

Farmoor to Blunsdon Water Main Oxfordshire and Swindon

Post-Excavation Assessment and Updated Project Design

> for Thames Water Utilities Ltd

> > CA Project: 9012 CA Report: 11201

> > > June 2012

FARMOOR TO BLUNSDON WATER MAIN OXFORDSHIRE AND SWINDON

POST-EXCAVATION ASSESSMENT AND UPDATED PROJECT DESIGN

CA PROJECT: 9012 CA REPORT: 11201

Author:	Jonathan Hart, Publications Officer		
Approved:	Andrew Mudd, Post-Excavation Manager		
Signed:			
Issue: 01		Date: 29 June 2012	

This report is confidential to the client. Cotswold Archaeology accepts no responsibility or liability to any third party to whom this report, or any part of it, is made known. Any such party relies upon this report entirely at their own risk. No part of this report may be reproduced by any means without permission.

© Cotswold Archaeology Building 11, Kemble Enterprise Park, Kemble, Cirencester, Gloucestershire, GL7 6BQ Tel. 01285 771022 Fax. 01285 771033 E-mail: info@cotswoldarchaeology.co.uk

CONTENTS

SUM	MARY	3
1.	INTRODUCTION	5
	Location	5
	Archaeological background and methodology	6
2.	OBJECTIVES	7
3.	RESULTS	7
	Oxfordshire Fieldwork Summary	8
	Filchampstead, Cumnor	8
	Long Leys House, Cumnor	12
	Kingston Hill Farm, Kingston Bagpuize with Southmoor	12
	Duxford Farm, Hinton Waldrist	14
	Faringdon Compound, Faringdon	19
	Pennyswick Farm, Coleshill	19
	Watching Brief	20
	Swindon Fieldwork Summary	20
	Broad Blunsdon	20
	Stratigraphic Record: factual data	22
	Stratigraphic record: statement of potential	22
	Artefactual record: factual data	23
	Artefactual record: statement of potential	25
	Biological record: factual data	28
	Biological record: statement of potential	29
4.	SUMMARY STATEMENT OF POTENTIAL	31
5.	STORAGE AND CURATION	32
6.	UPDATED AIMS AND OBJECTIVES	32
7.	PUBLICATION	35
	Synopsis of Proposed Report for Oxoniesia	36
	Synopsis of proposed note report for Wiltshire Archaeological Magazine	37
8.	PROJECT TEAM	38
9.	TASK LIST	39
10.	TIMETABLE	40
11.	REFERENCES	41

APPENDIX 1: STRATIGRAPHIC ASSESSMENT by Jonathan Hart	.43
APPENDIX 2: THE WORKED FLINT AND STONE by Hugo Anderson-Whymark	.45
APPENDIX 3: THE POTTERY by Paul Blinkhorn, Emily Edwards and Jane Timby	.41
APPENDIX 4: CERAMIC BUILDING MATERIAL by A. Crawford	. 64
APPENDIX 5: FIRED CLAY by A. Crawford	. 66
APPENDIX 6: COINS by A. Crawford And E.R. McSloy	. 67
APPENDIX 7: METALWORK by A. Crawford	. 69
APPENDIX 8: GLASS by A. Crawford	.71
APPENDIX 9: RESIDUES (METALLURGICAL AND OTHER) by E.R. McSloy	.72
APPENDIX 10: WORKED STONE by F. Roe and A. Crawford	.73
APPENDIX 11: CLAY TOBACCO PIPE by E.R. McSloy	.74
APPENDIX 12: THE ANIMAL BONE by Jonny Geber	.75
APPENDIX 13: MOLLUSCA by Michael. J. Allen	. 86
APPENDIX 14: PLANT MACROFOSSIL AND CHARCOAL by Sarah Cobain	. 92
APPENDIX 15: OASIS REPORT FORM	. 102

