke, and Enwick Shaw Pit, Aldworth) more extensive excavations were undertaken. These areas were stripped of soil cover using a mechanical excavator and the

²¹ Watching brief and evaluation carried out by OAU at Thamesbank in 1998.

²² *V.C.H. Berks.* iv, 5.

²³ *Ibid.*

²⁴ M. Gelling, *Place-names of Berkshire* (1974).

²⁵ Excavations by Reading University in 1963.

²⁶ *Op. cit.* note 9.

²⁷ *Ibid.*

²⁸ Berks SMR 02315.03.000.

²⁹ D. Wilkinson (ed.), *Oxford Archaeological Unit Field Manual* (1992).

exposed surface was hand cleaned. All visible features were planned and recorded and a sample of features excavated. The areas of watching brief were located along specific points of the pipeline route, and were given three context group numbers, 3000, 4000 and 5000.

ARCHAEOLOGICAL DESCRIPTION

EXCAVATIONS AT WOODCOTE ROAD, SOUTH STOKE

Three areas (Areas 1-3) were excavated revealing evidence for Iron Age, Roman and post-medieval activity (Figs. 4-6). Most of the features comprised pits which yielded a significant numbers of artefacts and ecofactual material.

Middle Iron Age (Figs. 4-6)

In Areas 1 to 3 a total of 31 pits were excavated; they contained middle Iron Age (MIA) pottery. Table 1 summarises the dimensions, fills and finds from each feature and a number have been selected for illustration (Fig. 7). Full details can be found in the site archive.

Most of the pits, 18 in total, were scattered in clusters of varying sizes over Area 1 (Fig. 4). Of these ten (10, 17 (Fig. 7), 31 (Fig. 7), 108, 197, 227, 235, 237, 288 and 362) lay towards the S. end of the area (including four from the trench leading S.), two (52 (Fig. 7) and 56) lay mid-way up the trench near the W. section and six (62 (Fig. 7), 70, 222, 262, 264 and 305 (Fig. 7)) were located towards the N. end of the area. Four pits (52 and 56 and 262 and 264) were intercutting. The pits were broadly similar but differed in details of dimension and profile. Recuts were not common and infill deposits were relatively complex, often displaying steep inclinations down from the pit sides that suggest deliberate backfilling. All the pits contained predominately MIA pottery.

At the N. end of Area 2 four closely spaced pits (124 (Fig. 7), 137, 139 and 141) lay near to the W. section (Fig. 5). There was only one recut and the sequence of fills was relatively simple. All the pits contained small quantities of MIA pottery.

In Area 3 a further eight pits were investigated (398, 405 (Fig. 7), 410, 426, 437, 440 (Fig. 7), 511 and 623 (Fig. 6)). These formed a slightly curving band in the centre of the excavated area, although due to the limited area excavated it is difficult to discuss the precise nature of this distribution. Two more pits (463 (Fig. 7) and 501) were discovered in the trench running N. from Area 3. Recuts were not common and infill deposits were relatively simple indicating a mixture of deliberate backfilling and infilling by natural erosion. All the pits produced sherds of MIA pottery ranging from a single sherd in 437 to 81 sherds in 405. Three pits, 405, 463 and 623, are of particular note as these all contained burials:

Pit 405 (Fig. 7)

Pit 405 was circular with a flat base and near vertical sides with a step 0.20 m. from the top on the SE. side. It measured 1.84 m. in diameter by 1.0 m. in depth. The primary fill (406) occupied the lower 0.18 m. of the pit and was a friable silt with occasional inclusions of charcoal. Overlying this and infilling the remainder of the pit were three layers (407-9) of chalky-silt with occasional inclusions of flint. Seventeen sherds of MIA pottery came from the lower three fills, along with a single fragment of animal bone and an assemblage of 64 potsherds along with some metal-working slag came from the upper fill. The fills also contained a fragment of flint debitage, a flint flake and 53 fragments of animal bone. The skeleton of a neonatal infant apparently orientated N.-S., and lying on its right side in a crouched position, was recovered from the upper fill.

Pit 463 (Fig. 7)

Pit 463 was circular with a fairly flat base and near vertical sides. It measured 1.5 m. in diameter by 0.95 m. in depth. The primary fill (469) was a 0.10 m. thick layer of tenacious clay-silt, with inclusions of occasional charcoal flecks and fragments of flint. Overlying this were two layers of friable clay-silt (468, 467) 0.40 m. thick, with moderate inclusions of chalk and charcoal. Overlying these on the S. and N. sides of the pit was a layer of friable chalk and silt (470) that had slumped down from the sides of the pit. Sealing this deposit were two layers of friable silt up to 0.63 m. thick (466, 465), with occasional inclusions of chalk and charcoal. A bowl-shaped recut 1.26 m. in diameter by 0.52 m. in depth cut fill

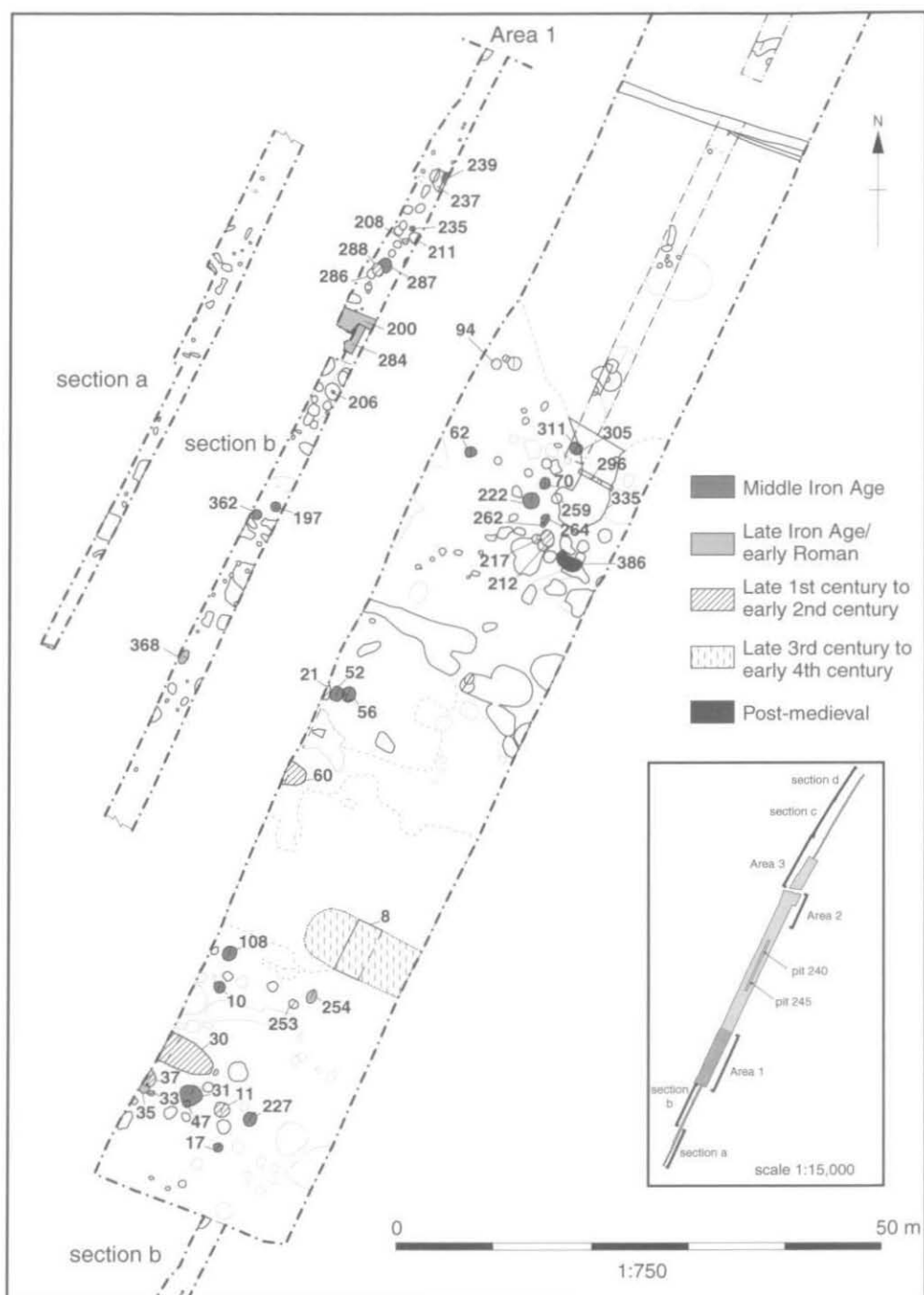


Fig. 4. Plan showing excavations at South Stoke, Woodcote Road, Area 1

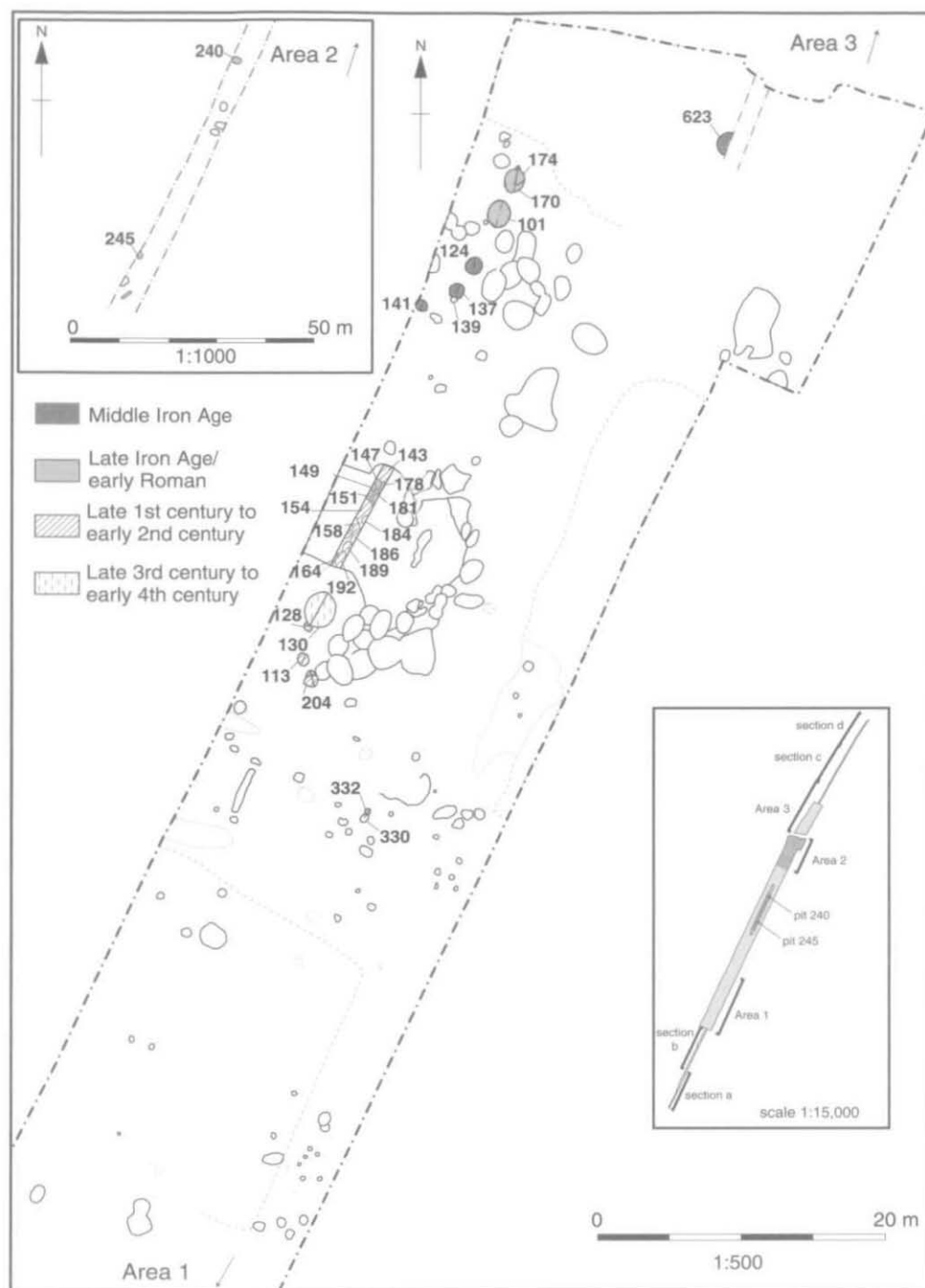


Fig. 5. Plan showing excavations at South Stoke, Woodcote Road, Area 2

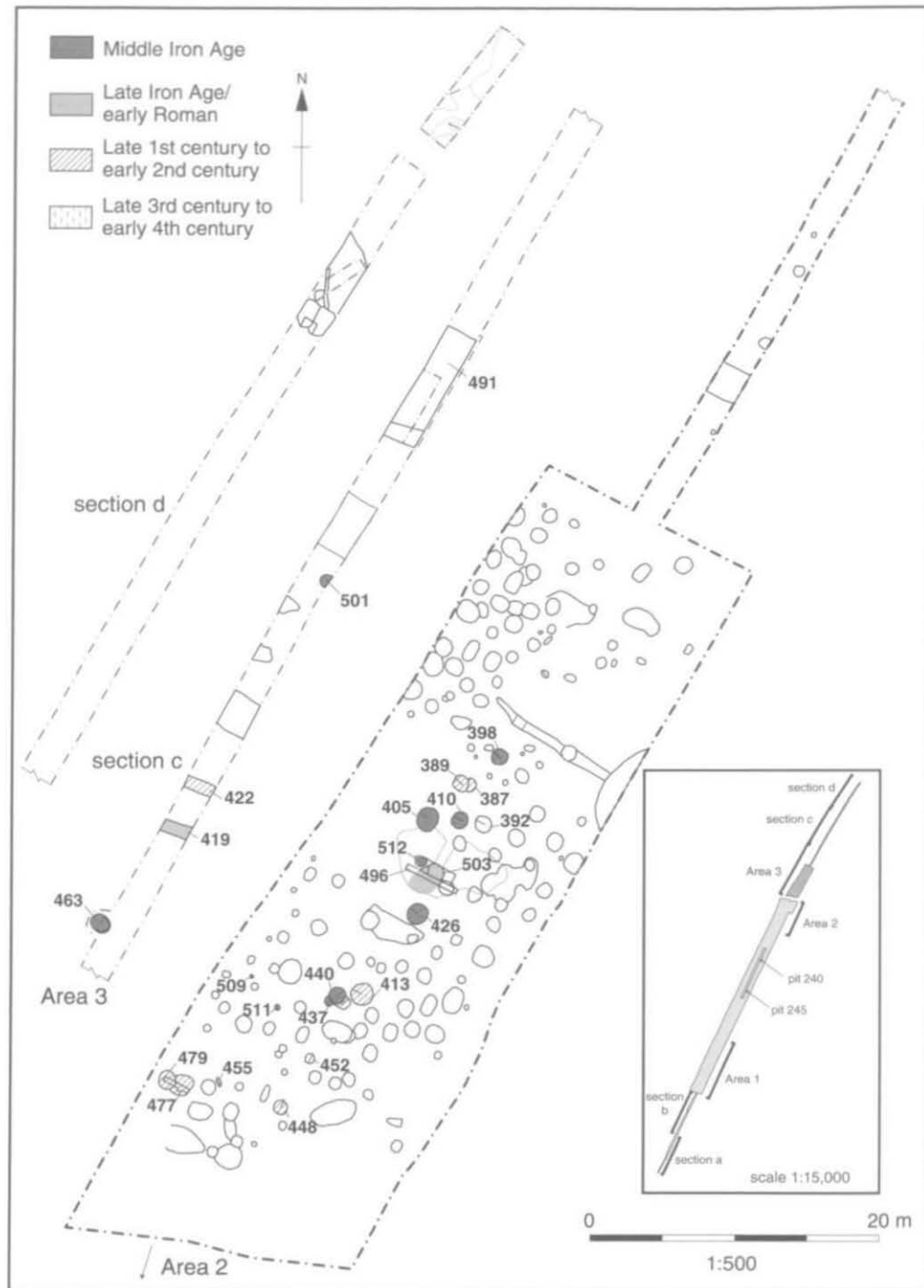


Fig. 6. Plan showing excavations at South Stoke, Woodcote Road, Area 3

TABLE 1. DETAILS OF MIDDLE IRON AGE PITs, SOUTH STOKE, WOODCOTE ROAD

<i>Pit</i>	<i>Size</i>	<i>Fills</i>	<i>Finds</i>	<i>Figure</i>
<i>AREA 1</i>				
10	2.2 by 1.9 m.; 0.47 m. deep	9	32 potsherds, charcoal, 1 flint flake, 32 fragments of animal bone	4
17	0.84 by 0.82 m. 0.14 m. deep	18	30 potsherds, charcoal, 1 burnt flint, 4 fragments of animal bone	4
31	3.2 m. diam.; 1.44 m. deep	51 (primary), 32, 41-48,	47 potsherds, charcoal, 1 flint, 55 animal bone, mortar/ saddle quern, enviro sample 3	4
52	1.5 m. diam.; 0.9 m. deep	53-5	14 potsherds; sandstone rubber, 4 fragments of animal bone	4
56	1.2 m. diam.; 0.65 m. deep	61 (primary) 57, 58	9 potsherds, charcoal, 2 fragments of animal bone	4
62	1.4 m. diam.; 0.75 m. deep	63 (primary), 64-65	30 potsherds, charcoal, burnt stone, 1 flint flake, 34 animal bone frags., enviro sample 2	4
70	1.57 m. diam.; 0.95 m. deep	71-4, 81-93, 99-100	8 potsherds, 2 flint flakes, 15 fragments of animal bone	4
94	1 m. diam.; 0.65 deep	95-8	Pottery; saddle quern frag., animal bone	4
108	1.64 m. diam.; 0.42 m. deep	109-10 (primary)	2 potsherds, 4 fragments of animal bone	4
108 (recut)		111-12	2 potsherds, 1 flint flake, 7 fragments of animal bone	4
197	1.1m. diam.; 0.56 m. deep	199 (primary), 198	19 potsherds, 2 fragments of animal bone	4
222	2.1 m. diam.; 0.75 m. deep	225 (primary), 226, 223	15 potsherds, 6 flint flakes, 1 fragment of debitage, 22 fragments of animal bone	4
227	2.44 m. diam.; 0.88 m. deep	234 (primary), 233-30	5 potsherds, charcoal, 1 flint flake 5 fragments of animal bone	4
235	0.6 m. diam.; 0.23 m. deep	236	4 potsherds	4
237	1 m. diam.; 0.44 m. deep	268	2 potsherds	4
262	1 m. diam.; 0.3 m. deep	263	1 potsherd, 2 fragments of animal bone	4
264	1.5 m. diam.; 0.45 m. deep	267-5	4 potsherds, 6 flint flakes, 2 fragments of debitage, 5 fragments of animal bone	4
288	1.85 m. diam.; 1.05 m. deep	327, 291	6 potsherds, 1 fragment of animal bone	4
305	1.7 m. diam.; 1.1 m. deep	306-10	22 potsherds, 2 fragments of animal bone	4
362	1.44 m. diam., 0.9 m. deep	376 (primary), 375, 367-5	1 potsherd, charcoal	4
362 (recut)		363	2 potsherds, 42 fragments of animal bone	4

AREA 2

124	1.6 m. diam.; 0.45 m. deep	125 (primary), 126-7	3 potsherds, charcoal, 6 fragments of animal bone	5
137	1.4 m. diam.; 0.25 m. deep	138	5 potsherds, 5 fragments of animal bone	5
141	1.05 m. diam.; 0.12 m. deep	142	1 potsherd, burnt flint, 2 fragments of animal bone	5

AREA 3

398	1.5 m. diam.; 0.6 m. deep	402 (primary), 399-401	30 potsherds, 1 stone loomweight, 53 fragments of animal bone	6
405	1.84 m. diam.; 1 m. deep	406 (primary), 407-9	81 potsherds, infant skeleton, metal-working slag, 1 flint flake, 1 fragment of debitage, 54 fragments of animal bone	6
410	1.32 diam.; 0.6 m. deep	411-2	3 potsherds, 5 fragments of animal bone	6
426	1.76 m. diam., 0.72 m. deep	427-9	5 potsherds, 7 fragments of animal bone, 1 tested flint nodule	6
437	0.4 m. diam.; 0.32 deep	438 (primary), 439	1 potsherd	6
440	1.5 m. diam.; 0.72 m. deep	441-3	5 fragments of animal bone	6
440 recut		444	13 potsherds, 6 fragments of animal bone	6
463	1.5 m. diam.; 0.95 m. deep	469 (primary), 467-8, 470, 466	40 potsherds, neonatal skeleton, 130 fragments of animal bone, enviro sample 16	6
463 recut		465-4	5 fragments of animal bone	6
501	1.2 m. diam.; 0.7 m. deep	502	2 potsherds, 1 flint flake	6
511	0.38 m. diam.; 0.26 m. deep	514 (primary), 510	5 potsherds, charcoal, 5 fragments of animal bone	6

465; it was filled by a friable clay-silt (464), with moderate inclusions of chalk, charcoal and flint. The skeleton of a neonatal infant was found lying crouched on its left side, on the base of the pit and 40 sherds of MIA pottery came from the upper two fills. In total 137 fragments of animal bone also came from the fills.

Pit 623

Pit 623 was circular with a fairly flat base and near vertical sides. It measured 1.5 m. in diameter by 0.84 m. in depth. The pit was filled by two layers of tenacious clay-silt (622 and 621) with frequent inclusions of chalk. A crouched adult skeleton, with arms crossed over the upper part of the chest, was buried in the upper fill (Fig. 8). A sample of bone submitted for radiocarbon dating, producing a date of 370 to 80 cal BC at 94.5% probability.

Late Iron Age to early Roman activity (Figs. 8–11)

Features dated to the later Iron Age (LIA) and early Roman (ERO) periods comprise 10 pits and one ditch (Fig. 9). Two isolated pits (35 and 254) lay towards the S. end of Area 1 (Fig. 4). Pit 35 ran under the W. section and was cut by two later pits (37 and 33). Four further pits (200 (Fig. 9), 239, 292 and 368) were discovered in the trench running S. from Area 1 (Fig. 4); pit 200 was cut by pit 292; pits 239 and 368 were isolated. In this phase there were no recuts and the sequence of infill deposits was relatively simple. The only find of note other than pottery was a fragment of copper alloy from pit 200.

Six pits were found in Area 2 (Fig. 5): an apparent cluster of three pits (101 (Fig. 7), 170 and 174) lay at the N. end of the area close to the W. section, and three pits (332, 164 and 181) were located in the middle section of the trench. Again it is difficult to discuss the distribution of these pits within the confines of the excavated area as archaeological features can be seen to extend under all of the baulks. Recuts were not common and took the form of shallow scoops rather than full scale clean outs. Infill deposits were often relatively simple, suggesting infilling by natural erosion and weathering rather than deliberate backfilling.

Area 3 (Fig. 6) revealed just two pits (496 and 503 (Fig. 9)) and a ditch (419) dating to the LIA-ERO period. The pits lay in the middle of the area and were characterised by a relatively simple sequence of fills; pit 503 had a single recut and cut pit 496. Pit 503 produced a total 31 sherds of LIA-ERO pottery from the fills. A leaf-shaped spearhead (Sf 8) (Manning group IA)³⁰ dating to the 1st century AD was recovered from the fill of the recut.

1st to early 2nd century AD (Fig. 10)

In total 22 pits were investigated with pottery finds indicating a date in the later 1st or early 2nd century (Fig. 10). Nine large pits were scattered over Area 1, seven in Area 2 and six in Area 3. Of the nine in Area 1 (Fig. 4) four (11, 30, 33 and 37) lay in an apparent cluster at the S. end of the area, near to the W. section, four (21, 60, 212 and 335) were more isolated, lying in the middle of the area and one (287) lay in the N. part of the trench running S. from the main area. Recuts were not common and fills were fairly complex, suggesting a mixture of deliberate backfilling and infilling by natural erosion and weathering. Pit 21 produced a single neonatal infant bone.

The seven pits in Area 2 (113, 128, 143, 154, 158, 178 and 204) formed a scatter in the middle of the trench near the W. section (Fig. 5). There were no recuts and the relatively simple sequence of fills indicates that infilling was predominantly by natural erosion and weathering. All but one of the pits (178) yielded pottery of late 1st to early 2nd-century date. A single neonatal infant bone came from pit 128 and an iron double-spike loop from pit 158.

The six pits in Area 3 (Fig. 6) (387, 389, 413, 448, 477, and 479) formed an approximately linear group running from N. to S. through the centre of the area. Recuts were uncommon and fill sequences were relatively simple, mostly indicating infilling by weathering or natural erosion although at least one pit (413) displayed clear signs of deliberate backfilling and one (477), contained a deliberately placed

³⁰ W.H. Manning, *Catalogue of the Romano-British Iron Tools, Fittings and Weapons in the British Museum* (1985).

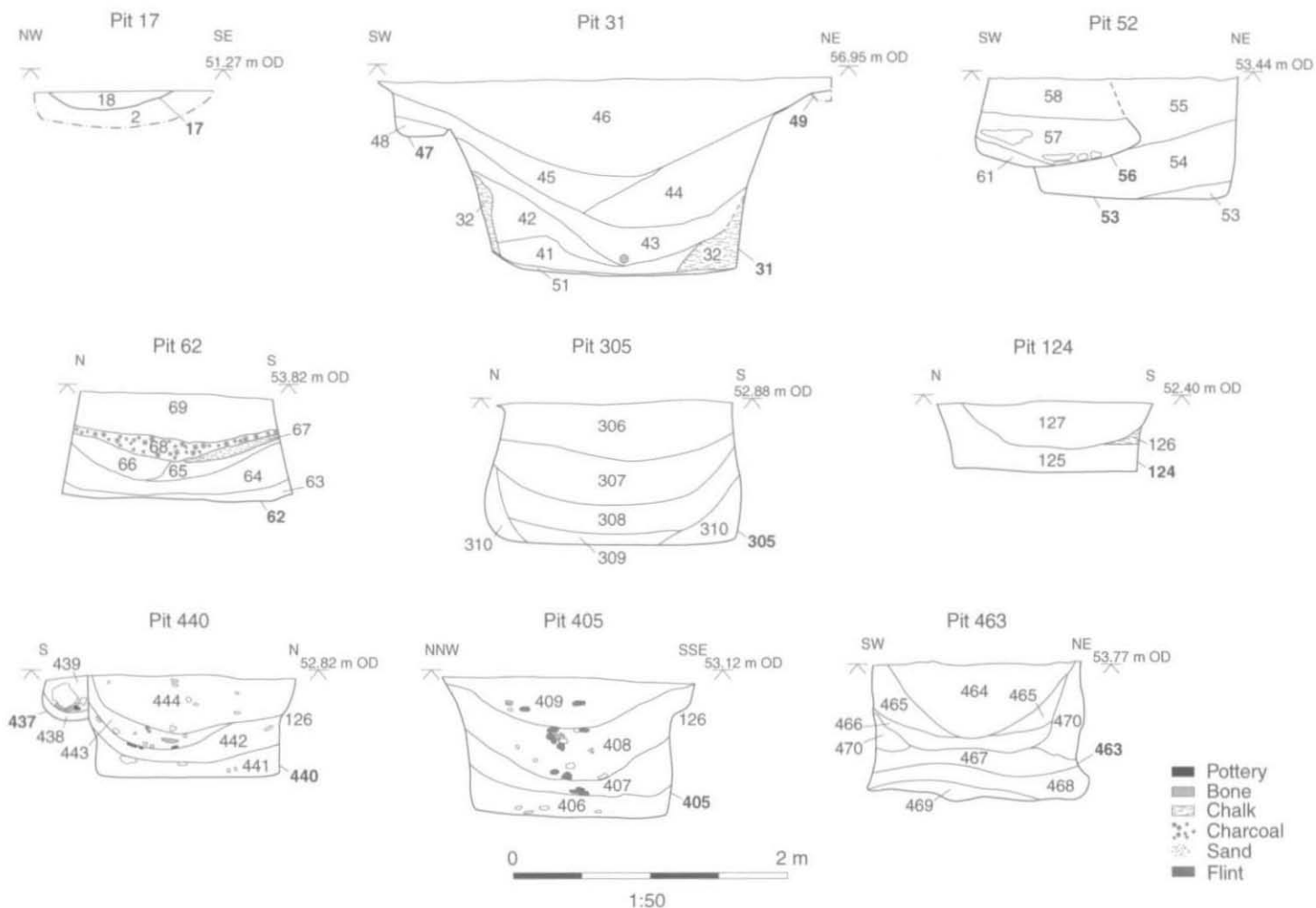


Fig. 7. Selected Middle Iron Age features, Stoke Stoke, Woodcote Road



Fig. 8. Middle Iron Age skeleton 620. Looking S. South Stoke, Woodcote Road.

pot. A fragment of rotary quern came from pit 448. Several of the pits were intercutting: pit 479 cut pit 477 and pit 389 cut pit 387. A single ditch (422) orientated NW/SE. ran across the S. part of the trench running N. from Area 3. It had been recut once and contained a substantial pottery assemblage.

Late third to early fourth century AD activity (Fig. 11)

Features dating to the late Roman period include a large oval quarry hollow located towards the S. end of Area 1 and two large pits, one, 130, in Area 2, the other 455, in Area 3. The quarry hollow was a substantial feature filled with layers of silty-clay. The fills produced 71 sherds of pottery spanning the late 3rd to early 4th centuries, 44 fragments of animal bone and 21 fragments of CBM. Pit 130 was bell-shaped and filled with layers of silty-clay; it had been recut twice. An assemblage of 307 sherds of late 3rd- to early 4th-century pottery was recovered from the fills, along with 416 fragments of animal bone and 69 fragments of CBM. An iron spoon-bit (Sf 3) came from the upper fill of the pit. Pit 455 was oval in plan and an almost complete mortarium of unknown source and typologically of 3rd-century date came from the fill, along with a single fragment of animal bone.

Undated Activity

A number of features, including pits and ditches were unphased, as they had no stratigraphic relationships and contained no diagnostic finds. These features were scattered throughout all three areas and in the trenches running N. from Area 3, and S. from Area 1. Pit 245, also undated, was excavated and sampled for charred plant remains in the trench running S. from Area 1.

TABLE 2. DETAILS OF LATE IRON AGE-EARLY ROMAN PITS, SOUTH STOKE, WOODCOTE ROAD

<i>Pit</i>	<i>Size</i>	<i>Fills</i>	<i> Finds</i>	<i>Figure</i>
<i>AREA 1</i>				
35	2 m. by 1.1 m.; 0.25 m. deep	36	1 LIA-ERO; 2 MIA sherds, 4 flint flakes	4
200	4 m. diam.; 1.8 m. deep	321 (primary) 203, 201, 275-79	10 LIA-ERO potsherds, 1 undiagnostic copper alloy fragment, snail sample	4
212	1.65 m. diam.; 1.03 m. deep	213-216	2 1st-2nd century potsherd; stone rubber; snail sample	
240	1 m. diam.; 0.6 m. deep	241 (primary), 242	22 LIA-ERO potsherds, 14 fragments of animal bone	5
254	1.74 m. diam.; 0.28 m. deep	258 (primary), 257	2 LIA-ERO potsherds	4
287	1.85 m. diam.; 1.24 m. deep	290, 323-4, 326	ERO potsherds, animal bone, stone rubber, CBM, slag, iron	4
292	0.8 x 1.2 m.; 1.1m. deep	280 (primary), 202	6 LIA-ERO potsherds, calf skeleton (209)	4
368	2 m x 1.42 m.; 0.82 m. deep	379 (primary) 380, 370-1	15 LIA-ERO potsherds, 53 fragments of animal bone	4
<i>AREA 2</i>				
101	2.4 m. diam.; 1.35 m. deep	102 (primary), 103-6	37 LIA-ERO potsherds, animal bone, 1 flint flake, 10 fragments of animal bone	5
164	1.3m. diam.; 0.26 m. deep	165, 166	5 LIA-ERO potsherds, 3 fragments of animal bone	5
170	1.83 m. diam.; 0.65 m. deep	171-3	25 LIA-ERO potsherds from 170/174, 5 flint flakes, 2 burnt flints, 1 tested flint nodule, 61 fragments of animal bone	5
174	1.7 m. diam.; 0.38 m. deep	173/175	See above.; 2 rubber frags.	5
181	0.86 m. diam.; 0.44 m. deep	182, 183	6 LIA-ERO sherds	5
332	0.6 m. diam.; 0.35 m. deep	333 (primary), 334	2 LIA-ERO sherds	5
<i>AREA 3</i>				
496	3 m. diam.; 0.8 m. deep	497 (primary), 498-500	4 LIA-ERP potsherds, 22 fragments of animal bone	6
503	1.5 m. diam.; 0.7 m. deep	504, 480	31 potsherds, Fe spearhead (Sf 8), 62 fragments of animal bone	6

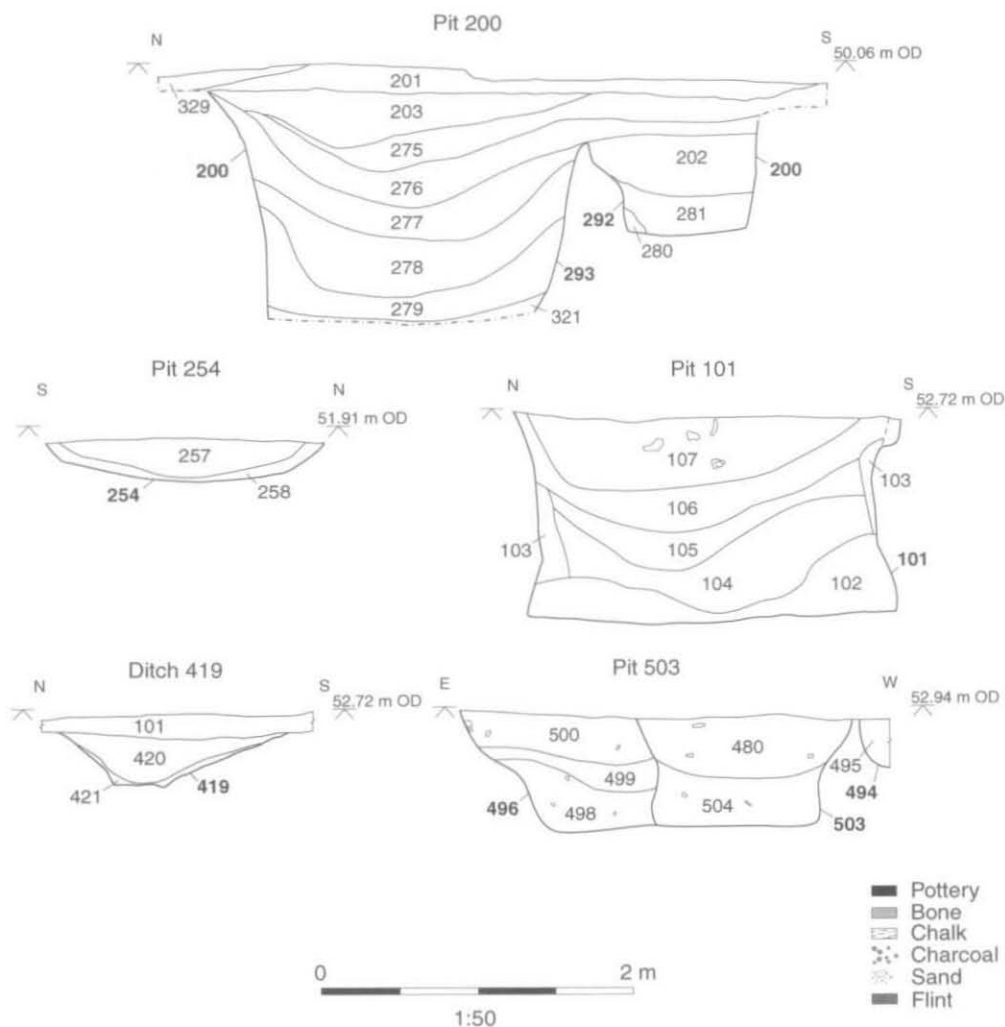


Fig. 9. Selected Late Iron Age — early Roman features, South Stoke, Woodcote Road

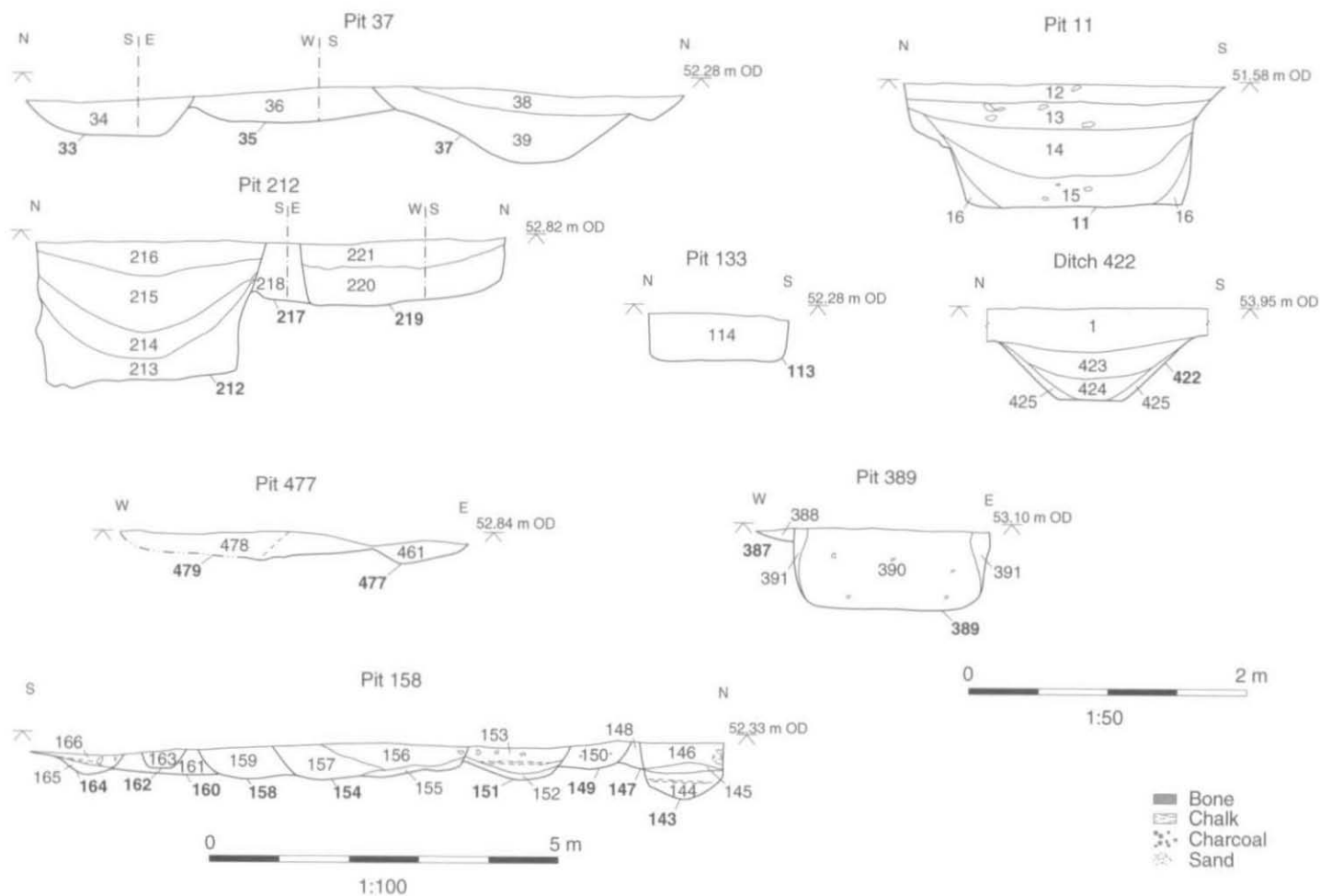
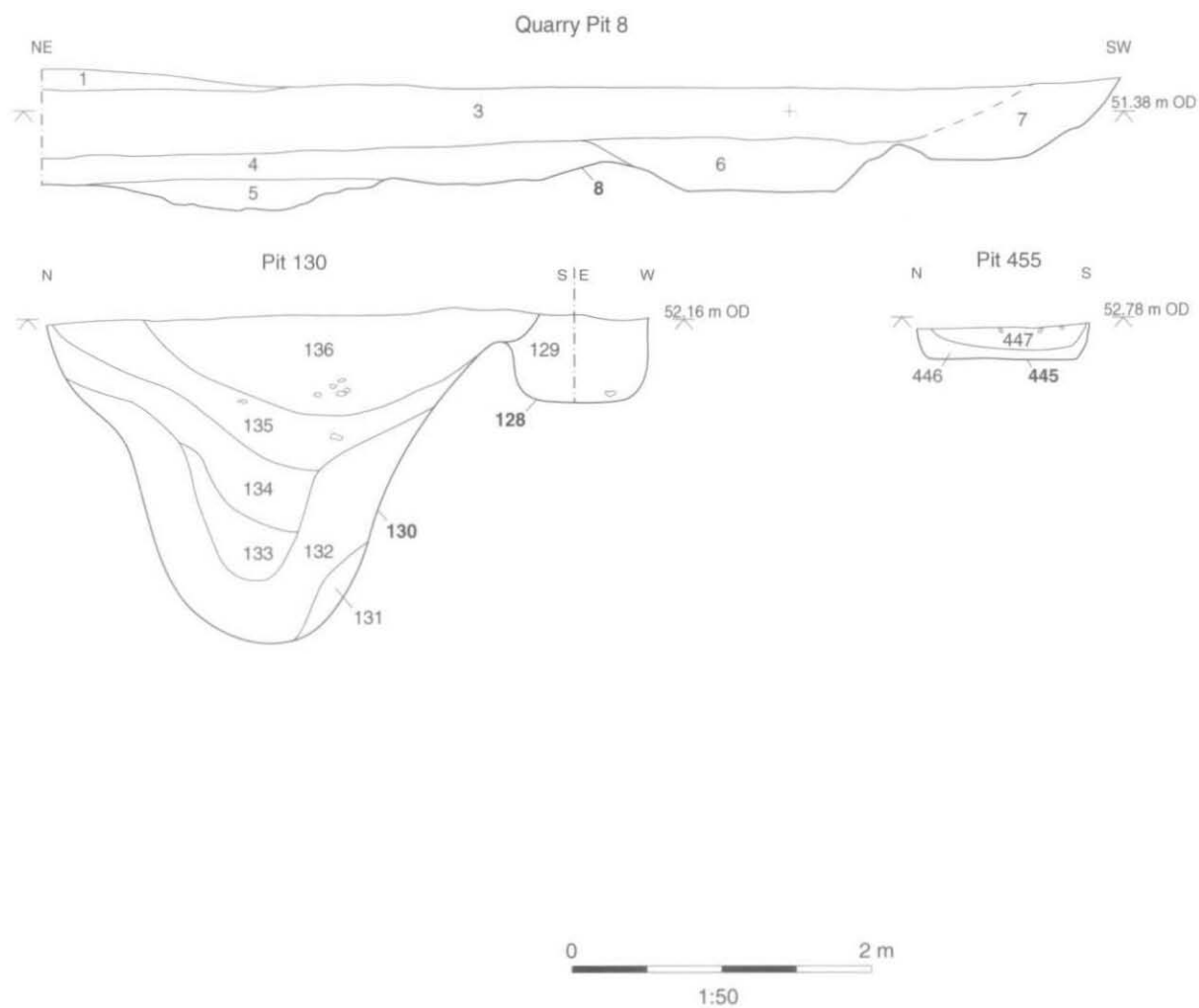


Fig. 10. Selected features of later 1st - early 2nd-century date, South Stoke, Woodcote Road



EXCAVATIONS AT ENWICK SHAW PIT

Three areas were excavated at Enwick Shaw Pit (Sites 1-3 Fig. 12), two of which overlapped with evaluation Trenches 9 and 10. The remains of ditches, pits, postholes and other settlement features were uncovered. A sequence of field boundaries and enclosures with a possible trackway has been postulated.

