

Cultivating the Margins: The Roman and Early Medieval Rural Landscape of Barton Park, Oxford

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SUMMARY

Late in 2015 an area of land west of Barton Park on the outskirts of Oxford was excavated in advance of a proposed housing development. The excavated features comprised remains of Romano-British and later field systems including rectilinear enclosures and possible trackways, perhaps representing a number of sequential attempts to cultivate an area of poor and frequently waterlogged land. These features were overlain and truncated by medieval ridge and furrow. The pottery assemblage from the site was paltry, comprising little more than forty identifiable sherds of Roman or medieval date. There were, however, some notable isolated finds including a middle Bronze-Age pit, an early Roman cremation burial, and a single first-century AD Roman coin. Furthermore, residual finds of a spearhead and knife, although more than 200 metres apart, indicate the possibility of an early Anglo-Saxon inhumation cemetery in the vicinity. Finally, a modest assemblage of medieval and post-medieval horseshoes possibly indicates that the site was once situated along a routeway, perhaps between the medieval settlements of Headington and Wick.

This report presents the results of excavations conducted by Oxford Archaeology in 2015 on an area of land west of Barton Park on the northern fringe of the City of Oxford (centred on SP 5450 0830; Fig. 1). These excavations were preceded by several phases of work conducted by other archaeological organisations. John Moore Heritage Services produced a desk-based assessment in 2009, the results of which are summarised and supplemented below.¹ A geophysical survey in 2011 by Stratascan revealed little more than the presence of ridge and furrow.² These non-intrusive surveys were followed by an archaeological evaluation by Cotswold Archaeology in 2012, during which 57 trenches, 2.1 metres in width and between 30 metres and 60 metres in length, provided a 2 per cent sample of a 35-hectare area (Figure 2).³ The evaluation, though inconclusive, provided indications of a landscape criss-crossed with linear features, some apparently dated by medieval pottery to the thirteenth to fifteenth centuries, but at least one of which appeared to be Roman from the small amount of ceramics it yielded. Moreover, most of the trenches revealed an extensive system of later ridge and furrow running north to south, with furrows about 1–2 metres wide and with a shallow average depth of about 0.08 metres, narrowly spaced at distances between 4 metres and 7 metres. Although no ridges are visible on the ground surface today, the evaluation demonstrated that they would have been discernible in the later nineteenth or twentieth century when a number of the furrows received land drains. If nothing else, this indicates the enduring poor drainage of

¹ D. Gilbert, 'An Archaeological Desk-Based Assessment of Land at Barton, Oxford', unpublished JMHS report (2009).

² Stratascan, 'Geophysical Survey Report: Barton, Oxford', unpublished Stratascan report, J3007 (2011).

³ D. Evans, 'Land at Barton, Oxford: Archaeological Evaluation', unpublished CA report (2012).

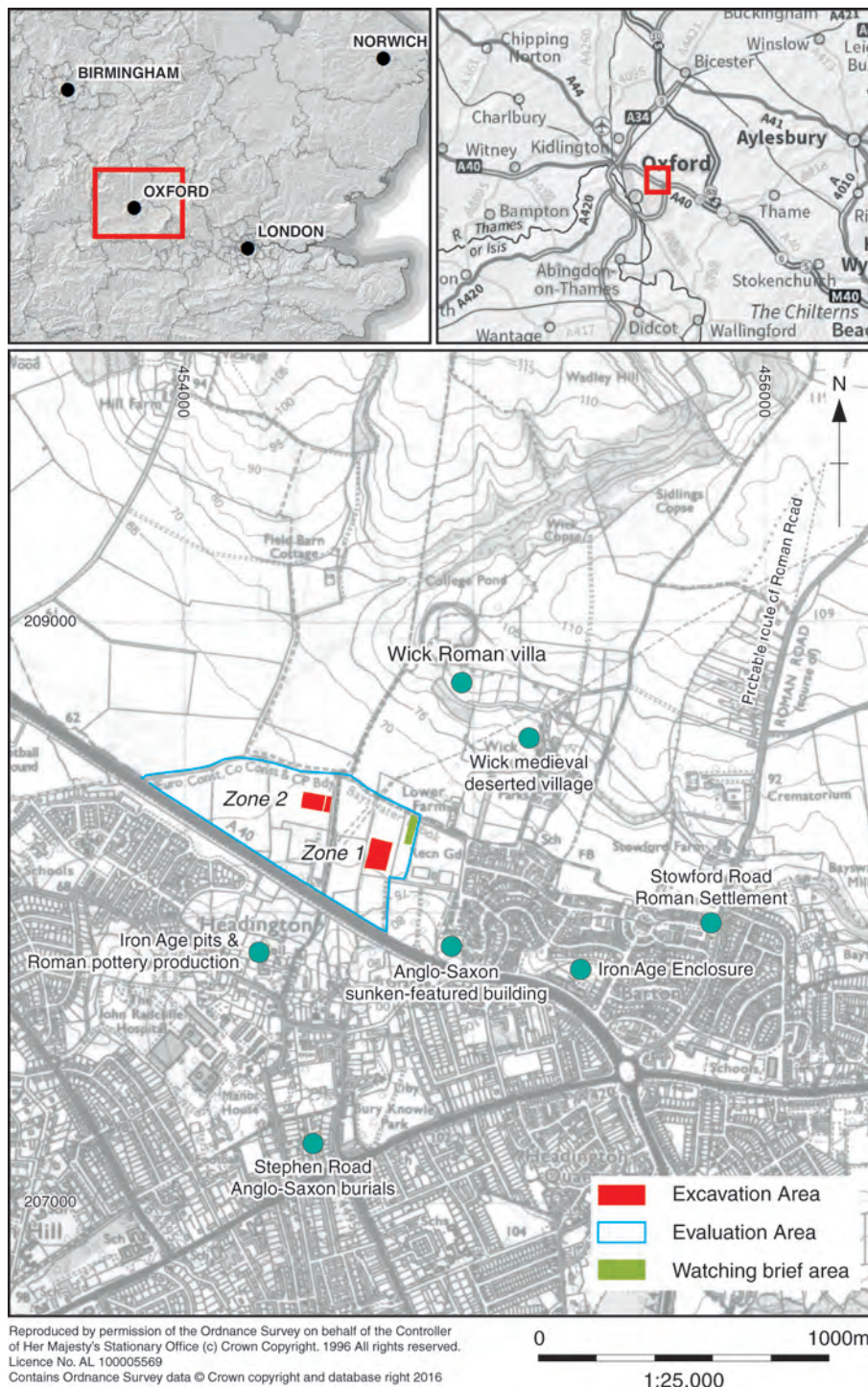


Fig. 1. Site location.

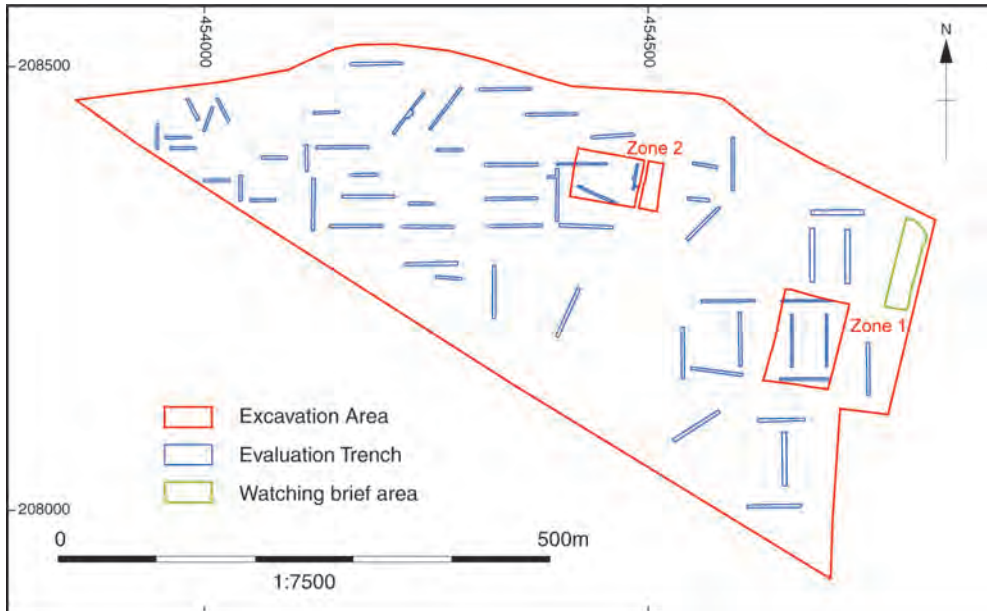


Fig. 2. Plan of the excavated areas and the previous evaluation trenches.

the land, demonstrable in the medieval and post-medieval period by the presence of a dark blueish silt found at the base of these furrows, formed by standing ground water.

In 2014 Oxford Archaeology were commissioned by C.A. Blackwell to carry out an excavation at the site in advance of building work including residential, retail, school and community development. Despite the relatively poor results of the evaluation the additional archaeological work was required to clarify the nature and morphology of the field systems in this area. From October to December 2015 two areas were opened, together covering an area of 2.11 hectares, and a watching brief was conducted on an additional area to the north-east. While the latter recorded no archaeological features, the excavations revealed a complex sequence of field systems truncated by later ridge and furrow ploughing. Due to a paucity of finds and few opportunities for scientific dating the absolute dates of individual ditches and gullies remain tentative, though it is likely that most of them belonged to the Romano-British period. A small number of isolated features were radiocarbon dated, including a Bronze-Age pit, a late Iron-Age or early Roman cremation burial, and a late or post-Roman fire pit. A few notable residual finds included an unusually early Roman coin and what appear to be traces of at least one disturbed early Anglo-Saxon furnished burial. Furthermore, a modest assemblage of medieval and post-medieval horseshoes possibly indicates the later use of the site as an intermittently traversed routeway. A metal-detecting survey was subsequently organised across an area of 11.7 ha around the metalwork finds but failed to identify any further significant objects. The picture for each period is frustratingly incomplete, but considered together with previous work in the vicinity these excavations provide glimpses of an intriguing range of past activities on the outskirts of the present-day city of Oxford.

