



Frontispiece: One of the Iron Age pits during excavation

Life and Afterlife at Duxford, Cambridgeshire: archaeology and history in a chalkland community

by Alice Lyons

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For details of East Anglian Archaeology, see last page

Cover illustration

Possible founder burial (Burial 21)

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Abbreviations

CAO County Archaeology Office **CUL** Cambridge University Library **CAM ARC** Cambridgeshire County Council **EHER** Essex Historic Environment Record Archaeological Field Unit SAM Scheduled Ancient Monument Cambridgeshire Historic Environment Record **CHER** SF Small Find Cambridge Records Office Sunken-featured building **CRO SFB**

Summary

Investigations on land to the west of Hinxton Road, Duxford, Cambridgeshire provided evidence for human activity over a period of at least two and a half thousand years. The site lies on a natural chalk knoll overlooking a bend in the River Granta c.100m south of one of the suggested routes of the Icknield Way, and its proximity to a river crossing contributes to its strategic location. The hilltop was the site of an early Iron Age 'crouched' inhumation burial. During the middle Iron Age a probable ritual structure was accompanied by human and animal inhumations, while numerous cylindrical grain silos were backfilled with 'ritual' deposits and possible feasting waste. A stock enclosure and numerous further storage pits were dug on the lower ground, the disuse fills of which contained additional evidence for the deposition of possible feasting waste and placed 'special' deposits. During the late Iron Age the higher ground was defined by a series of ditches that were repeatedly redug, surrounding a short-lived timber-framed rectangular shrine. To the

south and east of this building was a burial ground which continued to function into early Roman times.

The late Roman period saw the construction of a substantial drying building, followed by a break in habitation until the early Saxon era, when the lower part of the site was occupied by a small farmstead. Three sunkenfeatured buildings and a post-built structure yielded a range of domestic artefacts associated with textile working. In 1086 the Domesday Survey recorded at least three manors in Duxford and by 1200 it was a bi-focal settlement with two parish churches. The lower part of the site was probably in the ownership of the church of St Peter. A substantial mortar mixer was constructed, perhaps to aid repair works on the church. By the 17th century there was a rectory on the site, which was replaced in 1822. This building remained in use until it was demolished in advance of the archaeological excavation in 2002.

Résumé

Des recherches menées à l'ouest de Hinxton Road à Duxford dans le Cambridgeshire ont apporté la preuve d'activités humaines sur une période d'au moins deux mille cinq cents années. Le site se trouve sur un tertre naturel de craie qui domine un méandre de la River Granta à environ 100 mètres au sud de l'une des routes supposées de l'Icknield Way, sa proximité avec un gué renforçant sa position stratégique. Le sommet du tertre correspondait au site d'une tombe d'inhumation en position « accroupie » datant du début de l'âge du fer. Pendant l'âge du fer moyen, il existait probablement une structure rituelle qui comprenait des inhumations humaines et animales; on a également trouvé de nombreux silos à grains cylindriques qui étaient comblés par des dépôts « rituels » et des restes possibles de festins. Un enclos réservé au bétail ainsi qu'un grand nombre de fosses de stockage situées plus loin étaient creusées dans la partie inférieure du terrain. Parmi les restes abandonnés qu'elles contenaient, on a découvert de nouvelles traces d'éventuels festins ainsi que des dépôts « particuliers ». A la fin de l'âge du fer, la partie supérieure du terrain était délimitée par un ensemble de fossés qui avaient été creusés à plusieurs reprises autour d'un bâtiment en bois rectangulaire qui ne dura pas longtemps. Au sud et à l'est de ce bâtiment, on a trouvé un cimetière qui a continué à être utilisé jusqu'au début de l'époque romaine.

La période romaine tardive a vu la construction d'un bâtiment important qui servait de séchoir. Le lieu ne fut plus habité jusqu'au début de l'ère saxonne quand la partie inférieure du site a été occupée par une petite ferme. Trois bâtiments à structure enfouie ainsi qu'une structure construite sur des poteaux contenaient un ensemble d'artefacts domestiques associés à des vestiges provenant de travaux textiles. En 1086, le Domesday Survey a enregistré au moins trois manoirs à Duxford et en 1200, le lieu correspondait à deux foyers d'occupation dotés de deux églises paroissiales. La partie inférieure du site appartenait probablement à l'église de St Peter. Un important malaxeur de mortier a été construit, peut-être dans le but de faciliter les travaux de réparation de l'église. Au 17ème siècle, on construisit un presbytère sur le site qui a été remplacé en 1822. Ce bâtiment est resté en usage jusqu'à la rénovation récente du site.

(Traduction: Didier Don)

Zusammenfassung

Untersuchungen westlich der Hinxton Road in Duxford, Cambridgeshire, lieferten Hinweise auf menschliche Aktivitäten über einen Zeitraum von mindestens zweieinhalb Jahrtausenden. Der Fundort liegt auf einem natürlichen Kreidehügel über einer Biegung des Granta-Flusses etwa hundert Meter südlich eines der angenommenen Verläufe des Icknield Way. Eine nicht weit entfernte Furt ist ein weiterer Hinweis auf die strategische Lage des Ortes. Auf der Hügelspitze wurde ein Hockergrab aus der frühen Eisenzeit gefunden. In der mittleren Eisenzeit wurden Körper- und Tierbestattungen bei einer vermutlich kultischen Struktur durchgeführt. Mehrere zylindrische Getreidesilos wurden mit kultischen Deponierungen und wahrscheinlich von Festgelagen stammenden Abfällen verfüllt. Im unteren Bereich wurden ein Viehgehege und zahlreiche zusätzliche Vorratsgruben angelegt, deren Verfüllung weitere Hinweise auf mögliche Abfälle von Festmahlzeiten und intentionelle Deponierungen besonderer Art lieferte. In der späten Eisenzeit wurden in höherer Lage mehrere Gräben ausgehoben, die rund um einen nur kurzzeitig bestehenden

rechteckigen Holzschrein mehrfach nachgezogen wurden. Im Südosten des Schreins lag ein Gräberfeld, das bis in die frühe Römerzeit hinein Verwendung fand.

In spätrömischer Zeit kam es zum Bau einer großen Darre. Danach folgte eine Phase der Nichtbesiedlung, bis am Beginn der angelsächsischen Periode im unteren Teil der Stätte ein kleines Gehöft entstand. Aus drei Grubenhäusern und einem Pfostenbau wurden unterschiedliche Haushaltsgegenstände geborgen, die auf Textilarbeiten hinwiesen. Im Domesday Book sind für das Jahr 1086 mindestens drei Herrenhäuser in Duxford verzeichnet. Noch vor dem Jahr 1200 entwickelte sich die Stätte zu einem Ort mit zwei Siedlungsschwerpunkten und zwei Pfarrkirchen. Der untere Teil des Ortes gehörte vermutlich zur Kirche von St Peter. Ein großer Mörtelmischer wurde gebaut, womöglich um Reparaturarbeiten an der Kirche zu unterstützen. Ende des 16. Jahrhunderts befand sich ein Pfarrhaus auf dem Gelände, das 1822 ersetzt wurde. Das Gebäude blieb bis zur kürzlichen Umgestaltung der Stätte in Gebrauch. (Übersetzung: Gerlinde Krug)

Chapter 1. Introduction

I. Project background

by Alice Lyons, with Judith Roberts (Fig. 1; Plate 1)

In advance of residential development by Berkeley Homes (East Anglia) Ltd an archaeological evaluation was undertaken during November 2001 on a 0.8ha plot of land off Hinxton Road, Duxford, Cambridgeshire (Abrams 2001; TL 4805 4585). The work was carried out as a condition of consent following a planning application (S/0737/01/F). The site had been subject to landscaping in the post-medieval period and in the recent past had been occupied by a 19th-century rectory that was latterly utilised as factory offices (Plate 1). Considerable construction had also taken place during the 1970s.

The evaluation revealed that parts of the site had survived largely undisturbed, and that significant remains dating to the Iron Age and early Roman periods were present; there was also evidence of Anglo-Saxon, medieval and post-medieval activity. The range and density of archaeological features led to a requirement by Cambridgeshire County Council that the areas to be affected by development should be fully investigated and preserved by record. In March 2002 an archaeological excavation was therefore carried out by CAM ARC (now Oxford Archaeology East), in accordance with a Brief for Excavation issued by Cambridgeshire County Council.

The excavation was conducted in two phases (first the southern and then the northern part of the site) which continued until July 2002. The initial phases of work were funded by the developer but, as the nature and extent of the archaeology became apparent, an application for assistance was made to English Heritage, who funded the final stages of fieldwork as well as the post-excavation and publication programme. Further remains were recorded during subsequent monitoring works.

II. Geology, topography and preservation (Figs 1–5)

Duxford lies 11km south-east of Cambridge on the western bank of the River Granta. The underlying geology (British Geological Survey 2002) is the Middle Chalk of the south Cambridgeshire 'down land' (a ridge of chalk running south-west to north-east with patches of gravel and chalky boulder clay). Drift geology in the area is glacial till (Travers Morgan 1994). The River Granta, which meanders approximately from south to north, forms the boundary between the parishes of Duxford and Hinxton and is bordered by lowest and intermediate terrace gravels and alluvium. The site is to the west of Hinxton Road on a chalk knoll which at its highest point is c.31.5m OD and slopes down to the river (c.25m OD). The land also slopes down to the south and north quite sharply



Plate 1 The rectory building before demolition

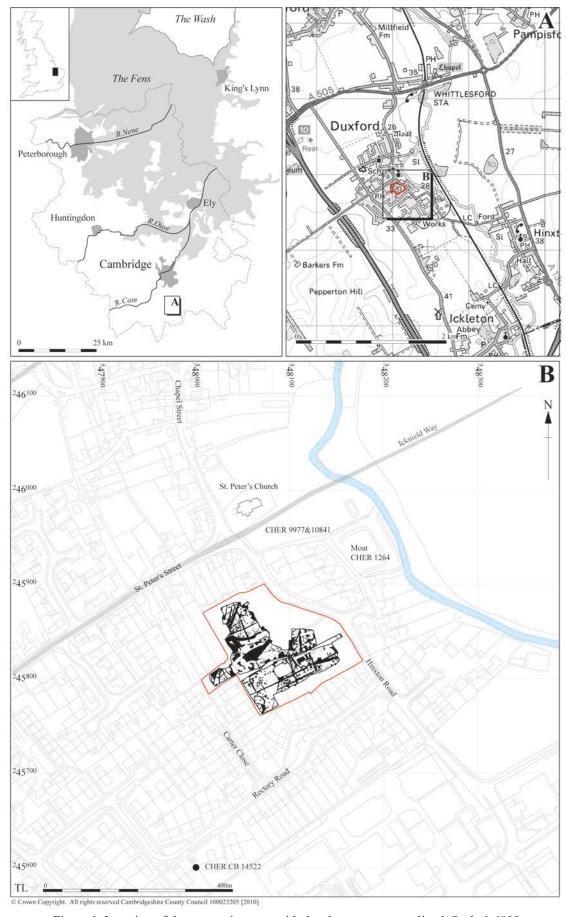


Figure 1 Location of the excavation area with development area outlined. Scale 1:4000

by between 3m and 4m. The wider landscape has recently been both archaeologically and topographically characterised by the Cambridge Archaeological Unit (CAU) (Evans *et al.* 2008).

The chalk geology allows for good preservation of certain categories of finds, such as larger fragments of animal bone, but since chalk provides excellent drainage the resulting dry conditions did not encourage preservation of more delicate organic remains.

Although the evaluation was correct in suggesting that significant archaeological remains had survived, severe truncation affecting the centre of the site (Fig. 5) occurred during construction of the 19th-century rectory and its associated garden features/planting. This was exacerbated in the 20th century by construction of a factory with associated access roads and services. Plough marks were visible in areas where the topsoil was thin (less than 0.2m deep); ploughing had contributed to the removal of horizontal archaeological deposits over most of the site. It is inevitable that shallower and more ephemeral features were destroyed during these truncations.

III. Archaeological background

(Figs 2 and 3)

Prehistoric

The historic core of Duxford lies between two possibly contemporary, but more probably sequential, branches of the ancient Icknield Way (Taylor 1997; 2002) which ford the river here and which in prehistory formed a series of parallel tracks linking the East Anglian coast with the Thames Valley (Margary 1963). Branches of this prehistoric route are probably represented today by the streets of St John's and St Peter's (Taylor 1973), which both lie to the north of the subject site. The preservation of these routes in the modern street plan suggests that from the earliest period the existence of Duxford was related to its proximity to the ford crossing the River Granta, 200m to the east.

In the Mesolithic period, low density occupation suggests the presence of small mobile groups, who left evidence for flint extraction on the flood plain and along the smaller tributary valleys of the Cam, Granta and Rhee (Price *et al.* 1997). Much of the activity in this period has been recovered from river valleys, although the higher chalk downland beyond the river valleys has not been extensively explored archaeologically. Investigations at Duxford Mill, adjacent to the river, revealed late Mesolithic/early Neolithic worked flint within degraded peat deposits on the edge of a palaeochannel (CHER 11808; Schlee and Robinson 1995). Further evidence of riverside flintworking was found *c*.800m to the south-east of the subject site, where undated prehistoric flint knapping was recorded (CHER 4210a).

Particularly worthy of note in the context of the current report is the burial of a Bronze Age woman found, with associated worked flint, only c.80m to the south-west of the site at Duxford, at No. 26 Rectory Road (CHER CB14522). These remains may represent the earliest evidence of the ritual use of this area.

Iron Age to early Roman

The landscape of south Cambridgeshire around Duxford is scattered with middle and later Iron Age sites on both the chalk uplands and the well-drained gravel and alluvial

terraces that border the Rhee and Granta, which drain northwards into the Cam. The most significant examples include a middle Iron Age settlement (CHER 14692) excavated at Pepperton Hill, c.1.5km to the south-west of the subject site (Price et al. 1997). This was found to be a mixed agricultural settlement with a bias towards pastoralism. To the west of the Pepperton Hill site, on the southern slope of one of the tributary valleys of the Cam/Rhee, further excavations revealed limited Neolithic and middle to late Iron Age activity including prehistoric field boundaries, storage pits, hearth and structures. In the early Roman period a marching camp may also have been located here.

Another significant middle Iron Age site was located at Great Abington, just over 4km to the north-east of Duxford, where over fifty cereal storage pits were recorded (CHER 17382; Kemp 1999; Sealey *et al.* forthcoming). Some of these pits were eventually backfilled with large numbers of finds in the form of placed deposits, possibly signifying the end of the storage function of the site and abandonment probably caused by rising groundwater levels.

At Hinxton, c.2km to the south, a small but significant quantity of middle Iron Age pottery was found in connection with a late Iron Age to early Roman Aylesford-Swarling type burial site (CHER 11306; Hill et al. 1999), where the burials were often marked with mounds. Of particular interest, located just to the south of the Roman villa at Linton (see below), is a group of huge conical burial mounds at Bartlow Hills containing extraordinarily rich cremations, with other accompanied cremations found nearby (EHER 4751; Hull 1963, 394-4). The presence of several Iron Age hillforts in the vicinity (Fig. 2) suggests that the area was on the cusp of several tribal areas and perhaps a troublesome border (Evans 2000). Approximately 10km to the north of Duxford, at Cherry Hinton, is the hillfort locally known as the 'War Ditches' (CHER 04963), while c.8km to the north of Duxford is a large hillfort at Wandlebury (CHER 04636; French 2004), with another smaller fort thought to be located c.3km to the north of Duxford at Sawston (CHER 09742; Taylor et al. 1994).

Romano-British

The subject site lies in an area rich in Romano-British remains, although at the time of the Conquest (AD 43) Duxford and the surrounding area were primarily agricultural, with extensive field systems having been recorded (CHER 9741). The Roman small town of Great Chesterford is only 4km to the south and this must have had a considerable impact on the surrounding area throughout the period of its occupation (Draper 1986). From a strategic point of view, Great Chesterford controlled the northern exit of the River Cam from Essex and a southern branch of the Icknield Way. It was also fortified in the early days of Roman occupation.

Duxford was close to several Roman roads (Fig. 2; Malim 2000), one of which ran to the north of the site (on the other side of the valley) and another to the east beyond Great Abington (now the route of the A11), although the exact location of these roads is not fully established (Evans *et al.* forthcoming). Also within Duxford were two branches of the Romanised Icknield Way, which ran either side of the village core and provided a strategic route crossing for the River Granta in this area. Moreover, the

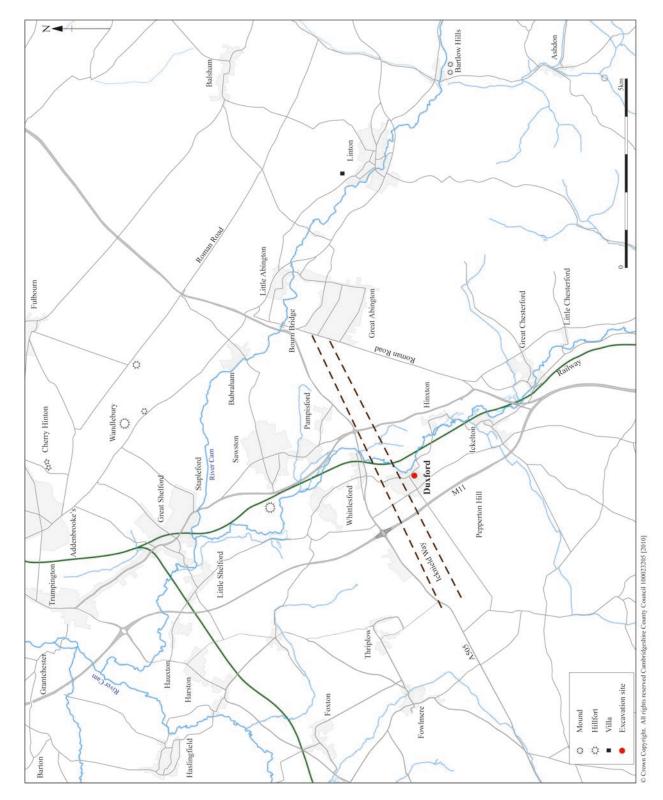


Figure 2 The site in its archaeological context. Scale 1:100,000

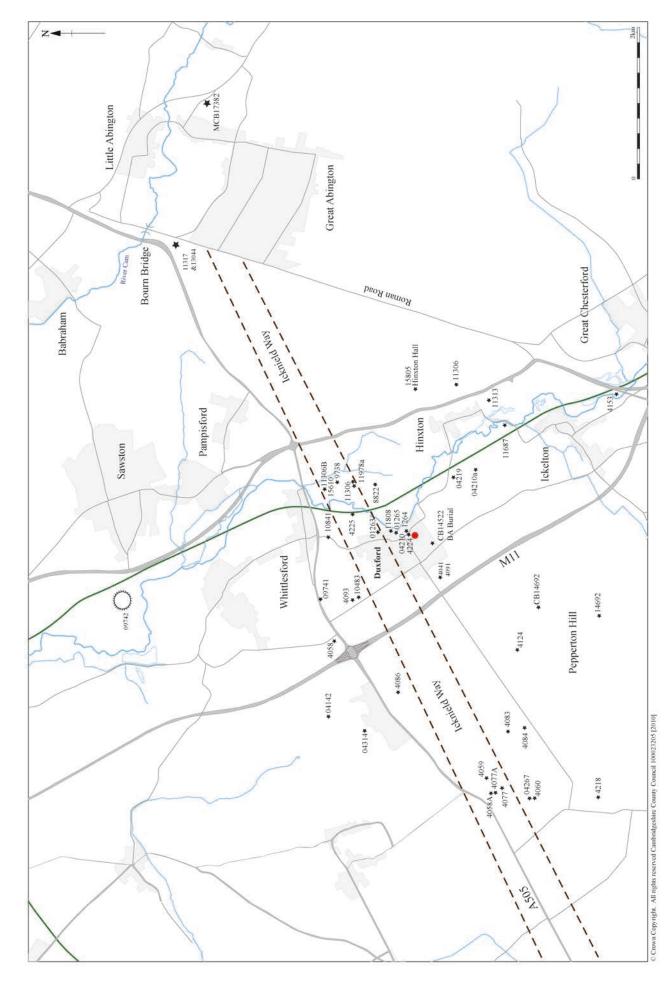


Figure 3 The local area, showing the HER sites in the vicinity. Scale 1:50,000

river would have provided an essential local route for trade and communication. A Roman iron shackle (CHER 4224) was found c.100m to the north of the site and another iron shackle with a swivel (CHER 4225) came from a site c.800m to the north-east: these items may indicate the transportation of slaves or prisoners along these routes.

As land use changed in the Romano-British period, with the adoption of the villa farming system, more substantial buildings appeared in the landscape. Roman building materials have been found c.800m to the south-east of the subject site (CHER 4219), indicating the likelihood of further settlement within the area. Further Roman settlement is known at Whittlesford (c.2km to the north), where five or six potential Roman settlements (e.g. CHER 4142) and a villa complex (CHER 4314; SAM 255) have been recorded. About 2km to the south-east of Duxford a Roman farmstead, corn-drying oven (CHER 9738) and field systems (CHER 8822; 11687; 11978a) have been found at Hinxton. The Duxford site is also just over 3km from a villa and barn at Ickleton (CHER 4153), while at Foxton (c.8km to the north-west of Duxford) another Roman farmstead was found (CHER 14689) with the remains of an early Roman drying building, hearths, pits and ditches. Also found at this site was a late Roman inhumation cemetery with twenty-four burials. A substantial Roman villa was discovered c.8km to the east of Duxford, near the village of Linton (Fig. 2, CHER 9841; Neville 1847; 1851; 1857), with a family burial ground containing five inhumations (CHER 6165).

Anglo-Saxon

In the Anglo-Saxon period Duxford lay in a 'frontier zone' of nucleated settlements which extended southwards along the Saffron Walden branch of the River Cam c. 15km into the dispersed settlement pattern of north-west Essex (Taylor 2002). To the north of this zone the settlement pattern was predominantly characterised by nucleation, while to the south lay a more dispersed pattern. Along the 'frontier' zone it may be expected that nucleation occurred at a later stage than in the heartland of the midland counties (Taylor 2002). Duxford developed into a bi-focal centre with two parish churches but it is not clear when, or whether this pattern emerged from two separate Anglo-Saxon settlements.

Excavations at Bourn Bridge (c.5km to the north-east of Duxford) support the argument for small-scale Anglo-Saxon settlement along the gravel river valley terraces in this area (CHER 11317; 13044). The settlement at Bourn Bridge dates to the early Saxon period (6th to 7th century) and was established within the relict Roman field system. It consisted of eleven sunken-featured buildings (SFBs) and numerous pits and hollows (Pollard 1996).

Two 5th- to 7th-century Anglo-Saxon structures were found during excavation less than 1km to the north-east of the development site at Hinxton Quarry (CHER 11306B; Mortimer and Evans 1996) on the Cam valley alluvium. Here, the Roman ditch systems continued in use as late as the 4th century AD; they remained open and were maintained in the post-Roman period, suggesting that elements of the Roman agricultural landscape may have continued in use in the Anglo-Saxon period. Further excavation on an adjacent site revealed more Anglo-Saxon settlement features, including a 7m-long sunkenfeatured building (CHER 15610). A more substantial Anglo-Saxon settlement has been excavated in the south

of the parish of Hinxton (CHER 15805; Spoerry and Leith forthcoming); again on the flood plain close to the river. This settlement may also have been related to Roman activity (Kenney forthcoming) and was established in the late 6th or early 7th century, continuing into the 11th century.

The relatively large population of thirty-seven tenants in 1086 suggests that Duxford was already a thriving settlement by the late Saxon period (Wright 1978, 201). In 950 it was called *Dukeswrthe* and in the Domesday survey it was *Dochuesuuord*. The name derives from the Old English meaning 'Ducca's enclosure', where *Ducc* is a personal name (Reaney 1943, 92–4).

Medieval to modern

Duxford is an example of a bi-focal village containing two parish churches — St John's (CHER 4698) and St Peter's (CHER 14835). These were both established by 1200 as a result of competition between the lords of the manors of Lacy's and Busteler's to display their wealth and devotion. This split remained until the 19th century (see Chapter 5 and Appendix 4). The subject site itself was tied to St Peter's Church (c.100m to the north) and in later periods housed the rectory.

Duxford's surviving medieval earthworks are the remains of the four manors which dominated the village during this period: the Temple (CHER 1265), Lacy's (CHER 1263), Busteler's (CHER 1264) and d'Abernons (unlocated). In 1230 Temple Manor was given to the Knights Templar, who held it until their suppression in 1308. It then passed into the king's hands and was relinquished in 1313 to the Knights Hospitaller, who also owned and ran the hospital at Whittlesford Bridge, 1.5km to the north-east. The estate remained in their possession until the Dissolution. Since then it has changed hands many times, but is still called Temple Farm. A second manor, later called Lacy's, was held in the honour of Richmond, for Count Alan of Brittany, at the time of Domesday. It belonged to the Lacy family by the 1270s and remained with them until 1350, after which it passed down through the Swinburne family. A house known as Old Lacey's Farm survives opposite St John's Church. The site of the medieval manor is opposite the farm, east of the High Street. Surviving earthworks suggest that the moat consisted of two rectangular enclosures. The western half of the moat has subsequently been destroyed by housing.

Several important earthworks from this period are recorded in the immediate vicinity of the excavation site. The most significant of these is the moated site of Busteler's manor house (CHER 1264), which lies behind St Peter's Church and c.100m north of the subject site. Also of interest are several ridges (CHER 9977) recorded in the field south of the church, associated with which is a roughly square depression that may be a small house plot (CHER 10841). Busteler's manor, held by Hardwin de Scalers in 1086 and then by the le Goiz family, took its name from William le Busteler, its owner in 1327. In the 17th century it passed to the Parys family, who farmed the land from a house near the west end of the High Street known as Busteler's Farm. The river lay further east at this time and its old course is probably marked by the present parish boundary.

The fourth manor, d'Abernons, was held in 1086 by Arnulf, later lord of the Ardres (Pas de Calais). In 1200 it

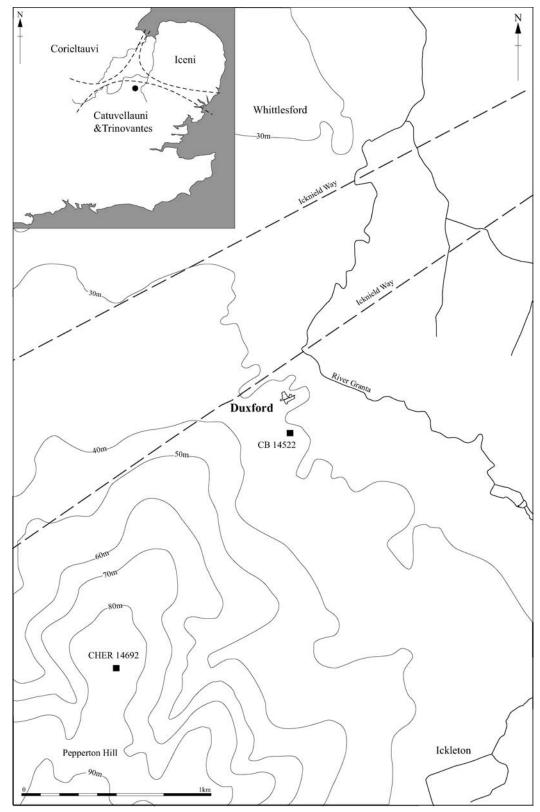


Figure 4 The local area, showing the topography surrounding the site. Scale 1:10,000

came into the possession of Roger d'Abernons, from whom it took its name. The manor was probably to the north of the village.

The medieval and post-medieval historic core of Duxford was designated as a conservation area in 1971: this covers an area of 27ha, of which 21% has survived

without being affected by 20th-century development (Brown and Taylor 1978).



Figure 5 Plan of all excavated features, showing the evaluation trenches. Scale 1:750

IV. The evaluation

(Fig. 5)

Twelve evaluation trenches were excavated in November 2001 and revealed occupation from the middle Iron Age with intensive activity in the later Iron Age and into the early Roman period (Abrams 2001). There was also evidence of Anglo-Saxon, medieval and post-medieval occupation. The range and density of archaeological features led to a requirement by Cambridgeshire County Council that the areas to be affected by development should be fully investigated and preserved by record.

V. Excavation strategy

(Fig. 5)

Topsoil and subsoil were removed from an area of approximately 0.8ha by mechanical excavator under archaeological supervision. The site was excavated in two phases (between March and July 2002), the southern area being examined first to allow development to start while archaeological investigation continued in the northern part. Excavation areas were restricted by the developer's build programme, which meant that some areas were not accessible both as a result of the need to retain access roads and storage areas and because some parts of the site were set aside as 'wildlife refuges'.

The site was planned and recorded to CAM ARC's normal single-context standards and monochrome and colour prints were supplemented by slide and digital photographs. The site and spoil was metal-detected regularly during the excavation. The site archive (paper, material and electronic) is at the time of writing held by OA East at their Bar Hill offices under the site code DUXHR01/02 and will be deposited with the relevant county stores in due course.

VI. Research objectives

Research objectives set out in the specification for the work were revised during the excavation and post-excavation assessment and take into account national, regional and local research frameworks and priorities. At the national level, general themes have been defined by English Heritage and by period specialists (English Heritage 1991 and 1997; Haselgrove 2001). The regional research agenda (Brown and Glazebrook 2000) identified specific research problems and the specialists involved in the post-excavation analysis highlighted particular areas where it was felt that the material from Duxford would add to current knowledge.

National research objectives and project aims included examining processes of transition from ritual to settlement landscape types in the earlier prehistoric periods. Continuity of use of foci was evident at the site through the Iron Age and Roman periods, and the project therefore focused on examining continuity of land use in social and economic terms.

The regional research objectives highlight the need for investigation of datable pottery sequences, feeding into the establishment of regional pottery sequences and an assessment of the adoption of Aylesford-Swarling and Roman culture across the region. They also require an investigation of the adoption of an agrarian economy and

how this changed through time by the quantification and standardised reporting of environmental remains. Other research objectives relevant to this project include the characterisation and comparison of rural settlement forms and functions, the role of the 'market economy' and characterisations of the agrarian economy in the Anglo-Saxon and medieval period.

Local research objectives that have been highlighted recently and which are relevant to this project include investigation of the use of hand-made versus wheel-made pottery on prehistoric sites in the north Essex/north Hertfordshire and south Cambridgeshire region. The study of differing burial practices during the Iron Age and Romano-British period in the surrounding area and evidence for variations within the population have also become important as a result of the increasing number of burials being found during excavations.

Project-specific research objectives identified during the excavation and post-excavation assessment included the need to determine the physical character and morphology of the ritual elements of the site, and to examine how and why they developed and declined. It was also hoped to analyse the social structure of the communities in as far as they were visible within the archaeological remains and to improve understanding of the environment and economy of the site through artefactual, environmental and stratigraphic analysis related to contemporary sites in the region.

VII. Phasing and presentation

Activity on the site has been divided into six main periods which are discussed in subsequent chapters:

Chapter 2 Period 1.1: early Iron Age

(c.800 to c.450 BC)

Period 1.2: middle Iron Age

(c.450 to c.100 BC)

Period 2: late Iron Age to early Roman

(c.100 BC to c. early 2nd century)

Chapter 3 Period 3: late Romano-British

(c. AD 240–410)

Chapter 4 Period 4: Anglo-Saxon

(c. AD 410 to c.750)

Chapter 5 Period 5: Medieval

(c.13th century to c.1535)
Periods 6 and 7: Post-medieval to modern

(c.1535 to 2002)

Finds and environmental evidence are integrated within the appropriate period chapter, with finds generally being illustrated with the feature from which they derived (e.g. grave goods are shown with the relevant grave). Given the significance of the detail of processes of deposition within the Iron Age and early Roman periods (Periods 1-2), pit gazetteers are presented in detail in Appendices 2 and 3 and summarised within the main text, where the contents of specific pits of interest are noted. The level of information included in the archaeological text for these periods (Chapter 2) is higher than might normally be expected to allow for detailed study of this unique set of deposits by other scholars interested in ritual behaviour of this period: for example, identification of specific animal bones is given in order to distinguish possible ritual and feasting waste in terms of meat-bearing and non-meat-bearing body parts.

Chapter 2. Iron Age to early Roman ritual

I. Summary

The earliest evidence found consists of small amounts of residual late Neolithic and Bronze Age pottery, along with a small quantity of diagnostic worked flint, some of which may date to the Iron Age (Bates, below). A series of faint ard or plough marks, pre-dating the Iron Age features on the hilltop, indicates earlier attempts at arable agriculture (Plate 2). It was during the early Iron Age (Period 1.1), however, that significant activity began, in the form of an isolated 'crouched' inhumation on the natural chalk mound in the north-western part of the site, with a possible structure and associated ditch being found on lower ground to the south.

In the middle Iron Age (Period 1.2) the chalk knoll was demarcated and used for ritual activity, being initially defined by a 'sub-circular' enclosure, enigmatic traces of which survived. A series of stake-holes set within the foundation cut of this enclosure suggests that it formed the support for a withy fence, perhaps continuing a tradition of multi-faceted enclosures for ritual use that can be traced back into earlier prehistory. Within the projected circumference of this enclosure were two inhumation burials on the same alignment, surrounded by several storage-type pits which contained structured deposits. Just to the north lay a ritual pit containing, *inter alia*, a horse burial. Further south, a D-shaped enclosure was surrounded by groups of pits, many of which yielded what

appeared to be feasting waste. Scattered across other parts of the site were further pit groups and a circular enclosure.

Ritual use continued into the late Iron Age and the early Roman period (Period 2). At this time narrow ditches following the contour of the hill (at least partially) defined the area, with the chalk upcast from their construction presumably providing a striking white boundary; within the southern element of this ditch inhumation burials were interred in the late Iron Age and early Roman periods. Subsequently a small rectangular structure, which has been interpreted as a shrine, was built with an associated inhumation burial ground to the east. The latest phase of the boundary ditches cut through both the shrine and the inhumation burials, as the ?enclosed area was becoming smaller and the shrine and burial ground were no longer in use.

II. Period 1.1: early Iron Age (c.800 to c.450 BC) (Fig. 6)

Establishment of the cemetery

The earliest, or founder, burial (Figs 6 and 7)

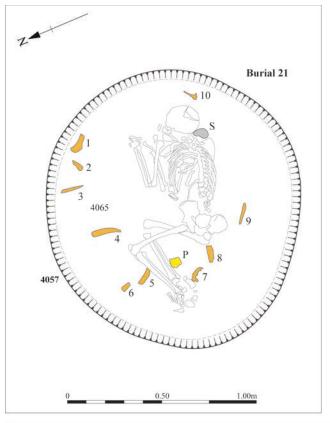
The earliest burial discovered (Burial 21) lay within a large circular pit (4057; 1.7m in diameter by 1.2m deep) which had vertical sides and a flat base. This feature may



Plate 2 Ard/plough marks that pre-date the middle Iron Age features



Figure 6 Plan of all early and middle Iron Age features (Period 1). Scale 1:750





- 1. Cattle femur
- 2. Large mammal rib
- 3. Large mammal rib
- 4. Large mammal rib
- 5. Large mammal tibia (probably cattle)
- 6. Sheep/Goat mandible fragments
- 7. Dog mandible
- 8. Large mammal rib

- 9. Large mammal rib
- 10. Large mammal vertebra
- S. Two polished stones
- P. Pot fragment

Figure 7 Period 1.1. Plan of Burial 21. Scale 1:20

have been originally dug for use as a storage pit or grain silo and it is unlikely to have been originally constructed for use as a grave. This burial has been radiocarbon dated to the early Iron Age (GU-5930, 2570±50BP; 830–540 cal BC at 95% confidence; Appendix 1) and was located in an isolated position away from all the other (later) burials, close to the south-western edge of a later enclosure (Enclosure 3). Although no direct evidence for a mound covering this burial survived, the archaeologically blank area surrounding the pit suggests the possible presence of such an earthwork, the upstanding remains of which would have prevented use of the immediate area for several hundred years.

The burial was that of a flexed adult male (4065) aged between twenty-three and thirty-five years (mean age twenty-five). In life the man would have been c. 1.68m tall and had diseased joints. The skeleton was lying on its right side with its head to south-east. Two smooth red stones had been deliberately placed behind the skull. The burial lay on a thin layer of soil in the base of the pit. A midbrown silty clay surrounded the skeleton and contained selected horse, sheep and dog mandibles together with teeth and post-cranial bones from these species and from cattle. This deposit also contained fourteen sherds from the same broken pot (188g), the fabric of which is consistent with an early to middle Iron Age date. Environmental sampling revealed small quantities of *Triticum* sp. (wheat) grains, other cereal grains too

damaged to analyse and $Lithospermum\ arvensis\ L$ (corn gromwell) weed seeds, along with snail shells from the open-country species of $Pupilla\ muscorum$, charcoal, cokey material and animal bone fragments. This material was probably present in the topsoil at the time of burial.

Sealing the inhumation was a dark brown silt clay which contained a relatively large amount of animal bone consisting of a horse ankle (astragalus) and feet (phalanx) bones, a sawn cattle horncore (Plate 8) and leg bones (tibia and calcaneum), a sheep leg bone (humerus), a pig jaw bone (maxilla) and the vertebrae and ribs from both medium-sized and large mammals. The upper part of the pit had been cut by a medieval feature and roots and rodents had evidently been very active, accounting for the numerous intrusive finds, including fifty-two sherds of late Iron Age pottery (801g) and a few Romano-British pottery fragments (three sherds, weighing 81g). A post-Roman buckle and fittings were also found in the human skull cavity, which had evidently been used as a rodent nest.

Activities to the south

Structure 1: an ancillary structure (Figs 8 and 12)

Some distance to the south of the 'founder' burial was evidence for possibly contemporary activity in the form of a group of four truncated post-holes (2111, 2117, 2139,

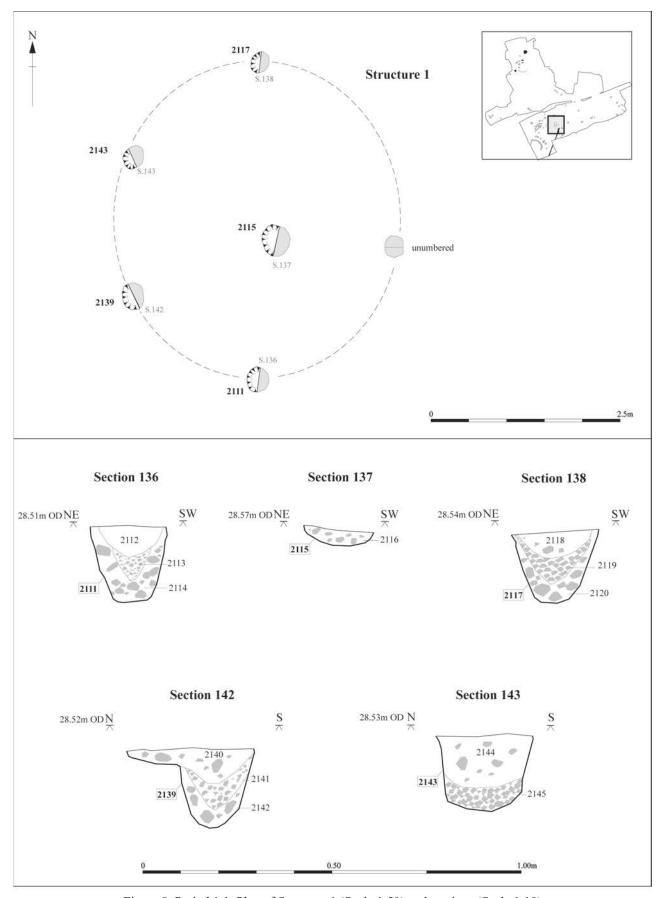


Figure 8 Period 1.1. Plan of Structure 1 (Scale 1:50) and sections (Scale 1:10)

2143) and another possible post-hole which was initially identified as a natural feature. These post-holes formed an arc around a central shallow post-hole (2115), indicating an oval structure with a diameter of c.4.6m. This may have been a small domestic dwelling or temporary shelter. The dark brown silt clay fill (2116) of the central post-hole contained a single sherd of middle Iron Age pottery (3g). The surrounding post-holes had very similar fills (although they contained no finds), suggesting contemporary use. They varied in width between 0.22m and 0.31m and in depth between 0.14m and 0.26m and they contained either two or three fills (with evidence of post-packing).

This structure was surrounded by a crescent-shaped area containing no archaeological remains (to the west), which can tentatively be interpreted as a 'yard' or enclosed space respected by a large group of middle Iron Age pits (Pit Group 2). The structure might also have been associated with an early ditch (Ditch 1, described below), since it was located adjacent to it: any evidence for such a relationship had been destroyed by the truncation caused by the construction and demolition of the later rectory.

Boundary ditch (Ditch 1) (Fig. 12)

A ditch (Ditch 1) lying to the south-east of Structure 1 formed a narrow boundary marker orientated south-west-north-east which may have originated during the early Iron Age. It survived to a length of c.30m and at its southern end was 0.4m wide and 0.31m deep with steep, straight sides and a flat base. The fill was a grey-brown slightly clayey silt with chalk lumps, and contained two sherds (108g) of undiagnostic Iron Age pottery. The next excavated section, to the north-east, was 0.65m wide and 0.45m deep with steep straight sides and a flat base; no

finds were recovered from this red-brown silt clay deposit. Further to the north-east the ditch widened to 1.00m and was 0.58m deep; again, it had steep sides and a flat base. Two sherds of middle Iron Age pottery (5g) and cattle and sheep bone (particularly cranial and vertebral fragments) were found within the mid-grey-brown silt chalk fill here. The northernmost excavated section was 0.55m wide and only 0.06m deep, rising to the north-east, where it became imperceptible; no finds were recovered from the dark grey-brown clay silt deposit. The north-eastern part of this ditch had been heavily truncated by the rectory cellar and modern services.

III. Period 1.2: middle Iron Age (c.450 to c.100 BC)

The cemetery and associated features

Enclosure 3 (Fig. 9; Plate 3)

In the northern part of the site a severely truncated enclosure of sub-circular shape with an estimated diameter of c.14m (Enclosure 3, 4052) was recorded over a distance of c.8m on the southern side of the higher ground (Plate 3). The ditch was 0.2m wide and survived to a depth of 0.17m. Within the base of the ditch, spaced at intervals of between 0.2 and 0.4m apart, were at least eleven stake-holes which were 0.15m in diameter and 0.17m deep. The ditch was filled by a brown-grey silt clay that also contained common chalk pebbles, but no finds, and appears to have been a shallow foundation for a withy fence, perhaps providing the first evidence of demarcation on the higher ground. It may have been a fenced enclosure defining an area for mortuary rites that fell out of use or



Plate 3 The sub-circular enclosure (Enclosure 3), showing its relationship to the later shrine. Looking north-east

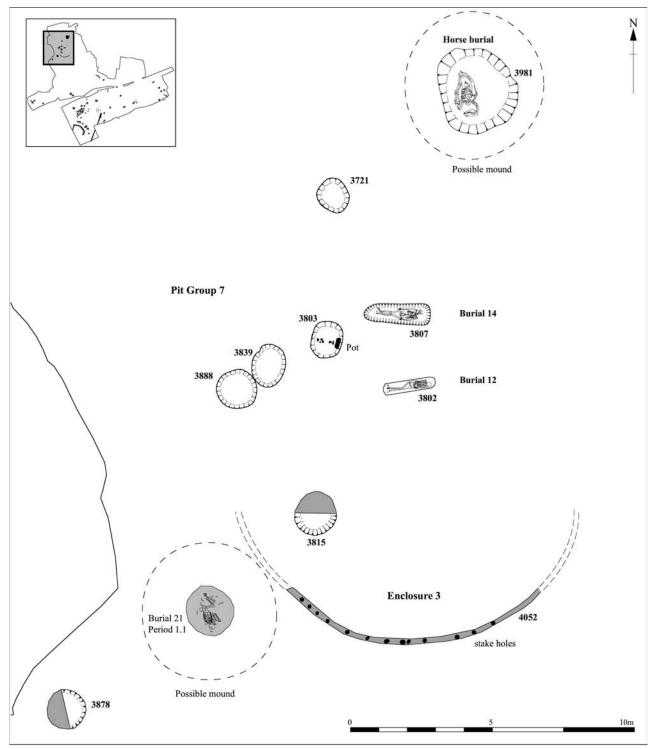


Figure 9 Period 1.2. Plan of Iron Age features in the northern part of the site. Scale 1:75

was replaced by the late Iron Age—early Roman shrine. Its diameter, however, does not preclude it from being a substantial roofed structure, although no evidence (such as post-holes) for this interpretation has survived.

Burial 12

(Figs 9 and 10)

Burial 12 contained the supine body of a male aged between twenty-one and forty-six years (mean age twenty-eight); it was an east—west interment with the head placed to the east. The skeleton (3812) was in good

condition and in life this man would have had a stature of $c.1.72\mathrm{m}$, with bad tooth decay in the upper jaw and evidence of arthritic joints. The body, which was at least 120mm longer than the grave, had been carefully placed into the narrow grave cut (3802; 1.6m long, 0.35m wide and 0.33m deep), by flexing the right leg and folding the arms across the body. This grave lay within the projected diameter of Enclosure 3 (described above). Sample 51, taken from the area of the stomach, contained between one and ten specimens of barley (*Hordeum* sp.) grains, which may have been evidence of a meal or could have been

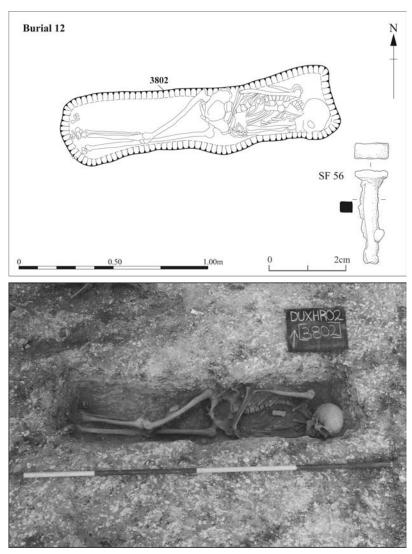


Figure 10 Period 1.2. Plan of Burial 12. Scale 1:20

introduced incidentally to the grave fill. Positioned next to the right thigh of the skeleton was a cattle *calcaneum* (heel bone) and an iron nail (SF 56), although the latter is not indicative of a nailed coffin. Also worthy of note is the presence of clay and charcoal over each ankle, which may possibly have been the remains of a temporary hearth used during the funeral rite. The pale brown clay silt (3801) backfill of the grave contained nine sherds of intrusive later Iron Age pottery (84g) scattered throughout. This burial was radiocarbon dated to the middle to late Iron Age (GU-5928, 2190±50BP; 390–90 cal BC at 95% confidence).

Burial 14 (Fig. 9)

A second burial was probably contemporary with Burial 12 as it lay parallel to and just to the north of the other grave. Both graves would have been within the perimeter of Enclosure 3. This grave was truncated by the digging of the grave for late Iron Age—early Roman Burial 11. Burial 14 contained the severely truncated remains of an adolescent aged between fifteen and seventeen years (3805), for which it was not possible to determine the gender. The skeletal remains were found in a barely perceptible hollow (3807) with the upper body to the east.

Pit Group 7 and isolated pits (Fig. 9)

Four pits (3888, 3803, 3815, 3839) lay within the confines of Enclosure 3, with outlying pits further to the north (3721) and south-west (3878). These pits were of the straight-sided and flat-based type used as storage pits elsewhere on the site. None of the pits was cut by the construction of the shrine in the late Iron Age and it is possible that they were still visible (marked) or in use when the shrine was constructed: two examples (3888 and 3839) were later overlain by the shrine. Of note among the group, pit 3803 (1.3m diameter and 0.45m deep) was circular with vertical sides and an uneven base. It contained a brown clay silt and finds that appeared to have been carefully placed. A pile of fifty-three pieces of middle Iron Age pottery (2.033kg) from at least seven different vessels, together with broken flint, was deposited on the western edge of the pit. A number of cobbles were placed in an east-west line across the base of the pit, emanating from the pile on the eastern edge. Seven sherds of pottery and two pieces of stone had also been placed in an arc around the western edge of the base. Also found within this deposit were a sheep/goat leg bone (tibia) and teeth, the shoulder blade from a pig and a rib from a medium-sized mammal.

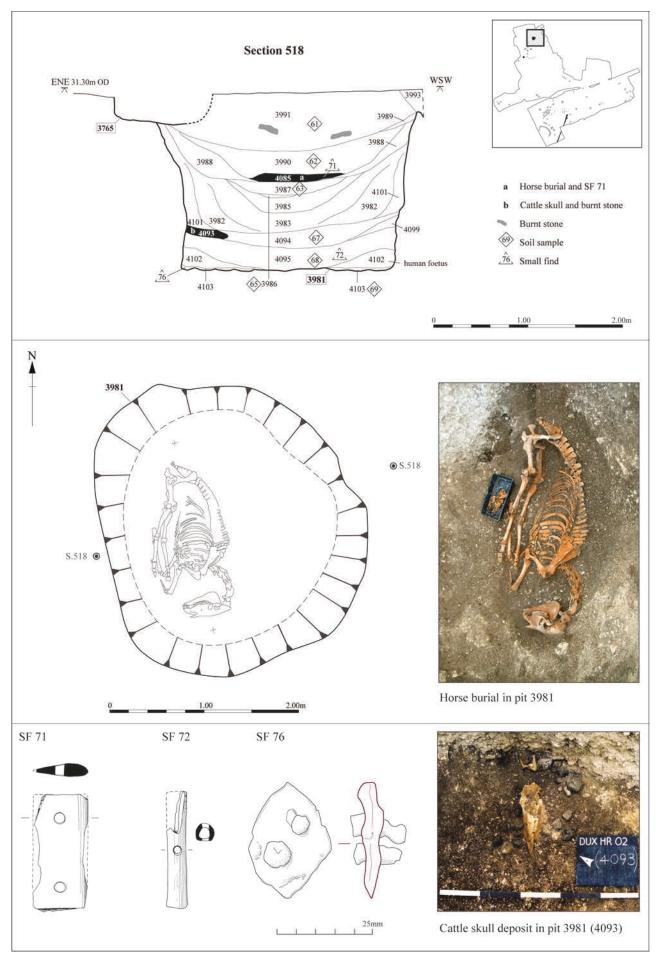


Figure 11 Period 1.2. Pit 3981: plan and section (Scale 1:40) and detail of artefacts

Ritual pit (Figs 9 and 11)

A large pit (3981) was located in an isolated position to the north of Enclosure 3 on the northern edge of the chalk knoll. It was sub-circular, 3.3m in diameter and 1.9m deep, with very steep sides and a flat base, and it contained a complex sequence of deposits. Many of the fills were ashy and most had been placed into the pit from the northern edge. Each layer containing organic remains was sealed by several chalky ones, presumably to stop the smell of decay.

The primary mid-brown-grey silt fill (4103) may represent trampled material. A sherd of Iron Age pottery (8g) was found in this fill, together with charred cereal grains, charcoal, weed seeds and a toad bone, which came from an environmental sample (Sample 69). A decayed fragment of sheet iron with two rivets/studs in situ (SF 76), which may be the remains of a buckle plate or similar fitting, was also found. Overlying this deposit (on the northern side of the pit) was an ashy charcoal layer that was probably the remains of a fire or hearth. This layer was similar to two later deposits (3984, 3986) which were all tipped over the northern edge of the pit suggesting a series of similar deposition episodes. The well-preserved remains of a human foetus (8-9 foetal months old) were found in the pale brown chalky silt (4102) that overlay this ashy fill. A dark grey silt with ashy patches (4095) sealed the layer that held the foetus and contained middle Iron Age pottery (75g), a bone bobbin (SF 72) and an assemblage of animal bone. The animal parts found consist of various small bones from wild species (hare, intrusive rabbit, water voles, toad/frog and mice), recovered from a sample (Sample 68), and also larger domestic species, including a cattle shoulder blade and teeth, a sheep/goat hip (innominate), jaw (mandible) and tooth and the vertebrae and ribs from a large mammal. This deposit was sealed by dumps of sterile chalk tipped in from the northern and southern edges of the pit.

These chalk layers were overlain by an ashy silt (4094) containing twelve sherds of later Iron Age pottery (424g, Fig. 39, No. 6), horse teeth and hip (innominate) bones, sheep/goat teeth and leg (radius) bones and a rib from a medium-sized mammal. Also found within this fill were the small bones of many wild species (field vole, mouse, toad/frog), including 211 bones from at least twenty-nine individual water voles, recovered from an environmental sample (Sample 67). Placed on this layer was another possibly ritual deposit (4093) consisting of an intact horse skull and some burnt stones (Fig. 11). This deposit was sealed by chalk dust (4101) that contained the bones of voles, a sparrow and a toad/frog. This, together with the overlying two layers (3982, 3983) which contained only a cattle tibia, formed a thick chalk deposit.

Next, a small ashy dump (3984) containing a sherd of late Iron Age pottery (21g) and a medium-sized mammal vertebra had been tipped in from the northern edge. Above this was a silty chalk layer (3985), which contained two sherds of middle Iron Age pottery (9g) and a sheep/goat leg bone (femur). The final ash dump (3986), again thrown in from the north side, contained a single sherd of middle Iron Age pottery (5g) and bones from a vole/mouse and a toad/frog. Similar wild species, together with skeletons of two sparrows and bones from another small bird (blue tit/wren), and sheep/goat bone, were found with five sherds of indeterminate Iron Age pottery (13g) and four

sherds of later Iron Age pottery (91g) in the overlying deposit (3987). This series of deposits was sealed by slightly silty weathered chalk (3988), which contained two sherds of later Iron Age pottery (19g, Fig. 41, No. 25) and a medium-sized mammal rib. Laid on this deposit was the skeleton of a stallion aged approximately seven years with its limbs contracted and its head to the south. The horse had not been poleaxed and there were no cut marks on the bones. The surrounding deposit (4085) contained one late Iron Age sherd (8g) and an archer's bone wrist guard (SF 71; Fig. 11). Three deposits (3984, 3986, 4094) within this complex sequence of fills contained a higher than average density of cereals, chaff and weed seeds, along with grasses and grassland macrofossils, and these may possibly be derived from animal fodder or mixed batches of cereal processing debris, animal bedding or litter. Overlying the articulated horse skeleton was another substantial silty layer (3990) which contained forty-two sherds (0.449kg) of later Iron Age pottery and horse, cattle and sheep/goat bones, together with field and water vole and anuran bones recovered from a sample (Sample 62). A thin, very firm, silty chalk weathering deposit (3989) suggests that the pit was left open for a short while before being finally backfilled with a silty layer (3991) which contained a human finger and animal bone. The latter consisted of a horse tooth, sheep/goat teeth and four jaw bones (mandibles), as well as a shoulder blade and leg (femur, radius, tibia) bones, a pig shoulder blade and the vertebrae and ribs from medium-sized and large mammals. Mouse/vole and toad/frog bones were also recovered from an environmental sample (Sample 61). Fifty sherds (0.743kg) of middle Iron Age-type pottery were found in this deposit.

Dating of the complete horse skeleton (370 cal BC to cal AD 10; GU-5931, 2130±60BP), which lay in the middle of the stratigraphic sequence, suggests that this pit was originally excavated between the middle to late Iron Age and was contemporary with the 'sub-circular' enclosure. It may have been open and in use for a significant period (see discussion) and it is certain that this pit remained the focus of ritualistic behaviour for a long time. Its final fill was cut by at least six Roman burials (Burials 7, 8, 9, 17 and graves 4127, 4129). The pit may have been sealed by a mound which helped preserve the memory of its use and into which the subsequent burials were perhaps cut.

The southern and central areas

Enclosure 1 (Fig. 12; Plate 4)

To the west of earlier features in the southern part of the site was a D-shaped enclosure ditch with an internal (east—west) measurement of c.10m (Enclosure 1), which had been truncated to the south-west by the modern factory foundations. The entrance to the enclosure was to the south-east, although only one terminal survived. The ditch cut was angular, with steep sides and a flat base, and varied in depth from 0.3m to 0.6m and in width from 0.64m to 1.2m. All excavated segments (2004, 2006, 2010, 2535) contained a mid-brown sandy silt that contained frequent middle Iron Age pottery (100 sherds, weighing 2.187kg), as well as fragments of sheep/goat, horse and cattle bone. The ditch terminal contained two sheep/goat jaw bones (mandibles), a cattle jaw bone

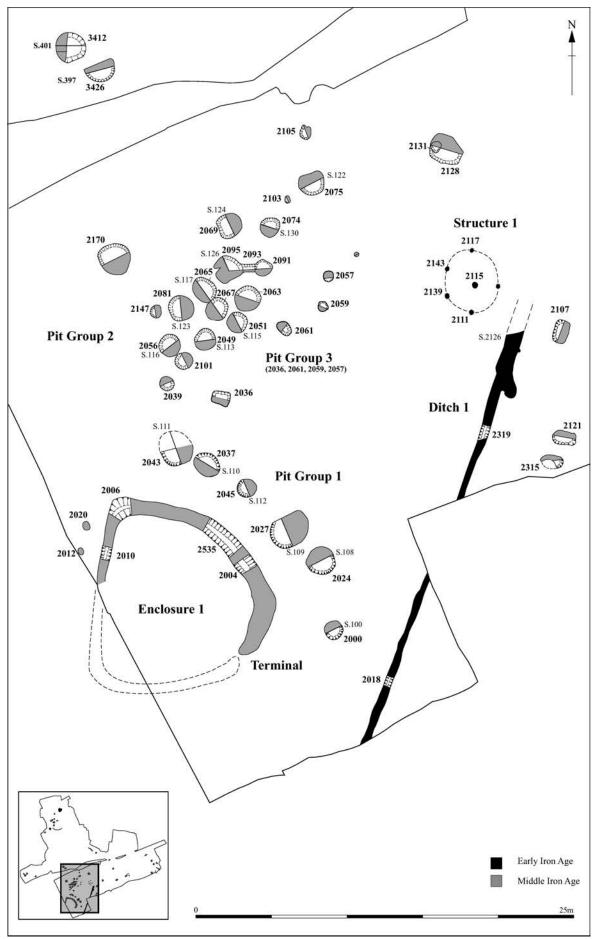


Figure 12 Period 1.2. Plan of middle Iron Age features in the south-western part of the site. Scale 1:250

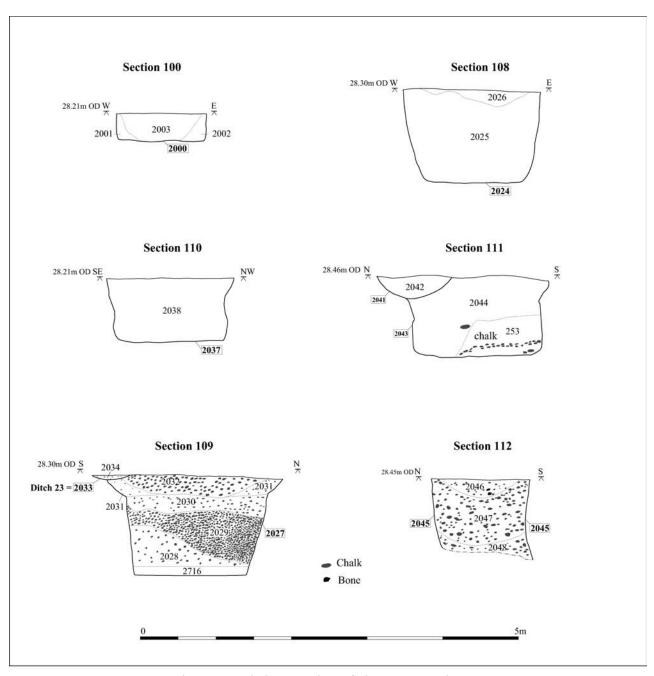


Figure 13 Period 1.2. Sections of Pit Group 1. Scale 1:50



Plate 4 Enclosure 1 and Pit Groups 1 and 2 (looking south-west)

(maxilla), a cattle ankle (astragalus) bone and a horse hip bone (ischium): all of these bones may have been placed as a ritual deposit. Intrusive medieval pottery was incorporated into the fills during construction of the 20th-century factory.

The asymmetrical nature of the foundation and the fact that there were no post-holes or structural remains associated with this feature to indicate that it had substantial walls or a roof militate against a domestic interpretation; rather, the group of contemporary grain silos (Pit Group 1) located to the east of this feature may indicate that it was a place used for crop processing (?threshing), or a stock enclosure, in which case the pits could have been used to contain animal feed.

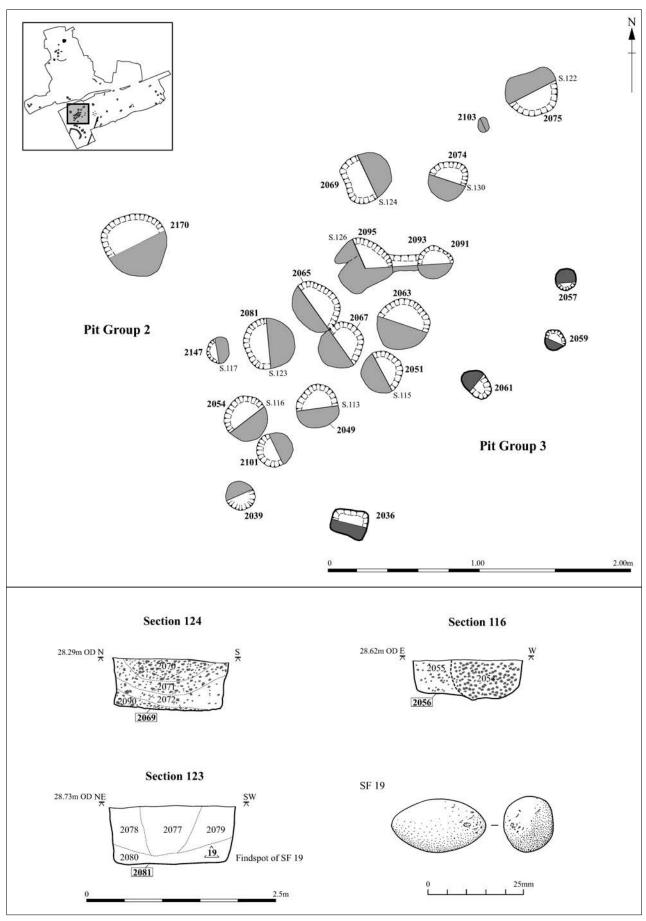


Figure 14 Period 1.2. Plan of and sections of Pit Groups 2 and 3 and pit 2170, with baked clay slingshot (SF 19) found in the base of pit 2081. Scale: plan 1:25; section 1:50

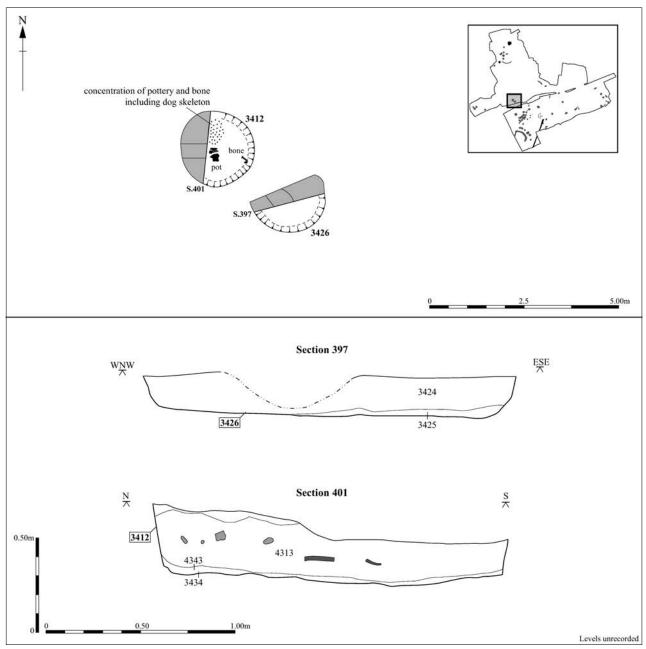


Figure 15 Period 1.2. Plan and sections of pits 3412 and 3426. Scale plan 1:40; sections 1:20

Post-holes 2020 and 2012

Just to the north-west of Enclosure 1 were two post-holes (2020 and 2012) which perhaps formed part of a larger structure such as a four-post granary, barn or fence-line which would have extended beyond the western edge of excavation. Post-hole 2012 was 0.4m in diameter and 0.12m in depth and contained eight sherds of middle Iron Age pottery (58g) and a cattle tooth within the post-packing. Post-hole 2020 was 0.35m in diameter and 0.38m deep and contained twenty-eight sherds of middle Iron Age pottery (482g). Both features were filled by a mid-grey-brown sandy silt with evenly distributed pebbles and charcoal.