In Trench 9 (Figs. 2 and 14) a substantial linear ditch (907/914) orientated N.-S. delimited an area with two pits (910 and 916) and a buried soil horizon (903) to its W. The ditch was cut on its W. side for at least some of its length by a smaller U-shaped ditch (909). An oval pit (1006) containing three sherds of Roman pottery was excavated in Trench 10 (Fig. 2). This cut a ditch (1004) to its NW. which in turn was cut by a second ditch (1002). Although devoid of datable finds these features contained similar fills to that of pit 1006 and may have been contemporary with it.

Middle-late Iron Age (Figs. 12-13)

The earliest phase of activity on site was represented by a single, apparently isolated sub-circular pit, 27, located towards the SW. end of Site 3 (Fig. 12). MIA pottery was recovered from the fills and the pit had a shallow recut in its uppermost fill. An exceptionally rich assemblage of charred cereal grains which included wheat, barley and a little spelt was recovered from the fills. A little redeposited worked flint was also recovered.

Early Roman (Figs. 13-14)

During the 1st century AD, a series of field boundaries or trackway ditches were laid out across the site. At the SW. end of Site 3 two linear ditches (3, 20) running at right-angles to one another may have formed part of a square or rectangular enclosure. At the SW. end of Site 2, two ditches (42, 51) running parallel to one another, in a N.-S. direction may have formed the boundary of a N.-S. trackway. A third ditch (75) running NW.-SE. at an oblique angle to ditches 42 and 51 may represent part of an enclosure boundary. A fourth section of linear ditch running NE.-SW. and a pit, 97 (Fig. 14) lay on Site 1.

Mid Roman Activity (Figs. 13-14)

Following the infilling of the early Roman ditches a series of mid Roman ditches were dug across the site, often on similar alignments to the early Roman features (Fig. 12). At the SW. end of Site 3 was a linear ditch (10) orientated NW.-SE. which may have bounded an enclosure to its NE. Running parallel to ditch 10, some 32.0 m. to its NE. was a second ditch (19) of similar proportions which possibly formed the NE. boundary of the putative enclosure. Lying between ditches 10 and 19, about 6.0 m. to the SW. of ditch 19 was a small oval pit (14). Some 15.0 m. NE. of ditch 19, also on a NW.-SE. alignment, was a substantial linear ditch (40) containing a layer of flint gravel (41). This may have functioned as a trackway. Towards the NE. end of Site 2 were two roughly parallel linear ditches (64, 80) which may have bounded another trackway or enclosure. Of these ditch 80 was the more substantial and may have functioned as a trackway in its own right.

Late Roman activity (Figs. 13-14)

Following the infilling of the mid Roman ditches at some point during the 3rd century, it seems that the landscape underwent another phase of reorganisation. This phase (Fig. 12) was characterised by pits and structures rather than extensive ditch systems. A substantial linear ditch (38) orientated NW.-SE, possibly representing a trackway, lay at the NE. end of Site 3. Two sections of flint-built wall (82, 85), possibly representing the remains of a single building lay towards the SW. end of Site 2. Lying c. 2 m. to the NE. of these was a large rectangular clay-lined pit (44). A second pit (69) which was even more substantial lay approximately 3 m. beyond this. These features silted up and went out of use by the end of the 4th century.

Unphased Activity

Several features, including pits, postholes, a ditch and a tree-throw hole were unphased as they had no stratigraphic relationships and contained no diagnostic finds. These features were scattered throughout all three trenches but were mostly concentrated on Site 2 (further details may be found in the archive).

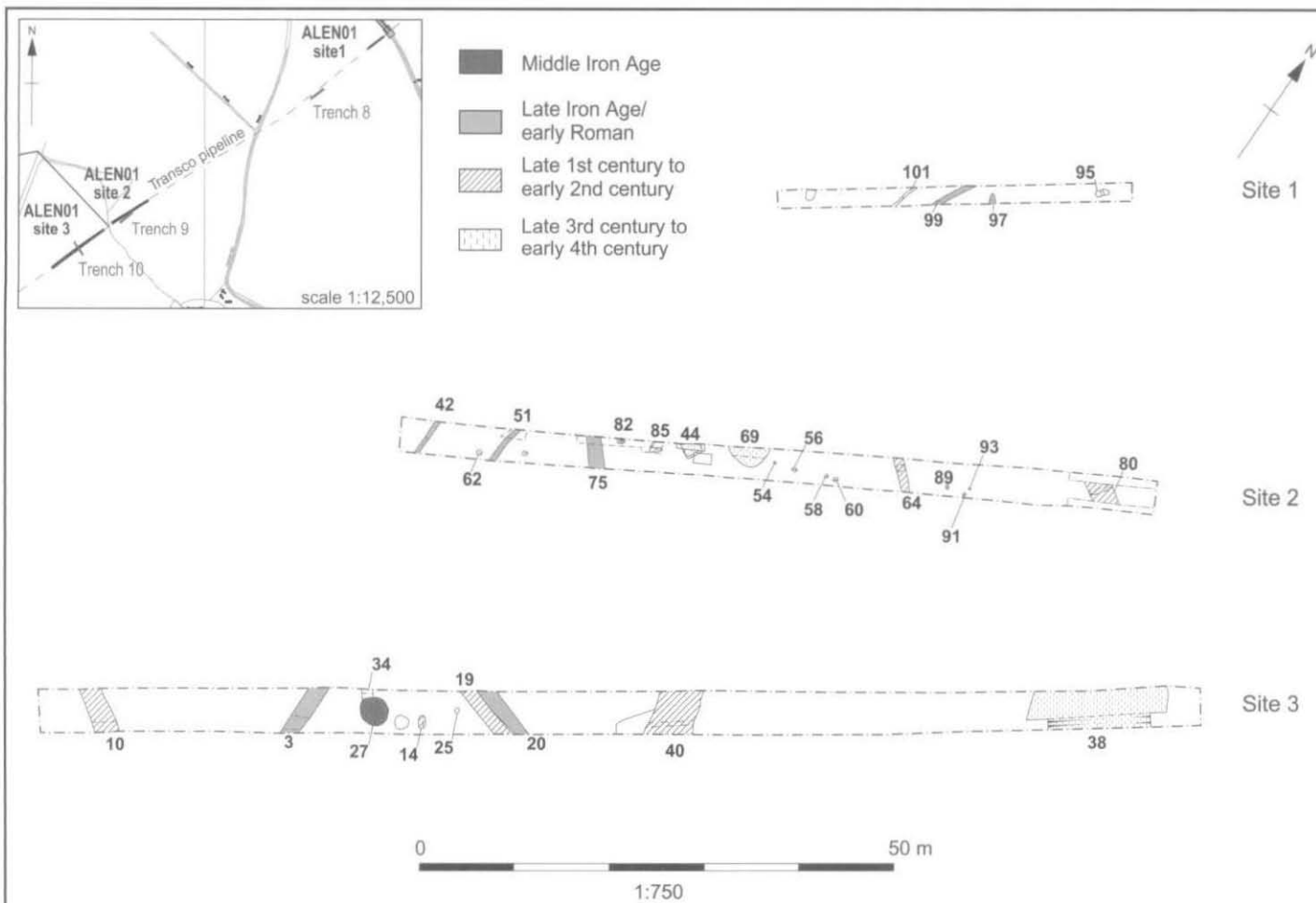


Fig. 12. Plan of excavations Enwick Shaw Pit

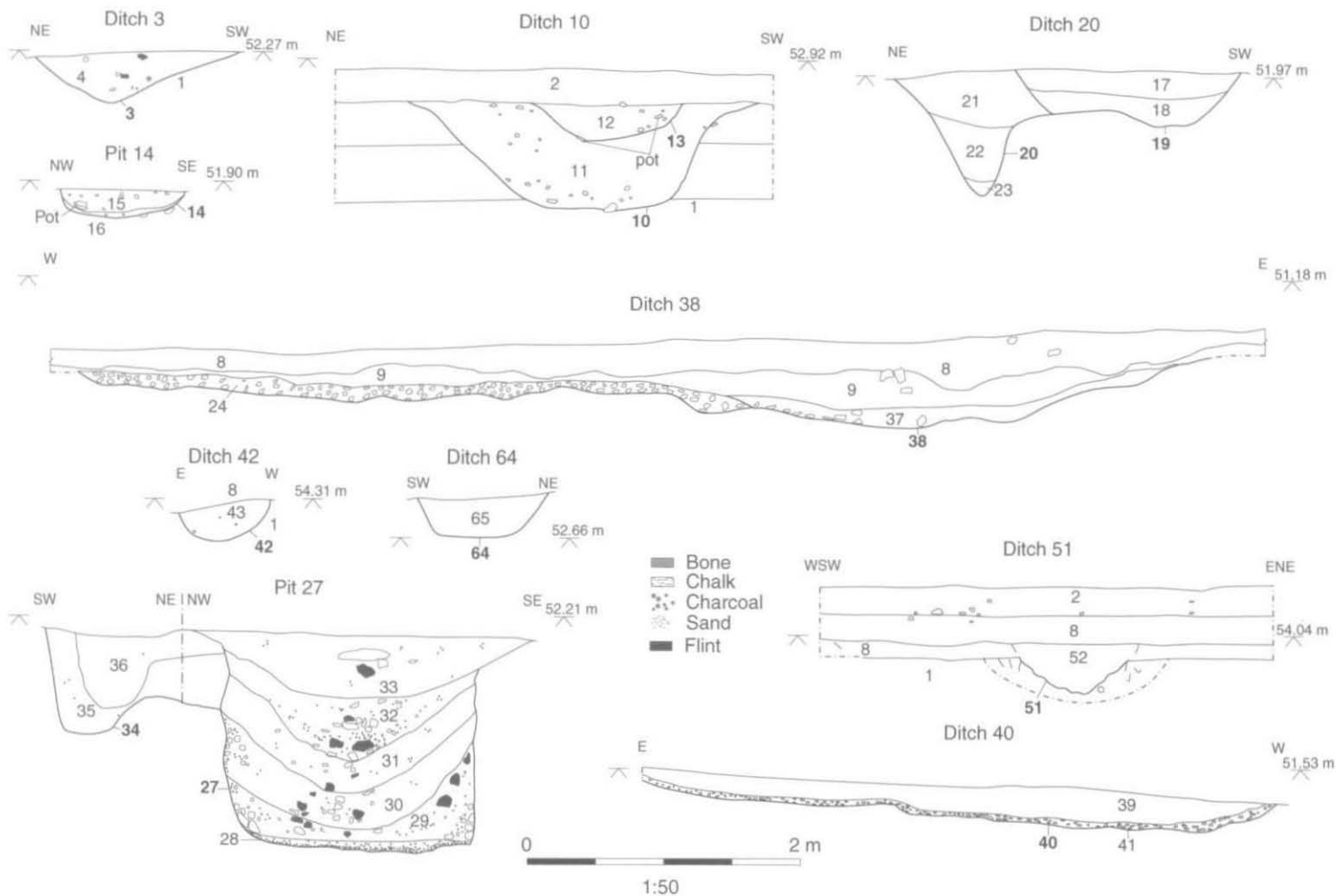
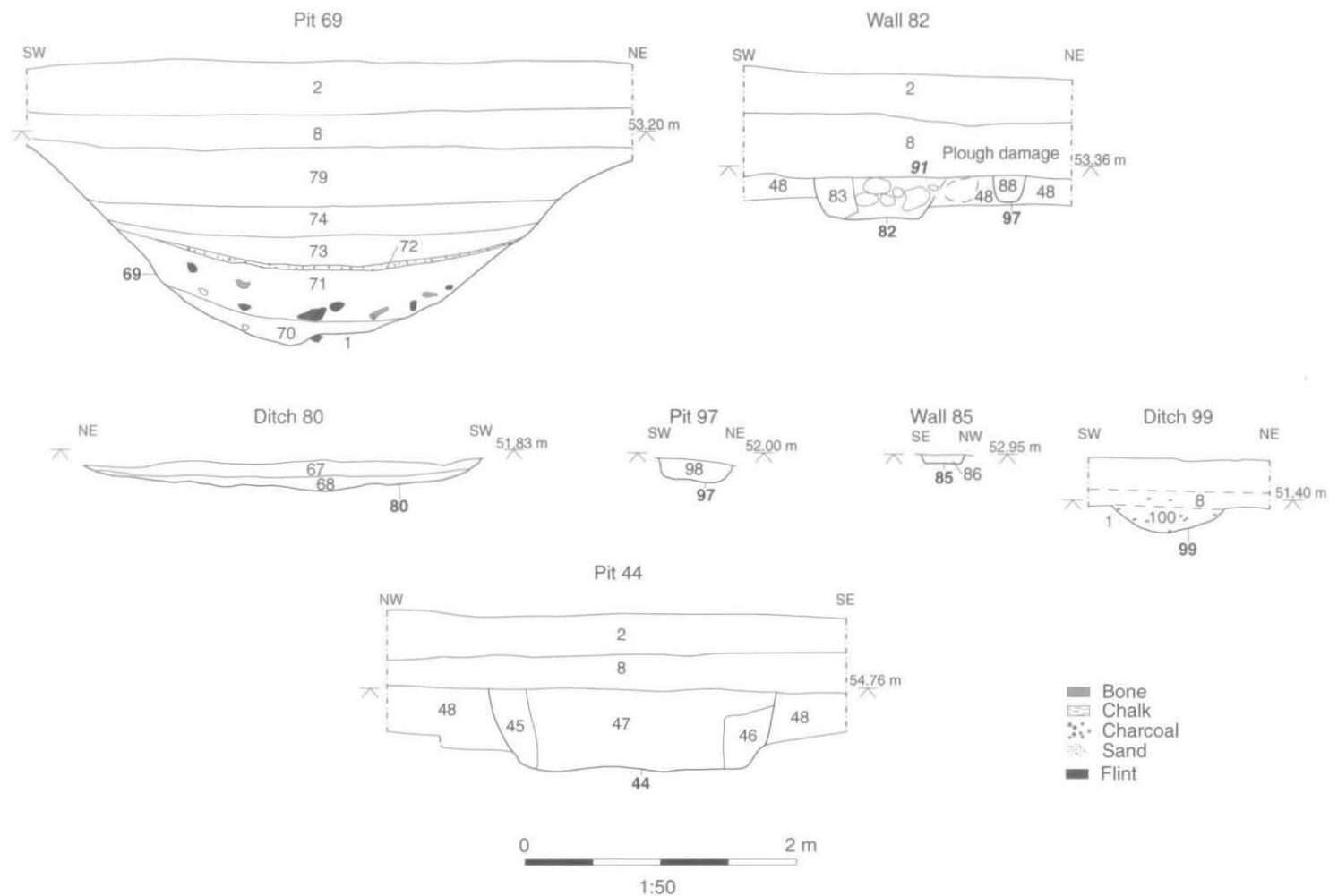


Fig. 13. Sections of selected features, Enwick Shaw Pit



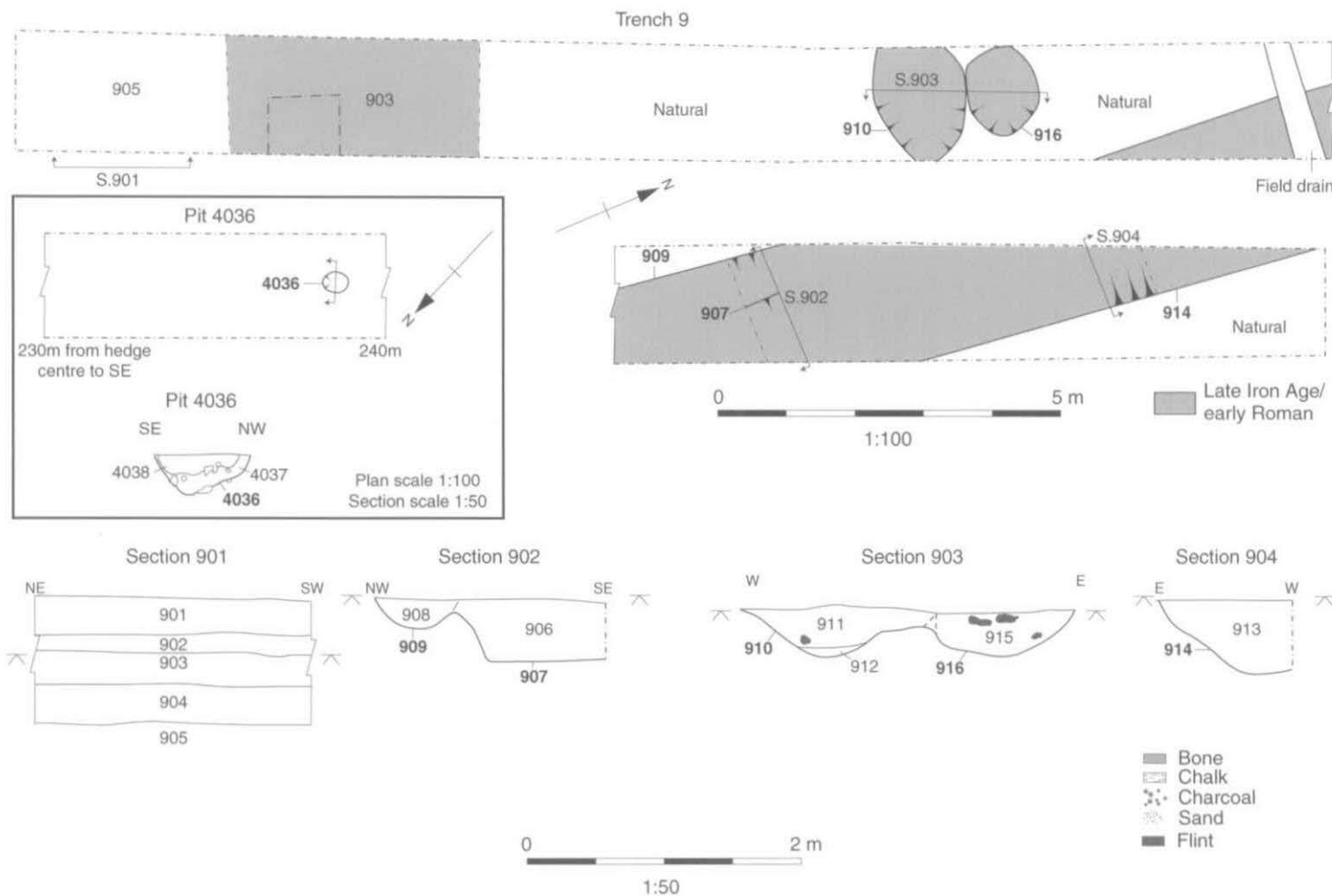


Fig. 15. Selected features from the evaluation and watching brief

WATCHING BRIEF AND EVALUATION TRENCHES

*Neolithic activity*Summary

Nine early Neolithic pits lay in the SE. corner of a field immediately to the W. of field 1.3, to the NE. of South Stoke (Figs 2 and 17). Seven similar pits (5015, 5019/5017, 5025, 5027, 5029, 5031 and 5035) occurred in close proximity to one another, some of which may well have been paired. Eight

TABLE 3. DETAILS OF THE EARLY NEOLITHIC PITS

<i>Pit</i>	<i>Fill</i>	<i>Depth, diameter and volume (m.)</i>	<i>Pottery</i>
5015- sub-bowl-shaped	5014- compact whitish-grey clay silt fill with some chalk-finds mixed within fill	0.18 m., 0.82 m., 0.095 m ³	19 sherds
5019- circular plan; saucer-shaped profile	5018- compact dark grey clay silt containing chalk and charcoal-finds evenly distributed within fill	0.11 m., 0.86 m., 0.064m ³ .	146 sherds, 1 vessel. Rim from a decorated bowl
5027- sub-circular plan; U-shaped profile	Upper fill 5026- compact whitish grey clay silt containing chalk	0.44 m., 0.82 m., 0.23m ³ .	56 sherds, two vessels
	Lower fill 5032- dark blackish-brown clayey silt containing only a little chalk and some charcoal- find denser in lower fill. NB- finds from 5032 listed as 5026		41 sherds
5035- sub-circular plan; bowl-shaped profile	5034- tenacious dark brown clay silt with chalk gravel and charcoal	0.21 m., 0.82 m., 0.11m ³ .	27 sherds, a single plain bowl
5025- sub-circular plan; saucer-shaped profile	5024- compact light brown clay silt containing chalk	0.14 m., 0.74 m., 0.06m ³ .	84 sherds, 5 vessels including a deep bowl, a lugged bowl and a cup
5029- sub-circular plan; saucer-shaped profile	5028- compact whitish grey clay silt containing chalk - finds distributed	0.14 m., 1 m., 0.25m ³ .	6 sherds, a single decorated bowl
5031- sub-circular plan; saucer-shaped profile	5030- compact light brown clay silt containing chalk	0.06 m., 0.64 m.,	7 sherds
5021- sub-circular plan; U-shaped profile	5020- compact whitish grey clay silt containing chalk-finds distributed evenly within fill	0.12 m., 0.7 m.	None
5023- Sub-circular plan; flat base, steep sides	5024- compact whitish grey clay silt containing chalk	0.2 m., 0.54 m.	None

radiocarbon dates were obtained on charred hazelnut fragments from four of these pits (see Table 4). The dates fall within the expected range of 3650-3350 cal BC (see Table 4). Two pits of slightly different character occurred to the SW. of this group. They were broadly similar to those found in the pit cluster but differed in details of dimension and profile. None of the pits had recuts and infill deposits were fairly simple. The pits were generally shallow, indicating that some truncation had occurred. Seven of the pits contained early Neolithic pottery and eight contained flint.

<i>Flint (no. of frags.) and burnt unworked flint (no., wt.)</i>		<i>Worked stone</i>	<i>Charred plant remains</i>	<i>Animal bone</i>	<i>Radiocarbon sample</i>
64: mostly flakes, a flake from a ground implement, a core, a scraper and a hammerstone	2/88 g.	?rubber frag., none local flint pebble	cereal and hazelnut	Cattle and unid.	
111: mostly flakes, a flake from a ground implement, a tested nodule, two cores and a serrated flake	2/41 g.	?quern frag.	cereal and hazelnut	Unid. (large and medium)	NZA-18465-6
90: mostly flakes, two flakes from ground implements, a tested nodule and three cores, eight serrated flakes	69/223 g.			Cattle and some burnt	NZA-18464
128: mostly flakes, 3 core rejuvenation flakes, a tested nodule, four cores, a scraper, five serrated blades and hammerstones			cereal and hazelnut	Cattle x5; pig x3; s/g x 3 (artic) incl. Cut cattle femur	
91: mostly flakes, five cores and a serrated flake	120/450 g.		cereal and hazelnut	Pig x2 + unid (x1 medium; x1 large)	
64: mostly flakes, a tested nodule and five serrated blades	16/48 g.		cereal and hazelnut	Cattle and some burnt	NZA-18463, 18502
44: mostly flakes and a core	4/21 g.		cereal and hazelnut		
17: mostly flakes, a scraper, and a serrated flake			cereal and hazelnut		NZA-18462, 18467, 18501
4: mostly flakes and a core rejuvenation flake					

TABLE 4. RADIOCARBON SAMPLES FROM EARLY NEOLITHIC PITs

<i>Feature</i>	<i>Laboratory no.</i>	<i>Context and sample <number></i>	<i>Radiocarbon age BP</i>	$\delta^{13}\text{C}(\text{‰})$	<i>Calibrated date range (95%)</i>	<i>Sample details</i>
Pit 5017	NZA-18465	5018 <5010>	4708 \pm 40	-24.22	3630-3370 cal BC	Hazelnut shell fragments
	NZA-18466	5016 <5009>	4725 \pm 40	-24.96	3630-3370 cal BC	Hazelnut shell fragments
Pit 5025	NZA-18463	5024 <5000>	4726 \pm 45	-24.25	3640-3370 cal BC	Hazelnut shell fragments
	NZA-18502	5024 <5012>	4668 \pm 40	-24.97	3620-3350 cal BC	Hazelnut shell fragments
Pit 5027	NZA-18464	5026 <5004>	4673 \pm 40	-24.53	3620-3350 cal BC	Hazelnut shell fragments
Pit 5031	NZA-18462	5030 <5011>	4718 \pm 40	-26.23	3630-3370 cal BC	Hazelnut shell fragments
	NZA-18467	5030 <5001>	4710 \pm 40	-24.86	3630-3370 cal BC	Hazelnut shell fragments
	NZA-18501	5032 <5005>	4701 \pm 40	-25.15	3630-3370 cal BC	Hazelnut shell fragments

Pit cluster: 5015, 5019/5017, 5025, 5027, 5029, 5031 and 5035 (Fig. 16)

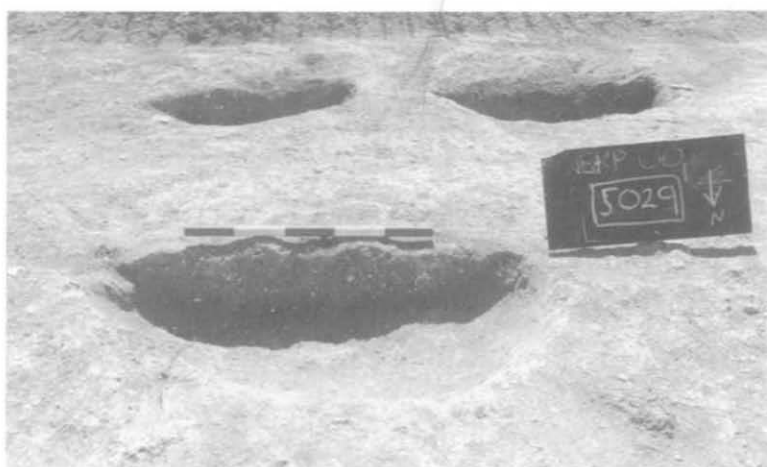


Fig. 16. Detail of Early Neolithic pit 5025. View to S. NERP 00.

Seven similar pits occurred in a relatively small area, 4.0 m. x 7.0 m. (Fig. 17). Table 3 summarises the character of these features. Six of the pits within this group appeared to be paired (5015 and 5019, 5027 and 5035, 5025 and 5029; see Table 3 and discussion below).

The pits were mostly sub-circular in plan (diameters ranging from 0.64-1.0 m.) and varied in depth from 0.11 m. to 0.44 m. Profiles ranged from shallow saucer or bowl to steep-sided and flat-based. With the exception of pit 5027 (the deepest with two fills) all of the pits had single fills. Pits 5015, 5027 (upper) and 5029 had lighter fills of clay silt, while 5019, 5027 (lower), 5035, 5025 and 5031 all had darker fills of brown clay silt. It was noted in most of the pits that finds, animal bone and charcoal (charred wood and plant remains), were distributed evenly within the fills. No indication of deliberately placed material was observed during fieldwork.

Flint was found in every feature and was most numerous in Pit 5027. A similar range of flint occurred in these pits (see Cramp and Lamdin-Whymark below), with evidence for on-site knapping including hammerstones, and a restricted range of tools dominated by edge retouched flakes and serrated flakes. Scrapers are relatively under represented, whilst arrowheads are absent. No whole polished implements were found, although fragments were present in a number of the pits. Use wear analysis indicates that some of the serrated and non-serrated flakes were used for working plant material – possibly rushes and reeds to produce fibres for textile. Evidence for the use of fires and hearths comes from the occurrence of burnt flint, charred wood and plants (fuel) and the sooting of pots during cooking. Both cereal and hazelnut shells are represented in all of the seven pits (Table 34 and Huckerby below). A minimum number of ten pottery vessels were identified. Half of the identified vessels were recovered from pit 5025, while with the exception of pit 5027 that contained two vessels, most pits only contained a single fragmentary vessel. Pit 5025 contained the remains from two relatively large bowls as well as two cups and the rim from a decorated bowl. Fragments of single decorated bowls came from pits 5019 and 5028 respectively, while the vessel from pit 5035 is plain. Animal bone occurred in five of the pits, with the majority coming from pit 5027 and the remainder from pits 5019, 5025 and 5035. Most of the bone is cattle with some sheep/goat and pig.

Isolated pits – 5021, 5023

Two relatively smaller pits, spaced 6.0 m. apart, occurred some 12.0 m. to the SW. of the main cluster of pits. These pits were smaller in size but had similar fills to many of those in the pit cluster. Other than a few flints of early Neolithic character in pit 5021 they contained no finds or ecofacts.

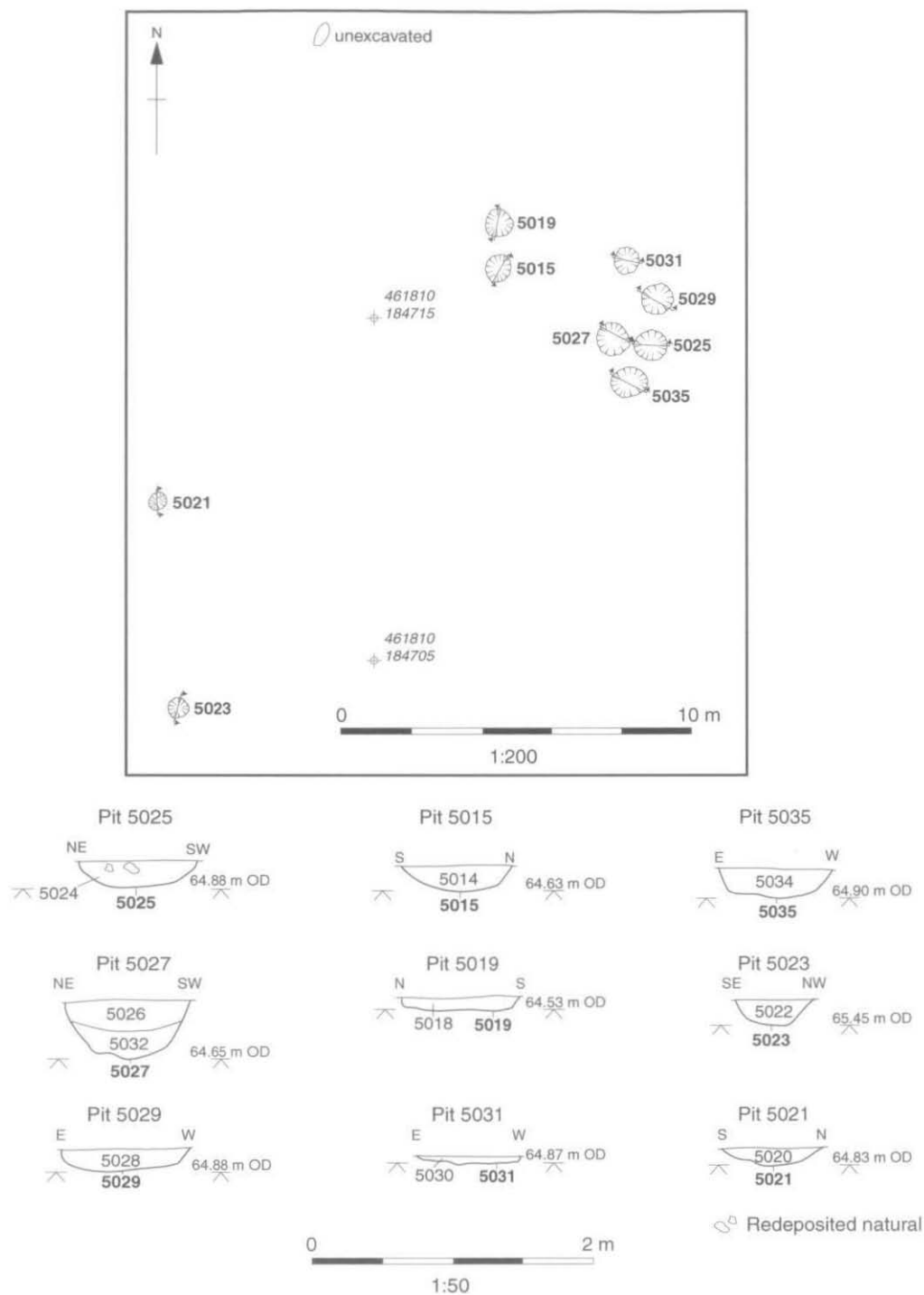


Fig. 17. Neolithic pit group, South Stoke

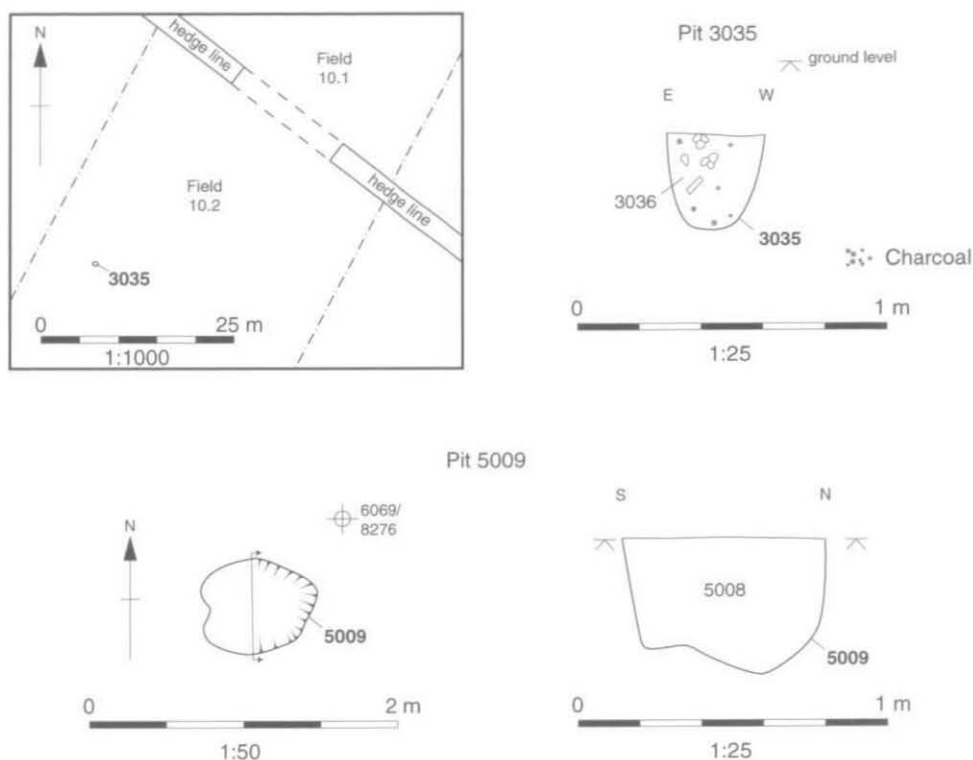


Fig. 18. Plans and sections of pits 3035 and 5009

Bronze Age

Two pits of Bronze Age date were excavated within the pipe trench, in fields 2.2 and 10.1 respectively. Pit 5009 (Fig. 18) was sub-circular in plan and had a rounded base with near vertical sides. It measured 0.66 m. in diameter by 0.44 m. in depth. The single fill was a friable silty-clay, with frequent inclusions of charcoal. Two sherds of Beaker pottery, one flint blade, one flint flake and a quantity of burnt flints was recovered from the fill. Pit 3035 (Fig. 18) was circular in plan and had a flat base with near vertical sides. It measured 0.28 m. in diameter by 0.32 m. in depth. The single fill was a friable silty-clay, with occasional inclusions of flint and charcoal. Seventeen sherds of late Bronze Age pottery and two sherds of Iron Age pottery were recovered.