LOCATION, TOPOGRAPHY AND GEOLOGY

The excavated site lies just outside Oxford's urban extent, north of Old Headington and immediately west of Barton (Fig. 1). The southern edge of the site is defined by the A40, while the

Bayswater Brook, a minor tributary of the River Cherwell, runs just beyond the northern limit. Although the excavated area of this low-lying site (60 metres above OD) is relatively flat, beyond the brook to the north the ground rises substantially towards both Elsfield and Wadley Hill (up to 115 metres above OD). To the south there is also a slight rise toward Headington (up to 80 metres above OD). The underlying geology belongs to the Oxford Clay and West Walton formations with superficial outcrops of clay, silt, sand and gravel.⁴ The 2012 archaeological evaluation of the site also noted the presence of various mixed alluvial deposits most likely related to the periodic flooding of the Bayswater Brook.⁵ The soils at the site can be characterised as relatively deep silty and sandy clays with minor variations running across the area. In recent decades the land has been used for pasture but it has also seen some recent landscaping in the areas of the recreation ground and the nature reserve, though both of these lie outside the excavated zones.

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The archaeology of the surrounding area is not especially well understood, but there have been some notable isolated finds.⁶ The earliest evidence constitutes a polished Neolithic axe found just north of the A40 in close proximity to the site. Another was found 1 km to the south in Headington.⁷ A single Bronze-Age pit has also been excavated about 0.5 km to the north-east of the site,⁸ and at about the same distance to the east, on a small rise overlooking the site, an Iron-Age univallate enclosure was excavated along with a number of other features at the site of the former Bernwood First School.⁹ While its extent is not known, the defensive bank would have been substantial and had a 3 metre-wide perimeter ditch, potentially as deep as 2.35 metres, with a 5 metre causeway and gate structure controlling entry. Though the site was otherwise entirely Iron Age in character, one of two radiocarbon dated burials was from the early Roman period, suggesting that the enclosure continued to be used after the Conquest.¹⁰ Less than 200 metres south of the present site, a series of Iron-Age pits was found at Ruskin College.¹¹

The Roman archaeology of the immediate area is a little more substantial, but it is still somewhat abstruse. The evidence includes a small number of pottery scatters: one just north of Bayswater Brook, and two to the south in Headington.¹² The northern scatter contained pottery, tile and stonework and is probably related to a villa at Headington Wick that was excavated in 1849 by Llewellyn Jewitt,¹³ perhaps located with respect to the major Roman road that runs between Alchester and Dorchester-on-Thames to the east.¹⁴ One of the ceramic scatters to the south potentially exhibits evidence for pottery production. This area of Roman

⁴ British Geological Survey, Geology of Britain viewer, <http://bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html>, accessed 2/12/2016.

⁵ Evans, 'Land at Barton, Oxford', p. 8.

⁶ For a useful summary see R. Beckley and D. Radford, *Oxford Archaeological Assessment 2011: Roman*, https://www.oxford.gov.uk/downloads/download/445/oxford_archaeological_resource_assessment, accessed July 2017.

⁷ NMR, nos. 338377 and 338417.

⁸ Anon, 'A40 Headington Bypass, Stage 2 Assessment: Fieldwalking and Geophysical Survey', unpublished Oxford Archaeology Unit report (1993); NMR, no. 1053695.

⁹ D. Gilbert, 'An Archaeological Excavation at Bernwood First School, North Way, Barton, Oxford', unpublished JMHS report (2005).

¹⁰ Gilbert, 'An Archaeological Excavation at Bernwood First School', pp. 30–3. Calibrated radiocarbon dates of the burial placed it in the bracket of AD 20–240 with a probability of 95.4 per cent. The other burial was not dated.

¹¹ M. Dodd, 'Ruskin College, Old Headington, Oxford', unpublished OA report (2008).

¹² HER, PRN 4528; NMR, nos. 1005375 and 338380.

¹³ L. Jewitt, 'On Roman Remains, Recently Discovered at Headington, near Oxford', *Journal of the British Archaeological Association*, 6 (1851), pp. 52–67. On the Roman road: *VCH Oxon.* 1, pp. 271–81.

¹⁴ I.D. Margary, *Roman Roads in Britain*, 3rd edn (1973), pp. 162–5.

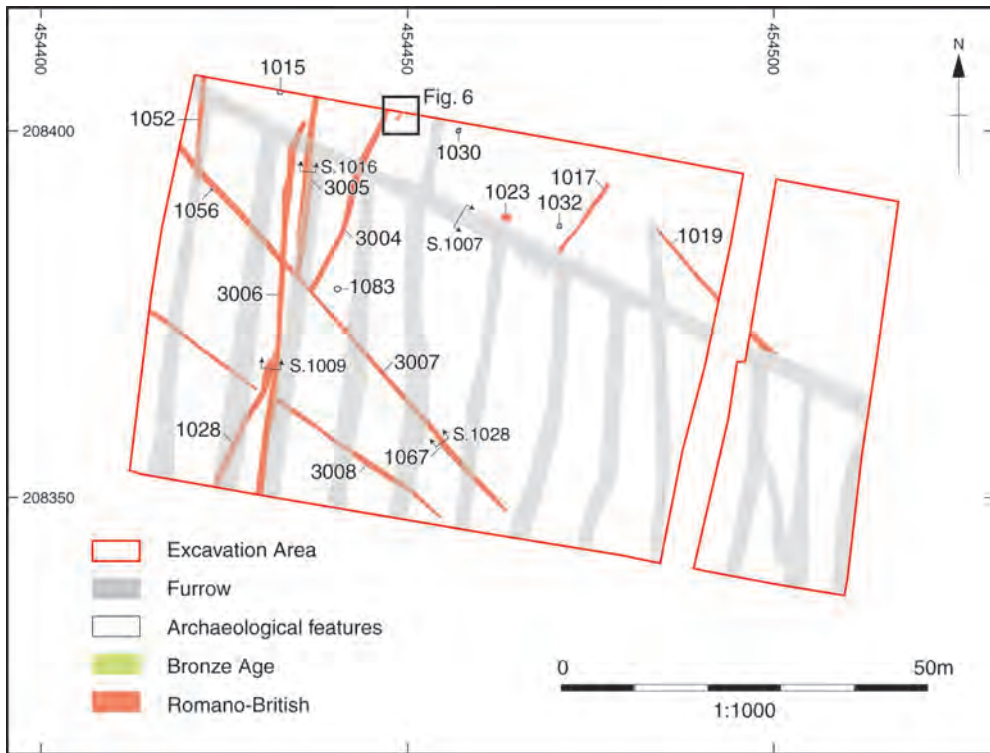


Fig. 4. Archaeological features and their phasing in Zone 2.

Oxfordshire was part of a landscape punctuated by small rural settlements, as well as by component production sites of the nationally important pottery industry, within which the Headington Wick villa was probably a significant element.¹⁵

There is limited evidence for early Anglo-Saxon activity in the vicinity, including an unusual fifth- to seventh-century unfurnished burial in a sunken-featured building just 400 metres to the south-east of the site, above the A40.¹⁶ Potentially, although it is at some distance, this burial was indirectly related to another found 800 metres to the south on Stephen Road dated to the same broad period by its grave furnishings.¹⁷ While they are too far apart to represent a single cemetery, and indeed the first was evidently a burial from within a settlement, they provide tantalising signs of early Anglo-Saxon activity in Headington, which by the time of the Domesday survey in 1086 had become a royal manor.

From the medieval period come various signs of settlement in Headington to the south, but also earthworks at Wick roughly 600 metres to the north-east that probably represent the former site of the medieval village.¹⁸ Excavations 500 metres to the east, alongside aerial photography, have indicated ridge and furrow agriculture, dated by eleventh- to thirteenth-century ceramics and truncated by the later enclosed field system.¹⁹ Evidence of ridge and

¹⁵ C.J. Young, *The Roman Pottery Industry of the Oxford Region*, BAR BS, 43 (1977).

¹⁶ *VCH Oxon.* 1, pp. 356, 371. See also T. Dickinson, 'The Anglo-Saxon Burial Sites of the Upper Thames Region', University of Oxford D.Phil. thesis (1977), volume 2, p. 139.

¹⁷ A. Witkin, '2 Stephen Road, Headington, Oxfordshire: Archaeological Watching Brief Report', unpublished OA report (2003). More recently, an undated second burial was found nearby, most likely part of the same cemetery: H. Webb, '10 Stephen Road, Headington, Oxford', unpublished OA report (2013).

¹⁸ HER, PRN 1104.

¹⁹ NMR, no. 1405035/HER, PRN 16981.