LIST OF ILLUSTRATIONS

- Fig. 1 Location of pipeline, showing excavated sites (1:100,000)
- Fig. 2 Areas of watching brief
- Fig. 3 Filchampstead site plan (1:2000 and 1:500)
- Fig. 4 Kingston Hill Farm site plan (1:100, 1:500 and 1: 1250)
- Fig. 5 Duxford Farm overall plan and site C (1:1250 and 1:500)
- Fig. 6 Duxford Farm plan of sites A and B (1:200 and 1:500)
- Fig. 7 Pennyswick Farm and Broad Blunsdon (Area A) site plans (1:250 and 1:500)
- Fig. 8 Filchampstead: the site, looking north
- Fig. 9 Filchampstead: possible box within ditch 3120, looking south-west
- Fig. 10 Kingston Hill Farm: the site, looking west
- Fig. 11 Photograph: Broad Blunsdon: the site, looking north-east

SUMMARY

Site Name:	Farmoor to Blunsdon Water Main
Location:	Oxfordshire and Swindon
NGR:	SP 4510 0790 to SU 1470 9020
Туре:	Evaluation, excavation and watching brief
Date:	9 July 2001–15 August 2004
Location of archive:	To be deposited with Oxford County Museum Service and
	Swindon Museum and Art Gallery
Site Codes:	BTF01, BTF02 and BTF04

A programme of archaeological investigation was undertaken by Cotswold Archaeology between July 2001 and August 2004 at the request of Thames Water Utilities Ltd along the Farmoor to Blunsdon Water Pipeline, Oxfordshire and Swindon.

Significant discoveries were made at sites within both counties, ranging in date from the Mesolithic through to the medieval/post-medieval periods. At Filchampstead, Oxfordshire, evidence of Iron Age settlement was identified, including a probable structured deposit within a ditch. More limited activity dating to the Early Roman and medieval periods was also present on the same site.

At Kingston Hill, Oxfordshire, limited evidence of Roman activity was present, along with traces of Anglo-Saxon enclosures. The majority of the features were medieval and were probably small enclosures such as paddocks.

Duxford Farm, Oxfordshire, included an unusual concentration of Middle Neolithic pits, along with a Middle Iron Age trackway and a small number of associated features. The majority of the features dated to the Early to Late Roman periods and included a re-alignment of the earlier trackway, along with adjoining field boundaries and a curvilinear ditch.

At Pennyswick Farm, Oxfordshire, a single medieval enclosure was found. Initial analysis suggests that this may have been the remains of a stock pen, possibly of timber and cob construction, although this requires further investigation.

A significant concentration of finds dating to the Mesolithic, Roman and Anglo-Saxon periods was present in one Oxfordshire field recorded during the watching brief. In Swindon, a single

site was excavated at Broad Blunsdon and this included a Roman ditch and pit, an Anglo-Saxon pit, and a number of undated quarry pits.

This document presents a quantification and assessment of the evidence recovered from the work. It considers the evidence collectively in its local, regional and national context, and presents an updated project design for a programme of post-excavation analysis to bring the results to appropriate publication.

1. INTRODUCTION

- 1.1 Between July 2001 and August 2004 Cotswold Archaeology (CA) undertook archaeological recording along the Farmoor to Blunsdon Water Pipeline (NGR: SP 4510 0790 to SU 1470 9020; Fig. 1). The pipeline route includes *c.* 29km within Oxfordshire and *c.* 8.5km within Swindon.
- 1.2 The work constituted permitted development under the terms of the Town and Country Planning Act, with Thames Water Utilities Ltd commissioning the archaeological recording in accordance with the Code of Practice on Conservation, Access and Recreation, published as a result of the 1989 Water Act. The work was undertaken in accordance with detailed *Project Designs* (PDs) produced by CA (2001a and 2001b) and approved by Mr Mike Lang Hall of Lang Hall Archaeology, the archaeological advisor to Thames Water; Mr Hugh Coddington, Deputy County Archaeological Officer for Oxfordshire County Council and Mr Roy Canham, formerly the archaeological advisor to Swindon Borough Council. The fieldwork also followed the *Standard and Guidance for Archaeological Field Evaluation* (Wiltshire Council Archaeology Service 1995) and the *Management of Archaeological Projects* (English Heritage 1991). It was monitored by Roy Canham, Hugh Coddington and Mike Lang Hall.