Middle Iron Age

The only evidence for MIA activity was right-angled ditch (2005), perhaps representing the corner of a rectangular enclosure, excavated in Trench 20 (Fig. 3). The ditch was *c.* 7.20 m. in length and orientated E.-W. by NE.-SW. It was 1.0 m. wide and 0.30 m. deep. In profile the ditch had a flat base and steeply sloping sides. The single fill, (2006), a tenacious sandy-silt with frequent inclusions of gravel, produced eight sherds of MIA pottery.

Roman

A pit (4036) containing a cremation burial was excavated between evaluation Trenches 20 and 21 in field 12.2 (Figs 3 and 15). Pit 4036 was circular in plan and had an irregular base and steeply sloping concave sides. It was originally identified as a hearth and half-sectioned, consequently the complete deposit was not retrieved for analysis. The pit measured 0.70 m. in diameter by 0.27 m. in depth. The

primary fill (4037) occupied the lower 0.16 m. of the pit and was a tenacious silty-clay, with moderate amounts of pebbles. Overlying this and infilling the remainder of the pit was a friable clay-silt (4038). The cremated remains of a sub-adult skeleton, along with two beads (one glass and one bone) came from the fills.

Saxon

A single stretch of Saxon ditch (4030) was revealed running in a N.-S. direction in field 13.3, NW. of Bucklebury (Fig. 3). The ditch was wide and shallow and filled by a simple sequence of deposits. Where exposed the ditch measured 29.5 m. x 5.0 m. and 0.40 m. deep. It had a fairly flat to irregular base and steeply sloping sides. The primary fill (4032) occupied the lower 0.16 m. of the ditch and was a tenacious clay-silt with frequent inclusions of stone. Overlying this and infilling the remainder of the ditch was a layer of friable clay-silt (4031) with occasional inclusions of stone. Twenty-eight sherds of Saxon pottery and 39 fragments of animal bone were recovered from the fill.

Medieval

A single truncated medieval pit (3037) was discovered in the NW. corner of field 9.4 (Fig. 3). It measured 2.50 m. x 2.0 m. and 0.12 m. in depth. The single fill was a tenacious clay-silt, with frequent inclusions of flint and occasional inclusions of charcoal. Three sherds of medieval pottery were recovered from the fill.

A single tree-throw hole (2001) was revealed in Trench 2 (Fig. 2); it was irregular in plan and profile. Five sherds of medieval pottery were recovered from the fill.

Post-medieval

There were a number of post-medieval features spread out along the pipeline route. These included a number of rubbish pits (3004, 3008, 3010, 3014 and 3024), a late 19th-20th-century boundary ditch (3002), a series of water meadow features on the N. edge of field 13.3 (4027) and a pillbox (3013) in field 9.2 (Fig. 3).

Unphased

A number of features, including pits and ditches, remain unphased as they had no stratigraphic relationships and contained no diagnostic artefacts. These features were scattered along the route of the pipeline (further details may be found in the archive).

THE FINDS

PREHISTORIC POTTERY by EMILY EDWARDS, MARK PETERS and ALISTAIR BARCLAY

A total of 361 sherds (1,540.0 g.) of pottery were recovered from context group 5000 at South Stoke. The assemblage was dominated by early Neolithic pottery (340 sherds, 1,420 g. Table 5), which derived from a group of seven pits. Two sherds of domestic Beaker (13.0 g.) and two sherds of Iron Age pottery (18.0 g.) were recovered from a tree-throw hole (5009). A further 17 sherds (89.0 g.) of late Bronze Age pottery were recovered from a single posthole (ctx 3036).

Methodology

The assemblage was quantified by weight and sherd number. Where possible refitting fresh breaks were excluded from the sherd count. The pottery was characterised by fabric, form, surface treatment, decoration and colour. The sherds were analysed using a binocular microscope (x 20) and were divided into fabric groups by principal inclusion type, denoted by OA standard codes: G = grog, F = flint, A = sand, B = glauconitic sand, Q = quartzite and Pfe = ferruginous pellets. Size range for inclusions: 1 = <1 mm. fine; 2 = 1-3 mm. fine-medium and 3 = >3 mm. medium-coarse. Rim sherds were examined and assigned, where possible, to vessel form. Details of surface treatment, firing, sooting and decoration were noted. The data was entered into an Access database, which forms part of the archive.

TABLE 5. SUMMARY BREAKDOWN OF EARLIER PREHISTORIC POTTERY BY CONTEXT AND PERIOD

(EN = EARLY NEOLITHIC, IA = IRON AGE, LNEBA = LATE NEOLITHIC/EARLY BRONZE AGE, LBA = LATE BRONZE AGE)

<i>Feature</i>	<i>Context</i>	<i>Count</i>	<i>Weight (g.)</i>	<i>Period</i>	<i>Comments</i>
Colluvium	5012	8	20	EN	Subsoil layer – residual. Small and plain sherds
subsoil	5044	2	18	IA	Undiagnostic body sherds
Tree-throw hole 5009	5008	2	13	LNEBA	Domestic Beaker, Vessel 10
Pit 5015	5014	19	62	EN	Small plain vessel fragments
Pit 5019	5016	77	258	EN	Small plain and decorated sherds
Pit 5019	5018	15	65	EN	Decorated bowl Vessel 1
Pit 5025	5024	84	574	EN	Plain and decorated bowls Vessels 2-6
Pit 5027	5026	56	169	EN	Decorated bowl. Vessel 7
Pit 5027	5032	41	118	EN	Plain bowl. Vessel 8
Pit 5029	5028	6	42	EN	Decorated bowl. Vessels 9-10
Pit 5031	5030	7	2	EN	Undiagnostic crumbs
Pit 5035	5034	27	110	EN	Plain bowl Vessel 11
Pit/posthole 3035	3036	17	89	LBA	Vessels 12-13
Total		361	1540		

Early Neolithic

A total of 340 sherds (1420.0 g.) representing a minimum of 10 vessels was recovered from seven pits of early Neolithic date.

Fabrics

Eight early Neolithic fabrics were defined (see Table 6). Six of these fabrics are principally flint-tempered with varying quantities of sand and, in some cases, quartzite. The remaining two are principally sand-tempered and quartzite-tempered. The fabrics are all poorly sorted: density and size of flint vary a great deal in one pot. It appears that all the fabrics observed are local and that the sand is likely to be naturally occurring.

Condition

With the exception of two vessels (Fig. 19. 2 and 6), little more than 5% of any vessel was represented and sherds were mostly sized under 40 x 40 mm. Several of these fragments were subsequently found to rejoin. The best example of this is pit 5025, although there were body fragments from other pits (such as 5027) that refitted. This suggests that the assemblage represents vessels that were deposited soon after breakage; further smashing and trampling may have occurred but the material was not worn or rolled. Some of the sherds had darkened surfaces, which may indicate some post-breakage alteration.

TABLE 6. QUANTIFICATION OF EARLY NEOLITHIC FABRICS

<i>Fabric Codes Description</i>		<i>Vessels (Fig. 19)</i>	<i>No. of sherds</i>	<i>Weight (g.)</i>
AF1/EN	Moderate micaceous sand, >1 mm., sparse flint >2 mm.		1	1
F2/EN	Flint, > 2 mm. Poorly sorted (ranging from sparse to common). Clay sometimes micaceous.	7	30	94
F3/EN	Sparse to common calcined flint > 3 mm.	2, 4, 6	62	491
FA2/EN	Sparse to moderate flint, > 2 mm. (rare F3). Very poorly sorted. Rare to sparse sand. Sometimes micaceous clay.		84	202
FA3/EN	Poorly sorted calcined flint, sparse to common, > 3 mm. Rare to sparse F2 and rare to moderate sand, > 1 mm. Sometimes micaceous clay.	1, 8-10	136	493
FAQ2/EN	Moderate flint sized > 2 mm. Moderate > 1 mm. Rare quartzite > 2 mm. Sometimes micaceous clay.		3	13
FAQ3/EN	Poorly sorted calcined flint, sparse to moderate F3 and sparse F2. Moderate sand >1 mm. Rare quartzite > 2 mm. Sometimes micaceous clay.	3, 5	9	84
QBF3/EN	Poorly sorted quartzite. Moderate quartzite, > 3 mm. and sparse quartzite > 2 mm. Moderate glauconitic sand, > 1 mm. Rare F, > 2 mm. Micaceous clay.	11	15	42
Total			340	1420

Manufacture and surface treatment

Surface treatment was limited and irregularly applied, with only 24% of the early Neolithic assemblage having been smoothed, burnished or wiped. There are spalling patches on two vessels (Fig. 19.2 and 6). The lugged vessel, (Fig.19.6), has an irregularly fashioned rim that varies in form from everted to semi-rolled, which may indicate sagging of the pot. Vessel 2 appears to have broken along the coil break.

Unoxidised colours mainly comprise patches of greys and browns with some fire clouding, indicating a short, open firing at low temperatures. Several vessels with oxidised surfaces suggest firing and cooling in aerobic conditions. Some are oxidised only at the core. This can be caused by blackening of an oxidised vessel during cooking (or after deposition) and by anaerobic firing of a finely textured, vessel.³¹

Form, decoration and character of the assemblage

Of the 340 sherds recovered, a minimum of ten vessels were represented. Of the ten early Neolithic rims three are everted (Fig.19.2, 6 and 11) and two are simple (Fig. 19.3 and 5). The remaining rims are rolled (Fig. 19.8-9) or semi-rolled (Fig.19.1, 4) and one is rolled and externally thickened (Fig.19.7). Two rims are decorated (Fig.19.1, 7) with diagonal incisions. A body sherd is decorated with an incised line and round impressions that were possibly made with a stick or bone point. This type of decoration

³¹ O.S. Rye, *Pottery Technology: Principles and Reconstruction* (1981), 114-18

is common and can be paralleled at the enclosure sites of Abingdon,³² some 20 km. to the NW., and at Maiden Bower, Bucks.³³ some 50 km. to the NE.

The assemblage is made up of various cup and bowl forms (Fig. 19). Two plain cups (Fig. 19.3 and 5) come from pits 5025 and 5035; both are greater than 120 mm. in diameter.³⁴ The remaining vessels can all be classed as bowls and include a range of open (Fig. 19.1 and 11) and closed (Fig. 19.1-2, 7-9, 11) forms with 'S' or hemispherical profiles. Vessel mouth diameters range in size from 135-210 mm. for the cups and small bowls and 170-270 mm. for the bowls.

The range of vessels forms, the absence of shoulders and the presence of decorated vessels indicate affinities with the plain and decorated bowl assemblages of the mid 4th millennium cal BC (c. 3700-3350 BC). This is supported by the results of eight radiocarbon dates obtained on charred hazelnut recovered from five of the seven pits (see Table 4 above).

Use and function

According to Howard,³⁵ the flint, sand and quartzite fabrics listed above are all porous enough to be used for cooking. This can be supported by the predominance of closed forms and, in one case, by clear evidence for cooking (charred residue on sherds from 5026). Other sherds have been fire-blackened, which may be the result of cooking on an open hearth. The cups may have been individual eating vessels, drinking vessels or for serving foodstuffs required in small quantities. The association with flint tools, a rubber, possible quernstone fragment, grain and charred hazelnuts suggests that the deposits symbolise fundamental aspects of life, of which pottery is an important element. The deposit may be linked to an event, such as feasting or the closure of a temporary site. What is clear is that the action of placing these articles in closely clustered pits constituted an important final role in the life of the pottery.

Discussion

It is relatively rare to find early Neolithic pottery in pits in the Upper Thames.³⁶ At Benson,³⁷ N. of Wallingford, a closely clustered set of early Neolithic pits contained approximately 30 vessels (690 sherds). Plain bowl³⁸ is more likely to be associated with tree-throw holes, occupation spreads and middens, whilst minimally decorated vessels are often associated with mortuary enclosures, such as those at Radley or New Wintles Farm³⁹ or flat graves, such as the one discovered at Pangbourne.⁴⁰ The presence of decorated incised rims is significant as the only decorated vessels to be found outside causewayed enclosures have been decorated with diagonal incisions. More elaborately decorated vessels tend only to be found at enclosure sites.

³² M. Avery, 'The Neolithic Causewayed Enclosure, Abingdon', in H. J. Case and A. W. R. Whittle (eds.), *Settlement Patterns in the Oxford Region; Excavations at the Abingdon Causewayed Enclosure and other Sites* (CBA Res. Rep. 44, 1982), 10-49.

³³ Decorated pottery from Maiden Bower illustrated in fig. 6, in S. Piggott, 'The Neolithic pottery of the British Isles', *Archaeol. J.* 88 (1931), 67-158.

³⁴ R. Cleal, 'The prehistoric pottery', in J. Richards, *The Stonehenge Environs Project* (EH Archaeol Rep 16, 1988), 45-57.

³⁵ H. Howard, 'The Wake of Distribution: towards an integrated Approach to Ceramic Studies in Prehistoric Britain', in H. Howard and E. Morris (eds.), *Production and Distribution: a Ceramic Viewpoint* (BAR British Series 120, 1981), 1-53.

³⁶ R. Holgate, *Neolithic settlement of the Thames Basin* (BAR British Series. 194, 1988).

³⁷ J. Pine, and S. Ford, 'Excavation of Neolithic, late Bronze Age, early Iron Age and early Saxon Features at St Helen's Avenue, Benson, Oxfordshire', *Oxoniensia* (forthcoming) 10-16, Figures 10 and 11.

³⁸ A. Barclay, 'Ceramic lives', in A. Woodward and J.D. Hill (eds.), *Prehistoric Britain: the Ceramic Basis* (Prehistoric Ceramic Research Group Occasional Publication 3, 2002), 86-95.

³⁹ R. Bradley, 'The Excavation of an oval Barrow beside the Abingdon Enclosure, Oxfordshire', PPS 58 (1992), 127-42; R. Kenward, 'A Neolithic Burial at New Wintles Farm, Eynsham', in H.J. Case and A.R.W. Whittle (eds.), op. cit. note 32, 51-4.

⁴⁰ S. Piggott, 'Neolithic Pottery and other Remains from Pangbourne, Berks and Caversham, Oxon', *Proc. Preh. Soc. East Anglia*, 6 (1928), 30-9.

Local early Neolithic activity has already been noted and assemblages of plain bowl have been found in the ditches of a bank barrow at North Stoke⁴¹ and at the site of a possible 'causewayed' enclosure at Gatehampton Farm, Goring,⁴² 1 km. S. of South Stoke. The contemporary assemblage of 30 vessels recovered from pit deposits at Benson⁴³ is notably different from the South Stoke assemblage and includes pots with heavy expanded rims and carinations, as well as necked vessels. Despite the apparent differences in form between the two assemblages, two radiocarbon dates (KIA-9530 4736 ± 32 and KIA-9531 4697 ± 35 on charred hazelnut)⁴⁴ indicate that they belong to the same broad period of the 4th millennium (3650-3350 cal BC). Similar closed and globular forms to South Stoke have been identified at Goring.⁴⁵

The predominantly closed rounded forms at South Stoke can be closely paralleled at the causewayed enclosure sites of Abingdon,⁴⁶ Staines⁴⁷ and Windmill Hill.⁴⁸ Examples of closed rounded forms, lugged vessels and pierced vessels with everted rims belonging to a similar period can all be found on these sites.

Catalogue

(Th = thickness; Dia. = diameter; Ext. = exterior; Int. = interior; ST = surface treatment; BU = burnished; WP = wiped; SM = smoothed. Colours: BL - black; BL-GBR - black to grey-brown; G - grey; RBR - red-brown; YBR - yellow-brown)

Pit 5019

1. 5018. Form: semi-rolled rim from a closed bowl (1 sherd, 6 g.). Fabric: FA3. Firing: Ext./core/ int.; YBR. Th: 9.7 mm. Decoration: Faint horizontal incisions on top and diagonal incisions on external and internal faces. Rim dia.: 210 mm.

Pit 5025

2. 5024. Form: A deep, almost straight sided bowl with a simple everted rim (17 sherds, 194 g.). Fabric: F3. Firing: Ext; BL, core; G-GBR, int; BL-GBR. Th: Average varies from 8.5-10.5 mm. Rim dia. 270 mm. ST: Ext; BU, int; WP, SM.

3. 5024. Form: closed cup with a simple rim (1 sherd, 20 g.). Fabric: FAQ3. Firing: Ext; GBR, core/ int; G. Th: 6.9 mm. Rim dia. 135 mm.

4. 5024. Form: small open bowl with a semi-rolled rim (4 sherds, 29 g.). Fabric: F3. Firing: Ext./int.; YBR, core; GBR. Th: 7.0-7.8 mm. Rim dia. 170 mm. Pierced below rim.

5. 5024. Form: large cup or bowl, closed form with a simple rim (2 sherds, 25 g.). Fabric: FA3. Firing: Ext; RBR, core; YBR, core; G. Th: 8.0 mm. Rim dia. 210 mm.

6. 5024. Form: rounded closed bowl, simple lug and an everted rim (7 sherds, 113 g.). Refitting sherds. Fabric: F3. Firing: BL, core; GBR, Int; G. Th: 8.5 mm. Rim Diameter: 240 mm. ST: Ext; SM, int; SM. Vessel has a spalled surface.

Pit 5027

7. 5026. Form: heavy externally thickened rolled rim (2 sherds, 11 g.). Fabric: F2. Firing: Ext; BL, core/ int. GBR. Th: 8.9 mm. Decoration: oblique incisions across rim top. Coil break.

⁴¹ H.J. Case, 'The linear ditches and southern enclosure, North Stoke', in H. J. Case and A. W. R. Whittle (eds.), op. cit. note 32, 60-75.

⁴² R. Cleal, 'Neolithic and Bronze Age pottery', in T.G. Allen, *Lithics and Landscape: Archaeological Discoveries on the Thames Water Pipeline at Gatehampton Farm, Goring, Oxfordshire 1985-92* (Thames Valley Landscape Monograph 7, Oxford University Committee for Archaeology, 1995), 85-94.

⁴³ J. Timby, 'The Pottery' in Pine and Ford, op. cit. note 37.

⁴⁴ 'Radiocarbon Dating' in Pine and Ford, op. cit. note 37.

⁴⁵ Op. cit. note 42.

⁴⁶ Op. cit. note 32.

⁴⁷ R. Robertson-Mackay, 'The Neolithic Causewayed Enclosure at Staines, Surrey: Excavations 1961-63', PPS 53 (1987), 23-129.

⁴⁸ I.F. Smith, *Windmill Hill and Avebury* (Oxford, 1985).

8. 5032. Form: rolled rim sherds, two refitting (4 sherds, 13 g.). Fabric: FA3. Firing: Ext; RBR-GBR, core; GBR, int; RBR. Th: 8.8 mm. ST: Ext; SM, int; SM.

Pit 5029

9-10. 5016. Form: rolled rim and decorated body sherd from a small bowl of uncertain form (4 sherds, 14 g.). Fabric: FA3. Firing: Ext; RBR, core; BR, int; missing. Th: 9.2 mm. ST: Ext; SM, int; SM.

Pit 5035

11. 5034. Form: open bowl with an everted rim (2 sherds, 25 g.). Fabric: QBF3. Firing: Ext; GBR, core/int; YBR. Th: 7.4 mm.

Beaker Pottery

Two sherds of Beaker pottery were recovered from the fill of tree-throw hole 5009. The presence of Iron Age pottery within the same feature indicates that the Beaker sherds were probably redeposited. The two sherds refit to form the rim of a single Beaker vessel with applied cordons.

Fabric

FAG2/LNEBA Hard fired with moderately sorted temper. Sparse calcined flint, > 2 mm. Sparse sand >1 mm. Sparse grog, >1 mm.

Discussion

Beaker pottery is quite common in the Upper Thames Valley and, has been found near to South Stoke from the monument complex at North Stoke⁴⁹ and at Gatehampton Farm, Goring.⁵⁰

Catalogue

12. 5008. Form: Pointed, bevelled rim. 2, 13 g. Fabric: FAG2. Firing: Ext. /core/ int.; YBR. Th: 12.2. ST: Ext; SM, int; SM. Decoration: Smoothed horizontal cordons.

Late Bronze Age and Iron Age pottery

A total of 19 sherds (107 g.) of later prehistoric pottery were recovered from two features. With the exception of two Iron Age sherds all of this pottery is of late Bronze Age (LBA) date.

Fabrics

Seven fabrics were recorded (see Table 7) of which six are LBA and one is IA (APFeF1). All of the fabrics are local in origin. The sand and ferruginous pellets are likely to be naturally occurring within the clay.

Late Bronze Age pottery

A total 17 sherds (89 g.) of LBA pottery (1000-750 cal BC) was recovered from pit/posthole 3035 (fill 3036). This included two rounded, everted rims (Fig. 19.13) and a shouldered sherd (Fig. 19.14), representing two vessels. On one body sherd, two shallow finger pits could be observed. The fabrics have affinities with Barrett's⁵¹ plain and decorated ware assemblages of the 10th- to 8th-centuries cal BC. Similar forms occur at Whitecross Farm, Wallingford.⁵²

⁴⁹ S. Ford and A. Hazell, 'Prehistoric, Roman and Anglo-Saxon settlement Patterns at North Stoke, Oxfordshire', *Oxoniensia*, liv (1989), 7-24.

⁵⁰ Cleal, *op. cit.* note 42.

⁵¹ J. Barrett, 'The pottery of the later Bronze Age in lowland England', *Proc. Prehist. Soc.* 46 (1980), 297-319.

⁵² A. Barclay, 'Late Bronze Age pottery', in A. Cromarty, A. Barclay, G. Lambrick and M. Robinson, *Late Bronze Age Ritual and Habitation on a Thames Eyot at Whitecross Farm, Wallingford, the archaeology of the Wallingford Bypass, 1986-92* (Thames Valley Landscapes Monograph 22, forthcoming).

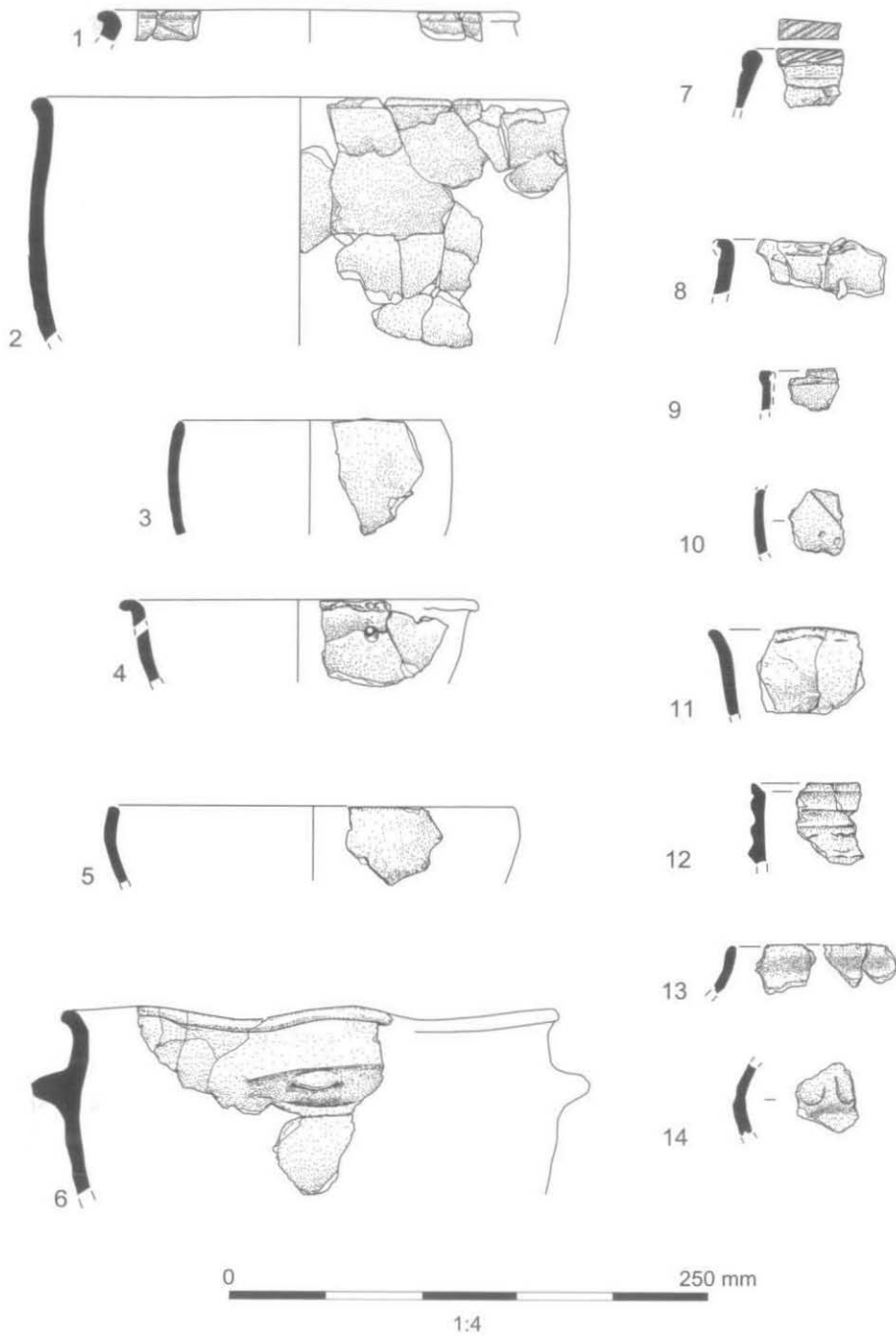


Fig. 19. Neolithic and Late Bronze Age pottery

TABLE 7. QUANTIFICATION OF LATE BRONZE AGE AND IRON AGE FABRICS

<i>Fabric</i>	<i>Fabric description</i>	<i>No. of sherds</i>	<i>Weight (g.)</i>	<i>Comments</i>
F1	Common well sorted angular flint >1 mm.	1	5	Small abraded sherds
FA1	Sparse to moderate, poorly sorted angular flint, > 1mm. Rare sand	5	20	Small abraded sherds
F2	Common, well sorted, subangular flint >2 mm.	2	6	Small abraded sherds
F3	Moderate, poorly sorted, calcined red and grey flint, >5 mm.	3	6	Small abraded sherds, one charred residue
FA2	Micaceous, fine, common sand and moderate, angular flint >1 mm.	2	12	One shoulder
FPfe2	Common, moderately sorted flint >2 mm. Rare ironstone >2 mm.	4	40	Two rims, body sherd with light finger impressions
APF1/IA	Common sand, > 1 mm. Sparse ferruginous pellets, >1 mm. Rare flint > 2 mm. Not micaceous clay.	2	18	
Total		19	107	

Iron Age pottery

Two sherds in probable Iron Age fabric, APF1, were recovered from tree-throw hole 5009.

Catalogue (Fig. 19)

13. 3036. Form: Simple, rounded everted rim (2 sherds, 6 g.). Fabric: FPfe2. Firing: Ext. / int.; BL-RBR, core; BL. Th: 5 mm.

14. 3036. Form: shouldered sherd (1, 10 g.). Fabric: FA2. Firing: ext; BL-G, core/ int.; G. Th: 5 mm.

IRON AGE, ROMAN, SAXON AND MEDIEVAL POTTERY by JANE TIMBY and DAN STANSBIE

An assemblage of some 4349 sherds (48.0 kg.) of pottery was recovered from the three main areas investigated dating to the Iron Age and Roman periods, with a further 68 sherds, 0.90 kg. of early Saxon and medieval date. The largest group was recovered from Woodcote Road. Smaller assemblages of 1574 sherds (13.9 kg.) and 503 sherds (4.6 kg.) were recovered from Enwick Shaw Pit and from the N. end of the pipeline between Ipsden and South Stoke respectively. The latter assemblage showed the greatest chronological range with material spanning the Iron Age to medieval periods, whereas the former two groups of material largely date to the Iron Age and Roman periods only. The three assemblages are reported on separately below following a comment on the methodology employed.

Methodology

The later prehistoric material was sorted into fabrics on the basis of the main inclusions present. Sorting was carried out macroscopically with the assistance of a x20 binocular microscope. Following the PCRG⁵³ guidelines designation of fabrics was based on the aplastic inclusions present and the fabrics

⁵³ PCRG, Prehistoric Ceramics Research Group, *The Study of Later Prehistoric Pottery: Guidelines for Analysis and Publication* (Occas. paper 2, 1997).

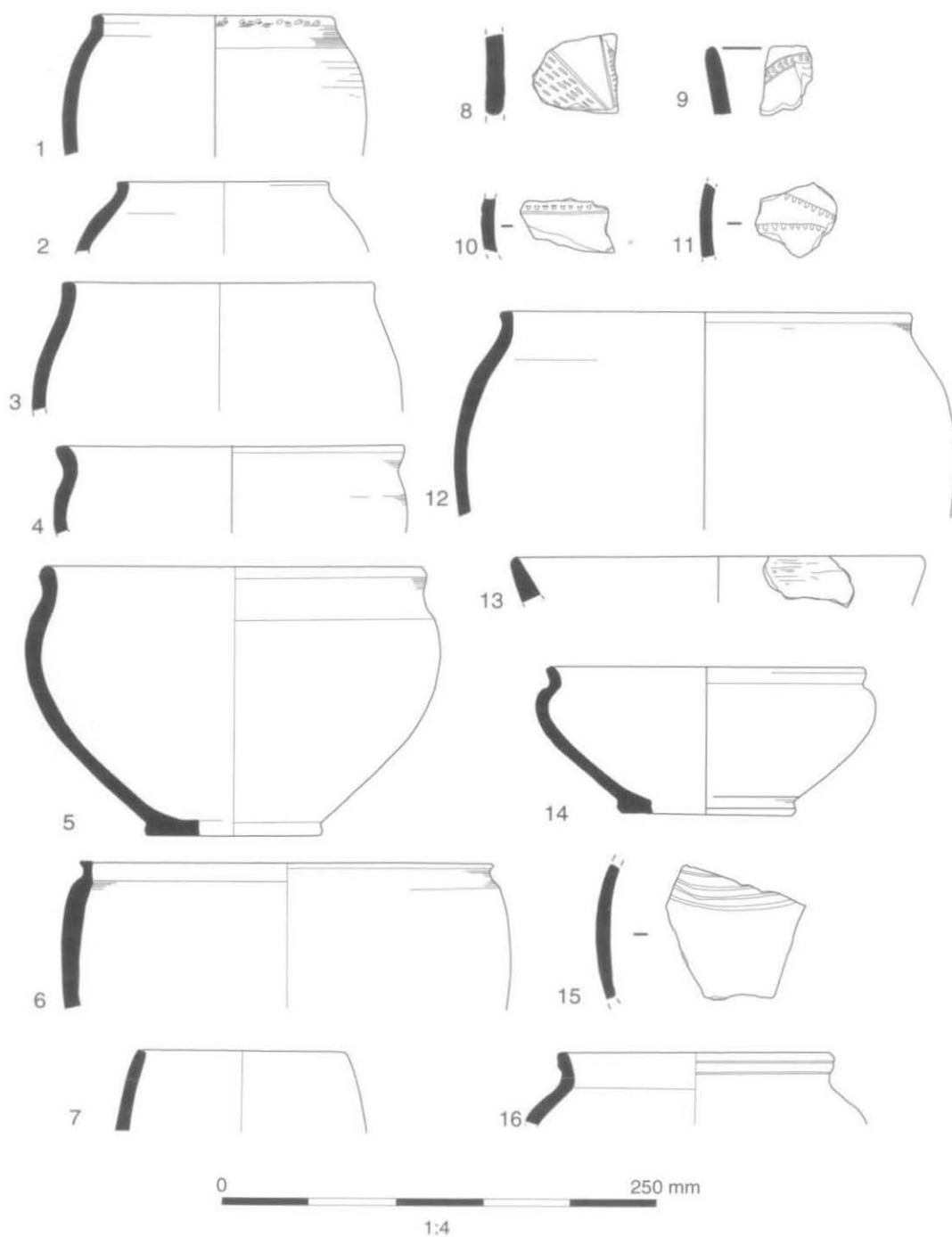


Fig. 20. Iron Age and Roman pottery, South Stoke, Woodcote Road

coded using the first two letters of the most distinctive inclusions present, for example, FL – flint, SA – sand, GR – grog, SH – shell, CA – mixed calcareous material, FE – ferruginous compounds and OR – organic. Further subdivision was made on the grade and frequency of the inclusions identified. Most of the defined later prehistoric fabrics feature in the Woodcote Road assemblage where the individual descriptions can be found.

The Roman fabrics were sorted using the OA recording system.⁵⁴ As few of the fabrics could be recognised as traded or regional types many of the codes used are generic rather than specific. The Saxon wares are described by fabric and the medieval wares by reference to other published material.

The assemblages were quantified by sherd count, weight and estimated vessel equivalents (rim) EVE for each recorded context. The data was entered onto Excel spreadsheets copies of which can be found in the site archive.

In the absence of stratigraphic sequences for the sites the features have been divided on the absence or presence of certain chronological ceramic markers. The MIA is based on the absence of grog-tempered wares whereas features designated LIA-ERO include all those features with grog-tempered material alongside the other Iron Age fabrics but for the most part exclude Roman wares proper. This group is provisionally dated to the later Iron Age probably extending up to at least the Flavian period. The later 1st century-early 2nd century AD is marked by the appearance of Roman wares proper.

Woodcote Road

An assemblage of some 2340 sherds of pottery (30.65 kg.) was recovered. Most of the pottery, some 71% by sherd count, dates to the M-LIA period, the remainder is Roman with material of 1st to late 3rd/early 4th-century date. Unclassified small crumbs and very small sherds account for 4.5% by count, 0.3% by weight of the complete assemblage. Table 8 provides a quantified summary of the fabrics identified.

The sherds mainly came from pits and ditches spread across the investigated area. In total some 77 features yielded pottery, and of these, some 15% produced assemblages in excess of 50 sherds and 43% produced less than 10 sherds, the remainder falling in between. This clearly has some impact on the reliability of the dating. The reoccurrence of the same sherds throughout the chronological range of occupation would suggest either that there is a relatively high percentage of redeposited material in many of the features, or that some of the fabrics are quite long-lived. The evidence would suggest both these factors were operating. The assemblage would appear to be quite local and shares many recognisable traits with better known assemblages to the W. in the Thames Valley proper or to the S.

Iron Age

Description of fabrics and associated forms

In total 25 fabrics were identified for the M-LIA assemblage for Woodcote Road. For the most part these comprise handmade wares but a few wheel-made examples also feature in the later sequence. The 25 fabrics can be condensed down into six main groups: calcareous, ferruginous, flint-tempered, sandy, organic-tempered and grog-tempered (Table 9). Looking at the assemblage as a whole it can be seen that sandy wares dominate on sherd count (41.5%) and grog-tempered wares form a close second (38.9%). On the basis of weight and EVE grog-tempered wares form the dominant group. This is probably accounted for in part by the longevity of the fabric into the Roman period and the fact that many of the later grogged wares feature as large storage jars. Of the other fabric groups, organic wares account for 8.2% by count, followed by calcareous wares at 5.8%, flint-tempered wares at 3.6% and ferruginous wares at 2%.

Although most of the assemblage appears to date from the later MIA there are a few redeposited sherds present that might hint at an EIA presence in the locality. Notable sherds include a bodysherd from a tripartite bowl with burnished surfaces from pit 287; a decorated sherd in the All-Cannings Cross style from pit 204 (Fig. 20.8), a haematite-coated sherd (fabrics SA6) from pit 143 and a jar with a notched rim (Fig. 20.1) from pit 398.

⁵⁴ P. Booth, *Oxford Archaeology Roman Pottery Recording System* (unpub. manuscript).

TABLE 8. QUANTIFIED SUMMARY OF IRON AGE AND ROMAN FABRICS (WOODCOTE ROAD)

	<i>Fabric</i>	<i>Description</i>	<i>No</i>	<i>%</i>	<i>Wt (g.)</i>	<i>%</i>	<i>EVE</i>	<i>%</i>
Later prehistoric	CA1	Calcareous	30	28.6	212	17.0	18	35.3
	CA2	Calcareous	1	1.0	52	4.2	18	35.3
	CA3	sandy with calcareous	13	12.4	134	10.8	0	0.0
	CAFL	calcareous with flint	36	34.3	548	44.0	2	3.9
	SH1	fossil shell, limestone	17	16.2	274	22.0	13	25.5
	SH2	alluvial shell	8	7.6	25	2.0	0	0.0
	FE1	iron-rich	22	21.0	397	31.9	20	39.2
	FESA	sandy with iron	2	1.9	14	1.1	0	0.0
	FECA	iron and calcareous	12	11.4	90	7.2	0	0.0
	FEFL	iron and flint	1	1.0	3	0.2	0	0.0
	FL1	Flint	21	20.0	169	13.6	0	0.0
	FL2	finer flint	45	42.9	344	27.6	5	9.8
	GR1	grog-tempered	620	590.5	9868	792.6	375	735.3
	GRFL	grog and flint	5	4.8	73	5.9	15	29.4
	GRSA	grog and sand	84	80.0	5117	411.0	41	80.4
	SA1	glaucconitic sandy	228	217.1	2546	204.5	109	213.7
	SA2	medium sandy	328	312.4	2687	215.8	147	288.2
	SA1FL	SA1 with flint	11	10.5	114	9.2	10	19.6
	SA1CA	SA1 with fossil shell	4	3.8	31	2.5	0	0.0
	SA2FL	SA2 with flint	54	51.4	877	70.4	22	43.1
	SA2CA	SA2 with shell/limestone	1	1.0	2	0.2	0	0.0
	SA3	Sandy	8	7.6	105	8.4	0	0.0
	SA4	Sandy	8	7.6	83	6.7	5	9.8
	SA5	Sandy	114	108.6	1166	93.7	26	51.0
	SA6	fine sandy, haematite slip	1	1.0	9	0.7	0	0.0
	OR1	organic-tempered	150	142.9	894	71.8	16	31.4
Sub-total			105	100.0	1245	100.0	51	100.0
ROMAN								
Imports	S20	South Gaulish samian	4	1.0	32	0.7	0	0.0
	S30	Central Gaulish samian	7	1.7	31	0.7	17	4.1
	A	Dressel Isp amphora	1	0.2	112	2.4	11	2.7
Regional	W21	Verulamium whiteware	1	0.2	43	0.9	0	0.0
	B11	Dorset black burnished ware	2	0.5	30	0.6	7	1.7
	F50	misc colour-coats	3	0.7	49	1.0	25	6.1
	R10	fine grey sandy ware	49	12.0	525	11.1	61	14.8
	R20	medium sandy greyware	184	45.1	2249	47.7	111	27.0
	R50	black sandy ware	69	16.9	572	12.1	67	16.3
	?R85	black micaceous ware	9	2.2	48	1.0	0	0.0
	O10	fine oxidised	10	2.5	187	4.0	7	1.7
	O20	medium sandy oxidised	25	6.1	134	2.8	53	12.9
	O80	grog-tempered	5	1.2	60	1.3	0	0.0
	M50	unknown mortaria	29	7.1	464	9.8	52	12.7
	F51	Oxon colour-coat	7	1.7	37	0.8	0	0.0
	W12	Oxon white ware	1	0.2	6	0.1	0	0.0
	W11	Oxon parchment ware	1	0.2	126	2.7	0	0.0
	M22	Oxon whiteware mortaria	1	0.2	10	0.2	0	0.0
Sub-total			408	100.0	4715	100.0	411	100.0
	Misc	Miscellaneous/ crumbs	108	26.5	99	2.1	0	0.0

TABLE 9. SUMMARY OF MAIN LATER PREHISTORIC FABRIC GROUPS (WOODCOTE)

<i>Fabric</i>	<i>No</i>	<i>%</i>	<i>Wt (g.)</i>	<i>%</i>	<i>EVE</i>	<i>%</i>
Calcareous	105	5.8	1245	4.8	51	6.1
Ferruginous	37	2.0	504	2.0	20	2.4
Flint-tempered	66	3.6	513	2.0	5	0.6
Sandy	757	41.5	7620	29.5	319	37.9
Organic-tempered	150	8.2	894	3.5	16	1.9
Grog-tempered	709	38.9	15058	58.3	431	51.2
TOTAL	1824	100.0	25834	100.0	842	100.0

Calcareous wares

CA1: A dark brown or black ware with a dark grey-black core. The fine, slightly micaceous paste contains a sparse frequency of coarse calcareous material (fossil shell/limestone) with fragments up to 7 mm. in size. Handmade vessels. Only one featured sherd was present, a barrel-shaped jar with a burnished finish from pit 405.