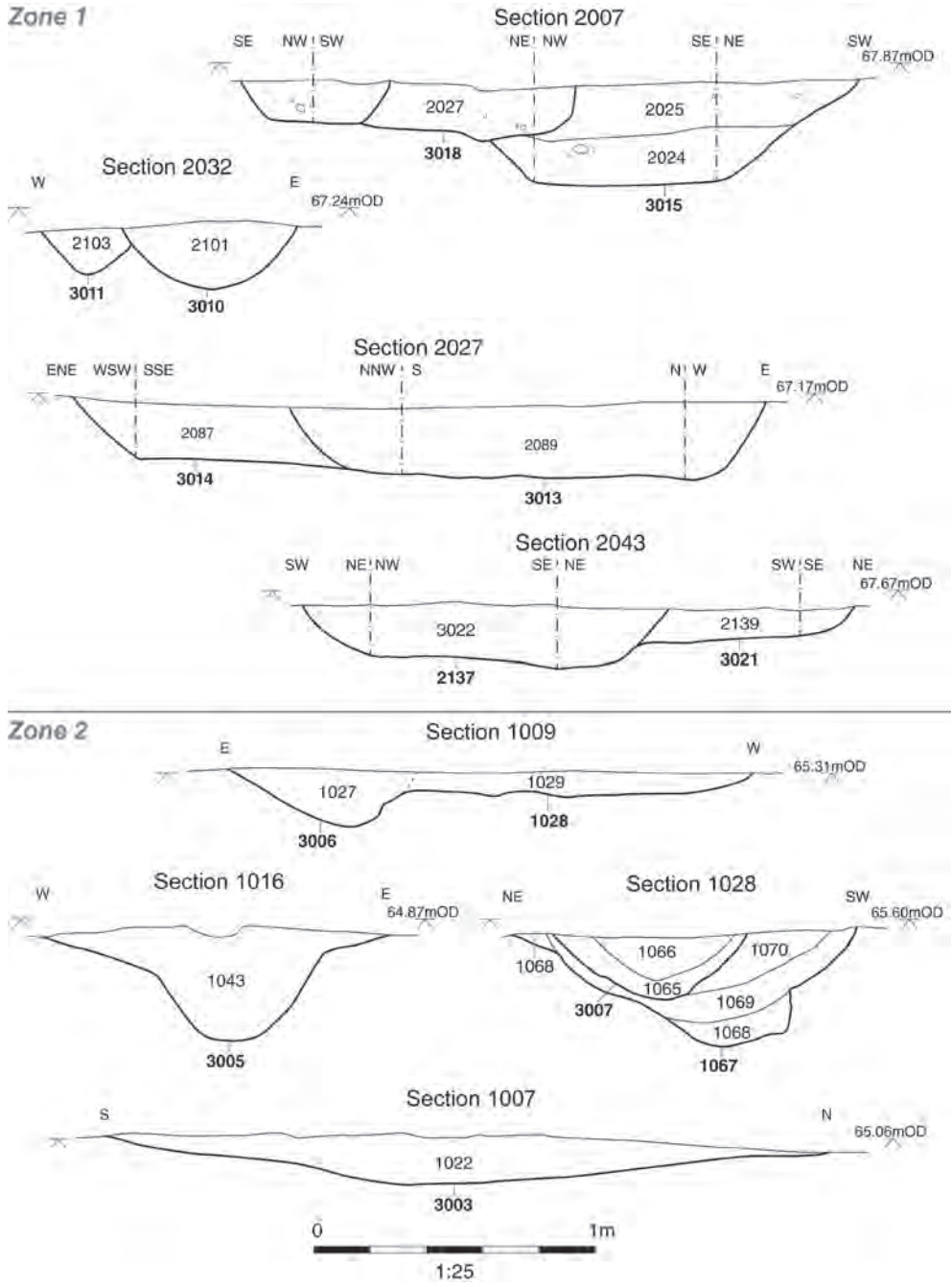


Fig. 5. Zone 1 and 2 sample sections.

furrow ceases just before it reaches Bayswater Brook, perhaps indicating the limit of farmable land.

Barton (adjacent to the east of the site) and Wick (less than 1 km to the north) are noted in the Domesday survey as a pair of hamlets within the royal manor of Headington, a demesne that was retained by the crown after the Norman Conquest and potentially also the seat of a royal residence until Henry I made Woodstock his preferred Oxfordshire residence in the early part of the twelfth century.²⁰ Headington parish seems to have retained a low population density until the nineteenth century when its population expanded from just under 700 to over 3,000.²¹ During the nineteenth century the landscape in which the site is found was subject to more intensive enclosure acts.²² However, there is very little evidence of post-medieval archaeology in the area.

DISCUSSION

A single Bronze-Age pit of uncertain function was excavated in Zone 2 (Figure 4, pit 1067), radiocarbon dated to 1420–1230 cal BC (95 per cent probability). This pit joins a similar feature just under 800 m to its east, found during work on a proposed section of the A40 bypass in 1993 (see above). A lack of evidence for storage, the uneven nature of the cut, and its situation on seasonally waterlogged ground, along with a possible sump dug into its base, (Fig. 5, section 1028) may indicate a function as a waterhole for domestic or pastoral use. Similar features of the same date and character have been interpreted in this way in the upper Thames valley, though the one at Barton is relatively small.²³ At the very least, these two pits together indicate that there was some form of settlement and perhaps even the farming of livestock in and around Headington during the middle Bronze Age. Despite the proximity of the important Iron-Age enclosure at Bernwood First School, Iron-Age remains were virtually absent from the site, with just one scrap of pottery potentially dating to this period.

Activity of greater interest comes from the interface between the late Iron Age and early Roman period, comprising a cremation burial (Figure 4, pit 1046) from Zone 2 and a first-century Roman coin from the fill of a linear feature 300 m to its south-east in Zone 1 (Figure 3, ditch 3009), potentially residual given the later date of the Roman pottery in the ditch, though in very fresh condition. Such early coins are relatively rare in rural contexts. Regrettably, much of the cremation burial had been lost to ploughing, though we know enough to suggest that the individual was an older juvenile or adult buried with pyre debris but without an urn or other container. Radiocarbon dating provided a date of 100 cal BC to cal AD 70 (95 per cent probability). Cremation burials of this date are uncommon in the region, but a small first-century AD cremation cemetery is now known from Gill Mill, Ducklington.²⁴ Another early Romano-British cremation was found 1.6 km to the south-east on the other side of Barton in a greyware urn along with a whetstone and iron pick or hatchet, most likely belonging to the first or second century AD.²⁵ In any case, early Roman activity is not unexpected at this locality given the continuity demonstrated at the Iron-Age enclosure at Bernwood First

²⁰ *VCH Oxon.* 5, pp. 157–68.

²¹ Data from censuses of 1801, 1841 and 1891, cited in Gilbert, 'An Archaeological Desk-Based Assessment', p. 8.

²² Gilbert, 'An Archaeological Desk-Based Assessment', pp. 8–11.

²³ G. Lambrick with M. Robinson, *The Thames Through Time: Late Prehistory: 1500 BC–AD 50*, Thames Valley Landscapes Monograph, 29 (2009), pp. 266–71; G. Hey et al., *Yarnton: Neolithic and Bronze Age Settlement and Landscape, Results of Excavations, 1990–98*, Thames Valley Landscapes Monograph, 39 (2016), pp. 78–9; R. Bradley 'The Bronze Age in the Oxford Area – Its Local and Regional Significance', in G. Briggs et al. (eds.) *The Archaeology of the Oxford Region* (1986), p. 56.

²⁴ P. Booth and A. Simmonds, *Gill Mill: Later Prehistoric Landscape and a Roman Nucleated Settlement in the Lower Windrush Valley near Witney, Oxfordshire*, Thames Valley Landscapes Monograph, 42 (2018).

²⁵ R.J.C. Atkinson and J.R. Kirk, 'Archaeological Notes', *Oxoniensia*, 14 (1949), p. 76.

School. It should also be noted that evidence for early Roman rectilinear enclosures has been found at Headington School to the south.²⁶

While this early Roman evidence provides some links with the cremation burial and coin, the more substantial evidence from the site comprised a network of ditches and gullies most likely dating to the third and fourth centuries. These ditches are numerous, and nearly all linear as opposed to curvilinear. The small excavated area of Zone 2 does not provide sufficient information for interpretation, and too few stratigraphic relationships were determined for any sequencing, but the ditches seem to be laid out on a rectilinear framework and represent several adjustments of a field system. The picture is a little clearer in Zone 1, where a small number of perpendicular ditches indicate at least four or five rectilinear enclosures, none of which appear to be contemporary. As in Zone 2, there are some repeated alignments that indicate the re-structuring of a very similar field system at slightly varying locations. The intensity and concentrations of these relatively slight linear features (generally no more than 0.4 m wide and 0.2 m deep) potentially represent repeated, and most likely unsuccessful, attempts at draining an area of marginal land which was probably regularly waterlogged. In both zones the tendency for north-south and north-north-east to south-south-west alignments respects the very slight slope of the land down toward the Bayswater Brook. The tentative stratigraphic sequence of the ditches in Zone 1 (see below) suggested as many as seven phases of activity, which taken together may indicate gradual re-alignment in a clockwise fashion, moving between a north-west to south-east, north-south, and finally east-north-east to west-south-west alignment, perhaps in an attempt to better manipulate the gradient of the land. The captured northern extent of the medieval ridge and furrow indicates that this land was still marginal in later periods. Even during the Second World War when agricultural land was in high demand these particular fields appear to have been left as pasture.²⁷ Although the dating evidence for these features was slight, the pottery assemblages from both zones taken together indicate a later rather than an earlier Roman date of the third and fourth centuries.

There is other late Roman evidence in the surrounding landscape contemporary with the patchwork of ditches and gullies that traverse the excavations. One nearby site broadly of this date was located just over 1 km to the east at Bayswater Hill, where building works turned up various remains including two inhumation burials and the presence of a possible roadside settlement at this location has been posited.²⁸ However, the well-documented pottery industry that operated across this landscape between the first and fourth centuries AD is more pertinent.²⁹ If nothing else, the longevity of this industry suggests that continuous activity between the early and later phases of the site is perfectly feasible if not demonstrable. The villa at Headington Wick was home to the best-known kiln site in the vicinity and lies just 600 m to the north, but there are several other important and proximal examples in the locale of Headington.³⁰ There is also plausible evidence for such a kiln less than 500 m to the south at Ruskin College in Old Headington where excavations produced a Roman pottery assemblage with disproportionate quantities of *mortaria* more characteristic of a production site than a domestic one, seemingly focused on the third century and later.³¹ A series of pits at the same site were also interpreted as potential evidence for clay winning.³² As such, the site lies within a relatively densely populated rural and industrial landscape, with the nearest major settlements

²⁶ S. Cass, 'Early Roman Boundaries at the New Music Building Headington School, Headington, Oxford', unpublished TVAS report (2007).

²⁷ D. Gilbert, 'An Archaeological Desk-Based Assessment', p. 15.

²⁸ R.J.C. Atkinson, 'Archaeological Notes, 1947', *Oxoniensia*, 11–12 (1946–1947), p. 163. Sadly, no more than this was recorded at the time.

²⁹ Young, *The Roman Pottery Industry*, pp. 12, 231–41. A more recent summary is provided by Beckley and Radford, 'Oxford Archaeological Resource Assessment', pp. 16–26.

³⁰ Young, *The Roman Pottery Industry*, p. 5, fig. 2.

³¹ P. Booth, 'Pottery', in Dodd, 'Ruskin College, Old Headington', pp. 21–2.

³² Dodd, 'Ruskin College, Old Headington', pp. 13–14.

of Dorchester-on-Thames and Alchester at some distance. The connecting road between these two sites, however, runs relatively close the site, directly adjacent to the aforementioned Roman occupation at Bayswater Hill, and there is evidence of later Roman settlement adjacent to the point at which the road crossed the Bayswater Brook, about 1 km east of the present site.³³

The major economic questions raised by this pottery industry are concerned with its interactions with agricultural production, for which we have little evidence in the Oxford area.³⁴ There is good evidence from a pollen core less than 2 km to the north at Sidlings Cope of extensive woodland clearance through the Roman period and increasing evidence for cereal production, with woodland only returning in the tenth century.³⁵ Such evidence might lead us to envision a general intensification of all economic activity, perhaps including the management of woodland to fuel the pottery industry. The dense network of ditches and gullies at the site, most likely dating between the second and fourth centuries, may indicate intensification, as their location on what was probably quite poor agricultural land suggests a relatively high demand for even the least enticing acreage.