Pit Group 1 (Figs 12 and 13)

A group of six circular pits with vertical sides and flat bases lay on the north-eastern side of Enclosure 1,

respecting its alignment and probably contemporary with it (2000, 2024, 2027, 2045, 2037 and 2043). Their discrete nature, with none of the pits intercutting, suggests that they were contemporary with (or sequential to) one another. They were cut into chalky bedrock, which means they would have been well drained and suitable for use as grain silos (perhaps for animal feed), although environmental samples failed to identify significant remains to indicate their function, their sterile character suggesting they had been cleaned out after use. After they had fallen from use small quantities of domestic-type debris were deposited within them, including significant quantities of animal bone (see Appendix 2). It is possible that this material, and the sealing deposits placed above these pits, might be evidence for rituals that were undertaken to mark the disuse of these features. It is also worthy of note that one of these pits (2027, Fig. 12 and frontispiece) contained apparently older pottery deposited

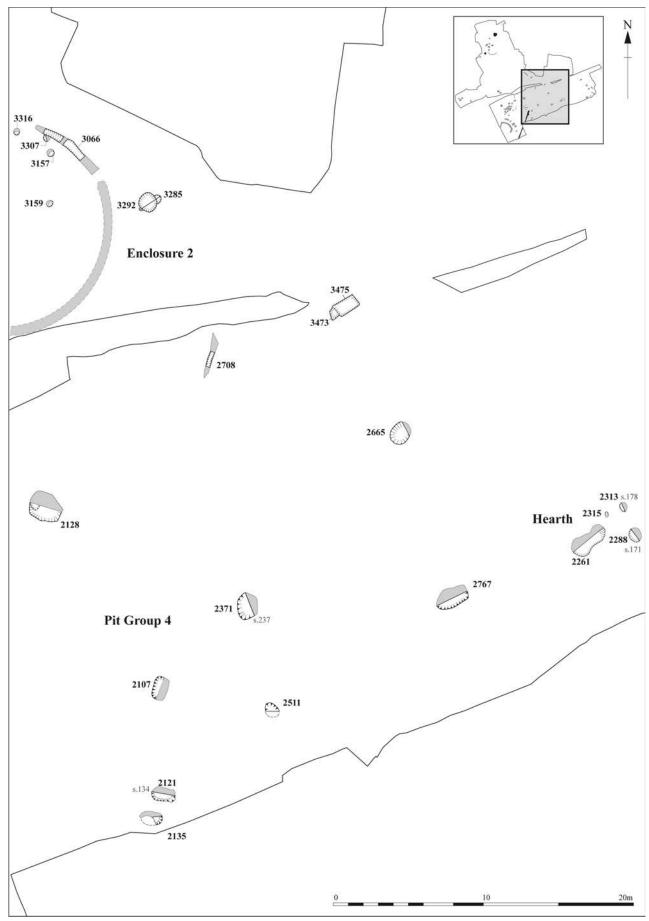


Figure 16 Period 1.2. Plan of scattered middle Iron Age features in central to eastern part of the site. Scale 1:250

over newer pottery, an observation that has been made elsewhere on the site (Percival, below).

Pit Group 2 (Figs 12 and 14)

A discrete group of eighteen circular pits (2039, 2049, 2051, 2056, 2063, 2065, 2067, 2069, 2074, 2075, 2081, 2091, 2093, 2095, 2101, 2103, 2105, 2147) was located to the north-east of Enclosure 1. The largest of the pits had a diameter of 1.7m and the smallest of only 0.3m, while their depths varied from 0.95m to only 0.13m (Appendix 2). This group of pits was aligned north-east to south-west and was surrounded by a archaeologically sterile area, possibly suggesting that they originally lay within a banked enclosure or were delimited by another feature now unseen (perhaps the lost 'yard' boundary of Structure 1). Only two of the pits intercut one another, and it is likely that they were all excavated or in use at broadly the same time.

Many of these pits were devoid of finds apart from animal bone, which suggests that they were well cleared out after use and the bone deposited subsequently. The single environmental sample taken from this pit group (pit 2069, Sample 14) supports this interpretation: only low levels of ?windblown crop waste, weed seeds, wetland sedge (Carex), molluscs (including a marsh freshwater mollusc (Vertigo sp.)) and charcoal were found within this deposit. In terms of faunal body-part distribution, the animal bone from these contexts probably represents processing waste. It consists largely of mandibles, vertebrae, rib fragments and loose teeth. Butchery marks seen on those meat-bearing elements that are present are indicative of disarticulation of carcasses (e.g. being chopped mid shaft and at the epiphyses, perhaps with a large knife or cleaver). While this does not preclude these remains being simple domestic debris, the nature of the assemblage (e.g. with pits being 'cleaned out' prior to deposition) does suggest the material is the result of specific events rather than day to day settlement waste.

Pit 2067 is of particular interest as the faunal remains were from the head and feet of horse, cattle and sheep/goat, rather than from meat-bearing parts of the animal. The basal fill (2080) of pit 2081 was made up largely of loose, crumbly chalk blocks with silt within which was found a ceramic slingshot (SF 19), a triangular 'rubbing stone', a cattle tooth and a middle Iron Age pottery base sherd (13g). This pit fill stands out as containing carefully selected artefacts which may have been placed as part of a deposition ritual.

Isolated pit (Fig. 12)

To the north-west of Pit Group 2 was a large circular pit (2170) with almost vertical sides and a flat base; it measured 2.2m long by 1.95m wide and was 0.75m deep. The dark brown clay silt basal fill was dumped from the western edge of the pit and contained three middle Iron Age pottery sherds (34g) and a tooth from a sheep/goat. This feature was one of only a few at Duxford to have preserved a good environmental assemblage (Sample 13), which contained a combination of organic remains that may have been derived from animal fodder, mixed batches of cereal-processing debris or animal bedding and litter. This deposit was sealed by a levelling layer made up entirely of crumbly chalk that contained two middle Iron

Age pottery sherds (150g). Above this was another layer of chalk interspersed with clay silt which also contained two middle Iron Age sherds (18g). The final fill in the sequence was light grey-brown clay silt with common chalk, gravel and grit inclusions that contained one middle Iron Age pottery fragment (15g) and appears to have been a levelling layer.

Pit Group 3

(Figs 12 and 14)

Four smaller and more irregular truncated pits (2036, 2057, 2059, 2061) located to the south-east of Pit Group 2 were also of middle Iron Age date.

Other pits near Enclosure 1 (Figs 12 and 15)

Two intercutting pits located in the south-central part of the site lay just to the north-east of Pit Group 2 and immediately to the north of Structure 1. The earliest feature was a large rectangular pit (2128) that measured 2.25m long by 1.75m wide and was 0.48m deep. It contained two fills, the lower of which was a yellow-white chalk that had been weathered in. The upper fill (2130) was also almost 90% chalk but contained eight sherds of middle Iron Age pottery (138g), horse vertebrae and ribs (constituting a large part of the axial skeleton), and a cattle jaw bone (mandible). These remains do not appear to be related to feasting and may be yet another example of placed animal remains in a ritual context. It is possible that the small pit (2131) excavated in its western end could have held a post to mark the position of this feature.

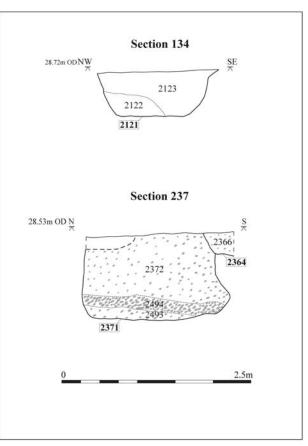


Figure 17 Period 1.2. Selected sections of Pit Group 4. Scale 1:50

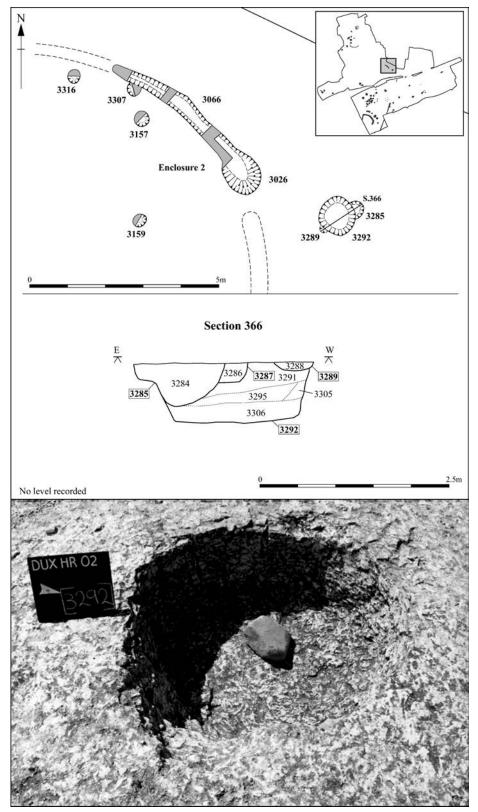


Figure 18 Period 1.2. Plan of Enclosure 2 (Scale 1:100) and section (1:50) of pit 3292

Just to the north of features assigned to Pit Groups 2 and 3 two large circular pits (3412 and 3426) were found lying close together in the central part of the site. Both features contained the remains of pottery and burnt animal bone which are consistent with the partial remains of a

meal. One also contained the partial skeleton of a mediumsized dog. It is possible that they were middle Iron Age storage pits (similar to Pit Group 2) that were used to contain deliberately placed deposits of a ritual nature.

Pit Group 4 (Figs 16 and 17)

To the east of Ditch 1, in the centre of the southern part of the site, were five scattered middle Iron Age pits (2107, 2121, 2135, 2371, 2511). Their lack of a cohesive distribution may be a result of the severe multi-period disturbance in this part of the site, which had almost certainly destroyed other pits of this date.

Enclosure 2 (Figs 16 and 18)

A severely truncated circular enclosure (3066) was visible in the central part of the site; the surviving ditch was 7.5m long by 0.5m wide and 0.32m deep. The arc of the ditch was evident as a stain in the natural chalk for approximately a third of its circumference, from which it was possible to estimate an internal diameter for the feature of c.14m. The light grey-brown silt clay basal fill contained two sherds of middle Iron Age pottery (56g) and burnt stones, while the upper fill held ten sherds of middle Iron Age pottery (43g) and two intrusive early Roman grey ware pottery sherds (7g). Also found were cattle and horse teeth and the vertebrae from medium-sized and large mammals. The terminal of the enclosure had been cut by a post-medieval pit. Several post-holes which may have been the remnants of internal fencing (3157, 3159, 3307, 3316) survived within the enclosure's projected circumference. They were between 0.32m and 0.38m wide and 0.2m deep; some contained packing material but all lacked dating material. The function of the enclosure remains unclear; the large diameter does not preclude it from being a substantial domestic structure, although there are no surviving structural post-holes to support this view. It has therefore been interpreted as an enclosure ditch for stock management.

Pit 3292

(Figs 16 and 18)

To the east of the terminal of Enclosure 2 was a large circular pit (3292) with steep sides and a flat base; it had a diameter of 1.45m and was 0.55m deep. It is possible that this pit was related to Enclosure 2 in the same way that Enclosure 1 and Pit Group 1 were related (*i.e.* pits located close to stock enclosures could have provided storage for animal feed). After this pit fell out of use it was backfilled with large quantities of middle Iron Age pottery and animal bone. These finds had been deposited in several distinct layers, suggesting that the detritus from more than one event of feasting or communal eating had been deposited here. Of particular interest was a large ?rubbing stone ($0.27m \times 0.24m \times 0.13m$) with a flattened surface that had been carefully placed face down in the base of the pit together with a pebble of non-local quartz.

The dark brown clay silt (3306) surrounding the stones in the base of the pit contained 127 sherds of middle Iron Age pottery (2.427kg) as well as animal bones consisting of a cattle jaw bone (mandible), vertebrae (atlas) and a heel bone (calcaneum), along with the ribs and vertebrae from medium-sized and large mammals. The environmental sample from this deposit (Sample 27) contained the tooth from a water vole. This layer was overlain by a mottled yellow-white and orange deposit (3305) which contained sheep/goat leg bones (tibia, humerus) and the vertebrae from a medium-sized mammal; this in turn was sealed by a mid-brown clay silt

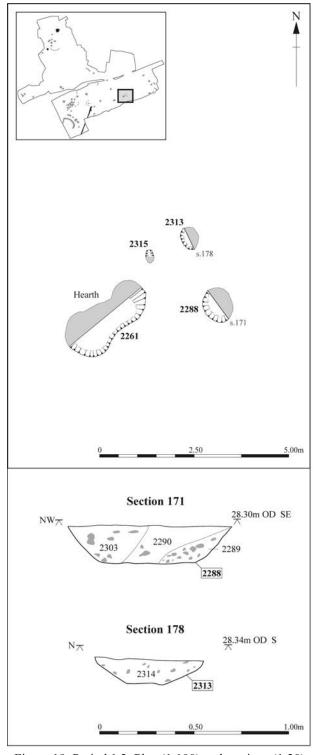


Figure 19 Period 1.2. Plan (1:100) and sections (1:20) of hearth 2261, pits 2288, 2313 and post-hole 2315

(3295) within which were twenty-seven sherds of middle Iron Age pottery (457g) and animal bone, which shows evidence for butchery and is consistent with processing waste. The small assemblage consists of a cattle jaw bone (mandible) and leg bone (tibia), a sheep/goat tongue support (hyoid) (which had been cut, suggesting that the animal was killed by having its throat cut), leg bones (ulna, radius, astragalus) and vertebrae, and the vertebrae and ribs from a medium-sized mammal. It is noteworthy that

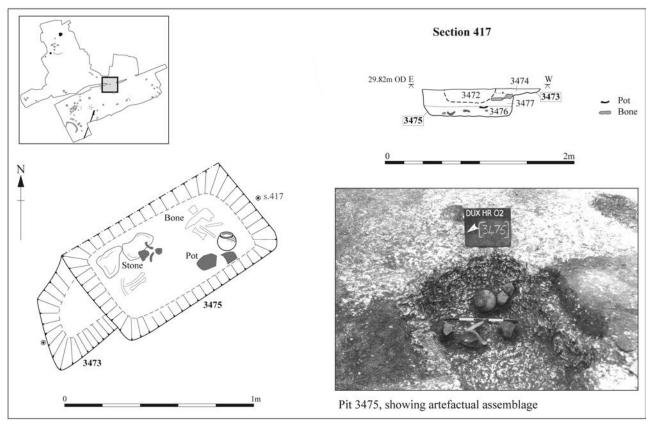


Figure 20 Period 1.2. Plan and section of pits 3473 and 3475. Scale: plan 1:25; section 1:50

there are a larger number of chopped long bones here than from other pit groups on this site. A further two greybrown silt fills had been deposited within the top of this pit, both of which contained sheep/goat bones, including jaw (mandible) and leg (ulna and phalanx) parts. The top of this pit was heavily disturbed by three later pits.

Hearth

(Figs 16 and 19)

In the central southern part of the site was a hearth (2261), two pits (2288 and 2313) and a post-hole (2315) which perhaps related to the hearth, although no finds were recovered from them. The hearth was an irregular oval in plan and measured 2.4m long by 1.7m wide and 0.16m deep. It was generally concave with a steep western edge that became more gentle towards the east, and was filled by a mixed chalky silt of pinkish-white hue and burnt black material. It was apparent that *in situ* burning had taken place in the base of this pit and it may have been utilised as a hearth or rudimentary cereal drier.

Pits to the south-east of Enclosure 2 (Figs 16 and 20)

Pits 3475 and 3473 lay in an area disturbed by postmedieval and modern activity close to (and inside) the entrance of a later ring-ditch (Enclosure 4). It is possible that the pottery and animal bone carefully placed within these pits formed a foundation deposit for this enclosure, although its fills included only later Iron Age pottery (and it is therefore described in Period 2).

Pit 3475, which had truncated most of earlier pit 3473, was rectangular and had almost vertical sides and a flat base; it measured 1.2m long and 0.7m wide, and survived

to a depth of 0.4m. The primary fill (3476) was a brown-grey clay silt with occasional chalk and rare large cobble inclusions, and contained twenty large unabraded middle Iron Age pottery sherds (2.089kg) — it would perhaps be more accurate to describe them as fragmentary vessels. Also found was a large animal bone assemblage including a cattle leg bone (humerus), sheep/goat jaw (maxilla), hip (innominate) and leg (tibia and phalanx) bones and the tooth of a dog. Non-domestic species were also identified, including bird, fish, vole and anuran (frog and/or toad) bones, which were retrieved from a sample (Sample 35). This forms a diverse assemblage within the context of this site. It is also worthy of note that this deposit was one of only two sampled that did not contain windblown cereal detritus, indicating that the pit was not left open to the elements for a long period. Indeed, the rectangular character of this feature combined with the lack of windblown detritus may suggest that these objects were originally deposited in a casket or box; however, no physical evidence for this has survived. These objects were sealed by a similar fill (3477) that contained only sheep/goat leg (tibia) bones.

Pit Group 5 and associated gullies (Fig. 21)

On the eastern side of the site in an area used as gardens in the post-medieval period (and therefore largely untouched by modern development) was a group of six middle Iron Age rubbish pits (2373, 2415, 2532, 2598/2616, 2702, 2446) and two narrow possibly associated structural gullies (2551, 2523/2553). The presence of these features may suggest an area of domestic habitation.

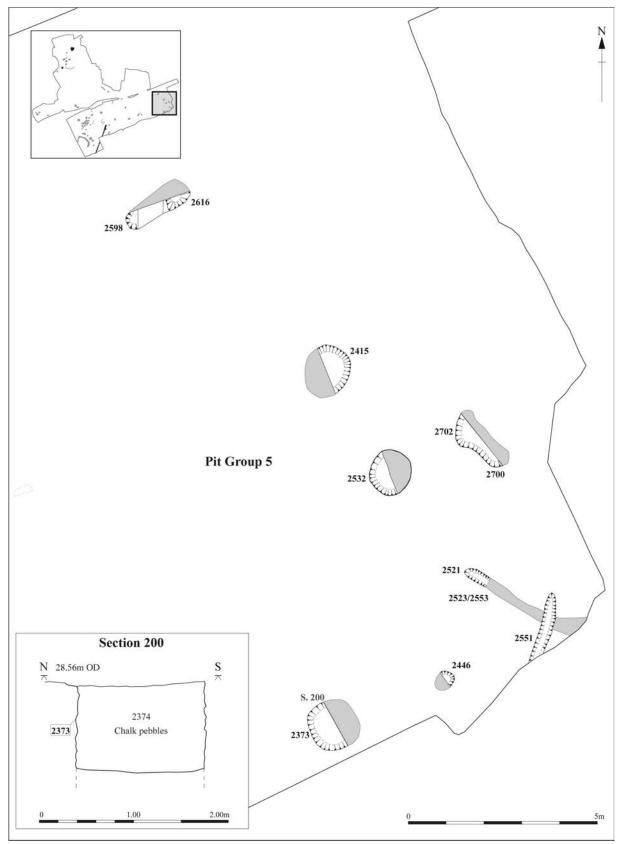


Figure 21 Period 1.2. Plan of middle Iron Age pits and gullies at the eastern end of the site. Scale 1:100 and 1:40

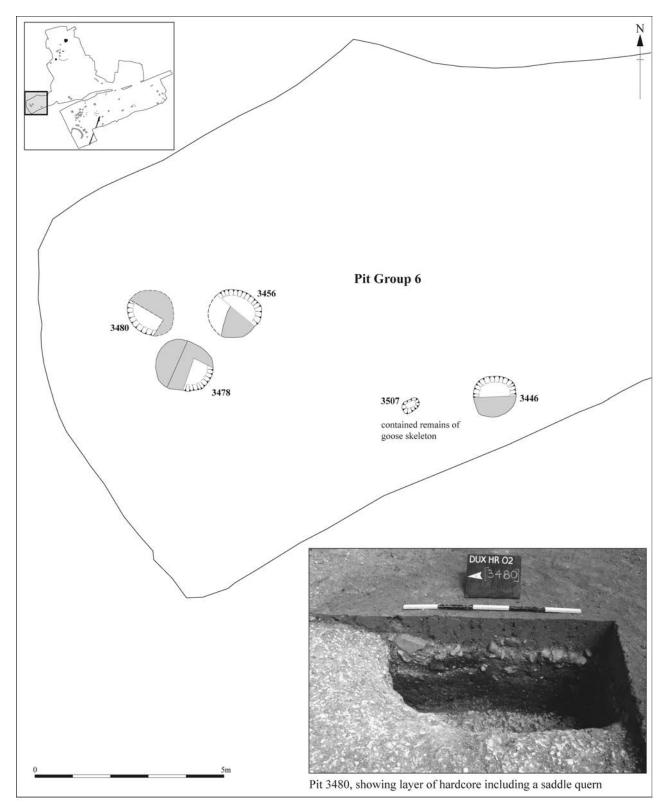


Figure 22 Period 1.2. Plan of middle Iron Age pits in the western part of the site. Scale 1:100

Pit Group 6 (Fig. 22)

In the western part of the site were another five middle Iron Age pits. These pits were of the steep-sided and flat-based variety that are consistent with cereal storage pits (3446, 3456, 3478, 3480, 3507). After they fell out of use they were backfilled with small amounts of domestic detritus that may have been lying on the surrounding

ground surface. The upper fills of one pit (3480) contained a range of objects (including a broken saddle quern, not catalogued) that had sunk into the disused feature when deposited as hardcore to provide a usable entrance for a later Iron Age ditch (Ditch 21). Pit 3507 contained a complete goose skeleton.

IV. Period 2: late Iron Age to early Roman (c.100 BC to c. early 2nd century AD)

(Fig. 23)

Continued ritual use of the hilltop

Pit Group 8 (Figs 24 and 25)

Three circular and flat-based pits of apparent late Iron Age date (3901, 3902, 3903) pre-dated the southern boundary ditch of the cemetery enclosure, and two other pits nearby (3960 and 4046) may have been contemporary. The three pits were located on the south-west edge of the higher ground and ran in a line from north to south. Pit 3901 contained two fills. The primary fill (3917) was a firm mid-brown-grey silt with common chalk fragments which was overlain by a similar, although slightly darker, secondary fill (3916). Pit 3902 also contained two fills. The primary fill was a pale brown-grey silt with moderate chalk inclusions (3919), which was covered by another mid-brown-grey silt with fewer chalk inclusions (3918). Similarly, the third pit, 3903, had only two fills; a primary pale grey silt with occasional chalk (3921) which lay beneath a mid-brown-grey silt with patches of chalk (3920) within which was the partial skeleton of a perinatal child. (The term 'perinatal' refers to the period between a foetal age of 5 months until a week after birth.) No relationship between any of the pits survived, as all had been cut by the later southern boundary ditches; as a result it is not known if they were contemporary or sequential.

Of particular note was pit 3960, which lay to the north-east of the three pits described above and contained a large quantity of pottery and animal bone that has been interpreted as feasting waste. The pit was located within the southern boundary of the cemetery and was cut by Burial 20. It had a diameter of 1.6m, almost vertical sides and a flat base, and survived to a depth of 0.96m. Its basal fill consisted of weathered loose chalk that was overlain by mid-grey-brown silt that contained fragmentary adult human skeletal remains (possibly related to Burial 20). A total of 168 sherds of late Iron Age pottery (3.066kg), including two almost complete vessels, was also found. The animal bone consists of cattle leg bones (humerus, tibia, radius, astragalus and phalanges), skull parts (horncore, mandible and a tooth) and a shoulder blade, as well as sheep/goat skull parts (mandible, maxilla and teeth) and leg bones (humerus, tibia and phalanx), pig jaw bones (maxilla and mandible), and vertebrae and ribs from unidentified medium-sized and large mammals. None of this bone shows evidence of butchery, chewing or pathology, although many of the unquantified fragments (i.e. ribs and vertebrae) do show chop marks. It has been possible to establish from the animal bone assemblage that a minimum of twelve individual domestic animals may have been butchered and the remains placed in this pit, the process yielding a total of c. 1800lbs of meat (Table 1). Assuming that all the meat was eaten and that it was consumed at one time, with each individual eating at least 1lb of meat, this evidence could indicate an attendance of up to 1,800 individuals at a single feasting event.

Evidence of non-domestic species was represented by the brow and beam of a red deer antler which had been used as a raw material for the production of objects. Also found within this deposit was a perforated bone plate (SF 67, Fig. 25) which has been identified as a second archer's wrist guard (the first example was found in ritual pit 3981).

Boundary ditches surrounding the shrine and cemetery

Western boundary

(Fig. 24; Plates 5 and 6)

In the north-western corner of the northern area a group of narrow parallel ditches were orientated north-eastsouth-west (Ditches 2-8). The underlying chalk sloped away to the north-west (although in the medieval or postmedieval period this part of the site was levelled) and the ditches drained into an area of dark compact silt which may have formed a pond. The earliest ditches in this sequence formed a boundary to the north-west of the shrine, with evidence for an entranceway that was in use for a short period. The latest ditch cut away the north-west corner of the shrine and must have been dug after it fell from use. The monitoring of subsequent groundworks showed that the group of ditches continued northeastwards beyond the area of excavation, although one turned to the east and was truncated by a later ditch and modern features.

The earliest ditch in the sequence (Ditch 2, 3675, 3736, 3724 and 3706) was 0.8m wide and 0.3m deep with very steep sides and a flat base. Its mid-grey-brown silt fills contained a cattle tooth and horncore, a horse tooth, a pig jaw bone (mandible) and two small mammal ribs. One fill contained two relatively large (142g) sherds of middle Iron Age pottery, and another yielded four smaller pieces of late Iron Age-early Roman (transitional) pottery (21g).

The initial ditch was recut by Ditch 3 (3735, 3677) which measured 0.9m wide and up to 0.4m deep, and had very steep sides and a flat base. One of the mid-pale brown-grey silt fills contained a cattle jaw (maxilla) and leg bone (humerus), as well as a pig leg bone (humerus). A mid-brown silt clay fill contained a Bronze or early Iron Age pottery sherd (25g) and three non-diagnostic Iron Age pottery fragments (29g).

Cutting both of these ditches was another ditch (Ditch 4, 3676, 3704, 3749, 3773), which measured at least 0.3m wide by 0.18m deep and had steep sides and a concave base. One of its lower fills consisted almost entirely of chalk as a result of weathering, but above this the midgrey-brown silt fills contained sparse pottery and animal bone. Another deposit contained an Iron Age pottery sherd (5g), a tooth from a sheep/goat and a rib from a large

	MNI	Estimated dress carcass weight per animal (lbs)	Total weight yield (lbs)	% Yield
Cattle	5	300	1500	83.3
Sheep/goat	4	25	200	11.1
Pig	2	50	100	5.6
Total	11	N/A	1800	100

Table 1 The estimated weight of meat from the animal bones recovered in pit 3960 (based on research by Chaplin and McCormick 1986)

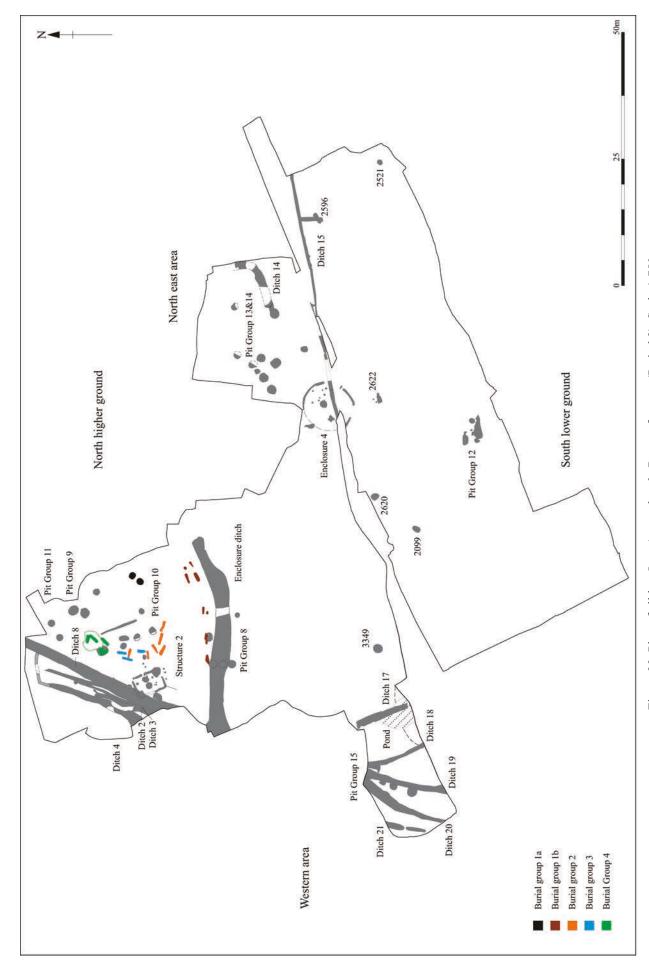


Figure 23 Plan of all late Iron Age and early Roman features (Period 2). Scale 1:750



Plate 5 North-west boundary ditches surrounding the cemetery, looking north

mammal. Four sherds of late Iron Age pottery (61g) and a single transitional sherd (5g), together with a cattle ankle (astragalus) bone, were retrieved from another layer.

Contemporary with Ditch 4, but cutting into Ditch 3, was another ditch (Ditch 5, 3678, 3680, 3711); this measured 0.4m wide by 0.23m deep and had steep sides and a flat base. It contained a light grey-brown silt clay from which no finds were recovered. Another very shallow and probably contemporary feature lay to the north (Ditch 6, 3713). This measured 0.3m wide and was 0.1m deep with a concave profile. No finds were recovered from it. Lying on the western edge of this feature was another shallow ditch (Ditch 7, 3703, 3715), which was 0.58m wide and 0.27m deep. Its grey-brown clay silt fills contained five fragments of late Iron Age pottery (58g) as well as horse and cattle teeth, cattle leg bones (humerus and phalanx) and vertebrae from a medium-sized mammal. Both these ditches terminated (with butt ends) at the same point, suggesting that there may have been an entrance into the enclosure to the west of the shrine.

The latest ditch in the sequence (Ditch 8, 4098, 4092) was considerably larger than its predecessors, varying in width between 1.7m and 1.95m and in depth between 0.85m and 1.10m. It was variously filled by between three and seven layers of mid–dark brown silt. The lowest fills were fine layers of inwash devoid of finds, but the other fills (unlike the earlier ditches in this sequence) commonly included pottery and animal bone. The lower deposits contained mostly later Iron Age pottery (thirty-two pieces, weighing 351g) and a wide variety of animal bone, comprising cattle (including a chopped horncore), sheep/goat, pig and horse (complete tarsus and proximal metatarsals), but also rarer non-domestic species

including a roe deer forelimb (radius), a red deer antler and the remains of a fish (ray). The upper fills contained a significant amount of pottery transitional between the end of the Iron Age and the beginning of the Roman era (fifty-one sherds, 1880g), as well as a small amount of Romano-British material (five sherds, weighing 74g). The animal bone from these deposits again included the main domestic species — cattle, sheep/goat (including a goat horncore), pig, horse and the leg bone (femur) from a juvenile dog — along with leg bones (humerus, radius and ulna) of at least one wild cat. A quantity of mandibles (lower jaw bones) was also present in this deposit (×1 cattle, ×3 sheep and ×3 pig). A little disturbed middle Iron Age pottery (96g) and intrusive medieval (59g) material was found in the top of this ditch.

Southern boundary (Figs 24, 26 and 27)

The southern boundary of the shrine and cemetery area cut across the line of three late Iron Age pits assigned to Pit Group 8, one of which contained a child's skeleton. Before excavation it appeared that a single ditch defined the southern edge of the northern enclosure, but careful recording revealed a sequence of (at least) five recut ditches along the length of the boundary (Ditches 9–13). The stratigraphic relationships between the ditches were not always well defined and the similarity of the midbrown-grey silt fills (3909, 3908, 3913, 2912, 3915, 3914) suggests that some of them may have been open at the same time. The majority of the pottery was of late Iron Age date, while the latest ditch in the sequence appears to have been dug during the 2nd century AD. Moreover, the presence of human bone and a 'ritually killed' pot

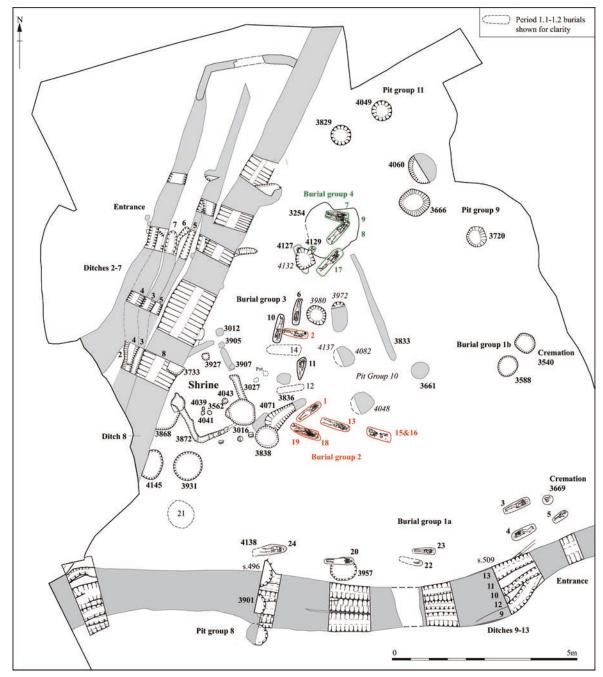


Figure 24 Period 2. Plan of all late Iron Age and early Roman features in the northern part of the site. Scale 1:250

indicates that the latest phase of these ditches had encroached on the burial ground and disturbed some burials. At their western end the ditches turned to the south-west (and continued beyond the edge of excavation), while at the eastern end they terminated, thus appearing to form an entrance.

The earliest ditch in the sequence (Ditch 9, 4018) was up to 1.30m wide and 0.76m deep with slightly concave sides and a gently concave base. It was filled with up to three layers, several of which were composed almost entirely of collapsed chalk. The remaining upper deposits consisted of pale brown-grey silt and contained late Iron Age pottery (thirty-two pieces, weighing 391g) along with cattle, sheep/goat and pig bones and a possible dog femur. The presence of a toad or frog was almost certainly an accidental inclusion.

This ditch was recut on its northern edge by Ditch 10 (4020), which in turn was truncated by Ditch 11. As a result Ditch 10 had a surviving width of only 0.8m and was 0.5m deep with concave sides and base. The excavated segments of this ditch contained between one and three layers of pale grey-brown silts, within which were twenty late Iron Age pottery sherds (317g), two pottery pieces dated to the transition between the late Iron Age and the early Roman period (44g) and two tiny scraps of Romano-British pottery (5g). Also found were small amounts of animal bone consisting of a sheep/goat jaw (mandible and tooth), a dog jaw (mandible) and a rib bone from a medium-sized mammal.

Ditch 11 (4021) was 1.85m wide, 1.26m deep and 0.4m wide with convex sides and base. It contained between one and three pale grey-brown silt fills from

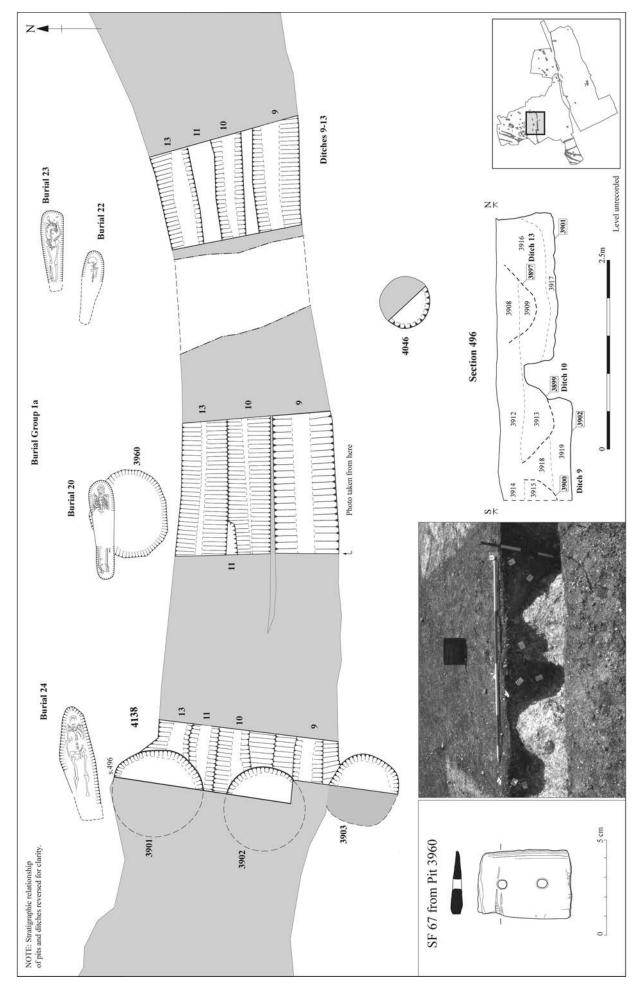


Figure 25 Period 2. Plan of pits pre-dating the cemetery enclosure (Pit Group 8). Scale: plan 1:75; section 1:50

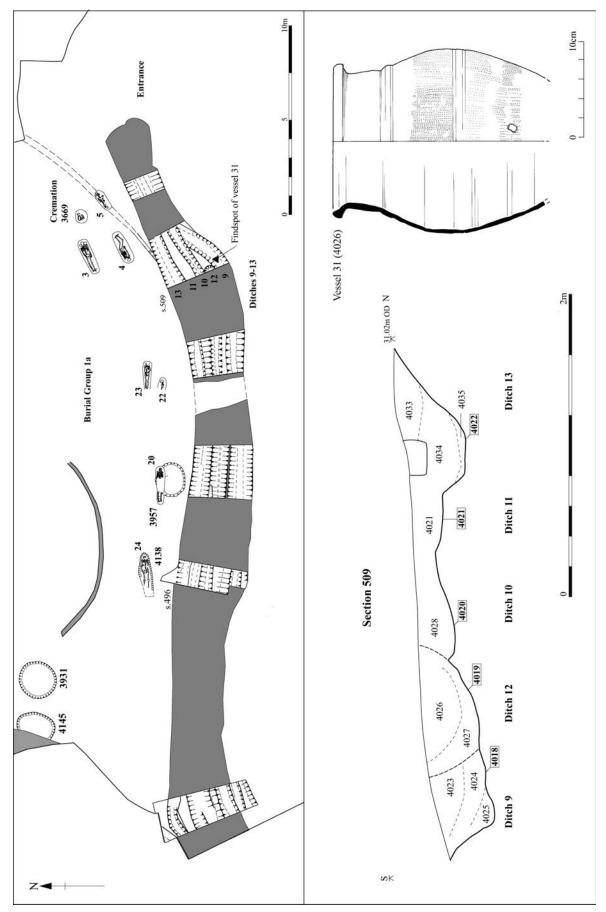


Figure 26 Period 2. Plan of southern ditches enclosing the cemetery. Scale: plan 1:200; section 1:25

which came two middle Iron Age pottery sherds (31g), twenty-seven late Iron Age sherds (239g), a tiny scrap of Romano-British pottery (1g) and a few intrusive medieval sherds (5g). Also found was a large dump of animal bone, which included cattle jaws (maxilla ×2), a horncore, a skull and a leg bone (radius), sheep/goat jaws (mandible ×2) and leg bone (humerus), a horse tooth and several foot bones (phalanx), and the ribs and vertebrae from both medium-sized and large mammals. Disturbed human remains were found in the upper fill.

Ditches 12 and 13 (4019 and 4022) were the two latest ditches in this sequence. The terminal end of Ditch 12 was recorded only over a length of 0.23m, where it was 0.55m wide and 0.37m deep with concave sides and base. It contained two pale grey silty fills and had disturbed an earlier burial accompanied by a ritually 'killed' late-1st-century AD butt beaker (Fig. 26, Vessel 31). It seems likely, therefore, that this ditch dates from no earlier than the early 2nd century AD. Ditch 13 measured 0.95m wide by 0.4m deep and was probably contemporary with Ditch 12, since it also contained disturbed human remains (but no other datable finds).

The shrine and related features (Figs 24 and 27; Plate 6)

The truncated remains of a building (Structure 2) were located in the northern part of the site, on the western part of the chalk knoll. This building has been interpreted as a shrine due to its location, design and the presence of associated burials (see discussion in Chapter 6). The surviving foundations (beamslots 3027, 3872, 3894, 3005) consisted of the eastern, southern, western and part of the northern sides of what would have been a

rectangular building. The structure was badly damaged, with the northern part of the western beamslot cut away by a later pit (3870) and the north-western corner removed by a Romano-British enclosure ditch (Ditch 8). When complete, the structure would have formed a single cella that measured $c.5.5\mathrm{m}$ long and $3.5\mathrm{m}$ wide and was orientated north-west-south-east. The beamslots measured between $0.1\mathrm{m}$ and $0.32\mathrm{m}$ deep and were uniformly filled with dark grey-brown clay silt which contained only a single sherd $(3\mathrm{g})$ of Iron Age pottery and a large mammal rib.

Three post-holes (unnumbered), some containing burnt clay, were found at the base of the southern beamslot, which suggests that the walls of the shrine may have been constructed of timber uprights plastered in daub. Five further post-holes (3562, 4041, 4039, 4043, 3927) were recorded within the shrine and may have been contemporary. Beyond the northern terminal of the eastern beamslot another two post-holes (3905, 3012) may provide evidence for an episode of restructuring.

Nine other post-holes (3781, 3783, 3785, 3787, 3789, 3791, 3793, 3795, 4036) were located close by and to the north-east of the shrine: they contained similar dark brown-grey clay silt fills with sparse finds, and may have been associated with the structure, perhaps even representing an earlier phase or ancillary building.

Two intercutting pits were adjacent to the south-east corner of the shrine. The earlier example (4071) contained a similar fill to the foundations of the shrine and may have been associated with its construction (perhaps functioning as a daub puddling pit), while the later circular pit (3838) contained a significant quantity of animal bone which may have been deposited during its use.

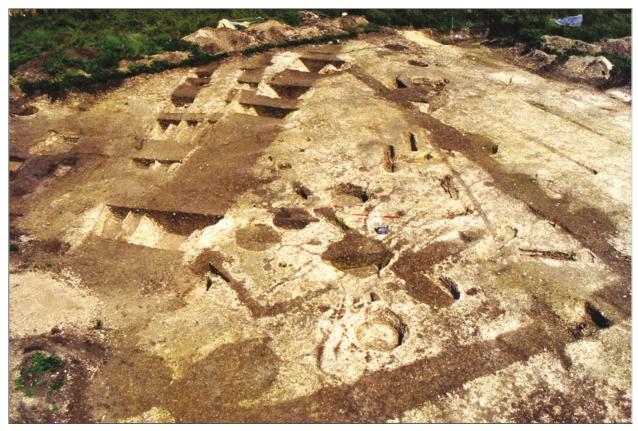


Plate 6 The shrine, burials and north-western boundary ditches during excavation

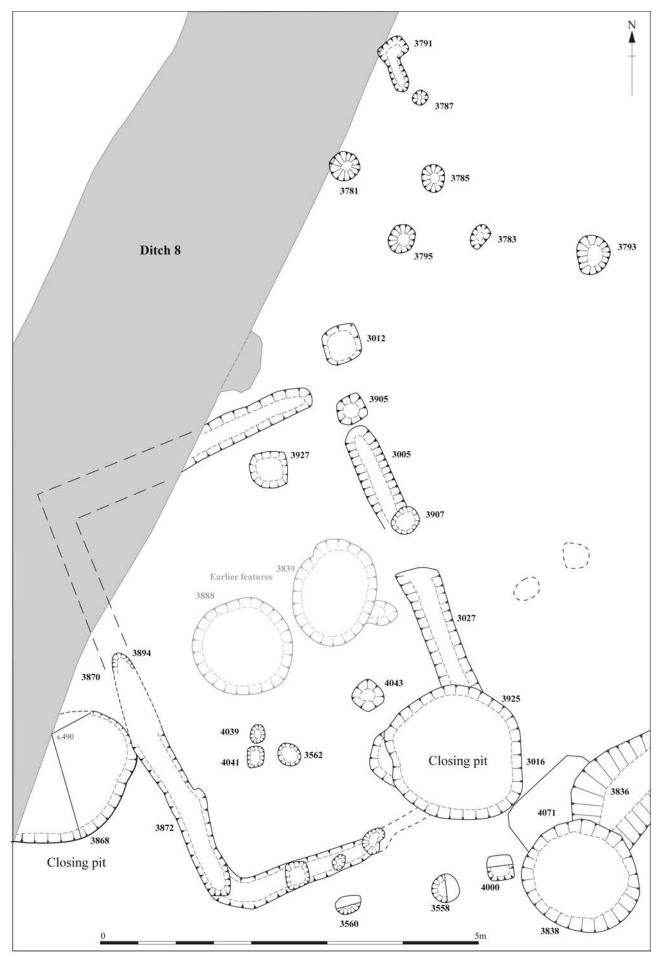


Figure 27 Period 2. Plan of the shrine and associated features. Scale 1:50

Running parallel to and c. 10m from the eastern wall of the shrine was a shallow gully (3833, Fig. 24), which was over 6m long. Its northern end had been truncated during post-medieval landscaping but its southern terminal was parallel with the southern wall of the shrine. It is possible that it may have been the foundation for a wall or fence marking the eastern boundary of the shrine's burial ground. Certainly no burials were found directly beyond this feature to the east (except those associated with pit 3981).

Disuse of the shrine

Two large circular pits cut the foundation trenches of the shrine. One (3868) clipped its western edge, while the other (3016/3925) covered the south-eastern corner of the building. Both pits contained substantial assemblages of animal bone and pottery associated with feasting waste and it is possible that these features were cut to symbolically close the use phase of the shrine.

Pit 3868 had a diameter of 1.2m and was 1.2m deep with almost vertical sides and a flat base. Its two primary fills were mostly composed of weathered chalk and silt and contained, respectively, a single late Iron Age sherd (52g) and a late Iron Age–early Roman pottery fragment (22g). These fills were overlain by grey-brown clay silt, within which were eight fragments of late Iron Age pottery (141g) and the remains of a mouse/vole and toad/frog that had presumably fallen accidentally into this pit, indicating that it may have been left open before it was backfilled. The two subsequent fills consisted of pale brown clay silts; a mid-late Iron Age pottery sherd (46g) was recovered from the lower of these. The uppermost fill of this pit was also a grey-brown clay silt, within which were ten sherds of late Iron Age pottery (120g), a horse cranium, cattle jaws (mandible ×2) and a hipbone (ischium), and the ribs from both medium-sized and large mammals. The teeth of the cattle mandibles were scorched in a manner consistent with the animals having been cooked over an open flame.

Pit 3016/3925 was 1.9m long by 1.75m wide and 0.55m deep and contained a series of four layers. The basal fill comprised red and grey to black burnt clay silt with two placed deposits of charcoal that were the remains of one, or more, fires; over these lay what appeared to be feasting detritus. This deposit was overlain by dark brown clay silt that contained three sherds of middle to late Iron Age pottery (118g) and was sealed by a light brown chalky silt that did not include any finds. The upper dark brown clay silt fill contained ten middle Iron Age pottery sherds (122g) and animal bone, which included cattle jaws (mandibles) and leg bones (radius), a pig shoulder blade and leg (ulna) bone, and a sheep/goat vertebra (atlas), shoulder blade and leg bone (radius).

Lying c.1m to the south-east of the shrine and on the same orientation as its southern wall was a sub-rectangular feature (3836) which contained demolition rubble (burnt daub) presumably resulting from the dismantling of the shrine. The feature measured 3.4m by 1m, and was 0.25m deep, with a concave base and sides. Its primary fill was pale orange-pink chalky clay that was the remains of decayed (burnt) daub. Its upper dark brown clay silt fill contained a rib bone from a large mammal and four sherds of later Iron Age pottery (17g).

The cemetery

The chalk knoll continued to be used for burial with increased frequency in the late Iron Age and early Roman periods. At least twenty-seven individuals were buried here, with evidence of disturbed graves indicating that the original number would have been greater (maximum thirty-four). The distribution of the graves, their orientation, differing burial rites and the radiocarbon dates (where available) show that burials took place on various parts of the hill in at least four phases (Burial Groups 1, 2, 3 and 4). Thirteen of the burials were adult males and seven were adult females, while five adults and two children could not be assigned to a sex (Duhig, below). The oldest adult individual had a mean age of forty-six years and the youngest sixteen years; as a group the average age of death was only thirty years. The predominance of men over women (2:1), the rarity of children and the absence of older people would suggest that the individuals buried here formed a selected part of a community perhaps largely made up of a single family or other social grouping.

Burial Group 1a

(Figs 23, 24, 26, 28, 29 and 30)

The first burials, which dated to the late Iron Age, followed the contour of the higher ground and were located just within the line of the southern boundary ditch. This group consisted of six inhumations (three men and three women) and up to three (unsexed) cremations (Table 2). It is possible that there were further burials in this group which were disturbed when the southern boundary ditch was (re)dug (Ditch 12). These burials were relatively isolated from the main cluster on top of the hill and their peripheral position may reflect their slightly earlier date. It is possible that they also pre-dated the construction of the shrine.

Burial 24

(Fig. 28)

This burial was located on the western edge of Burial Group 1 and has been radiocarbon dated to within the range of 50 cal BC and cal AD 140 (GU-6001; 1960±50BP). The east—west grave cut (4138) measured at least 1.75m long by 0.6m wide and 0.25m deep; however, the western end of the cut (containing the feet) had been removed by a modern pit. The grave contained an extended supine female skeleton (4139) that had the right hand beneath the pelvis (the left hand did not survive) and the head wedged against the grave cut to the east. The individual was aged between eighteen and twenty-five years (mean age twenty-one) at the time of her death and would have stood c.1.54m tall. Of particular interest are the vertebrae of this individual, which have changes in the lumbar region suggestive of tuberculosis or brucellosis. Unfortunately the grey-brown silt fill of this grave had been badly disturbed. An iron nail (SF 92) was found within the fill of this grave, but it can not be ascribed to a coffin or other furnishings.

Burial 20

(Fig. 28)

To the east of Burial 24, but still close to the southern boundary ditch of the cemetery, lay Burial 20, which had been cut into (and had slumped into) the top of late Iron Age pit 3960 (Pit Group 8). The east—west grave cut (3957) was 2.13m long, 0.4m wide and 0.29m deep, although the central part had been cut away by a modern pit. Within the grave lay the extended supine remains of an adult male (3959) with his head to the east. He was aged between twenty-five and thirty-five (mean age thirty) at the time of his death and would have stood c.1.76m tall. His surviving bones showed evidence for arthritis and his dental health was poor. Surrounding the skeleton was a dark brown silty clay deposit that contained twelve sherds of later Iron Age pottery (173g) perhaps originating from pit 3960.

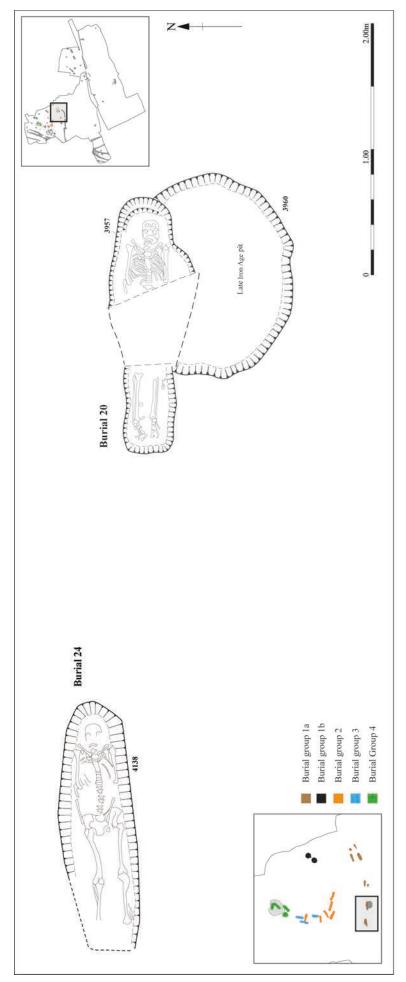


Figure 28 Period 2. Plan of Burials 20 and 24 (Burial Group 1a). Scale 1:30

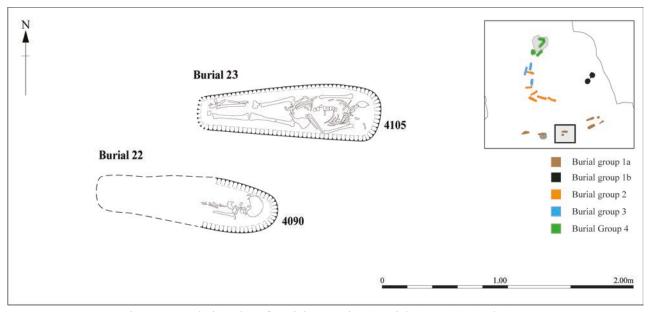


Figure 29 Period 2. Plan of Burials 22 and 23 (Burial Group 1a). Scale 1:30

Burial 23

(Fig. 29)

To the east of Burials 20 and 24, but still close to the southern boundary ditch of the cemetery, lay Burial 23. This burial has been radiocarbon dated to 50 cal BC to cal AD 320 (GU-6000; 1910±70BP). The east—west grave cut (4105) was 0.45m wide, 0.18m deep and over 1.45m long, its western end (the feet) having been truncated by a medieval ditch. The grave contained an extended supine skeleton of an adult female (4106) with her hands placed on top of her pelvis. She was aged between twenty-five and thirty-five years (mean age thirty), had poor dental health and also had pelvic damage consistent with childbirth. The skeleton was surrounded by a mid-grey-brown clay silt from which no finds were recovered.

Burial 22

(Fig. 29)

Parallel and just to the south of Burial 23 lay Burial 22, which was again severely truncated by a medieval ditch. The surviving portions of the east—west grave cut (4090) measured 0.62m long, 0.44m wide and 0.18m deep. Within the grave were the extended supine remains of an adult male (4104) aged between eighteen and twenty-five years (mean age twenty-one). Only his skull, upper left arm and rib cage survived. His bones had no surviving pathologies but his dental health was poor. Surrounding the skeleton was grey-brown clay silt that contained five fragments of late Iron Age pottery (8g) and a tiny intrusive scrap of

post-medieval glazed red earthenware (1g), as well as cattle and sheep/goat teeth. Also found was a riveted iron strip (SF 73). Although most of these finds are residual or intrusive it is possible that the iron strip was *in situ*.

Burial 4 (Fig. 30)

Burial 4 has been radiocarbon dated to 200 cal BC to cal AD 70 (GU-5999; 2050±50BP). It was orientated west-south-west-east-northeast, parallel to the southern boundary ditch of the cemetery. The grave cut (3608) measured 2m long, 0.65m wide and 0.4m deep, and was far longer (c.0.25m) than necessary just to contain the body: it is possible that something organic had been incorporated into this burial (possibly a pillow, blanket or clothes) that has not survived, or that the grave was originally intended for a larger individual. The grave contained a flexed adult female skeleton (3609) lying on her right side, with her head to the south-west, her knees slightly bent and the left hand and arm under the pelvis. At the time of death she was aged between thirty-five and fortyfive years (mean age forty) and stood c.1.56m tall. Her bones showed signs of disease (arthritis) and trauma, while her dental health was poor. This is the oldest female burial recorded at Duxford. The skeleton was surrounded by a grey clay silt deposit from which no finds were recovered.

Burial number	Calibrated date (95% confidence)	Burial type	Sex	Age (mean)	Orientation	Grave goods
Burial 3	_	Supine	Male	46	South-west-north-east	Two pottery vessels (Nos 26 and 27)
Burial 4	200 BC-AD 70	Flexed	Female	40	South-west-north-east	
Burial 5	_	Supine	?	40	South-west-north-east	
Cremation 3669	_	_	?	Adult	_	Pig skeleton and two pottery vessels
Burial 20	_	Supine	Male	30	East-west	_
Burial 22	_	Supine	Male	21	East-west	_
Burial 23	50 BC-AD 320	Supine	Female	30	East-west	_
Burial 24	50 BC-AD 140	Supine	Female	21	East-west	_
Cremation 3540	_	_	?Female	?	_	One pottery vessel, a bone toggle (SF 38) and a sewing needle (SF 51)
?Cremation 3588	_	_	_	_	_	_

Table 2 Burial Group 1, summary table

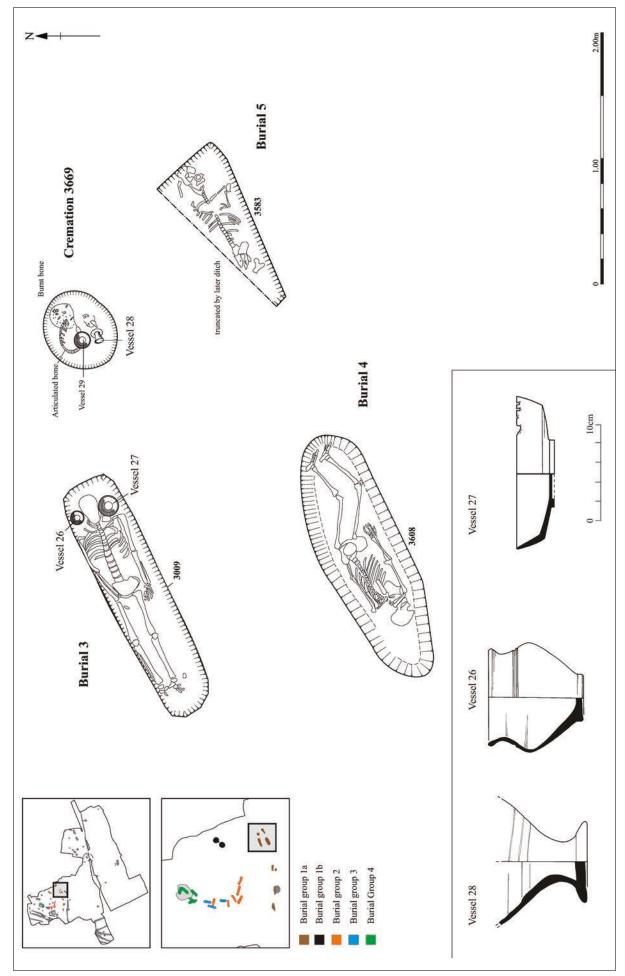


Figure 30 Period 2. Plan of Burials 3, 4 and 5 and Cremation 3669, with associated objects (Burial Group 1a). Scale 1:30

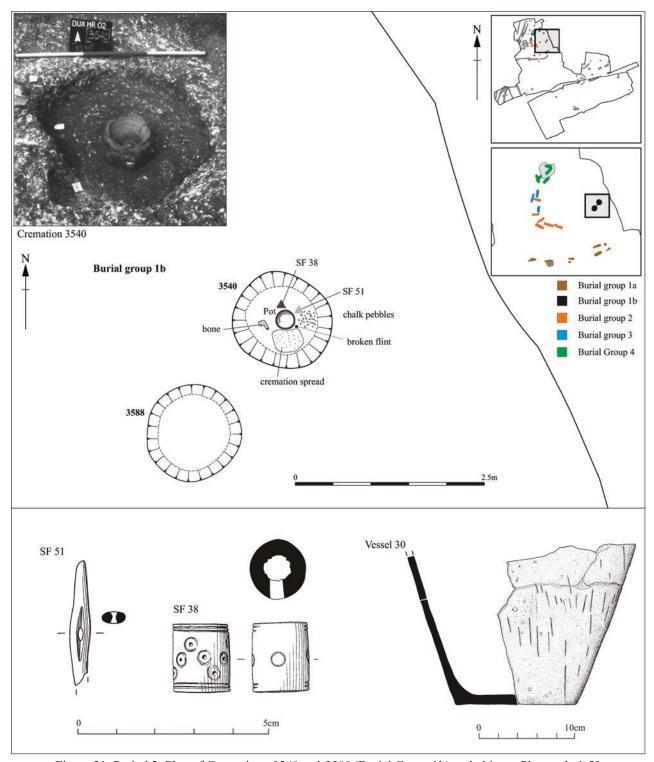


Figure 31 Period 2. Plan of Cremations 3540 and 3588 (Burial Group 1b) and objects. Plan scale 1:50

Burial 5

(Fig. 30)

Burial 5 was to the north-east of Burial 4 and on the same west-south-west-east-north-east alignment. The grave cut (3583) was over 1.5m long (its western end had been cut away by a modern pipe trench), 0.45m wide and 0.07m deep. It contained the extended supine remains of an adult (3647) with its head to the north-east and its left hand placed under the pelvis. The right side of the body and everything below the pelvis had been removed by modern disturbance. It was not possible to establish the sex, but the individual was aged between thirty-five and forty-five (mean age forty) at the time of death. No signs of disease or injury were visible on the poorly preserved bones, which were surrounded by a grey-brown clay silt from which no finds were recovered.

Burial 3

(Fig. 30)

Also in this group was Burial 3, which lay on the same alignment as Burials 4 and 5, but was located 1.5m to the north. The grave cut (3009) was 1.9m long, 0.45m wide and 0.2m deep and contained the extended supine remains of an adult male (3011) with his head to the north-east and his right hand missing. He was aged between thirty-five and fifty-seven years (mean age forty-six) when he died and was c.1.67m tall, while his joints showed signs of arthritic disease, his left hand having formed a fist. He was buried with two ceramic pots, one on either side of his head. The pots, a miniature wheel-made wide-mouthed jar (Vessel No. 26) and a small wheel-made platter (Vessel No. 27), would have been used as a set and date from between AD 10 to the post-Conquest period.

The platter had been ritually 'killed' by the drilling of small holes near the rim. Also found was a single sherd of pottery (20g) that could not be closely identified, which appeared to have been carefully placed over the pelvis. The body and pots were surrounded by a light grey-brown sandy silt which also contained fragments of fired clay.

Cremation 3669

(Fig. 30)

This cremation was located to the north-west of Burial 5 and to the north-east of Burial 4 within a badly truncated pit (3669) that had a diameter of 0.55m but was only 0.08m deep. The human skeletal remains were found in a centrally positioned concentration of burnt bone in the base of the pit. The remains were those of one adult, for which the sex and age could not be determined, as well as undiagnostic animal bone. The size of cremated fragments was small, but they showed no sign of deliberate fragmentation. No evidence survived of a container for these remains; however, the neat pile of burnt bone does suggest that they may have been originally placed within an organic (textile or leather) pouch that did not survive. The small amount of burnt material placed in the grave (0.328kg) indicates that the inclusion of the whole person or all of the pyre debris was not required for this burial rite.

In the south-western section of the pit several grave goods had been placed. These constituted a partial articulated piglet skeleton and two fragmentary ceramic vessels (both of which had their top halves removed by ploughing or machining). The surviving parts of the vessels consist of a pedestal base from a grey ware beaker (Vessel No. 28) and a vessel base with a slight foot ring from a globular jar (Vessel No. 29, not illustrated), indicating a mid-1st-century AD date. Also found was the jaw bone (mandible) from a weasel, but it is unclear whether this was deliberately deposited in the grave. These objects were surrounded by a brown clay silt deposit (3672) that did not contain any additional objects.

Disturbed human bone

(Fig. 26)

A small amount of unburnt (and apparently uncontained) human bone and an almost complete but ritually 'killed' mid–late-1st-century AD ceramic butt beaker (Vessel No. 31) were found c.4m to the south of Burials 3, 4 and 5 and cremation 3669. They were retrieved from a mixed dark–lighter grey-brown silt (4026) which constituted the upper fill of the butt end of Ditch 12. It is likely that these remains came from a grave which was disturbed when the later ditches constituting the boundary were excavated. Other fragments of human bone were also recovered from nearby ditches (10 and 12), which also formed part of the boundary ditch system for the shrine and cemetery enclosure: these bones may be related to this, or another, disturbed burial.

Burial Group 1b

Cremation 3540

(Fig. 31)

Circular pit 3540 was located on the eastern edge of the northern part of the site, where it had been truncated by medieval (and later) landscaping. The pit had a diameter of 1.15m and was 0.26m deep, with very steep sides and a slightly concave base. It contained dark brown-grey silt within which was a centrally placed, almost complete late Iron Age pot (forty-six sherds, weighing 1.508kg; Vessel No. 4), along with a shallow patch of very fragmented burnt bone and ash to the south. Also found were two (unburnt) bone objects — a toggle (SF 38) and a sewing needle (SF 51) — and seventeen pieces of pottery (58g), all consistent with a late Iron Age date. The burnt bone/ashy deposit (Sample 36) and the pot did

not contain any bone fragments large enough to determine whether the remains were human or animal, although the presence of such high-quality and carefully placed objects would seem to indicate that this was the truncated remains of a cremation burial.