CA2: A black, hard wheelmade ware. At x20 the paste contains a common frequency of moderately well sorted fine, rounded white calcareous inclusions including fine shell and fossil detritus such as bryozoa intermixed with a similarly sized scatter of rounded clear quartz not exceeding 0.5 mm. in size. Vessels include wheelmade necked bowls (Fig. 21.21).

CA3: A dark brown sandy ware containing a common frequency of fine-medium, rounded quartz sand and rare calcareous material comprising fossil shell and limestone with the coarser fragments up to 2 mm. in size. No featured sherds although a bodysherd from pit 94 had vertical scoring.

CAFL: A moderately hard ware with brown surfaces and a black core. The paste contains a scatter of coarse, rounded inclusions of chalk up to 4-5 mm., a scatter of coarse, angular calcined flint. At x20 a sparse scatter of fine rounded to sub-angular quartz with occasional large rounded, polished grains of quartz are visible. Featured sherds include a small jar rim from (173/5) and several bodysherds from a burnished jar with a countersunk handle from pit 305.

SH1: A black to dark brown ware with a sandy texture. The fabric contains a sparse frequency of white flint, occasional rounded quartz sand and iron and sparse fine alluvial shell. Only two rims were recovered, one from a barrel-shaped jar from pit 398; the other from a burnished jar with an expanded rim from pit 335.

SH2: A black to dark brown ware containing variable amounts of fossil shell and limestone. A rare fabric with just eight sherds recorded, one a base sherd.

Ferruginous wares

FE1: A soft, fine textured ware with a dark grey exterior and core and an orange-brown interior. The paste contains a sparse frequency of coarse, soft, sub-angular red-brown ferruginous grains up to 4-5 mm. across with no other visible inclusions. One sherd from ditch 30 has a burnished interior suggesting a bowl, and a rim from pit 496 may also be an open form (Fig. 21.12), otherwise most of the sherds appear to come from jar forms with just one rim from barrel-shaped jars from pit 335.

FEFL: Red-brown ware containing a sparse to common frequency of red sub-angular iron and angular calcined flint up to 1 mm. in size. At x20 rare grains of rounded quartz are present. Represented by a single sherd from a thin-walled vessel.

FESA: A sandy ware with distinctive grains of red-brown, irregularly-shaped iron inclusions. The paste contains a common frequency of fine quartz sand. No featured sherds.

FECA: A fine textured brown ware with variable amounts of ill-sorted iron and a sparse frequency of fossil shell/ limestone. A small group of 12 sherds the only featured piece being a sherd from a closed form with a handle springing from pit 113.

Flint-tempered ware

FL1: A moderately hard brown ware with a black core and interior surface with a harsh sandy texture. The paste contains a sparse to moderate frequency of angular, calcined flint up to 2-3 mm. in size but mainly finer and a scatter of fine, rounded quartz sand. One sherd from pit 204 has a burnished interior and exterior surface, otherwise no featured or other sherds with a surface finish were recovered.

FL2: A brown or black ware containing a sparse to moderate frequency of fine calcined flint, fragments up to 2 mm. Again featured sherds were sparse with just one rim from a large storage jar from pit 113. Within this fabric group is a sherd from an angular tripartite bowl with burnished surfaces from pit 287.

Sandy wares

SA1: A moderately hard black ware with a dark red-brown core or black with red margins. The paste contains a sparse to moderate frequency of ill-sorted fine, rounded to sub-angular quartz sand and a scatter of fine rounded dark brown grains of glauconite. Rare fragments of angular flint also occur. This is one of the commoner Iron Age fabrics recorded accounting for 14.4% by count of the assemblage. Vessels include barrel-shaped jars often with a highly burnished finish (Fig. 20.2-5). One sherd from pit 405 had a scratch-marked surface and occasional sherds were burnished. Two rims, from pits 463 may be from saucepan pot forms along with a decorated sherd (Fig. 20.9) from the same pit.

SA1FL: As SA1 but with sparse fragments of calcined flint. The only featured sherds again suggest barrel-shaped jars with examples from pits 31 and 405. One sherd from pit 204 is decorated with infilled demarcated zones (Fig. 20.8).

SA1CA: As SA1 but with sparse inclusions of fossil shell and limestone. A moderately rare fabric with no featured sherds although two pieces from pit 94 have a scratch-marked surface.

SA2: A black medium sandy ware, fairly soft. The paste contains a moderate to common frequency of moderately well-sorted, rounded to sub-angular, clear quartz. This is the commonest fabric recorded accounting for 20.7% by sherd count of the Iron Age assemblage. Vessels include mainly barrel-shaped jars, many with a burnished finish (Fig. 20.6). Other types of note include an unstratified bead rimmed jar, a round-bodied jar with a grooved rim from pit 101 (Fig. 20.16) and a saucepan-style pot from pit 197. A jar with a notched rim was recovered from pit 398 (Fig. 20.1).

SA2FL: Hard, black, sandy ware as SA2 containing sparse coarse flint inclusions up to 4 mm. in size. Represented by a total of some 52 sherds, 3% by count of the later prehistoric assemblage. Forms include barrel-shaped jars including some quite large examples such as the vessel from pit 31 (Fig. 20.13).

SA2CA: As SA2 with a sparse scatter of fossil shell/limestone. No featured sherds.

SA3: A brown ware with an orange interior and core. The moderately hard sandy textured paste contains sparse red iron and a moderate to common frequency of fine, rounded quartz sand approximately 0.50 mm. in size. A relatively rare fabric which may date to the late Iron Age or early Roman period. No featured sherds. Handmade.

SA4: A grey-brown ware with a reddish-brown core. The fabric is moderately hard with a hackley fracture and a slightly friable nature. The paste contains a common frequency of ill-sorted, rounded quartz, less than 1.0 mm. in size, sparse coarse angular flint, occasional large rounded quartz grains up to 3.0 mm. in size and coarse angular argillaceous stone fragments up to 5 mm. in size. The only featured sherd is a barrel-shaped jar from pit 496.

SA5: A fine, black ware with a sandy texture. The very finely micaceous paste has no visible inclusions. Vessels often have a burnished surface. Quite a common fabric with 115 sherds recorded. Forms are restricted to barrel-shaped jars. A sherd from pit 101 is decorated with horizontal tooled lines on the shoulder (Fig. 21.17). An almost complete, handmade, burnished, shouldered bowl came from pit 413 (Fig. 20.14).

SA6: A fine sandy, slightly micaceous ware with a red haematite surface. A single bodysherd from pit 143.

Organic-tempered

OR1: A soft, slightly laminar ware, dark brown in colour with a black core. The slightly micaceous paste contains a sparse to moderate frequency of coarse organic matter and at x20 magnification sparse rounded quartz grains. Sherds in this fabric include examples with a burnished finish and at least two sherds with impressed decoration (Fig 20.10, 11). Amongst the featured sherds are barrel-shaped jars and more slack-sided jars with undifferentiated rims (Fig. 20.7). Organic-tempered wares dating to the M-LIA have been noted at Reading⁵⁵ and Riseley Farm, Swallowfield.⁵⁶

Grog-tempered

GR1: A slightly wide-ranging group encompassing all those wares with a grog-temper thus relating to a tradition rather than individual fabrics. Usually dark brown or black in colour with a soapy feel. Vessels include handmade forms, mainly barrel-shaped jars and wheel-turned vessels with examples of bead-rimmed jars (Fig. 21.19), narrow-necked jars (Fig. 21.18), wide-mouthed bulged shoulder jars/bowls (Fig. 21.20), necked cordoned bowls and beakers. In the Roman period a grog-tempered tradition persists largely making necked, everted rim jars with rolled rims or storage jars. One colander sherd was also recorded.

GRFL: A grog-tempered ware with a sparse calcined flint temper. Used to make both handmade and wheel-made vessels, mainly necked and neckless jars and storage vessels.

GRSA1: A hard, black wheel-made ware with a slightly soapy feel. The paste contains a common frequency of dark grey sub-angular to rounded grog, rare flint gravel and a sparse scatter of ill-sorted, rounded quartz sand, up to 2.0 mm. in size but mainly finer. Vessels include wheel-made necked bowls. A large storage jar from pit 477 shows a coil break with slash marks on one side made by the potter for keying in the next coil.

Roman

Description of fabrics and associated forms

IMPORTS AND REGIONAL TRADED WARES

Samian. Eleven sherds only: four South Gaulish and seven of Central Gaulish provenance. Five of the Central Gaulish sherds came from pit 130, largely from dishes of Dragendorff (Drag) 31 form.

Dressel 1 amphora. A single rim with a discoloured grey surface was recovered from pit 101 (Fig. 21. 17). In fresh fracture the paste is pinkish-orange with small brown inclusions and fine ?limestone. It does not appear to be the better known Campanian black sand fabric.

A Comment on the Dressel 1 Amphora by Paul R. Sealey Rims like Woodcote Road are first attested in an assemblage of some seventy Dressel 1 amphoras dated c.125-100 BC from Cellar 130 at Mont Beuvray (Saône-et-Loire).⁵⁷ Sherd sizes are large and it is clear that the vessels had been dumped in the cellar not long after breakage, without contamination by earlier material. Similar rims have also been reported from a context dated c.110-100 BC in a ditch at Rodumna (Loire).⁵⁸ How long such rims remained current is more difficult to evaluate; but nothing like them was present among the cargo

⁵⁵ L. Mephams, 'Iron Age and Romano-British pottery' in I. Barnes, C.A. Butterworth, J.W. Hawkes and L. Smith, *Excavations at Thames Valley Park, Reading, 1986-88* (Wessex Archaeology Rep. 14, 1997), 49, fabric G1.

⁵⁶ S. Lobb and E. Morris, 'Investigations of Bronze Age and Iron Age features at Riseley Farm, Swallowfield', *Berkshire Archaeol. J.* 74 (1994), 37-68, fabric 26.

⁵⁷ F. Olmer, C.-A. Paratte and T. Luginbühl, 'Un dépôt d'amphores du II^e siècle avant J.-C. à Bibracte', *Revue Archéologique de l'Est*, 46 (1995), 295-317, fig. 16, 6 and 9.

⁵⁸ V. Guichard, 'Les amphores', in M.-O. Lavendhomme and V. Guichard, *Rodumna (Roanne, Loire), Le Village Gaulois* (Documents d'Archéologie Française 62, Paris, 1997), 133-41, pl. 53, nos 5-6 and 17.

amphoras on the c.75-60 BC Madrague de Giens shipwreck⁵⁹ or the contemporary wreck of La Formigue.⁶⁰ Nor are there comparanda in the large group of Dressel 1 amphoras from the c. 80-60 BC grave at Clemency (Luxembourg).⁶¹ Bearing these considerations in mind, the Woodcote Road rim should belong earlier, rather than later, in the period c. 125-75 BC.

Verulamium whiteware (fabric W31).

A single flagon sherd from pit 11.

Dorset black burnished ware (fabric B11).

Two sherds from a conical flanged bowl from quarry pit 8.

OTHER WARES

F50: Miscellaneous British colour-coated ware. Three bodysherds with buff fine sandy fabrics and red colour-coats, probably beaker.

R10: Fine grey sandy ware. A small group of wares including examples of poppyhead beakers with barbotine dot decoration, necked jars, a bead rim jar and a copy of a samian cup Drag. 27 from pit 130.

R20: Medium sandy grey wares. This forms the largest single group of Roman wares which probably spans the Roman period. Earlier forms include necked jars, flat rim bowls and later forms cavetto rim jars and flanged deep bowls.

R50: Black sandy wares. A similar range of forms to R20 with necked jars, flat rim bowls, bead rim jars and a finer sandy beaker.

?R85: Black micaceous ware. Wheel-made bodysherds only decorated with burnished line decoration and burnish.

O10: Fine sandy oxidised ware. A small group of just 10 sherds including at least two beakers and a necked jar.

O20: Medium sandy oxidised ware. A small group of 25 sherds. Of particular note is a butt beaker from pit 335 decorated with a burnished line lattice and a ring-necked flagon from pit 130.

O80: Grog-tempered oxidised ware. Five body sherds from a storage jar in quarry 8.

M50: Unknown mortaria. A moderately hard, pink sandy fabric with red iron inclusions. The trituration grit includes grains of quartz, quartzite and iron. Several sherds from a single vessel from pit 455.

F51: Oxfordshire colour-coated ware. Seven sherds only, all from pit 130.

W12: Oxfordshire whiteware. A single sherd only from pit 130.

W11: Oxfordshire parchment ware. A single large base sherd from pit 130.

M22: Oxfordshire white ware mortaria. A single sherd from pit 130.

⁵⁹ A. Tchernia, P. Pomey and A. Hesnard, *L'Épave Romaine de la Madrague de Giens (Var) (Campagnes 1972-1975)* (Gallia Supplement 34, Paris, 1978), 34, pl. 14; B. Liou and P. Pomey, 'Direction des recherches archéologiques sous-marines', *Gallia* 43 (1985), 564.

⁶⁰ C. Baudoin, B. Liou and L. Long, *Une Cargaison de Bronzes Hellénistiques: L'Épave Fourmigue C à Golfe-Juan* (Archaeonautica xii, Paris, 1994), figs. 3-4.

⁶¹ J. Metzler, R. Waringo, R. Bis and N. Metzler-Zens, *Clemency et les Tombes de l'Aristocratie en Gaule Belgique* (Dossiers d'Archéologie de Musée National d'Histoire et d'Art No 1, Luxembourg, 1991), 47-9.

Forms

Table 10 shows a breakdown of the main vessel forms by EVE. The sample is quite small precluding further analysis. For the MIA assemblage barrel-shaped jars are the most frequent form accounting for 56.9% of the total. Most of the remaining 43.1% is taken up by other jar forms with recognisable bowls accounting for 10.3% and saucepan-style pots for 3.4%.

The LIA-ERO assemblage is slightly more diverse but is again dominated by jar forms which collectively account for around 65%. Bowls account for a further 13%. This pattern is quite typical for a rurally based assemblage which is often characterised by a large number of storage type jars. Many of the other vessels such as the mortaria, flagon and cup are one-off examples contributing 6%, 5.8% and 1.7% respectively, whilst beakers account for a further 5.2%.

TABLE 10. BREAKDOWN OF MAIN VESSEL FORMS BY ESTIMATED VESSEL EQUIVALENTS (EVE)

<i>Date</i>	<i>Form</i>	<i>EVE</i>	<i>%</i>
MIA	barrel-shaped jars	198	56.9
	simple rim, slack-bodied jars	18	5.2
	jars with concave undifferentiated rims	25	7.2
	jar - indeterminate	59	17.0
	necked/shouldered bowls	36	10.3
	saucepan-style jars	12	3.4
sub-total		348	100.0
LIA-Ro	beaded rim jars	55	6.4
	necked, everted rim jars	102	11.8
	necked, thickened rim jars	231	26.8
	neckless jars	27	3.1
	cavetto-rim jars	8	0.9
	storage jar	104	12.1
	other jars	39	4.5
	jar/beaker	16	1.9
	jar/bowl	5	0.6
	necked bowls	72	8.4
	flat-rim bowls	21	2.4
	flanged-rim bowls	14	1.6
	mortaria	52	6.0
	cup	15	1.7
	beaker	45	5.2
	ring-necked flagon	50	5.8
	Dragendorff 31 bowl	5	0.6
sub-total		861	100.0

Discussion

Middle Iron Age (Tables 8-9)

Some 35 pits and one posthole (235) have been allocated to the MIA on the basis of the pottery present which amount to some 607 sherds, 5860 g. The overall average sherd size is 9.5 g. The fabrics are dominated by sandy wares (SA1 and SA2) forming 22.6 and 27% by sherd count followed by the organic-tempered ware at 18.3%. Other fabrics that appear to be clearly of MIA origin include CA1, CA3, CAFL, SH1-2, FE1, FECA, FEFL, SA1-2FL, SA1-2CA, FL1-2 and SA4-5. In nearly all cases the number of sherds of all these wares show a decreasing presence in the later phases. The predominance of sandy fabrics would suggest that the Woodcote assemblage falls quite late in this period, perhaps in the 2nd century BC.

Forms in this group include barrel-shaped jars, saucepan-style pots, a shouldered bowl and three decorated sherds, which can be considered as typical of the MIA tradition. Globular or barrel-shaped jars and bowls, and handled jars are quite typical of the middle Thames Valley, for example, Watkins Farm⁶² and on sites further east along the Thames Valley, for example, Reading⁶³, Aldermaston Wharf⁶⁴ and Riseley Farm,⁶⁵ but perhaps not so much to the S. Several sherds from a single vessel with a burnished finish came from pit 17 (Fig. 20.5). The tramline style decoration seen on the bowl sherd from pit 463 (Fig. 20.10) can also be paralleled with material from Reading⁶⁶ and broadly follows the Frilford-Hunsbury globular bowl style.⁶⁷ The impressed decoration on Fig. 20.11 from the same pit may also fall into the same general curvilinear style or may link with some of the decorated vessels found to the south, for example, at Brighton Hill near Basingstoke.⁶⁸ A few sherds also showed a scratch-marked or lightly scored surface again typical of MIA pottery from the region. The site lies on the periphery of the known distribution for saucepan-style pottery with only outliers extending beyond the Berkshire Downs and into the Chilterns.⁶⁹ Vessels analogous to the saucepan-style are known from Southcote, near Reading,⁷⁰ Thames Valley Park, Reading,⁷¹ Blewburton Hill, Berkshire⁷² and Brighton Hill.⁷³ One example from Blewburton also has curvilinear decoration as the Woodcote example (Fig. 20.9) although slightly differently placed.

Late Iron Age-early Roman

This phase is distinguished by the appearance of grog-tempered fabrics and is dated to the LIA. Some 12 pits fall into this criteria yielding some 209 sherds weighing 2763 g. Grog-tempered wares account for 32.5% by sherd count with sandy wares at 11% (SA1) and 23% (SA2). Other new fabrics include SA3, FESA, GRFL, GRSA, and the Dressel 1 amphora. Whilst the barrel-shaped jars continue to feature these are accompanied by necked everted rim jars in handmade and wheel-made grog-tempered wares. Pit 413 includes a beaded rim jar in a grey sandy ware in an otherwise Iron Age assemblage which might be intrusive or might date the pit to the 1st century AD. Grog-tempered beaded rim jars and large everted rim storage jars also start to appear, for example in pits 503 and 479 respectively. The ferruginous group of wares are still quite well represented accounting for approximately 4% by weight in both the MIA and LIA-ERO assemblages and also occur in the form of beaded rim jars, suggesting this may be a transitional M-LIA ware.

The Dressel 1 amphora from pit 101 is in a poor condition and is presumably residual. Amphora of this type have been documented both to the N., for example, Baldock, Herts⁷⁴ and the S.; Dressel 1 type amphorae sherds were present at Brighton Hill⁷⁵ and Silchester.⁷⁶

⁶² T. Allen, *Watkins Farm, Northmoor, Oxon* (Thames Valley Landscapes 1, Oxford, 1990).

⁶³ Mephams, op. cit. note 55, 50.

⁶⁴ R.W. Cowell, M.G. Fulford and S. Lobb, 'Excavations of Prehistoric and Roman Settlement at Aldermaston Wharf', *Berkshire Archaeol. J.* 69 (1980), 1-35.

⁶⁵ Op. cit. note 56.

⁶⁶ Mephams, op. cit. note 55, fig. 38.36.

⁶⁷ D.W. Harding, *The Iron Age in Lowland Britain* (London, 1974), 197 ff.

⁶⁸ H. Rees, 'Iron Age and Early Roman Pottery', in P.J. Fasham and G. Keevil with D. Coe, *Brighton Hill South (Hatch Warren): an Iron Age Farmstead and Deserted Medieval Village in Hampshire, Wessex* (Wessex Arch. Rep. 7, Salisbury, 1995), 35-46, fig. 25.

⁶⁹ Harding, op. cit. note 67, 196.

⁷⁰ S. Piggott and W.A. Seaby, 'Early Iron Age site at Southcote, Reading', *Proc. Preh. Soc. East Anglia* 3, pt 1 (1937), 43-57.

⁷¹ Op. cit. note 55, 62.

⁷² Harding, op. cit. note 67, 195.

⁷³ Rees, op. cit. note 68, 38 ff.

⁷⁴ V. Rigby, 'Amphorae', in I.M. Stead and V. Rigby, *Baldock: the Excavation of a Roman and pre-Roman Settlement, 1968-72* (Britannia monog. 7, 1986), 235.

⁷⁵ Rees, op. cit. note 68, 39.

⁷⁶ D. F. Williams, 'The Amphorae', in M. G. Fulford and J. R. Timby, *Late Iron Age and Roman Silchester* (Britannia monog. 15, 2000), 219-25.

Early Roman

This phase, marked by the introduction of more Romanised wares, probably dates to the Flavian period and later. Seventeen pits and three ditches are placed in this group, yielding an assemblage of some 970 sherds (16.7 kg). This group was well preserved with an average sherd weight of 17 g. Grog-tempered wares account for over half the assemblage, 56.2% by count, 72.2% by weight. The proportion of sandy ware has halved. Roman wares proper only account for 12.4% by count, with examples of samian, Verulamium whiteware, fine and medium grey or black sandy wares (R10, R20, R50), a black micaceous ware (?R85) and fine and medium sandy oxidised wares (O10, O20). Typical MIA style barrel-shaped jars continue to feature but alongside wheel-made necked everted rim jars. Several sherds from a large grog-tempered storage jar came from pit 477. One oxidised grog-tempered storage jar from pit 287 was decorated with tooled chevrons on the shoulder. Many of the Romanised wares proper are finewares; beakers, bowls and flagon. A single sherd of Verulamium ware flagon, came from pit 11, along with a Central Gaulish dish (Drag. 31) which may put this feature into the early 2nd century. A South Gaulish bowl, Drag. 29, came from pit 33. Other finewares include a black ware beaker from pit 37 and several sherds from a locally made orange sandy ware butt beaker decorated with a burnished line lattice from pit 335. The base of a globular beaker in fine oxidised ware came from pit 448.

Mid-late Roman

Pottery dating to the 2nd through to the early 4th century was largely confined to two large groups of material from pit 130 and quarry 8, along with a small group from pit 455, an overall total of 422 sherds (4624 g.). A decrease in average sherd size compared to the LIA-ERO and late 1st-2nd century assemblages might suggest a moderately high level of residual material present, also indicated by the fabric range (see Table 11). The key dating wares for this group are regional imports from the Dorset black burnished and Oxfordshire industries. Pit 130 produced an assemblage of 336 sherds (3529 g.) of which 38 sherds are clearly of Iron Age origin and grog-tempered wares still account for 16% by count. The datable pieces include seven sherds of Oxon colour-coated ware, one Oxon whiteware mortarium and one large sherd of parchment ware bowl, probably Young type P24,⁷⁷ indicating a date in the later 3rd- or early 4th-century. Residual Roman material includes sherds from a fine greyware beaker with barbotine dot decoration, a cup copying a samian Drag. 27 and an oxidised ring-necked flagon, all probably 2nd-century origin. The quarry, 8, produced 78 sherds, 635 g., with a fairly low overall sherd size of 8 g. Again a mixture of Iron Age, early Roman material is present, the latest sherd being a conical flanged BB1 bowl of later 3rd- or early 4th-century currency.

Catalogue of illustrated sherds (Figure 20: Vessels 1-16 are all handmade)

1. Barrel-shaped jar with a short vertical rim decorated with lightly impressed spaced notches on the exterior face. Fabric SA2. Pit 398 (400).
2. Barrel-shaped jar with a simple undifferentiated rim. Orange with a black core. Fabric SA1. Pit 17 (18).
3. Barrel-shaped jar with a simple undifferentiated rim. Red-brown with a smoothed exterior surface. Fabric SA1. Pit 17 (18).
4. Wide-mouthed bowl with a black burnished interior and a red-brown exterior. Fabric SA1. Pit 17 (18).
5. Wide-mouthed bowl with a simple rim. Burnished orange-brown exterior with a black interior. Fabric SA1. Pit 17 (10).
6. Wide-mouthed barrel-shaped jar with a finger-pinched vertical rim. Dark brown smoothed, partly burnished exterior. Fabric SA2. Pit 94 (96).
7. Jar with a inward curving wall and simple undifferentiated rim. Dark red-brown with a black core. Fabric OR1. Pit 94 (96).
8. Decorated bodysherd; orientation uncertain. Decorated with incised zones with infilled impressed linear decoration. Fabric SA2FL. Pit 204 (205).
9. Simple rimsherd with traces of a faint curvilinear tramline decoration with impressed notches between the lines. Fabric SA1. Pit 463 (467).

⁷⁷ C. Young, *Oxfordshire Roman pottery* (BAR 43, 1977).

TABLE 11. PERCENTAGE SUMMARY (COUNT/WEIGHT) OF FABRICS BY PERIOD (WOODCOTE ROAD)

<i>Fabric</i>	<i>MIA</i>		<i>LIA-ERO</i>		<i>1ST-2ND</i>		<i>3RD-4TH</i>	
	<i>No%</i>	<i>Wt%</i>	<i>No%</i>	<i>Wt%</i>	<i>No%</i>	<i>Wt%</i>	<i>No%</i>	<i>Wt%</i>
CA1	3.8	3.3	0.5	0.1	0.8	0.6	0.2	0.1
CA2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CA3	0.3	0.2	0.0	0.0	0.9	0.7	0.0	0.0
CAFL	4.0	7.8	4.3	2.0	0.0	0.0	0.2	0.1
SH1	0.7	1.5	0.0	0.0	1.3	1.1	0.0	0.0
SH2	1.2	0.4	0.0	0.0	0.1	0.0	0.0	0.0
FE1	1.8	3.9	3.3	3.8	0.0	0.0	0.0	0.0
FESA	0.0	0.0	0.5	0.2	0.0	0.0	0.2	0.2
FECA	0.8	0.4	0.0	0.0	0.5	0.4	0.5	0.1
FEFL	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
FL1	0.8	0.8	1.0	0.5	0.3	0.2	2.6	1.8
FL2	2.8	1.2	2.9	1.3	1.8	1.3	1.2	0.6
GR1	0.0	0.0	32.5	21.1	47.5	45.0	19.2	28.5
GRFL	0.0	0.0	0.5	1.1	0.3	0.4	0.0	0.0
GRSA	0.0	0.0	1.0	22.2	8.4	26.8	0.2	0.4
SA1	22.6	29.8	11.0	9.3	6.4	3.0	1.4	1.0
SA2	27.0	22.7	23.0	13.9	10.2	5.3	2.6	1.0
SA1FL	1.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0
SA1CA	0.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0
SA2FL	4.3	10.3	1.4	0.8	1.2	1.2	3.3	1.2
SA2CA	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0
SA3	0.0	0.0	3.8	3.8	0.0	0.0	0.0	0.0
SA4	0.3	0.3	1.9	2.4	0.0	0.0	0.0	0.0
SA5	8.2	5.4	9.6	12.9	4.2	2.9	0.7	0.4
SA6	0	0	0	0	0.1	0	0	0
OR1	18.3	9.4	1.9	0.4	3.5	2.0	0.2	0.1
AMP	0.0	0.0	0.5	4.1	0.0	0.0	0.0	0.0
S20	0.0	0.0	0.0	0.0	0.3	0.2	0.2	0.1
S30	0.0	0.0	0.0	0.0	0.1	0.0	1.4	0.5
W21	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0
B11	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.6
F50	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.4
R10	0.0	0.0	0.0	0.0	2.0	1.2	7.1	6.5
R20	0.0	0.0	0.5	0.1	7.0	5.7	27.3	28.0
R50	0.0	0.0	0.0	0.0	0.9	0.4	14.2	10.7
PR85	0.0	0.0	0.0	0.0	0.8	0.2	0.2	0.5
O10	0.0	0.0	0.0	0.0	0.8	1.1	0.5	0.2
O20	0.0	0.0	0.0	0.0	0.4	0.3	5.0	1.8
O80	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.3
M50	0.0	0.0	0.0	0.0	0.0	0.0	6.9	10.0
F51	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.8
W12	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1
W11	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.7
M22	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
TOTAL	100.1	100.1	100.1	100.0	99.9	100.3	99.8	99.9

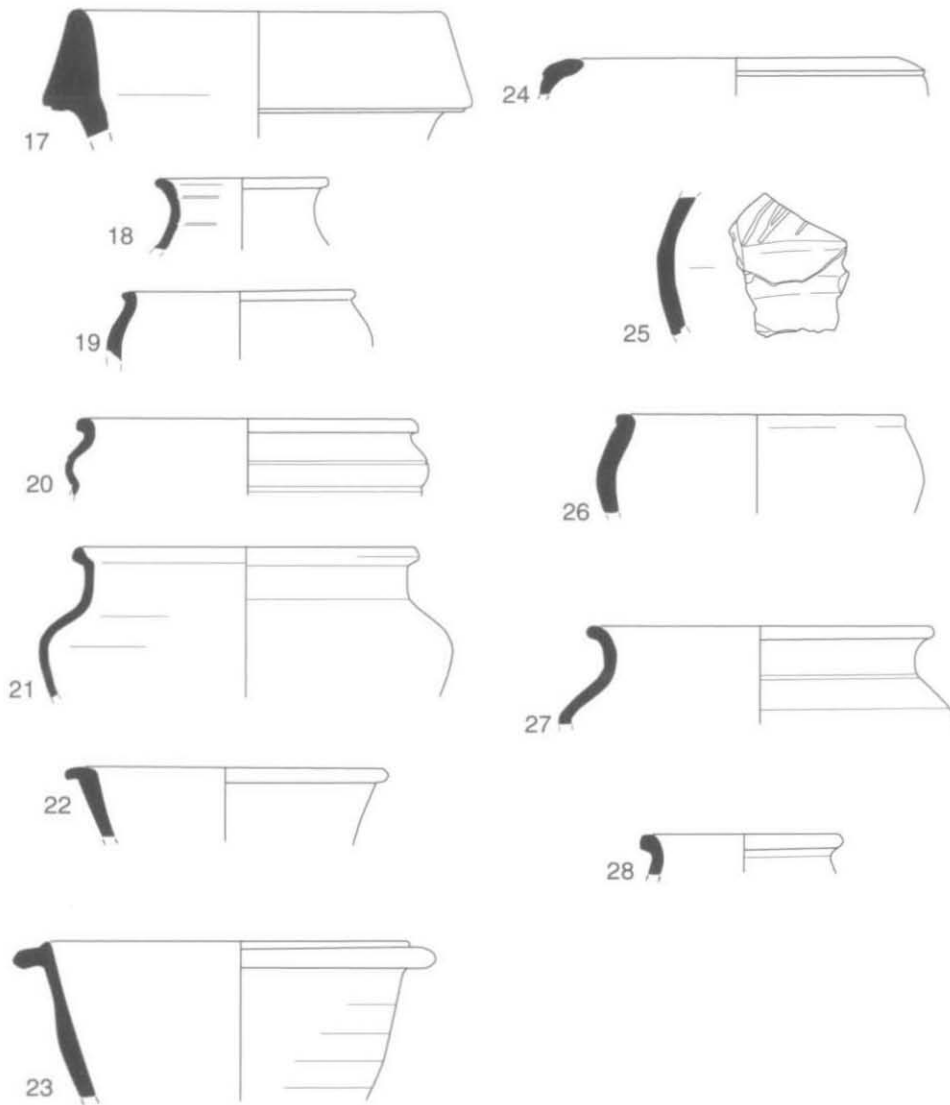


Fig. 21. Iron Age and Roman pottery, nos 17-21, South Stoke, Woodcote Road; nos 22-6 Enwick Shaw Pit, 27-8 Watching Brief.

TABLE 12. QUANTIFIED SUMMARY OF IRON AGE AND ROMAN FABRICS (ENWICK SHAW PIT)

	<i>Fabric</i>	<i>Description</i>	<i>No</i>	<i>%</i>	<i>Wt (g.)</i>	<i>%</i>	<i>EVE</i>	<i>%</i>
Later prehistoric	FL1	flint	35	27	352	30	8	25.8
	FL2	finer flint	32	24	243	21	6	19.3
	FL3	flint	10	8	78	7		
	G1	grog-tempered	28	22	244	21	5	16.1
	SA1	glaucous sandy	1	1	35	3		
	SA2	medium sandy	7	5	149	13		
	SA5	Sandy	17	13	62	5	12	38.7
Sub-total			130		1163		31	
ROMAN								
Imports	S30	Central Gaulish samian	11	0.7	43	0.34	16	1.5
	F45	Cologne colour-coat	4	0.2	4	0.03		
Regional	B11	Dorset black burnished ware	22	1.5	226	2	12	1.14
	W21	Verulamium region white wares	3	0.2	44	0.34	8	0.76
Local/ unknown	C10	shell-tempered wares	2	0.1	5	0.03		
	C80	flint-tempered wares	155	11	1810	14.2	63	6
	E30	medium to coarse						
		sand-tempered wares	13	0.9	362	2.84		
	E60	flint-tempered wares	21	1	172	1.34	15	1.4
	E80	grog-tempered wares	113	7.8	1248	10	23	
	E82	Savernake type wares	3	0.2	21	0.16		
	F50	misc colour-coated	3	0.2	20	0.15		
	F51	Oxon colour-coated	22	1.5	204	1.6	17	1.6
	F60	misc red/brown						
		colour-coated wares	6	0.4	32	0.25		
	M41	Oxon mortaria	3	0.2	15	0.11		
	O10	fine oxidised wares	36	2	119	0.9	9	0.9
	O20	sandy oxidised wares	68	5	403	3.16	61	5.8
	O22	coarse sandy oxidised wares	1	0.06	9	0.07		
	O23	fairly fine oxidised wares	3	0.2	19	0.14	5	0.5
	O31	fine quartz sand oxidised wares	6	0.41	29	0.22	17	1.61
	O50	misc oxidised wares	3	0.16	3	0.02		
	O80	coarse-tempered pink						
		oxidised wares	8	0.5	24	0.2		
	O84	oxidised grog-tempered	1	0.06	16	0.1		
	Q43	oxidised white slipped	2	0.1	16	0.1		
	R10	fine grey sandy wares	73	5	420	3.3	43	4.09
	R20	medium sandy grey	533	37	4736	37.1	501	48
	R30	medium/fine sandy grey ware	91	6	610	4.7	29	2.76
	R50	black sandy wares	123	9	944	7.4	188	17.9
	R90	coarse-tempered reduced wares	14	1	245	1.9		
	R91	black surfaced						
		grog-tempered wares	73	5	713	6	15	1.42
	W10	standard white wares	11	0.8	33	0.25		
	W20	sandy white wares	13	1	152	1	16	1.52
	W22	Oxon sandy white	1	0.06	35	0.27		
	W27	Oxon gritted white wares	1	0.06	5	0.03	3	0.28
	W30	fine white wares	2	0.1	5	0.03		
	Sub-total			1444		12742		1050
	MISC	misc/crumbs	30		19			

10. Slightly curved bodysherd, probably from a globular bowl with a horizontal line of impressed notched decoration defined by two parallel incised lines. Fabric OR1. Pit 463 (464).
11. Bodysherd with a smooth burnished exterior and two converging lines of triangular impressions. Fabric OR1. Pit 463 (464).
12. Large, wide-mouthed barrel-shaped jar. Dark brown with a black core. Fabric SA2FL. Pit 31 (41).
13. Wide-mouthed vessel with a simple rim. Fabric FE1. Pit 496 (498).
14. Shouldered bowl with a short everted rim. Smooth fine dark grey burnished interior and exterior surfaces. Fabric SA5. Pit 413 (414).
15. Bodysherd from a closed vessel decorated with at least four slightly erratically tooled horizontal lines. Burnished on the exterior and interior surfaces. Fabric SA5. Pit 101 (102).
16. Jar with a double grooved rim. Black in colour with a burnished exterior and interior rim. Fabric SA2. Pit 101 (102).

Figure 21

17. Dressel 1 amphora. Pit 101 (102).
18. Wheel-made narrow necked jar. Fabric GR1. Pit 503 (480).
19. Wheel-made beaded rim, globular bodied jar. Fabric GR1. Pit 503 (480).
20. Wheel-made wide-mouthed jar with a bulged shoulder. Black in colour. Fabric GR1. Pit 143 (146).
21. Wheel-made wide-mouthed jar with a slightly concave inner face. Fabric CA2. Pit 143 (146).

Enwick Shaw Pit

The excavations yielded an assemblage of some 1574 sherds (13.9 kg.) of pottery dating to the Iron Age and Roman periods. Most of the pottery, 92% by sherd count, is Roman; the remainder is M-LIA. In total some 39 features yielded pottery, and of these, some 29% produced assemblages in excess of 50 sherds and 42% produced less than 10 sherds, the remainder falling in between. With an average sherd weight of 9 g. the condition of the pottery is poor. Sherds are small and abraded and some rim sherds are broken off just below the rim, reducing the level of confidence given to form and fabric identification. Reduced coarse wares comprise 84% of the assemblage by sherd count. The assemblage would appear to be quite local and shares many recognisable traits with better known assemblages to the W. in the Thames Valley proper or to the S. A quantified summary of the assemblage can be found in Table 12.

Later prehistoric

Seven handmade fabrics were identified for the M-LIA which can be condensed down into three main groups: flint-tempered (fabrics FL1-3), sandy (fabrics SA1-2, and SA5) and grog-tempered (fabric G1) (Table 13) for descriptions see above). Flint-tempered wares dominate by sherd count (59%), with grog-tempered and sandy wares forming substantially less of the assemblage at 28% and 25% respectively. On the basis of weight and EVE flint-tempered wares also form the dominant group. This pattern may be accounted for by the small size of the assemblage and may not reflect the real patterns of use and deposition.