Owing to intractable problems with dating deposits of the fifth century, let alone the specific difficulties presented by the general lack of finds from the site, it is difficult to say whether or not the use of the site continued into the fifth century, though a radiocarbon date of cal AD 350–500 (95 per cent probability) from a small and isolated fire pit in Zone 2 certainly raises this rare possibility (Figure 4, pit 1023). The poorly documented nineteenth-century excavation of the villa at Headington Wick does not permit speculation as to when its occupation may have ceased, though given evidence for post-Roman occupation at nearby Dorchester-on-Thames, it is highly probable that the road running between there and Alchester remained in continuous use if not repair during the early medieval period.³⁶ In any case, the presence of a fire pit but no associated structures most likely indicates temporary use of the site, perhaps for the pasturing of livestock, perhaps for any number of presently unknowable purposes.

A residual spearhead retrieved from the fill of the large east-west furrow in Zone 2 provides more reliable early medieval evidence. This along with a substantial knife from Zone 1 may be tentatively dated to the seventh century, though a date between the fifth and seventh centuries can be stated with more confidence. Early Anglo-Saxon spearheads and knives are occasionally found in settlement contexts, though this is relatively rare.³⁷ As isolated finds, therefore, such artefacts are more likely to originate from disturbed inhumation graves, in which contexts spearheads and knives are among the most common finds. As mentioned above, there is some fragmentary evidence for early Anglo-Saxon settlement and burial in the vicinity, though taken together the picture is still frustratingly obscure. About 400 m to the south-east of the site near the site of the former Fox Inn, a sunken-featured building was excavated in 1931. Reportedly, its fill contained early Anglo-Saxon pottery along with an unfurnished inhumation burial. Human burials in and around early Anglo-Saxon settlement features are unusual, but not unknown and seem to form part of a persistent cultural practice.³⁸

³³ J. Pine, 'Excavation of Part of a 3rd-Century Roman Settlement and Later Roman Road at Stowford Road, Barton, Oxford', *Oxoniensia*, 68 (2003), pp. 263–77.

³⁴ M. Henig and P. Booth, *Roman Oxfordshire* (2000), p. 170.

³⁵ S.P. Day, 'Post-Glacial Vegetational History of the Oxford Region', *New Phytologist*, 119:3 (1991), pp. 445–70.

³⁶ For a recent summary of late Roman and early Anglo-Saxon activity at Dorchester-on-Thames see P. Booth, 'A Late Roman Military Burial from the Dyke Hills, Dorchester on Thames, Oxfordshire', *Britannia*, 45 (2014), pp. 243–73. On the use of roads: P. Hindle, 'Roads and Tracks in Anglo-Saxon England', in M.C. Hyer and G. Owen-Crocker (eds.), *The Material Culture of the Built Environment in the Anglo-Saxon World* (2015), pp. 37–49.

³⁷ A. Knox, 'The Subtle Knife: Using Domestic Objects to Access the Middle Anglo-Saxon Worldview', *Archaeological Journal*, 173:2 (2016), pp. 245–63.

³⁸ H. Hamerow, 'Special Deposits' in Anglo-Saxon Settlements', *Medieval Archaeology*, 50 (2006), p. 9; C. Sofield, 'Living with the Dead: Human Burials in Anglo-Saxon Settlement Contexts', *Archaeological Journal*, 172:2 (2015), pp. 351–88.

In addition, 800 m to the south on Stephen Road two burials have been excavated on separate occasions. The first, excavated in 2002 at 2 Stephen Road, was a supine burial with a copper-alloy disc brooch on the right shoulder and a copper-alloy sewing needle on the hip. Amber beads and a knife were also found in the grave. Most unusually, a copper-alloy openwork swastika brooch lay on the forehead of the individual. The bones identified the individual as a 40–50 year old female.³⁹ In 2013 a second burial was found nearby at 10 Stephen Road. The sex and age could not be identified, though the individual was an adult of a stature more characteristic of a male than a female.⁴⁰ Although the grave was unfurnished and the fill contained a piece of abraded Bronze-Age pottery, the burial probably represents a second inhumation from the same cemetery.

The relationship between settlements and cemeteries of the fifth to seventh centuries is not well understood, though where the scale of excavations has permitted relationships to be observed, it seems that inhumation cemeteries lay relatively nearby if not directly adjacent to settlements.⁴¹ It is likely therefore that a direct relationship can be drawn between the cemetery at Stephen Road and the traces of settlement (and further burial) at the former Fox Inn approximately 500 m to the north-east. However, the spearhead and knife from Barton Park were found to the north-west of the settlement. The implication is that there could be two separate inhumation cemeteries of similar dates potentially both linked to the same settlement. Cemetery shifts are a well attested phenomenon in the later sixth and early seventh centuries, and given that the Stephen Road cemetery is firmly dated by its finds to the fifth or sixth century, and the spearhead and knife from Barton Park could potentially be seventh century, the evidence, fragmentary though it is, would fit such a scenario.

The late Anglo-Saxon or Anglo-Norman period is attested by a few residual sherds of St Neots and Kennet Valley ware recovered from possible furrow fills. These sherds alone shed little light on activity of this period, though the Anglo-Saxon manor of Headington would have been in existence by the earlier eleventh century and it was situated just to the south of the site in Old Headington. Excavations at Ruskin College, thought to be within the area of the manor, recovered similar residual St Neots pottery from the burial of a cow dated by other ceramics to the twelfth or thirteenth century.⁴² These few sherds add little evidence to the picture, but they may represent the manuring of these fields that were potentially farmed as part of the manorial estate.

Evidence from the medieval period from the site is difficult to substantiate. However, it is important to reiterate that the pottery assemblage was small, and most ditches dated by Roman pottery also contained a small number of medieval sherds. As such, it is perfectly possible that some of the many ditches and gullies in both zones dated to the medieval period previous to the establishment of ridge and furrow agriculture, perhaps continuous with the late Anglo-Saxon period. The hamlet of Barton is first attested in 1246 by which point it was already known as Old Barton, and in 1279 it was home to eleven households. The land by the Bayswater Brook may well have been farmed by these peasant tenant farmers.

Before 1881, the Bayswater Brook formed a significant boundary that marked the limit of Headington. One would have had to cross the brook to approach the hamlet of Wick, which was mentioned in 1279 as just one farm and three cottages, though by the seventeenth century the farm at Wick was second only in size to the manorial farm of Headington. An enclosure map from 1802 shows a private road running north from Headington meeting the Bayswater Brook on the approximate line of what is now a public footpath running directly between

³⁹ Witkin, '2 Stephen Road, Headington'.

⁴⁰ Webb, '10 Stephen Road, Headington, Oxford'. Incidentally, a further watching brief at 4 Stephen Road failed to encounter any pre-modern archaeology: B. Dean '4 Stephen Road, Headington, Oxford: Archaeological Watching Brief Report', unpublished OA report (2012).

⁴¹ For example, S.E. West, *West Stow: The Anglo-Saxon Village* (1985); S. Hirst and D. Clark, *Excavations at Mucking, Volume 3: The Anglo-Saxon Cemeteries* (2009).

⁴² Dodd, 'Ruskin College, Old Headington'.

Zones 1 and 2, immediately east of the latter.⁴³ There has also been a speculative suggestion that a Roman trackway ran up to the villa at Wick from Headington, potentially crossing the present site, and then continued beyond it to the major Roman road.⁴⁴ The implication is that a route between Headington and Wick, whether Roman, medieval or post-medieval, would quite naturally have run directly across the site. This may help to explain the presence of the substantial assemblage of medieval and post-medieval horseshoes that were recovered from subsoil contexts during excavation, though these finds could also represent the loss of shoes during ploughing of this low-lying area.

EXCAVATION RESULTS

Methodology and Overview of Stratigraphy and Features

The evaluation provided a basis for targeting two excavation areas over relatively dense concentrations of archaeological features in its eastern part (Zone 1, 1.21 ha) and at its centre (Zone 2, 0.9 ha), the location and extent of the excavation areas being defined in a brief produced by the Oxford City archaeologist. The specific aim of the excavation was to record, characterise and date any archaeological features and deposits in these areas of intense activity prior to their development through a 'strip and record' excavation, as set out in a written scheme of investigation.⁴⁵ During the autumn of 2015 the two zones were machine-stripped of their topsoil and subsoil (a lower ploughsoil) to expose the natural substrate and the archaeological features cut into it. In Zone 1 the topsoil (2000) was up to 0.32 m thick and the underlying subsoil (2001) was on average 0.27 m deep. Comparable levels in Zone 2 were slightly shallower (0.27 m (1000) and 0.19 m (1001) respectively). Finds were recovered, particularly from subsoil 1001, during the machine stripping. Samples of each feature were then excavated, at an approximate sample rate of 10 per cent for linear features. In addition to these two excavated areas a watching brief was conducted to observe any archaeology disturbed by the installation of an attenuation tank to the north-east. Figure 2 shows the location of the excavated areas and the watching brief in relation to the positions of the earlier evaluation trenches. The watching brief area, being directly adjacent to the Bayswater Brook, lay directly on the flood plain and upon removal of the topsoil the area was almost immediately inundated. Although the alluvial soils uncovered indicated evidence for a palaeochannel, no archaeological features or material were recorded.

The prevailing soils were sandy and silty clays and loams. There was considerable variation across the site with colours generally ranging from orange browns to brownish yellows, as well as occasional patches of especially sandy soils indicative of localised flooding. These soils drain very poorly, which led to challenging conditions during their excavation at a particularly inclement time of the year, making archaeological features and their stratigraphic horizons very difficult to identify. This was especially true for Zone 2 where only a single stratigraphic relationship could be determined with a degree of certainty. This difficulty was exacerbated by the fact that the majority of features were shallow and slight, being small ditches or gullies, generally no more than 0.4 m wide and frequently with depths of less than 0.2 m. Although an approximate sequence could sometimes be deduced (some of which will be discussed below), in most cases the stratigraphic matrix was somewhat attenuated and it is clear that most features had been heavily truncated by post-Roman ploughing. Together with a very low density of finds, this makes the chronology of most archaeological features uncertain in both

⁴³ Gilbert, 'An Archaeological Desk-Based Assessment', p. 11.