Location

1.3 The pipeline begins 0.8km north of Farmoor, Oxfordshire, at Beacon Hill reservoir, located at 133m AOD on a limestone outcrop (NGR SP 4510 0790; Fig. 1). From here it runs southwards, parallel to and within 1km–2km of the Thames, descending into the Oxford Clay Vale to 60m AOD. The route passes east of Farmoor Reservoir and ascends to 105m AOD, running above the base of the Thames Valley floor, across Oxford Clay and Sandstone, Siltstone and Mudstone deposits. Following the course of the Thames, the route turns westwards south of Appleton, traversing the Oxford Clay Vale, passing 1.6km north of Faringdon. From Faringdon, the route continues westwards through the Oxford Clay Vale, crossing the River Cole at the Swindon border. It passes north of Highworth, then turns south-west towards Broad Blunsdon, ascending Stubbs Hill to 145m AOD at the Broad Blunsdon reservoir (BGS 2011).

Archaeological background and methodology

1.4 Archaeological interest in the route arises from its location within the Upper Thames Valley, an area of known archaeological remains. The *Brief* for archaeological recording included a primary survey of the Oxfordshire and Wiltshire Historic Environment Records (OHER and WHER). Following this, aerial photographic and geophysical surveys were undertaken within areas of archaeological potential (APS 2001, GQA 2002 and Stratascan 2004).

Oxfordshire

- 1.5 The preliminary work indicated that much of the route lies within areas of medieval ridge and furrow cultivation, potentially masking earlier remains. Possible Roman occupation was suggested at Long Leys House and Filchampstead, Cumnor (centred on SP 4530 0440 and SP 4520 0572 respectively), Kingston Hill Farm, Kingston Bagpuize with Southmoor (centred on SP 406 001) and at Duxford Farm, Hinton Waldrist (centred on SU 2362 9920).
- 1.6 Evaluations were undertaken at Long Leys House (five trenches), Kingston Hill Farm (10 trenches) and the Faringdon Compound (five trenches). All trenches were 20m long and 1.8m wide. Significant archaeological features were identified at Kingston Hill Farm and a single Roman ditch was present at Long Leys House. Subsequent excavations were undertaken at Duxford Farm in 2002, on the basis of very clear geophysical survey results, which indicated a Romano-British rural settlement (GQA 2002, para. 4.4 & fig. 6) and at Kingston Hill Farm and Filchampstead in 2004. The watching brief undertaken during soil stripping in the pipeline easement led to the excavation of a medieval site at Pennyswick Farm, Coleshill.

Swindon

1.7 The preliminary work indicated that much of the route lies within areas of medieval ridge and furrow cultivation but that the section near Broad Blunsdon (SU 164 908 to SU 168 911) bisects cropmarks thought to indicate Roman occupation. A subsequent geophysical survey identified anomalies corresponding with these cropmarks and these were targeted by eight evaluation trenches (Trenches 1–8). Significant archaeological features were found only within Trench 1 and a subsequent excavation was undertaken at this site, Broad Blunsdon (Area A), in 2001.

Watching brief

1.8 A watching brief was undertaken along the pipeline route between Farmoor and Kngston Hill Farm during topsoil removal along the easement strip and, where this did not expose the natural substrate, during the cutting of the pipe trench (Fig. 2).

Methodology

1.9 All work was undertaken using 360° mechanical excavators equipped with toothless grading buckets, under archaeological supervision. The archaeological features were hand-excavated and recorded in accordance with CA Technical Manual 1: *Excavation Recording Manual* (CA 1996). The examination of archaeological features concentrated on obtaining details of phasing. Deposits were assessed for their environmental potential and sampled appropriately in accordance with CA Technical Manual 2: *The taking of samples for paleoenvironmental and palaeoeconomic analysis from archaeological sites* (CA 2003). All artefacts recovered from the excavation were retained in accordance with CA Technical Manual 3: *Treatment of finds immediately after excavation* (CA 1995).

2. OBJECTIVES

2.1 The objectives of the recording, as stated in the original Project Design, were to identify any archaeological remains revealed during the pipeline construction; to ensure their preservation by record and/or identify deposits where preservation *in situ* would be the preferred option, to prepare an archaeological archive of the sites, including the treatment and preservation of any finds (CA 2001, section 3). It was envisaged that an interim report would be prepared, including an assessment of finds recovered, and that any final report and publication would be contingent upon the significance of the results obtained.