TABLE 13. SUMMARY OF LATER PREHISTORIC WARES (ENWICK SHAW PIT)

<i>Fabric</i>	<i>No.</i>	<i>%</i>	<i>Wt.</i>	<i>%</i>	<i>EVE</i>	<i>%</i>
flint-tempered	77	59	673	58	14	74
grog-tempered	28	22	244	21	5	26
sandy	25	19	246	21		
TOTAL	130		1163		19	

Table 14 shows a breakdown of the main vessel forms by EVE. The sample for the MIA assemblage is quite small precluding further detailed analysis, however, jars seem more plentiful than bowls at 74% and 26% of the assemblage respectively.

TABLE 14. BREAKDOWN OF MAIN VESSEL FORMS BY ESTIMATED VESSEL EQUIVALENTS (EVE)

<i>Date</i>	<i>Form</i>	<i>Type</i>	<i>EVE</i>	<i>%</i>
MIA	Bowl	bowls	6	26
	Jar	jars-indeterminate	17	74
Sub-total			23	100
LIA-Roman	Jar	angled-everted rim jars	12	1
		beaded-rim jars	2	2
		carinated jars	7	>1
		medium-mouthed jars	107	10
		narrow-mouthed jars	1	>1
		squat high-shouldered jars	29	3
		storage jars	1	>1
		jars-indeterminate	546	53
	Jar/bowl	jar /bowls	3	>1
	Bowl/dishes	bowls	94	9
		bowls/dishes	12	1
		Young C 51 bowl	6	>1
		curving-sided bowls	62	6
		straight-sided bowls	12	1
		straight-sided dishes	47	5
		Curving-sided dishes	2	2
		dog-dishes	5	>1
	Beaker	butt beaker	5	>1
	Flagon	large flagons	2	2
	Lid	Lids	6	>1
Sub-total			1033	

Roman

Table 12 provides a quantified summary of the Roman pottery. Continental imports are limited to 11 sherds of Central Gaulish samian, with examples of a Drag. 30 bowl and a Curle 23 dish, and four sherds of Cologne colour-coated beaker (F45). Regional imports are also poorly represented with three sherds of Verulamian whiteware (fabric W31) and 22 sherds of Dorset black burnished ware (B11). The latter includes a bowl/dish, two bowls and one dog dish.

Most of the other wares appear to be of local origin. Prominent amongst these are flint-tempered wares (fabrics C80 and E60). This forms the largest single group of early Roman wares and forms include storage jars, flanged bowls, straight-sided dishes and carinated jars. Other early fabrics include medium to coarse sandy wares (fabric E30), and grog-tempered fabrics (fabric E80). Also dating to the early Roman period is a fairly fine oxidised ware (fabric O23) which features as two body sherds and a rim from a butt beaker. This fabric was probably made in the Abingdon region.⁷⁸ Other early Roman wares include fine grey wares (R10), and several of the oxidised and fine whiteware fabrics.

Roman wares proper include a fairly diverse range of mainly oxidised and reduced sandy wares few of which can be recognised to source. Later Roman activity dating to the later 3rd - 4th century is indicated by various products of the Oxon industry, notably colour-coated wares (F51) with various

⁷⁸ J.R. Timby, P. Booth and T.G. Allen, 'A new Early Roman Fineware Industry in the Upper Thames Valley' (Oxford Archaeological Unit, unpub. Manuscript).

bowls including examples of Young⁷⁹ types C51 and C45 and three sherds of mortaria. Other later products include coarse grog-tempered pink ware (fabric O80) and three bodysherds with buff fine sandy fabrics and red colour coats of unknown provenance. Medium sandy grey and black wares (fabrics R20, R30 and R50) account for just over half the assemblage, 52% by sherd count, most of which probably derive from the Oxon industries. Forms include, narrow and medium-mouthed jars, necked jars, bead rim jars, angled everted rim jars, bowls, straight-sided dishes and a single lid.

The Roman assemblage is dominated by jars which collectively account for *c.* 72% (Table 14). Bowls make up a further 18%. This pattern is typical for a rural assemblage, which are often dominated by storage-type jars. Many of the other forms such as the butt beaker, the lid and the flagon are one off examples accounting for less than 2%, whilst dishes account for 8%.

Discussion

Middle Iron Age

Some 102 sherds (919 g.), with an average sherd weight of 9 g. have been allocated to the MIA. The fabrics are dominated by flint-tempered wares (FL1-3) forming 34%, 31% and 10% by sherd count followed by sandy wares (SA1, SA2 and SA5) at 1%, 7% and 17% by sherd count. Forms include jars and bowls; no decoration was observed.

Late Iron Age-early Roman

Some 28 sherds (244 g.) with an average sherd weight of 8.5 g. have been allocated to the LIA. The sherds are exclusively in grog-tempered fabric G1, and the majority of them were probably residual within early Roman features. Forms occurring in this group largely comprise undecorated jars and bowls.

Early Roman

Some 406 sherds (4620 g.) with an average sherd weight of 11.5 g. were assigned to the early Roman period. This group showed the largest sherd size. Grog-tempered wares account for approximately a third of the assemblage, 28% by sherd count, 27% by weight. Flint-tempered ware accounts for nearly half of the assemblage, 43% by sherd count, 43% by weight. The proportion of sandy ware is significantly reduced from the MIA, accounting for only 3% of the assemblage by sherd count, 8% by weight. Shelly fabrics only account for less than 1% by sherd count and weight. Roman wares proper only account for 25% by sherd count, 22% by weight, with examples of samian (S30), Savernake-type ware (E82), coarse-tempered wares (R90) and black surfaced grog-tempered ware (R91). Jars are the predominant form, both medium-mouthed and necked, everted rim jars are present. A Central Gaulish Drag. 30 bowl was present along with a Curle 23 dish.

Mid Roman

Some 62 sherds (565 g.) were assigned to the period spanning the 2nd to 4th centuries. Sherd preservation is good with an average sherd weight of 11 g. As with the site at Woodcote Road regional imports from the Dorset black-burnished (B11) and Oxon industries provide key dating evidence, however, in the case of Enwick Shaw Pit these are supplemented by Verulamium wares and Cologne colour-coated fabrics. Dorset BB1 and Oxon colour-coated ware dominate the assemblage at 35% by sherd count and 40% and 36% by weight respectively. Other datable sherds include four sherds of Cologne colour-coated ware, six sherds of miscellaneous red/brown colour-coated ware, three sherds of Oxon mortaria and three sherds of Verulamium white ware. Additionally there are single sherds of Oxon white ware and gritted white ware. The forms were dominated by bowls and dishes, although this is perhaps a reflection of the fabric types rather than a real distribution. There were several bowls and a dog dish in Dorset BB1, along with a bowl and dish in Oxon colour-coated ware.

Catalogue of illustrated sherds (Fig.21)

22. Body sherd from a jar with tooled line decoration. Fabric GR1. Pit 27 (33), late Iron Age.
23. Beaded rim jar. Fabric SA5. Pit 27 (33), late Iron Age-early Roman.
24. Flat-rimmed bowl. Fabric R50. Ditch 10 (9), early Roman.
25. Conical flanged bowl. Fabric R20. Ditch 13 (12), late Roman.
26. Bowl. Fabric R50. Ground surface 24, late Roman.

⁷⁹ Op. cit. note 77.

Watching Brief Pottery

The watching brief produced some 503 sherds of pottery, (4.6 kg.), dating to the Iron Age, Roman, Saxon and medieval periods. Most of the pottery, some 59% by sherd count, is Roman, with 28 % dating to the Iron Age, 8% dating to the medieval period and the remainder (6%) dating to the Saxon period. In total some 20 features yielded pottery, and of these, some 15% produced assemblages in excess of 50 sherds and 80% produced less than 10 sherds, the remainder falling in between. With an average sherd weight of 9 g. the condition of the pottery is poor with small, abraded sherds. Reduced coarse wares of mainly local origin comprised 53% of the Roman assemblage by sherd count. The Iron Age pottery belongs to the mid-late Iron Age with no clear-cut LIA-ERO material suggesting a hiatus of activity in the 1st century BC-AD. Similarly most of the Roman assemblage appears to date to the earlier part of the Roman period (1st-2nd century) with no late Roman material.

Later prehistoric

Eight fabrics were identified for the M-LIA (Tables 15-16) belonging to five main ware groups: iron-rich (FE1), iron-rich and organic (FEOR), flint-tempered (FL1-2), sandy (SA1-3) and grog-tempered (GR1). All these wares were found at Woodcote Road (see above) with the exception of FEOR (described below). Taking the assemblage as a whole it can be seen that flint-tempered wares dominate by sherd count (60%) and weight, with grog-tempered and sandy wares forming substantially less of the assemblage at 9% and 43% respectively and the iron rich and organic-tempered wares forming only 2%. Only one featured sherd is present, a medium-mouthed jar in fabric FL1.

TABLE 15. QUANTIFIED SUMMARY OF FABRICS FROM THE WATCHING BRIEF

	<i>Fabric</i>	<i>Description</i>	<i>No</i>	<i>%</i>	<i>Wt (g.)</i>	<i>%</i>	<i>EVE</i>	<i>%</i>
LATER PREHISTORIC	FE1	iron-rich	1	>1	2	>1		
	FEOR	iron and organic	1	>1	8	1		
	FL1	flint	83	59	471	59	2	100
	FL2	finer flint	2	1	24	3		
	GR1	grog-tempered	9	6	43	5		
	SA1	glaucous sandy	11	8	88	11		
	SA2	medium sandy	32	23	158	19		
	SA3	sandy	1	>1	4	>1		
subtotal			140		798		2	
ROMAN	E10	organic-tempered	1	>1	16	>1		
	E60	flint-tempered	25	8	131	5	7	2
	E80	grog-tempered	41	14	506	18	1	3
	O	oxidised	43	15	93	3	9	3
	O10	fine oxidised	28	9	24	>1	7	2
	R10	fine grey sandy ware	1	>1	14	>1		
	R20	medium sandy grey ware	93	31	953	33	179	50
	R50	black sandy ware	61	20	744	26	128	36
	R90	reduced coarse-tempered	2	>1	399	14	2	6
subtotal			295		2880		36	
SAXON	SOR1	organic-tempered	16	55	246	58		
	SOR2	sandy organic	5	17	82	19		
	SOR3	sandy organic	1	4	8	2		
	SOR4	iron/organic	5	17	42	10		
	SSA2	medium sandy	2	7	49	11		
subtotal			29		427			
MEDIEVAL	CALC	calcareous	5	13	25	5		
	NEWA	Newbury A ware	1	3	60	12		
	NEWB	Newbury B ware	5	13	39	8		
	NEWC	Newbury C ware	25	64	307	61	8	100
	SHBW	Surrey-Hampshire	3	8	72	14		
subtotal			39		503		8	

TABLE 16. SUMMARY OF MAIN LATER PREHISTORIC WARES (WATCHING BRIEF)

<i>Fabric</i>	<i>No.</i>	<i>%</i>	<i>Wt.</i>	<i>%</i>	<i>EVE</i>	<i>%</i>
iron-rich	1	>1	20	2	—	—
iron-rich organic	1	>1	8	>1	—	—
flint	85	61	495	61	0.02	100
grog-tempered	9	6	43	5	—	—
sandy	44	31	250	31	—	—
TOTAL	140		816		0.02	

Iron-rich and organic-tempered ware

FEOR: A black moderately hard ware with a waxy feel and a hackley fracture. The paste contains a moderate frequency of angular red/brown iron up to 1mm. in size; sparse burnt organic material and sparse calcareous rock. Only one body sherd was present.

Roman

In total some 295 Roman sherds were recovered, of which over half, some 52%, comprise medium grey or black sandy wares (fabrics R30 and R50) (see Table 15). The presence of a few sherds in flint-tempered fabric E60 and grog-tempered ware E80 indicate a limited amount of activity dating to the LIA-ERO period. There are no continental or regional imports present and no fine or specialist wares.

Table 17 shows a breakdown of the main vessel forms by EVE. The LIA-ERO assemblage is dominated by jar forms which collectively account for approximately 82%. Straight-sided dishes make up an additional 10% and small flagons a further 8%.

TABLE 17. BREAKDOWN OF MAIN VESSEL FORMS BY ESTIMATED VESSEL EQUIVALENTS (EVE)

<i>Date</i>	<i>Form</i>	<i>Types</i>	<i>EVE</i>	<i>%</i>
LIA-Roman	Jars	bead rim jars	14	4
		carinated jars	25	7
		medium mouthed jars	188	52
		narrow mouthed jars	14	4
		jars- indeterminate	55	8
	Dish	straight-sided dish	38	10
	Flagon	small flagons	28	15
sub-total			362	

*Discussion**Middle Iron Age*

Some 166 sherds (526 g.), with an average sherd weight of just 3 g. have been allocated to the MIA. The fabrics are dominated by flint-tempered wares (FL1-2) forming 34% and 1% by sherd count followed by sand-tempered wares (SA1-3) at 7%, 19% and 2% by sherd count, iron-rich and organic-tempered wares (FE1; FEOR) at 1% by sherd count, and grog-tempered wares (GR1) at <1%. The only featured sherd is medium-mouthed jar.

Roman

Some 295 sherds (2880 g.) were dated to the mid Roman period. With an average sherd weight of 10 g. this group was very well preserved compared to the MIA material. Grog-tempered wares account for 11% of the assemblage by sherd count, 15% by weight. Flint-tempered ware accounts for only 2% by sherd count, 1% by weight. The sandy wares that were so prominent during the MIA are completely absent from this phase, as are the ferruginous wares. Roman wares proper account for 70% by sherd count, 71% by weight, with examples of oxidised coarse ware (O23), fine oxidised ware (O10), fine grey sandy ware (R10) medium grey sandy ware (R20), black sandy ware (R50) and reduced coarse-tempered ware (R90). Jars are the predominant form, medium-mouthed jars dominate but there are also two bead rim jars, a narrow mouthed jar and a carinated jar (Fig. 21. 27). There are also rim sherds from a small flagon, a butt beaker (Fig. 21. 28) and a straight-sided dish.

Catalogue of illustrated sherds (Fig. 21).

27. Carinated jar. Fabric R50. Context 913.

28. Butt beaker. Fabric O23. Context 913.

Saxon

A small assemblage of 29 handmade sherds, (427 g.), of pottery dating to the early Saxon period was recovered. In total five fabrics were identified: organic/flint-tempered, organic/sand/iron-tempered, organic/sand-tempered, organic/sand/iron/flint-tempered and sandy (Table 15). Organic-tempered wares dominate accounting for 93% (sherds count), 89% by weight, with sandy wares accounting for the remainder. Although no rimsherds are present all the sherds come from closed jar forms with rounded bases.

DESCRIPTION OF FABRICS AND ASSOCIATED FORMS**Organic-tempered wares**

SOR1: A moderately hard brown to black ware with a black core, smooth surface and a laminated fracture. The very finely micaceous clay contains moderate to common organic material, rare flint and rare iron inclusions.

SOR2: A moderately hard black ware with a black core, slightly harsh surface and a laminated fracture. The very finely micaceous clay contains sparse rounded ill-sorted quartz grains, rare grains of white flint and rare grains of red iron less than 0.5 mm. in size.

SOR3: A moderately hard orange-brown ware with a black core, waxy feel and a laminated fracture. The very finely micaceous clay contains sparse ill-sorted rounded quartz grains and sparse to moderate organic matter.

SOR4: A moderately hard orange-brown ware with a black core, a rough feel and a rough fracture. The paste contains a common frequency of rounded, well-sorted, iron stained quartz grains, sparse organic matter, rare flint and sparse lumps of rounded red-brown iron 1-3 mm. in size.

SSA2: A black medium sandy ware, moderately hard with a black core. The paste contains a moderate to common frequency of moderately well-sorted, rounded to sub-angular, clear quartz.

Medieval

A small group of 39 sherds, (503 g.) of pottery dating to the medieval period (12th-15th century) was recovered. Five wares are present: an unidentified calcareous ware, Newbury fabrics A-C⁸⁰ and Surrey Hampshire border ware.⁸¹

⁸⁰ A. Vince, 'The Pottery', in A.G. Vince, S.J. Lobb, J.C. Richards and L. Mephams, *Excavations in Newbury, Berkshire, 1979-1990* (Wessex Archaeology Rep. 13 (1998), 45-68).

⁸¹ J. Pearce, *Post-Medieval Pottery in London, 1500-1700: Vol 1 Border Wares* (H.M.S.O., London, 1992).

FLINT by KATE CRAMP and HUGO LAMDIN-WHYMARK

An assemblage of 862 struck flints, two hammerstones and three non-local pebbles were recovered from the pipeline. A further 1318 sieved chips, including both genuine microdebitage and fragments of burnt unworked flint, were retrieved through environmental sampling (Table 18).

The excavations at Enwick Shaw Pit and Woodcote Road produced assemblages of modest size, totalling 15 and 81 pieces respectively. The majority of the flintwork was recovered from the watching brief at South Stoke and Ipsden, which yielded an assemblage of 2086 pieces including 1340 chips. Most of this material (697 pieces) came from the group of seven early Neolithic pits. Small quantities were also recovered from two further pits, one of which was associated with Beaker pottery (Table 19).

Methodology

The artefacts were catalogued according to broad debitage, tool or core type. The general condition was noted and, where possible, dating was attempted. Burnt unworked flint was quantified by piece and weight. Chips and pieces of burnt unworked flint recovered from 10-4 mm. sieved residues were not separated, and numbers were estimated from the average weight of 200 pieces.

The material from the early Neolithic pit group was subjected to further use-wear and refitting analysis. Attempts to find knapping refits and conjoins were made both within and between the pit assemblages and, when found, were recorded on the database.

Low power use-wear analysis was also performed on the flint assemblages from two of the early Neolithic pits, 5019 and 5035, drawing on the results of experimental work.⁸² Each assessable flint was scanned using a binocular microscope at 10x magnification to determine the presence or absence of use-wear. A higher magnification (x20) was used to provide more information on the distribution and morphology of the damage scars, from which the density of the contact material (hard, medium or soft) and the action type (cutting/whittling, scraping or boring) could be inferred. The results were again recorded on the database.

*The assemblages**Enwick Shaw Pit*

A total of 15 struck flints and 37 pieces (1570 g.) of burnt unworked flint was recovered from the excavation (Table 18). The assemblage consists entirely of debitage, the single multi-platform flake core recovered weighed 111 g. The condition of the flintwork is poor, with post-depositional edge damage and signs of rolling present on most pieces. The thick, broad form of the flakes indicates a probable Bronze Age date, although no chronologically distinctive pieces were recovered.

Woodcote Road

A total of 81 struck flints and 177 pieces (1737 g.) of burnt unworked flint was recovered from the excavation (Table 18). A considerable proportion of the assemblage exhibits post-depositional edge damage, suggesting that the flintwork is largely residual and derives from the fills of later features.

The material was thinly spread across 42 contexts and consists mainly of unretouched debitage, including 63 flakes and 10 pieces of irregular waste. Tools and cores are in a minority, represented by one edge retouched flake and one multi-platform flake core (24 g.) respectively. Tested nodules are relatively common (five pieces).

⁸² K. Akoshima, 'Microflaking quantification', in G. de G. Sieveking and M. Newcomer (eds.), *The Human Uses of Flint and Chert* (Cambridge, 1987), 71-9; A.G. Brown, 'Use-wear Analysis of Surface Material - can it really be done?', *Lithics*, 10 (1989), 33-6; B. Cotterell and J. Kamminga, 'The Mechanics of Flint Flaking', in B. Hayden, (ed.), *Lithic use-wear analysis* (London, 1979); G. Odell, and F. Odell-Vereecken, 'Verifying the reliability of Lithic Use-wear Assessment by "Blind Tests": the Low Power Approach', *J. Field Archaeology*, 7 (1981), 87-120; G.H. Odell, 'The Mechanics of Use-breakage on Stone Tools: some testable Hypotheses', *J. Field Archaeology*, 8 (1981), 197-209; R. J. Mallouf, 'An Analysis of Plow-damaged Chert Artefacts: the Brookeen Creek Cache (41H186), Hill County, Texas', *J. Field Archaeology*, 9 (1982), 79-98; R. Tringham *et al.* 'Experimentation in the Formation of Edge Damage: a new Approach to Lithic Analysis', *J. Field Archaeology*, 1 (1974), 171-96.

TABLE 18. STRUCK FLINT BY TYPE FROM ENWICK SHAW PIT, WOODCOTE ROAD AND THE WATCHING BRIEF AT SOUTH STOKE AND IPSDEN

Category:	Area:		Watching brief				Total:
	Enwick Shaw Pit	Woodcote Road	3000s	4000s	5000s (EN pits)	5000s (other)	
Flake	13	63	4	3	426	42	551
Blade	1	1	-	-	47	4	53
Bladelet	-	-	-	-	5	1	6
Blade-like flake	-	-	-	-	33	1	34
Irregular waste	-	10	-	-	76	5	91
Chip	-	-	-	-	22	-	22
Core face/edge rejuvenation flake	-	-	-	-	6	2	8
Flake from ground implement	-	-	-	-	4	-	4
Tested nodule	-	5	-	-	6	1	12
Single platform flake core	-	-	-	-	8	1	9
Multi-platform flake core	1	1	-	-	3	2	7
Core on a flake	-	-	-	-	2	-	2
End scraper	-	-	-	-	1	1	2
Side scraper	-	-	-	-	1	-	1
End and side scraper	-	-	-	-	1	1	2
Other scraper	-	-	-	-	-	2	2
Spurred piece	-	-	-	-	2	1	3
Serrated flake	-	-	-	-	22	-	22
Notch	-	-	-	-	2	-	2
Retouched flake	-	1	-	-	24	3	28
Unclassifiable retouched piece	-	-	-	-	1	-	1
Hammerstone	-	-	-	-	2	-	2
Non-local river pebble	-	-	-	-	3	-	3
Total:	15	81	4	3	697	67	867
No. (g) of burnt unworked flints	37 (1570)	177 (1737)	10 (165)	-	224 (987)	38 (599)	486 (5058)
No. (%) of broken struck flints*	4 (26.7)	10 (12.3)	1 (25.0)	-	181 (26.8)	9 (13.4)	205 (24.3)
No. (%) of burnt struck flints*	1 (6.7)	2 (2.5)	1 (25.0)	-	96 (14.2)	1 (1.5)	101 (12.0)
No. (%) of retouched pieces*	-	1 (1.2)	-	-	54 (8.0)	8 (11.9)	63 (7.5)
No. of chips from sieving 10-4mm.†	-	-	-	-	1318	-	1318

* Figures exclude chips

† Numbers over 50 estimated from the average weight of 200 pieces. The total includes some small fragments of burnt unworked flint as well as genuine micro-debitage

TABLE 19. THE FLINT ASSEMBLAGE FROM THE EARLY NEOLITHIC PIT GROUP NEAR SOUTH STOKE AND OTHER SELECTED CONTEXTS FROM THE WATCHING BRIEF

Category:	Beaker pit					Early Neolithic pit group					Early Neolithic	Total:
	Pit 5021 5020	Pit 5009 5008	Pit 5015 5014	Pit 5017 5016 & 5018	Pit 5025 5024	Pit 5027 5032 (lower) 5026 (upper)	Pit 5029 5028	Pit 5031 5030	Pit 5035 5034	pit group total:		
Flake	3	1	44	79	35	128	44	25	9	62	426	430
Blade	-	1	4	3	4	17	10	2	3	4	47	48
Bladelet	-	-	-	3	-	-	2	-	-	-	5	5
Bladelike flake	-	-	2	1	5	10	5	3	2	5	33	33
Irregular waste	-	-	6	10	8	26	10	9	-	7	76	76
Chip	-	-	3	6	1	10	1	1	-	-	22	22
Core face/edge rejuvenation flake	1	-	-	1	-	3	-	1	-	1	6	7
Flake from ground implement	-	-	1	1	-	-	2	-	-	-	4	4
Tested nodule	-	-	-	2	1	1	1	-	-	1	6	6
Single platform flake core	-	-	1	-	-	3	2	-	-	2	8	8
Multi-platform flake core	-	-	-	-	-	1	1	1	-	-	3	3
Core on a flake	-	-	-	-	-	-	-	-	-	2	2	2
End scraper	-	1	1	-	-	-	-	-	-	-	1	2
Side scraper	-	-	-	-	-	1	-	-	-	-	1	1
End and side scraper	-	-	-	-	-	-	-	-	1	-	1	1
Spurred piece	-	-	-	-	2	-	-	-	-	-	2	2
Serrated flake	-	-	-	2	5	5	8	-	1	1	22	22
Notch	-	-	-	-	1	-	1	-	-	-	2	2
Retouched flake	-	-	-	3	1	9	3	2	1	5	24	24
Unclassifiable retouch	-	-	-	-	1	-	-	-	-	-	1	1
Hammerstone	-	-	1	-	-	1	-	-	-	-	2	2
Non-local river pebble	-	-	1	-	-	1	-	-	-	1	3	3
Total:	4	3	64	111	64	216	90	44	17	91	697	704
No. (g) of burnt unworked flints	-	33 (370)	2 (88)	2 (41)	16 (48)	57 (164)	12 (59)	4 (21)	11 (116)	120 (450)	224 (987)	257 (1357)
No. (%) of broken struck flints*	1 (25)	-	21 (34.4)	45 (42.9)	17 (27.0)	44 (21.4)	24 (27)	9 (20.9)	3 (17.6)	18 (19.8)	181 (26.8)	182 (26.7)
No. (%) of burnt struck flints*	-	-	20 (32.8)	18 (17.1)	6 (9.5)	25 (12.1)	6 (6.7)	6 (14)	1 (5.9)	14 (15.4)	96 (14.2)	96 (14.1)
No. (%) of retouched pieces*	-	1 (33.3)	1 (1.6)	5 (4.8)	10 (15.9)	15 (7.3)	12 (13.5)	2 (4.7)	3 (17.6)	6 (6.6)	54 (8.0)	55 (8.1)
No. of chips from sieving 10-4 mm.†	-	-	6	65	156	478	24	49	70	470	1318	1318

* Figures exclude chips.
genuine micro-debitage

† Numbers over 50 estimated from the average weight of 200 pieces. The total includes some small fragments of burnt unworked flint as well as

The flints recovered are predominantly broad flakes, mainly struck using hard-hammer percussion. A single blade was recorded, although it is possible that this piece represents an accidental by-product of an essentially flake-based industry. A later Neolithic or Bronze Age date is considered most likely for this material.

South Stoke and Ipsden watching brief

A total of 771 struck flints was recovered, the majority of which came from the seven early Neolithic pits (Table 19). A further four flints were retrieved from pit 5021 and three from pit 5009, associated with Beaker pottery. The remaining assemblage was recovered from various topsoil, subsoil and colluvial layers and from within the fills of several ditches relating to the post-medieval field system.

CONDITION AND RAW MATERIAL

The condition of the flintwork from the watching brief varies by context. The material from the Neolithic pit group and the two isolated pits is in fresh condition. Much of the flintwork from other features, particularly from the topsoil and colluvial layers, is in very poor condition. With the exception of a small number of burnt pieces, a heavy white cortication is present on all the flints recovered from the pits. From elsewhere, the flints generally exhibit a light to heavy white cortication although the occasional piece is uncorticated. Patchy spots of iron-staining are visible on a few flints.

A combination of flint sources appear to have been used for the production of the tools and debitage in the pits: chalk flint probably obtained from surface deposits close to the site; gravel flint nodules probably originating from flint river gravels, readily available from the Thames floodplain S. of the Goring Gap and Bullhead flint from the Bullhead Bed at the base of the Reading Beds.⁸³

THE ASSEMBLAGE

The entire flint assemblage from the watching brief is shown in Table 18 and selected features tabulated by context in Table 19. The early Neolithic pit group (pits 5015, 5019, 5025, 5027, 5029, 5031 and 5035) produced a total of 692 struck flints, two hammerstones and three non-local pebbles. The largest amount of material was retrieved from pit 5027, which contained a total of 306 pieces within its two fills. Smaller but nonetheless substantial assemblages were recovered from all of the remaining pits with the exception of pit 5031, which produced 17 pieces. Large quantities of sieved chips, including both burnt unworked fragments and genuine microdebitage, were also retrieved.

The assemblage is dominated by flakes (426 pieces), with smaller proportions of blades, bladelets and bladelike flakes (85 pieces). These provide 16.6% of all unretouched flake material, a percentage that falls within but towards the lower end of the range predicted for early Neolithic assemblages.⁸⁴

Technologically, the flake and blade material shows careful preparation and removal. Platform edge abrasion was frequently noted. The flake removals have been made using direct percussion with both soft (antler) and hard (stone) hammers. A number of platform edge rejuvenation flakes are also present in the assemblage.

A total of 13 cores were recorded from the pits, with the 11 complete examples ranging in weight from 11 g. to 95 g. and averaging 48.5 g. All have been aimed at flake production, although in one case it is clear that the primary removals were blades with flakes a later stage in the sequence (Fig. 22.1). The ratio of cores to flakes (excluding chips) is 1:39. Most of the cores (eight pieces) are of the single platform variety (Fig. 22.2) with only three multi-platform cores recovered. In accordance with the debitage component, platform edge abrasion is present on a small number of cores. A further six tested nodules were also recovered, which in most cases seem to have been abandoned when thermal fractures were encountered in the flint during the first few preparatory removals. When these are included, the ratio of cores to flakes falls to 1:27.

⁸³ H. Dewey and C. E. N. Bromehead, *The Geology of the Country around Windsor and Chertsey* (London, Mem. Geol. Survey, HMSO, 1915); W. Shepherd, *Flint. Its Origin, Properties and Uses* (London, 1972).

⁸⁴ S. Ford, 'Chronological and functional Aspects of Flint Assemblages', in A. G. Brown and M. R. Edmonds (eds.), *Lithic Analysis and later British Prehistory* (BAR Brit. Ser. 162, 1987), 79.

The presence of these cores, along with numerous chips and pieces of irregular waste, indicates that a quantity of knapping debris has been incorporated into the pit deposits. This is supported by the occurrence of several knapping refits, conjoins and related groups of material within the assemblage, demonstrating that elements of the same reduction sequence were deposited together. Cortical and partly cortical flakes are well-represented. The results of the use-wear analysis (below) indicate that a considerable number of the flints from pits 5019 and 5035 were deposited in an unused state.

A total of 54 retouched tools (8% of the assemblage) were recovered from the pits. A total of 22 serrated flakes and 24 edge retouched flakes were recorded, which together provide 72.6% of all retouched tools. Serrated flakes (Fig. 22.3-5) occurred in five of the seven pits and were most numerous in 5027 (13 pieces) and 5025 (five pieces). In nine cases, a fine band of silica gloss is present on the underside of the edge and normally on the ventral surface. Although no serrated flakes were recovered from 5015, silica gloss was noted on the edges of one flake, one blade and one long end scraper (Fig. 22.6). These pieces were probably used for a similar purpose as their serrated counterparts.

Edge retouched flakes (Fig. 22.7) were recovered in varying quantities from all the pit deposits, with the exception of 5015. It may be significant that 5015 was also one of the few pits to be free of serrated flakes. Again, the majority of retouched flakes were retrieved from 5027 (12 pieces) with a relatively high number from 5035.

Scrapers are comparatively under represented in the assemblage: a total of three were recovered from pits 5015, 5027 and 5031. The only well manufactured example is the long end scraper (Fig. 22.6) with silica gloss along one edge; the other two scrapers are rather irregular in form. The disproportionately low number of scrapers in relation to serrated and edge retouched flakes suggests that the tool assemblage was deposited in the context of certain specialised activity, perhaps related to the working of plant materials. Two notched flakes and two spurred piecers (e.g. Fig. 22.9) were also recovered.

Together with the retouched material, four flakes struck from polished implements were found. One from 5027 has clearly been struck from the blade edge of an axe or an adze. The remaining three pieces have small, indistinct areas of polish on their dorsal surfaces. None of the pieces refit. It is unclear whether these flakes represent a deliberately destructive act with ritual significance or result from the reduction of an already broken axe for the practical purpose of producing useable flakes.

In addition to the struck flint assemblage, two hammerstones were also recovered. One from 5027 is large (616 g.) and sub-spherical in shape, and has been exceptionally well-used; the other from 5015 consists of a flat river-worn flint cobble weighing 400 g. with some battering on one edge. This piece shows evidence of burning and is slightly broken. The pits also contained three non-local flint pebbles, only one of which showed convincing evidence of use. This piece, from fill 5032 (pit 5027), exhibits a slight burnish on one surface and is of a similar flint type to the hammerstones.

USE-WEAR ANALYSIS

Low power use-wear analysis was performed on all the flints (excluding chips) from pits 5019 and 5035. A total of 195 pieces were examined, of which 66 flints possessed one or more utilised edge. A total of 33 flints from pit 5019 (31.4%) were found to exhibit 46 separate instances of use-wear. The results are similar for pit 5035, with 45 episodes of use detected on 33 flints (36.7%).

In both assemblages, patterns of damage caused by materials of a medium density are most heavily represented reflect plant processing activity. A wide range of materials encompassed by the 'medium density' category, however, the assemblage could therefore reflect the working of a variety of substances.

Both pit assemblages show a marked predominance of scraping, although cutting and whittling actions are also well represented. Use-wear was noted on a retouched edge in ten cases; all had been used for medium or hard scraping purposes. It seems likely that retouch was applied in these cases to increase the angle and robusticity of the edge. Only two episodes of boring were noted, both of which occur in the assemblage from pit 5035 and have been used for perforating materials of a medium or hard density.

REFITTING ANALYSIS

The refitting exercise identified a total of five conjoining pieces (e.g. Fig. 22.10) and nine groups of knapping refits both within and between the assemblages from the early Neolithic pits. Context 5016 (pit 5019) contained two groups of knapping refits, both consisting of two flakes that were removed at

an early stage in the reduction sequence. The lower fill of 5027 contained a knapping refit between two pieces of irregular waste, whilst a knapping refit between one flake and two flake core fragments was recovered from the upper fill.

A group of five knapping refits was found between flints from 5025 (three pieces) and 5029 (two pieces). When reassembled, these pieces form an elongated gravel flint nodule, c. 50% complete. A 'cap' was initially removed at one end, creating a simple platform from which a few flake removals were attempted, the majority of which terminated in step fractures. The core then appears to have shattered along incipient thermal flaws and is unlikely to have produced any useable flakes. Although they could not be refitted, a further three pieces of irregular waste and one flake probably belong to the same sequence.

PITS 5021 AND 5009

The flint assemblage recovered from 5009 comprises one flake, one blade and one end scraper (Table 19). None of flints are datable on typological or technological grounds, although the material could well be contemporary with the Beaker pottery found in association with it. The flint assemblage recovered from 5021 consists of four pieces, none of which are diagnostic, although the fresh condition of the flints implies that they are contemporary with the feature. A Neolithic or early Bronze Age date is therefore suggested for this small group of flintwork.

THE REMAINING ASSEMBLAGE

The remaining flintwork from the watching brief is a mixed assemblage of flakes, a small number of blades, and single and multi-platform flake cores (Table 18). The general technological appearance of the flintwork allows it to be assigned broadly to the Neolithic, although it is possible that some of the flake material represents Bronze Age activity. Retouched pieces include three edge retouched flakes, three scrapers and one spurred piece. One of the scrapers is denticulated and is probably Bronze Age in date.

DISCUSSION

The flintwork recovered from the early Neolithic pit group forms a coherent assemblage in very fresh condition. The high incidence of knapping refits and conjoins implies that the material was deposited shortly after knapping and use, whilst the presence of refits *between* individual pits strongly suggests their contemporaneity.

The assemblage possesses some interesting characteristics, not least the unusually restricted range of tools. The retouched component is dominated by edge retouched flakes and serrated flakes, whilst scrapers are comparatively under represented. This combination suggests that the main tasks performed related to the processing of plant rather than animal resources. Furthermore, the presence of silica gloss on nine of the serrated flakes and on three non-serrated flints implies that many were used for working silica-rich plant material, perhaps the processing of rushes and reeds to produce fibres for textiles.⁸⁵

Given the Neolithic date of these pits, the question of whether the deposits are structured has to be addressed. There was no evidence that the flints were positioned in any particular manner, and it appears that the flints were spread throughout the fill(s) of each pit. One repetitive trait of Neolithic pit deposits is the high incidence of burning, both within the fills and amongst the artefacts. This is certainly the case with the Newbury group, where on average 14.2% of the flints are burnt.

The location of the pits is also of particular interest, as Ford has identified extensive flint scatters dating from the early Neolithic to Bronze Age on and around the hill on which these pits are located.⁸⁶ Finds include a Neolithic polished axe, found in the immediate area of the pits, and a second later Neolithic axe c. 500 m to the S. It is difficult to assess the significance of these isolated finds, but it clearly indicates that the pits were located within an area that was the focus of considerable activity throughout the Neolithic and Bronze Age.

⁸⁵ H. Juel-Jensen, *Flint Tools and Plant Working. Hidden Traces of Stone Age Technology* (Aarhus University Press: Aarhus, 1994).

⁸⁶ Op. cit. note 84, 118.