⁴⁴ *VCH Oxon.* 1, pp. 271–81.

⁴⁵ 'Land West of Barton, Oxford: Written Scheme of Investigation for a Strip and Record Excavation and Watching Brief', unpublished OA report (2014). Note that the watching brief element of the investigation was abandoned due to conditions on site that prevented some of the proposed works.

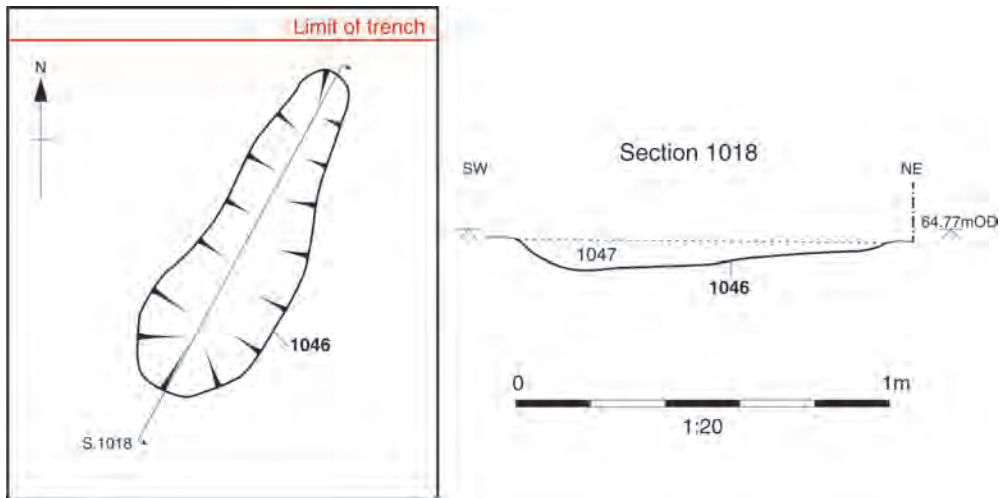


Fig. 6. Plan and section of the cremation burial.

relative and absolute terms. Some of the phasing proposed below is inevitably conjectural. Phased site plans of both zones can be seen in Figures 3 and 4.

Bronze Age Pit

The earliest feature on the site was a pit (1067) in Zone 2, with a calibrated radiocarbon date between 1420 and 1250 cal BC (95.4 per cent probability), belonging to the middle Bronze Age. The feature was an irregular shape, which led the excavator to suggest that it represented a tree-throw hole rather than a pit, but its three separate fills, one of which contained a relatively large amount of charcoal, may suggest otherwise (see Figure 5, section 1028). The same fill (1069) contained a number of charred wood species including sloe stones (see report on plant remains, below). The pit had a diameter of c.1.23 m and a depth of 0.38 m, and was cut by the north-west to south-east aligned ditch 3007. At the base of the pit there was a step down that potentially represents a recut, or the cutting of a sump for the collection of water.⁴⁶

Prehistoric remains besides this pit comprised a single fragment of possible Iron-Age pottery from ditch 3005 in Zone 2, though this is insufficient to date the feature given some doubt about pottery's identification, and the fact that it is the only piece of Iron-Age evidence from the whole site (besides the cremation burial which may date to the very end of this period, see below).

Romano-British Field Systems and Other Activity

From the late Iron Age or the early Roman period came a badly truncated human cremation deposit (1047; Fig. 6) buried without a cinerary container in the northern part of Zone 2 in feature 1046, an irregular oval cut 1.0 m x 0.34 m and only 0.09 m deep. No finds were recovered from the deposit besides the burned bone (see below), which produced a calibrated radiocarbon date between 100 cal BC and cal AD 70 (95.4 per cent probability). Intriguingly, this very early and unusual activity resonates with a similarly early coin of Nero from the top of ditch 3009 in Zone 1, which also happens to be among the earliest features in the tentative stratigraphic sequence. Given that the majority of the Roman pottery from

⁴⁶ Lambrick with Robinson, *Thames Through Time*, p. 267.

the site dates between the second and fourth centuries (see below), the cremation burial and the coin could relate to a slightly earlier phase of activity approximately contemporary with the conquest.

The rest of the Roman features in both zones essentially comprise a large number of linear features. It should be made explicit that due to the paucity of ceramics from the site none of these features are securely dated and they have been placed in the Roman period largely on the basis of their characterisation. It is perfectly possible that some of them belong to the middle or late Anglo-Saxon periods, or even to the medieval period before a ridge and furrow agricultural regime was applied comprehensively. However, the weight of evidence, albeit slight, suggests that at least most of these features are likely to be Romano-British. The Roman pottery assemblage from the site belongs between the second to fourth centuries, and there is little evidence between this and the earliest medieval ceramics, which belong to the eleventh to fifteenth centuries, which provides a likely bracket for the establishment of ridge and furrow. The exception is an assemblage of six residual sherds, comprising a tiny fragment of St Neots ware and five sherds of flint-tempered Kennet Valley ware, recovered from the surface of the unexcavated fill (2161) of a furrow in the southern part of Zone 1 (see Fig. 3), which raises the possibility that some of the linear features could be late Anglo-Saxon (tenth or eleventh century). Where features intersect, the furrows were always later, indicating that the majority of the other features here conclusively predate the ridge and furrow. The major difficulty is that none of these features yielded more than a few sherds of pottery from either of these phases (in total 22 sherds of Roman pottery were recovered from the whole site, and 18 of medieval date). Taking the evidence as a whole, that may suggest that the medieval pottery is largely intrusive in Roman features, but it is also true that in some instances the Roman pottery could be residual. Only three medieval sherds (two in Zone 1 and one in Zone 2) were recovered from fills of features assigned to the Roman period. These had a total weight of 13 g, and all were worn or very worn. All are likely to have been intrusive in earlier features.

An instructive example of the problem is the sequence in Zone 1, which can be divided into as many as seven tentative phases according to stratigraphic relationships. In this speculative scenario the first phase includes three parallel ditches 3009, 3011 and 3014, the second of which was cut by 3010, which is in turn cut by 2065. Ditch 3015 cut through a number of these preceding features, and was in turn cut by ditch 3018. The right-angled ditch 3012 and its continuation to the south-east cut through a large number of earlier ditches, and then finally all the ditches were truncated by the ridge and furrow. The most securely dated of any of these phases is the first, in which the three ditches collectively yielded an assemblage of five sherds of second- to fourth-century pottery and two sherds of medieval date, alongside a first-century Roman coin (see above). The finds evidence taken alongside the stratigraphic is sufficient here to assign a Roman date, but all other instances are less persuasive than this. It was not possible to construct even a tentative stratigraphic sequence for Zone 2. As such, a more prudent approach has been taken that broadly characterises most of these linear features as Roman, whilst keeping open the possibility that some could be late Anglo-Saxon or even medieval. This is preferable to constructing attenuated arguments based on one or two sherds of pottery and relatively ambiguous stratigraphic relationships.

These probable Romano-British features can be distinguished from the later furrows by their shape and dimensions rather than their alignments, which are occasionally coincident. Their fills also vary substantially within the range mentioned above. Comparing sections 2032 and 1016 with section 1007 gives a good impression of how easily these features are distinguished (Figure 5). Generally, the ditches and gullies measured no more than 0.2–0.5 m in width and had depths of around 0.2–0.3 m. Their profiles vary but most had concave or straight sides on a slope of about 45 degrees, with the occasional possible recut (for example, ditch 3005, see section 1016, Fig. 5). Most also had rounded bases, though a small number tended toward a more pronounced 'V'-shape. In short, these ditches and gullies were probably

for the purposes of drainage, and their shifting pattern may well represent sequential efforts to successfully drain this low lying and frequently waterlogged land.

Late- or Post-Roman Pit

In addition to those features and finds outlined above and below, there were a number of pits from Zone 2 (1015, 1023, 1030, 1032, 1056, 1083). These were all largely unremarkable with the exception of pit 1023 which was distinctly rectangular in shape (1.2 by 0.94 m, 0.22 m deep), with a flat bottom and straight vertical sides, showing obvious evidence for in situ burning on the sides of the cut itself as well as in its charcoal-rich fills. Its unusual character prompted radiocarbon dating, which returned unexpected results of a calibrated date between 330 and 530 AD (95 per cent probability), indicative of a date late in the late Roman period, or the transitional post-Roman and Anglo-Saxon fifth century. Environmental samples indicated the burning of oak, blackthorn, blackthorn/cherry, field maple and willow/poplar, as well as evidence for cereals and hazelnut shell. The environmental sample was therefore relatively undiagnostic, which along with the rarity of evidence datable to this transitional period makes this feature difficult to interpret beyond the prosaic observation that it indicates some form of intermittent activity in the vicinity.

A Disturbed Early Anglo-Saxon Burial?

Besides the fire pit with a potential Anglo-Saxon date, no other features could be dated to the early medieval period and neither were any ceramics from this period encountered besides a few sherds of late Anglo-Saxon pottery from one of the ditches (see above). However, a spearhead dating between the fifth and seventh centuries AD was found in the fill of the long west-north-west to east-south-east aligned furrow (3003) in Zone 2. An iron knife, most likely dating to the same period (see below for discussion of these artefacts), came from an unrecorded location in the subsoil in Zone 1, and therefore more than 200 m distant. While it is unusual to find such items in archaeological contexts besides burials, there is also attested evidence for early Anglo-Saxon burial and settlement nearby (see above). These facts taken together potentially indicate the presence of a furnished burial or burials.

Medieval Ridge and Furrow

A comprehensive pattern of ridge and furrow agriculture extended over both excavated zones and much of the surrounding area. From the pottery assemblage from the site in general, including that which was specifically recovered from furrow fills (comprising just 12 sherds), a date from the eleventh or twelfth century is likely for the onset of this activity. These furrows range between 2 and 2.5 m in width, with a maximum depth of about 0.20 metres, though most were only a few centimetres deep. The system is aligned broadly north-south, in line with the dominant slope of the site. Zone 2, however, seems to have captured what appears to be the northerly extent of the ridge and furrow, which terminates in a long west-north-west to east-south-east aligned furrow or ditch into which the perpendicular furrows would have drained during wet episodes. As such, this may well have been the extent of farmable land south of Bayswater Brook during the medieval period, placing the site in a highly marginal position not well suited to arable farming or habitation.