Possible Cremation 3588

(Fig. 31)

Just to the south of possible cremation pit 3540 was another circular pit (3588) which had been almost totally destroyed by post-Roman landscaping. It had a diameter of 1.3m and was 0.1m deep with a flat base. It contained a mid-brown silt clay and no finds. On the basis of its position (nearby but not intercutting) and the similarity of fills, it was probably contemporary with pit 3540.

Burial Group 2

(Figs 23, 24, 32 and 33)

Located to the south and east of the shrine and within the eastern cemetery boundary (3833) was a group of nine inhumation burials in seven graves which shared a similar orientation (broadly east—west) and contemporary radiocarbon dates; finds indicated an early Romano-British date (Table 3). This group contained both men and women (4 men, 2 women, 1 unsexed adult) and was the only group at this site to contain the graves of (2 unsexed) children, with two intercutting adult and child burials (15 and 16) found. It also included two overlying graves (Burials 18 and 19), which may indicate a relationship between the two interred individuals rather than chronological progression within the graveyard. Several of the burials contained grave goods.

Burial 1

(Fig. 32) This burial was located to the south-east of the shrine and was radiocarbon dated to cal AD 70–340 (GU-5924; 1830 \pm 50BP). The grave cut (3001) was 2m long, 0.5m wide and 0.15m deep, and was orientated south-west—north-east. The skeleton (3003) was that of a man placed in an extended supine position with his head to the north-east and his hands carefully placed below his pelvis. At the time of death he was aged between seventeen and thirty-five years (mean age twenty-five) and was c.1.73m tall. His joints showed signs of arthritic disease and he also had dental disease. The skeleton was surrounded by a grey-brown clay silt with frequent chalk pebbles. Within this fill were three pieces of late Iron Age pottery (28g), one early Roman wall-sided grey ware cup fragment (12g) and a tiny scrap of Romano-British grey ware (2g). A single piece of animal bone found next to the right side of the skull may have been deliberately placed (unfortunately this bone was not catalogued).

Burial 13

(Fig. 32)

This grave was located just to the south-east of Burial 1. The grave cut (3810) was 2.32m long, 0.53m wide and 0.17m deep and contained the extended supine remains of an adult (age unknown) male skeleton (3809) with his head towards the east and his left arm placed behind his back. He was c.1.66m tall and his joints showed signs of disease, as did his few surviving teeth (the poor survival of the skull hindered an estimation of the age of the individual at death); the spinal arthritis was very advanced,

Burial number	Calibrated date (95% confidence)	Burial type	Sex	Age (mean)	Orientation	Grave goods
Burial 1	AD 70-340	Supine	Male	25	North-east-south-west	
Burial 2	AD 20-320	Supine	Male	35	North-west-south-east	Iron knife (SF 32)
Burial 13	_	Supine	Male	Adult	East-west	Ceramic vessel (32) and an iron wire (SF 57)
Burial 15	_	Supine	Male	Adult	North-west-south-east	_
	_	Supine	?	Child	North-west-south-east	_
Burial 16	_	Supine	Female	Adult	North-west-south-east	_
	_	Supine	?	Child	North-west-south-east	_
Burial 18	_	Supine	Female	30	East-west	_
Burial 19	_	Supine	?	16	North-west-south-east	Copper-alloy bracelet (SF 68) and a hammer stone (SF 69)

Table 3 Burial Group 2, summary table

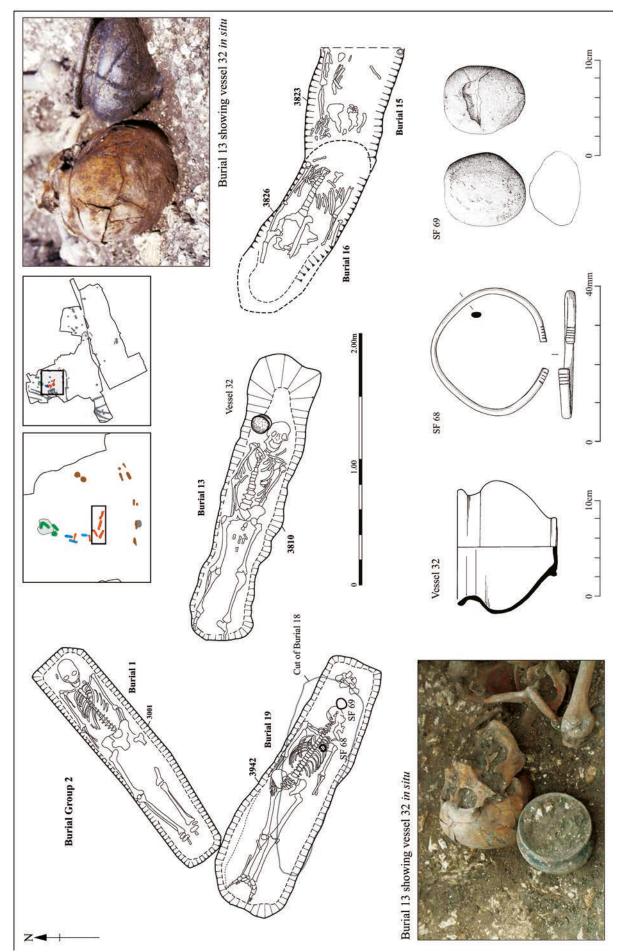


Figure 32 Period 2. Plan of Burials 1, 13, (18) and 19 (Burial Group 2) and associated objects. Plan scale 1:30

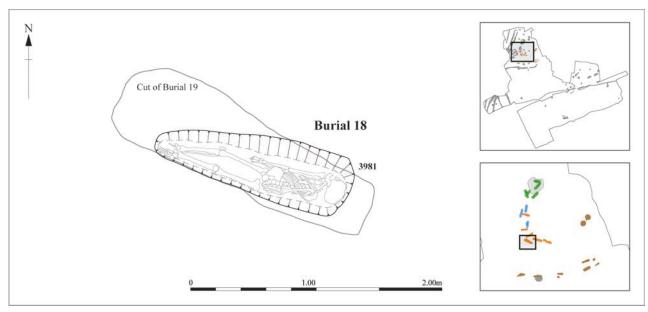


Figure 33 Period 2. Plan of Burial 18 (Burial Group 2). Scale 1:30

with several groups of vertebrae fused. He also had pronounced muscle markings on the femora which may have been evident in life as heavy musculature. The burial was surrounded by mid-brown clay silt with chalk inclusions. Sample 53, taken from the chest and stomach area, contained the sparse remains of cereal and *Triticum* sp. (wheat) grains, charcoal and black cokey/tarry material probably present in the soil when the individual was buried. To the north of the skull, on its right side, a pottery vessel had been carefully placed (Vessel No. 32). The pot had survived almost complete (eleven sherds, weighing 0.380kg), and is a wheel-made, small (rim diameter 12cm), high-shouldered mediummouthed jar produced in a hard grey ware sandy fabric of unsourced, but probable local, origin. It dates from the later 1st century AD. Examination of the soil (Sample 54) within the pot revealed only the sparse remains of charcoal and black cokey/tarry material similar to that found in the larger fill of the grave. A piece of iron wire (SF 57) was retrieved by metal detector from the area of the chest (upper body) and may have been deliberately placed in the grave. It is of interest that the skeleton did not fill this grave, there being quite a large gap (c.0.5m) between the top of the skull and the grave edge. It is possible that organic remains (such as bedding, clothing or food) that have not survived could have been placed in this space.

Burial 19

(Fig. 32)

Burial 19 was the lower of two superimposed burials to the west of and on a similar orientation (north-west-south-east) to Burial 13. It is possible that Burial 19 was deliberately excavated to a greater depth to allow for Burial 18 above; the grave cut (3942) was one of the deepest on the site. It measured 2m long, 0.5m wide and 0.5m deep, and contained the extended supine remains of a young adult (unnumbered) aged sixteen years, with the head towards the east. It was impossible to determine the gender and stature of this individual. Although the remains were generally in good condition the skull had been smashed (whether this occurred ante- or post-mortem is unclear) and the lower left arm was missing. The skeleton was surrounded by very compact off-white fine chalky silt with common chalk inclusions. A quartzite hammerstone (SF 69) had been placed directly above the skull and a Roman copper-alloy bracelet (SF 68) was placed on the chest. It is worthy of note that the hammerstone was laid next to the smashed skull, perhaps indicating its use to crush the skull, although it may simply have been crushed by the weight of the surrounding soil over time. Also found in this fill were several sawn cattle long bone shaft fragments which are the detritus from craft working.

Burial 18

(Fig. 33)

Situated directly above Burial 19 and orientated west-north-west-east-south-east, the grave cut (3891) of Burial 18 measured 1.6m long, 0.4m wide and 0.29m deep. It contained the extended remains of an adult woman (unnumbered) who had been placed in the narrow grave on her right side, with her head to the east. She was aged between twenty-five

and thirty-five when she died (mean age thirty) and was *c*. 1.53m tall. Her bones were arthritic and her dental health was poor. The skeleton was laid on a chalky layer sealing Burial 19 and was surrounded by a dark greybrown silty clay soil with occasional chalk stones that contained the rib from a medium-sized mammal but no dating material.

Burials 15 and 16

(Fig. 32)

Two graves orientated west-north-west-east-south-east were located on the south-eastern edge of Burial Group 2. Both graves contained one adult and one child. Burial 15 was significantly later than Burial 16 (as it cut away the lower part of the earlier skeleton). The burials had also been badly truncated by two medieval ditches (Ditch 28 and Ditch 29).

Burial 16 was the earliest in the sequence. The surviving grave cut (3826) measured 0.75m long by 0.5m wide and was 0.12m deep. It contained the incomplete remains of an extended supine adult female (3825): the lower part of the skeleton (below the pelvis) and the skull were missing. The upper part of the body had been removed by later ditch digging and the lower half had been removed by Burial 15. The head would have lain towards the south-east. Where the bones survived the joints showed signs of arthritis. With the woman were the remains of a small child (3825) aged between two and three years (mean age two and a half) at the time of death with no apparent pathologies. (Also found were fragments of another skeleton that may have originated from Burial 15.) The skeletons were surrounded by a mid-light brown silt clay that contained two pieces of late Iron Age-early Roman pottery (7g) and a single sherd (3g) of Nene Valley Colour-Coated Ware dated to the 3rd century AD. A sheep/goat tooth and the rib from a medium-sized mammal were also found.

The grave cut (3823) for Burial 15 measured 0.95m by 0.5m and was 0.15m deep. It contained the incomplete remains of an extended supine adult male (3822), with everything below the pelvis and above the shoulders missing as a result of truncation. The head would have lain towards the south-east. Where the bones survived the joints showed signs of arthritis. With the man were the remains of a small child (3822) aged between two and a half and three and a half years (mean age three) at the time of death with no apparent pathologies. The bodies were surrounded by a mid—light brown silt clay with frequent chalk inclusions. An early Roman sandy grey ware pedestal beaker base (40g) was found towards the head end of Burial 15, possibly representing the truncated remains of a ceramic vessel that was included in the grave.

Burial 2 (Fig. 34)

Burial 2 was located to the east of the shrine (Structure 2) and on the same orientation as Burials 13, 15, 16, 18 and 19, but a short distance to the north. It was also lying parallel to earlier Burial 14. Its western edge was clipped by Burial 10 and its northern edge cut away by a later post-hole (3015). It has been radiocarbon dated to cal AD 20–320 (GU-5925; 1870±50BP). The grave cut (3008) was 2m long by 0.60m wide and 0.26m deep, and contained the extended supine skeleton (unnumbered)

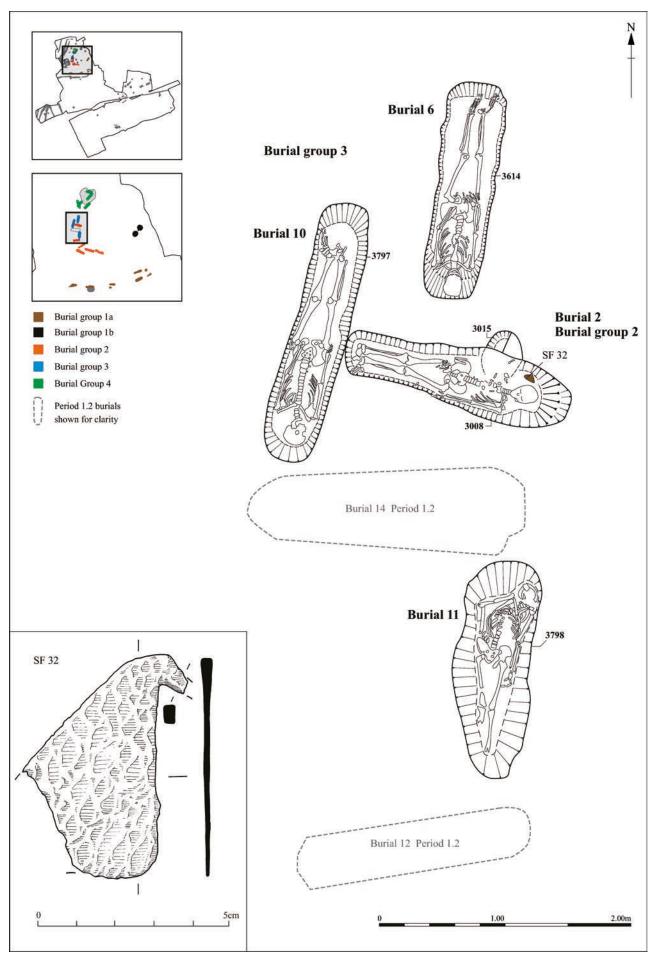


Figure 34 Period 2. Plan of Burials 6, 10 and 11 (Burial Group 3) and Burial 2 (Burial Group 2). Scale 1:30

Burial number	Calibrated date (95% confidence)	Burial type	Sex	Age	Orientation	Grave goods	
Burial 6	_	Supine	Female	Adult	North-south	_	
Burial 10	AD 80-380	Supine	Female	37	North-south	_	
Burial 11	_	Supine	?Male	Adult	North-south	_	

Table 4 Burial Group 3, summary table

of an adult male with his head laid to the east. He was aged between twenty-three and fifty-seven years (mean age thirty-five) when he died and stood c.1.68m tall. His joints showed signs of arthritis and the bones also showed changes which may have been due to habitual squatting; he also had poor dental health. The skeleton was surrounded by light grey-brown silty clay with occasional chalk pieces. Within the fill were five fragments of late Iron Age pottery (24g), a tiny Romano-British samian ware sherd (1g) and several sherds that were not closely datable (13g). Also found were cattle teeth, a jaw bone (maxilla) and foot (phalanx) bones, as well as a rib bone from a large mammal. Within the backfill (in an area disturbed by a modern pipe trench), close to the skull, was an iron triangular knife blade (SF 32) which can be dated to between the 1st century BC and the 1st century AD. Although the small scraps of pottery would seem to have been present in the soil at the time of burial, the animal bones and iron knife may have been deliberately placed in the grave.

Burial Group 3 (Fig. 23, 24 and 34)

Three inhumation burials located to the north-west of the shrine appear to have formed a cohesive group since they were all aligned (broadly) north-south, two with their heads to the south and one with its head to the north (Table 4). They were all adult burials, two of which were female and one ?male, and had no visible grave goods. Burial 10 was radiocarbon dated as Roman, and the stratigraphic sequence, in which Burial 2 was cut by Burial 10, also suggests that this group post-dates Burial Group 2.

Burial 10

(Fig. 34)

Burial 10, which was located to the south-west of Burial 6 and to the west of Burial 2 (which it post-dated), has been radiocarbon dated to cal AD 80--380 (GU-5927; $1810\pm50BP$). It clipped the western edge of Burial 2 (the feet end). It is possible that Burial 2 was still visible when Burial 10 was interred, although the latter was orientated quite differently. The grave cut (3797) for Burial 10 measured 2.2m long, 0.4m wide and 0.26m deep and contained a supine adult female skeleton (unnumbered) with her head to the south. It appears her knees were slightly bent to fit into quite an awkward cut. She was aged between twenty-five and forty-eight years (mean age thirty-seven) at the time of her death and would have stood c. 1.62m tall. The joints of her bones were arthritic and her dental health was poor. Of particular interest was the benign osteoma (a new piece of bone growing on another piece of bone, typically on the skull) that had occurred as a result of a trauma. The skeleton was surrounded by light grey-brown silty clay with moderate chalk inclusions, which contained no finds or grave goods.

Burial 6

(Fig. 34)

Burial 6 was located parallel to and to the north-east of Burial 10 and may have been contemporary with it. The grave cut (3614) was orientated north-south and measured 1.76m long, 0.5m wide and 0.36m deep. It contained an extended supine adult female skeleton (3591) with her head to the south. The age of the woman could not be closely determined, but she would have stood c.1.57m tall. The bone joints were arthritic and her dental health poor. The skeleton was surrounded by a grey-brown silty soil that contained eight sherds of later Iron Age pottery (23g).

Burial 11

(Fig. 34)

Burial 11 was located to the south of Burials 6 and 10 and shared the same orientation (north–south), although the head was laid to the north. This burial cut what appeared to be an empty grave located parallel to Burial 2, a sequence that indicates that Burial 11 could have been broadly contemporary with Burials 6 and 10.

The grave cut (3798) was 1.68m long, 0.68m wide and 0.26m deep and contained the skeletal remains of an adult ?male (3800). His feet and lower legs were removed during machining and it was therefore not possible to calculate his age and stature. His bones showed signs of arthritic disease and of an infection that had led to joint fusion in the spine; there is also a suggestion that he may have had a congenital spinal deformity. The skeleton was surrounded by a dark grey-brown silt within which were horse teeth and phalanx (foot) bones, a cattle hipbone (ischium) and a sheep leg bone (tibia), as well as three sherds of later Iron Age pottery (11g). Sample 55, taken from within the grave, contained small amounts of cereal grains, charcoal, a black tarry material, bone and small coal fragments, which appear to have been present in the soil at the time of burial. A medieval horseshoe (SF 89) also found within the fill of this grave was probably deposited when a modern pipe trench was excavated just to the east of this feature.

Burial Group 4

(Fig. 23, 24 and 35)

Six inhumation burials were cut into the upper fills of ritual pit 3981, which contained the horse burial (Period 1.2) (Table 5). Burial 8 was probably the earliest of these burials, being succeeded by Burials 9 and 7, then Burial 17 and graves 4127 and 4129 respectively. Pit 3981 may have been covered by a significant mound that was still visible in the Roman period and evidently attracted burials several hundred years after it was erected. The stratigraphy of the graves, combined with the radiocarbon dates, indicates that the use of the mound as a focus for burial may have continued over several generations. Moreover, the graves did not appear to be closely associated with the shrine and its burial ground, as they were outside the projected cemetery boundary and also on a different alignment to the burials there. All the burials

Burial number	Calibrated date (95% confidence)	Burial type	Sex	Age (mean)	Orientation	Grave goods
Burial 7	_	On right side	Male	30	East-west	_
Burial 8	_	Supine	Male	45	North-west-south-east	_
Burial 9	40 BC-AD 240	Supine	Male	35	North-west-south-east	_
Burial 17	AD 60-330	Supine	Male	30	North-east-south-west	Glass beads (SF 58 and 59)
Grave 4127	_	?	?	?	South-east-north-west	_
Grave 4129	_	?	?	?	South-west-north-east	_

Table 5 Burial Group 4, summary table

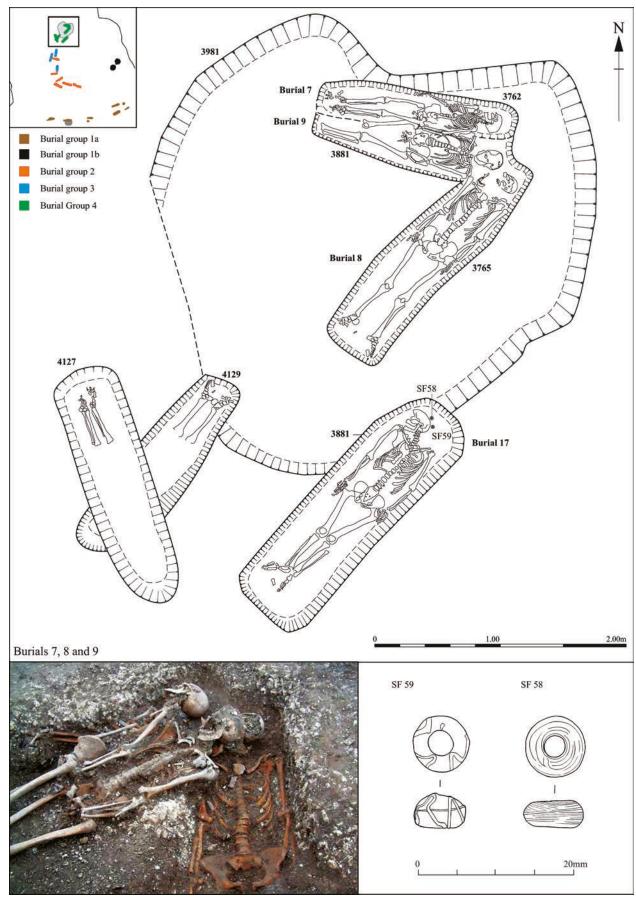


Figure 35 Period 2. Plan of Burials 7, 8, 9, 17 and Graves 4127 and 4129 (Burial Group 4). Scale 1:30

that could be sexed were those of mature men, only one of which was accompanied by grave goods (two glass beads). It is tempting to speculate that this area was still considered special (or of higher status) and was perhaps reserved for the elders of the community.

Burial 8

(Fig. 35

The grave cut (3765) for Burial 8 was 2.22m long, 0.7m wide and c.0.3m deep. It contained an extended supine male skeleton (3767) with the head to the north-east (although the skull had been displaced by Burial 9). The individual was aged between twenty-seven and sixty-six years (mean age forty-five) at the time of his death and would have stood c.1.73m tall. He was one of the oldest persons interred at Duxford, as reflected by the state of his bones, which were arthritic, with one joint being fused owing to a trauma; his teeth were also in a poor state. The brown silt clay fill of the grave contained thirty-nine sherds (248g) of unmixed middle Iron Age pottery, together with a sheep/goat tooth and heel bone, a cattle tooth and the rib of a medium-sized mammal. It is not clear whether these items were deliberately placed around the body.

Burial 9

(Fig. 35)

Some time after the interment of Burial 8 the grave cut (3768) for Burial 9, dated to 40 cal BC to cal AD 240 (GU-5926; 1910±50BP), was dug. The grave was 0.4m wide, c.0.3m deep and at least 1.6m long, precise measurement of the grave was not possible because of its relationship with Burial 8. The burial consisted of an extended supine male skeleton (3770) with the head to the south-south-east. The right arm and lower right leg were missing. The individual was aged between twenty-three and fifty-seven years (mean age thirty-five) at the time of his death and would have stood c.1.7m tall. Generally he was in poor health with arthritic joints and dental disease; his bones also showed changes which may have resulted from habitual squatting. The fill of the grave contained thirteen sherds of middle Iron Age pottery (58g). It is curious that both the graves for Burials 8 and 9 contained middle Iron Age-type pottery but no later Iron Age pottery, while the fill into which the graves had been cut contained only later Iron Age pottery.

Burial 7

(Fig. 35)

The grave cut (3762) for Burial 7 was placed immediately to the north of Burial 9, and was 1.93m long, 0.4m wide and c.0.3m deep. It contained an extended skeleton (3764) lying on its right side with its head towards the east. The remains were those of a man aged between twenty-five and thirty-five years (mean age thirty) at the time of death, who would have stood c.1.7m tall. His joints were arthritic and he also suffered from dental disease. The mid-brown silt clay grave fill contained three sherds of hand-made early Roman proto sandy grey ware (14g) dated to between the mid 1st and mid 2nd centuries AD. The position of Burial 7 and the close relative level between it and Burial 9 may suggest that they were buried within a very short interval; it is possible that they were related or died within a short space of time.

Burial 17

(Fig. 35

Burial 17 was located on the southern edge of pit 3981. The grave cut (3881) was 2.06m long, 0.64m wide and 0.36m deep and was radiocarbon dated to cal AD 60–330 (GU-5929; 1840±50BP). Within the grave was an extended supine male skeleton (3880) with his head laid to the north-east. He was aged between twenty-five and thirty-five years (mean age thirty) at the time of his death. He would have been c.1.7m tall, and had arthritic joints and dental disease. Two glass beads, a monochrome blue annular bead (SF 58) and an annular blue bead with white zig-zag trail (SF 59), were found near the skull, suggesting that they may have been worn as personal ornaments. Eight sherds of later Iron Age pottery (38g) and a sheep/goat tooth were found in the brown-grey clay silt backfill of the grave.

Graves 4127 and 4129

(Fig. 35)

Two further burials to the south-west of pit 3981 had been badly truncated by Ditch 28 (a substantial medieval ditch), which also cut the western edge of pit 3981. This truncation obscured any stratigraphic relationships between the graves and the surrounding features. Grave 4129 was aligned south-west-north-east and the orientation of the surviving adult leg bones (humerus and metatarsals) indicated that the head would have been to the south-west. This burial had been cut by another grave (4127) which was orientated south-east-north-west and also contained only adult leg bones (femur, tibia, fibula and metatarsal), the direction of which indicate that the head would have lain to the south-east. No finds were recovered from these graves.

Pits within the shrine and cemetery enclosure (Fig. 24)

Pit Group 9

Lying to the east of gully 3833, within the shrine and cemetery area, was a dispersed group of circular pits, which had vertical sides and flat bases (3661, 3666, 4060 and 3720). These varied in size, with diameters of 1.02m to 2.18m; most were relatively shallow although the largest example (4060) was 0.58m deep. This example had vertical, slightly undercutting sides with a slightly concave base. Its primary fill consisted entirely of collapsed and weathered chalk, while its secondary fill consisted of mid-brown-grey silt and contained both pottery and bone. Pit 3666 lay c.5m to the east of the earlier horse burial pit (3981) and was circular, with a diameter of 1.75m, and 0.17m deep; it contained an unusually large assemblage of animal bone, including cattle teeth, cheek bone, pelvis (ischium), heel (astragalus) and toe bones, sheep/goat teeth and upper part of the forelimb (humerus), a pig tooth and jaw bone (mandible), a toad bone (ilium) and single ribs from small and medium-sized mammals. None of the bone showed evidence of butchery or use. It seems likely that this pit was used for the disposal of feasting waste.

Analysis of the animal bone from pit 3666 shows that a minimum of eight domestic animals may have been butchered and their remains placed in this pit, resulting in a total estimated meat yield of 1150lbs (Table 6). Assuming that all the meat was eaten, that it was consumed at one sitting and that each person ate at least 1lb of meat, this quantity of animal remains could suggest that more than 1,000 individuals attended this feast.

Pit Group 10

Running between gully 3833 and the burials was a line of six pits (4082, 4137, 3972, 3980, 4048, 4132) two of which were intercutting. Although the earliest of these pits was oval, the majority conformed to the circular pattern with vertical sides and flat bases that was the norm at Duxford. Some of their fills contained notable quantities of animal bone, again suggesting the possible disposal of feasting waste (see Appendix 2). Pit 4048 also contained a greensand lower rotary quern (SF 80) and an iron knife (SF 70). These finds suggest a date after the Roman

	MNI	Estimated dress carcass weight per animal (lbs)	Total weight yield (lbs)	% Yield
Cattle	3	300	900	78.2
Sheep/goat	4	25	200	17.4
Pig	1	50	50	4.4
Total	8	N/A	1150	100

Table 6 The estimated weight of meat from the animal bones recovered in pit 3666 (based on research by Chaplin and McCormick 1986)

Conquest (AD 43), but perhaps as early as the end of the 1st century, for this feature. This pit may be one of the latest that could be considered of ritual significance within the confines of the enclosed higher ground in the northern part of the site.

Pit Group 11

Further north were four other pits, two of which were recorded only during a subsequent monitoring visit (3829, 4049 and 414, 4143, latter two unillustrated). Although heavily truncated they appeared to be typical of the circular storage pits seen elsewhere in the area. The sides of pit 3829 were undercut and concave, forming a 'bell' shape. Later Iron Age pottery and animal bone, including a horse skull, were recovered from the pits.

A pit to the west of the shrine

A pit (3733) late in the Period 2 sequence that did not conform to the Iron Age circular template was found to the west of the shrine. It contained a well-preserved environmental assemblage (Sample 50) including wild species: fish, eel, toads and frogs, mice/voles and thrush. Cereals, fruit remains and other dietary refuse, along with faecal concretions and a possible goat dropping, were also recorded.

Western area

Pit Group 15 (Fig. 36)

In the western part of the site five later Iron Age circular and oval pits were found (3392, 3489, 3503, 3505 and 3515), superseding Pit Group 6; all of these pits were cut by Ditch 19 (see below). The pits are thought to have been broadly contemporary and they contained similar soil deposits. Of note among this group was circular pit 3489, which had steep sides and a flat base; it had a diameter of 1.8m and survived to a depth of 0.51m. Its primary fills were weathered brown-grey silts that had been levelled across the base of the pit, within which were seventeen sherds of late Iron Age pottery (296g), charcoal, daub and a large quantity of animal bone consisting mostly of cattle bones and including an articulated leg bone (humerus and radius), as well as other leg bones (tibia, femur, humerus, calcaneum), jaw bones (mandible and maxilla), vertebrae, a pelvic bone (sacrum), teeth and a shoulder blade. Other bones found include large and medium-sized mammal ribs and vertebrae. This deposit was overlain by a sealing layer consisting of pale brown silt with patches of white chalk, within which were two sherds of late Iron Age pottery (17g), a cattle jaw bone (mandible), a sheep/goat cheekbone and tooth, and some ribs from medium-sized and large mammals.

The final mid-brown silt deposit within this pit contained twenty late Iron Age pottery sherds (379g) and another large assemblage of animal bone. In this case a

horse tooth and plentiful cattle bones were found including a horncore, a cheekbone, a jaw bone (mandible), a tooth and a hip bone (ischium). However, as opposed to the earlier layer, where cattle bones were the most numerous, it was sheep/goat bones that were found in large numbers, particularly bones from the skull (malar, maxilla ×5, mandible ×2 and teeth ×3), although a shoulder blade, leg bones (humerus, tibia and astragalus) and hip bones (sacrum and innominate) were also found. A mandible from this assemblage was scorched. Large and medium-sized mammal vertebrae and rib bones were also found. The quantity of bone recovered from this pit and the division of the bone by species indicates that it represents the remains of at least two possible feasting events. These events may have been related to seasonal gatherings (perhaps the sheep/goats were eaten in the spring/summer and the cattle in the autumn/winter); however, the lack of surviving teeth (needed to assess mandibular wear stages) meant it was not possible to confirm this interpretation.

When the animal bone was analysed it became apparent that the remains of at least six individual animals, possibly butchered, may have been placed in this pit. The meat from these animals had a combined estimated weight yield of 725lbs (Table 7). If it is accepted that these bones are the remains of an individual feasting event, that all the meat was eaten and that each individual ate at least 1lb of meat, it could represent the remains of a meal partaken of by more than 700 people.

Ditches

At least five boundary ditches (from east to west, Ditches 17–21) cut across the pits in the south-western part of the site. It is possible that some of these ditches joined those on the western edge of the hilltop (see above). The easternmost example, Ditch 17 (3441), was aligned north-north-west–south-south-east, had straight sides and a flat base, ran for a distance of at least 11m and was 1.34m wide and 0.78m deep. It cut through a pond represented by a series of very thin, compact, dark fills (4363). This ditch may have provided drainage from the higher ground to the pond, but it is likely that its primary function was as an enclosure ditch. It contained mid-brown silt from which a tiny undiagnostic pottery sherd (2g) was recovered, along with horse teeth, a cattle cheekbone, a pig tooth and some vertebrae from a large mammal.

Cutting across the western end of the pond, parallel to and c.9m to the west of Ditch 17, was another ditch (Ditch 18, 3517). It had straight sides and a flat base, ran for a distance of at least c.12m, and was 1.10m wide and 0.53m deep. At its northern end it cut into an earlier pit. It contained mid to dark brown silt clay within which was a cattle leg bone (humerus) and a tooth.

Originating from the same recorded northerly point as this ditch was another ditch (Ditch 19, 3394, 3484) aligned south-south-west–north-north-east, which cut across

	MNI	Estimated dress carcass weight per animal (lbs)	Total weight yield (lbs)	% Yield
Cattle	2	300	600	82.7
Sheep/goat	3	25	75	10.3
Pig	1	50	50	7.0
Total	6	N/A	725	100

Table 7 The estimated weight of meat from the animal bones recovered in pit 3489 (based on research by Chaplin and McCormick 1986)

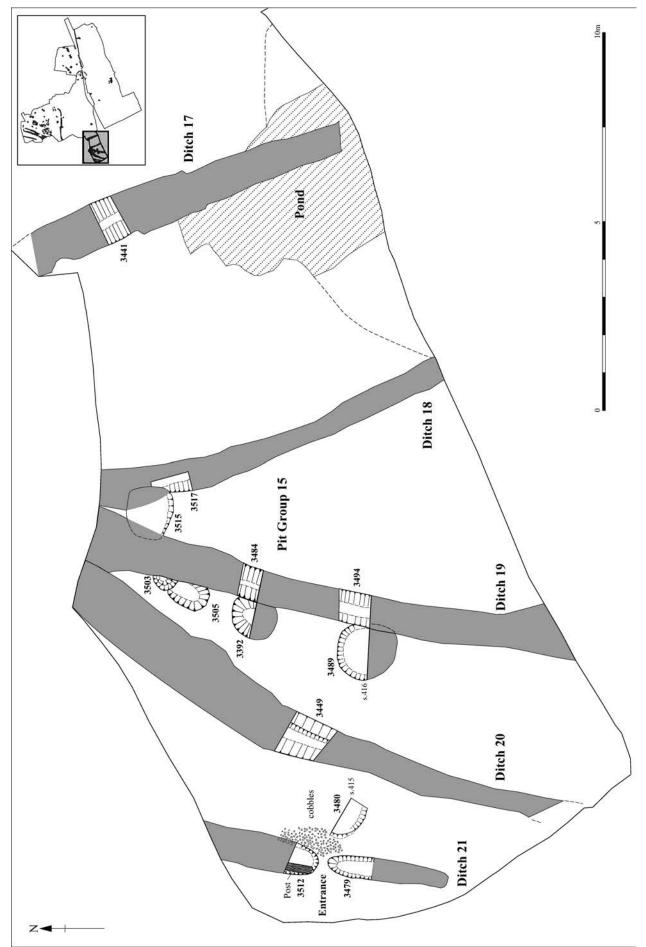


Figure 36 Period 2. Plan of all late Iron Age and early Roman features in the western part of the site. Scale 1:100

earlier pits. It had sloping sides with a base that tapered to a point, ran for a distance of at least c. 12m and was 0.86m wide and 0.32m deep. The light grey silt clay of the ditch showed evidence of weathering and contained two sherds of middle Iron Age pottery (8g) which may have come from pit 3392, which it cut.

Further west, and again recorded at the same northerly point as Ditches 18 and 19 (from which all three ditches fanned out), was another ditch (Ditch 20, 3449), which was slightly curved in plan and aligned south-west-north-east. It ran for at least c.13m and was between 1.3m and 1.45m wide and 0.33m and 0.4m deep. Its profile was more rounded and less V-shaped than the ditches to the east but its pale grey-brown silt basal fill again showed signs of weathering. The mid-pale grey-brown chalky silt backfill contained one fragment of late Iron Age pottery (16g) and two Roman grey ware (8g) pottery sherds.

At the extreme western edge of the area, approximately parallel to Ditch 20, was the final ditch (Ditch 21), which consisted of a southern element (3479) and a northern element (3512) with a narrow (0.5m) entranceway between them. The ditches ran for a cumulative distance of at least 7m and were between 0.75m and 1.1m wide and 0.47m and 0.6m deep; they had steep sides with gently concave bases and the terminals were gently rounded. They were filled with a series of sterile chalky deposits. In the terminal of the northern ditch there was evidence for a post or beam along the western edge with chalk packing around it, suggesting that this outer ditch may have been gated. Along the eastern edge of the same ditch a compact layer of cobbles and smaller stones (3513) was spread over the latest ditch fill; this would have formed a metalled pathway inside the ditch, which spread out to seal an earlier pit (3480). This metalled and gated entranceway may have been for defensive purposes, but may equally have been intended to keep stock enclosed.

The southern lower ground

(Figs 23 and 37)

Away from the intensive ritual activity on the higher ground there was evidence for land division (boundary ditches), possible structures and numerous storage pits (both in groups and individually). Where the site had been most severely truncated by the demolition of the rectory the survival of archaeology was compromised, although it does appear that late Iron Age and early Roman activity was not as common in the southern part of the site with activity evident only in the western and eastern parts of the southern area. Although sparse, the surviving archaeology in the southern part of the site does contain evidence for a possible domestic structure and some of the few certainly Iron Age domestic objects.

Pit Group 12 and associated features (Fig. 37)

A complex series of late Iron Age intercutting features consisting of two post-holes (2408, 2475) overlain by six pits (2410, 2442, 2471, 2469, 2477, 2511) and a layer (2537) was located in the southern central part of the site, to the south of the large area of modern disturbance caused by the demolition of the rectory. These may represent the remains of a structure or fence line that was later used as an area for the disposal of rubbish, including pottery and animal bone. Pit 2477 also contained an Iron Age bone 'gouge' (SF 18) and a possible clay bakestone (SF 75).

Isolated late Iron Age pits

(Fig. 23 and 37)

Several large storage pits survived in the southern part of the site (e.g. 2665, 2099 and 2620): they appeared isolated, as any other archaeological remains potentially associated with them had been destroyed. To the east of the area of modern disturbance caused by the demolition of the rectory were pit 2622 and four associated post-holes (2624, 2626, 2765 and 2767). This group of features respected each other in the landscape; all contained a similar sandy clay and were probably contemporary, although their function is unknown. It is tempting to speculate that four associated post-holes over a pit represent a raised granary replacing a grain storage silo; however, the post-holes were not regular enough to support this interpretation.

Only two pits of late Iron Age—early Roman date were recorded in the eastern part of the southern area of the site. As truncation was not particularly severe in this area, the paucity of features indicates that this part of the site was not intensively used at that time.

North-eastern area

(Figs 23 and 38)

A series of circular storage pits, close to and possibly associated with Enclosure 4, were recorded in the northeastern part of the site. These pit clusters were, typically, cleaned out after use and then casually backfilled; they thus normally contained sparse incidental finds. However, several pits contained remarkable assemblages of animal bone which may be the remains of communal meals or feasts. This suggests that feasting may have taken place, albeit less frequently, on the lower ground at Duxford.

Enclosure 4 and associated features

At the base of the north-eastern extension of the site a ringditch enclosure (2685, 2687, 2719 and 3079) with an internal diameter of c. 10m was found. Although severely truncated, the ditch survived to a width of up to 0.35m and to a depth of 0.25m. The excavated segments all contained grey-brown clay silt, with occasional patches of orange sand. Within this fill were eleven sherds of later Iron Age pottery (296g), mainly from the southern terminal of the northern arm (3079). The southern terminal also contained a cattle leg bone (humerus), a sheep jaw (mandible), two sheep/goat jaws (mandibles) and teeth, and large mammal vertebrae. The northern terminal of the southern arm (2687) contained no pottery, but a cattle shoulder blade and a sheep/goat tooth were found. Cattle and sheep jaws (mandibles), sheep/goat teeth and a large mammal rib were retrieved from other sections. At the entrance to the ring-ditch enclosure (3533), on the south-eastern side, was an irregular shallow depression (1m long, 0.3m wide and 0.04m deep).

Within Enclosure 4 were five sub-circular and square post-holes (3134, 3136, 3138, 3142 and 3144) which were all severely truncated. They measured between 0.1 and 0.26m in diameter and 0.1 and 0.16m deep, and contained similar brown-grey clay silt. They may have been related to the internal subdivision of the enclosure, and were perhaps for hurdles or other structures to aid animal management. Post-hole 3146 was found within the northern terminal of the northern arm. It was larger than the internal post-holes, measuring 0.7m long by 0.55m

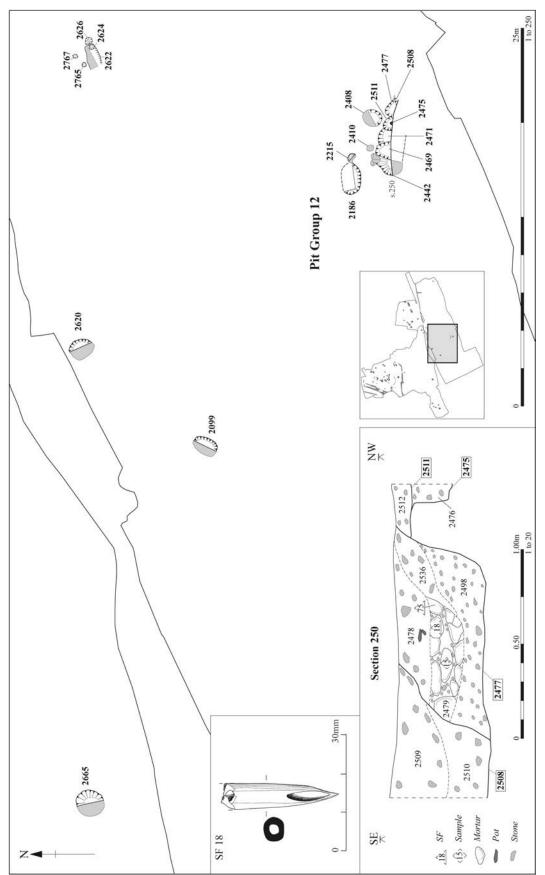


Figure 37 Period 2. Plan of all late Iron Age and early Roman features in the southern part of the site. Scale 1:250

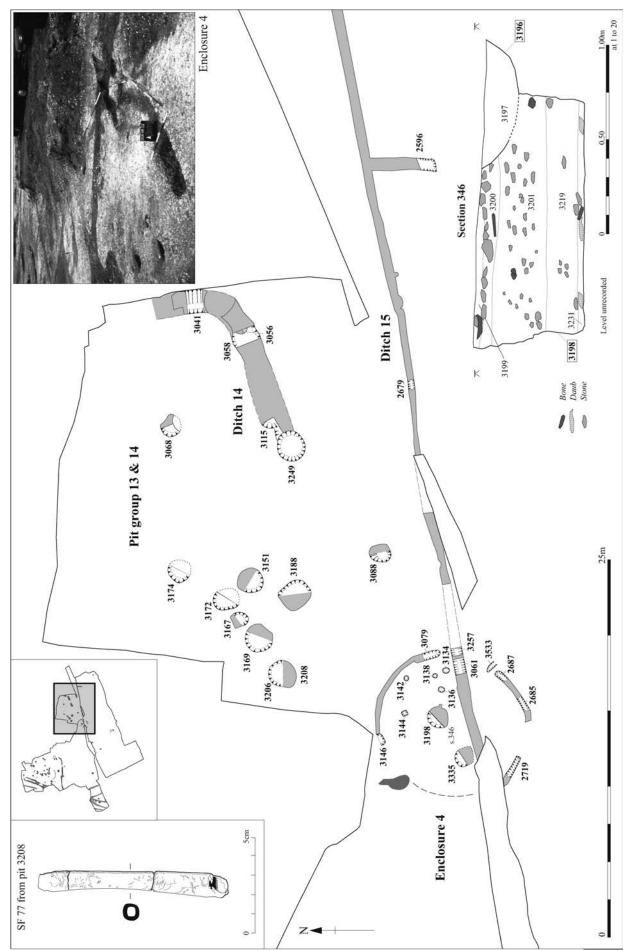


Figure 38 Period 2. Plan of all late Iron Age and early Roman features in the north-eastern part of the site. Scale 1:250

wide, but survived to a depth of only 0.1m. It may relate to a gated entrance on the enclosure's northern side.

Also within Enclosure 4 were two pits (3198, 3335) which can be assigned a later Iron Age date and may relate to the use of the ring-ditch.

Pit Group 13 (Fig. 38)

Four circular pits (3068, 3088, 3206 and 3208) appeared to be consistent with storage pits that were reused to contain significant assemblages of food waste associated with feasting; indeed, in terms of number of fragments (NISP) this group contained one of the largest assemblages on site (Table 8). One of the pits (3206) was redug (producing a new smaller pit within the footprint of the older, larger feature) to receive this material. The recut pit (3208) contained a partially worked animal bone (SF 77), which showed evidence of having been gnawed by a dog.

Two further pits lay just to the east (3249, 3056) and were cut by a substantial curving ditch (Ditch 14, below). Sub-rectangular pit 3249, which measured 1.6m wide and 0.42m deep, with steep sides and a flat base, was of particular note. Its primary and secondary silt deposits were devoid of finds, although the uppermost fill (3246) contained a large quantity of animal bone, including cranial elements and horncores from several 'Celtic' small horned cattle. The predominance of cranial and lower limb fragments from cattle is indicative of butchery, with burnt teeth suggesting at least some of the material had been cooked. Some 67% of animal bone from the uppermost deposit consisted of butchered cattle fragments

from the axial skeleton; the predominance of a single taxon in one context with the taphonomy shown is almost certainly the result of a single episode of feasting rather than any longer-term accumulation of debris.

Examination of the animal bone assemblage from the whole pit group suggests that at least fourteen individual animals may have been butchered, with a total estimated weight yield of 2,300lbs (Table 9), and their remains placed in these pits. If these are the remains of a single feasting event and it is assumed that all the meat was eaten and that each individual ate at least 1lb of meat, this could represent the remains of a meal partaken of by over 2,000 people.

Relatively large numbers of wild species — twelve toads or frogs, at least twenty water voles and one mole — were also found. It is likely that these animals were pit-fall victims. Their numbers suggest that the pit would have been open for a period of at least several weeks. Three sherds of late Iron Age pottery (47g) were also found within this fill. Although an environmental sample (Sample 28) was taken from this deposit, from which some small animal bones were recovered, it contained insufficient other material for accurate interpretation.

Pit Group 14 (Fig. 38)

Six other pits lay in the same area as those assigned to Pit Group 13 (3151, 3167, 3169, 3172, 3174, and 3188). Dating evidence was found in only one of these pits (3151), but they are thought to have been contemporary with other late Iron Age features in the vicinity. It is worthy of note that two environmental samples from

Bone type (in alphabetical order)	Cattle	Horse	Sheep/goat	Large mammal
Cranium	1	_	_	_
Femur	3	_	_	_
Horncore	3	_	_	_
Humerus	2	_	_	_
Innominate	3	_	_	_
Malar	2	1	_	_
Mandible	1	_	_	_
Maxilla	2	_	_	_
Phalanx	_	2	1	_
Premaxilla	_	1	_	_
Radius	1	_	_	_
Rib	_	_	_	1
Sacrum	1	_	_	_
Scapula	2	_	_	_
Teeth	4	2	_	_
Tibia	2	_	_	_
Vertebrae	_	_	_	1
Total	27	4	1	2

Table 8 The animal bone from deposit 3246 within Pit Group 13

	MNI	Estimated dress carcass weight per animal (lbs)	Total weight yield (lbs)	% Yield
Cattle	7	300	2100	91.4
Sheep/goat	6	25	150	6.5
Pig	1	50	50	2.1
Total	14	N/A	2300	100

Table 9 The estimated weight of meat from the animal bones recovered in Pit Group 13 (based on research by Chaplin and McCormick 1986)

adjacent pits (Samples 22 (3151) and 23 (3172)) are dominated by barley and wheat grains, with some chaff and possible mineralised faecal material, consistent with deposits of mixed domestic refuse including hearth waste (cereals, derived from accidental spillages during food preparation, and chaff, possibly indicative of the fuel used within the hearth) and sewage.

Of note among these pits was circular pit 3188, which had steep sides and a flat base and measured 1.7m in diameter and 0.32m deep. Its primary fill contained a burnt dark brown silt clay from which two sherds of late Iron Age pottery (5g) were recovered. An environmental sample (Sample 22) taken from this fill contained fish vertebrae, a frog leg bone (femur) and the remains of two field voles, two mice/voles, a wood mouse and a bank vole jaw bone (mandible). Mixed domestic refuse was also recovered. This material was overlain by a pale yellowbrown scorched chalk deposit that may have been related to an area of burning on the western edge of the pit. The upper light brown clay silt fill of this feature contained a sherd (20g) of Iron Age pottery, a red fox tooth and the rib of a large mammal. This feature may have been used as a hearth and then left open for a period of time, during which a number of small rodents fell into the pit, before it was backfilled.

Late Iron Age ditches

Two ditches were found in the north-eastern area. The first example (Ditch 14) did not survive to any great length, but its western terminal cut into pit 3249, which contained a significant assemblage of possible feasting waste (above). This feature (3058, 3041) was cut in an arc just over 13m long and varied in width between 1m and 1.5m and in depth between 0.18m and 0.45m. Its lower fills were light grey silt with common chalk pebbles, one of which (3059) contained four sherds of late Iron Age pottery (79g) and a single horse foot bone (phalanx). The upper fills were grey silty clay that did not contain any finds.

Running broadly parallel and to the south was a long narrow ditch (Ditch 15) which was probably in use at the end of this phase, as it cut Enclosure 4, which must have fallen out of use by this time. It may represent the change in land use that occurred during the 2nd century AD, when the Romano-British villa-based system of farming was adopted and new field systems were laid out (see general discussion). The ditch (2679, 3061 and 3257) crossed the eastern part of the site for a distance of c.47m. The eastern end extended beyond the edge of excavation and the western end was truncated by later features. Its primary fills consisted of fine dark brown silt clay, within which was a single sherd of late Iron Age pottery (8g). An environmental sample (Sample 24) taken from another part of this basal deposit (3258) contained the foot bone (phalanx) from a pig, a large bone from the leg of a plover (tibiotarsus), and two individual vertebrae from an eel(s). Some cereal grains were also recovered, but particularly worthy of note was a seed fragment from a large pulse (pea/bean) of a type which may have formed part of the diet of the people who lived here. The upper fill of the ditch was grey-brown clay silt from which five sherds of mid-late Iron Age pottery (30g) were recovered alongside another plover leg bone (humerus), a fowl leg bone (tibiotarsus), and large and medium-sized mammal ribs. More animal bone — a duck leg bone (radius), a fowl leg bone (tibiotarsus), a cattle leg bone (humerus), a sheep/goat leg bone (tibia), a pig tooth and a mammal rib — was recovered from another part of the ditch (3063).

V. Artefactual evidence

Flint

by Sarah Bates

Introduction

A total of 220 struck or shattered pieces of flint was recovered from the site. Nineteen fragments of burnt flint (weighing 299g) were also found (Table 10). Much of the material is patinated a mottled bluish-grey colour, probably as a result of chalky soil conditions in the vicinity of the site. Some is unpatinated. Cortex, where present, is mostly chalky and whitish in colour. The majority of the flint was recovered as residual material in later contexts.

Methodology

Each piece of flint was examined and recorded by context in an Access database. The material was classified by category and type (see archive), with numbers of pieces and numbers of complete, corticated, patinated and hinge-fractured pieces being recorded, and the condition of the flint being commented on. Numbers and weights of burnt flint were also recorded. Additional descriptive comments were made as necessary.

The assemblage

Three-quarters of the assemblage consists of flakes and shatter pieces (103 and 61 pieces respectively). Most of this material is irregular in nature and it is sometimes hard to differentiate between the two types, with a few very irregular thick jagged 'flakes' having more in common with the randomly shattered pieces. Some of the shatter pieces themselves might be accidentally derived, but those recorded as 'shatter' are generally quite fresh in appearance and most of them could have resulted from the initial and/or irregular knapping of the material. The flakes are mostly quite small and many of them have pronounced or irregular bulbs of percussion, and have been struck by hard hammer. Many pieces are squat or

Туре	Number
Core fragment	1
Tested piece	3
Struck fragment	2
Shatter piece	61
Flake	103
Blade-like flake	5
Blade	2
Spall	27
Chip	6
Scraper	1
Piercer	1
Notched flake	1
Retouched flake	3
Utilised flake	4
Total	220
Burnt fragment	19

Table 10 The flint assemblage

broad in shape and they are often quite thick, with pronounced bulbs of percussion and wide platforms. Cortex is often present and quite a few pieces have cortical platforms, showing that they were struck from cores that had had little preparation. Many of the flakes and shatter pieces are sharp or quite sharp and just over half of it them are patinated (52% by number). The flint debitage is characteristic of material of a late prehistoric date (later Neolithic to Iron Age). There are five blade-like flakes, including two fragments. All but one piece are edge damaged to a degree.

A thick flake is burnt and has a shattered ventral face and several blade-like scars on its dorsal face; it appears to be a fragment from the side of a blade core (pit 3803, Pit Group 7, Period 1.2). Three pieces have probably been tested for use as cores. They are all irregular cortical fragments. There are also twenty-seven spalls and six chips; the latter are very small and a few pieces might have been accidentally formed.

Among the very small number of quite regular flakes, one (pit 2596, Period 2) is slightly curving in form and may be soft-hammer struck. There are two blades: one is slightly irregular and cortical, the other (3643, fill of pond 3641) is a neat, long and narrow blade with slightly abraded platform. Its form suggests that it may be of Mesolithic or earlier Neolithic date, and its opaque white patina, different from most of the flint from the site, also suggests that it may be older than the most of the material.

There are very few retouched or utilised pieces and only three pieces have been classified as (probably) formal tools. There is one scraper (2495, SFB Structure 4, Period 4), consisting of a small squat fragment of a flake which has been retouched steeply around one edge. A very irregular cortical fragment from a nodule has crude retouch of an edge and probable utilisation of a point; it has been classified as a piercer (3181, fill of drying building Structure 3, Period 3). An irregular blade-like cortical flake has slight notches on both sides near its distal end (2374, pit 2373, Pit Group 5, Period 1.2) which are opposite one another and might have been deliberately formed.

Three miscellaneous retouched flakes and four utilised flakes are also present. These are mostly irregular, although one quite regular retouched piece (2716, pit 2027, Pit Group 1, Period 1.2) has, perhaps notably, the same white patina as the neat blade described above.

Discussion

The nature of the neat patinated blade and the possibly soft-hammer struck flake suggests that they might date to the Mesolithic or earlier Neolithic period. Most of the flint from the site, however, consists of irregular flakes and shatter pieces. The flakes are mostly small hard-hammer struck pieces, usually squat in shape and often quite broad and/or thick. There is virtually no evidence for the deliberate preparation of the cores, and the nature of the

shattered flakes and fragments as well as the wide and sometimes obtuse angled platforms all suggest a lack of skill in knapping. Cortex is often present (64% of the flakes and shatter pieces by number) and occurs on several flake platforms, again showing that the flint was utilised without much care or preparation.

There are very few retouched pieces and even fewer formal tools. Those that are present are all quite irregular and/or are formed on irregular fragments. There are no clearly diagnostic datable pieces. All the traits characterised above are consistent with those suggested elsewhere as indicating assemblages of later Bronze Age or Iron Age date (Humphrey 2007). It is entirely possible that the flint from Duxford might date to this period.

The fact that much of the flint is quite sharp (or very sharp) suggests that this material was deposited soon after being knapped and that its context may be of interest. Worked flint of probable Iron Age date has been identified at a growing number of sites in southern and eastern England, including at St Ives in Cambridgeshire (Young and Humphrey 1999). Some of the flint from the present site may be residual in Roman or later contexts but some of it seems likely to be contemporary with later prehistoric activity at the site.

The pottery by Sarah Percival

Introduction

A total of 2842 sherds (weighing 51.5kg) of Iron Age pottery was identified (Table 11). The assemblage was recovered from 209 excavated features or was found unstratified. It is generally in a good condition, with few abraded sherds. There are also several semi-complete vessels. The average sherd weight is 18g. The pottery assemblage was analysed using the guidelines for analysis and publication laid down by the Prehistoric Ceramic Research Group (PCRG 1992; Knight 1997).

The Iron Age pottery from Duxford has been split into two chronological groups: middle Iron Age, and later Iron Age including late pre-Roman Iron Age (LPRIA). The division reflects the stratigraphic phasing of the site and is in keeping with radiocarbon determinations from the key features. It should be noted, however, that the ceramic chronology almost certainly represents a continuum rather than two distinct phases, with some established forms, such as the slack-shouldered jars (ubiquitous within East Anglia and the Fens in the period around 400 BC), continuing in use beside new Gaulish Romaninfluenced developed forms, such as the S-profiled cordoned jars. It is to be hoped that as more assemblages are examined and published alongside absolute dates the ceramic typology for the region will become clearer.

Period	Date	Count	% of total count	Weight (kg)	% of total weight
Middle Iron Age	5th–3rd centuries BC	1251	44.02	23.396	46.65
Later Iron Age	3rd-1st centuries BC	1438	50.60	23.824	47.49
Transitional	1st century BC-1st century AD	71	2.50	2.080	4.15
Indeterminate Iron Age	5th-1st centuries BC	82	2.88	0.856	1.71
Total		2842	100.00	50.156	100.00

Table 11 Count and weight of Iron Age pottery in chronological order

Fabric	Description	Count	Weight (kg)
Q1	Common quartz-sand, occasional organic. Dark grey throughout. Hard-fired. Smoothed surface.	362	9.016
Q2	Common quartz-sand, occasional chalk. Dark grey throughout. Hard-fired. Smoothed surface.	420	8.262
Q3	Common quartz-sand, occasional calcined angular flint or quartz. Dark grey throughout. Hard-fired.	108	1.414
	Smoothed surface.		
Q4	Common quartz-sand. Dark grey throughout. Hard-fired. Smoothed surface.	269	3.254
S1	Common fossiliferous shell, moderate quartz-sand. Pink orange throughout. Hard-fired. Smoothed	62	1.084
	surface.		
G1	Common sub-rounded grog, common quartz-sand, Dark grey throughout. Hard-fired. Smoothed	14	0.131
	surface.		
F1	Common coarse angular calcined flint, common quartz-sand. Dark grey throughout. Hard-fired.	9	0.126
F2	Moderate, medium angular calcined flint, common quartz-sand. Dark grey throughout. Hard-fired.	1	0.004
O1	Common organic, common quartz-sand. Dark grey throughout. Hard-fired. Smoothed surface.	5	0.103
Crucible	Abundant, small, rounded quartz-sand fabric. Dense, hard-fired.	1	0.002
Total		1251	23.396

Table 12 Count and weight of the middle Iron Age pottery by fabric

Middle Iron Age

The middle Iron Age pottery represents just under half (46.65%) of the total Iron Age group (1251 sherds, weighing 23.396kg). The assemblage is generally in good condition; only 0.35% (0.182kg) of the sherds are abraded, of which no more than 0.12% (0.063kg) are very abraded. Most of the abraded sherds were redeposited within later features (and are therefore residual). The well-preserved condition of the assemblage is echoed by the large average sherd weight (18g). This is considerably larger than many contemporary assemblages (Percival 2007), which have an average sherd weight of around 11g. The good preservation of the Duxford assemblage may reflect depositional practices, which favoured disposal of pottery in pits rather than ditches or hut circles that were subjected to repeated reworking.

Fabric (Table 12)

Ten fabrics were identified in four fabric groups. Fabrics where quartz sand was the most numerous inclusion dominate the assemblage and reflect the use of local quartz-rich clay sources (Fabrics Q1–Q4: 93.76%; 21.936kg). The organic inclusions found in fabric Q1 and the chalk piece found in fabric Q2 probably also represent natural inclusions found within the clays. Fabric Q3 contains quartz sand and pieces of angular flint; this may be a deliberate addition to the fabric, but also occurs naturally within the boulder clays local to the site. Fabric Q4 contains only quartz sand, suggesting that the clay has been cleaned — perhaps sieved or washed — before use.

Fossiliferous fabric S1 represents 4.63% of the assemblage (1.084kg). Fossil shell occurs naturally in clay deposits and was used widely from the middle Iron Age into the Roman period in Cambridgeshire, south Suffolk and Lincolnshire (Knight 2002, 140). Fabric O1 contained a high proportion of organic material, suggesting that it was a deliberate addition to the clay. The organic matter is visible as elongated voids on the surface of the fabric and as burned-out charcoal pieces in the matrix of the sherd. Flint-rich fabrics F1 and F2 contain varying amounts of calcined flint. It is probable that this also represents a deliberate addition to the clay. Flint was used as a tempering agent from the earlier Iron Age onwards, falling completely out of use only in the latest

pre-Roman Iron Age. A small number of sherds (0.53%; 0.131kg) contain crushed ceramic pieces or grog. Grog is a useful additive to clay, as it is highly effective at withstanding thermal shock and helps to extend the useful life of the pot. Grog has been found with middle Iron Age assemblages at Greenhouse Farm (Hill and Braddock in prep.), where it makes up only 0.4% of the total assemblage, and at Little Thetford (8.88%; Braddock and Hill forthcoming), but is more often associated with later Iron Age and LPRIA pottery.

The range of fabrics seen at Duxford compares well with other middle Iron Age assemblages from the Ely area of Cambridgeshire, which are commonly dominated by sandy fabrics with smaller quantities of shell- and organic-tempered sherds (Hill and Horne 2003, 167; Abrams and Ingham 2008, fig. 2.11). The sources of the fabrics remain uncertain without the application of thin section analysis; however, it is probable that most of the sherds are made from clays from local sources (Hill and Horne 2003, 170). The exception may be the shell- tempered sherds, which were probably imported to the site. The source of this pottery may be the fossiliferous Jurassic clays found in the west of Cambridgeshire around Huntingdon and St Neots (Abrams and Ingham 2008, fig. 2.11).

Form, decoration and surface treatment (Figs 39–41)

The assemblage was recorded using the form series developed for recording the large Iron Age assemblage from Wardy Hill, which uses an alpha-numerical code to record rim/shoulder form with a separate series of code numbers for the shape of the base (Hill and Horne 2003, 171).

Туре	Description	Illustration
A	Upright rim, slack shoulder. Open vessel form	Fig. 39, Nos 1–4
В	Upright rim, angular dog-legged shoulder	Fig. 39, No. 7
C	Upright rim, no neck	Fig. 39, No. 5
D	Outward flared rim, slack shoulder	Fig. 39, Nos 6 & 8
Е	Short rim, short neck, high rounded shoulder	
F	Short everted rim, rounded shoulder and body	Fig. 39, No. 9

G	Round-bodied vessel. High rounded	Fig. 40, No. 10
	shoulder, everted rim	
Н	Straight outward flaring neck, high	Fig. 40, Nos 11 & 12
	rounded shoulder	
J	Straight outward flaring rim, high	Fig. 40, No. 13
	angular shoulder	
K	Ovoid or rounded slack-shouldered	Fig. 40, No. 14
	vessel, no distinct rim	<i>5</i>
L	Globular ovoid vessel, distinct rim	
M	Round globular vessel, no neck	
N	Fish bowl, short neck, everted rim	Fig. 40, No. 15
P	Flower-pot-shaped vessel	
Q	Carinated open bowl, sometimes	
	wheel-made	
R	Cordoned-necked open vessel	Fig. 40, No. 17
S	Wheel-made round-bodied S-shaped	
	profile	
T	Tall, straight-sided vessel	Fig. 40, No. 18
U	Shallow dish	-

Rim Ending Typology

- 1 Simple flattened
- 2 Simple rounded
- 3 Simple tapered or pointed
- 5 Flat with interior thickening
- 6 Flat with exterior lip

Four vessels with full or partial profiles were recorded, along with 207 rims and 51 base sherds. The most common form present within the assemblage is the slackshouldered jar with straight upright neck and simple rim, which makes up 67% of the assemblage (Form A, Fig. 39, Nos 1–4; vessel count = 172). Similar jars with slackshoulders and out-turned rims are also present, though in fewer numbers (Fig. 39, Nos 6 and 8, Form D; vessel count = 24). Forms with rounded profiles make up only 4% of the assemblage (Fig. 39, Nos 9 and 10, Forms E, F and H; vessel count = 9). Vessels with angular shoulders are also rare (Fig. 39, Nos 7 and 13, Forms B and J; vessel count = 4). Only two other forms are present: a small globular closed jar or bowl (Fig. 40, No. 15, Type N) and a single upright straight-sided vessel with open mouth and no defined neck (Fig. 40, No. 18, Type T). This limited range of forms is typical of middle Iron Age assemblages where the vessels are primarily used for cooking and food

Decoration	Count	Weight (kg)	% of total count
Undecorated	892	14.844	63.45%
Scored	301	6.641	28.38%
Wiped	20	0.411	1.76%
Scratched	19	0.340	1.45%
Fingertip-impressed on rim top	7	0.555	2.37%
Incised lines	4	0.145	0.62%
Rough wiped	4	0.173	0.74%
Slashed on rim top	3	0.278	1.19%
Applied circular knob	1	0.009	0.04%
Total	1251		

Table 13 Count and weight of middle Iron Age pottery by form of decoration

storage, with few vessels being produced for specialised food serving.