3. RESULTS

3.1 The results of the fieldwork show significant archaeological discoveries at five excavation sites (Filchampstead, Kingston Hill Farm, Duxford Farm, Pennyswick Farm and Broad Blunsdon) and one site where superficial finds only were recovered (Field AA, Appleton Lower Common). The discoveries cover a long time range that, for this assessment, has been divided in to 10 provisional periods:

Period 1: Mesolithic Period 2: Neolithic Period 3: Bronze Age Period 4: Early to Middle Iron Age Period 5: Late Iron Age Period 6: Early Roman/Roman Period 7: Late Roman Period 8: Anglo-Saxon Period 9: Medieval Period 10: Post-Medieval/Modern

3.2 The Mesolithic is represented by superficial flintwork from Field AA, Appleton Lower Common. Prehistoric flintwork was recovered from elsewhere, but the most significant group was stratified with Middle Neolithic pottery and animal bone at Duxford Farm, Hinton Waldrist. There was also Middle Bronze Age pottery from Duxford Farm, but the main group of features from that site relate to a trackway and enclosures shown on the geophysical survey which yielded Iron Age and Roman finds. There appear to have been two phases of Iron Age ditches and pits at Filchampstead as well as an Early Roman phase. Superficial Late Roman finds from Field AA, Appleton Lower Common suggest a significant site here, and there was also a relatively large group of probable Anglo-Saxon pottery from this field. More Anglo-Saxon pottery came from a pit at Broad Blunsdon, Swindon, although the overall form of the site could not be established. Medieval enclosures at Kingston Hill Farm may have had earlier predecessors as there were Middle Saxon ditches here, as well as Roman pits. At Pennyswick Farm, an unusual Medieval enclosure or structure may have been a sheep pen.

Oxfordshire Fieldwork Summary

Filchampstead, Cumnor

3.3 The site lies within the Oxford Clay Vale at *c*. 60m AOD, 1.5km west of the higher ground of the Corallian Ridge (centred on SP 4520 0572; Figs 3, 8 and 9). It

comprised two adjoining fields, 230m and 80m long respectively, each 10m wide (Figs 3 and 8). The site lies close to areas of Iron Age and Roman occupation examined in advance of the construction of Farmoor Reservoir (Lambrick and Robinson 1979). Aerial photographs had revealed little but ridge and furrow (Air Photo Services UK 2001, fig. 16), but geophysical survey in a 30m-wide corridor identified the corner of a rectangular enclosure and other linear features in two fields (Stratascan 2004, figs 20, 26), the pipeline easement in both was stripped.

3.4 Green-grey clay was exposed across the site, overlain in places by broad east/west bands of sandy calcareous gravel. These deposits were sealed by up to 0.55m of topsoil and subsoil. North/south aligned furrows were present throughout much of the site but archaeological deposits survived well between them and relationships between features were established with a high degree of confidence.

Period 4: Early to Middle Iron Age

- 3.5 Features containing calcareous wares and grog-tempered wares usually dated to the Early to Middle Iron Age were assigned to this period. Towards the southern end of the northern field these included narrow north-east/south-west ditch 3085 and elongated pit/ditch segment 3029, which had a single dark fill, 3030, containing burnt stone, burnt bone and charcoal (sample <3001>), elongated pit/ditch segment 3031 and pit 3035. It is unclear whether the three smaller features represent elongated pits or the remains of an interrupted or heavily truncated ditch adjoining ditch 3085. Another possibility, suggested by their curvilinear plan, is that they defined part of an enclosure.
- 3.6 Towards the centre of the northern field, a 40m wide gravel band was the location of a further group of Early to Middle Iron Age features. The northernmost was a fourpost structure defined by postholes 3005, 3045, 3047 and 3050, which included post pipes, and narrow east/west ditch 3074 to the south. South of this, pit 3083 was 2.4m in diameter and 0.6m deep with a rounded profile that stepped out on its southern side. Its profile and dimensions are suggestive of a waterhole, possibly with animal erosion, and its lowest fill was perhaps natural infilling which left a 0.3m deep hollow. This hollow was filled, naturally or deliberately, with a clay layer and deposit 3084, possibly derived from a former topsoil, which contained Late Iron Age pottery. Although the final fills date to the Late Iron Age, the feature itself is potentially contemporary with the Early to Middle Iron Age activity. It is possible that some of the undated features also date to this period, particularly the undated pits

located towards the southern end of the northern field and ditch 3113 towards the centre of the northern field, which was truncated by a Late Iron Age ditch.