Medieval and Post-Medieval Horseshoes

A modest assemblage of horseshoes came from furrows and unstratified contexts. These included a couple of horseshoes and loose fiddle-key horseshoe nails that potentially dated as early as the tenth century, and three post-medieval horseshoes with dates stretching into the nineteenth century. While not an especially remarkable assemblage, it does demonstrate persistent activity in this area through the medieval and post-medieval periods, possibly indicative of an informal or formal route way between the medieval and post-medieval settlements of Headington and Wick.

Table 1. Quantification of Roman pottery by fabric type

Fabric	Type	Quantity	Description
F51	Oxford colour-coated ware (OXF RS)	1 sherd, 26 g	Young type C45 rim
M31	Oxford white-slipped mortarium (OXF WS)	1 sherd, 38 g	Base
E80	Grog-tempered 'Belgic type' fabric (SOB GT)	1 sherd, 8 g	None
O10	Fine oxidised 'coarse' wares	8 sherds, 81 g	2 jar rims
O30	Moderately sandy oxidised coarse ware	1 sherd, 4 g	Indented beaker body sherd
R10	Fine reduced 'coarse' wares (OXF FR)	5 sherds, 65 g	1 jar rim
R20	Coarse sandy reduced wares	2 sherds, 8 g	1 straight-sided bowl/dish
R30	Moderately sandy reduced coarse wares	3 sherds, 85 g	1 jar rim

PREHISTORIC AND ROMAN POTTERY by PAUL BOOTH

The excavation produced a single tiny fragment (2 g) of prehistoric pottery and 22 sherds (315 g) of Roman date, mostly from Zone 1 and including material from post-Roman contexts and topsoil. The pottery was scanned rapidly using standard codes in the OA system for recording later prehistoric and Roman pottery.⁴⁷ Preservation of the surfaces of sherds was typically poor, perhaps as a result of adverse soil conditions rather than abrasion through extensive redeposition, since the very variable sherd sizes do not clearly indicate the latter.

The single prehistoric fragment, from ditch 3005 (fill 1078), was in a fabric characterised by moderate irregular voids (perhaps from burnt-out organic material) and sparse quartz sand. The exterior surface was irregularly fired and the interior unoxidised. Close dating is not possible, though an Iron-Age date is perhaps most likely.

The Roman fabrics/wares represented (using Oxford Archaeology ware codes) are given in Table 1. It is likely that all these fabrics are products of the Oxford industry.⁴⁸ Some of the sherds recorded as fabric group O10 might have been colour-coated ware with completely-eroded surfaces – the sherds of fabrics F51 and M31, for example, were identified on the basis of distinctive forms but had no slipped surfaces surviving.

Few of the pieces were very closely datable. With the exception of a single late Iron-Age/early Roman sherd (fabric E80) the overall date range represented is from the second to fourth centuries, the earlier end of this range being indicated by, *inter alia*, a fine reduced ware (R10) sherd with eroded barbotine decoration from context 2114 and a fine vertical footing in fabric O10 recovered from the subsoil. Fabrics F51 and M31 are diagnostic of the mid-third to fourth centuries and at least one of the rims in fabric O10, perhaps of Young type O38, is probably also of this date. Subjectively the group has a later Roman 'feel'.

Only 6 sherds (22g) came from Zone 2 and most of these were potentially of second-century rather than later date. The significantly more substantial mean sherd weight of the pieces in Zone 1 suggests that this area lies closer to a focus of Roman activity, but the overall quantity of material is still tiny and could represent little more than 'background noise' derived from sites such as the production complex at Headington Wick (see above), lying *c.*700 m to the north, albeit on the far side of the Bayswater Brook.

⁴⁷ P. Booth, 'Oxford Archaeology Roman Pottery Recording System: An Introduction', unpublished document, revised version (2014).

⁴⁸ Young, *The Roman Pottery Industry*.

Table 2. Medieval pottery types and quantities in rough chronological order

Fabric	Common Name	Date	Sherds	Weight (g)
OXBF	SW Oxon ware (Kennet Valley A)	875–1250	6	68
OXR	St Neots-type ware (SE Midlands)	900–1100	1	3
OXAC	Cotswold-type ware	1050–1250	1	17
OXAQ	East Wilts ware (Kennet Valley B)	1150–1350	3	12
OXAW	Early Brill/Boarstall ware (Bucks)	1175–1400	3	12
OXAM	Brill/Boarstall ware (Bucks)	1225–1625	4	18
TOTAL			18	130

MEDIEVAL POTTERY by JOHN COTTER

A total of 18 sherds of pottery weighing 130 g were recovered from nine contexts, mostly from the fills of ditches and furrows. The pottery is generally very fragmentary and abraded although a few sherds are fairly fresh. A date range possibly from the late Anglo-Saxon period to the fourteenth or fifteenth century is represented. The fabric types are typical of the Oxford area and were recorded using the system of codes developed for the Oxfordshire County type series.⁴⁹ A breakdown of the fabrics present is given in Table 2.

Zone 1 produced nine sherds of pottery (46 g) from four contexts. A date range possibly from the tenth century to the fourteenth or fifteenth centuries is represented. The earliest and most significant material here is a group of six sherds (35 g) of pottery gathered from the top of a furrow (context 2121). This included a single small worn sherd of St Neots-type ware (Fabric OXR) and five sherds from a single bowl in coarsely flint-tempered Kennet Valley A ware (OXBF). The latter has a distinctive in-turned rim (diameter *c.*400 mm) with a flattened top – a form probably copying a classic St Neots ware bowl form. These pottery fabrics span the late Anglo-Saxon and Saxo-Norman periods. St Neots-type ware is common in late Saxon contexts within the walled city of Oxford; it is fairly unusual, however, to find it in the immediate rural hinterland of the city. Later fabrics noted from other contexts include OXAQ and OXAM. Ditch 3009 (fill 2114) produced a small body sherd from a yellow-glazed jug in Brill/Boarstall ware (OXAM), this probably dates *c.*1225–1450(?) and may be the latest piece of pottery recovered from the site.

Zone 2 produced nine sherds of pottery (84 g) from five contexts. A similar date range to Zone 1 is represented, possibly from the eleventh century to the fourteenth century. The earliest 'group' comprises just two sherds from the fill of furrow 1003 (fill 1004), including a probable bowl rim in Cotswold-type ware (OXAC) and a large sagging base sherd, possibly from a bowl, in Kennet Valley A ware (OXBF). These give a possible date range of *c.*1050–1250, but an eleventh-century date is quite possible. Pottery from other contexts includes a few worn body sherds from glazed Brill/Boarstall ware jugs (OXAW and OXAM), dating as late as the fourteenth century.

FIRED CLAY by PAUL BOOTH

Limited quantities of small fired clay fragments were recovered from fire pit 1023 (fill 1024) and fill 2106 of a possible tree-throw hole (2104), in both cases from the residues of sieved soil samples. The material from the pit (1024) totalled *c.*36 fragments (46 g), variously sized,

⁴⁹ M. Mellor, 'Oxfordshire Pottery: A Synthesis of Middle and Late Saxon, Medieval and Early Post-Medieval Pottery in the Oxford Region', *Oxoniensia*, 59 (1994), pp. 17–217.

of dark brown to black very sandy material with some irregular voids. This had the character of burnt soil rather than deliberately worked material. The undated tree-throw hole fill (2106) produced c.30 tiny fragments (18 g) of oxidised subrounded fired clay lumps with irregular voids and sparse-moderate sand grains. None of the material is diagnostic.

ROMAN COIN by PAUL BOOTH

From ditch 3009 came a bronze *as* of Nero (*cf* RIC² 533, AD 66, Lugdunum mint; obverse: ? IMP] NERO CAESAR AVG P MAX [TR P P P, plain bust r; reverse: GENIO] AVGV STI S C. Genius standing left). The coin was in fairly fresh condition when lost, but is now soft and eroded, so some of the detail is uncertain (for example, the globe at the base of the obverse bust which helps to identify the Lugdunum mint is not discernible). A large break in the surviving reverse legend between AVGV and STI is notable. While not intrinsically remarkable the coin can be considered unusual as a stray find in a Romano-British rural context. Its likely original condition, however, suggests deposition within the first century AD rather than later. The coin came from one of the earliest ditches in Zone 1 in the tentative stratigraphic sequence (see above), which were dated by Romano-British pottery, including sherds of the second to fourth centuries, as well as two small sherds of medieval pottery. With this in mind, while it is possible that the feature could date to the first century AD, it does indeed belong to the earliest phase of the site.

ANGLO-SAXON SPEARHEAD AND KNIFE by TOBY F. MARTIN

An Anglo-Saxon iron spearhead with a split socket and leaf-shaped blade was found in the fill (1022) of furrow 3003 in Zone 2 (Figure 5, section 1007, Figure 7a). Now slightly broken, the assembled fragments are c.168 mm long, and the intact width at the widest point of the blade is 30 mm, which lies toward the lower half. The greatest thickness of the blade is c.6 mm and it has a lentoid section. The socket had a maximum inner diameter of c.15 mm, and an outer diameter of 18–19 mm. No rivet is visible and there are no wood remains adhering in the socket. The spearhead falls into Swanton's type C1, a relatively common type with no obvious regional distribution, dated only broadly between the fifth and sixth centuries, and possibly the seventh.⁵⁰ According to Penn and Brugmann's chronology, the spearhead probably falls into their medium 1 size group and is of lanceolate or rhomboid shape, which would provide a similar date.⁵¹ A more recent chronology by Hines and Bayliss, however, indicates that it might fall into group SP2-a1b1, which has absolute dates in the seventh century.⁵² In short, the shape of Anglo-Saxon spearheads is highly fluid, and does not always permit identification and a date range more specific than the fifth to seventh centuries.

A probable Anglo-Saxon iron knife was recovered from the subsoil in Zone 1 (Figure 7b). It measures 150 mm in length of which the blade comprises c.120 mm. The blade itself is triangular in section being 6 mm wide at the top. There is a tendency for knives to be longer in the seventh century, particularly with blade lengths of 100 mm or more.⁵³ Similarly, knives like this with a straighter cutting edge tend to belong to the seventh century. They may have had a more specific purpose than the earlier multi-purpose knives, and may even have served

⁵⁰ M.J. Swanton, *The Spearheads of the Anglo-Saxon Settlements* (1973), pp. 46–51.