Most of the vessels are undecorated (Table 13). Scoring is found on a little less than one quarter of the sherds (Fig. 41, Nos 20 and 21). This form of surface treatment, consisting of random intersecting slashes over the body of the vessel carried out using a thin sharp tool when the clay was wet or leather hard (Knight 2002, 133), is probably largely functional (providing grip) rather than decorative. Scored Ware is particularly associated with the East Midlands, where it was in use from at least the 4th century BC until the 1st century AD (Knight 2002, 134). The relationship between classic East Midlands Scored Ware and the scored vessels found in Cambridgeshire is unclear. At Greenhouse Farm Scored Wares made up 13.6% of the assemblage and were considered on the basis of their non-local, shell-tempered fabric to have been imported to the site (Hill and Braddock in prep.). The scored sherds from Duxford are mostly found in sandy fabrics; ten sherds have shell tempering and it is possible that these (as at Greenhouse Farm) may represent imports. A small number of vessels have scratched or roughened surfaces and it is probable that this too may be functional, (as a roughened surface is easier to grip) though this surface treatment may also have cultural associations (Knight 2002). One sherd has an applied knob, perhaps a handle (Fig. 41, No. 23). Purely decorative treatments are restricted to slashed or fingertip-impressed ornamentation on the rim top (ten sherds). Within later Bronze Age/ earlier Iron Age assemblages decorated rims are accompanied by fingertip-impressed or slashed decoration on the shoulder of the vessel, this becoming limited to the rim only by around the 4th century BC (Percival 1999, 176). No examples of decoration to the shoulder were present at Duxford. Less than 6% of the assemblage has burnishing to the surface of the vessel. Burnished vessels are often associated with tableware or 'fine wares', and it may be that these were not an important element of the Duxford assemblage.

Distribution and deposition (Table 14)

Middle to later Iron Age features contributed 93% of the total middle Iron Age assemblage (21kg) (Table 14). The majority of the sherds were found in pits, which contributed over 84% of the total middle Iron Age assemblage (20.674kg). A small quantity was redeposited within later features, particularly the Saxon SFBs and medieval ditches. It is possible that the pottery within the SFBs may be misidentified Saxon sherds, since the fabrics of Iron Age and hand-made Saxon sherds are very similar. Iron Age pottery has, however, been found in SFBs at Two Mile Bottom, Thetford, Norfolk (Percival 2003, 84), and it may be that Anglo-Saxon people deliberately or accidentally chose to occupy locations previously used in the Iron Age.

The arguments for 'ritual' or special deposition within pit fills are well rehearsed (Hill 1995a; 1995b). Digging or reusing pits for the disposal of domestic rubbish may also have a cultural significance, with particular types of artefact and ecofact often associated together. The pit assemblages from Duxford contain most of the rims, bases and decorated sherds found at the site, with only small numbers being recovered from ditches and none from other feature types. The sherds from pit fills have an average sherd weight of over 21g, suggesting that large

Period	Feature type	Count	Weight (kg)
2 and 3	Pit	8	0.201
	Burial	52	0.306
	Ditch	93	1.772
	Gully	13	0.224
	Pit	953	19.330
	Shrine	3	0.024
4	Post-hole	1	0.008
	Post-hole in SFB	1	0.002
	SFB	36	0.474
5	Ditch	31	0.328
	Pit	16	0.150
6	Pit	2	0.019
	Quarry?	3	0.029
Unphased	Pit	4	0.016
	Post-hole	35	0.513
Total		1251	23.396

Table 14 Count and weight of middle Iron Age pottery by site phase

distinctive sherds may have been selected for placing in pit fills, perhaps from material which had already been curated elsewhere after going out of use (Percival 2007, 56). Pit 2027 appears to have a particularly distinctive assemblage, with middle Iron Age-type pottery found stratigraphically later than later Iron Age forms. The relatively large average sherd size and the lack of mixing of the middle and later pottery types may indicate functional difference, with cooking and storage vessels of middle Iron Age form continuing to be used alongside the later Iron Age styles. Alternatively it is possible that there had been a rejection of the new later Iron Age types in favour of a return to middle Iron Age forms (P. Sealey, pers. comm.).

The later Iron Age and late pre-Roman Iron Age pottery The later Iron Age and LPRIA pottery represents 50.30% of the total Iron Age assemblage (25.904kg). The assemblage is well preserved, only 0.5% (0.163kg) of the

sherds showing signs of being abraded. The average sherd weight is 17g. This is slightly smaller than the middle Iron Age assemblage and may reflect the more widely dispersed distribution of the sherds within features of different types and periods.

Fabric

Eleven fabrics were identified from five fabric groups (Table 15). As with the middle Iron Age assemblage sandy, quartz-tempered fabrics were the most numerous, representing over 90% of the total later assemblage (23.406kg). These sandy fabrics are supplemented by smaller quantities of fabrics with a range of other inclusions including shell, grog, organic material (chopped grass or chaff) and mica. Of these, shelltempered fabrics contribute 9% of the total assemblage (2.383kg), a higher proportion than was found in the middle Iron Age assemblage. This suggests that shelltempered wares were becoming more widely used at the site in the later Iron Age to Roman period. Other fabrics, such as those containing organic material or grog continue to be used in small quantities, as they were in the earlier phases. The single hand-made micaceous sherd may represent an import.

Form, decoration and surface treatment

The later Iron Age and transitional assemblage shows no increase in the number of form types present. Both middle and later Iron Age assemblages contain seventeen different forms; however, the later material shows a marked diversification in numbers of each type of vessel used. Type A1 and A2 slack-shouldered jars with flattened or rounded rims again dominate the assemblage but there are also moderately large numbers of slack-shouldered vessels with flared rims (Type D) and round-bodied vessels with rounded shoulders and everted rims (Type F). LPRIA forms include the open vessels with cordons defining the neck (R2), the ovoid or rounded slackshouldered vessels with no neck (K1) and the highshouldered S-profile vessels (G2). The increase in vessels with sinuous forms is typical of later Iron Age assemblages. The change in vessel form is in conjunction

Fabric	Description	Count	Weight (kg)
Q1	Common quartz-sand, occasional organic. Dark grey throughout. Hard-fired. Smoothed surface	547	10.012
Q2	Common quartz-sand, occasional chalk. Dark grey throughout. Hard-fired. Smoothed surface	342	5.710
Q3	Common quartz-sand, occasional calcined angular flint or quartz. Dark grey throughout. Hard-fired. Smoothed surface	109	1.905
Q4	Common quartz-sand. Dark grey throughout. Hard-fired. Smoothed surface	304	5.413
Q5	Common quartz-sand. Dark grey throughout. Hard-fired. Smoothed surface. Thin, well made, often burnished. A transitional fabric	41	0.366
S1	Common medium to large fossiliferous shell, moderate quartz-sand. Pink-orange throughout. Hard-fired. Smoothed surface	144	2.319
S2	Moderate medium-sized fossiliferous shell, moderate quartz-sand. Orange throughout. Hard-fired. Smoothed surface	10	0.064
QS	Common quartz-sand. Moderate medium-sized fossiliferous shell. Dark grey throughout. Hard fired. Smoothed surface	7	0.076
G1	Common sub-rounded grog, common quartz-sand. Dark grey throughout. Hard-fired. Smoothed surface	1	0.003
O1	Common organic, common quartz-sand. Dark grey throughout. Hard-fired. Smoothed surface	3	0.030
M1	Dense sparkling mica-rich fabric. Common quartz-sand. Dark grey throughout. Hard-fired. Smoothed surface	1	0.006
Total		1509	25.904

Table 15 Count and weight of later Iron Age and transitional pottery by fabric

Decoration	Count	Weight (kg)	% of total count
Undecorated	1465	25.114	97.06
Burnished lines	2	0.014	0.13
Burnished horizontal ladder	1	0.012	0.07
Horizontal scored lines	1	0.014	0.07
Big impressed dots	2	0.061	0.13
Incised lines	2	0.032	0.13
Incised lines plus impressed dot (La Tène)	1	0.014	0.07
Pierced	1	0.020	0.07
Scored	33	0.613	2.20
Small impressed dots	1	0.010	0.07
Total	1509	25.904	100.00

Table 16 Count and weight of later Iron Age and transitional sherds by decorative type

with an increase in the diversity of vessel size. The middle Iron Age assemblage is comprised of vessels which almost all fall between 12 and 18cm in rim diameter, while the later Iron Age assemblage displays a range of rim diameters between 8 and 28cm.

Within the later assemblage several decorative trends are noticeable. The use of scored wares diminishes from over 24% in the middle Iron Age to less than 3% (Table 16). The use of fingertip decoration to the rim top disappears and there is an increase in ornamentation to the neck of the vessels, especially with burnished geometric designs (Fig. 41, No. 25). Several unusual decorative motifs are present; these include a single sherd with incised circles and swirls of 'La Tène' style decoration (cf. Hill and Horne 2003, fig. 80) and two examples of sherds with impressed dots or circles to the body of the vessel (Fig. 41, No. 24). La Tène style pottery is almost absent from northern East Anglia and rare in the south of the region. Small quantities of similar La Tène style decorated pottery have been found on several sites around Cambridgeshire, such as Wardy Hill (Hill and Horne 2003, fig. 80) and Hurst Lane Ely (Percival 2007, fig. 10, 1). La Tène sherds are often associated with later Iron Age plain ware assemblages, where they form a small but

Site Phase	Feature type	Count	Weight (kg)
2	Burial	62	0.446
	Ditch	137	1.761
	Gully	5	0.072
	Pit	960	18.935
4	Post-hole	1	0.005
	SFB	10	0.135
5	Ditch	115	0.555
	Hearth	3	0.018
	Pit	83	1.312
	Slot	3	0.013
6	Ditch	10	0.034
	Quarry	3	0.019
	Post-hole	1	0.003
7	Cleaning	2	0.066
	Ditch	54	1.832
	Kiln	15	0.206
	Pit	45	0.492
Total		1509	25.904

Table 17 Count and weight of later Iron Age and transitional pottery by site phase

significant element. They are often made of fabrics which were distinct from the majority of hand-made fabrics, having a source more compatible with the wheel-made pottery (Hill and Horne 2003, 180). The Duxford example is made of sandy fabric which does not appear distinctive to the naked eye.

Distribution and deposition

Just under 82% of the later Iron Age pottery was found within middle to later Iron Age features, around 18% having been redeposited in later features. The pottery again shows a marked bias towards deposition in pits, which produced 18.934kg of the total phase assemblage (Table 17); and the sherds from pits were large, having an average weight of 19g. The sherds from the pits are much larger than the pottery from the ditches, which has a mean sherd weight of 12g, a weight much closer to that expected on a middle to late Iron Age site. This suggests once more that larger sherds may have been selected for placement in pits and that this material was not disturbed by later reworking.

Catalogue of illustrated pottery

Fig. 39

- 1. Form A1, fabric Q2. Upright rim, slack shoulder. Open vessel form. Ditch 30 (2735). Period 6
- **2.** Form A2, fabric Q1. Upright rim, slack shoulder. Open vessel form. Pit Group 11, pit *3829* (*3828*). Period 2
- **3.** Form, A5, fabric Q1. Upright rim, slack shoulder. Open vessel form. Pit Group 9, pit *3666* (*3665*). Period 2
- **4.** Form A6, fabric Q5. Upright rim, slack shoulder. Open vessel form. Ditch 8 (*3541*). Period 2
- 5. Form C, fabric Q4. Upright rim, no neck. Ditch 9 (3915). Period
- Form D1, fabric Q1. Outward flared rim, slack shoulder. Ritual pit 3981 (4094). Period 1.2
- 7. Form, B2, fabric, Q4. Upright rim, angular dog-legged shoulder. Pit Group 8, pit 3960 (3961). Period 2
- **8.** Form D2, fabric Q5. Outward flared rim, slack shoulder. Pit group 6, pit *3456* (*3455*). Period 1.2
- 9. Form F2, fabric Q3. Short everted rim, rounded shoulder and body. Pit group 7, pit 3803 (3804). Period 1.2 Fig. 40
- **10.** Form G5, fabric Q2. Round-bodied vessel. High rounded shoulder, everted rim. Pit *3475* (*3476*). Period 1.2
- **11.** Form H2, fabric Q1. Straight outward flaring neck, high rounded shoulder. SFB Structure 5 (2269). Period 4
- **12.** Form H3, fabric Q1. Straight outward flaring neck, high rounded shoulder. Pit group 4, pit 2371 (2372). Period 1.2
- **13.** Form J1, fabric Q4. Straight outward flaring rim, high angular shoulder. Pit group 5, pit *2373* (*2374*). Period 1.2

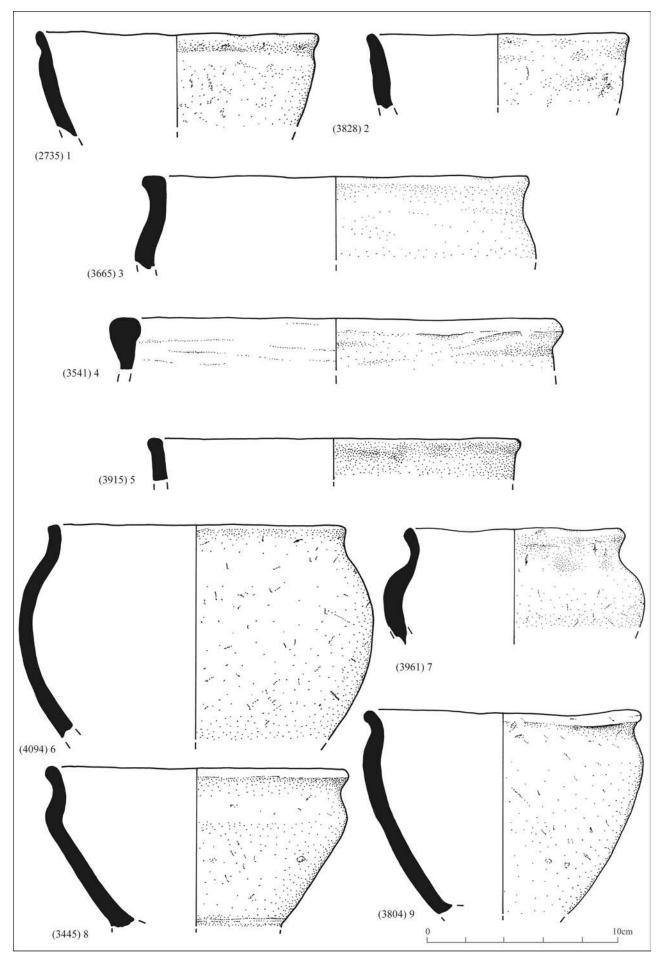


Figure 39 Middle to late Iron Age pottery rim/shoulder forms by type (Nos 1–9). Scale 1:2

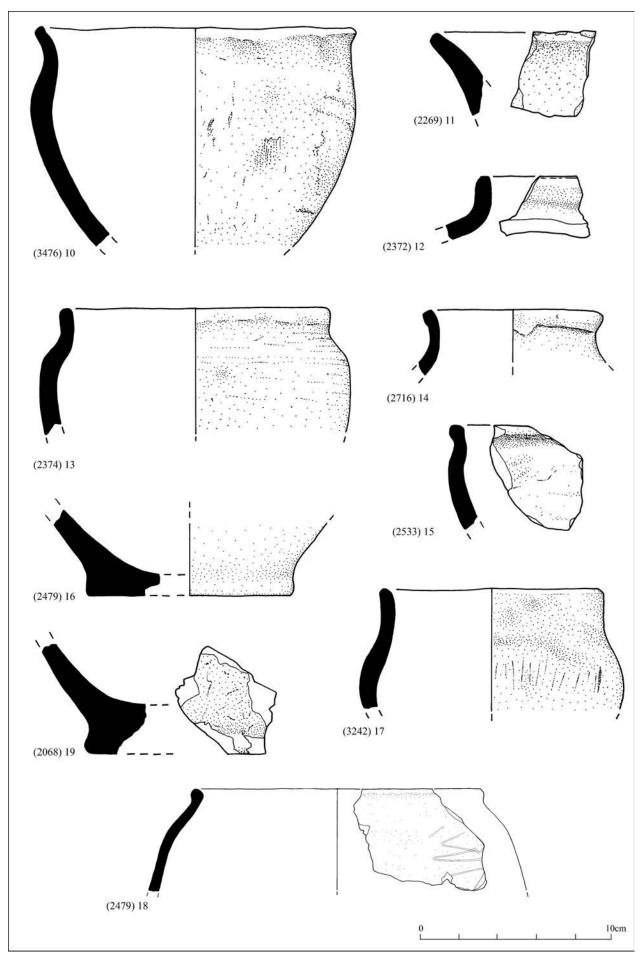


Figure 40 Middle to late Iron Age pottery rim/shoulder forms by type (Nos 10–19). Scale 1:2

- **14.** Form K1, fabric Q2. Ovoid or rounded slack-shouldered vessel, with no rim. Pit Group 1, pit 2027 (2716). Period 1.2
- **15.** Form N2, fabric Q4. Fish bowl, short neck, everted rim. Pit Group 5, pit *2532* (*2533*). Period 1.2
- **16.** Form 2, stepped base. Fabric Q1. Pit Group 12, pit 2477 (2479). Period 2
- 17. Form R2, fabric Q2. Cordoned-necked open vessel. Pit Group 13, pit 3245 (3242). Period 2
- **18.** Form T2, fabric Q1. Tall, straight-sided vessel. Pit Group 12, pit 2477 (2479). Period 2
- **19.** Form 3, pinched-out simple base. Fabric Q2. Pit group 2, pit 2067 (2068). Period 1.2

Fig. 41

- **20.** Fabric Q5. Pit *3292* (*3306*). Period 1.2
- **21.** Fabric Q5. Pit *3292* (*3306*). Period 1.2
- **22.** Fabric Q2. Pit Group 1, pit 2027 (2029). Period 1.2
- **23.** Fabric Q2. Pit Group 1, pit 2027 (2029). Period 1.2
- **24.** Fabric Q3. Ditch 8 (3755). Period 2
- **25.** Fabric Q4. Ritual pit *3981* (*3988*). Period 1.2

Pottery from graves

- 26. Fig. 30. SF 33. This is a miniature wheel-made grey ware wide-mouthed jar (rim diameter of 11cm) with an S-shaped profile and a double groove on the shoulder. The fabric is a very sandy coarse ware, with no other visible (×10 magnification) inclusions. Although unsourced, it is almost certainly of local manufacture. Most of the vessel was retrieved (38 sherds, weighing 0.333kg) and a complete profile restored. This is a common early (mid-late-1st-century) Roman form; a similar although slightly earlier example can be seen at Hinxton (Hill *et al.* 1999, fig. 13, 1). Burial 3, Period 2
- Fig. 30. SF 34. This is a small wheel-made platter (rim diameter 27. 15cm) with straight sides — angled slightly outwards angled base and a discrete foot ring. The rim had been deliberately damaged with (at least) five very small holes drilled near the edge of the rim which have then been 'broken open'. It seems likely that this damage is a form of 'ritual killing' tradition often seen in burial rites - where the vessel is damaged to make it useless for its original function (Lyons and Tester forthcoming). It is a Camulodunum (Hawkes and Hull 1947) form 1. This vessel was almost complete, and was found in two pieces (weighing 0.238kg) which have since been restored. The fabric is a dense, hard, slightly sandy grey ware, with sparse grey flint and white quartz inclusions. The vessel may have been burnished originally. The inside surface of the platter shows clear signs of wear and had, therefore, been utilised for domestic purposes before being deposited. The platter is of Gallo-Belgic inspiration but not produced in a classic Central Gaulish Terra Nigra (Tomber and Dore 1998, 11) fabric and is, therefore, likely to be of relatively local production. Some dishes and shallow platters of Gallo-Belgic type are known to have been copied by potters in East Anglia, particularly at Colchester (Hawkes and Hull 1947), West Stow (West 1990) and Wattisfield (Moore 1936). Platters of this type have been found in Cambridgeshire previously (Hull and Pullinger 2000, 141 and plate LXXII, no. 408) and widely identified throughout south-east England (Rigby 1988, 27, fig. 17 GB1A and GB 1B), where they have been closely associated with pre-Conquest oppidum sites. They are usually dated between the late Augustan (AD 10-14) and Tiberian periods (AD 14-37). They also occur in post-Conquest deposits. Burial 3, Period 2
- Fig. 30. A pedestal base (8cm diameter) from a substantial grey ware beaker (20 sherds, weighing 0.220kg). The fabric is a wheel-made, very hard sandy grey ware with frequent black grog inclusions. The exterior surface of the vessel is burnished and fume marks (probably from the firing process, possibly in a clamp kiln) are visible. A similar vessel was found at the nearby site at Hinxton (Hill *et al.* 1999, fig. 13, 2), although this was slightly larger (with a basal diameter of 11.6cm) and probably also earlier in date. This vessel is consistent with a date of the mid 1st century AD. Cremation 3669, Period 2
- 29. Not illustrated. The other pot found in cremation 3669 was a vessel base (7.5cm) with a slight foot ring from a grey ware globular jar (40 sherds, weighing 0.333kg). The fabric is wheelmade sandy grey ware with occasional large angular flint inclusions. Although the core of the vessel has been fired to a grey colour the outer margins are orange below the grey/black

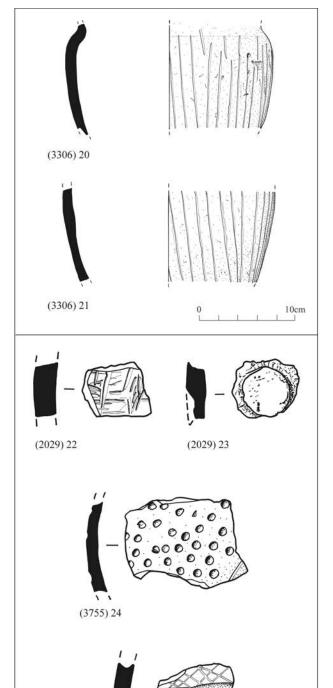


Figure 41 Middle to late Iron Age pottery decorative motifs (Nos 20–25). Scales as indicated

(3988) 25

slip. The surface of the vessel has been slipped in a very micaceous coating, probably for its decorative properties. Although much of this vessel has been destroyed (no evidence for carination or cordoning survives), it would also appear to be consistent with a mid (to late)-1st-century date. Cremation 3669, Period 2

5cm

30. Fig. 31. The lower half (46 sherds, weighing 1.508kg) of a shell-tempered (S1) hand-made reduced ware flat-based jar was recovered from a pit that also contained cremated human

- remains. The upper half of the vessel had been lost during later medieval activity. The jar fabric and manufacture is late Iron Age in character, although not enough remains of the vessel to assign it to a specific type. Cremation pit 3540 (3539). Period 2
- Fig. 26. Wide-mouthed, recessed rim (?lid seated), butt-beaker (rim diameter 18cm) of which a significant proportion was retrieved (37 sherds, weighing 0.472kg), although the base was missing. The vessel has a raised cordon just above the shoulder below which is a wide band of rouletted dots, with a flatter cordon below. The vessel is hand-made — to a high standard but with great variations in the thickness of the vessel wall. The fabric is a hard, quite soapy, grey ware with frequent very small white quartz and silver mica inclusions. The vessel has an external burnish which gives it a reddish-brown tinge. This is similar (although not identical) to a vessel published from the Burgh Iron Age and Roman enclosure in Suffolk (Martin 1988, 50 and fig. 27, 230), which is, in turn, similar to Camulodunum form 113, dated to the 1st century AD. The decoration, however, is similar to another example found at Burgh (fig. 22, no. 104). It is probable that this vessel was produced at Colchester (Camulodunum) in Essex. This vessel has been deliberately ruined, or 'killed', by having a post-firing hole drilled in the middle of the vessel wall. Ditch 12 (4036), Period 2
- **32.** Fig. 32. A wheel-made, small (rim diameter 12cm), high-shouldered medium-mouthed jar made from a hard grey ware sandy fabric of unsourced but probable local origin. Almost all of the vessel was retrieved (11 sherds, weighing 0.380kg). It probably dates from the later 1st century AD. Burial 13 (*3810*), Period 2

Metalwork

by Holly Duncan

Copper-alloy bracelet

A bracelet found with Burial 19 had been placed on the chest of the body (Fig. 32). The inclusion of bracelets in pre-Conquest native burials or cremations, while not unknown, appears to form a minor component of the late Iron Age burial rite and also occurs occasionally with early Romano-British inhumations (Philpott 1991, 128). This type of bracelet can be equated with Cool's group VII, a type in use throughout the Roman period (Cool 1983, 140). There are, however, occasional finds of similar bracelets from contexts which are thought to be pre-Roman (Kirk and Case 1950, 104; Philpott 1991, 143). Since SF 68 was found on the chest, rather than on an arm, it may have been an 'unworn' ornament. Studies of worn and unworn ornaments in Roman period suggest that the inclusion of 'unworn' ornaments in burials was a late practice, the majority of burials containing unworn ornaments belonging to the 4th century AD (Clarke 1979, 360; Philpott 1991, 147-9). Similar studies have not been carried out for the late Iron Age/Roman transitional period, and therefore the significance of the positioning of this bracelet is uncertain.

SF 68 Fig. 32. Bracelet. Copper alloy. Penannular bracelet, plano-convex cross section. Body plain, slightly swelled terminals decorated with transverse grooves, one terminal having four grooves and one having five grooves. The grooves do not continue on the reverse surface. Bracelet currently measures 67mm by 62mm. Width of hoop 5.4mm; thickness 4.2mm. Burial 19 (3941), Period 2

Iron and copper-alloy brooches

Only one fragmentary Roman brooch was recovered, and was found unstratified. Brooches are an important marker of the acceptance of Roman culture (Evans *et al.* forthcoming) and are commonly found in late Iron Age and early Roman sites in the region (Evans *et al.* forthcoming): their scarcity at Duxford, despite metal detecting, is significant. Another object which may have

been associated with the wearing of brooches is a lugged iron ring with attached chain (SF 60). This ring is comparable to one found associated with a pair of iron La Tène III developed Aylesford brooches accompanying a cremation at Harlington, Bedfordshire (Duncan 2001, 32–5 and fig. 9), and is thought to have served as a linking ring on a set of jewellery.

- SF 5 Not illustrated. **Brooch**. Copper alloy. Hod Hill type, dating from the Roman Conquest (AD 43) with use mainly limited to the Claudio-Neronian period. Although incomplete, this brooch shares some of the characteristics of Olivier's early transitional form (Olivier 1988, 47–8). Metal detected
- SF 60 Fig. 42. Linking ring for paired brooches? Iron. Annular, flat ring, with three projecting perforated lugs, each carrying the remains of a chain of small oval links. Also associated with this ring was a further portion of chain links and four fragments of narrow rectangular strip (5mm width), two of which join. Ring diameter 27mm. Metal detected

Iron knives

The identification of form of the knife that may have derived from Burial 2 (SF 32) is tentative, although it is similar to an example found in King Harry Lane grave no. 455 (Stead and Rigby 1989, fig. 179). Knives of this type, with wide triangular blades and a short handle at one corner, have also been found in La Tène III or early Roman burials across Britain (such as those at Snailwell (Cambs), Walmer (Kent), Owslebury (Hants), Welwyn Garden City and King Harry Lane (Herts) (Stead and Rigby 1989, 105), also Maiden Castle in Dorset (Wheeler 1943, 281, fig. 92.8) and Biddenham Loop, Bedfordshire (Duncan 2008a). On the continent they occur from the middle of the 1st century BC and continued into the 1st century AD. Various uses have been ascribed to them, including razors and saddlers', furriers' or cooks' knives.

A second iron knife blade was retrieved from a Period 2 pit. This example has a convex back and conforms to Ottaway's back form D knives (Ottaway 1992, 572). Knives of this form have a long history, occurring with no discernable change in the Roman period (Manning 1985, 115 type 14) and in early and middle Anglo-Saxon contexts, and continuing from the mid-9th into the 14th century (Ottaway 1992, 572; Goodall 1980, 82 type I). Although a long-lived type, there is no reason to believe that this item was intrusive in its pit fill.

- SF 32 Fig. 34. Triangular **knife**. Iron. Blade triangular in plan, with one corner broken off. Apex of triangle bent to side, forming a short handle. In 4 joining pieces. Length 121mm; width 76mm; thickness of blade 3mm; of handle 6mm. Pipe trench (*3037*), Phase 7. Associated with Burial 2, Period 2
- SF 70 Not illustrated. Knife. Iron. Whittle tang knife, incomplete and blade damaged. Tang set more or less on midline of the blade. Back convex, curving down to meet tip. Tang incomplete. Blade has been partially broken at about mid-point and tip portion twisted at right-angles to rest of blade. Ottaway type D. Length *c*.129mm; width 23mm. Pit 4048 (4047); Period 2

Iron wire

The wire associated with Burial 13 was recovered from the spoil overlying the head/chest area of the interment and may be intrusive.

SF 57 Not illustrated. Circular-sectioned wire. Iron. Length 35mm; diameter 3mm. Burial 13 (3810), Period 2

Iron nail

A partial corroded iron nail was found adjacent to the skeleton in a middle Iron Age burial. As it was the only nail found in the grave it is unlikely to be associated with a coffin or other funereal furniture.

SF 56 Fig. 10. An incomplete nail. Iron. The flat sub-circular head has a diameter between 5mm and 7mm and the remains of the square shaft are 23mm long and taper between 5mm and 3mm. The tip of the nail is missing. Burial 12 (3801), Period 1.2

Iron object

The iron plate recovered from a trampled layer in the base of ritual pit 3981 was in situ and therefore of Iron Age date. Although no direct parallels for this object have been identified it may be half of a buckle plate or similar fitting.

SF 76 Fig. 11. Plate. Iron. A thin (1mm) iron plate that has been crudely shaped into an irregular rhomboid (22mm × 18mm × 22mm × 17mm). In the centre of the plate two iron rivets remain in situ. (4103), Period 2

Glass beads

by Holly Duncan

Burial 17 was accompanied by two beads recovered from the head/neck area. The position of the beads suggests that they may have been 'worn' personal ornaments. The beads, one a monochrome blue annular bead (SF 58) and the second an annular blue bead with white zig-zag trail (SF 59), are both of long-lived forms, first occurring in the Iron Age and continuing into the 5th and 6th centuries AD. Annular blue beads in particular offer very little help for dating purposes (Guido 1978, 68). SF 59 conforms to Guido's group 5a. The waves or trails on the earlier Iron Age beads tend to be carefully and evenly applied, while the Roman and later period beads are slightly larger in diameter (about 16mm or so in diameter) with haphazard waves and less careful marvering (Guido 1978, 63). The latter characteristics apply to SF 59, suggesting given its context that this bead may belong to the Roman period.

- SF 58 Fig. 35. Bead. Glass. Annular bead in translucent(?) blue glass. Surfaces weathered. Height 7.5mm; diameter 15.5mm. Context 3879, Burial 17 (3881), Period 2
- SF 59 Fig. 35. Bead. Glass. Annular (approaching bi-conical) bead of blue (originally translucent?) glass with haphazard white zig-zag trail, irregular marvering. Glass weathered and surfaces iridescent. Guido (1978, 68) type 5a. Height 8.5mm; diameter 14.4mm; diameter of perforation 6.7mm. Burial 17 (3881), Period 2

Worked bone objects

by Holly Duncan and Ian Riddler

Toggle

A bone toggle from a cremation pit bears similarities in both form and decoration to a group of artefacts from Danebury (Sellwood 1984, 378-80; Cunliffe and Poole 1991, fig. 7.30). The Danebury assemblage exemplifies the middle to late Iron Age toggle, which can be distinguished from later forms (cf. Greep 1998, 283). Toggles of this period are made of bone or antler in equal measure and include a circular perforation cut through only one side of the object. Antler examples are also hollowed axially. They are usually regarded as fasteners, although their precise function is unclear. A survey of central European examples of middle Iron Age date showed a strong association with the graves of females, and it was suggested that they may have been used as small storage cylinders, equipped with wooden stoppers at either end, containing powders for colouring the body (Kisfaludi 1997, 79–80).

SF 38 Fig. 31. Toggle. Antler cylinder with single lateral perforation made from a shaft of a hollowed antler tine, sawn either end. Ovoid in section. The ends of the cylinder are decorated with a pair of circumferential grooves set 2mm apart, forming a border around two-thirds of the cylinder. Within the border, ring-and-dot motif is laid out in a zig-zag pattern. The surface containing the lateral perforation is currently undecorated. It is difficult to tell whether the grooves may have originally circumscribed the cylinder, and were worn away, or whether no decoration was applied to this surface. Height 37.6mm; width 29.3mm; thickness 33.7mm; diameter of perforation 7mm. Cremation pit 3540 (3160), Period 2

Bobbin

A single item (SF 72) identified as a bobbin is probably of late Iron Age date. This hollowed long bone is cut at both ends and has a transverse perforation at the mid-point. The surface of the bone is highly polished and remains of several transverse grooves are visible to one side of the central perforation. Centrally perforated sheep or goat metapodials, usually retaining articular ends, found in Iron Age deposits are thought to have carried spun yarn at some stage between spinning and warping (Wild 1970, 34; Taylor and May 1996, 353–7; Greep 1998, 282). The polished appearance of SF 72 may have resulted from such use. An object of comparable form to SF 72, from Castleford in Yorkshire, is thought to have had a similar function (Greep 1998, 283 and fig. 123, no. 179).

SF 72 Fig. 11. **Bobbin**. Bone. Incomplete. Hollowed ovicaprid metacarpus midshaft, both ends cut and worn smooth, one end partially split lengthwise. Central, transverse perforation (diameter *c.*4mm). Anterior surface highly polished, posterior surface less so. Transverse grooves visible along surviving edge of broken end. Length 62mm; width (mid-point) 10mm. Pit 3981 (4095), Period 1

Needle

The form of the bone needle from cremation 3540 can be closely paralleled by examples from Danebury, the majority found within late Iron Age deposits (Sellwood 1984, 380–82; Cunliffe and Poole 1991, fig. 7.31 nos 3.278–3.280). There are examples of Roman bone needles with pointed heads, but these differ in the form of hole and lack the slot above and below the eye. The surviving length suggests that this needle would not have been used in sewing cloth, but could have been a 'packing' needle for sewing up parcels in an outer covering such as canvas for storage or transport (Groves 1973, 17–18).

SF 51 Fig. 31. Needle. Bone. Narrowed pointed head with elongated eye with groove above and below. Shank broken shortly below eye. Ovoid in section, surfaces polished. Length 33.7mm. Cremation pit 3540 (3539), Period 2.

Tool

A classic Iron Age 'bone gouge' was found that is highly polished with an oblique tip: this surface patina suggests repeated use. A detailed study of the wear patterns on a group of fifty-five of these implements from Fiskerton led to the conclusion that they were bone spearheads, but others have interpreted wear traces as an indication of their use in weaving, while acknowledging that the majority were almost certainly hafted and originally included wooden shafts (Olsen 2003; Britnell 2000, 185). The object type first occurs in the late Bronze Age and was in use throughout the Iron Age, as evidenced by the sizeable collection from all phases at Danebury (Cunliffe and Poole 1991, 359 and fig. 7.32).

SF 18 Fig. 37. Pointed implement. Bone. Gouge type object, incomplete. Made from a sheep-sized long bone, proximal end removed at an oblique angle, forming a characteristic pointed end. Surfaces polished. Greater wear on one edge of tip, creating a slightly sinuous outline. Broken *c*.30mm above tip. Surviving length 62mm. Pit 2477 (2479), Period 2

Scoop or scraper

The function of the object (SF 20) from SFB Structure 4 is uncertain. Although the surface is root etched, polish is still evident over most of the surviving outer surface. The rounded point at one end is reminiscent of the gouge type pin-beaters, although lacking the extensive wear and polish visible on SF 18. The size of the object and its rounded ends recall an implement from Green Low, Derbyshire, fashioned from a cattle-sized rib bone (Thurnam 1871, fig. 136). A smaller and neater version of the object type came from Potterne (Seager Smith 2000, fig. 93.71). Closer to hand, an implement from Greenhouse Farm, Fen Ditton, has a similar terminal and was used either as a scoop or a scraper; a similar function can be suggested for this implement, although the closest parallel is provided by a scoop from Jarlshof, Shetland (Riddler forthcoming; Hamilton 1956, fig. 8.6). Although recovered from the fill of a SFB, the condition of SF 20 and its association with a mixed assemblage of pottery, including fabrics dated to the late Iron Age, provide a good indication of its date.

SF 20 Fig. 51. Incomplete scoop or scraper made from a cattle-sized tibia midshaft split longitudinally with its articular ends removed. Surface has traces of polish over most of the eroded and root-etched exterior surface. One end has been worked into a rounded point; opposite end damaged. Length 165mm. SFB Structure 4 (2495), Period 4

Object

The technology of working of an incomplete bone object is of interest, with unworked sections of bone left to either side of the centre, a similar method to that seen with an unfinished implement from Greenhouse Farm, Fen Ditton (Riddler forthcoming).

SF 77 Fig. 38. A possible incomplete or discarded object. Bone. It comprises a hollowed bone with two roughly executed circumferential grooves, one deeper than the other. Dog gnawing marks are visible on both broken ends. The lateral grooves define a section of midshaft a little shorter than that used for the bobbin (SF 72) described above. 93mm long, 8mm wide and 7mm deep. Pit 3208 (3207), Period 2

Archer's wrist guards

Two perforated bone plates (SF 71 and SF 67) have been identified as archer's wrist guards based upon similarities to the bone wrist guard found in late-1st-century deposits at Gorhambury, St Albans (Wardle 1990, fig. 141, no. 973). A second parallel was found in deposits of middle Iron Age date from Stagsden, Bedfordshire (Gentil 2000, 103 and fig. 60, no. 138). The concave sides can also be paralleled by a similar object from Lakenheath (Briscoe 1949, 109 and pl. 17b). Several examples are known from Cambridgeshire sites, mostly within contexts of early and middle Iron Age date. Nearly all of them are made from sections of cattle-sized rib and have two drilled perforations (Evans and Hodder 2006, fig. 5.93.10; Riddler forthcoming).

Fig. 11. Wrist guard. Bone. Rectangular plate formed from a section of cattle-sized rib, sawn at either end, with two circular holes (diameters 5mm and 5.6mm) set 30mm apart at centre of plate. Damaged along edges but with lightly concave sides. Some wear around edges of perforations. Elliptical in section. Length 61.4mm; width 28.3mm; thickness 7.3mm. Pit 3981 (4085), Period 1

SF 67 Fig. 25. Wrist guard? Bone. Rectangular plate, formed from a section of rib, sawn at either end, with two circular holes (diameter 4.8mm) set 16mm apart at centre of plate. Damaged along one edge in addition to two parallel knife cuts. Some wear

around edges of perforation. Elliptical in section. Length 49.6mm; width 37mm; thickness 7mm. Pit 3960 (3961), Period 2

Baked clay and stone objects

Baked clay slingshot

by Holly Duncan

Slings were in common use throughout Britain on the eve of the Conquest (Greep 1987, 193). Finds of clay slingshot, such as SF 19, all exhibiting the same biconical form (Greep 1987, 193; Cunliffe and Poole 1991, 370; Elsdon and Barford 1996, 337–40), have been found from numerous middle to late Iron Age sites. Regional parallels include single examples from Iron Age deposits at Biddenham Loop (Duncan 2008b), Ruxox, Bedfordshire (Wells *et al.* in prep.) and from Fengate, Cambridgeshire (Elsdon and Barford 1996, 337–40). The use of slings need not solely be associated with warfare; the weight of many of these fired clay projectiles suggest that the hunting of small mammals or fowl may have been a more likely use.

SF 19 Fig. 14. Bi-conical slingshot of rounded cross section. Baked clay with small well-sorted quartzite and mica grains and occasional larger calcareous inclusions visible on surface. Surfaces smoothed and blackened on one side. Length 50.4mm; diameter 28.9mm; weight 39.5g. Pit 2081 (2080), Period 1

Baked clay bakestone

by Holly Duncan

A baked clay slab is thought to have been a bakestone. Finds of similar slabs are not uncommon on late Iron Age sites, examples being known from Baldock (Stead and Rigby 1986, 187–8), Verulamium (Stead and Rigby 1989), Stagsden (Gentil and Slowikowski 2000, 88–9) and Biddenham Loop (Slowikowski 2008).

SF 75 Not illustrated. Bakestone. Ceramic. The straight edge of a clay slab (length 58mm × width 31mm × depth 28mm) with slightly blackened obverse surface. Pit 2477 (2479), Period 2

Ouernstones

by Holly Duncan

A greensand rotary quern (SF 80) and a Puddingstone Iron Age bun-shaped quern (SF 25) were found in a Period 2 pit and a Period 4 structure respectively. These objects were used to grind cereals for domestic consumption. Both these stones would have been expensive items traded into the site, which may partially explain why one of these objects was ?curated in a Saxon deposit.

Flat rotary querns such as SF 80 were a post-Conquest development of the British quern industries, but one that had already started by the late 1st century (Welfare 1985, 157). The thickness of the stone suggests that this quern may belong to the earlier part of this development (Peacock 1987, 69–70). Although the stone type is not commonly encountered in Cambridgeshire, examples are known from Northamptonshire and Bedfordshire (Peacock 1987, 78–80).

Bun-shaped querns such as SF 25 are recovered from dated contexts ranging from the late Iron Age to the end of the Roman Britain (King 1986, 71), though most of the examples pre-date AD 200. Although King suggests that production may have started early in the 1st century AD and implies that their use continued throughout the Roman period, other authorities believe that production might have ceased by the mid-2nd century (Buckley and Major 1983, 76).

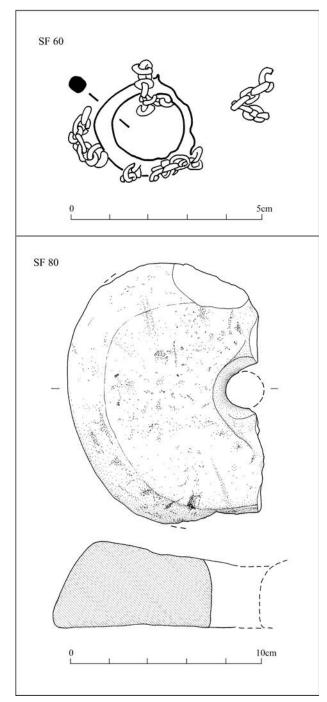


Figure 42 Objects recovered from Period 2 features other than graves. Scales as indicated

SF 80 Fig. 42. Quern. Lower greensand. About half of an upper stone from a flat rotary quern. Grinding surface slightly convex and worn, tapering feeder hole (diameter c.35mm). Skirt slightly bevelled. Possibly from Lodsworth quarry in West Sussex (Peacock 1987). Estimated diameter 360mm; maximum thickness 94.2mm. Pit 4048 (4047), Period 2

SF 25 Fig. 52. Quern. Hertfordshire Puddingstone. About one-third of a bun-shaped quern. Retains one-third of funnel shaped feeder, worn grinding surface and diagonal handle hole. The handle hole has broken through the external circumference, which has also suffered damage along the length of its surviving edge. Max diameter of central feeder 83mm, tapering to c.22mm; estimated external diameter 375mm; height 114.4mm. SFB Structure 5 (2270), Period 4

Hammerstone

A hammerstone came from Burial 19. This archaeological term is used for an object utilised as a prehistoric hammer, to create percussion on another object. A hammerstone is likely to be a rounded cobble of quartzite or other medium-grained material, and to weigh between 400g and 1000g. Hammerstone use is identified by one or more edges showing battering damage.

SF 69 Fig. 32. Hammerstone. Quartzite. It measures 94mm long by 83mm wide, is 64mm deep and weighs 0.614kg. Burial 19 (3941); Period 2.

VI. Human skeletal remains

Inhumations

by Corinne Duhig

Material

A maximum of thirty-five individuals are represented, although it is probable that many of the smaller contexts derive from other, more complete, graves. Bone condition is reasonable, with only slight erosion and root marking, but there is considerable breakage and loss.

Methodology

Table 18 shows the whole assemblage organised by burial and feature number. Age, sex and stature have been determined where possible and all pathological conditions noted, although the breakage and loss mentioned above has reduced the available information. Adherent soil, some of it concreted, has hampered examination and had to be removed in some cases with probes. Preservation stage 1 denotes just a bone or two, while stage 5 is complete apart from a few small bones: five skeletons are at stage 4, seventeen at stage 3, eight at stage 2 and twenty-four at stage 1.

General methods used are those of Cho *et al.*, Stewart and Ubelaker; estimation of age of the foetal/neonate individual uses the methods of Stewart, Fazekas and Kosa (Cho *et al.* 1996; Fazekas and Kósa 1978; Stewart 1979; Ubelaker 1989).

Demography (Table 19)

Immatures

Of the thirty-five individuals, ten are immature (skeletal maturity defined as the age when growth ceases and third molars are fully erupted): two are teenagers of sixteen years, three are young children of two to three years, two are newborns, one is a full-term foetus or newborn, one is a late-stage or full-term foetus and there is a single bone from an immature individual. They represent 18.5% of this assemblage. This figure is low when compared with modern undeveloped countries (30% average, compare early Anglo-Saxons at an average of 32%) but most deaths in the modern immature group are of foetuses and neonates, which are usually absent in archaeological cemeteries. It may be assumed, therefore, that, historically, the stillborn and neonates were usually disposed of outside archaeological cemeteries and that the shortage of immature burials in the archaeological record is more likely to relate to cultural practice than demographic factors. In this case, these small remains might have been buried in another location or might not

Burial	Preservation stage	Sex	Mean age	Age range	Stature
Burial 1	3	Male	25.0	17–35	173.1 ± 3.29
Burial 2	3	Male	35.2	23-57	167.5 ± 2.99
Burial 3	3	Male	46.0	35-57	166.6 ± 3.27
Burial 4	4	Female	40.0	35–45	155.0 ± 3.55
Burial 5	3	Unknown	40.0	35–45	N/D
Burial 6	4	Female	Adult	Adult	156.6 ± 3.55
Burial 7	3	Male	30.0	25–35	171.8 ± 2.99
Burial 8	3	Male	45.6	27–66	172.5 ± 2.99
Burial 9	4	Male	35.2	23-57	166.1 ± 2.99
Burial 10	3	Female	36.5	25-48	161.9 ± 3.55
Burial 11	3	?Male	Adult	Adult	N/D
Burial 12	3	Male	28.7	21–46	171.6 ± 3.27
Burial 13	4	Male	Adult	Adult	166.1 ± 2.99
Burial 14	1	Unknown	16.0	15-17	N/A
Burial 15	2	?Male	Adult	Adult	N/D
	1	Unknown	3.0	2.5-3.5	N/A
Burial 16	2	Female	Adult	Adult	N/D
	1	Unknown	2.5	2–3	N/A
	2	Unknown	Adult	Adult	N/D
Burial 17	3	Male	30.0	25-35	168.7 ± 3.27
Burial 18	3	Female	30.0	25-35	152.8 ± 3.72
Burial 19	3	Unknown	16.0	16.0	N/A
Burial 20	3	Male	30.0	25-35	176.0 ± 3.29
Burial 21	4	Male	25.0	23-35	167.6 ± 2.99
Burial 22	2	Male	21.0	18-25	N/D
Burial 23	3	Female	30.0	25-35	N/D
Burial 24	3	Female	21.0	18-25	154.0 ± 3.57
Ditch 13	1	?Male	Adult	Adult	171.1 ± 3.27
Ditch 28	1	Unknown	Adult	Adult	N/D
	1	Unknown	Adult	Adult	N/D
	1	Unknown	Adult	Adult	N/D
Pit <i>3960</i> (cut by Burial 20)	1	Unknown	Adult	Adult	N/D
Pit 3981	3	Unknown	8.5 fm	8–9 fm	N/A
Pit 4057 (over Burial 21)	1	Unknown	Adult	Adult	N/D
Trackway 3030, 3193	2	?Female	27.5	25-30	N/D
Trackway 3030, 3193	3	Male	Adult	Adult	N/D
Unstratified	1	Unknown	Adult	Adult	N/D

fm = foetal months

Table 18 Human bone age, gender and stature

	n	Minimum	Maximum	Spread	Mean	Standard
					(*median)	deviation (SD)
Duxford females	5	152.8	161.9	9.1	156.1	3.2
Duxford males	12	166.1	176.0	9.9	169.9	3.0
Duxford all	17	152.8	176.0	23.2	165.8	7.0
Jesus Lane females	7	152.0	163.0	11.0	157.0	
Jesus Lane males	15	161.0	178.0	17.0	169.0	
Foxton females		155.0	163.0	8.0	159.0*	
Foxton males		168.0	175.0	7.0	171.0*	
Poundbury females	360	150.9	171.5	20.6	160.9	4.2
Poundbury males	341	148.2	185.2	37.0	166.2	6.0
Average SDs for height						6.35-7.11

 $fm = foetal\ months$

Table 19 Human bone stature and gender comparisons (in cm)

have been subject to formal deposition at all. Unlike the adult bones at this site, however, the bones of the foetuses, neonates and small children are quite eroded, implying

that taphonomic factors could have removed some of these burials.

Sex

This can be determined for more than half of the adults (54.5%); of these, eight are female or ?female and sixteen male or ?male. The sex ratio is therefore exactly 2:1 in favour of males, an unlikely proportion. There might be more females in the many unsexed skeletons, because there is some relationship between small size and loss of demographic evidence owing to fragility of the bones, and we know that the females in this assemblage are significantly smaller than the males (see Stature, below). The unsexed 'skeletons' are mostly represented by only one or two bones, however, and, as suggested above, might well be part of other skeletons. Allowing for taphonomic effects and without any cultural reason, the imbalance is probably an artefact of the small sample number.

Unusually, in both sexes, there are far more definite than uncertain skeletons (male: 13 and 3; females: 7 and 1), and the unsexed adults are not ambiguous in sexual features (these features are merely poorly preserved or lost). Thus, the sexual dimorphism in this group is considerable.

Age

Age can be determined for slightly more than half the adults: six females, eleven males and one with sex not determined. The peak of deaths is in the 'adult 2' band, which is not unusual in the archaeological record. Males dominate the younger bands but this cannot be considered significant as there is an excess of males, as discussed above, and the sample size, both total and particularly when divided, is too small. The maximum ages are low, however: the two oldest individuals, both male, are in the ranges 27–66 (Burial 8) and 35–57 years (Burial 3), mean 45.6 and 46 years. Even were these individuals at the maximum for their age ranges, they are not of particularly advanced age. The oldest woman (Burial 4) is approximately five years younger, at 35-45 years. As with the sex determinations, however, the sample size is too small to give significant results.

Stature

Stature can be calculated for only half of the adults (53.1%) because of breakage and erosion of the ends of long bones. The details are shown in Table 19. The range of heights within each sex is narrow but sexual dimorphism is great in this respect, with no overlap between the heights of males and females (albeit only five females were sufficiently well preserved for height to be estimated); the result is that the spreads and standard deviations for each sex are rather small but the standard deviation for the whole population is within the normal range. Male heights tend to have a greater spread than female, because the male physiology is more vulnerable to environmental influences, and while this is found here it is much more noticeable in the comparator populations discussed below.

Local populations of similar date or even of the Roman period tend to be small or damaged samples, and little truly comparable data is currently available, but statures from the Roman-period Jesus Lane and Foxton cemeteries have been included in Table 19, as has Poundbury, owing to its large sample size (Alexander *et al.* 2004; Molleson 1993, 167–8). The standard deviations of the Poundbury samples, the only ones available, are even smaller than

Duxford (presumably a result of the large sample size), although the spread is much greater, particularly in the males. The Cambridgeshire samples are more similar to one another than to Poundbury; the only two statures from the many skeletons from Godmanchester are within the ranges 153.0 for a female and 168.9 for a male. By contrast, the average statures for early Anglo-Saxon populations from this region are higher by several centimetres: females 163.4 and males 175.5 (Duhig 1998; Duncan *et al.* 2003; Taylor *et al.* 1999).

The skeletons are mostly gracile in build in life and would have appeared to us as rather short, slight people, although skeleton in Burial 13 had pronounced muscle markings on the femora, perhaps shown in life by heavy musculature but possibly produced by over-use of muscles which were not especially developed.

Pathology

None of the immature individuals had any pathological changes in their skeletons, but the preservation of all but one (Burial 19, one of the teenagers) was so poor that much information could have been lost. Many of the adults had arthritic changes in the skeleton (43.2%). This is at the higher end, though within the range, of prevalence in archaeological cemeteries, and is interesting in that arthritic conditions, some of considerable severity, were found even in the youngest adults, such as the skeletons in Burial 24 (a female of approximately 21 years of age) and Burial 1 (a male of 25). The arthritic changes are almost exclusively in the spine and include both the effects of degenerative arthritis and Schmorl's nodes, which indicate heavy weight-bearing activity especially in youth. Skeletons within Burials 11, 13 and 15 (males of indeterminable age) have arthritis in their hips and shoulders (and hands in the case of Burial 11) as well as in the spine, perhaps denoting occupational stresses on the joints or perhaps merely that these are three older men; the spinal arthritis noted in Burial 13 is very advanced and several groups of vertebrae are fused.

Dental disease has been calculated for the adults and Burial 19 (the only immature with teeth). More than a third (37.8%) of these individuals had at least one dental disorder, such as ante-mortem tooth loss, alveolar resorption (resulting from gum disease), caries and abscesses, and most had two or more disorders, a high rate compared to that of the succeeding local population of early Saxons and particularly so given that there are no persons of advanced age in this population. This conforms to the pattern reported by Brothwell of increasing dental disease from the Bronze Age to the Iron Age/Roman period and subsequent decline in the Saxon period, but the percentage here is off the top of Brothwell's scale.

Three women had 'scars of parturition': severely eroded areas with reparative new bone at the pubic symphyses (where the pelvic bones meet in front) thought to be indicative of the ligament softening and tearing in late pregnancy and childbirth. One has additional changes in the auricular area (the sacro-iliac joint, where pelvis meets spine). This author finds scars of parturition extremely uncommon in ancient skeletal material, having found only ten in several hundred burials in England. As has been noted, the population is relatively short and gracile in build, especially the females, and ligament damage might therefore be a result of difficulties in delivery.

Two persons (Burials 2 and 9) have unusually horizontal femoral necks. This feature is not known to be indicative of relatedness — it has not been given much attention in the palaeopathological literature — but this should be considered. Two men (Burials 2 and 21) are platymeric. This condition, a flattening of the upper femoral shaft, is regarded as indicative of habitually adopting a squatting posture (Kennedy 1994, table 1) although it is highly variable in populations.

A probable case of tuberculosis

Of particular interest are the vertebrae of a 21-year-old female (Burial 24), which have changes on the lumbar vertebrae suggestive of tuberculosis or brucellosis, as illustrated in Table 20.

To summarise, at least two lumbar-vertebral bodies have been completely lost to a disease process and two more have signs of both destructive and reparative activity, in that they are penetrated by cavities and covered in or replaced by woven (immature) bone. The bodies are most affected in the anterior portions, visible in the first lumbar by 'wedging'. All arches recovered are unaffected apart from the second lumbar, which had one cavity close to the body of the vertebra. Soil-taphonomic effects might have created or expanded some of the holes within the vertebrae.

The form of the lesions (rounded or lobulated cavities), their location, the wedged collapse of the bodies and the non-involvement of the arches all suggest tuberculosis. The appearance of this example is not that of the 'classic' tubercular spine, in which the reparative process appears advanced and there is little disorganised reparative bone to be seen externally, although some is visible basing the cavities (compare, for example, an Anglo-Saxon case and those from early Egypt in Duhig 1998; Morse et al. 1964; Ortner and Putschar 1985, figs 198-205). The progress of the disease depends on the virulence of the infection and the individual's resistance to it, however, so that cases will vary in the amount of destruction and repair. Furthermore, this skeleton has the disorder in the most common location and the usual number of vertebrae are affected (Ortner and Putschar 1985, 145, table 7; Steinbock 1976, 179).

An alternative diagnosis of brucellosis, known in humans as undulant fever, has been considered. In northern Europe the disease is contracted from pigs (the organism being *Brucella suis*) or cattle and horses (*Brucella abortus*). Cavitating abscesses of the vertebral bodies are found, commonly in the lower thoracic to sacral vertebrae, consequent on chronic infection of the lungs and other organs, but they rarely lead to complete collapse or loss of the vertebral bodies and tend to form a bilobed appearance with destructive cavities within the bodies and penetrating the endplates of a pair of vertebrae, having developed around the initial focus of one intervertebral disc (Ortner and Putschar 1985, 138–41).

If this is a case of tuberculosis, it is not the earliest in date from Britain — which was recently reported by Mays from Tarrant Hinton and dated to 400-320 BC (Mays 2003) — but supplements the small number known from pre-medieval Britain. Tuberculosis of the skeleton is usually by extension from other organs, such as lungs (pulmonary TB, usually produced by the human form of the disease, Mycobacterium tuberculosis) or abdominal organs or lymphatic system (usually from the form contracted from unpasteurised cows' milk, M. bovis) and only 5–7% of cases will produce skeletal lesions. Thus, it can be assumed that many more cases were present in ancient populations than the direct evidence suggests. The disease tends to be chronic and the Duxford woman might well have had it from childhood, although the poor bone repair implies a more recent infection; it is possible that its effects on the soft tissues were the cause of death.

A full discussion of the significance of the cemetery appears in Chapter 6.

Cremated human bone

by Natasha Dodwell

Although three cremations or possible cremations were recorded, only one contained sufficient material for analysis. A small quantity (328g) of cremated human bone was recovered from pit 3669, within the south-east section of the burial ground (Fig. 30). The cremated bone was recorded using the guidelines outlined by McKinley (2004). The bone is buff-white in colour, indicating full oxidation, and the fragment size is generally small

Bone	Changes
L1	 Body: superior surface pierced by round hole (c.5mm diameter); inferior and anterior surfaces lack normal contour, blending together anteriorly in wedge shape of woven bone; posterior surface with lobulated cavities which connect through spongiosa of central body to hole in superior surface Immediately cranial to inferior facets: flattened; woven bone; articulating with L2 Articular surfaces of inferior facets: lipping and new bone on joint surfaces
L2	Body: missing except for trace, immediately adjacent to pedicles, of thinned body (max 4.7mm thick) of woven bone
	• Anterior aspect of left superior facet: lobulated cavity (8.2mm × 5.9mm)
	• Cranial aspects of superior facets: flattened; woven bone; articulating with L1
	 Articular surfaces of superior facets: lipping and new bone on joint surfaces
Lumbar vertebral body #1	 Body: superior surface irregular with woven bone; anterior surface with lobulated cavities and two clearly demarcated perforations entering body; posterior surface with lobulated cavities, one cavity in spongiosa of central body, connecting to posterior perforations, might be pathological or taphonomic
Lumbar vertebral body #2	• Body: superior surface irregular with woven bone; central and inferior body missing except for trace below superior surface (minimum 3.6mm) arching down to right side, surfaced with woven bone
Lumbar vertebral body fragment, probably L5	Possible rounded cavities
Lumbar vertebral body fragment	Possible rounded cavity

Table 20 Tubercular changes seen in Burial 24

(10–25mm). There is, however, no evidence of deliberate fragmentation. The small fragment size meant that the majority of bone fragments were identifiable only as skull or limb bone shafts. The degree of epiphyseal fusion indicates that the bones are those of an adult (McMinn and Hutchings 1985), as do the general size and robustness of the elements. The sex of the individual could not be ascertained. No duplication of skeletal elements was observed, suggesting that only one individual is represented. Several small fragments of burnt and unburnt animal bone were identified in the residue.

The concentration of bone within the pit suggests that it may have been contained within a bag or organic container. Two ceramic vessels and part of an articulated piglet had been placed beside the cremated bone and this burial suite is similar to, if more modest than, those identified nearby at Hinxton (Hill *et al.* 1999). There, the late Iron Age cremation burials were unurned but accompanied by vessels, metalwork and uncremated meat offerings (sheep ribs and pig leg). The burial at Duxford had been capped by redeposited subsoil and the lack of

charcoal suggests that the inclusion of pyre debris in the funerary deposit was not deemed necessary. Although the feature had been truncated, the position of the bone at the base of the pit suggests that all the bone that was originally deposited is likely to have been retrieved. While the small quantity of bone recovered is far less than that from a single cremated adult body, it is similar to the weights recovered from the Hinxton burials, where between 148g and 775g of burnt bone was recovered from each adult burial (Hill *et al.* 1999).

VII. Zooarchaeological and botanical evidence

Animal bone

by Ian Baxter

Most of the hand-collected animal, bird and amphibian bones from the site (77%) came from features dating to the Iron Age to early Roman periods (Periods 1 and 2; NISP = 875), with a further 799 NISP from the sieved samples

Taxon	Periods 1 and 2: middle–late Iron Age/ early Romano-British	Period 4: Anglo-Saxon	Period 5: medieval	Total
Cattle (Bos f. domestic)	314	20	56	390
Sheep/goat (Ovis/Capra f. domestic)	342	24	83	449
Sheep (Ovis f. domestic)	(66)	(9)	(19)	(94)
Goat (Capra f. domestic)	(2)	(—)	(—)	(2)
Red deer (Cervus elaphus)	2	_	_	2
Pig (Sus scrofa)	481	4	18	70
Horse (Equus caballus)	982	3	22	123
Dog (Canis familiaris)	73	1	54	13
Dog/fox (Canis/Vulpes)	1	_	_	1
Red fox (Vulpes vulpes)	1	_	_	1
cf. Wild cat (Felis silvestris)	1	_	_	1
Cat (Felis catus)	_	_	3	3
Weasel (Mustela nivalis)	1	_	_	1
Hare (Lepus europaeus)	15	_	_	1
Water vole (Arvicola terrestris)	146	_	_	14
Mouse/vole (Murid/Microtine)	4	_	_	4
Field vole (Microtus agrestis)	(1)	(—)	(—)	(1)
Mole (Talpa europaea)	1	_	_	1
Domestic fowl (Gallus f. domestic)	2	_	3	5
Goose (Anser/Branta sp.)	+	3	2	5
Duck (Anas platyrhynchos)	_	_	2	2
cf. Woodcock (Scolopax rusticola)	1	_	_	1
cf. Plover sp. (Charadriidae)	1	+	_	1
Wader sp. (Scolopacidae)	_	+	_	+
Pigeon (cf. Columba livia)	_	1	_	1
Anuran amphibian (Rana/Bufo)	35	_	1	36
Frog (Rana sp.)	(1)	(—)	(—)	(1)
Toad (Bufo bufo)	(5)	(—)	(—)	(5)
Fish (Pisces)	1	_	-	1
Total	875	56	195	1126

Notes

Table 21 Number of hand-collected mammal, bird and amphibian bones (NISP)

¹ Four and twelve bones from partial skeletons

² 205 bones from a complete skeleton

³ Twenty-one bones from a partial skeleton

⁴ Twelve, five and four bones from partial skeletons

⁵ Three bones from a partial skeleton

⁶ Thirty-two and seventeen bones from partial skeletons

^{&#}x27;Sheep/goat', 'mouse/vole' and 'anuran amphibian' also includes the specimens identified to species. Numbers in parentheses are not included in the total of the period. + means that the taxon is present but no specimens could be 'counted' (see text).

(Tables 21–22). The mammal bones were recorded on an Access database following a modified version of the method described in Davis (1992) and used by Albarella and Davis (1994).

Frequency of species (Fig. 43)

The relative frequencies of the main domestic species (sheep, cattle, horse and pig) have been calculated both by number of fragments (NISP) and minimum number of individuals (MNI) (Tables 23-26). This distribution is similar to Haddon Lodge in the Roman period (Baxter 2003) and the Plant Breeding Institute, Trumpington, in the Iron Age (Baxter 2002), differing from early Iron Age Landwade Road, Fordham (Baxter 1998a), primarily in the relative frequency of pig and horse, and Greenhouse Farm, Fen Ditton (Baxter 1999, fig. 7.3), in the proportion of cattle to sheep (Fig. 43). The Duxford assemblage produces the highest MNI based on teeth, with upper and lower limb segments from both fore and hind legs equally represented and foot elements under-represented for all species except horse (Table 24). In particular, sheep bones have suffered the greatest comparative loss compared with gnathic elements. Other species are comparatively scarce, with the exception of small rodent and anuran amphibian pitfall victims. Red deer is represented by both bones and antler off-cuts from craft working.