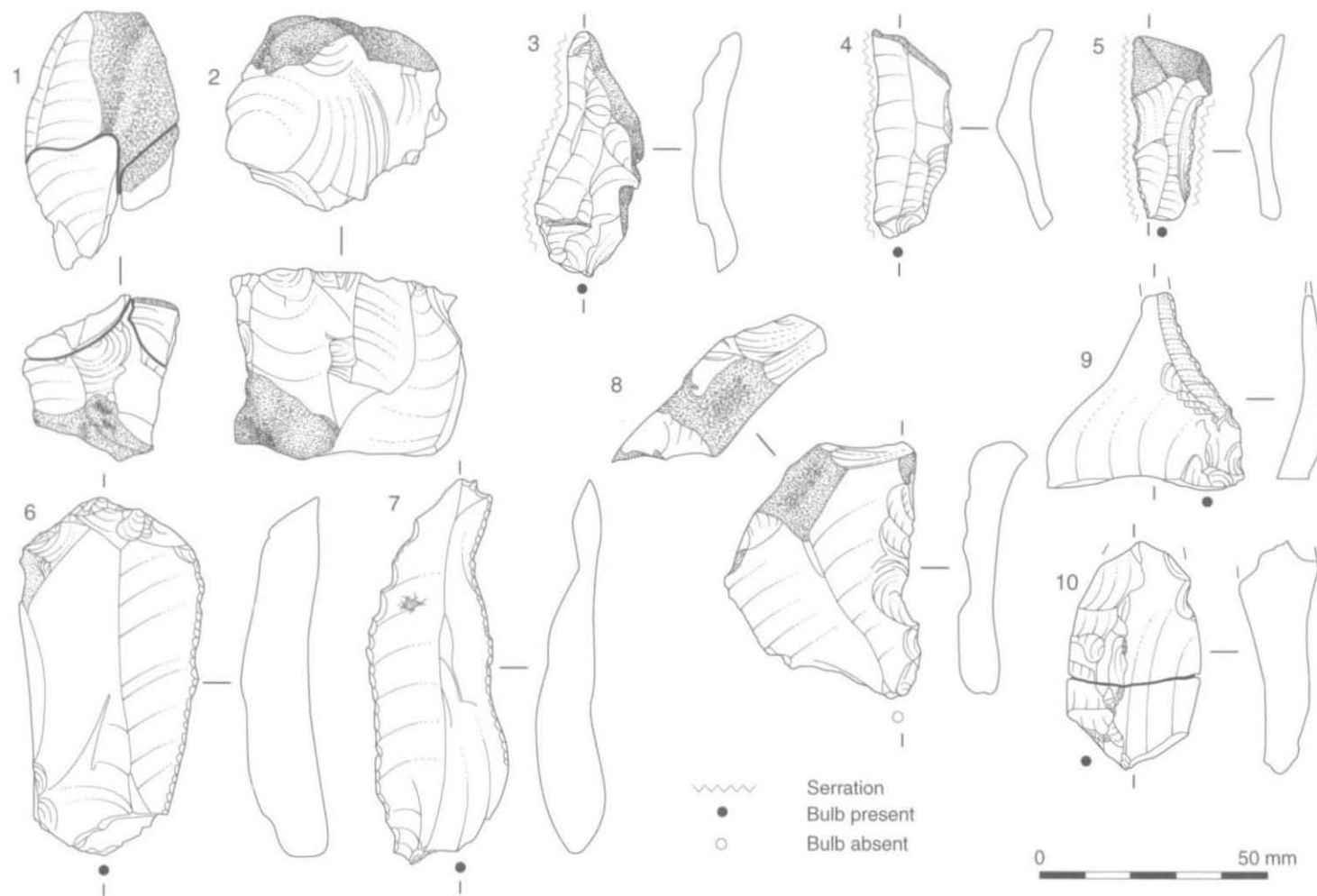


Fig. 22. Selection of flint from the early Neolithic pit group, South Stoke

TABLE 20. CATALOGUE OF FLINT ILLUSTRATED IN FIGURE 20

<i>Illustration no.</i>	<i>Pit</i>	<i>Fill</i>	<i>Small find number</i>	<i>Category</i>	<i>Description:</i>
1	5029	5028	341 347 355	Multi-platform flake core with 2 refitting flakes	Small flake core (40 g.) with 2 refitting flakes, one of which removed to create platform from which other was struck. Some platform edge abrasion. Initially aimed at blade production; flakes removed in later stages of reduction sequence.
2	5035	5034	536	Single platform flake core	Flake/blades removed from simple platform with some platform edge abrasion. Chalk flint. Abandoned before fully exhausted. 95 g.
3	5025	5024	249	Serrated flake	Bladelike flake, serrations and silica gloss on LHS.
4	5027	5026	301	Serrated flake	Blade, very fine serrated teeth and silica gloss on LHS.
5	5017	5016	107	Serrated flake	Blade, serrations on both lateral margins.
6	5014	5014	42	End scraper	Curving distal edge with rounded use-wear, RHS straight with slight edge retouch and silica/use gloss on ventral surface.
7	5017	5016	121	Retouched flake	Long blade (c. 80 mm.), with slight abrupt retouch and heavy use-wear to both lateral margins.
8	5031	5030	358	End and side scraper	Unusual scraper with crude, irregular, abrupt retouch on distal edge and RHS. Bulb removed.
9	5025	5024	217	Spurred piece	Spurred flake with slight edge retouch and use-wear. Tip broken.
10	5029	5028	328 353	Conjoining flake	Platform edge rejuvenation flake, deliberately struck in two before burning.

WORKED STONE by RUTH SHAFFREY

A total of 19 items of worked stone were retained; 4 from Enwick Shaw Pit, 2 from the watching brief and 13 from Woodcote Road, South Stoke (SSWR) (Table 21). The four items of worked stone from Enwick Shaw Pit (ALEN) include two rotary quern fragments and two mortars. There were also five pieces (320 g.) of burnt stone (contexts 32 and 33). The 13 items from Woodcote Road include three rotary quern fragments, four possible rubber fragments, one saddle quern, one loomweight, one hammerstone, two worked fragments and 102 pieces (7729 g.) of burnt stone. The stone from the watching brief includes a hammerstone (5038) and a probable rubber (5014), and three pieces (79 g.) of burnt stone (contexts 5008 and 5028). None of the burnt or unworked stone is described.

Querns and mortars

The four rotary quern fragments (three upper and one lower stone) are made of Old Red Sandstone (ORS) and all are of the usual ORS types found on Romano-British sites in the region.⁸⁷ Two of the upper stones are of the flat-topped type with concave grinding surface (ALEN ditch 51, early 2nd-century AD and SSWR Roman pit 448); one is of a much more rounded type and was found in a Roman pit 37 (39) with residual Iron Age pottery and the lower stone found in an unstratified context at ALEN (Sf 26; Fig. 24) is lozenge-shaped. The latter is unevenly worn and varies in thickness at the outer edge from 52 to 68 mm, clearly indicating that it was operated semi-rotationally.

The type of ORS used was transported from the Wye Valley and Forest of Dean and was widely distributed across central southern England.⁸⁸ It was one of the principal materials used in the Roman towns of Silchester and Wanborough which lay to the SE. and NW. of the pipeline route and which have both produced extensive collections of rotary querns.⁸⁹ The existing evidence suggests that the use of ORS was most intensive in this region during the later Roman period.⁹⁰ One rotary quern from Fenwick Shaw Pit provides a useful early 2nd-century date which can be added to the short list of closely dated examples.

In addition to the rotary querns, several mortars and processors were also found. One shallow mortar of Lodsworth Greensand was found in a 2nd-century pit (ALEN, 31 (41) Sf 25; Fig. 23.1). Lodsworth stone originates in W. Sussex and although known occurrences of mortars are limited,⁹¹ a rectangular example was found at nearby Wanborough. The majority of similar examples have been found in Sussex, for example at an early Roman site just to the S. of Angmering where rotary querns were reused as saddle querns.⁹²

A further probable unstratified and undated mortar was formed from a large quartzite boulder with a pecked upper surface curved in a rounded profile into a shallow dish; the rest of the boulder was unshaped (ALEN, Sf 34; Fig. 23.2). A single saddle quern fragment was also found in an MIA pit at Woodcote Road (94 (95)). It is made of a medium grained Lower Greensand, containing polished grains; the source of which is at Culham approximately 15 km. away. This material was broadly distributed in the local area occurring mainly on Oxfordshire and Berkshire sites such as Abingdon⁹³ and Farmoor.⁹⁴ Its presence at Woodcote Road extends the southwards distribution of the stone.

Processors and other items

Eight items can be classified as processors, including six rubbers, one hammerstone and one item which was used for both purposes. Two of the rubbers are unworked but utilised pebbles (SSWR MIA pit 212 (214) and NERP00 early Neolithic pit 5015 (5014) while four are small fragments with worked and

⁸⁷ R. Shaffrey, *New Light on old Querns: a Review of Roman Querns made of Old Red Sandstone* (BAR in prep.).

⁸⁸ R. L. Saunders, 'The Use of Old Red Sandstone in Roman Britain. A Petrographical and Archaeological study' (Ph.D. Thesis, Reading Univ., 1998).

⁸⁹ R. Saunders, 'The Rotary Querns from the Society of Antiquaries' excavations at Silchester 1890-1909', *Britannia*, 34 (2003), 143-74; D. Buckley, 'Querns and millstones', in A.S. Anderson, J.S. Wachter and A.P. Fitzpatrick, *The Romano-British 'Small Town' at Wanborough, Wiltshire* (Britannia monog. 19, 2001). Although the Wanborough publication does not name ORS as the material, this has been personally verified by the author.

⁹⁰ Shaffrey, op. cit. note 88.

⁹¹ Acc. B1989.1. Wanborough Museum, personal observation.

⁹² O. Gilkes, 'The Quernstones', in D. Rudling and O. Gilkes, 'Important Archaeological Discoveries made during the Construction of the A259, Rushington Bypass', *Sussex Archaeol. Coll.* 138 (2000), 15-29; D.P.S. Peacock, 'Iron Age and Roman Quern Production at Lodsworth, West Sussex', *Antiq. J.* 67 (1987), 74.

⁹³ T. G. Allen et al., *Excavations in the Vineyard, Abingdon, Oxfordshire* (in prep.); M. Parrington, *The Excavation of an Iron Age Settlement, Bronze Age Ring-Ditches and Roman Features at Ashville Trading Estate, Abingdon, Oxfordshire* (OAU Rep. 1/CBA Res. Rep. 28, 1978).

⁹⁴ G. Lambrick and M. Robinson, *Iron Age and Roman Settlement at Farmoor* (OAU Rep. 2/CBA Res. Rep. 32, 1979).

TABLE 21. CATALOGUE OF WORKED STONE

<i>Feature (context)</i>	<i>SF</i>	<i>Description</i>	<i>Lithology</i>	<i>Phase</i>	<i>Illustration no. (Figs. 23-4)</i>
ENWICK SHAW PIT					
Ditch 51 (52)		Small fragment of upper rotary quern of hopper-less, flat-topped type with slightly concave grinding surface. Measures 350 mm. diameter x 70 mm. max thickness.	Old Red Sandstone, quartz conglomerate	Early 2nd century AD	
(2) Ploughsoil	26	Half lower rotary quern with pronounced lip around perforation. Measures 340 mm. diameter x 105 mm. max thickness at the centre.	Old Red Sandstone, quartz conglomerate	Unstratified	24
Pit 31 (41)	25	Shallow mortar or well formed saddle quern. Square externally with curved and smoothed internal bowl. Measures >108 x >108 x 52 mm.	Lodsworth	2nd century.	23.1
Unstrat.	34	Large mortar, possibly unfinished with a rough unshaped base and a curved pecked top with wide shallow bowl inside. Measures 280 x 240 x 90 mm.	Quartzite	Unstratified	23.2
WOODCOTE ROAD					
Pit 448 (449)		Small fragment of upper rotary quern. Of the flat-topped/disc type. Measures 530 mm diameter (E) x 47 mm. max thickness (at edge).	Old Red Sandstone, quartz conglomerate	undated	
Pit 94 (95)	2	Probable saddle quern fragment. Measures >55 mm thick.	Culham Greensand	MIA	
Pit 37 (39)	2	Small edge fragment of upper rotary quern with flat grinding surface, vertical straight sides and rounded convex upper surface. Measures 540 mm. diameter. Heavily burnt.	Old Red Sandstone, quartz conglomerate	RB	
Pit 174 (173/175)		Two probable rubber fragments. Each fragment has one flat and smoothed face. Both are burnt.	Medium grained sandstone	LIA-ERO	
Pit 212 (214)		Rubber. Pebble used as rubber on one flattened and slightly polished face. Burnt.	Quartzite	MIA	
(28) topsoil		Processor. Used as a hammerstone with wear at one end and as a smoother with one smoothed side; also as a potboiler.	Pebble	Unstratified	

		Measures 78.5 x 67 x 48 mm.		
Pit 287 (290)		Possible rubber. Burnt. Measures >71 x 77 x >37 mm.	Pink quartzite	ERO
Pit 52 (55)		Rubber. Worked fragment with a well smoothed top. Burnt. Measures 74 x 60 x 37 mm.	Medium grained sandstone	MIA
Pit 398 (400)	6	Irregularly shaped loomweight. Broken across circular perforation of 20 mm. maximum diameter. Both faces are rough but approximately flat.	Very fine grained limestone	MIA
Watching brief				
Pit 5015 (5014)		Possible rubber fragment. Not shaped but might have been used as a rubber.	Well rounded pebble	EN
Pit 5029 (5028)		Hammerstone. Sphere with significant damage all over. Measures 80 mm. diameter.	White chert	EN

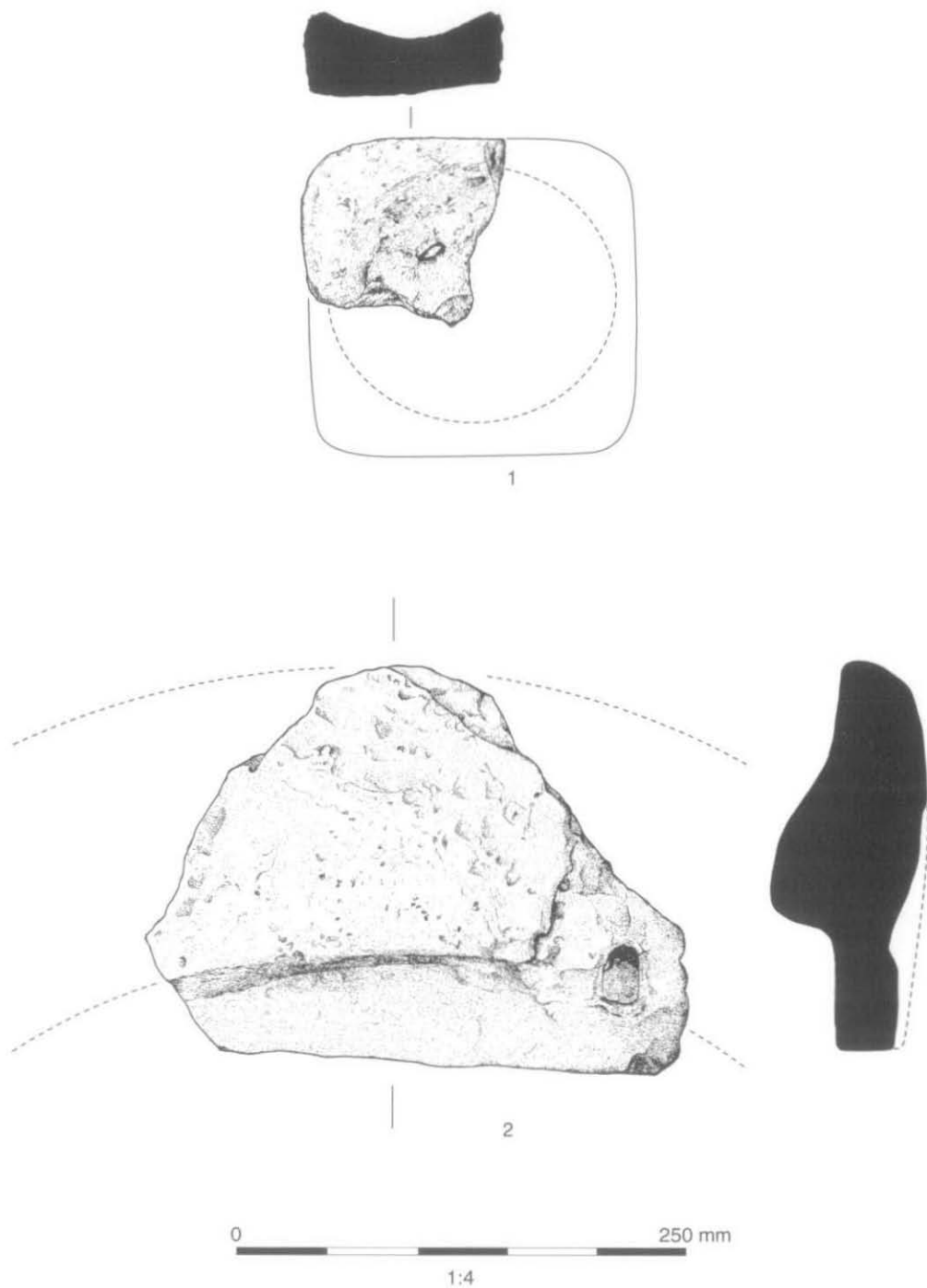


Fig. 23. Worked stone: sf. 26

smoothed faces. One was recovered from a MIA pit (SSWR 174), two from a LIA/ERO pit (SSWR 52) and the fourth from a probable Roman pit (SSWR 287). A further processor had been used as both a rubber and a hammerstone (SSWR 28, topsoil). None were made from imported stone types.

A single stone loomweight was also found in the fill of a MIA pit (SSWR 398). This is an irregularly shaped stone which has been broken across the top end of the circular perforation from which the stone would have been suspended (Sf 6). It is similar in morphology to chalk examples from Danebury⁹⁵ but is made from a very fine grained compact limestone.

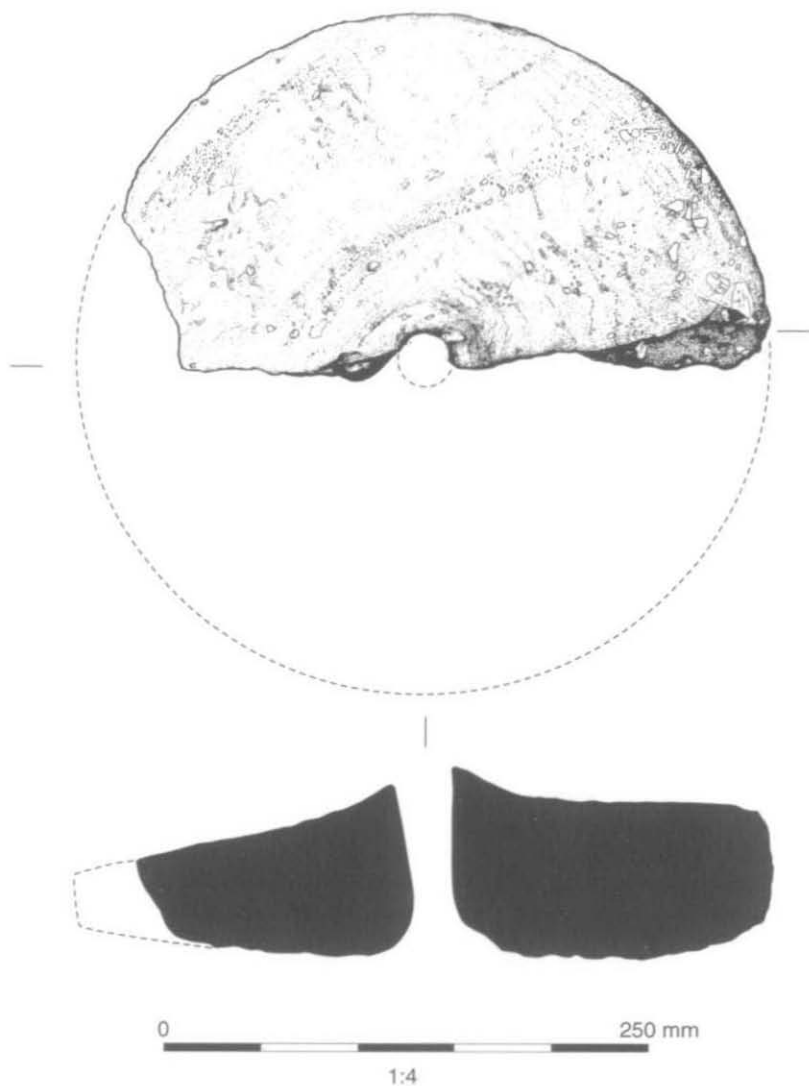


Fig. 24. Worked stone: 1, s.f.25 and 2, s.f.34

⁹⁵ L. Brown, 'Objects of Stone' in B. Cunliffe, *Danebury, an Iron Age Hillfort in Hampshire, Vol 2. The Excavations 1969-1978: the finds* (1984), 407-27 and fig. 7.59.

There were also several pieces of unmodified geological material which may have been associated with the slag found on site. Two samples (461 and 172) are iron ore, almost certainly haematite, while a third piece (409) is ironstone. The remaining piece originally identified as slag is of mineralogical origin (pit 287 (290)).

Discussion

The worked stone is not an outstanding or unusual collection for the locality and period but it supports our understanding of the use of stone in this area. ORS was the dominant material used for processing during the Roman period, while Greensands such as Culham and Lodsworth may have been more favoured in earlier times, with saddle querns and mortars made from these materials. Further closely dated examples will add to our understanding of the relationship between the use of Lodsworth and Old Red Sandstone querns in this region.

CERAMIC BUILDING MATERIAL by KAYT BROWN

Three small assemblages of Roman ceramic building material (CBM) were recovered from Woodcote Road, Enwick Shaw Pit and the watching brief. The material was sorted into fabrics and types and quantified by number and weight for each context. Fabric and form identification were based on visual and morphological characteristics. Where it was not possible to take thickness measurements or diagnostic features were absent, fragments were recorded as unidentifiable. Data was recorded directly into an access database.

Woodcote Road

An assemblage comprising 229 fragments (7333 g.) was recovered from 31 contexts. A single sandy fabric, with occasional ferruginous pellets, in some cases apparently poorly prepared, accounts for the bulk of the assemblage.

Much of the material comprised small, badly abraded fragments as reflected in the large proportion of unidentified material. However, context 397 produced 10 fragments of imbrex, including some joining fragments, which displayed a band of sooting extending across the interior breadth of the tile. A small number of plain tiles were also recorded, although there was no evidence visible to suggest tegula. A single tile with a painted upper surface in a distinct sandy fabric with calcareous grit and voids from other, leached calcareous inclusions, was recovered from pit 335 (341). A considerable proportion of the assemblage (67 fragments) was recovered from late Roman pit 130.

Discussion

Small groups of up to 10 fragments of CBM are dispersed across the excavated area, concentrating mainly in the early Roman phase suggesting the presence of masonry buildings in the vicinity. Larger concentrations of material from two later Roman features (quarry hollow 8 and pit 130) suggest that masonry buildings were also present during the later phase. The small size and abraded nature of the assemblage precludes any more detailed conclusions.

Enwick Shaw Pit

A small assemblage of 48 fragments (1621 g.) was recovered from 12 contexts. A sandy fabric accounted for the bulk of the material, with two fragments in an apparently finer and softer fabric, although this could be a result of firing and/or post-depositional conditions. The only identifiable types were plain flat tiles, ranging from 12-31 mm. in thickness. One tile displayed a signature mark. Some of this material may represent tegulae, but in the absence of any evidence for flanges, these could not be identified. The remainder of the assemblage comprised unidentifiable fragments.

Discussion

Small groups of CBM were distributed across the excavated area, and derived from all three phases of Roman activity, suggesting the presence of masonry buildings throughout the Roman period. Nine fragments of unidentified CBM and two fragments of plain tile from pit 69, along with three fragments of plain tile from pit 44 may derive from a late Roman building represented by wall cuttings 82 and 85.

Watching brief and evaluation

A total of 57 fragments of CBM (3291 g.) was recovered from eight contexts. The material occurred in two main fabrics, a medium sandy fabric and a coarser, poorly wedged, natural sand fabric with clay pellets and rare gravel inclusions. This latter fabric was largely restricted to tiles over 30 mm. in thickness. Plain flat tiles measuring 15-35 mm. were present which may have included unidentified tegula, and a small number of possible imbrex fragments (12-15 mm.). This material derives from a number of disparate contexts scattered along the route of the pipeline.

METALWORK by LEIGH ALLEN*Woodcote Road, South Stoke*

A total of six metal objects were recovered from Woodcote Road: four iron objects, a copper alloy fragment and a lead token. The copper alloy fragment is tiny and undiagnostic; it was recovered from LIA pit 200 (275). The lead token, recovered from the topsoil, is post-medieval in date. The four iron objects comprise a spearhead of LIA date, a spoon-bit, a double-spike loop and a structural nail of Roman date.

A complete spearhead (Sf 8) was recovered from LIA pit 503 (480). It has a narrow leaf-shaped blade with rounded shoulders and a closed socket. It conforms to Manning type 1A⁹⁶ small bladed spearheads with a blade width of 20 mm. and a length of 72 mm. (just a little outside the standard range, but still acceptable).

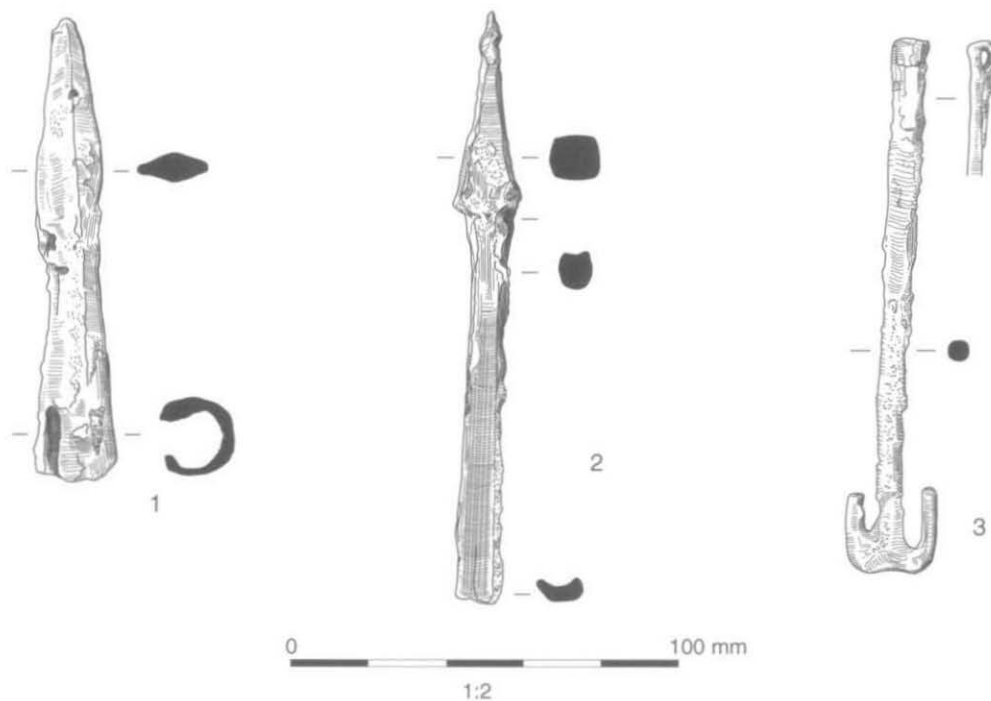


Fig. 25. Metalwork: 1, s.f.8, 2, s.f.3 and 3, s.f.4001

⁹⁶ Manning, *op. cit.* note 30, 162-3, pl.76, V42.

A broken spoon-bit (Sf 3) was recovered from pit 130 (136); it has a pyramidal head and a D-shaped section stem. The bit is broken across the blade which is formed by hollowing out the stem longitudinally. Drill bits are often found broken in this way, if the bit jammed in the wood it was often broken when force was exerted on it to try and free it.⁹⁷ A corroded structural nail was also recovered from this context.

A double-spike loop was recovered from pit 158 (159). It was made by bending the spiked ends of a bar together to form a loop at the head with arms running parallel. It has advantages over the loop-headed spike in that a ring could be slipped between the arms and once the arms has been driven into masonry or timber the ring would have been firmly held.⁹⁸

Illustrated objects (Fig. 25.1-2)

1. Sf 8, Pit 503 (480), spearhead with a narrow leaf-shaped blade with rounded shoulders and a closed socket L: 124 mm.
2. Sf 3, Pit 130 (136), broken spoon-bit, pyramidal head, D-shaped section stem L: 155 mm.

The total number of identifiable objects from this phase of work is small. The spoon-bit is a carpenter's tool and appears to have been broken in use. The spear head is a military object but could equally have been used by civilians.

Enwick Shaw Pit

A total of 163 iron objects and a single copper alloy object were recovered from Enwick Shaw Pit. Most of the ironwork assemblage comprises hobnails, structural nails and miscellaneous fragments. The single copper alloy object is an incomplete strip. All the metalwork is mid to late Roman in date.

Mid Roman activity

A large number of iron objects were recovered from ditches 10, 13 and 19 at the SW. end of the excavation. Ditch 10 (11) contained 19 hobnails and 5 structural nails associated with 2nd-century pottery. Context 12, the fill of a recut ditch 13 within ditch 10, contained a further two structural nails, ten miscellaneous fragments and a long curved strip associated with 3rd-century pottery. Ditch 19 (18) contained a triangular-shaped fragment of iron sheet associated with late 1st-2nd-century pottery. The hobnails all have short stems and domed heads and they range in length from 14-18 mm. Complete studded soles are rare but small groups and individual finds are common. Each sole would typically have had at least 35-45 hobnails (depending on the size of the shoe), a row running around the sole edge and possibly a pattern of nails under the ball of the foot and at the heel. The structural nails are very corroded, from context 11 there is only one complete example and from context 12 there are two. They all have circular, flat, flanged heads and rectangular-sectioned shanks and conform to Manning type 1B.⁹⁹ The long curved strip from context 12 is broken at both ends and very corroded, but could possibly be the remains of a bucket handle or the stem of a latch lifter.

Late Roman activity

The substantial linear ditch/hollow way (38) also produced a large number of iron objects of a similar type. The primary fill (24) contained a single hobnail but layer (37) overlaying this produced 20 hobnails, a cleat, 8 structural nails and a single fragment of iron sheet. Successive layers (8) and (9) produced a further 22 hobnails, 4 cleats, 7 structural nails and the single copper alloy strip. The cleats from (9) and (37) are of similar form although they vary slightly in size (20-32 mm. in length). They have oval plates with a relatively long tang (where they survive intact) at each end, they are usually identified as coming from the soles and heels of boots.¹⁰⁰ The complete hobnails and structural nails are identical to those mentioned above with the exception of one nail from (9) that, although corroded,

⁹⁷ Ibid. 27, pl. 12, B57.

⁹⁸ Ibid. 134.

⁹⁹ Ibid.

¹⁰⁰ Ibid. 131, pl. 61, nos. 61-4.

appears to have a T-shaped head and conforms to Manning type 3.¹⁰¹ The single fragment of curved copper alloy strip is broken at both ends and undecorated; it could possibly be a fragment from a bracelet.

A similar, but smaller, assemblage of ironwork was recovered from pit 44 (47). A single hobnail, four corroded structural nails and two miscellaneous fragments were found in association with late 3rd - 4th-century pottery. A single hobnail and a fragment of iron sheet were recovered from posthole group 61 and a single highly corroded iron nail was recovered from context (83).

The remaining finds from Enwick Shaw Pit were recovered from Roman plough soil layers. The 41 hobnails from context (48) probably represent the remains of a complete shoe/boot sole. Contexts (66) and (67) produced a further six hobnails, a single structural nail and a miscellaneous fragment.

The metalwork assemblage from Enwick Shaw Pit is fairly consistent throughout comprising hobnails and structural nails from a number of mid to late Roman contexts across the site. The total number of hobnails would only make up the number needed for a single pair of shoes.

Watching brief

Fourteen metal objects were recovered from the watching brief at South Stoke and Ipsden. Most of the assemblage comprises structural nails, lengths of wire and miscellaneous fragments. The only identifiable object is an unstratified Roman lift key Sf 4001. The lift key is T-shaped, it has a rolled bow at the top of the handle and a single tooth either side of the stem. These anchor-shaped keys are less common than the L-shaped type, but they remained in use through out the Roman period.¹⁰²

Illustrated (Fig. 25.3)

3. Sf 4001. T-shaped lift key with a rolled bow and a single tooth either side of the stem L: 135 mm. Context 4029, unstratified.

ROMAN COINS by PAUL BOOTH

Four Roman coins were recovered. All are in poor or very poor condition (one survived only as an irregular fragment) and are certainly or probably of 4th-century date.

1. AE3. Wolf and twins, URBS ROMA. No surviving legends. AD 330-35. S.f 11, context (9).
2. AE3. GLORIA EXERCITUS (2 standards), Constantius II or Constans. AD 330-335. S.f 15, context (37).
3. AE4. Completely eroded, ?head right. 4th century. S.f 12, context (9).
4. ?AE4 fragment. Eroded. Probably 4th century. S.f 2, context (9).

The coins would be unremarkable even had they been in good condition. Legends only survive (partially) on No. 2, which was in good condition when first lost, though now poor. None of the coins can be assigned to a mint. The size and character of the eroded head on No 3 might suggest a later 4th-century date - this is perhaps an issue of the House of Theodosius (AD 388-402), but in view of its condition this can be no more than a tentative suggestion.

SLAG by LYNNE KEYS

A small quantity of iron slag was recovered from a pit at Enwick Shaw Pit (ctx 98). The pit contained Roman pottery and its fill was burnt or scorched although this was not thought to result from *in situ* burning. The slag was examined by eye and categorised on the basis of morphology. Each type was separately quantified and summarised in Table 22 below.

¹⁰¹ Ibid. 135.

¹⁰² Ibid. 90, pl. 40, O23.

Discussion

The majority of the slag was undiagnostic and could not be securely attributed to either smithing or smelting, but one larger fragment with an abraded surface is almost certainly smelting slag. High temperatures had fused and incorporated into the slag some of the furnace clay. The dust adhering to the slag was a brownish-red colour possibly ferrous dust from the ore stored or roasted in the vicinity of a furnace.

The small assemblage represents some smelting activity but the amount recovered is not large enough to indicate that this was occurring on the site.

TABLE 22. SUMMARY OF SLAG FROM ENWICK SHAW PIT

Context	Soil sample number	Identification	Weight (g.)	Comment
98	4	Smelting	322	
98	4	Undiagnostic	482	adhering to fired clay

BEADS by ANGELA BOYLE

Two beads were found within a deposit of cremated human bone (4038). The cremation burial was originally misidentified as a hearth and consequently was only half sectioned. Both the beads and the human bone were identified during sample processing.

Catalogue (Fig. 26.1-2)

1. *Glass bead* (4038): opaque turquoise glass segmented bead (7 segments surviving), in two fragments. Incomplete, burnt and much distorted. Cross-section originally circular. Maximum length 10 mm.
2. *Bone bead* (4038): complete biconical bone bead which is in two halves, presumably having split longitudinally during the process of cremation. It is white and extremely well calcined throughout, but without any distortion. It has a maximum height of 5.4 mm. and a maximum diameter of 5 mm.

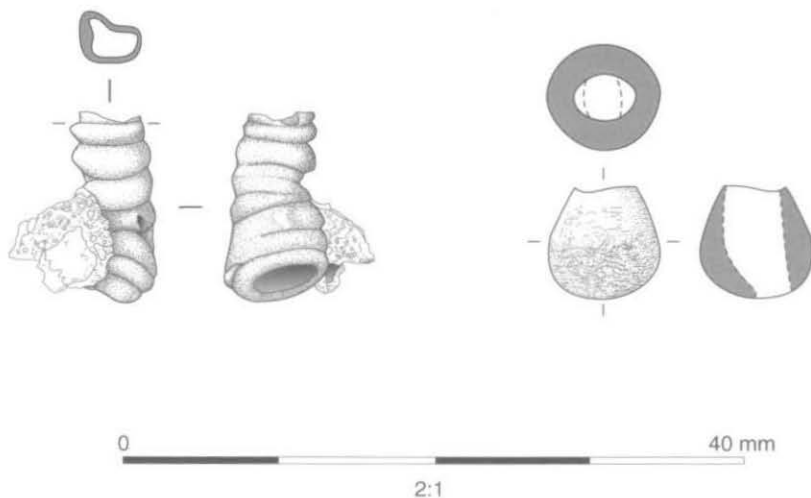


Fig. 26. Beads from Roman cremation 4037

Discussion

Cremation burials with personal ornaments occur in many Romano-British cemeteries but form only a small proportion of the total number of burials, for example, out of 1212 graves surveyed in the South East only 60 had personal ornaments.¹⁰³ Beads, in particular begin to appear in Colchester and other non-native graves, in the period AD 50-70, but elsewhere they are not common until the 2nd century, when they tend to form part of collections of trinkets. Several cremation burials have only one or two beads, often not matching and in contrast to the Newbury example they are most often unburnt. In this case the beads had quite definitely been on the pyre, possibly being worn by the deceased.

It should not be assumed that because this individual was accompanied by beads it was a female. Single or small collections of beads may have had an amuletic significance and may have been appropriate to males as well as females.¹⁰⁴

Comparable segmented beads with circular cross-section occurred at Colchester in both early (c. AD 80/90-100) and late contexts (c. AD 320-c. 450).¹⁰⁶ It has not been possible to find a parallel for the bone bead.

GLASS by HILARY COOL

Three fragments of blue-green vessel glass (SF. 7), probably from a square bottle broken at the junction of the two sides was recovered from the fill of a pit at Woodcote Road, South Stoke (ctx 461). The date range for this piece is 1st-early 3rd century.¹⁰⁶

ENVIROMENTAL AND ECOFACTUAL EVIDENCE

HUMAN SKELETAL REMAINS by ANNSOFIE WITKIN

Two neonates (372 and 481), an adult male skeleton (620), disarticulated fragments of neonatal bones (40, 129), one adult bone fragment (379) and adult disarticulated bone from pit 204 (Table 24) were recovered from Woodcote Road, South Stoke. The two neonates and skeleton 620 are dated to the MIA, the neonatal bone (129) to the LIA whilst the adult skeleton and disarticulated bones (40 and 205) have a broad Iron Age date. The bone found in fill 379 may date to the Roman period. All human remains were located in pits, they are summarised in Table 23.

An isolated cremation deposit from the watching brief was also fully analysed (Table 24). A bone bead and a glass bead were found amongst the cremated bone, which dates this deposit to the Roman period.

Woodcote Road, South Stoke

Skeleton 372 was located in the uppermost fill (409) of pit 405. Middle Iron Age pottery was recovered from the lower three fills. The skeleton appears to have been orientated N.-S. but this is uncertain due to partial removal and disturbance of the bones during excavation. The position of the body is uncertain though it appears the neonate was lying on its right side, possibly crouched.

Skeleton 481 was located at the base of MIA pit 463. The neonate was lying on its left side in a crouched position and orientated E.-W.

Skeleton 620 was located in pit 623. The skeleton was orientated S.-N. and in a crouched position. The arms were crossed over the upper part of the chest. The skeleton dated to the MIA. A radiocarbon date taken from the bone has given a date of 370 to 80 cal BC at 95.4%.

¹⁰³ R. Philpot, *Burial Practices in Roman Britain. A Survey of Grave Treatment and Furnishing* AD43-410 (BAR British series 219, 1991), 128.

¹⁰⁴ *Ibid.* 133.

¹⁰⁵ N. Crummy, *Colchester Archaeological Report 2. The Roman small Finds from Excavations in Colchester 1971-9* (Colchester Archaeological Trust Ltd., 1983), 34.

¹⁰⁶ J. Price and S. Cottam, *Romano-British Glass Vessels: A Handbook* (CBA Practical Handbook in Archaeology 14, 1998).

A disarticulated proximal neonatal right humerus was located in the fill (129) of LIA pit 128. A disarticulated neonatal right femur (40) was located within the fill of pit 21 dated to the Iron Age. Disarticulated neonatal bone and a rib fragment from an adult individual were located in fill (205) of pit 204 dated to the later 1st-early 2nd century AD. A disarticulated adult distal left humerus was located in the primary silting (379) of Iron Age pit 368.

TABLE 23. CATALOGUE OF INHUMATIONS

Skeleton number: 372

Completeness: Fair

Preservation: Good

Age: 33-34 weeks *in utero*

Pathology: None present

Skeleton number: 481

Completeness: Good

Preservation: Good

Age: 39-41 weeks, perinatal

Pathology: None present

Skeleton number: 620

Completeness: Good

Preservation: Good

Age: 24-31 years

Sex: Male

Stature: 1.62 ± 00.3 m.

Dental inventory:

R								L							
		Ca			Ca	Ca									
			H	H	H	H	H	H		H					
		C	C				C	C	C						
8	X	6	5	4	3	2	1	1	2	3	4	5	X	X	8
8	7	X	5	4	3	2	1	1	2	3	4	5	6	7	8
NP	C		C	C	C							C	C		NP
								H	H	H					
		Ca			Ca					Ca	Ca	Ca	Ca		

Dental Pathology: Enamel hypoplasia, slight periodontal disease, dental caries, and mandibular third molars not present. Non-masticatory wear of the incisors and chipped maxillary incisors.

Pathology: Healed porotic hyperostosis, healed type 2 cribra orbitalia, slight spinal degenerative changes, Schmorl's nodes, slight healed periostitis.