⁵¹ K. Penn and B. Brugmann, *Aspects of Anglo-Saxon Inhumation Burial: Morning Thorpe, Spong Hill, Bergh Apton and Westgarth Gardens*, East Anglian Archaeology Report, 119 (2007), p. 45.

⁵² J. Hines and A. Bayliss (eds.), *Anglo-Saxon Graves and Grave Goods of the 6th and 7th Centuries AD: A Chronological Framework*, Society for Medieval Archaeology Monograph, 33 (2013), pp. 163–4.

⁵³ Penn and Brugmann, *Aspects of Anglo-Saxon Inhumation*, p. 34.

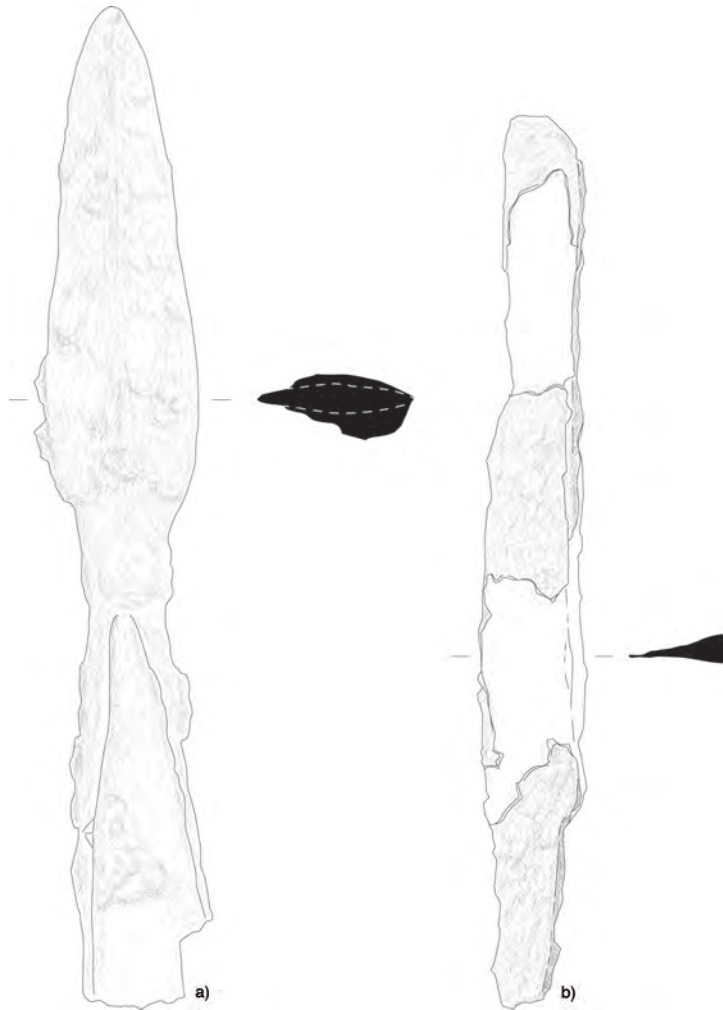


Fig. 7: a) The Anglo-Saxon spearhead and b) the Anglo-Saxon knife.

as small weapons. This knife is likely to date to the seventh century, though there remains a strong possibility that it could also belong to the fifth or the sixth century.

MEDIEVAL AND POST-MEDIEVAL IRONWORK by IAN R. SCOTT

A total of fifteen further iron objects were recovered, the majority of which came from the subsoil in Zone 2, specifically including five horseshoes and two, possibly three, buckles and a short length of chain (see Table 3 for a full list). The horseshoes include one small shoe of an earlier medieval, probably tenth- to twelfth-century, form (SF 2), along with two fiddle key horseshoe nails (SF 2 and 9) of a similar date. A second example (SF 12) with countersunk rectangular nail holes is probably later medieval thirteenth to fifteenth century. The remaining three shoes are post-medieval (SF 20) or specifically nineteenth-century (SF 23 and 25). The only other datable find is the shoe buckle (SF 29) which belongs to the eighteenth century.

Table 3. Summary of medieval and post-medieval ironwork

Small find no.	Context	Description
3	1001 (subsoil)	Horseshoe, small with wavy edge. Lacks most of one branch. The extant branch has three nail holes and two surviving fiddle key nails, one with double clenching. The toe of the shoe is clearly worn. L: 109 mm; W extant: c.80 mm. Sf 3.
12	1001 (subsoil)	Horseshoe, small. Complete. It has quite broad only slightly tapered branches each ending in a square heel with right angle calkin. There are three countersunk rectangular (?) nail holes in one branch and two (or possibly three) nail holes in the opposite branch. The toe of the shoe is worn. L: 113 mm; W: 105 mm.
20	1001 (subsoil)	Horseshoe, small. Complete. It has quite wide branches tapering to square heels with no calkins. It has four regularly spaced rectangular nail holes in each branch. The only surviving nail has an expanded head with a modern style of clenching. L: 116 mm; W: 115 mm.
23	1001 (subsoil)	Horseshoe, large narrow. Complete. The shoe has a toe. The branches are quite narrow and taper to narrow heels. The left branch has a feathered heel, i.e. it thickens markedly in section towards the heel, whereas the right branch is quite thin and has a side clip. The nail holes appear to be quite small and possibly square. L: 152 mm; W: 132 mm.
25	1001 (subsoil)	Horseshoe, large. Complete. It has narrow tapered branches, thick in cross-section, and narrow slightly angled heels. One side has four nails, the other three. The nails are probably tapered with rectangular heads now much worn. L: 136 mm; W: 138 mm.
2	1001 (subsoil)	Fiddle-key horseshoe nail. Not measured.
26	1001 (subsoil)	Harness buckle. Large plain rectangular buckle frame with simple tapered tongue with rolled over loop. L: 58 mm; W: 73 mm. Sf 26
29	1001 (subsoil)	Shoe buckle. Plain rectangular iron shoe buckle curved in longitudinal section. It has the remains of a hinged chape at the centre. L: 58 mm; W: 48 mm.
21	1001 (subsoil)	Possible buckle. Incomplete. Plain sub-rectangular form, now broken. No extant tongue. L: 51 mm; W: 72 mm.
22	1001 (subsoil)	Chain. Length of chain with seven oval links. Four links are between 53 mm and 55 mm long and three at one end are c.44 mm long.
11	1001 (subsoil)	Nail. Large nail with double clench. It has a tapered square section stem and small head. L with clenching: 106 mm; original L: 145 mm.
4	2121	Nail or horseshoe nail head. Not measured.
7	2123	Irregular small block. L: 37 mm.
8	2126	Nail stem fragment. Not measured.
9	2127	Fiddle-key horseshoe nail. Not measured.

CREMATED HUMAN BONE by HELEN WEBB

A single deposit of cremated human bone was recovered from a very shallow (0.09 m) pit (1046) measuring 1.0 m by 0.34 m, most likely truncated by ploughing (Fig. 6), and radiocarbon dated to between 100 cal BC and cal AD 70 (with a probability of 95.4 per cent). The fill was a sandy clay, black in colour due to its high proportion of charcoal, which

Table 4. Summary of cremation deposit 1047

Deposit	Skeletal region	>10 mm	10–4 mm	4–2 mm	Colour, MNI, age, sex, pathology
1047	Skull	/	/	/	40% Grey
	Axial	/	/	/	30% Black
	Upper limb	/	/	/	20% White
	Lower limb	3.5 g (?Femur shaft, ?tibia shaft)	0.5 g (?Femur shaft)	/	10% Brown
	Unid. long bone	4.0 g	4.8 g		MNI = 1 Adult or older juvenile
	Unid. hand/foot	/	0.5 g		
	Unid. other	/	8.6 g	6.8 g	?Sex
	(UNID. TOTAL)	(4.0g)	(13.9 g)	(6.8 g)	
					No pathology observed
	TOTAL	7.5 g	14.4 g	6.8 g	28.7 g

probably indicates that an amount of pyre debris was included in the deposit. The burned human bone was examined in accordance with the recommendations set out by the IFA and BABAO, with more details provided in the archive.⁵⁴ The total weight was just 28.7 g and the majority of bone fragments were less than 10 mm in size, with only around a quarter of the total bone weight (26 per cent, 7.5 g/28.7 g) comprising fragments over 10 mm (see Table 4). As a result of this high level of fragmentation, only a small proportion of fragments (13.9 per cent or 4 g) could be identified, all of which were lower limb bones. The minimum number of individuals represented in the deposit was one, and the thickness of the identified bone fragments was in keeping with that of an older juvenile or adult. It was not possible to estimate sex and no lesions of pathology were observed. The colour of the bone fragments was very mixed, comprising around 20 per cent white fragments, 40 per cent grey, 30 per cent black, and 10 per cent brown or unburnt, which together indicate mixed and inefficient pyre conditions in terms of temperature and duration, but that still included some full oxidation at over 600°C.⁵⁵

ANIMAL BONE by REBECCA NICHOLSON

A very small assemblage of animal bone, in poor condition, was recovered from the excavations. Three mammal bone fragments, weighing 3 g in total, were recovered from the fill (1008) of furrow 1007 in Zone 2; all are extremely root-etched as might be expected in this kind of context. The only identifiable piece was a small fragment of medium-sized mammal distal humerus (probably caprine). The remaining bone came from the residue of a soil sample taken from the Bronze-Age pit (1067). It comprised an eroded and gnawed fragment of medium mammal distal humerus (6 g), again probably caprine, and sixteen small indeterminate fragments of burnt and calcined bone (5 g).

⁵⁴ M. Brickley and J. McKinley (eds.), *Guidelines to the Standards for Recording Human Remains*, IFA Paper, 7 (2004).

⁵⁵ J. McKinley, 'Compiling a Skeletal Inventory: Cremated Human Bone', in Brickley and McKinley, *Guidelines to the Standards*, pp. 9–13.