Cattle

Cattle fragments comprise 41% by NISP and 27% by MNI of the most frequent domestic species at Duxford in Periods 1 and 2 (Table 25). No partial skeletons were recorded, although associated elements did occur infrequently. All of the crania were incomplete and in

most cases did not include the horncores. In general, the cattle assemblage appears to consist of primary and secondary butchery refuse with an absence of 'special deposits' (*sensu* Grant 1984).

Both small-horned ('Celtic') and short-horned beasts (Armitage and Clutton-Brock 1976) are present, with short horns outnumbering small horns by almost 2:1. Most of the cores derive from adults and old adults, although juveniles and sub-adults are also present (Armitage 1982). In respect of cranial form the majority (n = 4) have a prominent boss or are convex in frontal profile with high double or, less frequently, high single arches on the intercornual ridge. A single specimen has a slight boss combined with a low double arch.

The majority of cattle mandibles (79%) derive from adult and elderly beasts (Fig. 44; Table 26) and most of the epiphyseal ends of bones are fused (Fig. 45; Table 27), confirming the age profile suggested by horncores. The metacarpal from pit 2733 (Plate 7) has an expanded distal epiphysis and extoses above the distal articulation: this may derive from a draught animal (Bartosiewicz *et al.* 1997). Isolated perinatal bones representing natural mortalities occur occasionally in several contexts. Cattle were primary kept as draught animals during this period.

Complete long bones (n = 16) provide withers height estimates ranging between 101cm and 116cm with a mean of 107cm based on the multiplication factors of Matolcsi (1970). The cattle are, on average, smaller than those at Fen Ditton (middle Iron Age) and Haddon Lodge (late Iron Age and Romano-British) and more similar in size to those at Fordham (early Iron Age) (Baxter 2003, fig. A-17). Metrical analysis of the astragalus (Fig. 46) also illustrates the relatively small size of most of the Duxford cattle.

Taxon	Periods 1 and 2: middle–late Iron Age/ early Romano-British	Period 4: Anglo-Saxon	Period 5: medieval	Total
Cattle (Bos f. domestic)	1	_	_	1
Sheep/goat (Ovis/Capra f. domestic)	14	_	_	14
Pig (Sus scrofa)	1	_	_	1
Horse (Equus caballus)	1	_	_	1
Rabbit (Oryctolagus cuniculus)	24	_	_	24
Water vole (Arvicola terrestris)	249	_	_	249
Mouse/vole (Murid/Microtine)	136	_	1	137
Wood mouse (Apodemus sp.)	(3)	_	_	(3)
Bank vole (Clethrionomys glareolus)	(1)	_	_	(1)
Field vole (Microtus agrestis)	(44)	_	(+)	(44)
Mole (Talpa europaea)	_	_	1	1
Goose (Anser/Branta sp.)	19	_	_	19
cf. Plover sp. (Charadriidae)	1	_	_	1
Wader sp. poss. sandpiper (Scolopacidae)	1	_	_	1
cf. Thrush (Turdus sp.)	1	_	_	1
cf. Sparrow (Passer/Prunella sp.)	9	_	_	9
cf. Blue tit/wren (Parus/Troglodytes)	1	_	_	1
Bird (Aves)	+	+	+	+
Anuran amphibian (Rana/Bufo)	256	_	3	259
Frog (Rana sp.)	(49)	_	(1)	(50)
Toad (Bufo bufo)	(1)	_	_	(1)
Eel (Anguilla anguilla)	70	_	1	71
cf. Cyprinid sp.	15	_	1	16
Cyprinid/herring	_	1	2	3
Total	799	1	9	809

Table 22 Number of mammal, bird and amphibian bones (NISP) in the sieved assemblage

	Taxon								
	Cattle			Sheep/G	Foat		Pig		
Element	NISP	MNI	%	NISP	MNI	%	NISP	MNI	%
Upper deciduous + permanent incisors							1	1	25
Upper deciduous + permanent canine							2	1	25
Upper deciduous + permanent premolars	32	6	46	53	9	29	10	2	50
M1/2	35	9	69	50	13	42	8	2	50
M3	12	6	46	19	10	32	_	_	0
Lower deciduous + permanent incisors	12	2	15	10	2	6	9	2	50
Lower deciduous + permanent canine							8	4	100
Lower deciduous + permanent premolars	68	12	92	145	25	81	21	4	100
M1/2	48	12	92	123	31	100	12	3	75
M3	25	13	100	34	17	55	3	2	50
Horncore	14			6					
Cranium (Zygomaticus)	13	7	54	4	2	6	_	_	0
Atlas	2	2	15	5	5	16	1	1	25
Axis	4	4	31	2	2	6	_	_	0
Scapula	11	6	46	12	6	19	4	2	50
Humerus dist	19	10	77	8	4	13	3	2	50
Radius dist	10	5	38	9	5	16	2	1	25
Ulna prox	1	1	8	5	3	10	2	1	25
Carpal 2+3/C3	2	1	8	_	_	0	_	_	0
Metacarpal dist	9	5	38	7.5	4	13	0.5	1	25
Pelvis acetabulum	16	8	62	10	5	16	_	_	0
Femur dist	10	5	38	5	3	10	1	1	25
Tibia dist	14	7	54	12	6	19	4	2	50
Astragalus	19	10	77	4	2	6	_	_	0
Calcaneum	11	6	46	3	2	6	_	_	0
Centrotarsale/T4	2	1	8	1	1	3	_	_	0
Metatarsal dist	5	3	23	6	3	10	_	_	0
Phalanx 1 prox	11	2	15	20	3	10	_	_	0
Phalanx 2 prox	9	2	15	5	1	3	1	1	25
Phalanx 3 prox	1	1	8	_	_	0	1	1	25

Unfused epiphyses are not counted. The MNI has been calculated as follows: incisors have been divided by 8 for cattle and sheep/goat and by 6 for pig, deciduous + permanent premolars by 6, M1/2 by 4, phalanges by 8 and all other elements, except metapodials and vertebrae, by 2. Metacarpal = (MC1 + MC2/2 + MP1/2 + MP2/4)/2; Metatarsal = (MT1 + MT2/2 + MP1/2 + MP2/4)/2, where: MC1 = complete distal metacarpal; MC2 = half distal metacarpal; MC1 = complete distal metatarsal; MC1 = half distal metatarsal; MC1 = half distal metapodials are considered the equivalent of cattle and sheep/goat half metapodials. % = frequency of an element in relation to the most common one (by MNI). Sheep/goat horncores include 4 sheep and 2 goats

Table 23 Periods 1 and 2: Body parts of the main domestic mammals by number of fragments (NISP) and minimum number of individuals (MNI)

Element	Cattle		Sheep/goat		Horse	
	MNI	%	MNI	%	MNI	%
Teeth	13	100	31	100	5	100
Upper limbs	10	77	6	19	4	80
Lower limbs	10	77	6	19	4	80
Feet	5	38	4	13	4	80

^{&#}x27;Upper limbs' includes scapula, humerus, pelvis and femur. 'Lower limbs' includes radius, ulna, tibia, carpal, astragalus and calcaneum. 'Feet' includes metapodials and phalanges

Table 24 Periods 1 and 2: Frequency by MNI of the main parts of the body of the main domestic mammals

Taxon	NISP	%	MNI	%	
Cattle (Bos f. domestic)	311	41	13	27	
Sheep/goat (Ovis/Capra f. domestic)	354	46	31	63	
Horse (Equus caballus)	97	13	5	10	
Total	762	100	49	100	

Table 25 Periods 1 and 2: Frequencies of the three most common domestic mammals by number of identified specimens (NISP) and by minimum number of individuals (MNI)

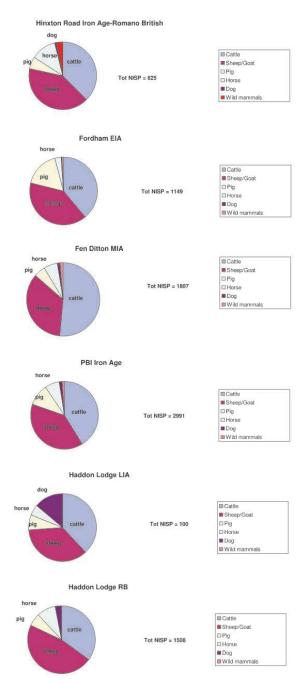


Figure 43 Frequency of mammal remains at Duxford and other Iron Age to Romano-British sites in Cambridgeshire

Discontinuous genetic traits include four out of twelve (33%) M3s with the third pillar or hypoconulid reduced or absent and a single cranium with an occipital perforation. Absence of the hypoconulid is variable between cattle populations (Davis 1997) and indicates strong homogeneity among the Duxford animals. The only pathology noted is an astragalus from pit 3839 (3840) with lateral eburnation indicative of arthritis (Baker and Brothwell 1980).

Mandibles from pit 3489 (3485) and pit 3868 (3862) have scorched teeth. A metatarsal from pit 2027 (2029) has transverse cut marks below the proximal articulation on the lateral surface. The relative shortage of cattle foot bones compared with the numbers exhibited by other domestic species suggests that they may possibly have



Plate 7 Cattle metacarpal with expanded distal epiphysis and extoses above the articulation

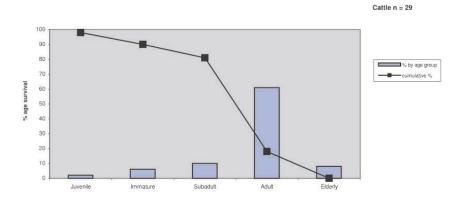


Plate 8 Cattle horncore from pit 4057 (Burial 1, Period 1.1), with saw cut

been left attached to hides that were processed elsewhere. Horncores from pit 2027 and Ditch 8 have chop marks near the base and a horncore from pit 4057 has a saw cut (Plate 8). Several sawn cattle long bone shaft fragments, which are the detritus from craft working, were found in the infill of inhumation Burial 19.

Sheep/Goat

Ovicaprids are the most common taxon at Duxford, accounting for 63% of the most frequent domestic mammals by minimum number of individuals. Only two



Pig n = 11

100
90
80
70
60
30
20
Juvenile Immature Subadult Adult Elderly

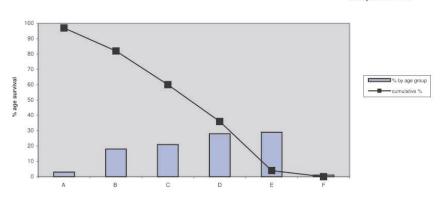
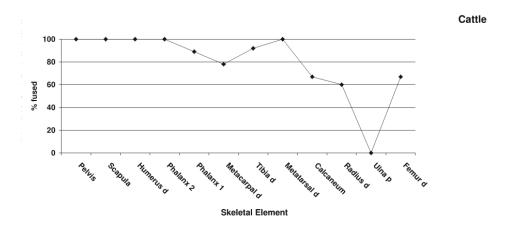


Figure 44 Periods 1 and 2: distribution of cattle, pig and sheep/goat mandibles

Taxon	Mand	Mandibular wear stages											
	A B		В	C			D		E		F	F	
	n	%	n	%	n	%	n	%	n	%	n	%	n
Sheep/goat	4	5	13	17	17	22	21	27	22	28	1	1	78
	Mana	libular we	ar stages										
			Ĭ				1.	l	1.		511 1		l
	Juver	nile	I	mmature	0/	Subadu		Adu		,	Elderly		Total
			Ĭ	mmature	%	Subadu n	lt %	Adu n	lt	6	Elderly	%	Total
Cattle	Juver	nile	I	mmature	% 7								

Only mandibles with two or more teeth (with recordable wear stages) in the dP4/P4-M3 row or isolated M3 are considered

Table 26 Periods 1 and 2. Mandibular wear stages (following Crabtree 1989 and O'Connor 1988)



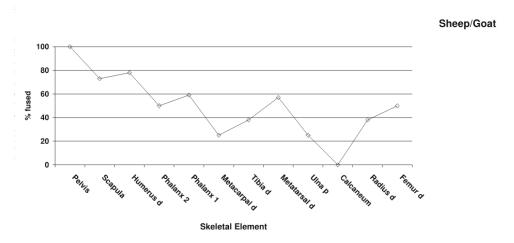


Figure 45 Periods 1 and 2: percentage of fused/fusing epiphyses for the main domestic mammals

	Taxon								
	Cattle			Sheep/	'Goat		Pig		
Element	n	n_f	%	n	n_f	%	n	n_f	%
Scapula	6	6	100	11	8	73	2	1	50
Humerus dist	17	17	100	9	7	78	2	1	50
Radius dist	10	6	60	8	3	38	1	0	0
Ulna prox	1	0	0	4	1	25	1	0	0
Metacarpal dist	9	7	78	8	2	25	—	_	
Pelvis acetabulum	7	7	100	7	7	100	—	_	
Femur dist	12	8	67	4	2	50	1	0	0
Tibia dist	13	12	92	13	5	38	4	4	100
Calcaneum	3	2	67	2	0	0	—	_	
Metatarsal dist	5	5	100	7	4	57	—	_	
Phalanx 1	9	8	89	17	10	59	l —	_	
Phalanx 2	5	5	100	4	2	50	_	_	

 $n = total \ number \ of \ fused/fusing \ epiphyses \ and \ unfused \ diaphyses; \ nf = total \ number \ of \ fused/fusing \ epiphyses \ Fused \ and \ fusing \ epiphyses \ are \ amalgamated. \ Only \ unfused \ diaphyses, \ not \ epiphyses, \ are \ counted$

Table 27 Periods 1 and 2: Number and percentage of fused epiphyses for the main domestic mammals

goat fragments, representing 0.6% of sheep/goats, were identified, in the form of horncores found in pit 3198 and Ditch 8. This compares with 19% positively identified as sheep. Only four sheep horncores, all female, were found, but no polled crania were noted.

The sheep mandibles (Fig. 44) indicate unspecialised slaughter for meat of animals aged from one year upwards with a natural mortality rate of around 5%. A similar pattern is demonstrated by the fusion state of the bone epiphyses (Fig. 45). The six bones sufficiently complete to provide estimates of wither height give results between 55cm and 59cm with a mean of 57cm based on the multiplication factors of Teichert (1975).

Only one mandible was seen with metallic calculus, a condition with unknown origin but thought to be related to diet. A goat horncore from Ditch 8 has been cut and snapped off. A hyoid bone from pit 3292 has cut marks, indicating that the throat was cut.

Pig

Pig remains account for less than 7% of domestic food species by NISP and 8% by MNI (Table 23). Most mandibles are juvenile and subadult (Fig. 44). Comparatively few epiphyseal ends of bones were recovered, although all four distal tibiae found are fused. These bones came from animals at least two years old (Silver 1969). Partial piglet skeletons were found in pit

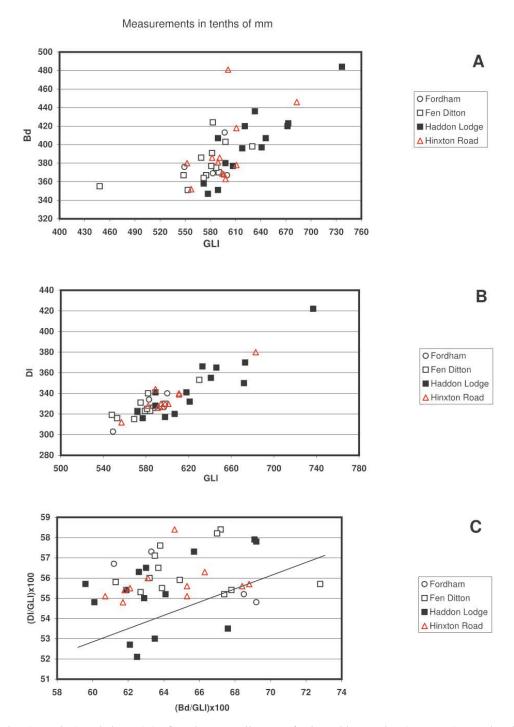


Figure 46 Size (A and B) and shape (C) of cattle astragali at Duxford, Haddon Lodge (LIA–RB), Landwade Road, Fordham (EIA) and Greenhouse Farm, Fen Ditton (MIA)

3088 and with cremation 3669. Upper and lower permanent canines or their alveoli comprise two male and three female.

Horse

Horse remains (Table 28) are comparatively more frequent at Duxford than at any of the comparable Iron Age assemblages from Cambridgeshire, resembling in this respect the Romano-British phases of Haddon Lodge (Baxter 2003). Ages, based on the wear of incisors (Barone 1980) and the crown heights of grinding teeth (Levine 1982), range between less than 2½ years to over 18 years with a very approximate average of 10 years. Sexable jaws, based on the occurrence and development of the canine (Sisson and Grossman 1953), comprise three males and one female. Withers heights, based on Kiesewalter (1888) and Vitt (1952), range between 122cm and 136cm (n = 10) with a mean of 127cm, or 12.5 hands. Substantially complete crania were found in pit 3868 and ritual pit 3981, while the burial of a complete stallion aged seven years was also found in pit 3981. This animal stood around 12.5 hands at the shoulder (mean of seven measurements) and was buried with its legs folded below the body (Fig. 11). It was not poleaxed and there are no cuts on the hyoid bones. Articulating bones belonging to individual animals were found in pit 2128 (2130):

fourteen bones from the axial skeleton; Ditch 8: complete tarsus and proximal metatarsals; and pit 3249: phalanges from two feet. A tooth (P2) from the silty layer that sealed pit 3981 has bit wear (cf. Clutton-Brock 1974). No cut marks were seen on any of the horse bones, although a tooth (P4) from pit 3206 has a burnt crown.

Dog

Domestic dog remains include the partial skeleton of an animal measuring approximately 51cm (Clark 1995) at the shoulder found in pit 3412. The fragmented cranium of what was probably a slightly smaller dog was found in pit 4137. Most of the dogs at Duxford were of medium size but a juvenile femur metaphysis from Ditch 8 seems to have belonged to a small bent-legged animal.

Wild mammals

Wild mammals found at Duxford in Period 1 and 2 features include red deer (*Cervus elaphus*), red fox (*Vulpes vulpes*), wild cat (*Felis silvestris*), hare (*Lepus europaeus*), weasel (*Mustela nivalis*), wood mouse (*Apodemus* sp.), water vole (*Arvicola terrestris*), bank vole (*Clethrionomys glareolus*), field vole (*Microtus agrestis*) and mole (*Talpa europaea*). A juvenile rabbit (*Oryctolagus cuniculus*) skeleton found in a sample from pit 3981 (4095) is certainly intrusive.

	Taxon		
	Horse		
Element	NISP	MNI	%
Upper deciduous + permanent incisors	17	3	60
Upper deciduous + permanent canine	5	3	60
Upper deciduous + permanent premolars	28	5	100
M1/2	17	5	100
M3	6	3	60
Lower deciduous + permanent incisors	17	3	60
Lower deciduous + permanent canine	5	3	60
Lower deciduous + permanent premolars	14	3	60
M1/2	9	3	60
M3	8	4	80
Cranium (Zygomaticus)	8	4	80
Atlas	3	3	60
Axis	2	2	40
Scapula	7	4	80
Humerus dist	6	3	60
Radius dist	5	3	60
Ulna prox	3	2	40
Carpal 3	2	1	20
Metacarpal III dist	3	2	40
Pelvis acetabulum	5	3	60
Femur dist	2	1	20
Tibia dist	6	3	60
Astragalus	7	4	80
Calcaneum	5	3	60
Centrotarsale	5	3	60
Metatarsal III dist	8	4	80
Phalanx 1 prox	13	4	80
Phalanx 2 prox	8	2	40
Phalanx 3 prox	6	2	40

Unfused epiphyses are not counted. The MNI has been calculated as follows: incisors have been divided by 6, deciduous + permanent premolars by 6 (P1 if present not counted), M1/2 and phalanges by 4, and all other elements, except vertebrae, by 2. % = frequency of an element in relation to the most common one (by MNI)

Table 28 Periods 1 and 2: Body parts of the Equids by number of fragments (NISP) and minimum number of individuals (MNI)

The only species of economic significance is red deer, which is represented by both bones and antler fragments. An antler brow tine was found in Ditch 8 and a beam and brow tine fragment in pit 3960 (3961). Both the beam and brow tine of the latter bear saw marks indicative of craft waste. Bones include a large radius and ulna found in Ditch 8 (3696). The distal humerus of a cat was found in Ditch 8 (4092). This is large by comparison with modern domestic cat specimens and probably belonged to a wild cat. The hare is represented by a partial leveret skeleton found in pit 3981 (4095).

The murids and microtines (mice and voles) probably represent pitfall victims, although as they are burrowing animals it is always possible that some may be intrusive. A remarkable assemblage of twenty-nine water vole partial skeletons was recovered from a sample taken from pit 3981 (fill 4094). This species is currently endangered in Britain. The micro-mammals suggest an environment of predominantly damp grassland.

Birds

A wide range of mostly small birds is represented in the Period 1 and 2 deposits, including thrush, sparrow and wren-sized hedgerow birds, woodcock (*Scolopax rusticola*), plover (*Charadriidae*) and goose (*Anser/Branta*). The partial skeleton of a goose found in environmental sample 34, from pit 3507, cannot certainly be attributed to any of several *Anser* or *Branta* species, but is larger than brent goose (*Branta bernicla*). There is no evidence to suggest that any of these birds were items in the human diet.

Amphibians

Considerable numbers of anuran amphibian (frog and toad) bones were recovered from the environmental samples, including at least eighteen skeletons. Most of these belong to frogs (*Rana* sp.), although toads (*Bufo bufo*) are more frequent among the hand-collected material probably due to the larger size and greater robustness attainable by this taxon. Like the micromammals, these amphibians are probably pitfall victims.

Fish

Eighty-five small fish vertebrae occurred in sample residues from several Period 1 and 2 contexts. The majority of these (82%) are eel (*Anguilla anguilla*) and the others are probably small Cyprinids (chub/dace/roach family).

Conclusions

by Ian Baxter and Chris Faine

Sheep were numerically the most common domestic species but cattle would have provided the bulk of the meat due to much greater carcass size. Sheep, along with goats, would also have provided milk. Pigs were kept but were of much less economic importance. In general, the cattle were primarily kept for traction and slaughtered only subsequently. As is frequently the case in Cambridgeshire, at least from the middle Iron Age onwards, pony-sized horses appear to have been used for herding stock. In this they were assisted by dogs. Wild species contributed little to the local diet, although deer were occasionally hunted. Deer antler, the horn of cattle and possibly that of goats were worked by craftsmen. It is also possible that cattle bones were utilised as a raw material. The wild species

present are generally suggestive of open country, perhaps a mix of water meadows and banked ditches.

The faunal assemblage from the middle Iron Ageearly Romano-British period at Duxford is broadly similar to others previously described from Cambridgeshire, although it is difficult to establish whether it is 'typical'. This is due to the fact that domestic mammal proportions in this period (particularly with regard to cattle and sheep), vary widely, even within a localised area (Hambelton, 1999, 46). Few sites in the region have yet recorded elevated levels of pig, with the highest numbers thus far coming from another 'ritual' site at Haddenham (Evans and Serjeantson 1988). No patterns have yet been established between species proportions (Hambleton 1999, 49), while the underlying chalk geology of the farmland around Duxford does not seem to have produced a unique signature within the faunal assemblage. Further discussion on the possibility of feasting at the site is given in Chapter 6.

Environmental remains

by Val Fryer

A group of thirty-two samples from the fills of Iron Age pits was examined (including Burial 21, Period 1.1), as were samples from two ditches, four later graves and a pot associated with a burial. Of the pit fill samples, eight came from the ritual pit (3981) containing the horse burial (Table 29).

The samples were bulk floated by a member of the CAM ARC staff, and the flots collected in a 500-micron mesh sieve. The dried flots (or sub-samples thereof) were scanned under a binocular microscope at magnifications up to ×16. Nomenclature within the table follows Stace (1997). Unless otherwise stated, plant remains were preserved by charring. Modern contaminants, including fibrous and woody roots, seeds, leaf fragments and arthropods, were present throughout.

Plant macrofossils

Cereal grains/chaff, seeds of common weed species and wetland plants, and tree/shrub macrofossils were recorded at varying densities from all but five samples. Preservation was moderately good, although a large number of the grains had become severely puffed and distorted during charring, and many macrofossils were fragmented and abraded. Mineral-replaced macrofossils were recorded from Samples 22 (pit 3151, Pit Group 14, Period 2), 50 (pit 3694, Period 2) and 60 (Burial 21, pit 4057, Period 1.1).

Cereals and other food plants

Oat (Avena sp.), barley (Hordeum sp.) and wheat (Triticum sp.) grains were recorded, along with a single possible specimen of rye (Secale cereale). Barley and wheat occurred at similar densities in a large number of the samples studied. Both elongate (typical of spelt (T. spelta)) and rounded hexaploid (possibly of bread wheat (T. aestivum/compactum) type) wheat grains were noted throughout, while asymmetrical lateral grains of six-row barley (Hordeum vulgare) were recorded from four samples. Glume bases of both emmer (T. dicoccum) and spelt were recovered, with the latter being abundant in the samples from the kiln. Remains of other possible food plants were rare, but a cotyledon fragment of a large pulse (pea/bean) was found in Sample 24 (ditch fill 3258) and mineral-replaced fruitstones and possible apple/pear

Sample No.	61	62	63	65	66	67	68	69
Fill No.	3991	3990	3987	3986	3984	4094	4095	4103
Cereals and other food plants	5771	2270	2707	3700	2707	,0,7	,0,5	1103
Avena sp. (grains)			X	X	X	X		
Cereal indet. (grains)	XX	X	XX	XX	X	X	X	X
Cereal indet. (detached embryos)					X			
Hordeum sp. (grains)			X	X	xcf	X	X	X
Hordeum sp. (rachis nodes)						X		
Hordeum sp. (rachis internodes)						X		
H. vulgare L. (asymmetrical lateral grains)								X
Triticum sp. (grains)	X	X	X	X	X	X	X	XX
Triticum sp. (glume bases)			X	XX		X	X	X
Triticum sp. (spikelet bases)			X		X	X	X	
Triticum sp. (rachis internodes)				X				X
T. dicoccum Schubl. (glume bases)	xcf		xcf					
T. spelta L. (glume bases)	X	X	X	X	X	X	X	X
Herbs								
Aphanes arvensis L.							X	
Atriplex sp.	X					X		
Bromus sp.	X			X		X		xcf
Chenopodium album L.	X		X	XX	X	X	X	
Chenopodiaceae indet.	X			X	X	X	X	
Fabaceae indet.				X	. 0			
Fallopia convolvulus (L.) A.Love	X			X	xtf	X		
Galium sp.				X				
G. aparine L.	X	X		X	X	X		
Lithospermum arvensis L.	X	0	X	X		X	0	
Medicago/Trifolium/Lotus sp.	xcf	xcf	xcf	XX	X	X	xcf	X
Small Poacea indet.		X	X	X	X	X	X	
Large Poaceae indet.			X					
Polygonum aviculare L.	X			X	X	X		
Polygonaceae indet.						X		
Ranunculus sp.				**		X		
R. acris/repens/bulbosus Rumex sp.			X	X	v	W	v	
kumex sp. Sheradia arvensis L.				X	X	X	X	
Silene sp.				X	X	X	X	
Stellaria sp.				X			Λ	X
S. media (L.) Vill.	X			Λ				Λ
Vicia/Lathyrus sp.	Λ		X	X				
Wetland plants			Α	Α				
Carex sp.						X		
Eleocharis sp.				X		••		
Other plant macrofossils								
Charcoal <2mm	XXX	XXX	XX	XXX	XX	XXX	XX	XX
Charcoal >2mm	X	X	X	X	XX	X	X	•
Charred root/rhizome/stem	X	X	X	X		X	X	
Pteridium aquilinum (L.) Kuhn (pinnule frags)				X				
Indet. seeds	X		X	X		X	X	
Indet, tuber frags						X		
Molluscs								
Woodland/shade-loving species								
Acanthinula aculeata				xb				
Open-country species								
Helicidae indet.						xb		
Pupilla muscorum					xb	xb		
Vallonia sp.				xb			xb	
V. costata	xb							
Other materials								
Black porous 'cokey'material	X	X			X	X	X	X
Black tarry material		XX						
Bone	X							
Fish bone			X					
Small coal frags		X	X					
Small mammal/amphibian bones			X	xb				
Vitrified material	X			X		X		
Sample volume (litres)	10	10	10	10	5	10	10	10
Volume of flot (litres)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	100%	100%	100%	100%	100%	100%	100%	100%

Key: x = 1-10 specimens, xx = 10-100 specimens, xxx = 100+ specimens, cf = compare, cf = compare,

Table 29 Plant macrofossils and other remains from ritual pit 3981 (Period 1.2)

(Malus/Pyrus sp.) 'pips' were noted in Sample 50 (pit 3694).

Wild flora

Seeds of common weed plants were present at a low to moderate density in all but thirteen samples. Segetal taxa were predominant and included brome (Bromus sp.), fat hen (Chenopodium album), black bindweed (Fallopia convolvulus), corn gromwell (Lithospermum arvense), knotgrass (Polygonum aviculare) and dock (Rumex sp.). Grasses and grassland herbs were also common, and included onion couch (Arrhenatherum sp.)-type tuber fragments, goosegrass (Galium aparine), medick/clover/ trefoil (Medicago/Trifolium/Lotus sp.) and indeterminate grasses. Wetland plant macrofossils were rare, but did include sedge (Carex sp.) and spike-rush (Eleocharis sp.) nutlets. Tree/shrub macrofossils were recorded from only one Iron Age sample: mineral-replaced seeds, possibly of the wayfaring tree (Viburnum lantana) were found in Sample 50, from a Period 2 Iron Age pit (3694).

Other plant macrofossils

Charcoal fragments were present throughout, generally at moderate to high densities. Other plant macrofossils included pieces of charred root/rhizome or stem and indeterminate culm nodes, seeds and tuber fragments. A single fragment of bracken (*Pteridium aquilinum*) pinnule was noted in Sample 65, from ritual pit 3981.

Molluscs

Although specific sieving for molluscan remains was not undertaken, shells were present throughout, frequently at high densities. However, many retained delicate surface structuring and colouration, and are probably modern in origin. Burnt specimens were recovered, generally as single specimens, from twenty samples and, as these may be contemporary with their contexts, they have been recorded. Open-country species (including Helicella itala, Pupilla muscorum, Vallonia costata and V. pulchella) were predominant, although single specimens of a woodland/shade loving taxa (Acanthinula aculeata) and a marsh species (Vertigo sp.) were also recorded.

Other materials

In most cases, other material types were rare. The fragments of black porous 'cokey' material and black tarry material are probably derived from the combustion of organic remains (including cereal grains) at very high temperatures. Possible dietary residues included fragments of bone, eggshell and fish bone. Mineralised/faecal concretions were noted in Samples 22, 23 (pit 3172, Pit Group 14, Period 2) and 50, and the latter sample also

produced a complete ficiform coprolite, probably a goat dropping.

Discussion: pits and burials

Of the thirty-two samples taken from various pit fills of middle to late Iron Age date, cereal grains/chaff and weed seeds are present in all but two (Samples 29 and 35, pits 1360 and 3172 respectively, Period 2). The majority of assemblages appear to be derived from low density scatters of refuse, possibly including cereal-processing debris accidentally incorporated within the pit fills in the form of windblown detritus. Four samples (Sample 13, isolated pit 2170, Period 1.2 and Samples 65, 66 and 67 from ritual pit 3981) contain a noticeably higher density of cereals, chaff and weed seeds, along with grasses and grassland plant macrofossils, and these may possibly be derived from animal fodder or mixed batches of cereal-processing debris and bedding or litter.

The assemblages from Samples 22 and 23, from adjacent pits (3151, 3172 in Pit Group 14, Period 2), are dominated by barley and wheat grains, with some chaff (particularly spelt glume bases) and possible mineralised faecal material. The composition of these assemblages would appear to be consistent with deposits of mixed domestic refuse, including hearth waste (cereals, derived from accidental spillages during food preparation, and chaff, possibly indicative of the fuel used within the hearth) and sewage. Cereals, possible fruit remains and other dietary refuse are also recorded from Sample 50 (pit 3694), although the presence of a possible goat dropping may indicate that this assemblage is largely derived from animal waste.

Seven samples were taken from soils adjacent to four burials, from a pot associated with one of the burials, and from the fills of two ditches. With the exception of charcoal fragments, plant macrofossils were very rare within these assemblages, and it is tentatively suggested that all are derived from small quantities of scattered refuse.

Conclusions

Although the site was utilised throughout the Iron Age period, charred plant macrofossils are relatively scarce, with few assemblages attaining 0.1 litres in volume. Despite this, the evidence suggests that cereal production/processing was of considerable importance to the local economy during the Iron Age, with a high proportion of the samples containing material which was randomly redeposited across the site, possibly as a result of wind dispersal. Animal husbandry may also have been practised locally, as indicated by possible stores of fodder and deposits of animal dung.

Chapter 3. A late Romano-British drying building

I. Summary

The transition from the Iron Age was completed in the eastern region by approximately the middle of the 2nd century AD, when the villa system of farming was adopted. From this time the Romano-British culture thrived until the early 5th century. This change in lifestyle is perhaps marked at Duxford by the abandonment of the enclosed high ground as a place of ritual and burial, although its boundary ditches and perhaps some of the burials were still visible (and respected). As in the Iron Age the site was not a place of settlement and was used for the grazing of cattle, sheep and goats, as well as the cultivation of cereals on the lower ground. The local community was certainly processing crops here, as a substantial chalk-block drying building was built in the late Roman period which may have continued in use until the early Saxon era. Its isolated position may have been intended to combat the risk of fire. It seems certain that Romano-British people were living, worshipping and burying their dead away from the excavated area at Duxford, as the lack of features and finds (especially coinage) from this period confirm.

II. Period 3: late Romano-British (c. AD 240 to c.410)

(Figs 47 and 48; Plate 9)

Located in the eastern part of the site were the substructural elements of a rectangular chalk-block drying building (Structure 3) (Figs 47 and 48; Plate 9). It was constructed in the southern portion of a sub-rectangular hollow (3186) that had been cut into the natural chalk on a north—south orientation and which measured 4.1m long,

2.9m wide and 0.7m deep. The outer walls of the building were rectangular, measured 3m long (north–south) by 2.4m wide (east–west) and were between 0.3m and 0.4m thick. The eastern wall was formed by the solid chalk edge of the hollow, while the western and northern walls were built with individually cut chalk blocks, using the base of the hollow as a foundation. The southern wall of the structure utilised the natural chalk of the hollow as the lower part of the wall, on top of which chalk blocks were then built up. All the blocks were roughly squared and bonded together using a pale yellow sandy mortar. They had been quarried from an area that measured 3.25m long, 0.25m wide and 0.25m deep and was located only 2.25m to the west.

In brief, the structure probably consisted of four main elements: an arch leading through the natural chalk from the east, with an accompanying stoke hole, where the fire would have been situated; a curved flue to conduct the warm air from the fire; a chimney with central vents at the base; and a superstructure in which material to be dried would have been placed. The chimney would have drawn the hot air from the surrounding flue up through the vents in its northern wall, and the opening and closing of these vents would have altered the draw of the warmed air and controlled the temperature within the building.

The probable chimney base, present in the centre of the building, was a sub-rectangular mortared chalk-block structure (3185) that measured 2m long (east—west) and 1.4m wide (north—south). The eastern edge of this internal structure butted up against the solid edge of the hollow. Its wall was 0.3m thick, and two vents survived on its northern side (Plate 9). The easternmost vent was 0.23m deep and 0.14m wide, while the western one was set slightly lower in the wall and was 0.23m deep and 0.12m wide. Two dark grey silt clay deposits with a large



Plate 9 The late Roman drying building (Structure 3): vent holes on the chimney base





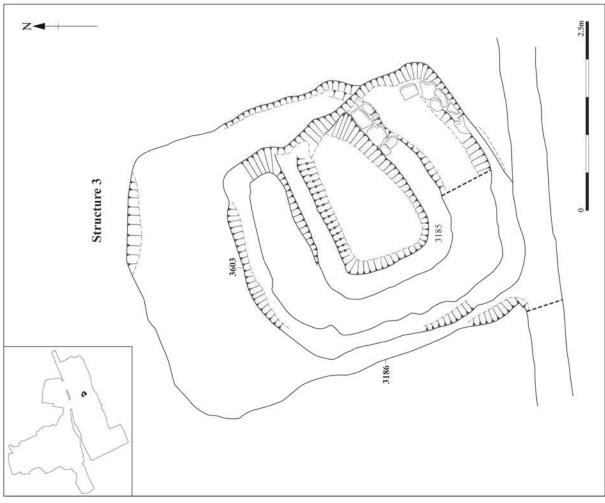


Figure 47 Period 3. Plan of Structure 3: the drying building. Scale 1:50

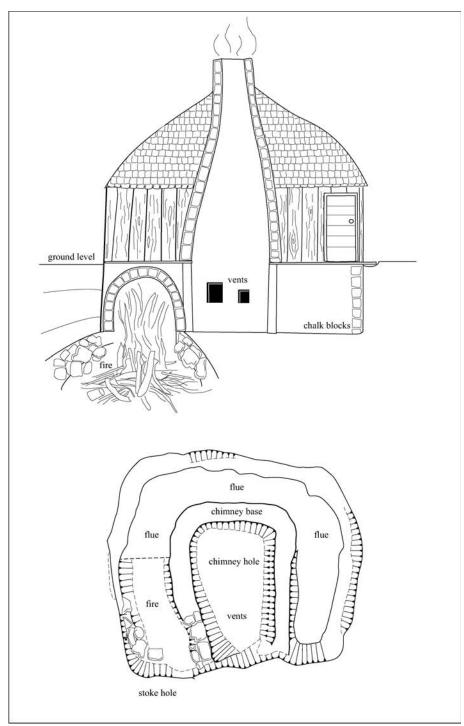


Figure 48 Reconstruction of the drying building

proportion of charcoal were located in the base of this chimney.

The area between the external walls and the chimney base formed a C-shaped flue between 0.4m and 0.6m wide, the curving shape of which would have prevented flames from being drawn directly into the drying building, lessening the risk of destruction by fire. The chalk blocks that formed the southern edge of the chimney base were reddened by heat, while soot residue on the chalk sides of the flue indicate that it was unlined. At least five layers were recorded within the flue: the lower three consisted primarily of charcoal and burnt material, while the upper

two contained mortar fragments associated with the collapse of the structure.

The flue was, as noted, provided with warm air via an arch which had been tunnelled through the natural chalk from the east and had been strengthened and extended with mortar. The fire would have been located at the eastern mouth of the arch and the person(s) who fed the fire (or raked out the cooled ashes) would have stood within the adjacent stoke hole. The stoke hole was 0.8m deep and oval in shape; near the mouth of the flue it was it was 0.6m wide, widening to 0.9m wide at its eastern end. It contained at least three dark grey silt clay deposits rich in charcoal and burnt material.

Samples of charcoal from the chimney base associated with the drying building were submitted for radiocarbon dating and produced dates of cal AD 380–640 (GU-5920; 1560±60BP) and cal AD 240–440 (GU-5919; 1690±50BP) respectively. Together they suggest a date of use between AD 380 and 440, although the possibility that this building continued in use further into the early Saxon period cannot be discounted.

The useful life of the drying building came to an end when the southern wall of the chimney collapsed into the flue. After this structural failure the remains of the building were demolished and levelled (there was no evidence that it had weathered or been left to decay naturally). Indeed, the chimney base had been deliberately backfilled with at least three individual fills, while the pieces of chalk it contained were small and mixed with silts, indicating demolition rather than simply collapse. Within the disuse fills were residual prehistoric pottery sherds and a late Roman Nene Valley Colour-Coated flanged bowl sherd (33g) which is contemporary with the date suggested by the radiocarbon dating. No other domestic debris was recovered from these fills, but an environmental sample (Sample 42) contained small quantities of cereal grains, charcoal and a black porous 'cokey' material.

The nature of the superstructure of the drying building is not certain, but a tentative reconstruction appears in Fig. 48. It is likely that the floor was constructed of wooden planks (perhaps with the gaps between the boards plugged by clay), which would have been sited just above the surviving sub-structure on the slight indentation visible in the surrounding chalk. The chimney would have stood several metres tall, and around it would have been an enclosed structure (probably made of wattle and daub or wooden planking) in which drying would have taken place. No evidence for the structure of the roof survived, although if the walls were indeed wooden they would not have supported heavy Romano-British tiles (tegula and imbrex) and wooden shingles may therefore have been used. It is likely that the construction of this drying building within the chalk hollow also provided some shelter from the weather and prevailing winds, as there is no evidence that it was situated within a secondary structure such as a barn.

Analysis of plant remains (Fryer, below) indicates that the drying building may have been used intermittently for the preparation of batches of malted grain, but that this may not have been its prime function. The fuel residues were chaff and charcoal, although the density of material present is comparatively low, possibly indicating that the flue and stoke hole were regularly cleaned. The lack of charred grain from the central chamber is consistent with this being the base for a chimney.

It is likely that the drying building at Duxford, which is remarkable for its solid construction and substantial size, was utilised by the whole community. It was a versatile building that would have been used for various processes, which may have included use as a malting oven, a cereal drier, a food smoker and even a pot drier at different seasons of the year and by different groups.

III. Artefactual evidence

The Roman pottery

by Alice Lyons

A total of 305 sherds (weighing 2.751kg) of Romano-British pottery was recovered. Most of the pottery was in good condition; however, many vessels had a white concretion on their external surfaces, thought to be natural chalk residues resulting from prolonged contact with the ground, probably in wet conditions. The pottery was analysed as recommended by the Study Group for Roman Pottery (Webster 1976; Darling 2004; Willis 2004).

The majority of this material (82% by weight) consists of locally produced, not closely datable, sandy grey ware body sherds (much of it residual in post-Roman features). Fine wares were notably sparse, with four sherds of samian (Tomber and Dore 1998, 25–41) and six Nene Valley Colour-Coat sherds (Tomber and Dore 1998, 118) being identified. A single late Roman Oxfordshire red colour-coat (Tomber and Dore 1998, 176) sherd and three sherds of Hadham (Tomber and Dore 1998, 151) fabrics were also recorded. It is of interest that several of these late Roman sherds were found in post-Roman features, including an SFB (Structure 4), suggesting some level of continuity between the two periods.

Coins

by Peter Guest

Only two coins were found, both of Roman date. Although indicating Roman-period activity in the vicinity in the later 3rd century, the circumstances of their recovery adds little to an understanding of the nature of this activity.

SF 3 Radiate (barbarous) obverse as TETRICUS II, reverse illegible. Date AD 274–96. Context 2240, pit 2775, Phase 5

SF 66 Radiate obverse GALLIENUS, reverse VICTORIA [AET]. Mint mark Z/-//-. Date AD 260–68. Reference RIC: 297; Cun 1238. Metal detected

Iron linchpin

by Holly Duncan

A relatively common iron linchpin suggests the use of horse-drawn carts in this area at this time.

SF 65 Fig. 49. Linchpin. Iron. The form of this pin, having a spatulate head with turned-over loop at the top of the head, equates with Manning's type 2b linchpin (1985, 74). Type 2b linchpins (inserted through an axletree to hold a wheel on) were a Roman introduction and are the commonest of all types found. Stem straight with stepped rebate towards end. Length 190mm; width head 55mm. Metal detected

IV. Zooarchaeological and botanical evidence

Animal bone

No animal bone was recovered from Structure 3.

Plant macrofossils and other remains

by Val Fryer

Introduction

Five environmental samples were taken (with an additional four (Samples 37, 38, 39, 40) duplicating this data and recorded in the archive) from the drying building (Table 30). Analysis of the plant macrofossil assemblages from this feature showed that they were primarily composed of spelt (*Triticum spelta*) and other wheat chaff,

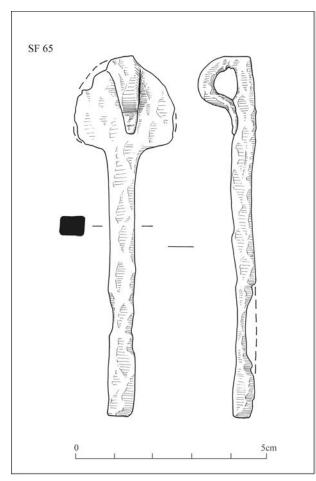


Figure 49 Iron linch pin. Scale 1:1

which was commonly used as a fuel for light industrial purposes during the Roman period.

Plant macrofossils

Cereal grains and chaff, and seeds of common weed plants, were present at varying densities in all five samples. Preservation of the macrofossils was generally good, although a proportion of the grains was severely puffed and distorted (possibly owing to high temperatures during combustion) and could not be specifically identified. The physical appearance of a number of grains within Samples 41, 43 and 44 had also been altered by either accidental or deliberate germination; grains typically had concave profiles and in some instances the entire embryo end of the grain was missing.

Cereals

Cereal remains were abundant in all five samples, with wheat (*Triticum* sp.) being predominant throughout. Elongated 'drop-form' grains typical of spelt were present in all samples, with only a very few possible rounded hexaploid-type forms (probably of bread wheat (*T. aestivum/compactum*) type) being recorded. It has already been noted that grains from Samples 41, 43 and 44 carried the physical characteristics of germination, and, in addition, further specimens with attached sprouts were noted, along with a number of detached sprout fragments. A small number of possible gristed or roughly milled wheat grains were recorded from Sample 44 although preservation of these specimens was very poor. Wheat

chaff, principally double-keeled spelt glume bases, was abundant throughout, but a small number of possible bread-wheat-type rachis nodes with attached internode fragments and characteristic 'crumpled' glume inserts were recorded from Samples 31 and 32.

Other cereal remains were comparatively rare. Barley (*Hordeum* sp.) grains and rachis node fragments were found at a low density in only three samples (31, 32 and 43) along with oat (*Avena* sp.) grains and awn fragments. A single possible cotyledon fragment of a large pulse (Fabaceae) was noted in sample 31.

Wild flora

Seeds/fruits of common segetal species were recovered at a low to moderate density from all five samples. Taxa noted included corn cockle (*Agrostemma githago*), scarlet pimpernel (*Anagallis arvensis*), brome (*Bromus* sp.), ribwort plantain (*Plantago lanceolata*) and indeterminate grasses (Poaceae). The comparative abundance of stinking mayweed (*Anthemis cotula*) seeds probably indicates that cereal production was largely based on the local heavy clay soils. A single possible spike-rush (*Eleocharis* sp.) nutlet was the sole wetland plant macrofossil recorded.

Other plant macrofossils

Charcoal fragments were present throughout. Other plant macrofossils were rare, but did include fragments of charred root or stem and indeterminate culm nodes and seeds. A single possible tuber fragment was noted in Sample 31. The presence of a small number of heat-discoloured charophyte (stonewort) oogonia in Sample 32 is a little unexpected, but it appears most likely that they may have been introduced during the construction of the kiln.

Molluscs

A small number of burnt mollusc shells were recovered from all samples except 32. Insufficient numbers were recorded for any accurate interpretation, but open-country species appear to predominate.

Other materials

Other materials were extremely rare. The fragments of black porous 'cokey' material and black tarry material from Samples 31, 32 and 41 are all probable residues of the combustion of organic materials at very high temperatures. Small mammal bones, including burnt specimens, were noted in Samples 32, 43 and 44.

Sample composition

It appears likely that the Duxford structure was a multipurpose drying building used for a variety of light 'industrial' processes. Unfortunately, little or no trace of any of these activities appears to have survived. The plant macrofossil assemblages are typical of others recovered from contemporary oven/kiln samples, and contain a range of material possibly derived from more than one activity.

Fuel residues in the form of spelt chaff and other cropprocessing waste (including seeds removed during winnowing and hand-cleaning) are predominant in the assemblages. Such material was commonly used as kindling or fuel in hearths, corn-driers and ovens, and also formed major components of the fuel used for brine evaporation during salt production (*cf.* Murphy 2001) and in pottery kilns (for example Two Mile Bottom, Thetford, and Postwick, Norfolk (Murphy and Gale 2003)).

Sample No.	31	32	41	43	44
Context No.	3184	3481	3627	3601	3585
	(Chimney)	(Chimney)	(Flue)	(Stokehole)	(Stokehole)
Cereals and other food plants					
Avena sp. (grains)	24	32	1cf		2cf
Avena sp. (awn frags)	126	112	3	1.7	22
Cereal indet. (grains) Cereal indet. (sprout frags)	136 168	112 168	24 18	17 30	32 67
Cereal indet. (sprout frags) Cereal indet. (detached embryos)	112	104	2	30 14	52
Cereal indet. (detached emoryos) Cereal indet. (basal rachis nodes)	88	120	1	7	32
Large Fabaceae indet.	1cfcotyfg		_	,	
Hordeum sp. (grains)	32	16		1+1cf	
Hordeum sp. (rachis nodes)	32	40		1cf	
Triticum sp. (grains)	320	152	37	68	126
Triticum sp. (sprouted grains)			1	3	1 6cf
Triticum sp. (gristed grains) Triticum sp. (glume bases)	3824	3816	428	389	400
Triticum sp. (gruine bases)	952	896	18	45	61
Triticum sp. (rachis internodes)	1016	1632	64	154	67
Triticum sp. (rachis node frag.)		40			
T. spelta L. (glume bases)	5024	4208	246	570	398
T. aestivum/compactum type (rachis nodes)	8+48cf	16cf			
Herbs	0	105			2
Agrostemma githago L. Anagallis arvensis L.	8 1cf	1cf 8			3
Anagatiis arvensis L. Anthemis cotula L.	24	48		3+1cf	1
Atriplex sp.	2.	8	2fg	3.101	6tf
Bromus sp.	16cf		8		
Caryophyllaceae indet.				1	
Chenopodium album L.		1cf			
Chenopodiaceae indet.	1.0	1			12
Fallopia convolvulus (L.) A.Love	1tf	8			1tf
Galium sp. (bedstraw type) Medicago/Trifolium/Lotus sp.	4cf	8cf		1cf	
Papaver sp.	1cf	001		101	1
Plantago lanceolata L.		16		1	1
Small Poaceae indet.	8	16		5	8
Large Poaceae indet.	24+4cf	32		4	3
Polygonaceae indet.	1 C		1		1
Sherardia arvensis L. Solanaceae indet.	1cf				1
Wetland plants					1
Eleocharis sp.					1cf
Other plant macrofossils					
Charcoal <2mm	XXX	XXX	X	XX	XX
Charcoal >2mm	XX	X		XX	
Charred root/rhizome/stem Characeae indet.	X	8		X	
Mineral-replaced root channels		o	X		XX
Indet, culm node	1		A		AA
Indet. inflorescence frags	X	X			
Indet. seeds	1	16	2	3	1
ndet. tuber frags	1				
Molluscs					
Open-country species Helicella itala	1b				
Helicidae indet.	10		1b	1b	
Pupilla muscorum	1b				
Vallonia sp.					1b
V. costata	1b			1b	
V. pulchella			2cfb		
Marsh/freshwater slum species			1b		
Vertigo sp. Other materials			10		
Black porous 'cokey' material	XX	X	X		
Black tarry material	X	X	X		
Small coal frags				X	
Small mammal/amphibian bone		X		xb	xb
Sample volume (litres)	10	10	10	10	10
Volume of flot (litres)	0.3	0.3	<0.1	<0.1	0.1
% flot sorted	100%	100%	100%	100%	100%

Table 30 Plant macrofossils and other remains from Structure 3: the drying building (Period 3)

However, the current samples also contain germinated grains and detached cereal sprouts. Although these may be derived from spoiled grain, which was burnt with the processing waste as a component of the fuel, it is also possible that they are indicative of small quantities of deliberately malted grain. Large-scale malting was practised in the eastern region during the Roman period, as at Beck Row, Mildenhall (Fryer 2004), but there is also evidence from, for example, Culver Street, Colchester (Murphy 1992), for the small-scale use of malt within a domestic setting. It may be possible, therefore, that the Duxford drying building was occasionally used for the preparation of small batches of malted grain, with only minimal traces being left within the structure after the cleaning-out of spent fuel materials and other accumulated debris.

Conclusions

Although the oven may have been used intermittently for the preparation of batches of malted grain, the evidence for this activity is scant and it may not have been the prime function of the structure. The assemblages are primarily composed of fuel residues in the form of cereal chaff, although the density of material present is comparatively low (varying between 67 and 890 glume bases per litre of soil (Samples 41 and 31 respectively)), possibly indicating that the flue and stoke hole were regularly cleaned. Unfortunately, there is no evidence within either the plant macrofossil or archaeological record to indicate what other purposes the oven may have served.

Samples from this feature produced varying densities of cereal grains, chaff and seeds of common segetal weeds, with grains (principally elongated forms typical of spelt wheat) being particularly common. Many show concave profiles characteristic of germination, as well as detached sprout fragments. Spelt chaff is abundant, as are silica 'skeletons' of cereal awn, the latter indicating that the material was burnt at a high temperature with a good air supply. Rare burnt shells of open-country molluscs were also present.

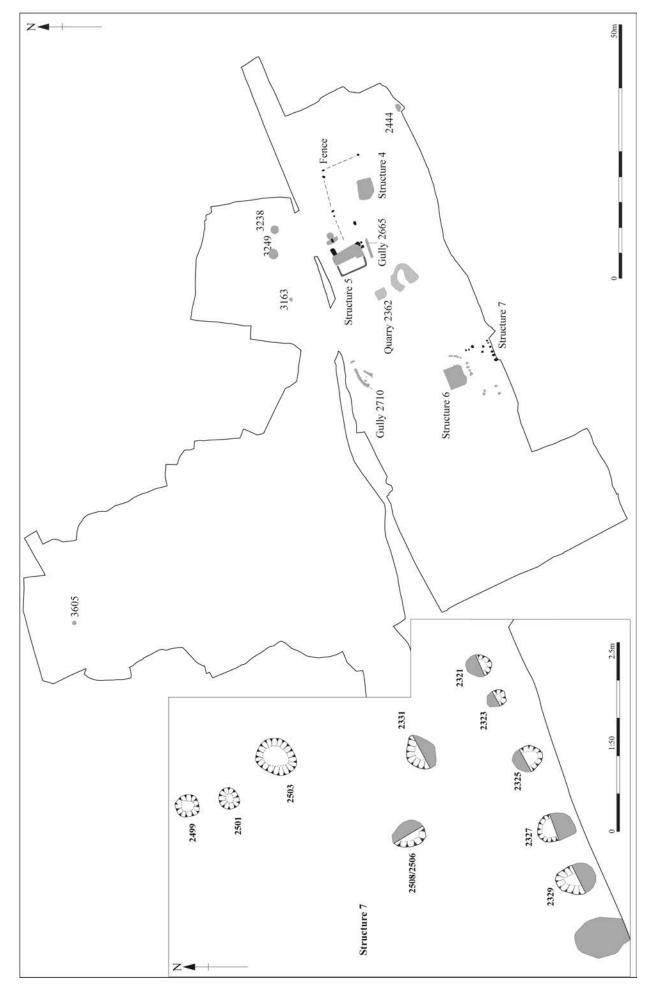


Figure 50 Plan of all Anglo-Saxon features (Period 4), showing detail of Structure 7. Scale 1:750, with Structure 7 at scale 1:50

Chapter 4. An Anglo-Saxon farmstead

I. Summary

(Fig. 50)

The Anglo-Saxon settlement at Duxford, which consisted of three sunken-featured buildings and a post-built 'hall'-type structure, lay in the southern-central and eastern (lower) part of the site on the south-facing slope of the chalk spur overlooking the River Granta. The buildings contained evidence for small-scale craft working (including textile production and processing, and leather working), crop processing and animal husbandry between the 6th and perhaps the mid 8th centuries. Since large parts of the site had been quarried and affected by later building, it is possible that other similar structures were destroyed.

The late Roman drying building (Chapter 3) may have survived into the early Saxon period; the fact that the Anglo-Saxon structures all align with and appear to respect its position supports this suggestion. It is proposed, therefore, that the drying building would have been a visible feature into the 6th century and potentially beyond, although there is no evidence that it continued to be used for its original purpose during this period.

II. Period 4: Anglo-Saxon (c. AD 410 to c.750)

by Paul Spoerry, Judith Roberts and Alice Lyons

Structure 4

(Figs 50 and 51)

The easternmost of the SFBs (Structure 4; 2179) was a relatively small building (3.22m wide, just over 4m long and 0.35m deep) with large posts at the mid-point of either end (both approximately 0.3m in diameter and 0.3m and 0.4m deep respectively) and evidence for internal posts along both sides, as well as a line of stake-holes around the western end. Along the northern edge the post-holes varied between 0.1m and 0.2m in diameter and 0.05m and 0.19m deep. Stake-holes were also found around two of the post-holes on the southern side. There was no evidence for any flooring, superstructure or external associated features.

The basal fill of the building (2180) was mid-greybrown clay silt which was overlain by a darker grey-brown clay silt (2196). Within these fills were artefacts associated with textile working: a 7th-century doublesided textile comb (SF 17) and a bone scoop or scraper (SF 20) of a type known to have been in use from the Iron Age. Also found within this deposit was a prehistoric flint scraper and numerous animal bones: species found included cattle, horse, sheep/goat, pig and goose. The pottery included a fairly large undiagnostic hand-made component (30 sherds, weighing 416g), as well as contemporary Anglo-Saxon sherds (3 sherds, weighing 37g) and intrusive Roman (6 sherds, weighing 44g), medieval (3 sherds, weighing 25g) and post-medieval (3 sherds, weighing 11g) fragments. An environmental sample (Sample 16) taken from the basal fills of this feature produced charred wheat grains and dock seeds,

together with eggshell, charcoal fragments and a 'black tarry material'. The upper part of Structure 4 was cut on its south-western corner by a large modern pit (2431), which may have been responsible for the later finds within the feature.

To the north-east of the building were six post-holes (2356, 2358, 2566, 2594, 2754, 2706) which perhaps formed the main boundary posts for an enclosure surrounding this structure.

Structure 5

(Figs 50 and 52)

Lying c.9m north-west of Structure 4 was another SFB, Structure 5 (2270), this time oriented north—south. It was 6m long and 0.3m deep, but only 2.4m of its original width survived, as it had been heavily truncated along its western edge by post-medieval quarrying (it is estimated that the original width would have extended to c.4m). There was one large post-hole at either end (0.68 and 0.7m diameter, 0.5m and 0.57m deep) and a central post-hole (0.30m diameter and 0.37m deep), while four post-holes along the eastern edge varied in diameter between 0.10m and 0.35m and in depth between 0.08m and 0.23m. On the south-eastern corner of this building were five post-holes (2267, 2274, 2513, 2515, 2517) which may have formed the foundations for a structure such as an entrance, porch, windbreak or fuel store.

A thin dark brown sandy clay with common charcoal formed the primary fill within this building and may have been related to its use, providing evidence of a hearth perhaps located above on a boarded floor and/or in a self-contained box, as no direct evidence for its existence was seen on the base of the SFB. An environmental sample (Sample 20) taken from this layer contained frequent hazelnut shell fragments, which may also have fallen through the floor when the building was occupied. This deposit was overlain by a grey-brown sandy clay associated with the disuse of this building, within which were finds of various dates (probably a result of the disturbance to this feature caused by the large quarry to the west). Objects found within the structure (a partial 7th- to 8th-century loom weight (SF 24) and undiagnostic fragments of another loom weight (SF 27)) indicate that textile working had been taking place in the vicinity during the Saxon era. Also found was a leather-working bone awl (SF 22) of a type which had been in use since the Iron Age, an early Roman bun-shaped puddingstone quern fragment (SF 25) and a probable 7th-/8th-century glass bead (SF 28). A 7th-century bone comb (SF 21) came from the fill of post-hole 2490.

Pottery found includes middle Iron Age (8 sherds, weighing 207g), late Iron Age (5 sherds, weighing 61g), Roman (1 sherds, weighing 1g), early Saxon (1 sherd, weighing 20g) and medieval (5 sherds, weighing 20g) fragments. Of particular interest is an almost complete 5th- to 7th-century ceramic vessel (Vessel 33, SF 79). Animal bone recovered from the disuse fills of the building includes cattle, sheep/goat and pig. Also found

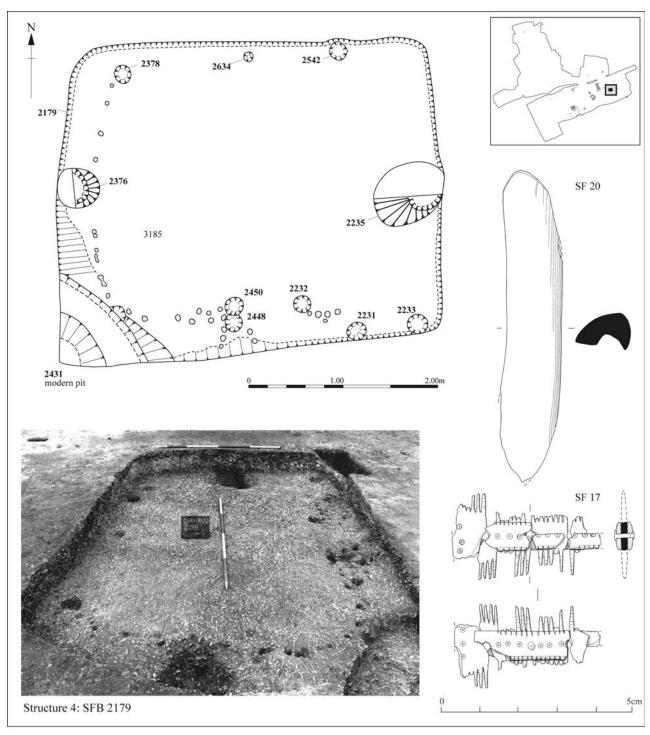


Figure 51 Period 4. Plan of Structure 4, SFB 2179. Scale 1:40

were a goose bone and the skeleton of a wader bird. Intrusive medieval/early post-medieval finds from this structure include a late Anglo-Saxon/early medieval whittle tang knife (SF 85), a late medieval cast vessel foot (SF 30), a perforated disc (SF 29) of uncertain function which may date between 1400 and 1600 and lead metalworking waste (SF 96).

Evidence for an ancillary building

A gully or beamslot 4m long and 0.5m wide (2265) ran approximately parallel to the southern edge of Structure 5 and just over a metre from the edge of the building. Its

alignment and proximity to Structure 5 suggest that they may have been contemporary, and this may represent part of an enclosure for the SFB. Alternatively, it may have formed the partial foundation for another associated building, although beamslot foundations are not generally known before the middle Saxon period; thus it might relate to the later use of the building, or align with it as a disused part-filled hollow.