Watching brief

Cremated human remains (4037-38) were recovered from a bowl-shaped feature (4036) originally interpreted as a hearth. The feature was half-sectioned and not all the bones were recovered. A bead dates the cremation deposit to the Roman period, possibly early Roman.

Methodology

Preservation and completeness

Preservation was recorded by the observation of the cortical integrity of the bones. The condition of the bones were scored on a sliding scale from excellent to poor depending on the degree of surface erosion, root impressions, bubbling and flaking of the outer surface of the bones. The completeness of each skeleton was scored using a sliding scale from poor to excellent.

Inventory

The skeletal inventory was recorded pictorially. In addition, the skeletal components of the individual were recorded in tabular form as present or absent. Dental inventory was recorded following the Zsigmondy system. Dental notations were recorded by using the universally accepted recording standards and terminology.¹⁰⁷

Determination of sex

The adult inhumation burial from Woodcote Road was sexed by using both pelvic and cranial data. Due to the fragmentary nature of the skeleton, five cranial and three pelvic features could be used. The features were recorded using published standards.¹⁰⁸ Each observable feature on the pelvis was scored on a five-point scale (probable female, female, probable male, male and unknown). The overall score from the observed features provided the basis for the assigned sex.

Assessment of age

The methods applied for the assessment of age were, the degenerative changes observed on the auricular surface,¹⁰⁹ dental attrition¹¹⁰ and epiphyseal fusion.¹¹¹ The age of the subadult remains was obtained from the length of the long bones.¹¹²

Stature estimation

Stature was calculated using the regression formulae devised by Trotter for white males and females.¹¹³ Complete long bones were used for the calculation of stature and the bones from the legs were favoured over those of the arm since these carry the least error. In order to limit the standard errors the stature was obtained from the left or right femur measurement.

Pathology

The remains were examined for abnormalities of shape and surface texture. When observed, pathological conditions were fully described and recorded following the standards listed in osteological textbooks.

¹⁰⁷ D. Brothwell, *Digging up Bones* (3rd edn., New York, 1981).

¹⁰⁸ J.E. Buikstra and D.H. Ubelaker, *Standards for Data Collection from Human Skeletal Remains* (Arkansas, 1994); Workshop of European Anthropologists, 'Recommendations for Age and Sex Diagnoses of Skeletons', *J. Human Evolution*, 9 (1980), 517-49.

¹⁰⁹ C.O. Lovejoy, R.S. Meindl, T.R. Pryzbeck and R.P. Mensforth, 'Chronological Metamorphosis of the Auricular Surface of the Ilium: a new Method for Determination of Adult Skeletal Age-at-Death' *American J. Physical Anthropol.* 68 (1985), 15-28.

¹¹⁰ A. Miles, 'Assessment of Age of a Population of Anglo-Saxons from their Dentition' *Proc. Royal Society Medicine*, 55 (1962), 881-6.

¹¹¹ A. Chamberlain, *Human Remains* (London, 1994).

¹¹² J.L. Scheuer, J.H. Musgrave and S.P. Evans, 'The Estimation of late Fetal and Perinatal Age from Limb Bone Length by Linear and Logarithmic Regression', *Annals Human Biology*, 7 (3) (1980), 257-65.

¹¹³ M. Trotter, 'Estimations of Stature from Intact Long Limb Bones', in T.D. Stewart (ed.), *Personal Identification in Mass Disasters* (Washington, 1977), 71-83.

Burnt human bone

The cremation contexts were subject to 50% recovery as whole-earth samples due to the misidentification of the feature. The sample was subsequently wet sieved. The cremated remains were retained as unsorted residue. These were subdivided into 10-4 mm. and 2-4 mm. categories. The residues were scanned to ascertain the quantity of bone present.

TABLE 24. SUMMARY OF CREMATED BONE

<i>Context</i>	<i>Period</i>	<i>Weight</i>	<i>NI</i>	<i>Age</i>	<i>Sex</i>	<i>Pathology</i>
4037, 4038	Roman	37 g.	1	Juvenile	-	None

ResultsPreservation and completeness

The preservation of all of the articulated skeletons (372, 481 and 620) is generally good. However, skeleton 620 had extensive cortical abrasion to the anterior surface of the distal right femur and the posterior surface of the iliac blade. These areas were also very chalky. The skeleton was also extensively fragmented, especially the cranium, ribs, and the distal half and proximal half of the femora and tibiae.

Neonate 372 was near complete but with the majority of the cranium missing together with both jaws. The lower left leg, both clavicles, the left hip and both scapulae were also absent. Both petrous portions, a few ribs, metacarpals and metatarsals were recovered.

Neonate 481 is also near complete with the right fibula, most of the feet and hands, right humerus and most of the left humerus missing. The ischia and pubis were not recovered.

Skeleton 620 is near complete. The main elements missing are the distal left humerus, proximal left radius and ulna, most of the left pelvis, proximal third of the left femur, the distal third of the left tibia and fibula as well as the left foot.

The disarticulated bone from pit 204 consisted of a left iliac blade, the proximal half of a radius, a distal humerus, few rib fragments and a proximal tibia. The tibia was much larger than the other bones and is therefore from an older individual. All bones, including the adult rib fragment are in a good condition.

The disarticulated right proximal humerus (129) and the distal left humerus (379) are in good condition but the preservation of the right femur (40) is very poor.

Sex and age estimates

Skeleton 372 can be aged 33-34 weeks *in utero*. This suggests that the baby was born six to seven weeks prematurely. Skeleton 481 can be aged between 39 and 41 weeks *in utero*. This indicates that this individual was a newborn baby. Skeleton 620 is that of an adult male aged between 24 and 31 years. The disarticulated neonatal bones (40 and 129 and 205) are definitely from individuals younger than six months. The adult distal humerus and rib could not be sexed and are from an individual older than 18.

Stature

The stature of skeleton 620 was calculated using the measurement of the right femur. This individual was estimated as 1.62 ± 0.03 m. The average stature for males in the Iron Age was 1.68 m.¹¹⁴

Dental pathology

Dental pathology is present on the teeth of skeleton 620. Of a possible total of 32 teeth, 26 are present, four had been lost ante-mortem and two were not present. The teeth not present were the third mandibular molars. These were either congenitally missing or impacted.

¹¹⁴ C. Roberts and M. Cox, *Health and disease in Britain. From Prehistory to Present Day* (Stroud, 2003), 106.

Slight periodontal disease is present on both the maxilla and the mandible. The main predisposing factor for periodontal disease is the accumulation of calculus in dental pockets. The disease starts with an inflammation of the soft tissues, gingivitis, which is transmitted to the jaw bone itself. There is a strong link between the increase of age and the increase of the prevalence of periodontal disease in modern populations, which is also the case with archaeological populations. However, the aetiology is multi-factorial, genetic predisposition, environment, diet and hygiene all play a part.

A total of 12 teeth had carious lesions present at the cemento-enamel junction. Their location is likely to be related to the presence of periodontal disease. Slight calculus deposits are present on 10 teeth, commonly between the teeth.

Enamel hypoplasia is present on 10 teeth which all had between 2 and 5 lines each. These are growth arrest lines or pits present on the enamel surface of the teeth which appear when the permanent dentition is developing in the dental crypts in the jaws during the childhood. Broadly speaking, nutritional deficiency, weaning and bouts of childhood diseases can all contribute to the formation of enamel hypoplasia.¹¹⁵ The enamel defects are therefore an indicator of the general health of the individual during childhood.

Skeleton 620 also has dental wear consistent with the teeth being used for non-masticatory activities. The lingual surfaces of the maxillary incisors had excessive wear and the labial surfaces of the central maxillary incisors were also chipped. The precise activity which caused the wear pattern and lesions are not known but may be related to plant preparation prior to consumption or hide processing.¹¹⁶

Skeletal pathology

Healed porotic hyperostosis is present on the superior part of the parietals and the occipital bone of skeleton 620. Healed type 2¹¹⁷ cribra orbitalia is also present on the orbital roofs. Both types of lesions are caused by anaemia. The lesions were likely to have been active during childhood and may well be connected with the hypoplastic lines present on the teeth.

The medial aspects of the tibiae shafts and the distal end of the fibulae exhibited very slight striated lamellar bone which indicated that the infection was healed. This type of infection involves only the surface of the bones and is known as periostitis. The thoracic and lumbar vertebral bodies exhibited pitting on the joint surfaces. These slight degenerative changes are caused by the normal progression of age. Shallow Schmorl's nodes are present on the vertebral bodies in the lower thoracic region. These depressions are caused by the herniation of material within the intervertebral disc and are in effect pressure defects.¹¹⁸

Cremated bone

The total weight of the cremated bone (4037) is 37 g. The weight of the cremated remains (4038) within the unsorted residue is unknown but very small, certainly less than 50 g. All of the bone is white and well calcined with little abrasion to the fragments. Overall, the fragment size is quite small, between 10 and 20 mm. within the residue and the maximum size of the bone within the cremated bone sample (4037) is 34.1 mm. Identifiable fragments include cranial vault, tooth roots, axial fragments and shaft fragments from the lower arms. The cranial vault is unfused and the apex of the roots not quite fully formed. This suggests that the individual was a subadult, possibly an adolescent.

¹¹⁵ S. Hillson, *Dental Anthropology* (New York, 1996), 165-6.

¹¹⁶ C. S. Larsen, *Bioarchaeology. Interpreting Behaviour from the Human Skeleton* (Cambridge, 1997), 260.

¹¹⁷ P. Stewart-Macadam, 'Anemia in Roman Britain: Poldbury Camp' in H. Bush and M. Zvelebil (eds.), *Health in Past Societies. Biocultural Interpretations of Human Skeletal Remains in Archaeological Contexts* (BAR Int. Ser. 567, 1991), 101-13.

¹¹⁸ J. Rogers and T. Waldron, *A Field Guide to Joint Disease in Archaeology* (Chichester, 1995), 27.

Discussion

Iron Age skeletal remains

From the late Bronze Age to well into the Iron Age, the dead are, to a large extent, archaeologically invisible. However, within specific contexts associated with settlements, human remains are uncovered. The remains are commonly disarticulated cranial fragments and long bones.

The neonatal bones (40 and 129) from pits 21 and 128 and those found in pit 204, together with the adult rib and the distal humerus in pit 368, were the only disarticulated human remains found within the excavation area. Since all bones were incomplete with old breaks including poor preservation of some elements, it appears that these bones had clearly been lying around the settlement for some time prior to being deposited in the pits. Other examples of sites where this type of deposit has been found in the Upper Thames Valley includes Mount Farm, Berinsfield,¹¹⁹ Ashville, Abingdon,¹²⁰ Gravelly Guy, Stanton Harcourt¹²¹ and Yarnton.¹²²

The paucity of disarticulated remains within the settlement as well as articulated burials in pits may indicate that a cemetery was located on the periphery of the settlement. The presence of cemeteries on the outskirts of some Iron Age settlements has been established during recent excavations at the MIA settlements of Yarnton,¹²³ Cockney Down, near Salisbury¹²⁴ and Suddern Farm.¹²⁵

ANIMAL BONE by EMMA-JAYNE EVANS

Small assemblages of animal bone were recovered from Woodcote Road, South Stoke, Enwick Shaw Pit and from the watching brief. Each of these assemblages is described below.

Methodology

Identification of the bone was undertaken at OA with access to the reference collection and published guides. The remains were counted and weighed, and where possible identified to species, element, side and zone.¹²⁶ Fusion data, butchery marks, gnawing, burning and pathological changes were noted when present. Ribs and vertebrae were only recorded to species when they were substantially complete and could be accurately identified, or were from an identifiable articulated skeleton, in which there could be no doubt as to their species. Undiagnostic bones were recorded as small (small mammal size), medium (sheep size) or large (cattle size). The separation of sheep and goat bones was undertaken using the criteria of Boessneck¹²⁷ and Prummel and Frisch.¹²⁸ Where distinctions could not be made, the bone was recorded as sheep/goat (s/g).

¹¹⁹ A. Barclay and G. Lambrick, 'Berinsfield, Mount Farm, Post-Excavation Assessment and Research Design' (Oxford Archaeological Unit, 1995).

¹²⁰ J. Muir, J. and M. R. Roberts, *Excavations at Wyndyke Furlong, Abingdon, Oxfordshire, 1994* (Thames Valley Monograph, 12, Oxford Archaeological Unit, Oxford, 1999).

¹²¹ G. Lambrick and T. G. Allen, *Gravelly Guy, Stanton Harcourt: The Development of a Prehistoric and Romano-British community* (Thames Valley Landscapes Monograph 21, Oxford Archaeology, 2004).

¹²² G. Hey, A. Bayliss and A. Boyle, 'Iron Age Inhumation Burials at Yarnton, Oxfordshire', *Antiquity*, 73 (1999), 551-62.

¹²³ *Ibid.*

¹²⁴ Trust for Wessex Archaeology, 'Clarendon to Cockney Down Water Main, Salisbury, Wiltshire' (Internal report prepared for Wessex Water, Trust for Wessex Archaeology, 1996).

¹²⁵ B. W. Cunliffe, 'The Danebury Environs Project: Suddern Farm and Fiveways Excavation 1996' (Internal Report Danebury Trust, Oxford Institute of Archaeology, 1996).

¹²⁶ D. Serjeantson, 'The Animal Bones', in S. Needham and T. Spence (eds.), *Refuse and Disposal at Area 16, East Runnymede: Runnymede Bridge Research Excavations*, Vol. 2 (British Museum Press: London, 1996).

¹²⁷ J. Boessneck, 'Osteological Differences in Sheep (*Ovis aries* Linné) and Goat (*Capra hircus* Linné)', in D. Brothwell and E. Higgs (eds.), *Science in Archaeology* (Thames and Hudson, 1969), 331-58.

¹²⁸ W. Prummel and H.-J. Frisch, 'A Guide for the Distinction of Species, Sex and Body Size in Bones of Sheep and Goat', *J. Archaeological Sci.* 13 (1986), 567-77.

The condition of the bone was graded using the criteria stipulated by Lyman,¹²⁹ grade 0 being the best preserved bone and grade 5 indicating that the bone had suffered such structural and attritional damage. Tooth eruption and wear stages were measured using a combination of Halstead¹³⁰, Grant,¹³¹ and Levine,¹³² and fusion data was analysed according to Silver.¹³³ Measurements of adult (fully fused) bones were taken according to the methods of von den Driesch,¹³⁴ with asterisked (*) measurements indicating bones that were reconstructed or had slight abrasion of the surface. Withers heights were calculated using Fock,¹³⁵ Kieserwalter in Boessneck and von den Driesch,¹³⁶ Teichert¹³⁷ and Matolcsi.¹³⁸

TABLE 25. CONDITION OF THE ANIMAL BONE FROM WOODCOTE ROAD

Date	Condition					Total
	1	2	3	4	5	
Middle Iron Age	40.7%	40.7%	16.2%	2.4%	—	100.0%
Late Iron Age-early Roman	22.3%	50.9%	14.3%	12.5%	—	100.0%
Late 1st-early 2nd century	29.2%	55.2%	13.7%	1.6%	0.3%	100.0%
Early 2nd-early 4th century	—	100.0%	—	—	—	100.0%
Late 3rd-early 4th century	30.8%	49.7%	18.4%	1.1%	—	100.0%
Unphased	21.0%	42.7%	30.7%	5.6%	—	100.0%
Total	30.8%	47.5%	17.7%	4.0%	0.0%	100.0%

Woodcote Road, South Stoke

The bones from here survive in relatively good condition, with the majority scoring 2 according to Lyman's grading (see Table 25). A total of 3233 animal bones and teeth (26799 g.) were recovered by hand collection and sieving. Many of the bones had fresh breaks, and re-fitting reduced the total fragment count to 2026. A list of all the species identified is shown in Tables 26 and 27.

¹²⁹ R. L. Lyman, *Vertebrate Taphonomy* (Cambridge Manuals in Archaeology, Cambridge University Press: Cambridge, 1996).

¹³⁰ P. Halstead, 'A Study of Mandibular Teeth from Romano-British Contexts at Maxey', in F. Pryor, *Archaeology and Environment in the Lower Welland Valley* (East Anglian Archaeol. Rep. 27, 1985), 219-24.

¹³¹ A. Grant, 'The Use of Tooth Wear as a Guide to the Age of Domestic Ungulates', in B. Wilson *et al.*, *Ageing and Sexing Animal Bones from Archaeological Sites* (BAR British Series 109, 1982), 91-108.

¹³² M. A. Levine, 'The Use of Crown Height Measurements and Eruption-Wear Sequences to age Horse Teeth', in B. Wilson *et al.*, *Ageing and Sexing Animal Bones from Archaeological Sites* (BAR British Series 109, 1982), 223-50.

¹³³ I. A. Silver, 'The Ageing of Domestic Animals', in D. Brothwell and E. S. Higgs, *Science in Archaeology* (Thames and Hudson, 1969).

¹³⁴ A. von den Driesch, *A Guide to the Measurement of Animal Bones from Archaeological Sites* (Peabody Museum, 1976).

¹³⁵ J. Fock, 'Metrische Untersuchungen an Metapodien einiger europäischer Rinderrassen' (Dissertation, Munich University, 1966).

¹³⁶ J. Boessneck and A. von den Driesch, *Kritische Anmerkungen zur Widerristhöhenberechnung aus Längenmassen vor und frühgeschichtlicher Tierknochen*, *Saugetierkd Mitt* 22 (4) (1974), 325-48.

¹³⁷ M. Teichert, 'Osteometrische Untersuchungen zur Berechnung der Widerristhöhe bei Schafen', in A. T. Clason, *Archaeological Studies* (Amsterdam, 1975).

¹³⁸ J. Matolcsi, 'Historische Erforschung der Körpergrösse der Rinder auf Grund von Ungarischen Knochenmaterial', *Zeitschrift für Tierzüchtung und Züchtungsbiologie*, 87 (1970), 89-128.

TABLE 26. MEDIUM AND LARGE MAMMALS IDENTIFIED FROM WOODCOTE ROAD

	Cattle	Sheep/ Goat	Sheep	Horse	Pig	Dog	Roe Deer	Fox	Unid	Total
Middle Iron Age	66	57	5	32	10	2	3	–	388	563
Late Iron Age – early Roman	67*	48	–	17	7	1	–	1	195	336
Late 1st-early 2nd century	48	54	3	14	11	4	–	–	246	380
Early 2nd-early 4th century	–	1	–	–	–	–	–	–	–	1
Late 3rd-early 4th century	46	55	–	4	13	10	–	–	333	461
Unphased	120	10	–	2	1	–	–	–	115	248
Total	347	225	8	69	42	17	3	1	1277	1989

*15 bones from a likely neonatal burial

TABLE 27. SMALL MAMMALS AND BIRDS IDENTIFIED FROM WOODCOTE ROAD

	Bird	Domestic fowl	Corvid	Bullfinch	Field vole	Water vole	House mouse	Frog/ toad	Total
Middle Iron Age	2	–	1	1	23	–	1	3	31
Late Iron Age – early Roman	–	–	–	–	–	–	–	–	0
Late 1st-early 2nd century	–	–	–	–	–	–	–	–	0
Early 2nd-early 4th century	–	–	–	–	–	–	–	–	0
Late 3rd-early 4th century	–	5	–	–	–	1	–	–	6
Total	2	5	1	1	23	1	1	3	37

The good condition of the bone has allowed for 749 (40% of the total) bones and teeth to be identified to species. The large majority of the identified bones come from cattle and sheep/goat, indicating that these were the most dominant species for all periods represented at this site.

Middle Iron Age

The MIA period yielded the highest number of animal bones. Almost all the bone came from pits, with the exception of five fragments, including two cattle bones and one sheep/goat bone, which came from postholes 437 and 511. Cattle and sheep/goat dominate the assemblage, with five bones positively identified as sheep. No goat bones were identified.

Cattle: Many of the cattle bones exhibit cut marks, including marks associated with dismemberment. A single horn core has been worked. Only one cattle bone shows pathological changes, a mandible with ante-mortem loss of the 4th premolar and new bone growth over the root socket. Burning was also noted on a scapula, possibly as a result of cooking. A 1st, 2nd and 3rd phalanx and a radius and Ulna were articulated, indicating that they were possibly *in situ*.

Tooth eruption and wear stages could be estimated for seven cattle mandibles, suggesting one animal died aged 8-18 months, one aged 30-36 months, two as old adults and three as senile. The majority of bones are fully fused adult bones, but there are several unfused or fusing bones, suggesting that at least one animal died aged approximately 2-2½ years and at least one died aged approximately 3-3½ years. Withers heights could only be calculated for one cattle metacarpal, giving a height of 1.07 m.

Sheep/goat: Only two sheep/goat bones have butchery marks, a scapula with marks characteristic of dismemberment, and a radius that had been chopped through the shaft, probably for marrow extraction. Carnivore gnawing was noted on two bones, from pits 426 and 440, suggesting that these bones were exposed before their final deposition.

Tooth eruption and wear stages could be estimated for 13 sheep/goat mandibles, giving a range of ages at death from 1-3 months to <8 years. The death of a sheep/goat at 1-3 months, and two sheep/goats aged 3-10 months indicate a degree of juvenile mortality suggesting that sheep/goats were bred within the immediate vicinity of the site. The six individuals that died aged 10-34 months are likely to be those killed at an optimum age for meat production; whereas the four older sheep/goat (two aged 5-8 and two over the age of 8) were probably kept for wool.

Fusion data from the sheep/goat bones also show a range of ages at death, with an unfused pelvis suggesting an age of less than 6-10 months, an unfused distal humerus suggesting an age of less than 10 months, and an unfused distal radius and proximal femur indicating that other individuals died before reaching 2½-3 years. Withers heights could only be calculated on one bone, a metacarpal, giving a height of 0.55 m.

Horse: Butchery marks were noted on several horse bones, with dismemberment marks identified on a pelvis and a humerus, and cut marks on an atlas. Ageing of the horse remains by means of tooth wear gave an age at death for two animals. One died aged 6½-9 years and one died aged 9¾-12¼. There were no unfused horse bones suggesting that all the excavated individuals had survived into adulthood.

Articulations were identified between two pairs of bones from different pits, a scapula and humerus from pit 70, and a metacarpal and trapezoid from pit 398. Withers height could be calculated from the greatest length of two long bones, a radius giving a height of 13 hands (1.28 m.), and a metacarpal also giving a height of 13 hands (1.29 m.).

Pig: The pig bones show no evidence of butchery or any articulating elements and age at death could only be estimated for one mandible, indicating that the individual was immature at death. An unfused calcaneus is present, suggesting that at least one animal died before reaching 2-2½ years.

Other: The two dog bones present comprise a left and right mandible, found in different pits, pit 227 and 362. The roe deer bones consist of an articulating sacrum and two lumbar vertebra, with the sacrum exhibiting cut marks as a result of dismemberment.

The largest percentage of bones in excellent condition (scoring 1 using Lyman's scale) date to the MIA, which may explain the high proportion of small mammal and bird bone within the MIA assemblage. The majority of the small mammals and birds come from pit 468, including a minimum of four field voles. The only exceptions to this are the corvid bone and an unidentified bird bone from pit 405, and four field vole bones from pit 31.

Late Iron Age-early Roman

The bones from the LIA-ERO follow the same pattern as those from the MIA, with cattle and sheep/goat dominating the assemblage (cattle again in slightly higher numbers) and horse, pig, and dog present in fewer numbers.

Cattle: All the cattle bones from this period come from pits, apart from one mandible fragment from ditch 422 and a maxillary molar from ditch 487. Cut marks, including some distinct dismemberment marks were noted on several bones and a cattle skull has an oval hole in the frontal which may have been the cause of death.

The age at death from tooth eruption and wear stages could be ascertained for four mandibles, giving ages at death of 18-30 months for two cattle, and adult for another two. Fusion data suggests that at least one individual died as a neonate. Other unfused bones suggest ages at death based on individual bones of 7-10 months, 12-18 months, two of 2-2½ years and two of 3-3½ years. The death of animals at the prime age for meat production, as highlighted by both tooth wear analysis and fusion data, may imply that cattle were kept for meat production.

No pathologies were noted on any of the cattle bones, and withers heights could only be calculated on one metacarpal, giving a height of 1.07 m. Carnivore gnawing was only noted on one cattle ulna.

Sheep/goat: The majority of the sheep/goat bones come from pits, with the exception of eight bones which were found in ditches. Dismemberment cut marks are evident on an axis and a humerus, and several of the bones had been burnt, probably during cooking. A radius and ulna from pit 240 articulated.

Tooth eruption and wear stages could be estimated for five mandibles, giving ages at death of 3-10 months, 20-34 months, 3-5 years, and two of 5-8 years. Fusion data suggests that one animal died before reaching 6-8 months, one around 10 months, and two before reaching 18-24 months. No pathologies or gnawing are evident, and there were no complete measurable long bones available to estimate withers heights.

Horse: Butchery marks are evident on one horse bone, a humerus which has been chopped probably for marrow extraction and also has dismemberment marks. Gnaw marks are present on an articulating 2nd and 3rd metatarsal, possibly indicating that these bones had been exposed before their final deposition and while they were still partially fleshed. Articulations were also seen between an atlas and four cervical vertebra.

Tooth wear analysis has suggested an age at death for one individual as 2-4 $\frac{1}{2}$ years, and fusion data suggests that one individual died before reaching the age of 3 $\frac{1}{2}$ years. Withers heights could be calculated using an articulating metatarsal, giving a height of approximately 13 hands (1.32 m.).

Pig: All the pig bone came from pits, with only one pig humerus exhibiting cut marks. These cut marks are from two distinct activities, dismemberment marks around the distal articulation, and filleting marks along the shaft. The bone had also been chopped through the shaft, probably for marrow extraction. This same bone also had a non-pathological depression on the distal articulation. One radius had carnivore gnawing on the shaft and a maxilla was identified as female.

Other: Only one dog bone was identified from this period, a scapula found in pit 368, and a single fox metatarsal was identified from pit 287. No other wild species were present.

Early Roman

As with the other periods, the majority of the bone from the late 1st to early 2nd century was recovered from pits, with the exception of a sheep/goat molar from ditch 30, and a pig femur, some medium long bones and a large skull fragment from tree throw 60. Cattle and sheep/goat again dominate the assemblage, but in this phase the sheep/goat bones are present in larger quantities. Horse, pig and dog are again present in lower numbers.

Cattle: Dismemberment cut marks are evident on a number of cattle bones, and several had been chopped through the shaft. A horn core had also been cut through the base, probably a result of horn working. Age at death through tooth wear stages could not be determined, but fusion analysis of the bones suggests that 2 individuals died aged 2-2 $\frac{1}{2}$ years, one at 3-3 $\frac{1}{2}$ years and another at 3 $\frac{1}{2}$ -4 years. This would be the optimum age for meat production. Several bones have carnivore gnawing, and an articulating astragalus and calcaneus were recovered from pit 335. Withers heights could not be determined from the bones available.

Sheep/goat: There were no butchery marks present on any of the sheep/goat bones recovered from this period, and no pathologies, gnawing marks, articulations or burning was observed. Tooth eruption and wear stages could be determined for ten mandibles, with two mandibles giving an age at death of 3-10 months, one at 10-20 months, four at 20-34 months, one at 5-8 years, and two at greater than 8 years. Fusion data suggests that one animal died before reaching 10 months, two died before 1 $\frac{1}{2}$ -2 years, and another before 3-3 $\frac{1}{2}$ years. No measurements are available to calculate withers heights.

Horse: Dismemberment marks were observed on a horse astragalus, and a femur had been chopped through the shaft. Ageing of one tooth gave an age at death of 9 $\frac{3}{4}$ -14 years and fusion data suggests that one individual died before 15-18 months, and two died before 3-3 $\frac{1}{2}$ years. No articulations, pathologies, burning or gnawing are evident. Withers heights could not be calculated on any of the bones present.

Pig: Dismemberment marks can be seen on one pig atlas, probably from removing the head. Carnivore gnawing is evident on one scapula and one neonatal femur is present. No other ageing evidence is available.

Dog: An articulating dog skull and left and right mandible were recovered from pit 448, with an ulna present from pit 335. There were no pathologies observed or evidence of gnawing, burning or butchery.

Later Roman

Contexts dated to the late 3rd-early 4th century yielded bones mainly from pits, with the exception of some cattle, sheep/goat, horse and pig bones from quarry hollow 8. A sheep/goat mandible aged 3-5 years at death was recovered from pit 455.

Cattle: Other than those in quarry hollow 8, all the cattle remains came from pit 130. Three cattle bones exhibited cut marks, including two tibiae chopped through the shaft, and a skull that had skinning cut marks circling the horn core. The horn core had been removed possibly for horn working.

Ageing using tooth eruption and wear stages was ascertained for one mandible, giving an age at death of 8-18 months. Two loose 3rd molars were aged as senile. An unfused distal radius suggests an age at death for one individual of 3½-4 years, as does an unfused ulna. An unfused calcaneus suggests an age at death of 3-3½ years. Articulations were noted between a tibia and an astragalus and between three carpals, and carnivore gnawing was noted on a lunate. It is not possible to calculate withers heights from the bones present.

Sheep/goat: Butchery marks were observed on one sheep/goat bone, a tibia which had been chopped. Tooth wear and eruption stages were calculated on six mandibles, with one giving an age at death of 3-10 months, two giving an age at death of 10-20 months, and three giving ages at death of 5-8 years. No evidence for burning or gnawing was seen, and withers heights could not be calculated with the bones present.

Horse: The horse remains from this period comprise two teeth, a mandibular ramus and a metatarsal. All the remains except one tooth were found in quarry hollow 8. The metatarsal had carnivore gnawing on the distal articulation. No pathologies, burning, or butchery were recorded, and withers heights could not be calculated from the bones available.

Pig: All the pig bones came from pit 130, with the exception of one molar which was from quarry hollow 8. No butchery marks were recorded on any of the bones, and tooth wear analysis could only be estimated for one mandible, giving an age at death of immature. No other information can be gained from the pig bones of this period.

Dog: The dog bones all came from pit 130, with the exception of an articulating dog skull and left and right mandible from pit 448, and an ulna from pit 335. No butchery marks, gnawing, pathologies or burning were noted on any of the bones and withers heights could not be calculated from the bones present.

Other: Also excavated from pit 130 was the articulated wing of a domestic fowl. In the same feature there was also the mandible of a water vole.

Conclusions

It is clear that cattle and sheep/goat dominate the assemblage for all periods, with horse, pig and dog present but in fewer numbers. From the MIA butchery marks are seen on cattle, sheep/goat and horse bones, indicating that these animals were utilised for their meat. A single cattle horn core has been worked. Butchery marks were also noted on the cattle, sheep/goat and horse bones from the LIA-ERO period, along with the butchery marks on a pig bone. Dog bones are present from the MIA.

While some of the cattle were killed at the optimum age for meat production, the presence of older cattle in both the middle and later Iron Age may indicate that they were also used for traction. The presence of young sheep/goat suggests that the animals would have been bred within the vicinity of the site. From the tooth wear analysis it can be suggested that sheep/goat were being killed at the optimum age for meat production, with older animals also being kept for breeding and wool production. The age at death for horses and pig suggests that the horses survived into adulthood, and at least one pig died before reaching adulthood. The patterns of butchery marks on the LIA-ERO pig bones suggest dismemberment and filleting, and the chopping of a horse humerus may indicate marrow extraction.

It may be suggested that some hunting of wild animals was carried out, as indicated by the butchered roe deer remains, but it is unlikely that this would have contributed much to the daily diet.

From the late 1st-early 2nd century cattle are present in slightly lower numbers than sheep/goat. Although this is based on a small sample of bones, perhaps it represents a shift in the importance of animals at the site. Again butchery marks are noted on cattle, horse and pig bones, and the age at death of cattle may represent animals being killed for meat production. The same kill off pattern for sheep/goat is seen here as earlier periods, with some animals being killed for meat, and older animals probably kept for wool. Age at death of the horses from this period suggests that one animal died quite young, before reaching 15-18 months, and another before 3-3½ years.

During the late 3rd-early 4th century the main domestic species are represented, but no dog bones were found. However, the first evidence for domestic fowl on the site occurs at this time, which is not unexpected as it is generally thought that they were introduced to Britain during the Roman period. A cattle skull has clear skinning marks around the horn cores, which have been removed, possibly indicating the use of both the hides and the horn. Age at death suggests that the cattle were being killed at the optimum age for meat production. A sheep/goat tibia had been chopped, probably for marrow extraction, and it is possible that the sheep/goat were utilised for meat and wool. Horse remains were also present, but in much smaller proportions than the earlier periods, which may indicate that they were not so important to the later inhabitants of the site. Only one pig mandible could be aged, indicating that the animal was immature when it died. No butchery marks were observed, and so very little else can be said about their presence. An articulating skull and mandible of a dog was found in one pit, suggesting it had been deposited not long after death.

TABLE 28. CONDITION OF THE BONE FROM ENWICK SHAW PIT

<i>Date</i>	<i>Condition</i>			<i>Total</i>
	<i>1</i>	<i>2</i>	<i>3</i>	
Middle Iron Age - late Iron Age	18.0%	79.1%	2.9%	100.0%
Late Iron Age	12.5%	87.5%	—	100.0%
Early 2nd-late 3rd century	50.5%	47.6%	1.9%	100.0%
Late 3rd-late 4th century	46.9%	53.1%	—	100.0%
Unphased	47.7%	51.4%	0.9%	100.0%
Total	28.0%	71.2%	0.8%	100.0%

TABLE 29. TOTAL NUMBER OF BONES AND TEETH FROM ENWICK SHAW PIT

	<i>Cattle</i>	<i>Horse</i>	<i>Sheep/ Goat</i>	<i>Pig</i>	<i>Dog</i>	<i>Bank vole</i>	<i>Unidentified</i>	<i>Total</i>
Middle Iron Age - late Iron Age	5	2	2	—	1	6	123	139
Late Iron Age	3	—	3	1	—	—	370	377
Early 2nd-late 3rd century	41	6	3	2	—	—	51	103
Late 3rd-late 4th century	27	5	2	1	—	—	110	145
Unphased	6	1	3	—	—	—	101	111
Total	82	14	13	4	1	6	755	875

Enwick Shaw Pit

A total of 1923 fragments (7249 g.) of bone and teeth were recovered by hand and through sieving from this site. The condition of the bone from this site is reasonably good, with the majority of the bone scoring 2 using Lyman's grading system (Table 28). Fresh breaks were noted on many of the bones, and the re-assembly of many of the elements reduced the fragment count to 875. The highly fragmented nature of the bones from this site resulted in only 120 bones being identified to species, 13.7% of the total fragment count. The species identified are shown in Table 29.

Middle-late Iron Age

All 139 fragments of bone and teeth from the M-LIA phase were recovered from a single pit 27. Many of these bones are from small mammals, the only identifiable ones being those of the bank vole.

One sheep/goat radius had been chopped through the shaft, suggesting the exploitation of marrow, and one cattle phalanx had carnivore gnawing. Tooth wear analysis suggests an age at death of 3-5 years for one sheep/goat, and young adult for one cow.

Most of the bone from this site came from LIA features. However, the high fragment count is due to a large number of small, unidentifiable burnt bone fragments. The majority of the bone (84%), including all the burnt bone came from a single ditch (20), with the remainder of the bone coming from ditches 3, 51, and 99. Butchery marks were noted on only one cattle bone, a humerus which has been chopped longitudinally down the shaft. One deciduous 4th premolar was positively identified as sheep, but distinctions could not be made for the other sheep/goat bones present.

The majority of the identified fragments from the early 2nd-late 3rd century come from broken fragments of cattle molars (71%). Bones of this date were found in pits or ditches. Dismemberment cut marks are present on one cattle scapula, and a medium-sized long bone was chopped. A pig phalanx had been burnt, possibly during cooking.

Much of the identifiable bone from the late 3rd-late 4th century was also from cattle. Given the good condition of the bone, the total fragment count suggests that cattle were the dominant species in this period. All the bone from this phase came from a single pit 69, apart from a horse molar and some unidentifiable long bones which came from pit 44. Cut marks were noted on a cattle radius, and carnivore gnawing marks were noted on several bones. Periostitis was seen along the shaft of a cattle metatarsal and a type 2 non-pathological depression was seen on the distal articulation of a cattle 1st phalanx. A distal cattle radius and femur and proximal humerus are unfused, suggesting that at least one animal died before reaching 3½ years of age. The measurement of a cattle tibia gave a withers height of 1.05 m., and a metacarpal gave a height of 1.09 m. A horse tibia gave a withers height of almost 14 hands (1.41m.).

Conclusion

The sample size from this site is too small to allow for any specific conclusions to be drawn as to animal husbandry techniques. The main domestic species are represented and the bones are likely to have accumulated from domestic waste. Cut marks on a variety of bones show that the animals were butchered and the presence of burnt bones, particularly the burnt pig phalanx, may constitute evidence of cooking. There is also the evidence for the chopping of long bones, probably for marrow extraction.

Watching brief

There is a marked difference in the condition of the animal remains from the watching brief which are of variable date. The bones from the early Neolithic pits have survived in relatively poor condition, with the majority scoring 4 according to Lyman's grading. The bones from Iron Age and later features are in much better condition, with the majority scoring 2. These marked differences can be seen in Table 30.

A total of 417 fragments (1680 g.) were recovered by hand collection and sieving, with many of the fragments having fresh breaks. The re-fitting of the bones reduced the fragment count to 284. Of these 284 fragments, 57 (20%) could be identified to species. The species identified from the watching brief are shown in Table 31. Most bone was recovered from pits, with the exception of 53 fragments found in the ditches 3002, 4038, 5003 and 5051.

TABLE 30. CONDITION OF THE ANIMAL BONE FROM THE WATCHING BRIEF

<i>Date</i>	<i>Condition</i>				<i>Total</i>
	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	
Early Neolithic	–	12.0%	81.5%	6.5%	100.0%
Middle Iron Age	98.3%	1.7%	–	–	100.0%
Late 1st-early 2nd century	100.0%	–	–	–	100.0%
Saxon	95.6%	4.4%	–	–	100.0%
Medieval	50.0%	50.0%	–	–	100.0%
Post-medieval	100.0%	–	–	–	100.0%
Unphased	–	14.0%	84.2%	1.8%	100.0%
Total	40.1%	9.2%	47.9%	2.8%	100.0%

TABLE 31. TOTAL NUMBER OF BONES IDENTIFIED TO SPECIES AND DATE

	<i>Cattle</i>	<i>Pig</i>	<i>Sheep/ Goat</i>	<i>Horse</i>	<i>Hare</i>	<i>Pigeon</i>	<i>Corvid</i>	<i>Unidentified</i>	<i>Total</i>
Early Neolithic	11	5	3	–	–	–	–	89	108
Middle Iron Age	11	3	4	3	–	–	–	38	59
Late 1st-early 2nd century	–	–	–	2	–	–	–	1	3
Saxon	4	–	–	–	–	–	–	41	45
Medieval	1	1	1	–	–	–	–	1	4
Post-medieval	1	–	–	–	1	1	1	4	8
Unphased	4	–	–	–	–	–	–	53	57
Total	32	9	8	5	1	1	1	227	284

Early Neolithic

The bones from the early Neolithic period originate from five pits, with the most coming from pit 5027 and less from pits 5015, 5019, 5025 and 5035. Apart from a femur and a mandibular ramus, cattle are only represented by teeth. The femur has been chopped through the shaft. The sheep/goat bones comprise a 1st phalanx and two lumbar vertebra, and the pig bones consist of two molars, a 3rd phalanx, an astragalus and an unfused distal tibia. This unfused bone suggests that at least one pig from this site died before reaching 2 years of age.