Table 5. Charcoal from sieved samples

Sample No.		1002	1001	1000	1003
Context No.		1069	1047	1024	1024
Feature No.		1067	1046	1023	1023
Description		Pit?	Cremation burial	Pit with in situ burning	Pit with in situ burning
Phase/Period		MBA	LIA/ER	LRB/EAS	LRB/EAS
Litres of soil processed		40	15	30	32
Rosaceae					
<i>Prunus spinosa</i> type	blackthorn type	54r		2r	1r
<i>Prunus</i>	blackthorn/cherry	47r	6r	4r	5r
cf. <i>Prunus</i>	cf. blackthorn/cherry	3	1		1
Pomoideae	hawthorn group	3	9r		
cf. Pomoideae	cf. hawthorn group		2		
Fagaceae					
<i>Quercus</i>	oak	1h	88shr	98shr	104hrs
Betulaceae					
<i>Alnus glutinosa/Corylus avellana</i>	alder/hazel	1			
Salicaceae					
<i>Salix/Populus</i>	willow/poplar			2	1
Sapindaceae					
<i>Acer campestre</i>	field maple	1	1r	1r	
Indet. charcoal fragments		3	3		
Total charcoal fragments		113	110	107	112

KEY: h – heartwood; s – sapwood; r – roundwood. Pomoideae includes: *Pyrus* (pear), *Malus* (apple), *Crataegus* (hawthorn) and *Sorbus* (rowan, service, whitebeam) species.

WOOD CHARCOAL AND PLANT REMAINS by SHEILA BOARDMAN

Four samples were analysed, one from a middle bronze-Age probable pit feature (1067), one from a late Iron-Age/early Roman cremation burial (1046) and two from late Roman/early Anglo-Saxon pit 1023 which had evidence for in situ burning. Plant remains from all three features were radiocarbon dated. All four samples produced wood charcoal, while smaller charred remains (seeds, fruits, and so on) were largely confined to sample 1002 from pit 1067. These generally came from the same taxa as the wood charcoal, so may have arrived on site and become charred with the wood fuel.

Samples were processed in the standard OA manner with flots and residues collected on meshes with aperture sizes of 250 µm and 500 µm respectively. After drying, the flots and residues were sorted for cereals grains, wild seeds, fruit and nut remains and other plant material (root/tuber fragments, culm nodes), using a Brunel low power microscope (with x10-x40 magnifications). Where not readily identifiable, remains were compared to modern

Table 6. Charred plant remains other than charcoal. F = fragments

Sample No.		1002	1001	1000	1003
Context No.		1069	1047	1024	1024
Feature No.		1067	1046	1023	1023
Description		Pit?	Cremation burial	Pit with in situ burning	Pit with in situ burning
Phase/Period		MBA	LIA/ER	LRB/EAS	LRB/EAS
Litres of soil processed		40	15	30	32
Indet. cereal grain			1		
cf. Indet. grains					1
<i>Prunus spinosa</i> L.	sloe, stone	10			
<i>Prunus</i> cf. <i>spinosa</i>	cf. sloe, stone	7			
<i>Prunus</i> sp.	sloe/cherry, stone	6 + 100F+	2F		
cf. <i>Prunus</i> sp.	cf. sloe/cherry, kernel	4+Fs			
<i>Crataegus monogyna</i> Jacq.	hawthorn, stone	3.5			
<i>Crataegus</i> sp.	hawthorn, stone	3			
<i>Prunus/Crataegus</i> spp.	sloe/cherry/hawthorn, stone	2.5			
<i>Corylus avellana</i> L.	hazel, nut shell				1F
<i>Rumex</i> sp.	dock		2		
Monocotyledon - small	culm nodes	2			
Indet. non quantifiable stone/kernel Fs		30F+			
Indet. leaf buds			12		
Indet. root/rhizome frags.		1+Fs		8F	

reference material and published keys.⁵⁶ Wood charcoal fragments greater than 2 mm in size are considered identifiable. These were randomly extracted from the flots, and sectioned and identified using methods and keys in Gale and Cutler,⁵⁷ Hather,⁵⁸ and Schweingruber.⁵⁹ Identifications were made using a Brunel SP400 metallurgical microscope with brightfield/darkfield illumination. Plant nomenclature follows Stace.⁶⁰

The wood charcoal remains are listed in Table 5 (as fragment counts), and the smaller charred plant remains are in Table 6. For the latter, whole seeds/fruits, cereals grains, culm nodes and leaf buds were counted as one. Other remains are mostly listed as fragment counts (suffixed by 'F' in Table 6).

Wood charcoal remains from the middle Bronze-Age pit fill 1069 sample 1002, were

⁵⁶ R.T.J. Cappers et al., *Digital Seed Atlas of the Netherlands* (2006); A.L. Anderberg, *Atlas of Seeds. Part 4. Resedaceae – Umbelliferae*, Swedish Museum of Natural History (1994).

⁵⁷ R. Gale and D. Cutler, *Plants in Archaeology: Identification Manual of Vegetative Plant Materials used in Europe and the Southern Mediterranean to c.1500* (2000).

⁵⁸ J.G. Hather, *The Identification of Northern European Woods: A Guide for Archaeologists and Conservators*, Archetype Publications (2000).

⁵⁹ F.H. Schweingruber, *Microscopic Wood Anatomy*, 3rd edn, Swiss Federal Institute for Forest, Snow and Landscape Research (1990).

⁶⁰ C. Stace, *New Flora of the British Isles*, 3rd edn (2010).

composed mostly of blackthorn (*Prunus spinosa*) and blackthorn/cherry (*Prunus*). The latter may include bird/wild cherry (*P. avium/padus*), but as this material was largely from narrow roundwood and sloe (*Prunus spinosa*) stones were also recovered (see below), it is probable this material is mostly immature blackthorn. Some hawthorn group (Pomoideae) charcoal was identified. Hawthorn (*Crataegus*) and blackthorn are frequently found growing together, forming spiny thickets or scrub. In addition to hawthorn, Pomoideae charcoal may include apple (*Malus*), pear (*Pyrus*) and rowan/whitebeam/service (*Sorbus*) species, and there were single fragments of oak (*Quercus*), alder/hazel (*Alnus/Corylus*) and field maple (*Acer campestre*) charcoal in these samples.

As noted above, sample 1002 produced blackthorn/sloe (*Prunus spinosa*) stones. Some of these had some flesh adhering. There were also stones/fragments of sloe/cherry (*Prunus* sp.), hawthorn (*Crataegus monogyna/Crataegus* sp.) and sloe/cherry or hawthorn (*Prunus/Crataegus* spp.) type. The indeterminate fragments also seem to be largely of probable sloe/cherry/hawthorn (cf. *Prunus/Crataegus* spp.). Thus, this sample appears to be a fuel residue of scrubby blackthorn with some hawthorn, both collected when in fruit. This may have been gathered for a particular purpose (small roundwood is often used to increase fire temperatures rapidly), or it could represent debris from scrub clearance and burning.

The three other samples were very much oak dominated. The main cremation fuel in sample 1001, dated to the late Iron-Age or very early Romano-British period, appears to be a mixture of oak sapwood, heartwood and roundwood, so a single tree may have been used. Small amounts of blackthorn/cherry, hawthorn group and field maple charcoal, mostly from roundwood, may represent kindling materials. Other remains in this sample were an indeterminate cereal grain and two dock (*Rumex* sp.) seeds, which may represent intrusive or residual remains, plus two blackthorn/cherry stone fragments, which may have arrived with the *Prunus* wood fuel.

The two samples (1000 and 1003) from pit 1023 had very similar remains, including a fairly equal mix of oak heartwood and sapwood, with a few roundwood fragments. The other taxa were blackthorn, blackthorn/cherry, willow/poplar (*Salix/Populus*) and field maple. Again, these were mostly represented by roundwood or immature wood. Since oak is the main fuel used (for all purposes) in prehistoric and early historic times across southern Britain,⁶¹ the charcoal remains provide limited information for the use of this feature. The smaller charred plant remains include some root/tuber fragments (in sample 1000), and one cereal grain and a hazelnut (*Corylus avellana*) shell fragment (in 1003). These remains do not indicate a strong association with cooking, crop processing or food preparation.

While the dominant species varied, there was a strong degree of consistency in the woody taxa represented in the four samples from Barton Park, pointing to some stability in local conditions over many centuries. The local landscape appears to have supported mature woodlands with oak and possibly hazel and field maple. Also fairly well represented, particularly in sample 1002, were scrub and/or hedgerow habitats. Wood charcoal and charred plant remains here point to exploitation or clearance of this vegetation type. Mature oak trees may have been reserved for use in buildings, or for when high, sustained temperatures were required (such as in cremations and some industrial activities). Unfortunately, the samples were poor in smaller charred plant remains, other than material associated with wood fuels, so it was not possible to draw any firm conclusions about the cultivated or wild species utilised in these periods, or for the detailed uses of these features.

⁶¹ W. Smith, *A Review of Archaeological Wood Analyses in Southern England*, English Heritage Centre for Archaeology Report, 95 (2002).

Table 7. Radiocarbon dates

Laboratory code	Context	Material	Radiocarbon age BP	$\delta^{13}\text{C}$ (‰)	Calibrated date range (95% confidence, rounded)
SUERC-71000 (GU42649)	1069, pit 1067	Charred fruit stone (<i>Prunus spinosa</i>)	3063±33	-27.7	1420–1230 cal BC
SUERC-71004 (GU42651)	1047, burial 1046	Charcoal (<i>Prunus</i> sp. roundwood)	2006±33	-26.3	100 cal BC–cal AD 70
SUERC-71344 (GU43063)	1024, pit 1023	Charcoal (<i>Quercus</i> sp. Roundwood)	1651±26	-24.9	cal AD 330–530

RADIOCARBON DATING

Three samples were sent for radiocarbon dating, chosen for the suitability of the organic material they contained, combined with the character of the features in the cases of cremation burial (fill 1947) and fire pit (fill 1024), and stratigraphic relationships in terms of the other pit (fill 1069). The full results returned are shown in Table 7.

ACKNOWLEDGEMENTS

The authors would like to thank C.A. Blackwells for facilitating and funding the archaeological works, and especially Justin Downer (Project Manager) and Paul Woods, also David Radford for his invaluable help and advice during the different stages of the project. The fieldwork was undertaken by Andrew Ginns, Ashley Strutt, Belle Neilson and Brenton Culshaw under the management of Carl Champness. The post-excavation programme was managed by Paul Booth. The project archive will be deposited with Oxfordshire County Museum Service, under accession number 2015.184.