Intercutting pits and a gully

A group of three intercutting pits and a gully were located c.2.25m from, and parallel to, the eastern edge of Structure

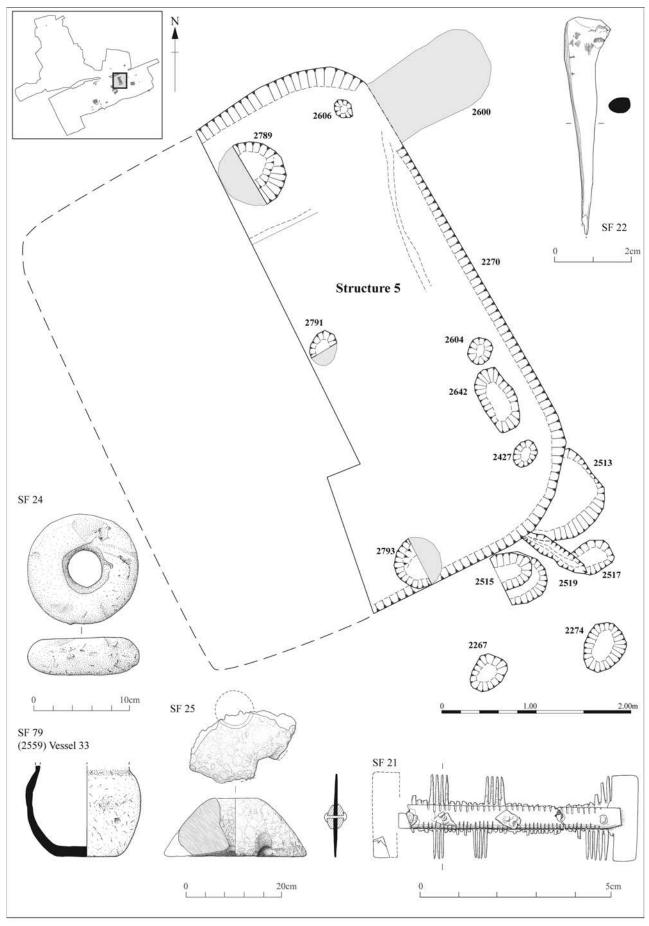


Figure 52 Period 4. Plan of Structure 5, SFB 2270. Scale 1:40

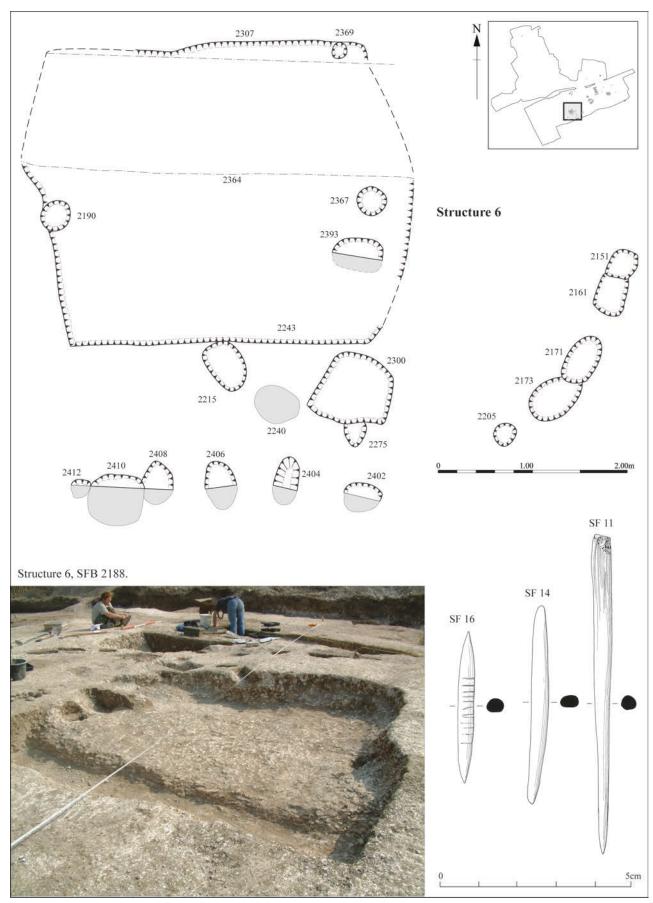


Figure 53 Period 4. Plan of Structure 6, SFB 2188. Scale 1:40

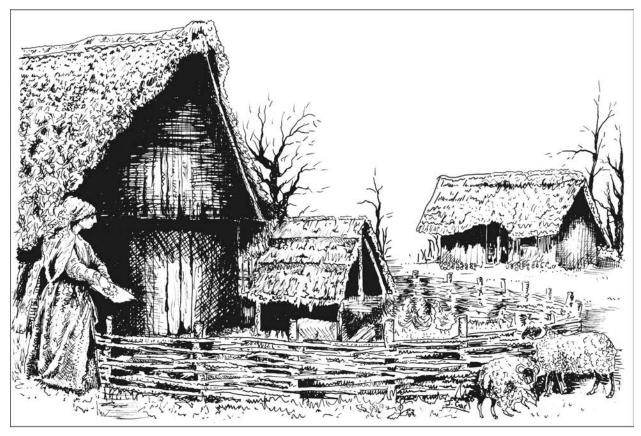


Figure 54 Reconstruction of Structure 6 (copyright Julie Curl)

5. No finds were recovered from any of these pits but their alignment with the SFB suggests they were contemporary with that building, perhaps serving as rubbish or cess pits containing organic material of which no trace survived.

Later features

Although stratigraphically later than Structure 5, the features that truncated its foundation contained objects that probably originated from it or from other destroyed buildings. A sub-rectangular pit (2600) which cut into Structure 5 on its north-eastern corner measured (at least) 1.25m long, 0.86m wide and 0.32m deep and contained a dark brown sandy clay (2601) within which was a third Anglo-Saxon loom weight (SF 81). It is likely that this object originated from within Structure 5. A medieval quarry (2362) lying some 10m from Structure 5 contained Anglo-Saxon pottery and may have disturbed another feature.

Structure 6

(Figs 50, 53 and 54)

Structure 6 was the westernmost SFB (2188), and was located in the south-central part of the site c.27m to the south-west of Structure 5. It was oriented east—west and was approximately 4m long, 3.2m wide and 0.4m deep, with internal post-holes at either end (0.30m and 0.35m diameter and 0.35m and 0.75m deep respectively). This structure had been heavily truncated by a ditch along its northern edge but one internal post-hole (0.20m diameter, 0.25m deep) was recorded in the north-eastern corner and another (0.35m in diameter, 0.10m deep) was noted at the south-eastern end of the building.

The SFB contained mid-brown-grey chalky clay (2189), from which an environmental sample (Sample 5) was taken. This was found to contain small amounts of barley, rye, wheat, vetch and wild grass, as well as charcoal and cokey, tarry remains. Numerous animal bone fragments were recovered, including all of the domestically reared species: horse, cattle, sheep/goat and pig. In addition to these, dog, goose, 'fowl' and pigeon bones were also retrieved. The bones of one toad/frog may indicate an animal accidentally trapped beneath the floor. In contrast, only a small amount of pottery was retrieved, including residual late Iron Age (4 sherds, weighing 22g) and Roman (2 sherd, weighing 4g) fragments and intrusive medieval wares (2 sherds, weighing 14g). Also within this fill were two cigar-shaped bone pin beaters (SF 14 and SF 16) associated with weaving. These early to middle Saxon objects were used with the warp-weighted loom. An unusual type of bone awl, perhaps used in leather working (SF 11), was also found in this deposit.

Around the southern and eastern end of Structure 6 were features which appear to be contemporary and may have formed an enclosing fence. These consisted of six post-holes that were parallel to, and c.1.4m to the south of, the southern edge of the Structure 6. The eastern end of this line of post-holes was removed by later features but an alignment of another five post-holes continued around the eastern end of Structure 6. Two of the post-holes had been recut, presumably to replace rotten timbers. Between Structure 6 and the southern line of posts was a further post-hole (0.3m wide and 0.07m deep), which might have been intended to give additional support at a vulnerable corner of the structure.

Possible hall, Structure 7

(Fig. 50)

A line of post-holes at the extreme southern edge of the site, around 7m south of Structure 6, may represent either the partial remains of the northern wall of an early to middle Saxon 'hall' or, alternatively, along with other post-holes in the vicinity, further remains of fence lines contemporary with Structure 6 and its own enclosure. These six post-holes were closely spaced, at intervals of between 0.25 and 0.5m, and extended over a distance of *c*.4.6m. Most were oval and varied in size between 0.6m long and 0.16m deep at the western end to 0.24m long and 0.04m deep towards the eastern end.

Further fence lines

A further row of four post-holes that were slightly less regular and had been truncated by later features may represent a north to south aligned fence that linked yards/ spaces associated with SFB Structure 6 and possible Structure 7. Three post-holes (2499, 2501, 2503) were spaced approximately 0.5m apart. Post-hole 2499 contained four sherds (0.20kg) of undiagnostic handmade pottery but there were no finds from any of the others. Another group of post-holes survived a few metres to the west. The two northernmost examples were between 0.45m and 0.47m wide and 0.21m and 0.14m deep; a similar-sized post-hole a short distance to the south was paired with post-hole 2386, which was only 0.14m wide and 0.11m deep. Around 1.5m to the west were two further post-holes. Post-hole 2388 was 0.33m wide and 0.18m deep while 2390 was 0.55m wide and 0.38m deep with evidence for post-packing. This may indicate the removal of an earlier post and replacement with packing to support the new post.

With so much later truncation from medieval Ditch 23 and other features it is almost impossible to interpret these groups of post-holes in a meaningful fashion; however, it can be noted that post-holes 2390 and 2384 may align with post-hole 2506 and/or post-hole 2331, more than 8m to the east, to form a fence that may respect and demarcate a yard associated with possible Structure 7 to the south.

Gullies and post-holes

Several apparently isolated features of Anglo-Saxon date were found in the south and east of the site. Only one Period 4 feature (3605) was found to the north; it may constitute the earliest evidence for domestic occupation at the rear of St Peter's Street. A group of features located in the south-central part of the site, to the north of the rectory cellar footprint which truncated them, may be of late Saxon or Saxo-Norman date. Gully 2710, 2673, 2671 (cut by Ditch 26), which was 0.5m wide, 0.19m deep and over 0.9m long, curved in an arc and terminated just beyond Ditch 26. It contained a mid-brown silt chalk clay within which was a sherd of St Neots ware (2g), but no other finds. Other features in the vicinity included another gully (2784), which was 0.55m wide, 0.06m deep and over 2m long, and contained a dark grey-brown clay silt, and post-holes 2778 (0.5m wide and 0.15m deep) and 2786 (0.2m wide and 0.16m deep). No clear function can be ascribed to these features because of the level of disturbance in this part of the site.

Pits

Four pits lay scattered across the site. Pit 2444 was circular, had a diameter of 1.4m and was 0.5m deep, with convex sides and an irregular base. It was located in a relatively isolated position in the south-east corner of the site, just over 12m to the south-east of Structure 4. It contained a mid–light brown silty clay within which was an early Saxon pottery sherd (6g). No other finds were recovered.

Sub-rectangular pit 3163 lay in the north-eastern arm of the site and was 0.71m long, 0.51m wide and 0.19m deep with vertical sides and a concave base. It contained a brown-grey silt clay within which were two sherds of St Neots ware (8g) and a pig molar. To the north-east of the late Roman drying building (Structure 3) was a circular pit (3238) with a diameter of 1.45m and a depth of 0.36m, with near-vertical sides and a flat but irregular base. It contained mid–light brown clay silt within which were eleven sherds of a St Neots ware bowl (2.151kg) and sheep/goat and pig bone.

A sub-rectangular pit (3605) lay in the north-western corner of the site beyond the area of ritual late Iron Age enclosure. It was 1.95m long, 1.6m wide and 0.3m deep, with gradually sloping sides and a flat base. It contained grey-brown silt clay, within which were fragments of residual Iron Age (1 sherd, weighing 6g) and contemporary Saxo-Norman/early medieval pottery (27 sherds, weighing 348g). Also within this fill were sheep/goat and pig bones. This feature may have been a rubbish pit at the back of a plot fronting on to St Peter's Street. This was the only significant evidence for occupation in the northern or western parts of the site during the later Saxon/early medieval period.

III. Artefactual evidence

Anglo-Saxon pottery

by Carole Fletcher

The SFBs and a post-built structure (with associated features) contained four Anglo-Saxon sherds and a near-complete vessel (0.495kg) dated between AD 450 to 650 (early Saxon). In addition, a single sherd was recovered from quarry 2362, close to Structure 5 (2270), and a further six sherds were recovered as residual material within later features, making the total Anglo-Saxon assemblage twelve sherds (0.561kg).

Within Structure 4 (2179) two small Saxon sherds were recovered from context 2433: a small rim sherd (0.003kg) from a reduced quartz-tempered vessel with traces of burnishing on the surfaces, and a body sherd (0.005kg) from a burnished quartz-tempered vessel well made with a buff oxidised external surface, reduced core and inner surface. There is a slight groove on the inner surface that may relate to manufacture, representing the place where two clay coils were joined. A third sherd, tempered with quartz and vegetable matter, was recovered from context 2180.

The assemblage from Structure 5 (2270) included a near-complete vegetable-tempered vessel (Vessel 33, SF 79), which is fully described below (catalogue). In addition, a single sherd from a quartz- and crushed rock-tempered vessel (0.020kg) was found. Structure 6 (2188) and the post-built 'hall' (Structure 7) produced no Anglo-Saxon pottery.

Among the other features yielding Anglo-Saxon pottery, pit 2444 (Period 4) produced a single sherd (0.002kg) of fine quartz-tempered pottery dated between AD 450 and 650, while the material recovered from pit 2399 (Period 4) consists of two small shelly ware sherds (0.010kg) which may be Maxey Ware; if so, these represent the only middle Saxon pottery from the excavation, since no Ipswich Ware was recovered. Pit 2642 (Period 5) produced a single residual sherd (0.005kg) of Grano-dioritic pottery, dated between AD 450 and 650. From quarry 2362 (Period 5.2) came a single sherd (0.020kg) of quartz- and vegetable-tempered pottery, again of mid-5th- to mid-7th-century date. Pit 2560 (Period 5) contained two sherds of Anglo-Saxon pottery: the larger sherd (0.010kg) is from a burnished quartz-tempered vessel and the smaller sherd (0.008kg) is burnished Grano-dioritic-tempered pot dated between AD 450 and 650.

With the exception of the near-complete vegetable-tempered vessel the sherds present are too small to allow full identification of their form and they may represent both the jar and bowl the forms present in the early Saxon period. No sherds were decorated or rusticated and there is no evidence for lugs, although several sherds are burnished. These sherds are most likely to be the remains of domestic vessels, although only one sherd has traces of internal residue or sooting.

Catalogue of illustrated pottery by Paul Spoerry

Fig. 52. SF 79. A hand-made early Anglo-Saxon vessel is of a normal domestic form. The whole of the vessel below the neck survives. It is in a vegetable-tempered fabric, the impressions indicating that perhaps chaff was used. The fabric also includes occasional large flint pebbles and fragments up to 10mm. It was probably fired in a low-temperature bonfire or clamp, but subsequent burning through use has in part obscured the original colouration. It shows burning across the base and around much of the upper body, both externally. The implication is that this vessel has been heated in both the upright and inverted positions. The form is best described as wide-mouthed and sub-globular, if conforming to Myres' typology (1977), with perhaps a slightly out-turned rim and a flattened base. Simple vessels of this type, without decoration, have a very wide distribution and date-range, within the early Anglo-Saxon period in England. It cannot confidently be dated to anything other than the mid-5th to mid-7th centuries. Structure 5 (2559), Period 4

Metalwork

by Holly Duncan

Copper-alloy brooch

Further evidence of activity in the earlier Anglo-Saxon period comes in the form of a small-long brooch of crosshead derivative type (SF 35). Although the brooch was not recovered from stratified deposits, it does suggest activity in the vicinity in the 6th century. As a type these brooches first appear in the early 5th century and survive well into the 6th century (MacGregor and Bolick 1993, 125). This fragment appears to belong to the cross-head derivative type, defined as having headplates of rectangular outline decorated by notching or perforation, and is considered to represent a later stage in the development of small-long brooches (Malim and Hines 1998, 201).

SF 35 Fig. 55. Brooch. Copper alloy. Small-long, cross-headed derivative type. Head plate cruciform around a central square, with T-shaped arms. Arched bow, carinated in front and flat behind. Bow incomplete. Brooch fragment worn and x-ray does not show any decoration. Single perforated hinge. Surviving length 30mm. Metal detected

Iron buckle

An extensively corroded oval iron buckle with looped over tongue was found within the skull cavity of Burial 21; it was associated with a small tubular 'eyelet' of copper alloy and a curving fragment of iron. Although the burial rite and radiocarbon date for Burial 21 attest an Iron Age date for the interment, both the form and location of SF 78.1 within the skull cavity indicate secondary deposition, possibly by rodent activity. Oval iron buckles of similar size are frequently encountered in deposits of 7th- and 8th-century date, becoming less common in the earlier medieval period.

SF 78 Fig. 55. Buckle. Iron. Small oval buckle with looped over tongue. In very poor condition (visible only on x-ray). Mineralised organic matter associated (strap/girdle?). Frame length 16mm; width 23mm. Burial 21 (4065), Period 2

Iron knife

An incomplete iron knife blade was found. Its recovery from within SFB Structure 5, combined with its small size and the remains of a straight blade back, may suggest it belongs to the angle-back form. Knives of this type are common in deposits of Anglo-Saxon and early medieval date.

SF 85 Not illustrated. Knife. Iron. Too fragmentary to assign to type. Structure 5 (2559), Period 4

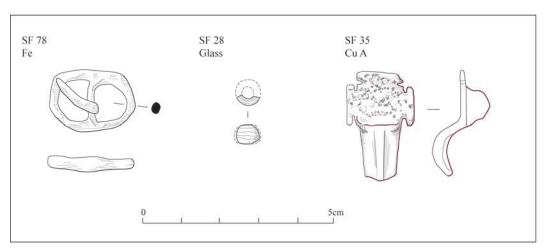


Figure 55 Anglo-Saxon metalwork and glass bead. Scale 1:1

Glass bead

by Holly Duncan

A small globular bead of 'black glass' ground with two light blue circumferential bands (SF 28) was found in the fill of a pit within an SFB. Beads of 'black' glass rarely occur on Iron Age sites and it is not until the 4th century AD that they become popular (Guido 1999, 17–18). This colour increased in popularity in the 6th century, and polychrome examples persist into the 10th century (Guido 1999, 19–20). Although the combination of black ground with blue decoration can be seen on a number of Anglo-Saxon beads (Guido 1999, plates 2 and 3), patterns tend to comprise zig-zag or crossed trail motifs; circumferential banding does occur in other colour combinations (e.g. blue with terracotta bands or terracotta with white bands), but is generally less popular. Although the fill of SFB Structure 5 contained both residual and intrusive finds, the presence of intermediate loom weights suggests a date in the 7th or 8th century for this bead.

SF 28 Fig. 55. Bead. Glass. About one third of a small globular bead of opaque 'black' glass with two bands of pale blue translucent glass encircling the circumference. Lower half of bead incomplete. Est. diameter 6mm; present height 5.2mm. Structure 5 (2269); Period 4

Ceramic loom weights

by Holly Duncan

Remains of four loom weights used on the warp-weighted loom were found: two (SF 24 and SF 27) from SFB Structure 5 and single examples from the fills of pit 2600 (SF 81) and Ditch 27 (SF 47). Dunning et al. (1959, 23–5), following on from Wheeler (1935, 154-5), identified three forms of Anglo-Saxon loom weight; annular, intermediate and bun-shaped. Annular loom weights are distinguished by having a central hole as wide as, or wider than, the surrounding ring of clay; they were either made as rings or the hole was pushed out with the fingers. These are dated to the early Saxon period. Intermediate and bun-shapes differ in that they are made from discs of clay which have been pierced with holes of varying sizes. Intermediate loom weights are thought to have been introduced in the 7th to 8th centuries, being replaced by the bun-shaped variety in the 9th century (Dunning et al. 1959, 24-5).

The remnants of loom weights from the fills of pit 2600 (SF 81) and Ditch 27 (SF 47), although incomplete, appear to derive from the annular form and therefore suggest a date in the early Saxon period. These annular loom weights are, therefore, residual within the Period 5 deposits in which they were found. It should be noted, however, that pit 2600 cut into an earlier SFB (Structure 5). In contrast, SF 24, with its narrower pierced central hole falls into the intermediate category, indicating a date in the 7th or 8th centuries for the fill of SFB Structure 5. Remains of at least two other loom weights (SF 27) were found within the same context but were too fragmentary to allocate to a specific form.

SF 24 Fig. 52. Loom weight. Ceramic. Intermediate loom weight of 'doughnut' shape, complete. Central pierced hole, maximum diameter 35.5mm. Surfaces orangey-buff to grey in colour and smoothed. Well-sorted sandy fabric. Maximum external diameter 122mm; height 40.8mm. Structure 5 (2269), Period 4

Worked bone objects

by Holly Duncan and Ian Riddler

Combs

Evidence of grooming and toiletry was limited to two double-sided composite combs. One of the combs (SF 21) is undecorated, although saw marks from the cutting of the teeth are prominent on both sides. The connecting plates are cylindrical in shape, with a light taper at one end. Double-sided composite combs with these characteristics are widespread in East Anglia and include several examples from West Stow (West 1985, figs 33.7-8, 49.1, 73.3, 252.1-2 and 253.1-2). The earliest combs of this type from West Stow go back to the late 5th to 6th century, but the majority can be placed in the 7th century, which accords well with the dating of similar combs from grave SG82 in the Melbourn cemetery and grave 79 at Burwell (Lethbridge 1931, fig. 30). Slightly later examples, extending into the early 8th century, have pronounced saw marks cut into the connecting plates, as can be seen at Dover and Lundenwic (Philp 2003, figs 40.29 and 60.155–6; Cowie et al. 1988, fig. 38.5). The type is also common on the Continent; the majority of those from the Pleidelsheim cemetery came from graves of phases SD 7–9, dating to c. AD 580–650 (Koch 2001, 188–9). The likelihood is that the Duxford comb belongs to the 7th century, along with the majority of combs of this type, but it is not closely dated.

A second comb (SF 17) has broader connecting plates decorated with a row of single ring-and-dot motifs running along the centre and applied also to both sides of the end segment. Single rows of ring-and-dot patterning occur in association with framing lines on double-sided composites of the 6th century. Seventh-century doublesided composite combs lack the framing lines and some, as with an example from Collingbourne Ducis Grave 31, also have ring-and-dot motifs extending to the end segments (Gingell 1978, fig. 21.7). Combs from Bantham and Whitby are decorated in a similar manner, but closer parallels for the decoration are provided by comb fragments from Garton Slack and Wickham Market, both from graves of the 7th century (the Garton grave probably dating to after c. AD 650), as well as a late-7th-century comb from Bonner's Lane, Leicester (Riddler 1986, 52–3; Peers and Radford 1943, fig. 20.2; West 1998, fig. 135.2; Finn 2004, fig. 42.34). The comb is likely, therefore, to have been deposited in the 7th century.

- SF 17 Fig. 51. Comb. Bone. Composite double-sided comb, incomplete. Straight-sided end plate, end edge decorated vertically with ring-and-dot motifs (three surviving either face). The connecting plate has a line of ring-and-dot motifs down its centre. One iron rivet survives in situ with iron staining representing up to a further three rivets. Teeth are not differentiated, suggesting a 'migration period' date. In about eight joining pieces; estimated surviving length 68mm. Structure 4 (2495), Period 4
- SF 21 Fig. 52. Comb. Bone. Composite double-sided comb, incomplete. One straight-sided end plate survives. Narrow, undecorated connecting plate of plano-convex section. Four iron rivets in situ with staining representing a fifth rivet. Teeth differentiated. In nine joining pieces; estimated reconstructed length 126mm. Post-hole 2490 (2489) within Structure 5, Period 4

Pin beaters

Cigar-shaped pin beaters, such as those recovered from SFB Structure 6 (SF 14 and SF 16), first appeared in the Roman period (Wild 1970, 666, 134 and 156). In England,

this form is most commonly encountered in early and middle Anglo-Saxon deposits and is firmly associated with warp-weighted looms. A few examples have been found in late Saxon contexts, but this form disappears from the archaeological record by the Norman Conquest (Addyman 1969, 87; Rogers 1997, 1755). Diagnostic features include two working ends and all-over polish. Transverse grooves, thought to assist gripping, are sometimes found around the middle of the pin beater, as is the case on SF 16.

- SF 14 Fig. 53. Pin beater. Bone. Cigar-shaped pin beater. Oval cross section tapering to flattened point at both ends. Surfaces polished. Pin beater slightly curved in plan view. Length 105.5mm; width 9.2mm; thickness 7.6mm. Structure 6 (2308), Period 4
- SF 16 Fig. 53. Pin beater. Bone. Cigar shaped pin beater. Oval cross section tapering to point at both ends. Surfaces highly polished. A series of eleven transverse grooves visible along two adjoining surfaces is possibly intended as a grip for the fingers. Length 81.6mm; width 9mm; thickness 8.2mm. Structure 6 (2308). Period 4

Leather-working tools

Leather working is suggested by an awl-like bone implement (SF 22) manufactured by trimming one end to form a point, albeit with little modification of the bone (a horse tarsal). Such items are more commonly encountered in Iron Age deposits (e.g. Cunliffe and Poole 1991, fig. 7.33), and an awl from an early Iron Age context at Balksbury Camp provides a good parallel (Wainwright and Davies 1995, fig. 53.6). A second implement (SF 11) may also have served as an awl. It is made of bone and tapers evenly to a rounded point, with cortile tissue visible at the upper end. Its form recalls that of transitional single pointed pin beaters (Walton Rogers 1997, 1757; Riddler 1997), but the cortile tissue at its head and its presence in a middle Saxon context would both argue against that interpretation. A bone awl accompanied two pin beaters in the fill of a contemporary structure at Abbots Worthy and comparable, if longer, implements are known from Århus and Haithabu (Riddler 1991, 47 and fig. 36.33; Andersen et al. 1971, 110; Jankuhn 1943, fig. 70c). All of these implements include perforations at the head, however, unlike this object. A similarly enigmatic implement from Lundenwic is unperforated and forms a closer parallel, although it is somewhat shorter (Blackmore 2003, 310).

- SF 11 Fig. 53. Awl? Cattle-sized long bone. Stem of awl of oval cross section tapering to point. Head trimmed into squared butt-end, cancellous (spongy) tissue visible, as well as part of the articular surface. Wear and polish confined to the area from mid-shaft to the point. Length 169mm; Upper stem width 9.2mm; thickness 8.6mm. Structure 6 (2308), Period 4
- SF 22 Fig. 52. Awl. Horse tarsal. Tip damaged and body in two joining pieces. Articular end retained as handle, opposing end trimmed to a tapered point. Surfaces of bone slightly eroded. Length 115mm. Structure 5 (2269), Period 4

IV. Zooarchaeological and botanical evidence

Animal and bird bone

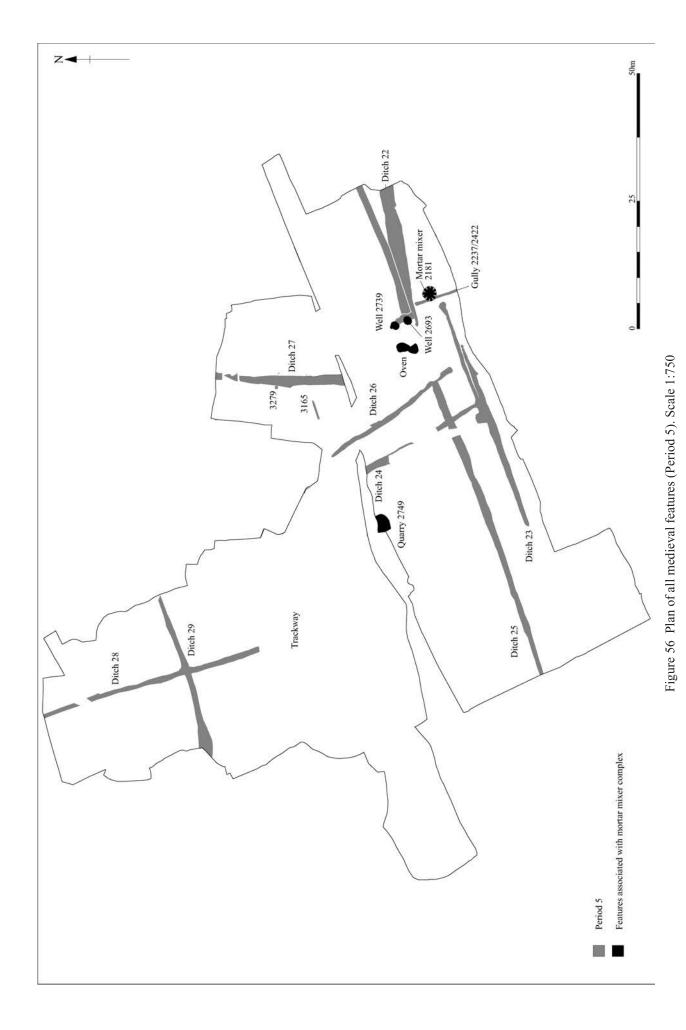
by Ian Baxter

The Anglo-Saxon animal bone assemblage is comparatively small (NISP = 56; Tables 21 and 22, see Chapter 2). Sheep/goats slightly outnumber cattle by NISP. The few ovicaprid specimens identifiable to species are all sheep. Pigs are present at a similar frequency to Periods 1 and 2, while horse and dog also occur. The only potentially domestic bird species present is goose, which is relatively common (NISP = 3). A single small fish vertebra recovered from a sample residue probably belongs to a small Cyprinid (see above), although herring cannot be ruled out. A cattle metacarpal from pit 3972 has extensive lateral and medial exostoses on the posterior surface of the shaft. A high proportion of the sheep are younger prime mutton animals. A calcaneum from Structure 5 came from an animal approximately 56cm high at the shoulder, based on the multiplication factors of Teichert (1975). Plovers and longer-legged waders also occur, along with a pigeon represented by a fledgling tarsometatarsus recovered from an environmental sample (Sample 5) taken from within Structure 6.

Plant macrofossils and other remains

by Val Fryer

Two samples were taken from contexts of probable early to middle Saxon date. Sample 20 was from the basal fills of Structure 5. Hazel nutshell fragments are common, but other materials are rare, and the entire assemblage may be derived from occupation detritus which fell through the floor of the SFB. Sample 28, from pit 3249, contains insufficient material for accurate interpretation.



Chapter 5. Medieval mortar mixer to modern rectory

I. Summary

Activity during the medieval period (Period 5) was characterised by large irregularly spaced and shaped quarry pits, concentrated to the south-east, that were typically backfilled with soil and rubbish in a single episode. A system of boundary ditches, on an east-north-east-west-south-west alignment, was also introduced at this time and was maintained and slightly altered in the post-medieval period. By the late medieval period the south-eastern part of the site housed a group of related features that formed a centre for the production of lime mortar. This activity required chalk, an oven to heat the chalk (and thereby extract the lime), sand, water and a mixer, all of which were present at Duxford.

In the post-medieval period (Period 6) only one new boundary ditch was recorded. This was associated with a number of rubbish pits perhaps relating to the rectory or its precursor. Period 6 was also characterised by landscaping, gardening and the introduction of various horticultural features. A trackway and rubbish pits associated with the rear of St Peter's Street were also recorded.

II. Documentary evidence

by Twigs Way

An outline of the origins of Duxford, including its four medieval manors, is given in Chapter 1. It is likely that, in a secular sense, the village was a single settlement from the medieval period; it was only for the purposes of gathering tithes that two parishes existed. St John's Church received tithes from Lacy's and Temple manors and St Peter's from Busteler's and d'Abernons. Changing manorial fortunes led to the decline of St John's Church, which fell into a state of dilapidation during the 19th century. The two ecclesiastical parishes were finally united only in 1874, at which time St Peter's became the parish church.

Housing extended eastwards along St Peter's and St John's Streets and clustered around the village green. Medieval houses built on the green indicate encroachment at an early stage. The areas were linked by a network of back lanes, such as Manger's Lane and Long Lane, many of which still survive as footpaths. Until the 1820s there was almost no housing east of the main road, close to the river. Land there was owned by the various manors and by Duxford Mill (Elrington 1978, 203). In the 13th century the arable land was divided equally between the manorial estates and small landholders, a balance which gradually shifted in favour of the estates. At enclosure in 1830, Duxford parish was essentially four large farms, with very little land left over which common rights pertained. Several mills, owned by d'Abernons and Temple manors, are recorded from the time of the Domesday Survey onwards.

From at least the 17th century the excavation site was connected with the rectory of St Peter's, the advowson of which was held by Busteler's Manor (see Appendix 4). Court records for this manor do not survive and it has thus not been possible to trace the specific names of the occupiers of the site before the rebuilding of the rectory in the 19th century, although it is known that 'poor people' were resident in the 18th century. It is possible that the incumbents of the living of St Peter's occupied the site in the 14th century, when the incumbents of both churches (St John and St Peter) are recorded as being resident. By the late 15th century St Peter's was held by an absentee graduate and this general pattern of plurality and absenteeism continued into the 17th century, after which time the two benefices were frequently held by one person. Despite St Peter's being the richer church, incumbents usually occupied the vicarage close to St

The earliest records (1625) give outline descriptions of the buildings and outbuildings that occupied the site at that period. More detailed maps and written records have been consulted for the period c.1822 onwards, giving a good idea of the layout of the site, including the location of paths, yards, outbuildings and major planting. A 19thcentury ha-ha was identified on the southern boundary of the rectory grounds and a contemporary circular feature close to this may have survived but was not available for excavation as it lies within the area retained as a tree belt. The records indicate substantial areas of pebble pitching, also of 19th-century date, which survived (in patches) towards the western boundary in the areas of the former yards and outbuildings. The areas to the east of the former rectory building, and along the path leading south, were affected by roots from mature (19th-century) trees, although there is some indication on the 1st edition OS that the conifers at least were mound-planted.

III. Period 5: Medieval (c.13th century to c.1535)

by Alice Lyons, with Judith Roberts (Fig. 56)

Boundary ditches

Medieval property boundaries were found in the northern and southern part of the site. Presumably they would have linked together to form one cohesive system, although the truncation in the centre of the site destroyed any evidence of this. The ditches were predominately aligned east-northeast—west-south-west, although their position and alignment changed slightly over time. It is thought that they were boundary markers rather than drainage ditches as the free-draining nature of the underlying geology and the shallow depth of overburden makes it unlikely that drainage was required.

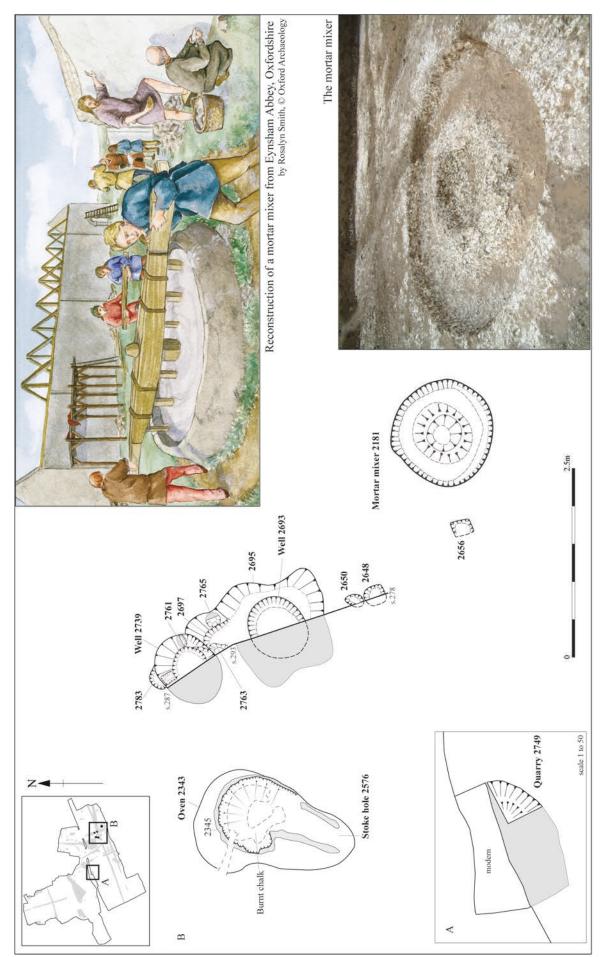


Figure 57 Period 5. Plan of mortar mixer and associated features. Scale 1:50

A substantial ditch (Ditch 22, 2628) aligned west-south-west-east-north-east was located in the south-eastern part of the site. It was at least 25m long by 2.5m wide, survived to a depth of 1.4m, and had steep sides and a concave base. Its fill contained a fragment (49g) of Medieval Essex Micaceous Sandy Ware dated between AD 1150 to 1375, as well as teeth from a horse and a sheep/goat.

A straight gully (2237/2422) orientated north—south also lay to the south-east. Its southern terminus extended beyond the edge of excavation and as a result its full extent could not be examined. However, it measured at least 8.5m long by 0.55m wide, was 0.3m deep and was cut at right-angles by Ditch 22. It contained silty clay which was light grey to the north and red-brown to the south. The fill yielded a tiny scrap of intrusive post-medieval pottery (2g); there was no other dating evidence from this feature, which was cut by the medieval mortar mixer (2181; see below). Although this gully was stratigraphically earlier than Ditch 23, it was probably in use at the same time and may have formed the eastern arm, or a sub-division, of a property division.

The most southerly of the boundary ditches (Ditch 23, 2008) crossed the site from west-south-west to eastnorth-east approximately parallel to the southern edge of excavation, although there is no evidence of a ditch in this position on the 1831 enclosure map. It ran for a distance of c.44m, varied in width between 0.4m and 0.6m and was less than 0.2m deep; it had gradually sloping sides and a concave base. The grey-brown clay silt fill yielded sparse finds consisting of a single residual Roman pottery sherd (8g), a fragment of St Neots Ware (1g) (AD 900–1150) and another of Essex micaceous ware (8g) (AD 1200–1400). At its eastern end this ditch had been recut and realigned slightly to the south. On approximately the same alignment and further east shallow irregular features, which appeared to be part of a hedge line continuing the boundary, were noted.

Ditch 24 (2280, 2340, 2667, 3054) extended across the south-central part of the site and ran from north to south for a distance of c.44m. The northern terminus of the ditch extended beyond the edge of excavation, while the southern end butted up against (and cut) Ditch 23. The ditch had a concave base and steep, uneven sides and varied in width between 0.9 and 0.5m and in depth between 0.15m and 0.3m, depending on how well it was preserved. Central parts of the ditch had been severely truncated by the rectory cellar and quarry 3314, while the northernmost section of the ditch (3054) was on rising ground and had been truncated during modern landscaping. The ditch contained between one and three grey clay silt fills (again depending on the level of preservation) which contained a few fragments of pottery comprising two medieval sherds (6g) dated between AD 1200 and 1375 and an intrusive post-medieval fragment (3g)

Running parallel to Ditch 24 was another ditch (Ditch 26, 2669, 2727, 3409) orientated north-west–south-east, which had been truncated by the cellar of the rectory and Ditch 25. It ran for a distance of c. 30m, was 1.2m wide and 0.3m deep, and had moderately steep sides and a flat base. Its fill consisted of mid-grey-brown chalk clay silt which contained sheep/goat bone, a residual Romano-British sherd (8g) and a relatively large amount of early-13th-century pottery (110g).

Another ditch (Ditch 25, 2016) ran parallel to, and just over 10m north of, Ditch 23, on a west-south-westeast-north-east alignment, extending across the whole of the southern part of the site for a distance of c. 100m. It was up to 1.05m wide and between 0.20m to 0.47m deep, with concave gradually sloping sides and a slightly concave base, and contained a firm, mid-grey silty clay fill. The animal bone assemblage consisted of horse, cattle, sheep/ goat, duck, domestic fowl and an almost complete medium-sized dog skeleton. The pottery consisted of residual middle Iron Age (3 sherds, weighing 6g), Iron Age (two sherds, weighing 8g) and Roman (2 sherds, weighing 7g) pottery. Medieval (3 sherds, weighing 23g) and late medieval (3 sherds, weighing 18g) pottery fragments were also found, suggesting a date for the cutting of this boundary in the later medieval period.

Ditch 27 (3028, 3033, 3282) was located in the north-eastern part of the site. It was oriented north-south (the alignment of this ditch is at variance with all other ditches of this period on the site) and ran for a distance of c.25m. It was 1m wide and up to 0.55m deep, with even sides and a flat base. The northern end extended beyond the excavation area and the southern end had been truncated by quarrying. It contained grey-brown clay silt with frequent chalk lumps. A residual Saxon loom weight fragment (SF 47) was recovered from this fill, as were nine sherds of medieval pottery (46g) dated to between AD 1200 and 1350. A rectangular post-hole (3279) located adjacent to and to the west of Ditch 27 appeared to be contemporary. An apparently isolated beamslot (3165) with a sub-rectangular post-hole (3163) at its eastern end was found to the west of and at right-angles to Ditch 27, and may be the remains of a structure associated with this property division. The beamslot was visible for a distance of c.4m, and was up to 0.31m wide and only 0.10m deep. It contained light grey chalk silt and was cut at its eastern end by a large sub-rectangular post-hole. This feature contained brown-grey silt clay within which was a pig tooth and two sherds of residual early medieval pottery (7g) dated to AD 900-1150.

Above the former ritual area on the chalk knoll were two ditches. Ditch 28 (3887) was orientated north-northwest–south-east and ran for a distance of c.45m. It varied in width between 0.95m and 1.2m, and in depth between 0.27m and 0.8m, and had steep sides and a flat or slightly concave base. It did not continue southwards beyond the enclosed higher ground because its southern limit had been truncated during 20th-century landscaping. Typically the ditch contained three fills: the primary fill was compact brown silt clay with frequent chalk fragments, and was overlain in turn by a layer of redeposited natural chalk and grey-brown silt clay with occasional chalk fragments. As many of the excavated sections cut through older features a significant quantity of residual pottery and animal bone was recovered. Ditch 28 also cut through several burials (graves 3127, 4129; Burials 15, 16, 22, 23), and as a result human bone from at least three individuals, including an arm bone (ulna), was retrieved from it. Also found was an iron chain link (SF 74) which came from a southern section where the ditch cut through two burials.

Running at right-angles to Ditch 28 was Ditch 29 (3994), which was oriented west-south-west-east-north-east and survived over a distance of c. 32m across the lower part of the northern area. Its alignment was similar to that

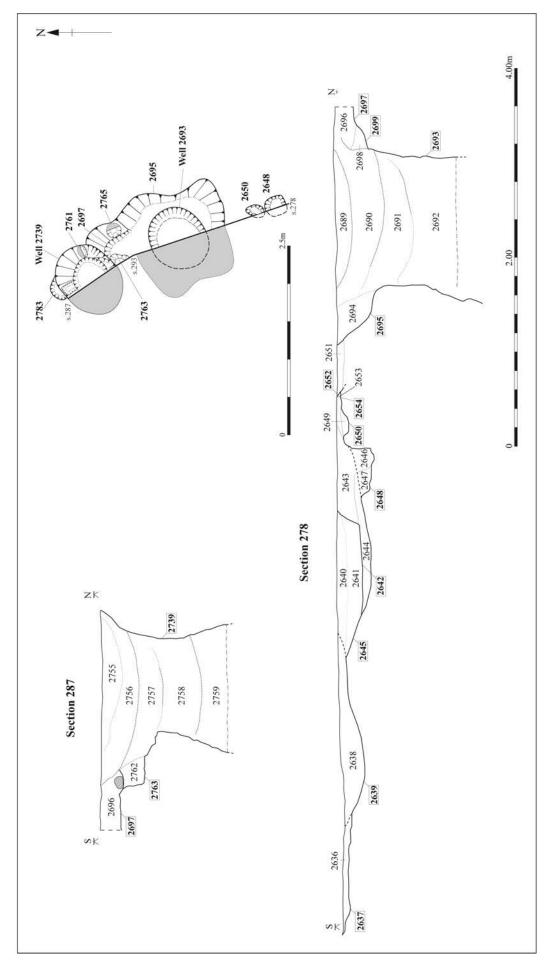


Figure 58 Period 5. Section of well 2693 and associated features. Plan scale 1:50. Section scale 1:40

of Ditches 23 and 25. It was c. 1m wide and between 0.52m and 0.78m deep with steeply sloping sites and a narrow, concave, base. The number of silty grey-brown fills found within the ditch varied between one and four depending on the levels of preservation. Again, this ditch cut through several earlier features (including Burials 15 and 16), and its fills contained residual pottery as well as five late medieval sherds (13g). A small amount of animal bone was also recovered.

Wells

(Figs 56-58)

In the south-eastern part of the site were several post-holes (2761, 2763, 2699, 2765 and 2783) which may have related to adjacent wells. The post-holes were either rectangular or oval and varied in size, the largest being 0.70m long, 0.40m wide and 0.55m deep. All contained silty fills within which finds were sparse.

Oval well 2739 was located adjacent to and to the north of well 2693 (see below). It was 2m long, 1.85m wide and over 1.3m deep (it was not bottomed). The upper part had concave sides which soon became almost vertical, if not slightly convex. The basal fill (2759) consisted of frequent chalk block rubble which was probably the collapsed remains of a lining for the well (the collapse of which would explain the convex nature of the well profile). This was overlain by mid-grey-brown silt (2758), within which were four pieces of medieval pottery (22g) dated between the 12th and the 14th centuries, and the rib from a medium-sized mammal. A similar mid-grey clay silt (2757) was next in the sequence of disuse fills. In this fill was one sherd of not closely datable medieval pottery (2g), three pieces (6g) dated between AD 1150 and 1375, another fragment (12g) produced between AD 1270 and 1400 and three sherds (13g) of pottery dated to between AD 1375 and 1550. This layer was sealed by a thin lens of black ash, over which lay a mottled layer that consisted of clay, ceramic building material, mortar and silt (2756). This layer contained no finds and may have been a capping layer for the feature. After a period of settlement a final layer (2755) of mottled grey and yellow silt and clay was packed into the top of the well. This feature appears to have fallen out of use by the late 14th century.

A square pit (2695) that measured 2.5m long by 2.5m wide and was 0.4m deep with moderately steep sides and a flat base formed the construction cut for well 2693. It contained mid-yellow silt (2694) within which was a (probably residual) early medieval pottery sherd (14g) dated between AD 1025 and 1200, as well as cattle bone. The well (2693), which sat centrally within the feature, was circular (diameter 1.85m) with steep sides and an excavated depth of 1.55m (it was not bottomed). The primary fill (2692) was white-grey chalk silt representing the collapsed and blocked lower layers of the well. This was overlain by mid-pale yellow-brown clay silt (2691) that contained a medieval sherd (4g) dated between AD 1375 and 1450 and animal bone constituting a cattle tooth, medium-sized mammal vertebrae and large mammal rib. The next fill in the sequence was mid-grey-brown silt (2690) within which was a sherd of medieval pottery (9g) dated to between AD 1200 and 1400 and two sherds (35g) of not closely datable medieval pottery. Also found was a pig jaw bone and the vertebrae from a large mammal. The latest fill within this well was mottled grey-brown silt (2689) which contained six fragments (15g) of medieval pottery dated to between AD 1200 and 1400 and another three pieces (7g) dated between the 13th and 16th centuries. There was no obvious cap for this well which appears to have ceased being used by the early 15th century.

Mortar mixer

(Fig. 57)

Lying to the south-east of the wells was a distinctive circular feature 2.8m in diameter identified as a mortar mixer (2181). In its centre was an upstanding disc of hardened mortar 0.95m in diameter that contained a depression (which would have held the central post) 0.25m deep. Surrounding this disc was an outer gully that measured between 0.87m and 0.98m wide and 0.25m deep. The fill of the central depression was mid-orangebrown sand silt, within which was a scrap of intrusive pottery dated between AD 1780 and 1900. Environmental sample 1, also taken from this deposit, contained a fish vertebra (carp) and water vole, mouse or vole and frog bones. The primary fill was overlain by light orange slightly silty sand, within which was another intrusive pottery sherd (4g) dated to between AD 1700 and 1900. No small wild animal species were found in this fill (including from the residue of an environmental sample (Sample 2)), indicating that this deposit capped the central depression, preventing any further pit falls. The fill of the surrounding gully was mottled grey-brown and orangebrown clay silt, within which were another two intrusive pottery fragments (9g).

Oven

(Fig. 57)

Immediately to the west of the wells and c.9.5m northwest of the mortar mixer was an oven (2343). It was circular in plan with a diameter of 1.35m and a depth of 0.22m. Attached to its southern edge was a narrow flue orientated north–south that measured 0.4m wide and c.1m long. There is evidence that both the oven and the flue had been lined with a 10cm-thick layer of clay (2344, 2345). The oven was backfilled with mottled yellow-brown silt clay which contained baked clay from the collapsed superstructure, residual Iron Age pottery (5 sherds, weighing 27g) and pieces (3 sherds, weighing 20g) from a Colchester ware jug dated between AD 1200 and 1400. The natural chalk in the base of the hearth had become discoloured owing to exposure to high temperatures, possibly during the heating of the chalk for lime for the manufacture of mortar. It is noteworthy that an environmental sample from the base of this feature failed to produce evidence of the fuel used in the hearth. Adjacent to the south-west edge of oven 2343 was an oval pit (2576) forming the stokehole for the oven; it measured c.2.2m long by 1.7m wide and 0.35m deep, and had almost vertical sides and a concave base. It contained a mix of fine silty light grey-brown soil and sandy mortar and brick fragments that gave the impression of having been heated.

Chalk quarries

(Figs 56 and 57)

A sub-oval quarry (2749) was located in the southern half of the site, north of the rectory demolition footprint and c.44m north-west of the mortar mixer. This pit functioned as a chalk quarry which was contemporary with the mortar mixer, and may have been one of several small quarries in

the vicinity that provided chalk for mortar production at that time. Six other similar chalk quarry pits (2250, 2362, 3340, 3313, 3314, 3380) were cut in the south-central (east) part of the site. These features were all stratigraphically later than Ditch 26 and contained small quantities of residual later Iron Age, Roman and medieval (14th-16th century) pottery and cattle, pig, sheep/goat and fowl bone. Quarry 2749 was cut away on its northern edge by a modern ditch, but its surviving dimensions were 1.25m long by at least 0.81m deep (the bottom of the pit was not reached). The lowest recorded fill was mid-grey-brown sandy silt (2752) that was overlain by pale brown silt (2751) which contained large pieces of white chalk rubble. These layers were sealed by mid-grey-brown silt (2750) within which was a small piece of medieval pottery (2g) dated between the 12th and 14th centuries and two cattle teeth.

IV. Post-medieval to modern (c. 1535 to 2002)

by Alice Lyons, with Judith Roberts (Fig. 59; Plate 10)

Boundary ditch and associated features

A post-medieval boundary ditch (Ditch 30) recorded over a distance of 28m was 1m wide and up to 0.3m deep with a flat, uneven, base and concave sides. It was orientated north—south and was broadly parallel to Ditch 26 (to the east). It was post-medieval and may relate to the rectory or its precursor, but does not appear on the 1831 enclosure map (Plate 10). Its fill was grey-brown clay silt with moderate chalk fragments, within which were residual Iron Age (2 sherds, weighing 18g) and Romano-British (2 sherds, weighing 5g) pottery, as well as medieval and post-medieval pottery (6 sherds, weighing 29g) dating through to the 16th century.

Another pit (2737) was located very close to the eastern edge of the demolished 19th-century rectory and may have been related to it or to the earlier buildings on the site. This pit was truncated, with surviving dimensions of 1.45m wide and 0.3m deep, and had concave sides and base. It contained light to mid-grey-brown sand silt within which was a 13th- to 14th-century pottery sherd (4g) and a pig jaw bone.

Horticultural features

During the 19th and 20th centuries the eastern part of the site was landscaped and made into a garden. Many planting holes, fence lines and other features were recorded. In the north-western corner of the site the natural chalk geology dipped down to the west but the ground had been levelled by importing soil, possibly at around the time the cottages along the northern edge of the site were built (between 1831 and 1885, as the redeposited soil (1.28m thick) sealed 16th-century cobble-filled gullies, which drained from the north into a pond, and a cobbled surface). A late medieval/post-medieval harness loop (SF 53) was found in one of the lowest deposits. A 19th-century pit cut through the redeposited soil and was itself sealed by 0.44m of modern topsoil.

Trackway and pits to the rear of St Peter's Street properties

A trackway orientated south-west-north-east ran across the site from an entrance off Hinxton Road to serve a cottage situated to the north-west of the rectory. (The foundations of a cottage or outbuilding to the north-west of the rectory (shown on the enclosure and early Ordnance Survey maps) were noted but they barely penetrated the surface of the chalk and the exact layout of the building could not be determined.) Material to construct this trackway was evidently taken from the burial ground and included human skeletal remains constituting two individuals (one 25-30-year-old? female, and one adult male). These bones had been collected and reburied together, possibly in a bag which did not survive. Pottery from the trackway deposits indicate that it was constructed in the late 18th to early 19th century. The line of the track follows the boundary (marked on the 1831 enrolled enclosure map) between the northern allotment and the rectory garden. Other landscaping may have taken place at this time which redistributed the overburden in the northern area. The track had been cut by modern features associated with construction of the factory.

Located in the north-western and north-eastern parts of the site were two oval pits that probably served as rubbish pits to the rear of houses which fronted onto St Peter's Street.

V. Artefactual evidence

Medieval and post-medieval pottery

by Carole Fletcher (Fig. 60)

Introduction

A total of 913 sherds (weighing 12.503kg) of medieval and post-medieval pottery was recovered; its condition is generally good with an average sherd size of 14g. The assemblage was analysed in accordance with guidelines published by the Medieval Pottery Research Group (Blake and Davey, 1983; MPRG 1998).

Fabrics and their source of supply

The major fabric types in the assemblage include Medieval Essex Micaceous Sandy Ware, Colchester-type ware (Fabric 21; Cotter 2000, 108) and post-medieval red ware from Essex. Other fabrics include St Neots Ware, Early Medieval Essex Micaceous Sandy Ware and the shell-dusted variant of Early Medieval Essex Micaceous Sandy Ware. The source of supply of different fabrics changed through time (Table 31), although the Essex

Region (in alphabetical order)	Early medieval	Medieval	Post- medieval
Buckinghamshire	2.59	2.73	0.00
Cambridgeshire, Huntingdonshire, Bedfordshire	13.38	4.8	0.08
Essex	77.01	83.34	81.29
Import	0.00	0.00	1.02
Lincolnshire	0.19	0.00	0.00
Midlands	0.15	0.00	6.86
Norfolk	0.00	1.03	0.00
Northamptonshire	0.23	0.00	0.00
Staffordshire	0.04	0.28	7.50
Unknown	6.41	7.82	3.25
Total	100.00	100.00	100.00

Table 31 General provenance of medieval and postmedieval pottery by date (shown as a percentage)



Figure 59 Plan of all post-medieval (Period 6) and modern (Period 7) features. Scale 1:750

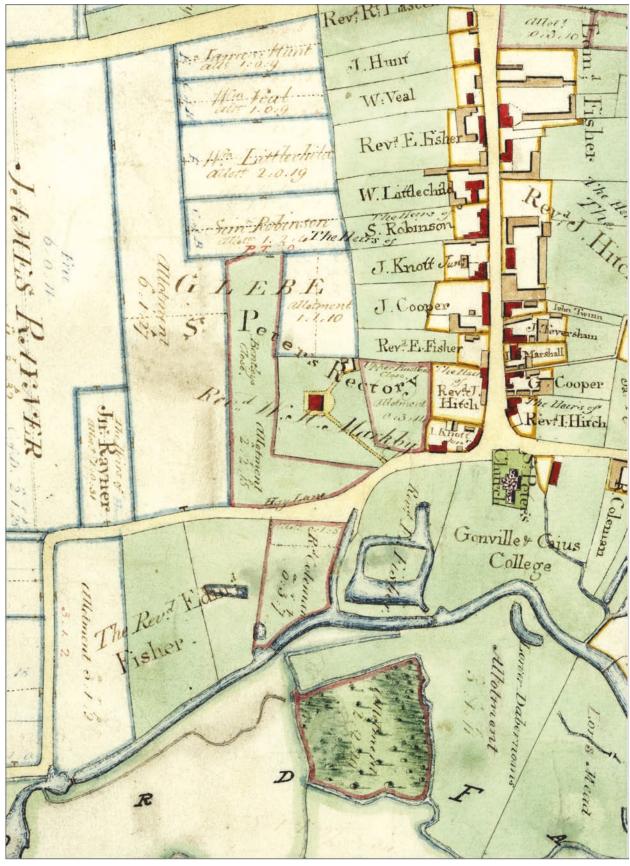


Plate 10 1831 Enrolled Enclosure Map (CRO Q/RDc44; courtesy of Cambridge Records Office)

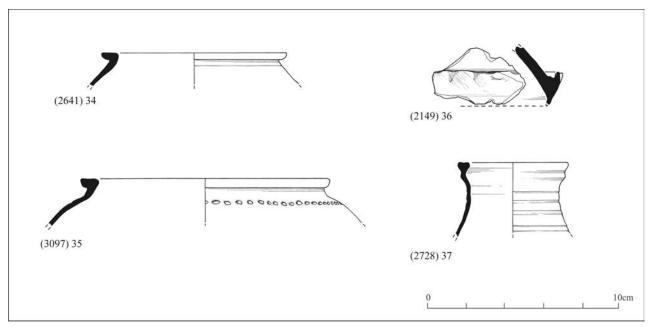


Figure 60 Medieval and post-medieval pottery. Scale 1:4

pottery industries can be seen to dominate the supply of ceramics in every phase.

Material from Essex, consisting mainly of early medieval or medieval Essex micaceous sandy wares and Colchester-type wares, makes up 77% of the early medieval assemblage. Other material found includes a jug sherd from Brill in Buckinghamshire, a piece of Stamford ware from Lincolnshire and a fragment of Shelly ware from Northamptonshire. The remainder of the assemblage is intrusive pottery from the Midlands and Staffordshire.

The percentage of coarse wares fell to less than 20% by the medieval period, while the percentage of glazed wares increased to *c*.29%. Essex remains the major pottery supplier, providing Medieval Essex Micaceous Sandy Ware coarse ware vessels and Colchester-type fine ware. However, jug sherds from Brill (Buckinghamshire) and Grimston ware (Norfolk) indicate that glazed wares were being brought to the site from areas other than Essex.

Subdivision of the post-medieval period into two periods — from its beginning to c.1700 and from c.1700onwards — shows changes in ceramic production and supply at the start of the industrial age. The rise of factory production resulted in increased supply of fine and utilitarian wares from the Midlands and Staffordshire, supplementing the more established Essex production centres. The largest component of the pre-1700 vessels is the late medieval/early post-medieval fabrics, including late Colchester ware, which was in use between c.1400 and c.1600 (Cotter 2000), bridging the medieval-postmedieval transition. The assemblage also includes a rim sherd from an Anglo-Netherlands tin-glazed earthenware dish c.1600 to 1700 and a single sherd from a Raeren drinking jug c.1480 to 1550. The largest group in the post-1700 fabrics is the 19th-century fabrics, comprising 35% of the assemblage. These consist of post-medieval red wares (35 sherds, weighing 0.454kg), although the largest group are the modern red wares (190 sherds, weighing 1.394kg).

Vessel types (Table 32)

Approximately 66% (by weight) of the assemblage could be assigned to a specific type. The assemblage is broadly domestic in character, with a predominance of jars used as cooking pots in the early medieval period (Medieval Essex Micaceous Sandy Ware). Jugs are predominant in Colchester-type ware during the 13th and 14th centuries, with bowls becoming more common in the 15th century. The other medieval glazed ware sherds have been identified in the main as jug sherds. In addition, a large Early Medieval Essex Micaceous Sandy Ware sherd from a curfew (a pottery fire cover) was also recovered. In post-medieval deposits bowls are the dominant vessel form in both post-medieval red ware, stoneware and modern white earthenware fabrics (possibly used in the kitchen to process dairy products and in other food preparation). Drinking vessels consisting of imported stoneware drinking jugs and red earthenware mugs or Tygs, which were replaced by china tea cups with transferprinted designs in the early modern era, were also common. The latest phase of the site also includes sherds of modern red earthenware flowerpots.

Basic form	Early medieval	Medieval	Post- medieval
Bowl	18.23	37.38	28.92
Jar	55.96	27.52	8.59
Jug	19.82	33.33	19.24
Drinking vessel	0.00	0.38	3.41
Lighting and heating	5.52	0.00	0.00
Miscellaneous	0.47	1.39	39.84
Total	100.00	100.00	100.00

Table 32 Percentage of medieval and post-medieval vessel functional types

Conclusion

There appears to have been continuous pottery use and deposition at Duxford from the Anglo-Saxon to the early modern periods, with the period AD 1150 to 1350 forming the main phase of activity. The Essex pottery industry was the main supplier throughout the medieval period and pottery from several different centres was identified. This dominance of supply is typical of medieval assemblages retrieved from the southern edge of Cambridgeshire; other assemblages with this range of fabrics have been found at Barrington and Fulbourn. It is not entirely clear why medieval pottery assemblages in this southern part of Cambridgeshire were being supplied by the pottery industries of Essex, however, the superior quality of these wares makes the other relatively local medieval fabrics, such as Ely ware (which produced a full range of glazed and unglazed vessels), or the unglazed Fen Sandy wares, look very poor-quality by comparison.

Catalogue of illustrated pottery by Paul Spoerry

- 34. Fig. 60. Jar rim in a fine, micaceous 'grey ware' fabric from kilns in Essex (Fabric 20, Cunningham 1985). These 'blocked, neckless' rims (flanged rims on short-necked vessels) are very characteristic of the period after 1250 in London and Essex (Cotter 2000, 94) but might not be expected in Cambridgeshire before perhaps 1275, continuing until 1400 (fabric: Medieval Essex Micaceous Sandy Ware). 2641, fill of pit 2642, Period 5
- 35. Fig. 60. Blocked, neckless jar rim in a micaceous fabric with moderate, medium (to 0.5mm) quartz grains, mid-brown surfaces and mid-grey core with a horizontal band of lightly stabbed decoration. Possibly a Mill Green Coarse ware fabric (Pearce *et al.* 1982) but generally of Fabric 20 type, dated 1275–1400 (fabric: Medieval Green Coarse Ware). 3097, fill of pit 3099. Period 5
- **36.** Fig. 60. Base/cordon of curfew in Mill Green Coarse Ware fabric (Pearce *et al.* 1982). Brown fabric with abundant coarse (to *c.*2mm) clear quartz grains, occasional coarse grog and moderate fine mica. Soot on outer and lower edge. Dated 1275–1400 (fabric: Early Medieval Essex Micaceous Sandy Ware). *2149*, fill of pit *2148*, Period 5
- 37. Fig. 60. Flat-topped, hollowed rim with external cordon below and neck from wheel-made jug in an orange fabric containing abundant white quartz grains to 0.5mm, with a patchy iron-speckled lead glaze that appears both olive green and clear/orange in colouration. This appears to be generically an East Anglian red ware, but is in a coarser fabric than most sherds of this type commonly found in south Cambridgeshire, which are usually attributed to the Colchester kilns. This vessel may have been made at, for example, Hollesley or Ipswich in Suffolk (West forthcoming). 2728, fill of ditch 2727, Period 5

Metalwork

by Holly Duncan

Button

Dress fasteners are represented by the remains of half of a domed composite button (SF 9, not illustrated) of probable post-medieval date.

Hook and eye

A second possible fastener (SF 1) may have been used in a manner similar to a hook and eye. It is suggested that the complete fastener originally comprised three parts. A fixed stud would have been fed through the wider section of the clasp opening and then 'locked' in place by sliding the clasp along to the narrower oval end of the opening. The opposing end of the clasp would have been hooked over the third, possibly bar-like, element. It is possible that this fastener was used on heavier clothing such as a cloak.

No certain parallels have been found for SF 1, but it is thought to be late medieval to post-medieval in date.

SF 1 Fig. 61. Possible dress fastener. Copper alloy. Fastener of flat rectangular sectioned sheet. One end oval in plan with central opening. The base of the opening or slot is squared; it then curves out into a rounded shape and terminates in an elongated oval. The fastener narrows in width to form a rectangular stem which widens slightly before the end is hooked over. Length 31mm; max. width 12.2mm; thickness 1.1mm. Mortar mixer 2181 (2182), Phase 5

Strap fastenings and mounts (buckles)

Seven items comprised strap fastenings and mounts, although only half of this assemblage was recovered from stratified deposits. One form of buckle found possesses a central bar, which may be cast in one with the frame (SF 2) or have a separate revolving bar housed in holes in the side of the frame (SF 15). Such buckles are a later medieval form, the majority occurring in deposits of the later 14th century continuing into the post-medieval period. SF 2, with its ornate cast decoration, is of post-medieval date.

A single strap loop or guide (SF 6) was found. Guides of this type have a rectangular or trapezoidal frame with two opposed internal lugs close to one long edge. They have been found in late 12th- to 15th-century deposits in London (Egan and Pritchard 1991, 229–33) and from mid-13th- to mid-15th-century deposits in York (Ottaway and Rogers 2002, 2903). The recovery of SF 6 from a Period 5 post-hole indicates intrusive activity.

Various forms of strap mounts were recovered. A possible 'eyelet' (SF 78.3) was associated with the oval iron buckle (SF 78.1) recovered intrusively from the skull cavity of early Iron Age Burial 21. The eyelet, found in situ on mineralised remains of a strap or girdle, comprises a short hollow cylindrical tube with the ends of the tube flattened outwards. These eyelets are thought to have been used mainly as surrounds for buckle pin holes in straps or for lace holes. Similar eyelets, although of lead/tin, have been found in London, in the main from deposits of early-15th-century date, although one example may pre-date the middle of the 14th century (Egan and Pritchard 1991, 227–8). A copper-alloy mount or eyelet from Bedern, York, was found in a mid-14th- to early-15th-century deposit (Ottaway and Rogers 2002, 2909 and cat no. 14439). The form of the buckle (SF 78.1) associated with 'eyelet' SF 78.3 is thought to date from the 7th century into perhaps the earlier half of the medieval period, however, which does not seem to marry well with the late date of eyelets noted above. It is thus suggested that this form of strap reinforcement may have been in use before the mid-14th century.