Saxon – post-medieval

Other than two cattle molars and three large long bones marked as object reference, all the bones dated to the Saxon period come from the ditch 4030. Besides the two cattle molars, the only other identifiable bones are a cattle scapula and a metatarsal. The scapula has porosity and eburnation on the glenoid, characteristic of osteoarthritis. There are also three medium sized burnt ribs.

Three bones are identifiable to species from the medieval period, all from ditch 5051. These bones comprise a cattle humerus, a sheep/goat humerus and an adult pig mandible. The sheep/goat humerus had been chopped through the shaft.

From the post-medieval period, a cattle 1st phalanx and a pigeon humerus were excavated from pit 3008, and some hare and corvid bones from ditch 3002. The cattle 1st phalanx was burnt and unfused, suggesting an age at death of less than 1½ years of age. A large cervical vertebra and a medium thoracic vertebra had been chopped through the sagittal plane.

Conclusions

The animals represented are the main domestic species, along with hare, pigeon and corvid from the post-medieval period. Butchery marks are noted on several of the domestic species and some bones have been chopped probably for marrow utilisation. The importance of different domestic animals for each period cannot be determined, and it can only be said that domestic species were being used for meat and marrow during all periods. The pigeon bone from the post-medieval period may suggest consumption of pigeons, but as only one bone was recovered and there was no evidence for butchery it is just as likely that this, like the deaths of the hare and the corvid, was a natural death.

CHARRED PLANT REMAINS by ELIZABETH HUCKERBY and DENISE DRUCE

Samples were taken from features at, Woodcote Road, South Stoke, Enwick Shaw Pit and the watching brief sites for the recovery of environmental material. The sampling programme targeted the Neolithic pit deposits at South Stoke to gather information about the early agricultural communities of the region. Samples from other contexts were taken for the recovery of environmental remains relating to the rural economy and the local landscape when the archaeological deposits were accumulating. Following the initial assessment of 42 samples, 16 were selected for further analysis, 11 from the Neolithic pits, two from Woodcote Road,¹³⁹ and three from Enwick Shaw Pit.¹⁴⁰

Methodology

Sampling on site ensured that deposits from all major feature types and phases were represented. Where possible samples were taken from discrete and secure contexts.

Forty-two samples were processed with a modified Siraf machine, the flots were collected on a 250 micron mesh and air-dried. The volume of the samples processed was from 10 litres to 80 litres and the size of the flots varied from 1500 ml. to less than 20 ml.

Following the assessment 16 samples were selected for analysis and these were sorted for charred plant remains with a binocular microscope. The individual charred plant remains, excluding the charcoal, which is considered elsewhere (see Gale below), were recorded, counted and if possible identified.¹⁴¹ Plant nomenclature follows Stace.¹⁴²

Results from Woodcote Road, South Stoke

Two samples from the fills of the LIA-ERO pits 335 and 368 were analysed. The samples were rich in cereal grains and glumed wheats *Triticum dicoccum/spelta* (emmer/spelt) or (spelt), hulled and undifferentiated *Hordeum* and indeterminate cereal grains were recorded. There were large numbers of fragments and half cereal grains identified in both samples. Chaff was represented in the samples, glume bases and spikelet forks from *Triticum spelta* were identified as well as undifferentiated bases and spikelet forks. The ratio of chaff fragments to entire grains and grain pieces of less than 1, suggests that the charred plant remains represent a cleaned and processed crop. The weed seeds identified are restricted to a few taxa mainly from a possible nutrient-poor grassland community.¹⁴³

¹³⁹ One late Iron Age to early Roman pit 341 and a second from middle Iron Age to early Roman wattle and daub lined pit 368.

¹⁴⁰ A mid to late Iron Age pit 27, Roman ditch 20 fill and 1st-3rd-century Roman pit 69.

¹⁴¹ Identifications were made on the bases of comparison with modern reference material held at Oxford Archaeology North.

¹⁴² C. Stace, *New Flora of the British Isles* (Cambridge, 1991).

¹⁴³ Weeds included members of the Fabaceae family (eg. vetches and tares), *Bromus* sp (bromes), less than 2 mm. Poaceae (small grasses), medium sized grasses, *Rumex acetosella* (Sheep's sorrel) and *Rumex acetosa* (common sorrel) possibly from nutrient poor grassland.

TABLE 32. CHARRED PLANT REMAINS WOODCOTE ROAD, SOUTH STOKE

Feature number	Pit 335	Pit 368
Context	341	371
Sample number	10	13
Feature type	Top fill	wattle and daub lined
Phase	LIA-ER	MIA-ER
Sample size l	40	35
Flot size ml	100	75
Cereal grain		
<i>Hordeum</i> -barley hulled	1	5
<i>Hordeum</i> -barley undiff	1	4
<i>Triticum</i> -wheat	12	31
<i>Avena</i> -oats		12
Cereal undiff	26	59
Cereal undiff half grains	24	
Cereal undiff fragments	c 230	240
Cereal chaff		
<i>Triticum spelta</i> glume bases	33	66
<i>Triticum spelta</i> glume spikelet fork	1	2
Glume base fragment cf <i>Triticum spelta</i>	11	66
spikelet fork fragments cf <i>Triticum spelta</i>	3	
Glumes bases undifferentiated		245
Spikelet fork		83
<i>Avena-fatua</i> awn fragments	3	12
Awn fragments		2
Culm node	2	2
Weeds		
<i>Bromus</i> sp-bromes		26
<i>Bromus</i> fragments		15
<i>Eleocharis palustris</i> -spike-rush		2
Fabaceae <4mm-pea/bean family	8	14
<i>Fallopia convolvulus</i> -black-bindweed		2
<i>Galium</i> sp-bedstraw/cleavers	2	
<i>Lapsana communis</i> -nipplewort		2
<i>Hypericum</i> sp-St John's wort		4
<i>Plantago lanceolata</i> -ribwort plantain		2
Poaceae <2mm-small grass	7	28
Poaceae 2-4mm-medium grass	1	6
Poaceae <4mm-large grasses		6
Poaceae/cereal fragments		8
<i>Polygonum aviculare</i> -knotgrass		2
<i>Rumex acetosella</i> -sheep's sorrel	1	4
<i>Rumex acetosa</i> -common sorrel		6
<i>Stellaria media</i> -common chickweed	1	
<i>Viola</i> - sp-violet/pansy	1	
Unknowns		2
Matrix components scale presence/absence		
Charcoal	++ mixed taxa	++ mixed taxa
<i>Rubus</i> thorn-blackberry		+
Molluscs	++	+
Bone fragments	+	Small mammal
Modern roots	+	+
Modern moss	+	

TABLE 33. CHARRED PLANT REMAINS ENWICK SHAW PIT

Feature	20	27	69
Context	22	28	72
Sample number	1	2	3
Feature type	Ditch fill	Fill of pit	Fill of pit
Phase	Early Roman	M-L Iron Age	1st-3rd C
Sample size l	40	40	30
Flot size ml	150	260	100
Cereal grain			
<i>Hordeum</i> -barley hulled	2	16	3
<i>Hordeum</i> -barley undiff	1	24	4
<i>Triticum</i> -wheat	11	>2000	27
<i>Triticum spelta</i> -spelt wheat		232	
<i>Avena</i> -oats	1	16	7
Cereal undiff	22	972	24
Cereal undiff half grains		1652	47
Cereal undiff fragments		>20,000	345
Cereal chaff			
<i>Hordeum</i> -rachis-barley rachis			44
<i>Hordeum</i> -glume -barley			12
<i>Triticum spelta</i> glume bases	28	4	481
<i>Triticum spelta</i> glume spikelet fork	1	4	2
Glume base fragment cf <i>Triticum spelta</i>	106		12
spikelet fork			220
Glume base		16	>1550
<i>Avena-fatua</i> awn fragments	21		27
Coleoptiles-cereal embryo	2	72	11
Culm node	4	8	
Weed and native species			
<i>Corylus avellana</i> nut fragments-hazel	2		
<i>Anthemis cotula</i> -stinking chamomile	1		6
<i>Bromus</i> sp-bromes		36	18
<i>Carex</i> lenticular-sedge	2		
<i>Centaurea</i> sp-knapweeds			1
Asteraceae-daisy/dandelion family			1
Fabaceae <4mm-pea/bean family	40		1
<i>Galium</i> sp-bedstraw/cleavers	11		
<i>Hypericum</i> sp cf-St John's wort			7
Poaceae <2mm-small grass	24		17
Poaceae 2-4mm-medium grass	9	8	9
Poaceae >4mm-large grass	3		10
Poaceae stem fragments	17		74 stem/embryo
Poaceae palae/lemma fragments	6		16
<i>Polygonum</i> sp-docks		4	
<i>Ranunculus repens</i> -type-buttercup	1		
<i>Rumex acetosa</i> -common sorrel			1
<i>Rumex acetosella</i> -sheep's sorrel	1		
Unknown			3
Matrix component presence/absence			
Charcoal	++	+	+
Molluscs	+	+	+
Bone fragments	+	+	
Modern roots	+	+	+
Modern seeds	+	+	+
Modern moss	+	+	+

Results from Enwick Shaw Pit

The sample from the fill of M-LIA pit 27 is exceptionally rich in cereal grains. The dominant cereal type was *Triticum* sp. (wheat) with some *T. spelta* identified. Both hulled and undifferentiated *Hordeum* (barley) were also recorded. The identification of cereal coleoptiles (embryos) suggest that some of the grain had germinated when it was burnt. Chaff fragments were recorded but were not abundant. Weed seeds as at Woodcote Road were limited and only *Bromus* (Bromes) and 2-4 mm. Poaceae (medium sized grasses) were identified.

The fill of ERO ditch 20 and that of 1st-3rd-century pit 69 both yielded charred cereal grains. Wheat was the dominant type, with some barley. The fill of ditch 20, like that of pit 27 above, contained very little chaff but that of pit 69 was dominated by enormous numbers of glume bases some identified as *Triticum spelta* but others described as *Triticum dicoccum/spelta*, because they were so fragmentary. The weed flora preserved in the two Roman fills is more diverse than that from the Iron Age samples.¹⁴⁴

Discussion of late prehistoric and Roman charred plant remains

The samples from Woodcote Road and Enwick Shaw Pit confirm that *Triticum spelta* was the dominant wheat being grown in the area during the Iron Age and Roman period. At both sites some 6 row hulled barley was also being cultivated. The relatively low levels of chaff fragments in the two Iron Age samples from pits 27 and 335 suggest that these fills represent the accidental or deliberate burning of processed grain. The very high numbers of fragmented grain in both these contexts may result from partially ground grain being burnt and/or the burning process causing the grains to fragment further. Alternatively, the grain could be fragmented due to post depositional processes in the fills. The fill of Roman pit 69, from Enwick Shaw Pit probably represents the fine sieving residue by-product of Hillman's stage 12 of crop processing.¹⁴⁵ This pit fill and that from the LIA-ERO pit 335 at Woodcote Road indicate that crop processing was being undertaken at both sites in the 1st to 3rd centuries and possibly earlier at Woodcote Road.

Results from the Neolithic pits

The fills from the cluster of Neolithic pits all contained some charred plant remains. A single sample was analysed from pits 5015, 5019, 5029, 5031, and 5035 and three samples were analysed from pits 5025 and 5027. Duplicate samples from these two later pits were analysed to increase the limited dataset from these contexts. The preservation of the charred plant remains was poor and the plant assemblages were very limited. Small numbers of charred cereal grains, were recorded in all the pits and in pits 5029 and 5035, 16 grains were recorded in each. Some *Triticum* sp (wheat) grains were identified but it was not possible to distinguish whether a glumed wheat such as *Triticum dicoccum* (emmer) or *T. spelta* (spelt) or a free threshing variety such as *T. aestivum/compactum* was being grown as no chaff was recorded. However, three grains appeared to be more compact in shape and another was diagnostically more like emmer wheat in pit 5035. A single grain of either wild or cultivated *Avena* (oats) was identified in pit 5029. Except for two indeterminate weed seeds in pit 5027 the only other charred plant remains were charred *Corylus avellana* (hazel) nut fragments and charcoal, which is discussed separately. Some samples had more than 200 fragments of hazel nuts in them and the weight of the shell in the eleven samples was between 2 g. and 14 g. Some modern contamination was also present in all the samples.

¹⁴⁴ Weeds recorded include *Anthemis cotula*, high numbers of grass seeds, grass vegetative fragments and undifferentiated Fabaceae seeds.

¹⁴⁵ G. Hillman, 'Reconstructing Crop Husbandry Practices from Charred Plant Remains of Crops', in *Farming Practice in British Prehistory*, R. Mercer (ed.), (EUP: Edinburgh, 1981), 123-62; M. van der Veen, *Crop Husbandry Regimes* (Sheffield Archaeological Monographs, Sheffield, 3, 1992).

TABLE 34. CHARRED PLANT REMAINS FROM THE NEOLITHIC PITS

Pit number	5025	5029	5027	5027	5027	5015	5017	5031	5025	5025	5035
Context	5024	5028	5032	5032	5032	5014	5016	5030	5024	5024	5034
Sample number	5000	5002	5003	5005	5007	5008	5009	5011	5012	5013	5014
Section of pit	North							South	South spit 1	South spit 2	
Sample size l	20	50	40	20	20	20	20	10	40	30	?
Flot size ml	60	150	50-60	60	50	50	50	25-50	140-150	100	100
Cereal grains											
<i>Triticum</i> sp-wheat	1	6	2	3	1	2		1.5			3+?1 emmer
<i>Avena</i> -oats		1									
Cereal-undifferentiated	2	9	11	8	4.5	4	1	1	4	3	12
Cereal fragments	8		5	51	14	9	7	4	3	7	12
Culm node								2			
Total number of complete cereal grains	3	16	13	11	5.5	6	2	2.5	4	3	16
<i>Corylus avellana</i> nut fragments-hazel	230	>300	50	74	223	>300	204	89	>500	>400	>300
<i>Corylus avellana</i> weight g	>4	11	>3	>2	>2	6	>2	2	9	8	14
Fabaceae-vetch/tares					1			2			
Poaceae <2mm-small grass								2			
Unknown weeds			2								
Matric components presence/absence											
Charcoal	++	+	++	++	++	+	+	+	++	++	++
Molluscs	++	++	++	++	++	++	++	++	++	++	++
Bone fragments					+				+burnt		
Modern roots	++	++	+	+	+	+	+	+	+	+	+

Discussion of the Neolithic pit cluster

Charred Neolithic plant remains are still a rarity in the British Isles, and by comparison with other sites in the South of England eg. Barrow Hills,¹⁴⁶ Birdlip Quarry, Duntisbourne Grove and Trinity Farm,¹⁴⁷ and sites at Sutton Courtney¹⁴⁸ the values of cereal grains and hazel nut fragments at Newbury are relatively large. In common with other sites there are few weed seeds or chaff fragments. Pelling¹⁴⁹ suggested that the charred plant remains in the Neolithic pits at Birdlip Quarry, Glos. are likely to represent the waste from food preparation or of accidental burning during crop processing. The data from this pit cluster suggests that they may be derived from similar events. The low numbers of charred cereal grains suggest that crop cultivation, was on a small scale around the Newbury pipeline site.

Hazel nut shell fragments seem to be a ubiquitous component in the charred plant assemblages from most British Neolithic sites suggesting that a hunter-gatherer economy was still being practised as cultivation was beginning to become established in the British Isles. Pollen diagrams from sites throughout Britain and Ireland suggest that hazel was a dominant tree/shrub in the British Flora throughout the prehistoric period thus providing an abundant source of food and fuel.

In conclusion the charred plant remains from the Neolithic pit fills corroborate the data from other sites. Wheat was being cultivated in the neighbouring landscape at a low level secondly they illustrate the importance of hazel nuts in the Neolithic diet.

This report includes the analysis of 15 samples of charcoal from the group of Neolithic pits (5015-5035). It is probable that the charcoal originated from domestic fuel debris. Species identification was undertaken to indicate the character of the fuel and to provide evidence of the woodland environment during the Neolithic period.

Methods

Bulk soil samples were processed using a modified Siraf machine. Flots were collected on a 250 micrometre mesh and air dried; the charcoal was then separated from the charred plant macrofossils under low magnification.

The samples were small and the charcoal poorly preserved and mostly infiltrated by soil sediments. Samples 5004, 5008, 5011 and 5013 contained very comminuted fragments of charcoal that were too small for identification. Fragments measuring more than 2 mm. in radial cross-section were considered for identification. The samples were prepared using standard methods¹⁵⁰ and examined using a Nikon Labophot-2 microscope at magnifications up to x400. The anatomical features were matched to reference slides of modern wood. When possible, the maturity of the samples was recorded (e.g. heartwood/roundwood).

Results

The taxa identified are presented in Table 35. Classification follows that of Flora Europaea.¹⁵¹ Group names are given when anatomical differences between related genera are too slight to allow secure identification to genus level. Where a genus is represented by a single species in the British flora this is named as the most likely origin of the wood, given the provenance and period. The anatomical structure of the charcoal was consistent with the following taxa or groups of taxa:

Cf. Betulaceae. *Alnus glutinosa* (L.) Gaertner, European alder

Corylaceae. *Corylus avellana* L., hazel

¹⁴⁶ L. Moffett, 'The Prehistoric Use of Plant Resources', in A. Barclay and C. Halpin (eds.), *The Excavations at Barrow Hills, Radley, Oxfordshire* (1999), ii, 243-47.

¹⁴⁷ R. Pelling, 'Charred and Waterlogged Plant Remains', in A. Mudd, R. Williams and A. Lupton, *Excavations alongside Roman Ermine Street, Gloucestershire and Wiltshire* (Oxford Archaeological Unit, 1999), ii, 469-94.

¹⁴⁸ D. Challinor, 'Drayton, Sutton Courtney (DRSCT 02)' (Unpub. client assessment report).

¹⁴⁹ R. Pelling, op. cit. note 147.

¹⁵⁰ R. Gale and D. Cutler, *Plants in Archaeology* (Westbury and Royal Botanic Gardens, Kew, 2000).

¹⁵¹ T. G. Tutin, V. H. Heywood et al., *Flora Europaea*, 1-5 (Cambridge, 1964-80).

Either: Caprifoliaceae. *Viburnum* sp., wayfaring tree/guelder rose,

or, Cornaceae. *Cornus sanguinea* L., dogwood.

Fagaceae. *Quercus* sp., oak

Oleaceae. *Fraxinus excelsior* L., ash

Rosaceae. Subfamilies:

Pomoideae, which includes *Crataegus* sp., hawthorn; *Malus* sp., apple;

Pyrus sp., pear; *Sorbus* spp., rowan, service tree and whitebeam. These taxa are anatomically similar; one or more taxa may be represented in the charcoal.

Prunoideae. *Prunus spinosa* L., blackthorn.

CHARCOAL FROM NEOLITHIC PITS by ROWENA GALE

TABLE 35. CHARCOAL FROM NEOLITHIC PITS

Cut No.	Sample	Fill no.	<i>Alnus/ Corylus</i>	<i>Corylus</i>	<i>Fraxinus</i>	Pomoideae	<i>Prunus</i>	<i>Quercus</i>	<i>Viburnum/ Cornus</i>
5019	5009	5016	—	1	—	1	—	1h	—
5019	5010	5018	—	—	—	5	1	1	—
5025	5000	5024	—	1	—	2	4	—	—
5025	5012	5024	—	3	—	1	2	—	—
5027	5003	5032	2	—	—	6	3	2h	—
5027	5005	5032	—	1	—	3	4	—	—
5027	5006	5032	—	1	1	6	7	—	—
5027	5007	5032	—	1	—	2	2	1r	—
5029	5002	5028	—	Cf. 2	—	1	6	—	—
5031	5001	5030	—	—	—	—	5	—	—
5035	5014	5034	—	Cf. 1	—	5	3	6h, 1s	Cf. 1

Key: h = heartwood; r = roundwood; s = softwood

Discussion

Bulk soils samples, collected from several of the pits, produced small quantities of charred plant remains including charcoal. Charcoal was examined from six pits (5019, 5025, 5027, 5029, 5031 and 5035). The pits also included burnt food remains (cereals and hazel nutshells – see Huckerby, above) and, by association, the charcoal seems likely to have originated from domestic hearths.

The charcoal examined indicated that firewood was obtained mainly from shrubby species, such as blackthorn (*Prunus spinosa*), the hawthorn/*Sorbus* group (Pomoideae) and hazel (*Corylus avellana*); dogwood (*Cornus*) or wayfaring tree/guelder rose (*Viburnum*) was also provisionally identified. Charcoal from larger woodland trees, e.g. oak (*Quercus* sp.) and ash (*Fraxinus excelsior*), was relatively infrequent. The apparent dominance of charcoal from shrubby species may relate directly to the range of species available in the locality but could also reflect the greater difficulty in cutting firewood from, or felling, larger woodland trees. Other types of fuel likely to have been used, especially for tinder or kindling, may have included hazel nutshells and, possibly, cereal processing waste. The charcoal examined from the six pits was roughly similar in character and species content.

Environmental evidence

The site was located close to the E. edge of the Lambourn downs, in an area of valley gravel. Evidence from the charcoal analysis suggests that local woodland may have been fairly open and colonised mostly with shrubby species including blackthorn, the hawthorn/*Sorbus* group and hazel. The abundance of charred hazel nutshells (see Huckerby above) adds weight to this suggestion, since hazel only fruits in open or well-lit conditions. Blackthorn, hawthorn and hazel typically grow as scrub on downland; the first two taxa, in particular, rapidly colonise cleared or open areas on most types of soil and can be quite invasive. Deciduous oak woodland and associated tree species (e.g. ash) would probably have been more common on the deeper richer soils on the lower flanks of the hills and on the well drained gravels.

Conclusion

Although charcoal deposits in the pit group 5015-5035 were relatively sparse, the charcoal almost certainly represents spent domestic fuel dumped with other hearth debris, including waste from food preparation (charred cereals and hazel nutshells). Firewood consisted predominantly of shrubby species such as blackthorn (*Prunus spinosa*), the hawthorn/*Sorbus* group (Pomoideae) and hazel (*Corylus avellana*), with less use made of larger woodland trees, such as oak (*Quercus* sp.) and ash (*Fraxinus excelsior*). It is suggested that the immediate environment was largely open and shrubby and that denser oak/ash woodland may have been less accessible.

LAND SNAILS by ELIZABETH C. STAFFORD

The presence of snail fragments was noted in several of the flots from the bulk samples retrieved for charred plant remains at Woodcote Road and the watching brief. It appears that the large volumes of sediment processed from these bulk samples concentrated the shells that would otherwise not have been present in the smaller samples usually retrieved for land snails. Contexts from features such as pits are not the most ideal deposits in which to examine molluscan assemblages since these features are often deliberately backfilled leading to complex taphonomic problems. Some indication however of the local environment may be obtained from these features, and for this purpose the assemblages were examined in more detail.

Method

The flots from the bulk samples were scanned under a binocular microscope at x10 and x20 magnification. Full counts of identifiable molluscan remains were not undertaken since flotation of the samples would not have achieved adequate recovery. A number of shells, particularly apical fragments, may have remained in the residues which were not examined. The abundance of taxa was recorded on a sliding scale of + (present, 1-5 individuals), ++ (some, 6-25) and +++ (many, 26-50), ++++ (abundant >50). The results are presented in Tables 36-7. Nomenclature follows Kerney.¹⁵²

Results

Woodcote Road, South Stoke

The assemblages derive from five pit fills, three of which are dated to the middle Iron Age (pits 62, 31 and 463), one to the LIA-ERO period (pit 200) and one to the early Roman period (pit 212). The assemblages were all very similar, dominated by dry open-country grassland fauna, *Vallonia costata*, *V. excentrica*, *Helicella itala*, *Vertigo pygmaea*, *Pupilla muscorum* and various catholic species. Smaller quantities of shade-loving species, *Carychium tridentatum* and various Zonitidae, were also present. These shells may be redeposited, or perhaps represent more shaded conditions in the base of features or around the edges of features where damp coarse herbage may have been growing. The presence of *Pomatias elegans* may indicate some ground disturbance possibly associated with the loose soil around the feature edges.

¹⁵² M. Kerney, *Atlas of Land and Freshwater Molluscs of Britain and Ireland* (Harley Books: Colchester, 1999).

TABLE 36. MOLLUSCAN ASSEMBLAGES FROM WOODCOTE ROAD, SOUTH STOKE

	<i>Period</i>	<i>MIA</i>	<i>MIA</i>	<i>Late 1st century-early 2nd century</i>	<i>LIA-ER</i>	<i>MIA</i>
	<i>Feature type</i>	<i>pit</i>	<i>pit</i>	<i>pit</i>	<i>pit</i>	<i>burial</i>
	<i>Feature</i>	62	31	212	200	463
	<i>Fill</i>	65	42	214	278	468
	<i>Sample</i>	2	3	5	9	16
TAXA						
<i>Pomatias elegans</i>		-	-	++	+	-
<i>Carychium tridentatum</i>		+	+	++	+	-
<i>Cochlicopa</i> sp.		++	+	+	++	-
<i>Vertigo pygmaea</i>		++	++	+++	++	-
<i>Pupilla muscorum</i>		+++	++++	++++	++++	++
<i>Vallonia costata</i>		++	+++	+++	++	+
<i>Vallonia excentrica</i>		+++	++++	++++	++++	+
<i>Acanthinula aculeata</i>		-	-	+	-	-
<i>Punctum pygmaea</i>		+	-	+	+	
<i>Discus rotundatus</i>		+	-		-	-
<i>Zonitidae</i> indet.		+	-	+	-	-
<i>Vitrea</i> sp.		-	-	-	+	-
<i>Vitrea crystallina</i>		-	+	-	-	-
<i>Vitrea contracta</i>		-	+	-	-	-
<i>Aegopinella nitidula</i>		-	+	+	-	-
<i>Clausiliidae</i> indet.		+	+	-	-	-
<i>Cochlodina laminata</i>		-	-	Cf.+	-	-
<i>Clausilia bidentata</i>		-	-	-	-	-
<i>Helicidae</i> indet.		+	-	+	+	+
<i>Candidula</i> sp.		-	+	+	-	-
<i>Candidula gigaxii</i>		-	+	-	-	-
<i>Cepea/Arianta</i> sp.		-	-	+	+	-
<i>Helicella itala</i>		+++	+++	++++	+++	+++
<i>Trichia hispida</i>		+	++++	++++	++++	++++
Abundance + 1-5 ++ 6-25 +++ 26-50 +++++ >50						

TABLE 37. MOLLUSCAN ASSEMBLAGES FROM THE WATCHING BRIEF

Period	Early Neolithic										Unphased
Feature type	pit	pit	Pit	pit	pit	pit	pit	pit	pit	pit	pit
Feature number	5025	5031	5029	5027	5015	5017	5017	5031	5025	5025	3052
Fill number	5024	5030	5028	5032	5014	5016	5018	5030	5024	5024	3054
Sample number	5000	5001	5002	5003	5008	5009	5010	5011	5012	5013	3000
TAXA											
<i>Pomatias elegans</i>	++	++	+++	+++	+	++	-	++	+++	++	-
<i>Garychium tridentatum</i>	++	++	++++	++++	+	+	++	++	++++	+++	+
<i>Cochlicopa</i> sp.	++	+	++	+++	+	++	++	+	+++	++	-
<i>Cochlicopa lubrica</i>	-	-	-	++	++	+	+	+	+	+	-
<i>Cochlicopa lubricella</i>	-	-	-	+	+	+	-	-	+	-	-
<i>Vertigo</i> sp.	-	+	+	+	+	+	+	+	+	+	-
<i>Vertigo pusilla</i>	-	+	+	+	-	-	-	-	+	-	-
<i>Vertigo pygmaea</i>	+	+	-	+	+	++	+	+	++	++	-
<i>Pupilla muscorum</i>	++	++	+++	++	++	++	++	++	+++	++	-
<i>Vallonia</i> sp.	-	-	-	-	-	-	-	++	++	+	-
<i>Vallonia costata</i>	+++	++++	++++	++++	++	+++	+	+	++++	+	-
<i>Vallonia excentrica</i>	+++	++++	++++	+++	++	+++	+	++	++++	++	-
<i>Acanthinula aculeata</i>	+	+	++	+++	+	+	+	+	+	+	-
<i>Ena Montana</i>	-	-	-	-	-	-	-	+	-	-	-
<i>Ena obscura</i>	-	-	+	++	+	+	+	-	+	+	-
<i>Punctum pygmaea</i>	+	+	+	++	+	+	+	+	-	+	-
<i>Discus rotundatus</i>	++	+	+++	++++	+	++	+	+	+++	++	-
<i>Vitrina pellucida</i>	-	-	-	+	-	-	-	-	-	-	-
Zonitidae indet.	+	+	-	-	+	+	-	-	+	-	+
<i>Vitrea</i> sp.	++	-	-	++	-	+	-	+	++	+	+

<i>Vitrea crystalline</i>	-	-	-	-	-	-	-	-	+	-	-
<i>Vitrea contracta</i>	-	-	-	+	-	-	-	-	++	+	-
<i>Nesovitrea hammonis</i>	+	-	+	+	+	++	+	+	++	+	-
<i>Aegopinella pura</i>	+	+	+	++	++	++	+	+	++	+	-
<i>Aegopinella nitidula</i>	+++	+	++	+++	++	++	++	++	+++	++	-
<i>Oxychilus cellarius</i>	+	-	+	++	+	+	-	-	++	+	-
<i>Cochlodina laminate</i>	-	-	+	+	cf+	-	-	-	-	-	-
<i>Clausilia bidentata</i>	+	-	++	+	+	+	-	+	+	+	-
Helicidae indet.	-	-	-	+	-	-	+	-	+	-	-
<i>Candidula</i> sp.	-	+	-	+	-	-	-	-	-	-	-
<i>Candidula gigaxii</i>	+	-	-	-	+	++	+	-	-	+	-
<i>Helicella itala</i>	+++	+++	++	++	+++	+++	+	-	+	-	-
<i>Trichia hispida</i>	+++	+	++	+++	++	+++	++	+	++++	++	+
<i>Cepea/Arianta</i> sp.	-	-	-	-	+	+	+	-	-	-	-

Abundance + 1-5 ++ 6-25 +++ 26-50 +++++ >50

Watching brief

A total of 17 samples were examined, 16 from pit fills of which 10 were dated to the early Neolithic, 5 were unphased, and 1 was Roman. One sample was also examined from a Roman buried soil.

The assemblages from the early Neolithic pit fills were quite diverse, dominated by mixed assemblages of shade-loving and open country fauna. The shade loving species included *Discus rotundatus*, various Zonitidae including *Aegopinella nitidula*, *A. pura* and *Oxychilus cellarius*, *Clausilia bidentata*, *Cochlodina laminata*, *Ena* sp., *Acanthinula aculeata* and *Vitrea* sp. Occasional specimens of the sinistral species *Vertigo pusilla* were also identified. The open country elements were dominated by *Vallonia costata* and *Vexcentrica* with lesser quantities of *Helicella itala*, *Pupilla muscorum* and *Vertigo pygmaea*. Various catholic terrestrial species were noted, predominantly *Trichia hispida*, although *Cochlicopa* sp. and *Punctum pygmaea* were also present. *Pomatias elegans* was also present in some numbers indicating some ground disturbance nearby.

The assemblages are generally consistent with a partly open environment, possibly grassland, with perhaps some form of wooded environment very close by from which shade-loving species may have colonised the base of features. At the very least the features were backfilled with shells that derived from a former woodland soil. Particularly robust shells such as those of Clausiliidae and *Pomatias elegans* can frequently remain as residual elements in deposits for long periods particularly apices. However, the preservation of the woodland elements of the assemblage was extremely good in these deposits, often whole shells in a fresh condition and accompanied by more fragile shelled species of Zonitidae. *Vertigo pusilla* is generally associated with open woods but does not live in dense woodland. It was a common occurrence in the Boreal and Atlantic periods but its decline roughly coincided with the beginnings of prehistoric farming.¹⁵³ The presence of *Ena montana* is noteworthy. This species is generally associated with mature deciduous woodland on well-drained calcareous soils where it lives amongst ground litter and fallen timber.

Of the Roman and unphased pit fills only feature 3052 contained shells. Abundance however was very low with the assemblage consisting of shade-loving and catholic species. No shells were identified in the Roman buried soil.

DISCUSSION

It is widely acknowledged that the interpretation of data recovered during the archaeological monitoring of pipeline projects is difficult, particularly as the narrowness of pipeline easements make only very small samples of any sites encountered available for study.¹⁵⁴ However, the Newbury reinforcement pipeline constitutes a transect through a little known, largely upland archaeological landscape and consequently it represents a good opportunity to expand our knowledge of the archaeology of the area.

¹⁵³ Ibid.

¹⁵⁴ D. Enright and A. Thomas, 'Evidence of Romano-British Activity along the Route of the Harwell to Blewbury Sewerage Pipeline', *Oxoniensia*, lxiv (1999), 235-243; S. Ford, 'The Archaeology of the Cleeve-Didcot Pipeline, South Oxfordshire, 1989', *Oxoniensia*, lv (1990), 1-40.

NEOLITHIC PITS by ALISTAIR BARCLAY

A group of nine early Neolithic pits were discovered at South Stoke. Early Neolithic pits are generally rare in the Middle and Upper Thames Valley¹⁵⁵ and the few that are known tend to be isolated examples (e.g. Mount Farm, Dorchester, Yarnton and Barrow Hills, Radley). The site at South Stoke is, therefore, unusual in having a cluster of pits. A similar site at Benson had 18 pits that were again arranged in small clusters. The pairing of pits is a phenomenon that occurs throughout much of the Neolithic period. At South Stoke a group of five refitting flints from pits 5025 and 5029 indicate that these two features were filled at the same time and possibly during the same event. It is possible that all of the pits belong to a single episode of temporary occupation or alternatively they could represent a series of repeat visits by a semi-mobile group of farmers. The pits were no doubt dug to receive deliberate offerings of what appears to be a range of occupation rubbish that includes flintwork, knapping and waste, animal bone, broken pottery, charcoal from fires and charred plant remains and stone tools. This material appears to represent many used and broken artefacts (e.g. sooting and charred residue on broken pot sherds, use-wear on flint tools). It is possible to interpret this material as the collected residue from everyday living, material perhaps mixed and stored at a temporary midden before burial. The material itself could be taken as representing the settlement and the act of burial could have been to mark the closure of a temporary site (see Edwards *et al.* above). Alternatively the pit deposit could represent the residue from feasting and again the deliberate digging and filling could be seen as an important act in closing such an event.

Iron Age

Middle Iron Age activity was mostly concentrated within Areas 1, 2 and 3 at Woodcote Road (SSWR) and comprised scatters of storage pits of various dimensions and depths, and a single crouched inhumation. The presence of large quantities of pottery and animal bone in the fills of these pits suggests the disposal of rubbish and/or structured deposition. Such pits imply the storage of grain and, therefore, the presence of one or more agricultural settlements in the vicinity. Similar groups of pits were found in 1989 on the route of the Cleeve-Didcot pipeline at Halfpenny Lane.¹⁵⁶ However, no similar inhumations have been recorded in the area.

Late Iron Age activity was again mostly concentrated at Woodcote Road, with the exception of a single pit in trench 3 at Enwick Shaw Pit. The LIA activity comprised a scatter of storage pits, more thinly dispersed than those belonging to the MIA but otherwise similar in character and containing similar quantities of artefacts. The presence of the LIA pits in the same area as the MIA pits suggests settlement continuity through the middle and late Iron Age periods. The discovery of new Iron Age sites on the route of the pipeline is not particularly unexpected given that other sites of Iron Age date lie in close proximity to it. The hillforts of Perborough Castle, Grimsbury Castle and Ramsbury Corner lie immediately to the W.¹⁵⁷ Indications of smaller scale occupation of the LIA and Roman period were found at Streatley, Berkshire, just to the SE. of the pipeline route where a scatter of pottery and a piece of rotary quern suggested domestic occupation.¹⁵⁸ That agricultural exploitation

¹⁵⁵ Holgate, *op. cit.* note 36.

¹⁵⁶ *Ibid.*

¹⁵⁷ A. Cotton, *op. cit.* note 13, 30-52.

¹⁵⁸ S. Allen, J. Allen and M. G. Fulford, 'A Late Iron Age and early Roman Site at Streatley', *Berkshire Archaeol. J.* 74 (1991-3).

of the landscape was fairly intense during the Iron Age and Roman periods is shown by the field systems at Streatley Warren.¹⁵⁹ Given the limited scope of the excavations and particularly the lack of structural evidence it is difficult to assess the function and status of the Iron Age sites. However, the storage pits and a reasonably large assemblage of pottery would suggest the presence of rural settlements.

Roman

Early Roman activity was again concentrated at Woodcote Road, but there was also significant activity at Enwick Shaw Pit. At the former site features were limited to scatters of pits whereas at the latter boundary ditches defined enclosures and trackways, suggesting an organised agricultural landscape. The pottery and animal bone found at both these sites suggests low status rural settlements. The presence of other Roman sites to the N. was established during the excavation of the Cleeve to Didcot and Harwell to Blewbury pipelines, where several sites were found between Moulsoford and South Moreton and Harwell and Blewbury.¹⁶⁰ Other early Roman sites in the vicinity of the pipeline include a settlement at Streatley defined by artefact scatters.¹⁶¹

Late Roman features were also present at Woodcote Road and Enwick Shaw pit. Once again at Woodcote Road features were limited to scatters of pits, including a large quarry hollow (8). At Enwick Shaw pit boundary ditches defined enclosures and trackways, containing occasional pits and some stretches of stone walls suggesting masonry buildings. The pottery assemblage at both these sites was localised suggesting low status rural settlements, with few long distance contacts. However, the presence of stone buildings at Enwick Shaw pit and large quantities of ceramic building material at Woodcote Road, along with an iron drill bit and a spearhead tempers this view, suggesting that reliance upon the pottery assemblage alone may be misleading. The majority of the early Roman sites discussed above continued into the late Roman period, suggesting that the regional context of the late Roman settlements was little changed from the early Roman period. The isolated cremation burial located during the watching brief indicates some Roman activity at the southern end of the pipeline.

Post-Roman and modern

Occasional stretches of ditch and isolated features belonging to the Saxon and Medieval periods were spread along the course of the pipeline, suggesting activity and occupation of some kind from the end of the Roman period to the present day. There was also an important group of Second World War airfield defences, including a pillbox near Haw Farm.

The discovery of sites belonging to the prehistoric and Roman periods along the route of the Newbury reinforcement pipeline adds significantly to our understanding of settlement, in a region which was previously thought to be largely devoid of occupation, especially compared to the Upper Thames Valley and adds to a picture, which as noted by Enright and Thomas is 'slowly being filled in as a result of opportunistic fieldwork'.¹⁶²

¹⁵⁹ P. P. Rhodes, 'The Celtic Field Systems on the Berkshire Downs', *Oxoniensia*, xv (1950), 1-28.

¹⁶⁰ Op. cit. note 1.

¹⁶¹ Op. cit. note 4.

¹⁶² Op. cit. note 154, 235-43.

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