- SF 6 Fig. 61. Trapezoidal strap loop with internal projections. Copper alloy. Loop shape is currently distorted. The internal projections are at the narrower end of the loop. Length 14.2mm; width 23.8mm. Post-hole 2274 (2273), Structure 5, Period 4
- SF 78.3 Fig. 61. Possible eyelet. Copper alloy. Small eyelet for strap? Heavily corroded and in very poor condition. X-ray indicates tubular central hole with opposing ends flattened. Diameter c.12mm; internal diameter 5mm; height 5.5mm. Burial 21 (4065), Period 1

Iron woodworking tool

Evidence for woodworking was limited to the find of a possible auger twist bit (SF 48). This form of bit was used in the same manner as modern gimlets: for boring pilot holes in wood. Although an example of a twist bit with lanceolate terminal was found in a 12th-/13th-century context from Coppergate in York (Ottaway and Rogers

2002, 2727) these are not common finds in medieval contexts. Goodall (1980, 29–30 and fig. 33 nos B83–86) records three examples from late medieval deposits, which accords well with the suggested dating of SF 48.

SF 48 Fig. 61. Auger twist. Iron. 44mm long by 7mm wide and 4mm deep. Quarry 3313 (3321), Period 5

Copper-alloy book clasp?

One item tentatively identified as a book clasp (SF 12), and therefore associated with written communication, was recovered. Although bearing some similarities to small straps from casket hinges (*e.g.* Ottaway and Rogers 2002, fig. 1416), this example is diminutive in size and thus more akin to book clasps. The ends of these clasps were hooked over a bar which projected on a fitting from the fore-edge of the other cover. This method of closure first appeared in the 13th century (Biddle and Hinton 1990, 755) but the majority of these hooked clasps are recovered from deposits of 15th- and 16th-century date (Ottaway and Rogers 2002, 2938).

SF 12 Fig. 61. Book clasp? Copper alloy. Narrow rectangular strip, one end looped over to form hook, opposing end perforated (rivet not in situ). The strip is decorated with three groups of incised horizontal grooves. Length 36.4mm; width 5.5mm; thickness 1.7mm. Metal detected

Iron horseshoe and nail

Evidence for the shoeing of horses was limited to the find of a shoeing nail and the remains of a shoe. The nail (SF 84.2) appears to be an early medieval form, predominantly encountered in deposits dating to the 10th–11th centuries (Ottaway 1992, 707). A branch of a horseshoe (SF 89) was also found within the fills of Period 2 Burial 11. The presence of three rectangular nail holes indicates a date of 1350 or later for this shoe (Clark 1995, 88), its presence within the fill explained by the truncation of the burial.

Copper alloy strap connector or guide

A single looped strap connector or guide (SF 53) from a bridle was found within a Phase 5 layer. The hooked ends of these guides were attached to the bit, while the leather harness strap passed freely through the loop (Goodall 1980, 189). Where found, these items are more commonly of iron (*e.g.* Goodall 1980, nos L106–L108). Date ranges for parallels span the later medieval into the post-medieval period (Goodall 1980, 189; Clark 1995, fig. 35.2; Margeson 1993, 225 no. 1824).

SF 53 Fig. 61. Strap connector. Copper alloy. Distorted and damaged rectangular frame with stem and beginnings of integral hook. Current width frame 27mm; frame length 14mm; hook length 27.5mm. Layer 3573 (3572), Phase 5

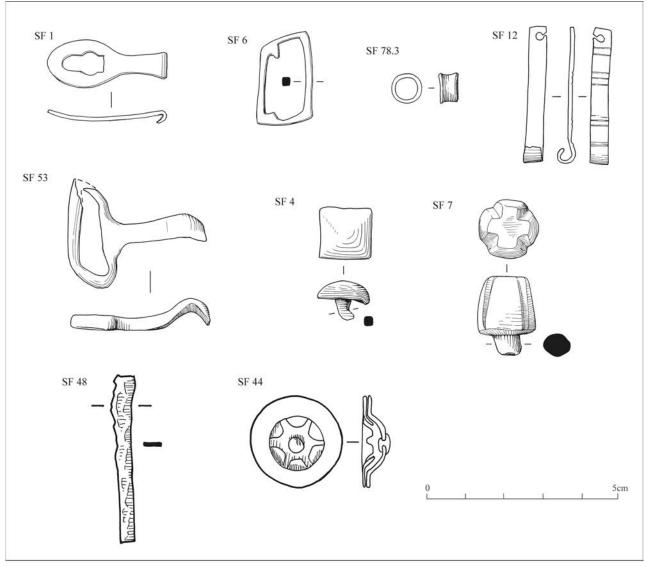


Figure 61 Medieval and post-medieval metalwork. Scale 1:1

Lead shot

Two pieces of post-medieval shot were found during metal detecting (not illustrated). The diameter of one (SF 13) suggests it was fired from a musket, while the other (SF 45) may have been used with a pistol.

Studs and mounts

Studs and mounts served both a decorative and strengthening function on straps and belts. Three examples were identified. A domed square-headed stud or mount with integral rivet (SF 4) can be readily paralleled by similar mounts from London (Egan and Pritchard 1991, 198) and Coppergate, York (Ottaway and Rogers 2002, fig. 1480 no. 12894), from deposits spanning the mid-13th to 15th centuries. The circular mount (SF 43; unillustrated) would have had a separate rivet and is closely paralleled by an example from mid-14th- to 15th-century deposits in London (Egan and Pritchard 1991, fig. 114 no. 926). The third mount (SF 44) is of unusual composite construction, with an openwork iron disc overlying a lead-alloy disc, with central iron rivet. Although the six-pointed wheel or star motif appears on copper-alloy and lead/tin mounts of the mid-14th to 15th century (cf. Ottaway and Rogers 2002, 2911; Egan and Pritchard 1991, fig. 111, no. 850), the combination of iron and lead-alloy discs is not readily paralleled.

The size and weight of SF 7 argues against it having been a decorative stud, although large domed studs (Bishop and Coulston 1993, fig. 108) and bell-shaped studs of Roman date are known (Allason-Jones 1985). An alternative function may be that of a decorative terminal, as on late medieval/early post-medieval purse frames (Ward Perkins 1940, fig. 52), and ornate drop-handles such as one from London (Egan 1998, fig. 143). As this object is from an unstratified deposit there can be no certainty as to dating.

- SF 4 Fig. 61. Mount. Lead/tin. Cast domed square-headed stud with integral rivet. Tip of rivet 'upset'. Head 13.8mm by 13.8mm; length 10mm. Post-hole 2275 (4147), Period 4
- SF 44 Fig. 61. Mount. Iron and lead alloy. Two perforated circular discs, one of iron and one of lead alloy, set one on top of the other, with flat rim and convex centre. The upper, iron disc has an openwork motif of a six-pointed wheel or star. An iron rivet is *in situ* at the apex of the convex dome. Diameter 25mm. Metal detected
- SF 7 Fig. 61. Terminal or stud(?) Copper alloy. Cast, truncated conical head with four longitudinal depressions forming a quadrilobe outline in overview. At the base of the head is a short, circular sectioned stem or shank (diameter 7mm and length 5mm). Total length 21.2mm; width of head 16mm; thickness of head 15.5mm. Metal detected

Lead plumb-bob

Building activity is represented by a conical lead plumbbob (SF 8). Suspension is likely to have been achieved via a short rod-like projection, which survives only as a scar on the flat surface. This form can be paralleled by a lead example from late-9th-century deposits and a copperalloy version from an early-11th-century context at Winchester (Jones 1990, 304 and fig. 71a nos 426 and 429).

Nails

A total of eleven nails was recovered, six of which derived from stratified deposits; of those, most (×4) were found in deposits assigned to Period 2. Of the others, one came from a Phase 6 deposit and one from a Phase 7 deposit. None of the nails was complete, the majority having

damage to the lower shank. Where surviving (nine examples), the nail heads were flat and of rectangular or square plan. Lengths ranged between 25mm and 58mm, with a single nail over 71mm.

Tacks

Two tacks with flat rounded heads and lengths of less than 17mm were found associated with the nail from the medieval mortar mixer (2181). Although one tack survived in poor condition, the second tack retained traces of white metal plating, which not only provided protection against corrosion but may also have been a decorative feature.

Vessels

A post-medieval vessel, comprising the foot from a leaded bronze vessel (SF 30), was found in earlier deposits. This probably dates to the late medieval/early post-medieval period, when the use of cheaper leaded bronze was more widespread. Another vessel constructed out of iron sheet (SF 88.1) was found in a post-medieval deposit. It may have served as a tinder box or be an early form of tinned can. Tin-plate iron cans with soldered lids were introduced in England in 1810.

Glass

Window glass

The fragment of medieval window glass (SF 31) found intrusively in an Anglo-Saxon pit (2434) bears the remains of 'black letter' or textura inscription executed in a matt red paint. It was during the 14th century that Lombardic lettering style gave way to the more angular textura (Alexander and Binksi 1987, 498 cat. 679). Transitional inscriptions sometimes contain a mixture of both styles and it was perhaps in the years around 1350 that Lombardic script was finally supplanted by 'black letter' (Marks 1993, 167). Too little of this shard survives to determine whether a mixture of lettering styles was present. It may have originated from the nearby church of St Peter.

Beads

A single monochrome sky blue bead (SF 49) was found in a deposit containing post-medieval pottery. This colour is not easily datable, although it was particularly common in the Victorian period.

Vessel

A post-medieval glass phial (SF 50) was found intrusively. Its composition, colour, condition and form suggest a date in the 18th century.

VI. Zooarchaeological and botanical evidence

Animal bone

by Ian Baxter

Period 5: medieval

The medieval animal bone assemblage is larger than that from the Anglo-Saxon period but still quite small (NISP = 195; Tables 21 and 22). Again, sheep outnumber cattle by NISP with no goats identified. As in the preceding periods, however, beef would have been the main dietary component. Pig shows a slight increase by NISP and horse

frequency is broadly similar to Period 3. Dog is also relatively frequent. Domestic cat appears for the first time and chicken is slightly more common than goose and domestic duck or mallard, both of which occur at similar frequency. The few frog, eel and Cyprinid/herring bones from the sample residues probably represent accidental inclusions. They include a Cyprinid pharyngeal found in pit 3099. The cattle and sheep/goat teeth and epiphyses are too few in number to ascertain the kill-off patterns. Cattle withers heights (based on seven bones) range between 101cm and 127cm with a mean of 110cm. This shows an increase in the average size of the cattle over Periods 1 and 2. The sheep (n = 6) range between 51cm and 61cm with a mean of 55cm and apparently display a slight reduction in average height compared to Periods 1 and 2. A partial dog skeleton found in pit 2283 came from an animal that stood approximately 53cm high at the shoulder.

Periods 6 and 7: post-medieval and modern

The post-medieval material has been recorded but not tabulated or analysed. Items of interest from Period 7 include a large turkey (*Meleagris gallapavo*) femur: turkeys were introduced to England from the New World in 1541, an early example having recently been found at Norwich Castle (Albarella *et al.* 2009).

A pig maxilla fragment with P3 rotated at 90° from the normal position was found in pit 3395. A recent pig cranium in the author's collection has a similarly rotated M2.

Plant macrofossils

by Val Fryer

Samples 1 and 2 were taken from the mortar mixer (2181). With the exception of a single cereal grain and an indeterminate small legume, charcoal fragments were the only plant macrofossils recorded. Of the remaining six samples of medieval date, only one is of potential interest. The assemblage from Sample 21 (pit 3099) contains a moderate to high density of cereal grains (mostly wheat), which may be derived from a small batch of prime grain intended for domestic consumption.

Chapter 6. Discussion and conclusions

I. Introduction

Duxford is located on the chalk downlands of south Cambridgeshire, with clay uplands to the west and watery fens to the north. This is a landscape with gently rolling undulations formed by the tail end of the great glaciers at the close of the last Ice Age. As the climate warmed and the trees were cleared during the Neolithic, an open landscape covered by grassland with occasional stands of trees became typical of this area. The settlement lies on the River Granta, a tributary of the River Cam, with several arms of the ancient Icknield Way passing close by (Figs 2 and 3). Its characteristics as an area of higher ground at the junction of road crossings and river routes, and perhaps also on the (shifting) edge of a tribal territory, meant that during the Iron Age it became the focus for mortuary features and related rituals. Contemporaneously people farmed the surrounding land, in the process developing from semi-nomadic to permanent settlement (Hill 2007, 22). The Duxford site is remarkable since it demonstrates the complex processes of change from its origins as a newly cleared Bronze Age field to an Iron Age landscape dominated by ritual activity, followed by Anglo-Saxon settlement and the eventual transition to medieval and modern village with associated farmland.

II. Prehistoric

The initial evidence for activity on the excavation site consisted of worked flint attributable to the Mesolithic or earlier Neolithic and small quantities of residual late Neolithic and Bronze Age pottery. No pre-Iron Age occupation was found at Duxford, which is consistent with Yates' (2007, 98) contention that Bronze Age settlement along the River Cam gravitated to the islands of gravel along the river course. A possible Bronze Age burial found nearby (CB 14522, see below) may suggest an earlier origin to 'ritual' use of the area. Of particular note were the possibly Bronze Age and or plough marks, which were clearest in the area of the later shrine and burials supporting the view that shallow soils on such higher ground were taken out of agricultural use, thus leading to the preservation of such features beneath unbroken turf (Bradley 2005, 26).

III. The Iron Age to early Roman period

The tribal and cultural framework

During the Iron Age and early Roman period the area that we now know as south Cambridgeshire was on the edge of the territories of the four major tribes in the region, with the Iceni to the east, the Corieltauvi to the west and the Catuvellauni and Trinovantes to the south (Fig. 4). It would have been a place of shifting tribal boundaries and allegiances producing an uncertain political situation that may have led to the construction of at least three large ditched enclosures, at War Ditches in Cherry Hinton,

Wandlebury (French 2004) and Sawston (Taylor *et al.* 1994), to the north of Duxford (Fig. 2). The function of these hillforts may have been more complex than simple defence, as recent research indicates that they acted as foci for dispersed settlement groups and a venue for communal festivities (Hill 1995b; Hinman forthcoming). Lying between major tribal divisions, this region occupied an unusual cultural position in which the social structure of communities (including their use of coinage, metalwork, pottery and burial practices) did not always reflect regional norms (Gibson and Lucas 2002, 113).

Ritual use of the site

The Duxford hilltop was utilised during the Iron Age as a place where possibly mounded mortuary features were constructed. Also found were numerous middle Iron Age grain silos that had fulfilled a secondary function as containers of feasting waste (disarticulated animal bone, some with butchery marks), accompanied by selected unusual objects and the (articulated) burial of both humans and animals: this behaviour has been interpreted as 'ritual'. The term 'ritual' has been discussed by many researchers, and how it should be defined and approached is constantly under review (Wait 1985; Hill 1995a; 1996; Haselgrove and Moore 2007). Ritual processes themselves are not static and change through time and from place to place. At Duxford, 'ritual' has been interpreted as practices such as the structured deposition of 'special objects' within pits (Richards and Thomas 1984, 215; Hill 1995a, 54) that were motivated by 'spiritual' or 'religious' belief and were not a product of natural taphonomic processes. It is likely that these actions may have been integrated into familiar cultural processes (such as a seasonal feast) whereby 'belief systems were tied in with the fabric of everyday existence' (Gwilt and Haselgrove 1997, 2); such ritual acts are unlikely to have been undertaken daily (Bradley 2005, 81-120; Hill 1996, 25).

The earliest burial and contemporary activity

The first use of the natural chalk knoll at Duxford for ritual purposes is represented by a crouched inhumation burial of the complete skeleton of a twenty-five-year-old man who was interred during the early Iron Age between 830 and 540 cal BC. The burial was isolated from subsequent middle Iron Age features. The body had been placed in a deep circular pit that may have been a reused grain silo. The individual was buried with the selected remains of horse and dog, as well as sheep and cattle bones. Both horses and dogs were status symbols associated with hunting prowess, while the bones of the cattle and sheep may be associated with a funerary meal provided for the individual's benefit in the afterlife. Two smooth red stones had also been carefully placed behind the human skull these were not tools but may have been prized for their unusual colour. For this burial to have stayed in the memory of the local population it must have been marked, most probably by a mound, although other methods of indicating its presence, such as naming, vegetation or a wooden marker, might also have been used.

There are few clues as to why this individual was chosen for burial in an apparently isolated place, on higher ground in a re-used grain storage pit or silo. His bones give no indication of how he died: it is therefore not known whether he met a natural death or perhaps represents a human sacrifice. The status of the individual and the role he played within his community is also unknown. It is possible that in this type of burial the individual was of limited importance, rather it was the burial itself that had symbolic importance for the community (Hill 1995a, 15), perhaps as an offering to produce continued fertility and success (1995a, 12).

The burial may also have had significance as a boundary marker. While no similar burials were found on the site, the presence of a Bronze Age (possibly early Iron Age) female flexed burial has been reported close by. It is likely that this area, on a chalk spur close to the River Granta and the Icknield Way, was of political, ritual or religious significance from an early date, a place where burials were interred on high ground as markers of tribal territory and influence: 'funerary practises are products of 'political' decisions (or sequences of decisions) in which the corpse is manipulated for the purposes of the survivors' (Pearson 1993, 203). Indeed, the placement of the dead in areas viewed as boundaries may have enforced the differences between the 'living or social' and 'dead or natural' worlds (Fitzpatrick 1997, 83). Other Iron Age burials in circular pits are also known at Trumpington (Hinman forthcoming) and Wandlebury (French 2004) in Cambridgeshire.

The presence of a selected individual on higher ground, whether as a sacrifice or as a political statement (or both), emphasises the fact that the skeletal remains of the rest of the community have not been located. Indeed, burials from the early and middle Iron Age are generally rare, leading to the supposition that the majority of the people were probably not buried at all but excarnated (Carr 2007, 444–53; Willis 2002, 37), a process leaving few physical traces: 'it is sometimes difficult to understand death and the treatment of the deceased during the Iron Age, for the archaeological record would suggest that few people were buried' (Ralph 2007, 106) (see further discussion below).

Evidence for early Iron Age settlement in this region typically consists of enclosures, roundhouses and trackways (Taylor 2007). At Duxford the evidence was limited to one small sub-circular structure, similar to those found at Wardy Hill, Ely (Evans 2003, 39, fig. 31, B Structure VI), which Evans interpreted as having a nondomestic ancillary function. The Duxford example may have been used as a shelter for a stockman and vulnerable animals and/or as a store for feed and tools. Associated with the structure were pit groups, a linear ditch and two enclosures, one circular and one D-shaped. Although C-shaped enclosures are relatively well known in Cambridgeshire, with examples seen at Wardy Hill (Evans 2003, 39, fig. 30, A) and Bob's Wood, Hinchingbrooke (Hinman in prep. b), comparative D-shaped enclosures are not found in this area.

It is entirely possible that the community who managed their stock at Duxford during the early Iron Age were settled but not static (Fitzpatrick 1997, 74–5), moving through the landscape with the seasons.

Moreover, it seems clear that while the lower ground was used for stock management, the higher ground had been selected as a place of burial (see below). This clear spatial separation of land use shows specific zoning of different activities by the Iron Age community.

The first 'ritual' enclosure

It was during the middle to late Iron Age that the first possible ritual structure was built at Duxford, consisting of an insubstantial and heavily truncated narrow curving trench with stake-holes in the base, forming a sub-circular enclosure on the hilltop. Within the projected circumference of this enclosure were two extended inhumation burials which may have been contemporary. The enclosure was probably constructed using wattle fences (rather than substantial posts), which served to shield activities from general view as well as the prevailing wind. This method of construction is well paralleled within the region: withy fence or 'wall plate' buildings have been found at other Iron Age sites in Cambridgeshire, including examples at Earith, Haddenham and Fengate (Evans and Hodder 2006, 141, fig. 5.50). The Duxford enclosure could be a large example of this type of construction, although the absence of any other structural evidence (such as post-holes or drip gully) does not support this suggestion. The enclosure of a 'ritual space' may have been to exclude the uninitiated, adding to its importance and sense of exclusivity (Evans 2003, 253) and perhaps also providing a sheltered space for feasting (see below), or possibly for the excarnation of human remains (Carr 2007, 451).

Horse burial in a ritual pit

Both animal and human remains were present in a series of at least twenty deposits in a large middle Iron Age pit (3981) lying to the north of the initial 'ritual' enclosure. The primary deposits included trampled layers, hearth material, a worked bone bobbin and a human foetus. In the central part of the pit a complete articulated horse skeleton had been carefully laid out with another high-status worked bone object (an archer's wrist guard). The horse had been placed intact (not butchered or skinned) with flexed legs. Also within the pit (within separate layers) were another horse skull and burnt stones, along with a human finger found in the deposit that sealed the pit. The latter may represent evidence for excarnation, whereby body parts (or relicts) were sometimes removed from a place of temporary storage to a permanent resting place (Carr and Knüsel 1997, 167-8). These 'special deposits' were interspersed with layers of weathered infill and natural chalk (which contained large numbers of wild species pit falls), as well as ashy layers perhaps from hearths with plentiful 'feasting' waste in the form of animal bone and pottery. This would suggest that the pit was used over several years as part of a ritual process that included feasting and sacrifice (Hill 1995a, 105). The presence of wild species (some in large numbers) indicates that the pit was left open between episodes of use, which may have been as infrequent as once every twenty years (Hill 1995a, 54). When the pit was finally backfilled it appears, like the early Iron Age burial, to have been marked, perhaps by a mound, as it became the focus for later Iron Age to Roman inhumations.

The discovery of an articulated Iron Age horse pit burial associated with few human remains and lying

within a cemetery has few direct parallels in the region, although a small number of other horse burials are known. A late Iron Age articulated horse (with no legs) was buried with human remains in a pit at Trumpington (Hinman forthcoming), and an articulated horse (without the top of its head) was found buried in a pit at Love's Farm, near St Neots, in a non-cemetery location (Hinman in prep. a). A horse burial within a ditch was recently found near Huntingdon (Hinman in prep. b), while a spectacular example of combined horse and cattle burial totalling fourteen individual animals has been found in a purpose-built ditch at the ritual site of Haddenham near Ely (Phillips and Grassam 2006, 179-82). At Broom, Bedfordshire, eleven circular pits contained unusual basal deposits of animal bone including articulated horse limbs (Cooper and Edmonds 2007, 171). Other instances of horse burial are known across the country (Parfitt 1995, 156), particularly in the south-west (see Winnall Down in Hill 1995a; 1996).

Carr (2007, 450) established that animals were commonly deposited with people in the middle to late Iron Age, but rarely by themselves. Indeed, Hill states (1996, 18) that articulated animal burials are generally not found in ritually defined areas, which also suggests that the Duxford example is unusual. It would seem that the Duxford horse was buried with similar ritual and respect as was offered to the earliest human burial at the site, perhaps reflecting its status as a high-order animal (Carr and Knüsel 1997, 167).

The Duxford horse showed no evidence for butchery and can therefore be regarded as special, falling outside the practices of normal animal husbandry (Wait 1985, 151). The burial of an entire animal must have been a loss to the community, not only in terms of the animal as a means of transport, beast of burden or means of traction but also of its by-products; hide, meat and bone (Wait 1985, 153). It is unclear whether the horse was killed as a sacrifice, although its intact burial would indicate that a deliberate choice was taken to sacrifice any useful parts.

This pit, with its long sequence of deposits containing unusual finds, belongs to a tradition that can be seen elsewhere in south Cambridgeshire and in the south of the country, where it is referred to by Hill (1995a, 15) as 'the pit belief system'. In this system pits were used as receptacles for 'material deposited in features according to a proper sequence and with people often actually carefully placing material in, stamping down fills etc in the pits themselves' (Hill 1996, 28). In these pits animal bones and unusual finds are found in the lower fills of pits, with less well-preserved deposits in the upper fills combination of cultural placement and post-depositional processes. At Duxford the deposition of the articulated horse in the central fills, with unusual finds placed nearby, does not quite fit that pattern. These significant deposits, interrupted by a series of ashy fills, were always tipped in from the northern side and had apparently been stamped into place by the individuals involved. The remarkable nature of this feature and the complexity and longevity of its use, combined with its retention in the communal memory makes this more than a pit, giving it, rather, the status of a monument.

Enclosure of the hilltop in the later Iron Age

'The later Iron Age was characterised by increasing specialisation of the landscape and the intensive use of

sites and locations away from the normal areas of settlement for specific activities' (Haselgrove and Moore 2007, 4). This process of specialisation within the landscape can be seen at Duxford in the demarcation of the whole area of the hilltop. Enclosure was achieved by the excavation of ditches, which was started in the later Iron Age and continued through the early Roman period, with the final episodes of ditch digging in the 2nd century AD. In the north-western corner of the site a group of narrow parallel ditches ran on a north-east–south-west orientation and drained into a pond. Around the southern edge of the higher ground narrow ditches followed the contour of the slope. Access to the enclosed area (on foot) was possible on its western side close to the rectangular shrine. Although ditches were revealed on the western and southern edges of the higher ground, the area of excavation was not large enough to confirm that similar ditches ran on the northern and eastern sides.

The construction of this probable enclosure may have thrown up a white chalk bank which (when fresh) would have been a marker visible for a long distance across the landscape. It is possible that the ditches were repeatedly redug to maintain this aspect of the boundary. As the ditches themselves were not very wide or deep and certainly not defensive, they appear to have been symbolic in character. Indeed, it has been suggested that 'boundaries obviously did play an important role in the social and symbolic landscape, bounded spaces being used to signify community identity' (Bevan 1997, 189). It is also noteworthy that these ditches did not reflect the normal field boundary alignment in use at this time; the southern section was sinuous and reflected the topography of the hillside into which it was cut.

It is of particular interest at Duxford that the latest phases of these ditches (see 'The cemetery' below) destroyed both the north-western corner of the shrine and several of the southernmost burials. It would seem that people continued to respect this boundary (and perhaps the special character of the area it enclosed) while what it actually contained became less well remembered. It is possible that only the putative mounds (or other methods of commemoration) remained as a reminder of the burial ground. The enclosure continued to be maintained by the local Romano-British population, while the Anglo-Saxons who lived nearby seem also to have respected the area. It was not until the medieval era that this area finally fell out of communal memory as a special place and was reintegrated into the agricultural practices of the community, with new boundary ditches excavated on new alignments.

The shrine (Fig. 27)

The rectangular single cella timber-framed building found at Duxford was interpreted as a shrine as it was placed away from domestic settlement, on high ground, in an area that had already been used for ritual deposition and human burial in the early and middle Iron Age (Smith 2001, 162). The building fits within the 'shrine model' suggested by Venclová (1993, 61), whereby buildings devoted to ritual should occupy conspicuous positions in the landscape. Importantly this structure also conforms to the range of shrine-types known from this period (Drury 1980; Wait 1985; Woodward 1992) and is consistent with the 'humble' shrine structure described by Warwick Rodwell

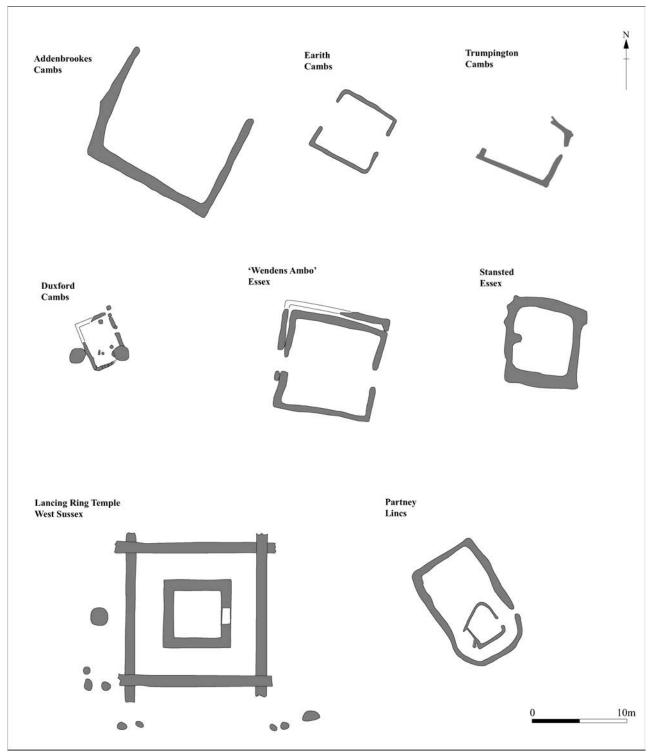


Figure 62 The Duxford shrine and comparative examples (after Evans *et al.* 2008, fig. 2.58.1; Evans *et al.* forthcoming; Hinman in prep. b; Hodder 1982, fig. 13; Havis and Brooks 2004, fig. 74; Bedwin 1981; Frere 1940; Atkins forthcoming). Scale 1:400

(1980, 212). Other similar examples that have been interpreted as shrines (although of slightly differing designs) include those found in Cambridgeshire at Trumpington (Hinman forthcoming) and Earith (Evans *et al.* forthcoming). The Duxford shrine was of similar design to, although smaller than (Fig. 62), an open-sided enclosure recently found at Addenbrookes (Evans *et al.* 2008, 137, fig. 2.58.1), which, owing to its location and lack of associated evidence for ritual practices, was not

interpreted as a shrine but may be associated with mortuary practices. Other comparable shrines have been found in Essex at Wendens Ambo (Hodder 1982, fig. 13) and Stansted (Havis and Brooks 2004, fig. 74). Further afield, an enclosed timber shrine, associated with a small cemetery containing a possible priestess burial, has recently been found at Partney, Lincolnshire (Atkins forthcoming).

The large circular pit found cutting into the south-east corner of the Duxford shrine (Fig. 27) bears a remarkable resemblance to a pit found on the south-east corner of a shrine at Danebury (Cunliffe 1984, RS2, 85–6). The Duxford pit contained ashes, broken pottery and food waste possibly associated with a communal meal or feast, and may represent a closing deposit. The date that this event took place remains uncertain, since the pit contained middle to late Iron Age pottery.

Although the chalk readily available at Duxford would have been a suitable material for construction, there is no evidence that it was used to build the shrine. Instead the construction method comprised upright timbers set in small shallow bedding trenches: this was the standard building method, with more than half of the known shrines using this form of construction (Wait 1985, 172). The Duxford shrine was of flimsy construction and, although it shows signs of modification and repair, it seems unlikely that it could have survived for more than a generation or two, perhaps a period of fifty years.

The building was orientated north-west-south-east, with no door opening surviving; this orientation is common for shrines of this type (Wait 1985, 172). Several post-holes on its northern side suggest that there may once have been a porch similar to that seen at Cadbury (Wait 1985, 166). The shrine had no internal divisions and no evidence of an altar, while no votive metal offerings (coins, miniature tools or broken metalwork) were found; as a result this shrine could not be connected with any known deity, although perhaps the continuation in use of the early and middle Iron Age burial site suggests that an aspect of ancestral veneration should be considered. The shrine may also have had a practical part to play in the preparation of the dead for burial, possibly it may have served as a place for the dead to be laid out and viewed before interment.

The cemetery

The cemetery lay to the east and south-east of the shrine, all of the burials lying within the confines of the ditched enclosure. The location of the Duxford inhumation cemetery in association with the shrine is particularly important as, typically, burials are not found close to these structures (Watts and Leach 1996, 145; Philpott 1991, 236). Temple or shrine sites associated with late Iron Age or Romano-British burials are very rare, with Lancing Ring, West Sussex (Bedwin 1981; Frere 1940), and Partney, Lincolnshire (Atkins forthcoming), providing the best comparisons.

The excavated cemetery population at Duxford consisted of thirty-seven or possibly thirty-eight people, including men, women and children (Fig. 24). Few stratigraphic relationships survived, although four distinct groups or phases of burial could be identified (Fig. 23). The earliest late Iron Age burials pre-dated the shrine and followed the contour of the southern ditch, while two slightly later groups directly associated with the shrine were enclosed by a boundary c.10m to the east. A fourth group centred over ritual pit 3981 is of particular interest since it consisted only of males that radiocarbon dating suggests were interred over several generations, continuing into the early Roman period.

It has been possible to establish by analysis of the radiocarbon dates, grave groups, varying orientations and differing burial practices, that continuous burial took place at Duxford between c.100 BC and AD 200, with seven of the ten dated inhumations interred during the first two centuries AD. Burial at the site had ceased by the time that later Romano-British rites (such as burial within a coffin or the wearing of hobnail boots; Dodwell 2008) or indeed any aspect of Christianity (such as east to west burial), had been introduced.

In most ways the cemetery at Duxford fits the expected model for rural burial during the late Iron Age period: i.e., small cemeteries within a discrete area, with poorly furnished graves and with a mixture of rites. It was originally thought that the community at Duxford did *not* conform to wider practice in that it adopted inhumation as the main burial rite, with only two certain and two possible cremations being found. It is generally believed that cremation was the favoured burial practice at this time, with inhumation not becoming widely adopted until the 2nd century AD (Taylor 2000a, 17; Evans et al. 2008, 12), and cremation cemeteries were common along the chalk ridge of the Chilterns from southern Bedfordshire to the Snail and Lark valleys and into north Essex, south Cambridgeshire and north Hertfordshire in the last century BC (Gurney 1998, 1). However, as was first suspected in the early part of the 20th century after excavations at an inhumation cemetery at Guilden Morden in Cambridgeshire (Fox and Lethbridge 1929; Lethbridge 1936), the use of interment as the main burial rite in this period is quite normal in parts of East Anglia (Ralph 2007, 29), and south Cambridgeshire particularly (Pearce 1999), a suggestion reinforced by a growing body of new evidence, including Addenbrookes (Evans et al. 2008), Hinxton (Kenney forthcoming) and Duxford. Other late Iron Age and early Roman sites in the region predominantly interred their dead on a north-east-southwest or south-east-north-west orientation (Dodwell 2008), which is not the case at Duxford. This regional preference for interment can be seen elsewhere in the country, including in the south-west (Parfitt 1995, 157), London (Pearce 1999), and Deal in Kent (Parfitt 1995), demonstrating that pockets of differing burial rites did exist. While the majority of the Duxford burials consisted of unaccompanied supine inhumations of no fixed orientation, variations of burial rite were recorded. Three examples had been buried with their hands placed under their pelvis (Burials 1, 5 and 24), while another was buried in an over-long grave that would perhaps have contained organic grave goods which have not survived (Burial 4); two inhumations were accompanied by pots (Burials 3) and 13), and others by personal possessions including a knife (Burial 2), glass beads (Burial 17) and a bracelet (Burial 19). One cremation was accompanied by a partial piglet skeleton and two fragmentary ceramic vessels and another by a near-complete pot, bone toggle and needle.

Until fairly recently it was thought that the chalklands of southern Cambridgeshire formed the northern limit of Gallo-Belgic influence and the Aylesford-Swarling tradition—archaeologically visible as imported fine ware wheel-made pottery, the adoption of a new style of dress (brooches), personal grooming (tweezers) (Hill 1997, 103), diet (the contents of amphorae and the use of mortaria), coinage and the accompanied cremation burial rite (Fitzpatrick and Timby 2002, 168, fig. 14.4). A reassessment of the adoption of Aylesford-Swarling and Roman culture across the region shows that there is a growing body of evidence to suggest that these new

influences in fact travelled northwards at least as far as Cambridge, through a corridor either side of the River Granta; as accompanied cremation sites are now known at Bartlow, Duxford, Hinxton, Trumpington and Addenbrookes (Evans *et al.* 2008, 139). Recent work has also illustrated that many other similar 'corridors' existed, as evidence for this culture is now known north of Bedford and as far west as Milton Keynes (Bull and Davies 2006; Atkins in prep.).

A distinct group of burials (Burial Group 1) on the south-eastern edge of the cemetery (Fig. 26) illustrates the mixture of rites found at Duxford and includes an inhumation of a male accompanied by two pots, one on either side of the head, dating to the first half of the 1st century AD (Burial 3), and an accompanied cremation (3669). The ceramics associated with the cremation also date to the 1st century AD but show similarities with vessel forms from an earlier (last half of the last century BC) cremation cemetery at Hinxton (Hill et al. 1999). The two other burials (4 and 5) associated with Burial 3 and cremation 3669 appear (by absolute dating and associated orientation) to be dated to the last centuries BC/1st century AD and include both a male and a female in their 40s. A scatter of adult human bone and a later 1st-century AD butt beaker found in later ditches and in the post-medieval trackway may have come from other (lost) burials in this group. In contrast to the Hinxton cemetery, where the cremations (often surrounded by a ring-ditch) pre-date the inhumations, it appears that both rites were being conducted in the same period at Duxford as inhumations both pre- and post-date the few cremations.

Where ceramics accompanied burials at Duxford the limited repertoire of vessels was associated with the presentation and consumption of food and drink. It is particularly worthy of note that Tazza dishes (a shallow saucer-like dish either mounted on a stem and foot or on a foot alone), which form a distinctive feature of the south Cambridgeshire and north Essex accompanied burials (Evans *et al.* 2008, 13, fig. 1.10.1), are not found at Duxford. The absence of this distinctive pottery type is another example of the divergent burial practices chosen by people at Duxford.

The presence of a partial pig skeleton with cremation 3669 again supports the concept that offerings of food and drink accompanied burials. The animal remains and pottery within the graves were present as part of the final meal or ceremonial feast to mark the passing of the individual; vessels do not appear to have been deposited in their own right. Both Romans and indigenous Britons had similar funerary rituals involving food and inclusions of food offerings in graves, demonstrating an element of continuity between the two cultures (Tuffreau-Libre 2000, 52–60).

It is not known why the burial ground fell out of use by the 2nd century AD. Certainly, the introduction of Romano-British culture may have had some influence and it is possible that the disuse of the enclosed ritual area was related to the introduction of Christianity, which became widespread in Cambridgeshire in the late Roman period (Taylor 2000b, 18). As noted above, none of the burials at Duxford are placed in the traditional Christian east to west alignment (with the skull to the west), suggesting that they all pre-dated the introduction of Christianity.

Feasting

Other evidence of 'ritual' activity at Duxford took the form of large quantities of pottery and food waste deposited within disused grain silos unaccompanied by a human or animal burial. In many cases this has been interpreted as the remains of a single event referred to as 'feasting'. This term can be problematic as it brings to mind Hollywood images of a corpulent Henry VIII surrounded by mounds of food: however, it is used here to suggest communal meat-based meals that were not part of the everyday routine of the community, but took place instead at certain times of year when the hilltop was used as a meeting place. Analysis of the meat yields recovered from individual pits and pit groups indicates that enough meat may have been cooked to feed up to 2,000 people 'in one sitting' (note the various caveats in Chapter 2) during these communal events, although it is not clear if the feast was equally open to all members of society. If the estimates of the number of animals butchered during each 'feasting' event are correct, they represent a very large investment by the community or communities involved, which must emphasise the importance of these hilltop

The coming together of the community at different times of the year not only to feast but also to process their dead (Carr and Knüsel 1997, 167), arrange marriages, and trade horses and other livestock has already been proposed as a function for the larger Iron Age hillforts of the region (see above) and it is likely that smaller-scale meetings (Fitzpatrick 1997, 83-4) were also held at places such as Duxford. Such meetings could have provided an opportunity for 'reinforcing and renegotiating relationships' (Morris 2002, 55) while following a traditional process that could potentially have encouraged a strong cultural identity. Several other sites in southern Cambridgeshire where feasting took place have been recognised: Addenbrookes, Trumpington and Wandlebury (Ralph 2007, appendix A). The shared use of the inhumation burial rite could be an indicator of the connections forged at such communal events.

Distinguishing between domestic waste and 'feasting' assemblages primarily through the analysis of the faunal material is problematic. Domestic and feasting assemblages both contain broadly similar body part distributions; they are, after all, the result of the same processes carried out for the same reason, merely in a different cultural context. To interpret these assemblages it is necessary to consider the method of deposition and the types of features in which they were found. At Duxford the pits containing large quantities of animal bone are not associated with any known settlement, and the deposits of waste appear to be the remains of single eating events that have been deposited in a single phase (i.e., the bone and pot has not accumulated over time). There also seems to be a possible seasonal aspect to some of these deposits, suggesting that they were placed in the ground at distinct times of the year. While it is true that similar deposits associated with settlement activity may be viewed as rubbish dumps, the isolated location of the pits on a hill with a long history of mortuary and ritual use in a landscape where feasting behaviour has been recorded supports the view that these pits contain evidence for communal eating or feasting events.

It is noteworthy that no metalwork or items of feasting equipment were found at Duxford, suggesting either that the Iron Age communities who met and ate here were of a low status (a view which the human skeletal evidence supports) and did not have access to metalwork, or that it was not part of the ritual to deposit such items in pits.

The people

Comments on the initial early Iron Age burial (Period 1.1) have been made above. Two other burials pre-dating the main cemetery, comprising a male and an adolescent, have been assigned to the middle to late Iron Age (Period 1.2). The late Iron Age-early Roman cemetery (Period 2) probably represents the selected remains of several possibly related groups deposited over a period of c.300 years, spanning the pre- and post-Conquest period. It is noteworthy that not everyone from a whole community or even an extended family was buried in this cemetery, as there are insufficient skeletons to represent a group of this type over such a long period of time: specifically, there are too few children and no older people. This suggests that there must have been selection processes involved in the burials in the enclosed area. The group of male burials (Fig. 35) overlying the earlier ritual pit (3981) does tempt speculation that this area was reserved for community leaders and was still recognised as a special place hundreds of years after it was constructed.

Thirty-seven, possibly thirty-eight, individuals were identified. Five were immature, including one (or possibly two) foetuses, two children and two teenagers; other non-adults must have been buried in another location or using a different method of disposal. Some 66% of the skeletons that could be sexed were male, although this figure may be misleading (see Chapter 2.V). The population of Duxford that was buried here did not live to an old age and, again, it is possible that the older members of society were buried elsewhere. The people were also of slight build, with the exception of Burial 13, which had heavy musculature. A high proportion showed evidence of arthritic conditions (especially in the spine, but also in hips, shoulders and hands), even in young adults, caused by heavy weight- bearing activity in youth. Their dental health was also poor, which accords with an increase in dental disease known to have taken place throughout the Iron Age and Roman period. Evidence of pregnancy/ childbirth was found in three of the women, scarring suggesting that their small size made childbirth difficult. One skeleton (Burial 24) showed signs of possible tuberculosis. This is a rare indicator of this disease, which can be difficult to diagnose in skeletal remains.

The population buried at Duxford appears to have been a poorly nourished society whose members had endured hard physical labour during their lives. The failure to produce food in sufficient quantity and variety to allow them to thrive may have been as a result of farming on chalk land, which can be dry and infertile, and may be linked to population expansion in the Iron Age and pressure on already-cultivated land.

Economic and social connections

It is clear from the total absence of Iron Age coinage, high-status metalwork such as brooches (despite methodical metal-detecting) and imported ceramic fine wares that these items were not part of life and death at Duxford during the Iron Age and early Roman periods. The significance of the dearth of coinage may be minimal as, unless the community was in contact with the military,

coinage was not in general use in this area at the time (Evans 2003, 270). Indeed, the absence of coins from this period is typical of south Cambridgeshire and north Essex (the area around Great Chesterford).

The scarcity of brooches (only two examples, both fragmentary, recovered by metal detection) and the lack of personal grooming articles (such as tweezers and scoops) may be significant, as their absence suggests a cultural disinclination to adopt the Romanised way of life (Hill 1997). Recent excavations in the region have shown that, while coinage is generally absent, personal toilet articles are usually found on sites where people have lived, worked and cremated their dead (Hill et al. 1999; Evans et al. 2008). Another site where these articles are missing is that of the enclosed ritual site of Wardy Hill, near Ely (Evans 2003, 270). It may be that the activities taking place on these hilltop centres of feasting and ritual may not have been compatible with the Romanised way of life. This may also explain the disuse of the ritual space at Duxford as the Roman period progressed and Romano-British culture became dominant.

From c.300 BC onwards all classes of material culture become more numerous and new objects appear for the first time (Ralph 2007, 18). At Duxford, exchange networks are indicated in the artefactual assemblage by non-local shell-tempered coarse ware pottery (perhaps from Lincolnshire), quern stones from Hertfordshire and west Sussex, and small items of copper-alloy and glass jewellery. This suggests that the community who were living in the area around Duxford did not exchange highstatus goods. They may have been largely self-sufficient, perhaps trading surplus edible and crafted goods for other archaeologically invisible products (such as livestock, leather goods, blankets, reeds, meat, cereals, salt, fat, wax and ale) and low-status jewellery. This pattern of economic life is consistent with other sites in the region, where there is relatively little evidence for long-distance exchange, except for basic commodities.

Some of the pits found at Duxford showed differentiation in the deposition of pottery, with coarse middle Iron Age-type wares found stratigraphically above finer late Iron Age wares. This suggests either that people were bringing coarse ware cooking pots and finer serving vessels to the site and depositing them separately or that different social classes, family groups or communities used different pottery types. Alternatively, utilitarian domestic coarse wares may have been less susceptible to changes in style and fashion. Whatever the actual case, it is clear that middle Iron Age-type pottery continued in use alongside the finer late Iron Age wares longer than previously realised and this investigation of datable pottery sequences has advanced current understanding of pottery use for the region.

The Iron Age pottery assemblage is domestic in character, the earlier material being principally multipurpose utilitarian slack-shouldered jar/bowl forms of the type ubiquitous within the region. Traces of soot and burnt residues on the exteriors of the vessels confirm that many were used for cooking and the narrow range of vessel sizes present also suggests cooking and storage within a household or family unit. No detailed petrological analysis was carried out, and it is unclear whether the pottery could have been produced from sources within walking distance of the site, which is itself situated on one of the chalk outcrops which characterise much of the

region. The shell-rich clays also found at the site may have come from further afield, to the west of the county, and perhaps represent local imports.

The pottery can be characterised as a plain ware assemblage and is relatively small when compared to those of many contemporary settlement sites (Hill and Horne 2003, 146). The small quantity of pots with scored decoration is of interest. Some of the scored ware may have been imported to the site as traded pots or stored goods from other communities. It is likely, however, that most are locally made and reflect a stylistic trait brought to the region through marriage or trade links.

The later Iron Age assemblage shows some diversification of forms with an increase in more rounded or sinuous styles, which appear alongside the slackshouldered jars. The La Tène decorated sherds may also suggest material or 'ideas' being imported to the site, and it is of note that similar sherds occur in small quantities on many contemporary sites (Hill and Horne 2003). The presence of deposits of limescale on the interiors of many of the later vessels and a corresponding decrease in soot residues on the exterior suggests a change in cooking practice perhaps towards steamed, poached or boiled food and away from broth or stews cooked directly in the fire. The addition of more finely made vessels, sometimes decorated with burnished designs to the neck, may suggest that this change in cooking practice was accompanied by the adoption of more delicate and finely decorated table wares for serving food (Hill 2002, 143). The presence of styles with cordoned decoration suggests the beginning of the adoption of 'Belgic' styles, which sees its climax with the vessels which accompany the later cremations.

The Duxford assemblage indicates activity at the site throughout the mid to later Iron Age with a decline in the 1st centuries BC to AD. Several vessels from Duxford can be paralleled with the pottery from a site located approximately 1km to the south-east at Hinxton (Hill et al. 1999, 243-73), where late Iron Age Aylesford-Swarlingtype cremation burial rites have been recorded. Cremation 3669 at Duxford, moreover, was very similar to cremation 2 at Hinxton in its construction and the pottery it contained. Much of the pottery at Duxford was found as grave goods within extended inhumation burials, where the pots had been placed by the heads of the dead. This material includes the early Roman platter (Vessel No. 27) and the wide-mouthed jar (Vessel No. 26) which, although both early Roman forms, are significantly different from the late Iron Age vessels from Hinxton (Hill et al. 1999, 257-8, figs 12 and 13). The Duxford cremation and burials have an overall spot date of the mid (to late) 1st century AD.

The majority of pottery would have been made by the community that used it, although some of the scoring techniques seen on the Iron Age pottery may have been influenced by Lincolnshire material; some may have even been traded. In the late Iron Age and early Roman era the influence of the Roman Empire and Gaulish trade links can also be seen in the shapes and repertoire of the pottery, but all is locally produced.

Agriculture and ritual activity

The community at Duxford was evidently engaged in mixed subsistence farming typical of the Iron Age when an increase in population had led to the exploitation of previously un-utilised chalky soils. Circular pits with

straight sides and flat bases were common across the excavated area, and were often grouped together in clusters on both the lower (Pit Groups 1-6) and the higher ground (Pit Groups 8–11). These deep circular pits have been interpreted as cereal storage pits or silos. At Duxford they were unlined and relatively few contained significant quantities of cereal grains but it is likely that they were cleaned seasonally and that backfilling took place once the grain had been retrieved for consumption or sowing. Indeed, sparse environmental evidence for the use of this pit-type is generally the case where they have been found elsewhere in Cambridgeshire (such as at Wandlebury (French 2004), Trumpington (Hinman in prep), Great Abington (Sealey et al forthcoming) and Great Shelford (Evans et al 2008, 166)). Only one pit at Wandlebury which had been 'cleaned' by burning contained significant remains of carbonised cereal grains. This negative environmental evidence suggests that thorough cleaning of these pits (without burning) must have been part of their normal use-cycle.

If all of the pits within these groups were contemporary, as silos they would have held a considerable quantity of cereal, perhaps the whole annual harvest from several farmsteads. It is possible that they represent a system of central storage, where the grain could be protected by the ancestors that were buried on the higher ground (and perhaps a more temporal guard also). Regular meetings at which communal meals or feasts were enjoyed could also have acted as a chance to check the cereal and to dole out any quantity needed. This view of co-operative storage accords with the theory presented by Wigley (2007, 126) for the earlier Iron Age, where he suggests that networks of social relations would have been cemented through co-operation in agricultural tasks.

Environmental evidence, although poorly preserved at Duxford, suggests that cereal production (oat (*Avena* sp.), barley (*Hordeum* sp.) and wheat (*Triticum* sp.)), storage and processing were of considerable importance to the local economy. The middle Iron Age hearth found in the southern part of the site may have been used as a cereal drier to prevent germination of this material during storage or to harden the material prior to processing (Cunliffe 2005, 410).

The location of the fields utilised to grow the cereal that found its way into these silos has not yet been identified. The landscape surrounding the settlement would appear (from both the environmental and faunal remains) to have consisted primarily of open grassland in close proximity to watercourses with some wooded areas nearby. The underlying local geology is consistently chalk, which was not the first choice of prehistoric farmers for arable, being less fertile than other soil types, although silt sand and gravel geology can be found in the river bed to the east of the settlement, with pockets of chalky sand and gravel to the north. It would seem likely that any nearby Iron Age field systems have been destroyed by subsequent development.

The Duxford grain silos and pits often had a secondary use as containers for placed 'ritual' deposits, examples containing selected objects such as rubbing stones (pits 2067; 3292) and querns (pit 4048), and a possible wooden casket loaded with pots and meat (pit 3475). The complete skeletons of a dog (pit 3426) and a goose (pit 3507) were also found. The features were also used to hold the large quantities of food waste which have been interpreted as

feasting detritus. In addition, several of the Duxford pits had burnt deposits in their upper fills which suggested that a fire (perhaps a hearth) had been used to close these features symbolically at the end of their period of use. Indeed, Cunliffe (1992, 78) considers it likely that pit use was closely bound with cycles of fertility and renewal that were essential to the expanding Iron Age population; the utilisation of holes in the ground was part of a fertility cult not adopted by those who stored their grain in post-built structures, and objects placed in these pits may have been predominantly votive and propitiatory.

Pit silos have not, until relatively recently, been found in large numbers in Cambridgeshire, although the recent excavations noted above have led to a revision of this data set. Storage pits could be used at these particular Cambridgeshire sites and not in the claylands or fenland basin because these areas have a natural chalk geology that allows free drainage and has relatively drier soil conditions as a result. The use of pits for grain storage was generally thought to give a higher germination yield than above ground storage in post-built structures (Fitzpatrick 1997, 80), although pit use may also have had religious meaning, as discussed above.

The tradition of digging cylindrical pits on the site continued well into the later Iron Age but there was little evidence of ritual activity at this time, other than the deposition of a perinatal human skeleton in the base of pit 3903 (Pit Group 8), together with later Iron Age sherds. The reduction in the number of grain storage pits in the later Iron Age may reflect a change in the handling and storing of cereals or a shift in the use of the site away from a focus on cereals towards a more obviously ritual function associated with the burial area. The ritual significance of the site, which had its origins in the early part of the Iron Age, was clearly retained and modified to reflect changing influences and attitudes.

The general absence of contemporary worked flint at the site may indicate that the range of activities undertaken here did not include the widest range of domestic activities, supporting the interpretation that this part of Duxford was not a settlement site but an area for animal and grain management and ritual activity. The lack of worked flint in later features may also reflect the decline in the area's use during the later Iron Age — certainly there appears to have been a decline in quality (and perceived status) of flint objects at this time (McLaren and Edmonds 2008).

On the lower part of the Duxford site were various enclosures for stock management. Animal husbandry was intrinsic to survival, a view supported by the animal bone evidence, which shows cattle used primarily for traction and then meat. Sheep were the most numerous domestic stock, kept for milk, meat and manure. Pigs were also raised for meat but on a much smaller scale. Horses, and to a lesser extent dogs, were used to herd stock. Horses were also status symbols, useful pack animals and, possibly, sources of meat. The burial of a complete horse suggests, as do the relatively high numbers of horse bones retrieved from the site, that these animals played an important part in the lives of the people at Duxford, although no horse furniture or horse paraphernalia was found. The horns and bones of domestic beasts, together with red deer antler, were worked into useful objects. Sawn horncores and other bones were found and it is likely that at least some of the bone objects found were manufactured on or near the

site. Red deer were also occasionally hunted, which is consistent with the open grassland with some wooded areas that has been proposed as the surrounding landscape for Duxford during the Iron Age.

A single possible early Iron Age ditch was found, although in the later Iron Age more substantial ditches were established. How the local people chose the orientation of their ditches is unclear, as they do not relate to the direction of the Icknield Way that ran close by: while some may reflect the contemporary course of the River Granta, most appear to link directly to local contours. In particular, the ditch sequence that defined the southern edge of the ritual area was distinctive since it followed the contours of the hill. At Addenbrookes the late Iron Age and early Roman ditch system, although also containing curvilinear and straight ditches, was fundamentally on a north-west–south-east/north-east–south-west alignment alignment (Evans *et al.*2008, 88, fig. 2.37) and therefore quite different.

Several of the Iron Age and early Roman ditches at Duxford had a distinct flat-bottomed profile seen in other sites of this date in this area, such as Babraham (Hinman 2001); this style of ditch-digging is probably influenced by the chalk bedrock and the tools available (wooden shovels). The porous nature of the chalk allowed for easy drainage, which meant that it was not necessary to dig each ditch especially deep, while the unresponsive nature of chalk meant it would have been difficult to create a 'V'-shaped profile. The local community may have combined the quarrying of chalk blocks with ditchdigging, which may also account for this particular profile. The majority of the ditches were created for boundary purposes or for stock management, perhaps being made more effective by their association with the white chalk banks thrown up during the excavation. Some, however, may have been of more symbolic use, which would explain their shallow but well-defined nature.

IV. Romano-British

The transition from the late Iron Age and early Roman period to the Romano-British is demonstrated by a drastic change in land use at Duxford. The use of the higher ground for feasting appears to have ceased by the end of the Iron Age and burial stopped during the early Roman period, when the last of the boundary ditches was recut. Changes in social organisation through the transition from Briton to Roman can be seen in the choice made by the Romano-British people not to bury their dead in the hilltop cemetery at Duxford, perhaps choosing to follow the Roman tradition of interment on the edge of their settlements, often near a road (being symbolic of undertaking a journey).

Unless a Roman settlement is hidden beneath the surviving medieval village of Duxford, the nearest known Roman domestic structures lie 800m to the south-east of the site. Evidence for Romano-British activity was very limited at the excavated site and, apart from the drying building, there were no structural or settlement remains. Construction of the large drying building on the excavated site, however, indicates that the Roman style of (villa) farming had been adopted, a change which would have had a considerable impact on the local landscape. This shift in farming methods has been documented during

recent research which has established that gradual expansion combined with restructuring took place during the 1st century AD, whereby 'a trend towards increasing spatial segregation of activity and buildings within settlements' can be seen (Taylor 2007, 110). This new approach to spatial organisation may explain the apparent isolation of the Romano-British drying building found at Duxford. The available dating evidence, both artefactual and from radiocarbon analysis, does, however, point to this building being a late Roman feature, with a good possibility that it continued in use into the early Saxon period.

The chalk-block drying building was a multifunctional structure that would have been used by the whole community on a domestic basis (Reynolds and Langley 1979) to dry cereals and malt grain. Flax, beans and peas would also have been dried, as would wood for heating and cooking, while clay pots could be gently dried out before they were exposed to the harsh process of firing (Swan 1984, 47–8). Other foods, such as fish, meat (pork) and cheese, could also have been placed in the drying chamber or smoked within the chimney, depending on the level of preservation and taste required.

The Duxford drying building is of an unusual constructional type, with a square footprint and a C-shaped flue, and was perhaps built by an itinerant specialist builder. A square chalk-block drying building 3.2m by 3.5m was found at Foxton, only c.8km to the north-west of Duxford (Cleary 1997, 26-9); however, this had an L-shaped flue and was dated to the early Roman period (AD 45-140). Other square late Roman drying buildings are known; regional parallels include one at Orton Hall Farm, Peterborough (Mackreth 1996, 77), which was dated between c.375 and the early 6th century and measured 2.6m by 2.4m internally, its walls being constructed from mixed limestone rag and the whole structure situated within a barn. A similar example, also situated within a barn, was discovered at Beck Row in Mildenhall, Suffolk (Bales 2004, 20-21). The central flue of the Suffolk example was 6m long and bifurcated into two. Another square example with two flues has recently been found at Hethersett, Norfolk (Watkins forthcoming). The building was formed from clay walls in a flat-based cut measuring 5.27m by 5.42m. All these examples, however, are developments of the T-shaped flue design and therefore fundamentally different to the Duxford example.

The C-shaped flue and chimney base of the Duxford drying building has few published parallels. Those which do exist consist of a similar drier at Longthorpe, near Peterborough in Cambridgeshire (Morris 1979, 168, fig. 11, a), and four almost identical driers dated to the 4th century AD excavated at Foxholes Farm, Hertfordshire (Reynolds and Langley 1979; Morris 1979, 168, fig. 11, d). The size and permanence of the Duxford building must reflect a nearby successful agricultural community in the later part of the Romano-British period.

The building was designed with vents to control the passage of hot air and the internal temperature. Historically such structures have been referred to as 'corn driers', as the introduction of above-ground grain storage made it necessary to dry cereals to protect them from early germination, mildew, fungus and insect damage (Morris 1979, 5). (It is worth noting that the Iron Age storage of damp grain in sealed pits caused the accumulation of

carbon dioxide, which effectively halted early germination and killed insects. The drying of crops did not therefore become common until cereal was generally stored above ground). Cereals intended for planting or malting (that were still required to germinate) needed to be gently heated, while high temperatures were required for grain that was intended to be milled or made into animal feed

The use of the drying building to produce malted barley, necessary for the production of ale, has been considered. The process of malting (Mackreth 1996, 229-30) begins with the softening of the grain to allow germination to take place. In the case of Duxford the disused quarry nearby to the west may have been used as a tank to soak the barley before malting. A clay lining may not have been necessary as the grain only needed to be soaked for a few hours or even just sprinkled with water. After the grain had been soaked it was heaped or spread out to allow germination to take place. When this was judged to have progressed sufficiently the grain was heated to prevent any further germination. The heated grain was then placed in a vat with water and boiled before being cooled and the yeast added. After a period of four to six days the ale would have been ready to drink. Most malting ovens were square (as opposed to T-shaped), as they provided the largest floor space for the drying of the spread-out grains.

V. Anglo-Saxon

by Judith Roberts, Paul Spoerry and Alice Lyons

Anglo-Saxon activities were concentrated in the southern, lower, part of the site on a chalk-bedrock south-facing slope with easy access to the river. The location of the Duxford settlement on chalk (which was relatively unproductive as a soil type) is noteworthy, as Tipper (2004) suggests it was unusual for chalklands to be utilised at this time. Several examples of Saxon settlement on chalk are known in the Cam Valley and south Cambridgeshire, however, such as the single early Saxon SFB at Fowlmere (Spoerry and Hinman 2007) and the 6thto 7th-century group of eight or nine SFBs at Hinxton Hall (below, and Spoerry and Leith forthcoming). At Hinxton Hall, all of the SFBs were excavated into chalk or marly chalk deposits, although where gravel terraces were examined an early Saxon hall was found overlying Romano-British enclosures and settlement. It is possible that the settlements at both Duxford and Hinxton started on gravel deposits close to Romano-British settlement and gradually moved to the chalk, but there is no conclusive evidence to support this suggestion.

The surviving evidence at Duxford comprised three SFBs, two of which were enclosed by fences, as well as a possible hall, a few rubbish pits and some further postholes, indicating that a more complex arrangement of yards or spaces was in place. These structures may not all have been in use at the same time, but in general terms their alignment is roughly common, or ordinal, and the small amount of variation combined with the irregular spacing between the structures is entirely in keeping with other excavated sites of the period. The finds indicate a limited range of activities being carried out over a relatively wide date range. The remains perhaps point to occupation by a single family unit involved in agriculture

and animal husbandry (sheep rearing) and small-scale craft activities such as textile production and leather and bone working typical of rural life at this time, which did not involve the use of coinage (Taylor 2000c, 24).

The SFBs were of typical two-post form: most of the excavated sunken-featured buildings in England and the continent were constructed with two post-holes, the closest continental parallel being found in the Elbe-Weser triangle of north-west Germany, where the two-post structure also predominates (Tipper 2004, 70). The relative proportions of building types on individual sites are variable; for example, over 90% of sunken-featured buildings at Mucking were two-post or two-post derivative, compared with 41% at West Heslerton (Tipper 2004, 68). Recent excavations at Brandon Road, Thetford (Norfolk), found a ratio of four two-post sunken-featured buildings to three of other types (just fewer than 60%; Atkins and Connor 2010). The dimensions of the two Duxford buildings (Structures 4 and 6), at c.4m long by 3.25m wide, are similar to those found at various sites in Thetford (Atkins and Connor 2010) and elsewhere. The third, larger, example (Structure 5), at 6m long and an estimated 4m wide, may reflect the suggested trend towards larger structures during the 7th century: the largest example at Mucking, for example, measured 6.73m by 4.37m (Tipper 2004, 66).

It is unfortunate, but entirely usual, to find that there is very little dating evidence for the use of the SFBs, the artefacts found in their fills being mostly from post-use and/or post-demolition backfilling of the floor hollows. Where more closely datable, these artefacts suggest that the SFBs at Duxford began to be used during the 6th century (there is no definite 5th-century component) and went out of use by the 8th century (in the middle Saxon period). Even the presence of a whole pottery vessel from the fill of SFB Structure 5 does not enable dating to be more accurately assigned as this was not recovered from the basal fill, the only possibly use-related deposit within any of the three structures, but from the deeper infilling above, which also contained 7th- or 8th-century objects. The pottery vessel itself is of a type that could just as easily be middle Saxon as earlier. An important and related point is the lack of Ispwich Ware, or other pottery types attributable to the 8th century or later, in the backfill of the SFBs; the upper fills all include early to middle Saxon material alongside later medieval pottery and artefacts, suggesting a lack of domestic or other activity on this part of the site from the 8th to perhaps the 13th century or later, at which point the Period 5 boundary system appears to have been established close by. The implication of this is that the remains of the SFBs remained relatively undisturbed, perhaps from the 8th century until the earlier post- Conquest medieval period.

It seems likely that there was a significant break (perhaps a period of c.100 years) between the final use of the late Roman drying building and the construction of the SFBs, after which time small-scale agrarian and domestic activities were resumed. The characteristics of the agrarian economy in the Anglo-Saxon period remained broadly similar to those of the later Iron Age and Romano-British phase, even though there was major political and social change at this time.

The valleys of the River Cam and its tributaries have long been recognised as a zone in which there is much evidence for very early Anglo-Saxon-style activity

(Taylor 2000c and d), originally from cemetery evidence but increasingly now from excavated domestic sites as well (e.g. Dodwell et al. 2004; Mortimer and Evans 1996; Malim 1994; Pollard 1996; Spoerry and Hinman 2007, Spoerry and Leith forthcoming). Despite the excavator's assertions to the contrary for Bourn Bridge (Pollard 1996), subsequently challenged by Tipper (2004) it seems likely that all of these settlements included both halls and SFBs, the two building types characteristic of the period (e.g. Rahtz 1976), and, where that was not immediately apparent, it is most probably due to the excavated sample being only a partial representation of the settlement. The apparent lack of halls at Bourn Bridge and Hinxton Quarry (Mortimer and Evans 1996) — in a comparatively small excavated area in the former case and in a partial view of the main settlement in the latter case — can be compared with, for example, the plan of early Saxon structures of both kinds at Hinxton Hall and Hinxton Genome Campus (Spoerry and Leith forthcoming), which are visible within a much larger excavated area. This clearly demonstrates what is known from all of the other, smaller, excavated sites in the region; that both kinds of early Saxon structure invariably co-existed.

With that in mind it is entirely reasonable to suggest that Structure 7 at Duxford may well represent a hall, although its surviving element was only c.4.6m in length, making it, if this does represent its full east—west dimension, one of the smallest examples of this type known. It is more likely, however, that part of its western end has been truncated by a later quarry and, if so, it could have been up to 6.5m long, which, although still small, is well within the size range of buildings of this type (James et al. 1984).

The surviving buildings at Duxford should be viewed as one element in a larger but fairly dispersed early to middle Saxon settlement that lay on the higher ground above the River Granta, overlooking an important ford where a branch of the Icknield Way met the river. As has been seen in excavations at Hinxton Quarry and the Hinxton Genome Campus, the individual structures and features of the Anglo-Saxon settlement could both respect pre-existing field systems by being positioned within corners of enclosures or adjacent to ditches that must have remained open, while at the same time other elements might ignore the pre-existing alignments, being scattered irregularly across surviving fields. The excavations at Hinxton Quarry revealed small-scale settlement, similar to that recorded at Duxford, dating to the 5th to 7th centuries and positioned along the higher gravel plateau of the eastern Cam/Granta valley, possibly with more extensive settlement remains to the east of the excavation area (Mortimer and Evans 1996). Large quantities of Anglo-Saxon pottery were recovered from the two structures found, together with loom weights and other Anglo-Saxon rubbish. The evidence suggests a distance of approximately 25m between each structure, a pattern also found at Bourn Bridge.

A larger Anglo-Saxon settlement has been excavated in the grounds of Hinxton Hall (Spoerry and Leith forthcoming). Work here has revealed occupation between the 7th and 12th centuries, but in the early to middle Saxon period there were at least four SFBs and two timber halls on one part of the site and other similar structures to the south, again occupying a late Iron Age settlement site. The northern part of this settlement

subsequently developed during the 9th to 12th centuries with the construction of timber-framed buildings, wells. ovens, cess pits and other pits. In the later phases it was surrounded by rectangular enclosures for livestock and arable fields. The later evolution of the Hinxton settlement is atypical, in that it prospered and developed into a hamlet which was only abandoned in the late 12th-13th century, when the village shifted northwards to its present location and developed a formalised village layout round the parish church. This has been proposed as an example of the very last gasp of the 'moment' of nucleation in rural settlement evolution in eastern England (Taylor 2002). The wider history of Saxon settlement in Hinxton parish, perhaps with many small places in the early to middle Saxon period giving way to one place that develops as a parochial centre, could equally be postulated for Duxford, with the excavated Saxon settlement disappearing as a shift is made elsewhere, perhaps closer to the river crossings and around a point where either or both of the parish churches were eventually established. The difference here is that at Duxford the demise of the excavated settlement is during the middle Saxon period, providing an example of the 'middle Saxon shuffle', as it has become known (Hodges 1983). In that sense the settlement history at Duxford is entirely as would now be expected, with some early centres being replaced by one large one a short distance away, which evolves further and becomes recognisable as a nucleated village. St John's Church, which contains later Anglo-Saxon material in the present fabric, was almost certainly one of the foci for the development of the late Saxon village, and it is possible that there was a 'shuffle' northwards to this location, followed by the later re-establishment of settlement around the southern river crossing and St Peter's Church. As ever, such a simplistic model should be used with caution, as the true story is likely to have been more complicated.

There is no evidence for the continued use of the Duxford site for burials in the Anglo-Saxon period and it is possible that during this time the earlier cemetery was known and its boundaries respected but the Anglo-Saxon population chose not to continue burying there, nor to use it for any other purpose. Local parallels suggest that contemporary burials could have been either cremations and/or inhumations (Taylor 2000d), and the cemetery could have been located in many different contexts within the landscape. Places that were chosen often include locations with ancient significance, such as Roman settlements, villas, temples or roads, or Bronze Age barrows. Two local examples where Bronze Age round barrows were reused occur at Whittlesford and Sawston (Taylor 2000d, 25). The Iron Age-Roman ritual site excavated here clearly comes into that general category, but it was not utilised. Finally, liminal points in the local early Saxon territorial units, close to crossing points or boundary features, might be chosen. It could be argued that the place at which Duxford developed meets almost any of these criteria, and it is therefore all the more surprising that no Anglo-Saxon cemetery is yet known here.

VI. Medieval and post-medieval

Despite the known presence of late Saxon and early medieval settlement in the vicinity, there was little evidence for activity on the site in the earlier part of the medieval period and it was apparently not until the 13th century that ditches were laid out. The medieval ditches which divided the northern part of the site clearly aligned with St Peter's Street, which is believed to have been part of the Icknield Way, thereby representing the strongest and longest-lived topographical element in the immediate landscape. After the late 13th/early 14th centuries the orientation of boundaries in the southern part of the site changed and boundary ditches which crossed the whole of that area were dug. Some ditches went out of use by the 15th century and new ditches, on similar alignments but in slightly different positions, were created. Little significance need be attached to these common or slightly revised alignments since the sinuous path of Hinxton Road, which is entirely topographically derived through the natural course of the terrace above the river, offers scope for various courses. At this time there was a considerable increase in the amount of activity on the site, particularly to the south-east. Again there is no evidence for structures but the documentary evidence suggests that the incumbent of St Peter's Church was resident in Duxford and it is likely that the parsonage or rectory stood on the site.

The mortar production centre at Duxford was located in the south-eastern part of the site, close to the southern edge of excavation, c. 100m south of St Peter's Church. It was probably located here because of the good supply of water and chalk in a location that was not occupied by housing. Mortar mixers are rare in England, with only eight other examples having been excavated to date (Stelzle-Hueglin 2007): two 11th-century examples came from Eynsham Abbey in Oxfordshire (Hardy et al. 2003); one late-7th- to 8th-century mixer from Monkwearmouth Abbey in Sunderland (Cramp 1969) and five early-9thcentury examples from St Peter's Church in Northampton (Williams 1979; Williams et al. 1985). The mortar-mixing device found at Duxford was similar to those found in England and continental Europe; the type does not generally differ from the middle Saxon to the late medieval period, and all are associated with large-scale ecclesiastical or monastic building projects. Exactly how these mortar mixers worked is unclear, although it is thought that there was a fixed or revolving central post around which a set of rakes rotated, actively mixing the mortar mixture, which consisted of sand, lime and water (Fig. 57). It is possible that the wooden superstructure of the mixer could have been dismantled and carried to the next building project, where it could have been rebuilt. When in use, the rakes may have been moved by either animal (one ox) or man (four men) power, and may have been able to produce between a half and two tonnes of mortar mix per load. Such large quantities of mortar would have been needed to fill the rubble core of walls, as well as to finish the floors, walls and ceilings of substantial masonry buildings such as churches.

It is known (Stelzle-Hueglin 2007) that the earliest mortar mixers were relatively large (up to 4m in diameter) and that as the medieval period progressed they generally became smaller (c.2.5m diameter, which is the approximate size of the example recorded at Duxford).

Close dating of the Duxford mixer is problematic since it contained no contemporary pottery or closely datable artefacts. Its close proximity to the two wells suggests that they are of a similar date. Analysis of the pottery suggests that well 2739 was the earliest of the two, and when this feature was blocked by the collapse of its lined walls, another, simpler, well was hastily dug nearby. The wells had fallen from use by the early 15th century. Records indicate the nave of St Peter's Church was rebuilt in the 14th or 15th century. This combined evidence indicates a late medieval date for the mortar-mixing and limeproduction complex. The method of converting chalk into lime and the associated dangers have recently been described in relation to another Cambridgeshire site at Burwell, where several well-preserved lime kilns were found (Muldowney 2006): the noxious gases and risk of fire may explain the relatively isolated location of the Duxford complex, away from the church and manor it was presumably built to repair.

Evidence for other craft activities was limited, but included items indicating further building-related work, including a woodworking tool (auger), a plumb bob and a piece of decorated glass that may have come from the church of St Peter.

Excavated evidence for other aspects of the local economy during the later phases of the site was limited. During the medieval period sheep remains were common but beef and dairy products would have been the main source of protein. The sheep apparently display a slight reduction in average height compared to the prehistoric and Romano-British period, whereas there was an average increase in size of the cattle in Period 5. The cattle, sheep/goat teeth and epiphyses were too few in number to ascertain the kill-off patterns. There was a slight increase in the occurrence of pig. Dog remains were also relatively frequent and domestic cat appears for the first time in the medieval period. Chicken remains were slightly more common than goose and domestic duck or mallard, both of which occur at similar frequency.

Of the six samples taken from medieval features only one was of potential interest. The assemblage from pit 3099 contained a moderate to high density of charred cereal grains (mostly wheat), which may be derived from a small batch of prime grain intended for domestic consumption. Some of the ceramics from the same context were kitchen wares with external soot residue. Almost all of the medieval pottery assemblage reflects the trade routes established during the Roman period and comes from Essex, with a few items originating further afield (Bedfordshire, Northampton and Lincolnshire).

In the post-medieval period there was an increase in activity on the site; 17th-century records (Appendix 4) suggest that a range of buildings was present although none were identified during excavation, either because they were destroyed by more recent activity or because they had insubstantial foundations. The cottage in the western part of the site and the associated trackway left very limited evidence. A number of quarries may have provided chalk for the trackway and perhaps some of the structures. Several rubbish pits were found in the southeastern part of the site but the absence of finds from some makes it difficult to discern function.

The construction of the rectory and factory (with their associated services), tree planting, excavation of garden features and recent landscaping had a major impact on the survival of remains in the central part of the site. There was no archaeological evidence of the early-17th-century rectory, either in the form of structural evidence or demolition debris, but it is clear from the pottery that domestic activity was taking place on the site, with vessels associated with food processing dominating the assemblage. The trade in Essex wares continued into the later medieval and early post-medieval periods in preference to the use of material from potteries in other parts of Cambridgeshire (e.g., Ely). The range of post-medieval pottery found shows the increasing access to mass-produced wares from the Potteries in Staffordshire.

VII. Conclusions

The remains found at Duxford present a fascinating glimpse into the life and death of the people who utilised this landscape from the Bronze Age to modern times, demonstrating a remarkably long period of ritual land use. The function of the site changed dramatically from newly cleared ploughed field in the Bronze Age to an area that may have hosted seasonal gatherings and contained burials in the Iron Age, and again to a shrine and associated burial ground in the later Iron Age and early Roman period. The ritual pit containing the horse burial may have remained in use for several generations, providing an important focus within the Duxford community over a long period of time, as well as perhaps providing a place for the male elders to be buried during the early Romano-British era. The site conforms to regional trends that have only just begun to be understood, such as the choice to inter the dead in the late Iron Age, the influence of the Aylesford-Swarling burial tradition and the disinclination of the local people to adopt Romanised dress and diet. Similarities between other recently excavated sites in south Cambridgeshire hint at connections between these communities, which perhaps met at hillforts and other hilltop sites (such as Duxford) for communal meals and feasts.

The excavation has added to the corpus of information on early to middle Saxon settlement in the river valleys of south Cambridgeshire, confirming that this landscape was probably occupied at an early stage by people we call Anglo-Saxon, but they almost certainly continued to utilise and reference the Romano-British agricultural landscape. The Anglo-Saxon settlement was clearly abandoned by the 8th century. During the medieval period, the presence of a mortar- and lime-production complex is also important, adding to a small corpus of similar features.

Overall, the excavation at Duxford has established how the site developed and declined, revealing a process of transition from a ritual to settlement landscape which has enriched our understanding of the people who lived, farmed and died in this place over a period of several thousand years.

Appendix 1. Absolute dating

by W. Derek Hamilton and Gordon Cook

Introduction

Thirteen radiocarbon measurements have been obtained from archaeological features at Hinxton Road, Duxford. The samples submitted included two bulk samples of charcoal, one animal bone from a burial and ten human bones from inhumation graves. All the samples were processed at the Scottish Universities Research and Reactor Centre, according to procedures described by Stenhouse and Baxter (1983) and measured by Liquid Scintillation Counting (Noakes *et al.* 1965). The laboratory maintains a continual programme of quality assurance procedures, in addition to participation in international inter-comparisons (Scott 2003). These tests indicate no laboratory offsets and demonstrate the validity of the precision quoted.

General approach

A Bayesian approach has been taken to the interpretation of chronological data from this site (Buck *et al.* 1996). This is a mathematical modelling technique which combines the radiocarbon dates with chronological information provided by the archaeological evidence, such as the relative dating provided by stratigraphy. This allows more precise dating to be provided by determining which parts of the simple calibrated radiocarbon dates are

unlikely because of the known relationships between samples, and results in a reduced date range, known as a posterior density estimate (shown in black in the figures). These distributions are based on probability, and are shown in italics when expressed as date ranges in the text. The posterior density estimates are not absolute; they are interpretative estimates, which can and will change as further data become available and as other researchers choose to model the existing data from different perspectives.

The technique used is a form of Markov Chain Monte Carlo sampling, and has been applied using the program OxCal v3.5 (http://units.ox.ac.uk/departments/rlaha/), which uses a mixture of the Metropolis-Hastings algorithm and the more specific Gibbs sampler (Gilks *et al.* 1996; Gelfand and Smith 1990). Details of the algorithms employed by this program are available from the on-line manual or in Bronk Ramsey (1995; 1998; 2001), and fully worked examples are given in the series of papers by Buck *et al.* (1991; 1992; 1994a; 1994b). The algorithms used in the models described below can be derived from the structure shown in Figs App.1.1 and App.1.2.

The following section concentrates on the archaeology, and particularly on the reasoning behind the interpretative choices made in producing the models presented. These archaeological decisions fundamentally underpin the choice of statistical model.

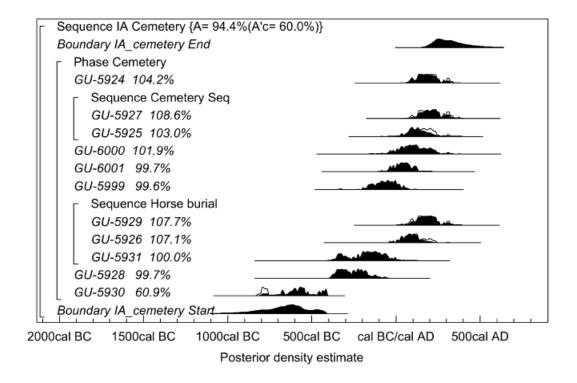


Figure App.1.1 Chronological model of inhumations from Hinxton Road, Duxford. The distributions in outline represent the calibration of each result by the probability method (Stuiver and Reimer 1993). The solid distributions are *posterior density estimates* of the calendar date for each sample. The model structure is exactly defined by the square brackets and OxCal keywords at the left of the diagram

Laboratory number	Context, burial number and sample	Material	δ13C (‰)	δ 15N (‰)	C:N	Radiocarbon age (BP)	Calibrated date (95% confidence)	Posterior Density Estimate (95% probability)
GU-5919	<i>3481</i> Sample 32	13 fragments of Alnus spinosa	-24.6	_	_	1690±50	cal AD 240–440	_
GU-5920	3184 Sample 31	21 fragments of Prunus spinosa	-24.8	_	_	1560±60	cal AD 380-640	_
GU-5930	4065 Burial 21	Human bone, right femur	-18.8	9.2	3.1	2570 ±50	830–540 cal BC	810–760 cal BC (at 7%) or 690–480 cal BC (at 69%) or 470–400 cal BC (at 19%)
GU-5931	4085 Horse burial	Horse bone, left femur	-21.9	7.5	3.5	2130±60	370 cal BC– cal AD 10	360–1 cal BC
GU-5928	<i>3812</i> Burial 12	Human bone, right femur	-19.7	10.3	3.6	2190±50	390–90 cal BC	390–110 cal BC
GU-5927	<i>3796</i> Burial 10	Human bone, left femur	-20.6	9.5	3.5	1810±50	cal AD 80-380	cal AD 120–340
GU-5925	3007 Burial 2	Human bone, left femur	-19.7	9.9	3.1	1870±50	cal AD 20-320	cal AD 20–240
GU-5926	<i>3770</i> Burial 9	Human bone, right femur	-19.9	9.7	3.3	1910±50	40 cal BC– cal AD 240	20–10 cal BC (at 1%) or cal AD 1–210 (at 94%)
GU-5924	3003 Burial 1	Human bone, right femur	-19.9	9.1	2.9	1830±50	cal AD 70–340	cal AD 70–270 (at 91%) or cal AD 280–320 (at 4%)
GU-5929	3880 Burial 17	Human bone, right femur	-20.2	10.7	3.6	1840±50	cal AD 60–330	cal AD 70–260 (at 93%) or cal AD 300–320 (at 2%)
GU-6000	4106 Burial 23	Human bone, left femur	-19.8	7.5	3.2	1910±70	50 cal BC– cal AD 320	50 cal BC–cal AD 260
GU-6001	4139 Burial 24	Human bone, right femur	-19.7	9.3	3.2	1960±50	50 cal BC– cal AD 140	100–70 cal BC (1%) or 60 cal BC–cal AD 140 (93%) or cal AD 150–180 (1%)
GU-5999	3609 Burial 4	Human bone, left femur	-20.1	8.4	3.5	2050±50	200 cal BC– cal AD 70	180 cal BC– cal AD 60

Table App.1.1 Radiocarbon measurements

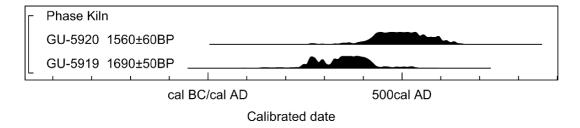


Figure App.1.2 Probability distribution showing the calibrated results of the two bulk charcoal samples from the area of the Lime Kiln at Hinxton Road, Duxford

Objectives

The principal aims of the dating programme were to:

- a) determine the period of use for the Iron Age cemetery
 - b) provide a date for the drying building

Sampling

The initial step in sample selection was to identify suitable material that was probably not residual in the context from which it was recovered, and which would help answer questions relating to the principals aims listed above. The samples consisted of either charcoal used as fuel (kiln series) or articulated human and animal bone (cemetery series).

The results

The results are given in Table App.1.1, and are quoted in accordance with the international standard known as the Trondheim convention (Stuiver and Kra 1986). They are conventional radiocarbon ages (Stuiver and Polach 1977).

Calibration

The calibration of these results, which relates the radiocarbon measurements directly to the calendrical time scale, is given in Table App.1.1 and in outline in Fig. App.1.1. All calibrations have been calculated using the datasets published by Stuiver *et al.* (1998) and the computer program OxCal (v3.5) (Bronk Ramsey 1995; 1998; 2001). The calibrated date ranges cited within the text are those for 95% confidence. They are quoted in the

form recommended by Mook (1986), with the end points rounded outward to ten years. The ranges in Table App. 1.1 have been calculated according to the maximum intercept method (Stuiver and Reimer 1986); all other ranges are derived from the probability method (Stuiver and Reimer 1993). Those ranges printed in italics in the text and tables are *posterior density estimates*, derived from the mathematical modelling described below.

Analysis and Interpretation

Cemetery

Bones from a total of ten human burials and one horse burial were submitted for radiocarbon dating from the Iron Age and early Romano-British cemetery at Duxford. These results were incorporated in a chronological model for the dating of the cemetery (Fig. App.1.1). Also included in the model was the information that Burial 2 is earlier than Burial 10, and that horse burial 4085 was earlier than Burial 9, which was in turn earlier than Burial 17. The chronology of the cemetery was also modelled as a continuous phase of relatively constant activity. This assumption counteracts the inevitable statistical scatter on the radiocarbon measurements which would otherwise make it appear falsely that activity began earlier than it did in reality and continued later (Steier and Rom 2000; Bronk Ramsey 2000).

The Bayesian model shows good overall agreement between the radiocarbon results and this prior information (Aoverall=94.4% (A'c=60.0%)). However, it is possible that sample 4065 (Burial 21) (GU-5930), which has an individual index of agreement only just within the acceptable limit (A=60.9% (A'c=60.0%)), may be an earlier outlier. In fact, there may have been a break in cemetery use between the early-middle Iron Age and the

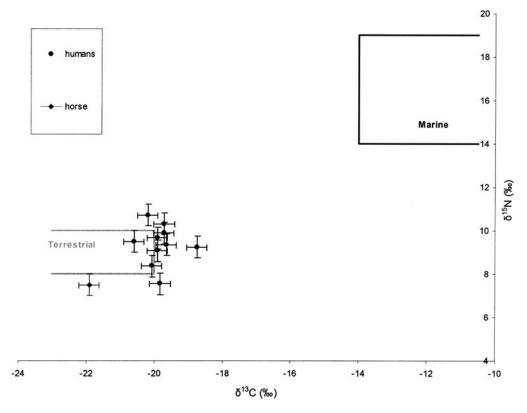


Figure App.1.3 Estimated protein foods' contribution to stable isotope values in bone

late Iron Age–Romano-British period. Without additional radiocarbon dates from the cemetery it is impossible to determine whether there are, in fact, two discrete phases of use, or if sample 4065 (Burial 21) simply represents a slightly earlier burial at this site.

The most complicated sequence in the model (horse burial, Fig. App.1.1) consists of a burial of a stallion which is cut by three successive human burials, and which overlies an infant burial (undated). The stallion (4085) (GU-5931), dates to 360–1 cal BC (at 95% probability), and so the undated infant must be earlier than this. Burial 9 (3770) (GU-5926) dates to 20–10 cal BC (at 1% probability) or cal AD 1–210 (at 94% probability), and Burial 17 (GU-5929) dates to cal AD 70–260 (at 93 % probability) or cal AD 300–320 (at 2% probability).

Of particular interest among the samples submitted from the cemetery is Burial 24 (GU-6001), which comprises the remains of an individual that has been identified as possibly having suffered from tuberculosis. This skeleton dates to 100–70 cal BC (at 1% probability) or 60 cal BC–cal AD 140 (at 93% probability) or cal AD 150–180 (at 1% probability). It is most likely that the 93% probability range most accurately dates this specimen, placing it in the terminal Iron Age to early Romano-British period.

The δ 13C and δ 15N values from this site (Fig. App.1.3) suggest a very small marine component in the diet, which is not likely to affect the radiocarbon dating (Chisholm *et al.* 1982; Schoeninger *et al.* 1983). The C:N ratios suggests that bone preservation was sufficiently

good to have confidence in the radiocarbon determinations (Table App.1.1; Masters 1987; Tuross *et al.* 1988).

Late Roman drying building

Two samples were submitted from what was initially thought to be a lime kiln in the hope that the dating of this material would not only provide a date for the kiln, and by association, the nearby mortar mixer, but would also help to chronologically associate these two features with either the nearby Saxon building or medieval structures. Following environmental analysis and comparison with similar structures from Foxton (Price *et al.* 1997) and Foxholes Farm, Hertfordshire (Reynolds and Langley 1979), this structure was reinterpreted as a drying building.

Two measurements were made on charcoal from two separate loci (3184, 3481) associated with the drying building (Fig. App.1.2). While the material from 3184 is likely to be *in situ*, the material from 3481 appears to have spilled over the retaining wall of the kiln. As the question arises as to the possible contemporaneity of these contexts, a $\chi 2$ test was performed on the two radiocarbon measurements (GU-5920 and GU-5919) using the method described in Ward and Wilson (1978). The test shows that there is no significant difference in the two measurements (T'=2.8, v=1, T'(5%)=3.8), and therefore these two contexts may in fact be contemporary. The dating of the material from the drying building shows the use of this and associated features to be late Roman/early Saxon in date.

Appendix 2. Middle Iron Age pits (Period 1.2)

Cut	Shape	Dimensions (m)	Depth (m)	Details	Finds and environmental remains
2000	Circular	1.20 diam	0.34	Steep near-vertical sides with a flat base. The lower fills were weathered chalk deposits and contained no finds.	1 middle Iron Age sherd was found in the upper fill with cattle and horse bone and a number of medium-sized burnt pebbles. No significant remains were recovered from the samples
2024	Circular	1.83 diam	1.27	Steep-sided with flat base. Filled with 1 deposit which had settled and been levelled with silts with lumps of heat-discoloured chalk, perhaps fragments from a hearth.	11 middle Iron Age sherds (0.178kg) were found with cattle, horse, sheep/goat and pig bone. Environmental samples produced no significant remains
2027	Sub-circular	2.50 diam	1.65	Steep-sided with a flat base contained 6 fills. Possibly cleaned out and enlarged, putting late Iron Age pot in first and backfilling with middle Iron Age material. The lowest fill had been levelled across the base. The next fill (2028) contained frequent chalk lumps had been tipped from the northern edge. 2029 was a levelled layer, as was 2030. The pit was left open before being backfilled with 2 further fills devoid of finds.	Basal fill, 30 later Iron Age sherds and cattle, horse, sheep/goat and pig bone. 2028, middle Iron Age crucible fragment and 50 middle Iron Age sherds, iron sheet (SF 87). 2029, 37 middle Iron Age sherds, significant quantity of horse, cattle and sheep/goat bone from non-meat bearing parts. 2030, 23 middle Iron Age sherds, horse, cattle, sheep/goat bone, burnt stones and charcoal
2036	Sub-rectangular	1.15×0.80	0.10	Steep sides, flat base. 1 fill with frequent chalk	No finds
2037	Sub-circular	1.73×1.50	0.87	Steep-sided with a flat base. 1 fill	3 middle Iron Age sherds, sheep/goat mandibles, cattle and anuran bones
2039	Circular	0.92 diam	0.13	Steep sides and a flat base. 1 chalky fill	No finds
2043	Sub-circular	1.75×2.10	1.08	Steep at the top, almost vertical towards the flat base. 2 fills, the lower (very chalky) one being tipped in from the south side, and then the pit was backfilled in a single episode.	Lower fill, horse, cattle and sheep/goat bone and an intrusive sherd (3g) of Roman grey ware. Upper fill, no finds
2045	Circular	1.30 diam	1.10	Almost vertical sides and a flat base. 3 fills. Lower fill moderate chalk lumps. Next fill frequent chalk lumps, some heat-affected. Upper fill moderate chalk lumps	Lower fill, 9 sherds middle Iron Age pottery, charcoal and cattle and sheep/goat bone. Middle fill, 1 middle Iron Age sherd. Upper fill, charcoal, 3 middle Iron Age sherds and a cattle tibia
2049	Circular	1.40 diam	0.45	Almost vertical sides and slightly concave base. 1 fill	Horse and cattle bone
2051	Circular	1.35 diam	0.22	Concave sides and a flat base. 1 fill	Cattle pre-molar
2056	Sub-circular	1.55×1.45	0.55	Almost vertical sides, slightly concave base. 2 fills, both with moderate chalk lumps	No finds
2057	Sub-circular	0.70×0.60	0.11	Concave sides and slightly concave base. 1 fill with frequent chalk lumps	No finds
2059	Sub-circular	0.60×0.54	0.17	Irregular sides and base. 1 fill	1 middle Iron Age sherd
2061	Oval	1.10×0.76	0.32	Steep sides, flat base. 1 fill	1 middle Iron Age sherd, cattle cranium and mandible and sheep/goat bones
2063 2065	Circular Oval	1.65 diam 1.8×1.3	0.22 0.44	Almost vertical sides, flat base. 1 fill Almost vertical sides, undercut on the eastern side with a flat base. 1 fill	Pig pre-maxilla 11 middle Iron Age sherds, large mammal, pig and sheep/goat bone.

Cut	Shape	Dimensions (m)	Depth (m)	Details	Finds and environmental remains
2067	Circular	1.40	0.45	Almost vertical sides and a flat base. 1 fill	10 middle Iron Age sherds, horse, cattle, sheep/goat bones from non-meat bearing parts
2069	Circular	1.55 diam	0.67	Almost vertical sides, flat base. 4 fills. 1st fill, frequent chalk, flecks of charcoal. 2nd fill, dark sandy silt with chalk lumps and charcoal. 3rd fill, moderate chalk lumps. 4th fill, frequent chalk lumps	Basal fill, 1 middle Iron Age sherd, large mammal vertebra. 2nd fill, 12 middle Iron Age sherds, burnt stones, ash, medium mammal rib and pit falls. 3rd fill, 14 middle Iron Age sherds, horse, cattle and sheep bones in north-western part of pit. 4th fill, 7 middle Iron Age sherds, cattle and large and medium mammal bones
2074	Circular	1.25 diam	0.42	Concave sides and a flat base. 1 fill, frequent chalk lumps	No finds
2075	Sub-circular	1.75×1.50	0.35	Steep sides, flat base. 1 fill, frequent chalk lumps and some burnt stones	No finds
2081	Circular	1.70 diam	0.78	Almost vertical sides and a flat base. 4 fills. 1st fill, loose crumbly chalk blocks. Weathering round the southern and northern edges. Final fill frequent chalk lumps	1st fill, ceramic slingshot, triangular rubbing stone, a middle Iron Age base sherd and a cattle tooth. 2nd fill, middle Iron Age rim sherd. Final fill, middle Iron Age rim sherd, horse and cattle teeth
2091	Oval	1.00×0.95	0.10	Heavily truncated steep sides, slightly concave base	No finds
2093	Oval	0.90×0.40	0.05	Heavily truncated, slightly concave	No finds
2095	Sub-circular	1.60×1.40	0.95	Almost vertical sides, flat base. 3 fills. 1st fill, small to medium chalk lumps. 2nd fill, very frequent chalk lumps. 3rd fill, small to medium chalk lumps	1st fill, 3 middle Iron Age sherds, ribs and horse vertebra. 2nd fill, no finds. 3rd fill, 10 middle Iron Age sherds, cattle and sheep/goat bone, charcoal and occasional burnt stones
2101	Oval	1.20×1.10	0.49	Steep sides, slightly concave base. 1 fill	2 fragments of bone in base
2105	Oval	0.95×0.80	0.15	Concave sides, irregular base. 1 fill	No finds
2107	Sub-rectangular	1.51×1.00	0.48	Gradually sloping sides and a flat base. 1 fill	3 middle Iron Age sherds, cattle and sheep/goat bone
2121	Oval	1.60×0.82	0.62	Steep sides and a flat base. 2 fills. The lower fill was concentrated in the north-western corner	Lower fill, 1 middle Iron Age sherd, sheep mandible and rib.
2128	Rectangular	2.25×1.75	0.48	Concave sides and flat base. 2 fills. 1st fill was weathered chalk. 2nd fill 90% chalk	1st fill, no finds. 2nd fill, 8 middle Iron Age sherds, horse bone and cattle mandible
2131	Circular	0.78	0.32	Concave sides and slightly concave base. 1 fill	No finds
2135	Oval	1.25×0.80	0.11	Concave sides, flat base. 1 fill	1 middle Iron Age sherd
2147	Oval	0.80×0.70	0.17	Concave sides and slightly concave base. 1 fill	No finds
2165	Circular	1.08 diam	0.42	Steep sides and a flat base. 3 fills with small quantities of chalk	No finds
2170	Sub-circular	2.20×1.95	0.75	Almost vertical sides and a flat base. 4 fills. 1st fill, dark brown clay silt dumped from western edge. 2nd fill, crumbly chalk. 3rd fill, frequent chalk lumps. 4th fill, clay silt with chalk 'gravel'	1st fill, 3 middle Iron Age sherds, sheep/goat deciduous incisor. 2nd fill, 2 middle Iron Age sherds. 3rd fill, 2 middle Iron Age sherds. 4th fill, 1 middle Iron Age sherd
2261	Irregular oval	2.40×1.70	0.16	Steep western edge, gradually sloping to east. <i>In situ</i> burning. 1 fill	No finds
2288	Oval	0.85×0.75	0.20	Steep on north side, 45° on south side and stepped on south-west. Possible quarry for chalk to build hearth <i>2261</i> . 3 fills	No finds
2313	Oval	0.57×0.45	0.12	Near vertical northern side, 45° on south, flat base	No finds

Cut	Shape	Dimensions (m)	Depth (m)	Details	Finds and environmental remains
2371	Oval	1.60×1.30	1.00	Almost vertical sides and a slightly concave base. 3 fills. 1st fill, silty chalky clay. 2nd fill, chalk, deposited from the northern edge. 3rd fill, silty chalky clay	1st fill, 54 sherds of a late Iron Age flower-pot-shaped vessel and sheep/goat bone. 2nd fill, no finds. 3rd fill, 56 middle Iron Age sherds, horse, cattle and sheep/goat bone
2373	Circular	1.60 diam	>1.10	Almost vertical sides and a flat base. 2 fills	1st fill, 45 middle Iron Age sherds, horse, cattle and sheep/goat bone. 2nd fill, 2 Roman sherds (total weight 3g)
2415	Circular	1.70 diam	0.68	Slightly concave sides and a flat base. 2 fills.	1st fill, no finds. 2nd fill, cattle and pig bone
2446	Circular	0.57 diam	0.17	Concave sides and flat bases. 1 fill	Cattle bone and ?3 middle Iron Age sherds from feature which cut it
2471	Truncated	?	>0.09	Uneven base. 1 fill	No finds
2477	Truncated	>1.00 diam	>1.00	Concave sides and uneven base. 4 fills. 3rd fill contained frequent chalk lumps. Possibly cleaned out and enlarged, putting late Iron Age pot in first and backfilling with middle Iron Age material	1st fill, 19 late Iron Age sherds, sheep/goat mandibles and maxilla and ribs from medium and large mammals. 2nd fill, 32 middle Iron Age sherds, sheep mandible and rib, bone implement and bakestone fragment, mortar/daub. 3rd fill, 4 late Iron Age sherds. 4th fill, 12 late Iron Age sherds
2511 2532	Truncated Circular	? 1.34 diam	0.11 0.15	Steep sides and uneven base. 1 fill Steep, slightly undercut sides and a flat base. 1 fill.	No finds 15 middle Iron Age sherds, sheep/goat and large and medium mammal ribs
2598/ 2616	Oval	1.20×0.66	0.35	Truncated by later Iron Age feature, gradually sloping sides and slightly concave base. 1 fill	6 middle Iron Age sherds, cattle tooth and rib fragment.
2665	Oval	1.40×>1.25	>1.3	Steep sides and flat base. 3 fills. 1st fill, sandy silt, occasional chalk. 2nd fill, silt with frequent chalk lumps. 3rd fill, sandy silt	1st fill, 4 middle Iron Age sherds, horse, cattle, sheep/goat and pig bone. 2nd fill, 4 later Iron Age sherds and cattle bone. 3rd fill, 1 late Iron Age sherd and small intrusive Roman and medieval sherds, sheep mandible and foot bone and pig canine
2702	Irregular rectangle	>2.35×1.20	0.33	Steep sides, irregular base. 1 fill	8 middle Iron Age sherds, burnt stones, horse, cattle, sheep/goat and pig bone.
3016/ 3925	Circular			Almost vertical sides and flat base. 4 fills. 2nd fill, burnt flint and pebbles. 3rd fill, chalk. 4th fill, frequent chalk lumps, flints and pebbles	1st fill, burnt clay/charcoal, possible hearth base. 2nd fill, 3 middle Iron Age sherds. 4th fill, 10 middle Iron Age sherds from northern half, 20 later Iron Age sherds from southern half, cattle mandibles and a maxilla, pig scapulae, sheep/goat and other fragments from the above species
3292	Circular	1.45 diam	0.55	Steep sides and flat base. 5 fills. On base of pit was a large stone with a flattened surface, placed facing down, and a quartz pebble. The fills were clay silts with varying amounts of small chalk fragments.	1st fill, 127 middle Iron Age sherds and cattle bone. 2nd fill, sheep/goat bone. 3rd fill, 27 middle Iron Age sherds, cattle and sheep/goat bones. 4th fill, sheep/goat bones. 5th fill, charcoal and sheep/goat bones
3412	Circular	1.75 diam	0.30	Steep sides and a slightly concave base. 2 fills. 1st fill, grey-brown silty clay. 2nd fill, very chalky	1st fill, cattle humerus. 2nd fill, 90 sherds of a middle Iron Age flower-pot-shaped vessel and a base sherd from another pot. Very fragmented burnt bone, a partial dog skeleton and cattle, horse, sheep/goat teeth and bones and anuran bones
3426	?Circular	1.95×>1.45	0.21	Near-vertical sides, flat base. 2 fills. Upper fill 60% chalk	Ash and burnt bone fragments in primary fill in eastern part of pit
3446	Circular	1.44 diam	0.44	Steep sides and a flat base. 3 fills. 1st 2 fills, weathered chalk. 3rd fill, clay silt	1st 2 fills, no finds. 3rd fill, 4 middle Iron Age sherds, cattle and sheep/goat bones

Cut	Shape	Dimensions (m)	Depth (m)	Details	Finds and environmental remains
3456	Circular	1.55 diam	0.52	3 fills. 1st fill spread evenly across the base. 2nd fill, weathering. 3rd fill, chalky silt with occasional burnt stones	1st fill, 41 middle Iron Age sherds. 2nd fill, no finds. 3rd fill, 7 middle Iron Age sherds, sheep mandible and scapula
3473	Sub-rectangular			Moderately steep sides and uneven base. 1 fill with occasional pebbles	8 middle Iron Age sherds, cattle and sheep/goat bones
3475	Sub-rectangular	1.20×0.7	0.40	Almost vertical sides and flat base. 1st fill, clay silt with large cobbles. 2nd fill, clay silt with occasional cobbles	1st fill, 20 middle Iron Age sherds, cattle, sheep/goat, dog, bird, fish and anuran bones. 2nd fill, sheep/goat bone
3478	Circular	1.80 diam	0.30	Almost vertical sides and flat base. 2nd fill, dark grey ashy silt with molluscs. 3rd fill, sandy silt with large flint cobbles (some burnt), charcoal and burnt clay	1st fill, no finds. 2nd fill, no finds. 3rd fill, 26 middle Iron Age sherds, 3 later Iron Age sherds (possibly intrusive) cattle and sheep goat maxilla, mandible, horncore, vertebrae and ribs
3480	Circular	2.55 diam	0.60	slightly undercut sides and flat base. 4 fills. 1st fill, dump of chalk in middle of base. 2nd fill, silt. 3rd fill, chalky silt thrown in from north and west sides, with burnt stone, burnt chalk and charcoal. 4th fill, compact levelling layer with small angular flints sealed by cobbles and flint nodules	1st fill, no finds. 2nd fill, 19 middle Iron Age sherds, cattle, sheep/goat and pig bone. 3rd fill, no finds. 4th fill, saddle quern fragment, 1 Iron Age sherd and horse bone
3721	Circular	1.14 diam	0.20	Uneven sides and flat base. 1 fill with occasional burnt stones and pebbles	9 sherds middle Iron Age pottery, large and medium mammal ribs, 2 intrusive Roman sherds
3803	Circular	1.30 diam	0.45	Almost vertical sides and flat base. 2 fills. 1st fill, clay silt, moderate chalk lumps and placed cobbles	1st fill, 53 middle Iron Age sherds on base of pit, pig scapula and sheep/goat bones from fill above. 2nd fill, 1 later Iron Age/transitional sherd and 1 Roman sherd.
3815	Circular	1.30 diam	0.40	Almost vertical sides and flat base. 2 fills. 1st fill, weathered chalk. 2nd fill, silty clay with burnt stones	1st fill, no finds. 2nd fill, 10 middle Iron Age sherds, horse scapula, pig and sheep/goat mandibles and cattle horncore
3839	Circular	1.30 diam	0.35	Almost vertical sides and flat base. 1 fill.	14 middle Iron Age sherds, large amorphous lump of daub, burnt cattle and sheep/goat bone. Small, intrusive later Iron Age/transitional and Roman sherds
3878	Circular	1.37 diam	0.36	Almost vertical sides and flat base. 2 fills. 2nd fill, burnt stones	1st fill, 3 middle Iron Age scored ware sherds. 2nd fill, 1 middle Iron Age scored ware sherd and 4 indeterminate Iron Age sherds

Appendix 3. Late Iron Age to early Roman pits (Period 2)

Cut	Shape	Dimensions (m)	Depth (m)	Details	Finds and environmental remains
2099	Oval	1.65×1.20	0.39	Almost vertical sides and flat base. 1 fill	3 later Iron Age sherds, 2 small intrusive medieval sherds, cattle bone
2186/ 2217/ 2241	Oval	1.90×1.20	0.43	Heavily truncated, near-vertical slightly concave sides and flat base. 1 fill	3 residual middle Iron Age sherds, 1 Roman sherd, sheep/goat bone and a cattle tooth
2442	?	2.61×>0.95	0.12	Heavily truncated, concave sides and flat base. 1 fill	No finds
2452	?	1.1×>0.20	0.30	Heavily truncated, near-vertical sides and flat base. 1 fill with moderate small chalk lumps	No finds
2521	Oval	1.10×0.88	0.23	Steep on western side, gentle on east. 1 fill	8 later Iron Age sherds and large mammal vertebra
2596	Oval	0.80×0.53	0.17	Almost vertical sides and irregular base. 1 fill with frequent chalk lumps	3 later Iron Age sherds, fowl scapula
2620	Circular	1.46 diam	0.40	Steep sides, flat base. 1 fill	2 later Iron Age sherds and cattle bone
2622	Rectangular	>1.2×0.65	0.40	Near-vertical sides, irregular base. 1 fill	1 residual later Iron Age sherd, 1 Roman sherd
2775	Sub-rectangular	1.1×0.95	0.15	Concave sides and flat base. 1 fill with frequent chalk fragments	3rd-century coin (SF 3)
3056	?	>0.3	0.10	Badly truncated, 1 fill	No finds
3068	Circular	0.88 diam	0.16	Concave sides and uneven base. 1 fill with frequent chalk lumps	7 later Iron Age sherds, cattle and sheep/goat bone
3088	Circular	1.34 diam	0.29	Concave sides and flat base. 2 fills. 1st fill, frequent chalk lumps. 2nd fill, rare chalk lumps and angular flints	1st fill, no finds. 2nd fill, 1 later Iron Age sherd, pig skeleton and cattle teeth
3151	Circular	1.7 diam	0.32	Steep sides and a flat base. 3 fills. 1st fill, silty clay with occasional pieces of chalk, 2nd fill, frequent chalk	1st fill, 1 middle, 1 later Iron Age sherd, fish, anuran, mice and 2 species of vole (the latter pit falls, but probably not the former). 2nd fill, no finds. 3rd fill, 1 Iron Age sherd, fox canine and large mammal rib
3167	Circular	1.05 diam	0.08	Truncated, concave sides and flat base. 1 fill	No finds
3172	Circular	1.50 diam	0.17	Almost vertical sides and flat base. 2 fills. 2nd fill, medium and occasionally large chalk lumps	1st fill, charcoal and charred grain and pit falls. 2nd fill, horse scapula
3174	Circular	1.50 diam	0.12	Gradual on north and south and vertical on western side. 2 fills	1st fill, 2 cattle femurs. 2nd fill, small, intrusive, medieval sherd
3188	Sub-rectangular	1.95×1.83	0.38	Steep sides and irregular base. 3 fills, all with frequent chalk lumps	1st and 2nd fills, no finds. 3rd fill, late medieval sherd (1g)
3198	Circular	1.4 diam	0.60	Almost vertical sides and a flat base. 5 fills; most fills were a clay silt with occasional to moderate chalk lumps. 4th fill contained pebbles and cobbles	1st fill, 3 later Iron Age sherds, 2 horse foot bones. 2nd fill, 5 later Iron Age sherds, horse, cattle and sheep/goat bones. 3rd fill, 23 later Iron Age sherds, pig and sheep/goat bones. 4th fill, cattle bone, goat horncore. 5th fill, 1 later Iron Age sherd and piece of medium mammal bone
3206	Oval	1.86×1.05	0.60	Steep sides and flat base. 1 fill with frequent chalk lumps	2 indeterminate Iron Age sherds, horse tooth, sheep/goat scapula
3208	Oval	1.13×1.05	0.55	Steep sides and flat base. 1 fill with occasional chalk lumps	27 later Iron Age sherds, horse, cattle, sheep/goat, woodcock and water vole bones and a piece of worked bone (SF 77)
3216	Circular	1.99 diam	0.73	Slightly undercut sides and flat base. 7 fills with varying amounts of chalk	1st 6 fills, no finds. 7th fill, sheep/goat and pig bones and teeth and the lumber vertebrae of a large mammal

Cut	Shape	Dimensions (m)	Depth (m)	Details	Finds and environmental remains
3245	Sub-circular	0.73 diam	0.40	Steep sides and flat base. 3 fills. The 2nd fill had frequent chalk lumps	1st fill, 1 indeterminate Iron Age sherd, cattle and sheep bones. 2nd fill, no finds. 3rd fill, 3 later/transitional Iron Age sherds, small intrusive medieval sherd, sheep/goat and cattle teeth and bones
3249	Sub-rectangular	1.60	0.42	Steep sides, flat base. 3 fills	1st and 2nd fills, no finds. 3rd fill, 3 later Iron Age sherds, small intrusive medieval sherd, 'Celtic' small-horned cattle crania and burnt teeth suggestive of spit roasting and a significant quantity of other animal bone — feasting?
3267/ 3270/ 3972	Circular	1.15 diam	0.50	Almost vertical sides and a slightly concave base. 3 fills with occasional to moderate small chalk lumps	5 residual middle Iron Age, 5 later Iron Age, 2 transitional and 2 Roman sherds, sheep/goat, pig and cattle bones and teeth
3272	Oval	0.50×0.35	0.25	Gradually sloping sides and flat base. 1 fill	5 later Iron Age sherds, 1 Roman and 1 intrusive medieval sherd
3335	Circular	1.15 diam	0.35	Steep sides and a flat base. 2 fills	1st fill, 6 later Iron Age sherds, medium mammal rib. 2nd fill, 1 middle Iron Age sherd
3349	Circular	1.68 diam	0.15	Truncated, with concave sides and flat base. 2 fills	1st fill, no finds. 2nd fill, 1 later Iron Age sherd and 1 piece sheep/goat bone
3392	Circular	1.45 diam	0.17	Steep sides and flat base. 1 fill with occasional pieces of charcoal	1 middle Iron Age and 17 indeterminate Iron Age sherds, cattle and sheep/goat bone
3489	Circular	1.80 diam	0.51	Steep sides and flat base. 4 fills. 1st fill, weathering in from eastern edge. 2nd fill, levelled across base, charcoal and daub. 3rd fill, chalk thrown in from western edge. 4th fill, charcoal, occasional large pebbles, daub	1st fill, no finds. 2nd fill, 17 later Iron age sherds, articulated cattle leg, mandible, maxilla, scapula and sacrum, horse tooth and large mammal vertebrae and large and medium mammal ribs. 3rd fill, 1 later Iron Age sherd, cattle mandible, sheep/goat teeth and ribs. 4th fill, 20 later Iron Age sherds and relatively large quantities of animal bone
3503 3505	Circular Circular	0.60 diam 1.6 diam	0.30 0.50	Gradually sloping sides, flat base. 1 fill Steep sides, flat base. 1 fill, very chalky	Piece of large mammal rib 4 later Iron Age sherds
3515	Sub-circular	>1.25	0.52	Truncated, gradually sloping sides, flat base. 1 fill	7 later Iron Age sherds and sheep mandible and ribs
3540	Circular	1.15 diam	0.26	Truncated, very steep sides and slightly concave base. 1 fill. Several medium to large pebbles	Almost complete pot in centre and 18 later Iron Age sherds in different fabric, patch of ash and very fragmented bone in the southern part, cattle mandible, sheep/goat teeth and medium mammal vertebra. Bone hinge and bone needle (SF 38 and 51)
3588	Circular	1.30 diam	0.10	Heavily truncated, gradually sloping sides and flat base. 1 fill	No finds
3661	Circular	1.02 diam	0.12	Steep sides and flat base. 1 fill	6 later Iron Age sherds, cattle tooth, large and medium mammal rib fragments
3666	Circular	1.75 diam	0.17	Almost vertical sides and flat base. 1 fill with burnt stones and cobbles	1 middle Iron Age sherd, 29 later Iron Age sherds and a relatively large quantity of animal bone (cattle, pig and sheep/goat)
3694	Sub-rectangular	1.80×1.25	0.65	Near-vertical sides and flat base. 4 fills with variable quantities of chalk inclusions	1st fill, cattle maxilla, fish, eel, amphibians, mice/voles and bird bones. 2nd and 3rd fills, no finds. 4th fill, 8 later Iron Age sherds

Cut	Shape	Dimensions (m)	Depth (m)	Details	Finds and environmental remains
3720	Circular	1.35 diam	0.20	Almost vertical sides and flat base. 1 fill	30 later Iron Age sherds, horse, cattle and sheep/goat bones
3733	Oval	1.10×0.55	0.75	Almost vertical sides and flat base. 5 fills with occasional to frequent chalk inclusions.	No finds
3829	Circular	1.30	0.40	Almost vertical sides and flat base. 1 fill	23 later Iron Age sherds, 2 Roman sherds cattle and sheep mandible
3836	Sub-rectangular	3.40×1.00	0.25	Concave sides, flat base. 2 fills. 1st fill with heat-discoloured chalky clay	1st fill, no finds. 2nd fill, 4 small later Iron Age sherds and a large mammal rib
3838	Circular	1.45 diam	0.40	Vertical sides, flat base. 1 fill with frequent chalk lumps	8 late Iron Age/transitional sherds, 1 intrusive medieval sherd, cattle, horse, sheep/goat and pig bone
3868	Circular	1.2 diam	1.2	Almost vertical sides and flat base. 6 fills. 1st fill, weathered chalk. 2nd fill, chalk weathered from the edges. 4th fill on southern edge of pit, loose chalk. 5th fill also on southern side, chalky. 6th fill, frequent chalk lumps	1st fill, 1 later Iron Age sherd. 2nd fill, 1 transitional sherd. 3rd fill, 14 later Iron Age sherds and pitfalls. 4th fill, 1 middle Iron Age rim sherd. 5th fill, no finds. 6th fill, 10 later Iron Age sherds, horse teeth, cattle mandibles (signs of spit roasting) and ischium and mammal ribs
3870	Circular	1.1 diam	0.4	Steep sides and slightly concave base	4 later Iron Age sherds and 1g Roman grey ware, piece of mammal bone
3888	Circular	1.33 diam	0.55	Very steep sides and flat base. Lower fill levelled across base	1st fill, 2 later Iron Age sherds, sheep/goat mandible and teeth. 2nd fill, 30 later Iron Age sherds, mainly from a flower-pot-shaped vessel, cattle and sheep/goat mandibles and large mammal rib
3901	Oval	1.85×1.60	0.76	Vertical to south and east, slightly undercut to north, flat base. 2 fills. 1st fill, moderate chalk lumps	1st fill, cattle bone. 2nd fill, 46 later Iron Age sherds, sheep/goat bone and ribs from large and medium mammals
3902	Circular	1.60 diam	0.93	Almost vertical sides, flat base. 2 fills. 1st fill with moderate chalk lumps	1st fill, 1 later Iron Age sherd, large mammal rib. 2nd fill, 8 later Iron Age sherds, cattle cranium and horncore
3903	Circular	1.38 diam	0.43	Almost vertical to north-east, steep elsewhere, slightly concave base. 2 fills	1st fill, no finds. 2nd fill, 4 later Iron Age sherds, perinatal human
3930	Sub-circular	1.15 diam	0.40	Near-vertical sides and a slightly concave base. 1 fill.	2 later Iron Age sherds, cattle and sheep/goat bone
3931	Circular	1.83 diam	0.85	Very steep sides and flat base. 1st fill levelled across base. 2nd fill chalk with charcoal and large pebbles	1st fill, 31 later Iron Age sherds, cattle, pig and sheep/goat bone and human humerus. 2nd fill, 16 middle Iron Age sherds, cattle horncore and wild species (pit falls), probably material from cleaning out this or another pit. 3rd fill, 11 later Iron Age sherds and medium mammal vertebrae and ribs.
3932	Circular	1.00 diam	0.30	Concave sides and base. 1 fill	Cattle, sheep/goat bone and a perinatal human humerus.
3960	Circular	1.6 diam	0.96	Almost vertical sides and flat base. Basal fill, loose chalk; upper fill	1st fill, no finds. 2nd fill, 168 late Iron Age sherds, cattle, pig, sheep/goat bone, piece of red deer antler, perforated bone plate (SF 67)
3980	Circular	1.30 diam	0.52	Steep, slightly concave sides and flat base. 3 fills with occasional small chalk lumps.	1st fill, 8 sherds later Iron Age pottery and relatively large quantity of horse, cattle, pig and sheep/goat bone. 2nd fill, 18 later Iron Age sherds, cattle and sheep/goat bone. 3rd fill, no finds
4046		0.75 diam		Heavily truncated, 1 fill	No finds

Cut	Shape	Dimensions (m)	Depth (m)	Details	Finds and environmental remains
4048	Circular	1.60 diam	0.23	Steep sides, flat base. 1 fill with large burnt pebbles and angular stones	1 residual middle Iron Age sherd and 12 later Iron Age sherds, half of the upper stone of a greensand rotary quern (SF 80) and knife (SF 70), human phalanx (possibly from Burial 15 or 16), cattle and sheep bone.
4049	Circular	1.20 diam	0.12	Heavily truncated, almost vertical sides, flat base. 1 fill	1 later Iron Age sherd
4060	Oval	2.18×1.95	0.58	Vertical, slightly undercutting to south and south-west, steep on north, slightly concave base. 2 fills. 1st fill, redeposited chalk	1st fill, 1 indeterminate Iron Age sherd, sheep/goat scapula and cervical vertebra. 2nd fill, 2 later Iron Age sherds, horse and sheep/goat bones
4071	Sub-rectangular	1.05×0.84	0.18	West side almost vertical, others more gradual, flat base. 1 fill with frequent chalk lumps	No finds
4082	Oval	1.35×0.90	0.33	Concave sides and base. 1 fill	Cattle, pig, sheep/goat teeth and large and medium mammal ribs
4132	Circular	1.30 diam	0.64	Steep sides, flat base. 2 fills. 1st fill, frequent chalk	1st fill, no finds. 2nd fill, 1 late Iron Age sherd and a human astragalus (possibly from grave 4127 or 4129)
4137	Circular	1.60 diam	1.20	Very steep sides and slightly concave base. 1 fill	Dog cranium, horse, cattle and sheep/goat bone
4141	Oval				3 indeterminate Iron Age sherds, horse skull, cattle teeth, pig femur and astragalus
4143					17 later Iron Age sherds, horse radius

Appendix 4. Documentary and cartographic evidence for the rectory

by Twigs Way

The rectory and associated landscape features

There are two surviving descriptions of the original house on the site of the rectory in the first part of the 17th century. Both descriptions are contained in glebe terriers, the first of 1625 and the second of 1638 (both in CUL EDR H1 box 3). In 1625 the parsonage site encompassed approximately five roods and contained a parsonage 'mansion' stable and other house for hay as well as a croft adjoining with yards and orchard. In addition, there was a further half acre which appears to have lain within the Backland Field but was abutting the croft and therefore closely associated with it. Further glebe land lay in the open fields.

By 1638 there is a fuller description of the site: 'There is belonging to the parsonage a mansion house with a bakehouse adjoining, a barn, stable, two houses for corn, hay or straw with houses for hogs or other cattle, also a little boarded house, a yard, garden place, orchard and pasture close, all of them containing by estimation three half acres of ground, or thereabouts.' (Transcription and modern spelling by TW.)

The five roods mentioned in 1625 would be approximately one and a quarter acres (approximately 0.5ha), which, with the half acre in Backland Field, would be one and three quarters (or perhaps a little less as these may be rounded up in terriers). The area mentioned by the 1638 description is, however, open to question. It is either three times half an acre (*i.e.*, 1.5 acres) or three and a half acres. There is no mark between the three and the half and a consultation of the rest of the document fails to clarify, as other areas are half acres or less. The next entry is for a meadow of half an acre which does not appear from its location (between the manor sites of Lacy's and the land of Bustelers) to be the same half acre referred to in 1625 as abutting the croft.

In 1654 the Lords Commissioners heard a plea between the Master and Fellows of Clare Hall (plaintiffs: St John's) and Samuel Mills (incumbent) and Charles Paris (holder of the manor) (defendant: St Peter's) over the tithes allocated to the two churches. The original of the document recording this is noted by the VCH (Wright 1978) as being within the archives of Clare College, although in the 19th century it was recorded as lost (CRO P62/3/1 insert). A transcription of the document (without the survey) made by the Revd Henry Markby in 1832 is contained within a 19th-century parish book (CRO P62/3/1). For the current research it is this transcription which has been used. The hearing outlines the rather confused system of tithes that was in operation at the time and seeks to clarify the situation. The tithes of St Peter's were at that time recorded as belonging to St Bene't College, Cambridge. No information on the rectory building itself can be gained from the transcription and it is unlikely that a fuller description is contained within the original, as the payment of tithes for the rectory site would not have been in question.

A field book of 1754 (CRO R58/7/1) does not mention the enclosed lands of the rectory or village area. A Visitation Report of Rural Deans (c.1783) (CUL EDR B7/1) records the parsonage (sic) house of St Peter's as: 'a very ordinary building, inhabited by a poor family, but the Tiling and Walls are in substantial repair' (i.e. in relatively good condition); 'the resident minister, for the last hundred years, has always lived in the Vicarage House and the Rectory House, which is not capable of any improvement, has been, during that time, occupied by poor people.' (Transcription and modern spelling by TW.)

With the advent of the 19th century considerably more information becomes available about the rectory site and adjoining gardens. Several parish-based maps survive from this period (1822 CUL Maps bb.53(1)95.3; 1831 enrolled enclosure RO Q/RDc44; 1842 tithe CRO P62/27/2) as well as the 1885/6 1st edition Ordnance Survey 25 inch (Sheet LIX.3 1885) and the second edition of 1903 (surveyed in 1901). In addition, written records include the enclosure award, invoices for work carried out on the grounds and other records of the Revds. Markby and Carter.

The year 1819 saw the appointment of the Revd William Henry Markby to the parish of St Peter's and it is Markby who, in *c*.1822, rebuilt the rectory as a 'square grey-brick house in Regency style' with the assistance of his patron (Corpus Christi College, Cambridge) (Wright 1978, 215).

Enclosure (1822/23 and 1830/1)

In 1822/3 there appears to have been either a preliminary or partial enclosure enquiry with a resultant map and an (unlocated) award. Part of this is recorded in the parish book of Revd Markby already referred to (CRO P62/3/1). This records the allotments to the glebe as follows:

1st Allotment (0-3-14) an old enclosure called Upper Bustler's in exchange from the Revd Fisher;

2nd Allotment (2-2-15) part of an old enclosure called Bentley's Close in exchange from Sir Chas. Long;

3rd Allotment (7-2-37) in Blakeland Field.

A photostat of the map that accompanied the 1822/3 survey confirms this and records the enclosures as glebe (CUL Maps bb.53(1) 95.3). It must, therefore, be surmised that before this swapping the actual rectory site was considerably smaller. A subtraction of the 0-3-14 of the first allotment and a similar amount for the eastern part of the L-shaped Bentley's Close from the 3.038 acres recorded for the site in 1885/6 leaves c.1.4 acres, an area very roughly equivalent to the five roods or three half acres recorded in the 17th century.

Enclosure took place in the parish in *c*.1830 (award 1830, enrolled copy of map 1831) (CRO Q/RDc44 and CROQRDz10). The rector at this time was still the Revd Markby, whose name is recorded in the award and on the map. The house of Revd Hitch is shown to the north, while to the east is the house of L. Knott and to the west the house of Revd Fisher.

1885/1886 1st Edition Ordnance Survey (Sheet LIX.3)

The 25-inch edition of the 1st edition Ordnance Survey shows the site in considerable detail, indicating alterations to the paths since the previous map. By the time of this later map, the allotments to the east and the north have been fully incorporated, while a conservatory/glasshouse has been added on the west side of the house.

Starting to the east: a tree belt or shelter-belt has been planted along the line of the old Hay Lane (now Hinxton Road). This extends from south of the entrance drive to the rectory beyond the rectory grounds, and terminates a considerable distance to the south. Conifers then continue westwards, obscuring from the rectory's view a range of farm (?) buildings. The area between the tree belt and the rectory is shown with many deciduous trees.

A drive leads to the rectory from Hay Lane in a curve, with a small turning area to the east front of the rectory. This appears to continue to the south (forming a semi-circle). Careful examination of the map reveals a fence or other boundary between the rectory and this southern end of the path. A large conifer is shown at the southern end (two by 1903). To the west of the entrance drive the lawns are more open, with a mix of deciduous and coniferous trees less densely planted.

In the south-west corner, abutting the house, is a more formal area of crossing paths (again with sparse mixed trees). A ha-ha is shown on the southern boundary of the garden area, which would have allowed a view from the house across to the adjoining field (shown planted with conifers and deciduous trees) which would have been terminated by the row of conifers that obscured the farmhouse in the distance. The whole would have given the impression (if pasture) of an open parkland stretching for some distance beyond the actual grounds.

An east—west-orientated glasshouse is shown abutted to the west side of the house with a probable enclosed area or building to the rear of it. On the western boundary of the site is an area of yards and/or outbuildings, to which one of the paths from the house leads directly.

Invoices for work on the rectory 1885, 1887 and 1899

A series of invoices survives for various works carried out on the rectory site for the years 1885, 1887 and 1899. These are addressed to the then incumbent, Revd H. Carter. Two are from William Wade builder, St Neot's, and the other from F. Rogers, Undertaker and House Decorator. From these some valuable information can be gained about the site – not least the fact that the Revd Carter was carrying out a range of works and generally upgrading the grounds.

In 1885 (CRO P62/3/) building works included putting extra height on the garden wall and plastering it, adding Staffordshire paving on the edge of the paths, putting up new oak posts and gates, pebble pitching the yard (the pebbles had to be brought in by train), lath plastering the

ceiling of the apple store (chamber), building a new shed and also repairing the stall divisions in the stables. The invoice for the works was £347 3s 8d. An area of pebble pitching survived (layer *2741–2743*) to the east of the rectory (Period 6).

In 1887 Mr Wade carried out further work altering, improving and repairing the stables and outbuildings (at the considerable cost of £344 4s 11d). In 1899 F. Rogers erected new front gates with new oak posts, repaired an old gate and dug trenches to take piping which connected the new soft-water tank to the house (at the kitchen door). After carrying out the trenching and laying of pipes, Rogers records that the pebble pitching was relaid.

1903 2nd edition Ordnance Survey 25-inch (surveyed 1901) Sheet no LIX.3

This map exhibits several differences from the 1885/6 Ordnance Survey sheet. There is considerably less planting shown, although the tree belt and some mixed planting along the path/boundary to the south-east of the rectory are shown. Conifers are no longer shown shielding the building complex to the south (although that also appears to have changed). However, the 2nd edition maps are often less detailed than the 1st editions and it is possible that the lack of depiction of planting is a result of cartographic changes rather than real alteration.

Additional information is, however, available about the building to the rear of the glasshouse (which is shown with diagonal lines, indicating a solid building) and also the yard/buildings area on the western boundary of the site. The ha-ha is still clearly shown. A small circular feature at the end of the path to the south-east of the house may be a statue or fountain. As has been seen, the Revd Carter carried out work and probably landscape planting of the grounds in the 19th century, which are probably responsible for these changes.

Post-medieval activity on the site is dominated by the presence of the rectory of St Peter's church and by the later addition of the Techne factory. The archaeological evidence supports the historical sources, which suggest domestic use of the site from the 17th century with a 'mansion' and associated gardens and outbuildings. By the 18th century the building had become dilapidated and was rebuilt.

Despite a full photographic record for Duxford parish (held at the Cambridge Collection) only one photograph of the rectory was found (Cambs. Coll. Y Dux. K2). Dating to the 1930s (possibly 1935), this postcard shows a distant view of the house with a wide driveway or avenue leading between formal gardens. Although not very clear, it appears to indicate low hedging on either side of the drive with larger clipped topiary pieces set in the lawn.

In 1945 a mortgage was taken out by Revd Joyce for £26 to enable 'improvements to the parsonage house and offices, and of paying the diocesan costs' (CRO P62/3/11). The rectory was sold in 1950 and the Revd Joyce was by 1949 inhabiting a house previously known as Glengyle on Cambridge Road.

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