Period 5: Late Iron Age

- 3.7 Features assigned to this period comprised ditches containing grog-tempered ware dateable to the Late Iron Age and features with Middle Iron Age pottery that is considered residual. Four parallel north-west/south-east ditches (3119, 3120, 3121 and 3122) were found on the gravel band running through the centre of the northern field (Fig. 3B). Although not intercutting at the excavated level, they presumably would have been at original ground level given their close spacing, and may have formed a periodically re-cut boundary. This perhaps comprised paired ditches, since the alignment included two deeper ditches (3120 and 3122), each directly to the north of a smaller ditch with a broad u-shaped profile. Three of these ditches contained one or two fills. Of these fill 3071 (ditch 3121) yielded Middle Iron Age pottery and the lower fill 3069 of ditch 3122 contained Late Iron Age pottery, whilst its upper fill (3070) contained Middle to Late Iron Age pottery. Fill 3098 of ditch 3119 contained Late Iron Age pottery.
- 3.8 Ditch 3120 was the largest at 3.6m wide and 1m deep and included a 0.15m wide cleaning slot along its base. Its lowest fills (3109, 3111 and 3126) resulted from natural infilling and of these, fill 3111 contained Middle Iron Age pottery. The next fill, 3110, corresponded with a change in the ditch profile and may be the lowest fill of a re-cut. It contained Middle Iron Age pottery and a horse skull and was overlaid by a possibly natural infill, 3125. Fill 3125 had been truncated by an unusual verticalsided, flat-based cut with 90° corners. The shape of this cut was suggestive of the former presence of a box (Fig. 9) and, although no wood survived, its sides and base were lined with oak and alder/hazel charcoal from which Middle Iron Age pottery was recovered (fill 3097; sample <3002>). If a box had been present, no lid had survived so it is unclear if its main fill represents box contents or subsequent collapse/infilling (fill 3124; sample <3003>). If this fill does represent box contents, molluscs found within it indicate that it may contained water, although this requires further investigation. The same fill also included charred plant remains (barley, hazelnut shells and a cherry pip). The remainder of the possible box was fully filled with ditch fill 3073, which extended beyond the box itself. This differed from the underlying fills, being dark in colour and containing three special finds: a lump of slag (RA 3001), an articulated horse pelvis (RA 3002) and a burnt polished Neolithic stone axe (RA 3003), as well as Middle to Late Iron Age pottery. The fragile but

largely intact burnt surface of the axe perhaps indicates that the burning occurred during its Iron Age deposition, rather than in the Neolithic period when it was produced (Appendix 2). The presence of these deposits, particularly the axe, which is likely to have been a curated item, is notable and may represent structured deposition. The overlying fill, 3127, was a thin clayey layer and potentially represents slighting from an adjacent bank (on the northern side of the ditch). The final fill, 3072, was relatively dark in colour and included Middle to Late Iron Age pottery, animal bone and burnt and unburnt ragstone fragments.

- 3.9 To the south, ditch 3059/3088 truncated the possible Early/Middle Iron Age waterhole and contained Late Iron Age pottery and a fragment from a Roman glass vessel (fill 3060). The ditch was narrow, but had been re-cut where it crossed the soft fills of the waterhole and it was this re-cut that survived throughout most of the ditch. The fill of the ditch re-cut was finds poor but notably dark. Although currently assigned to the Late Iron Age, it is possible that this feature was post Conquest, given the presence of glass.
- 3.10 The southernmost feature containing Late Iron Age pottery was ditch 3191 which contained three fills (3184, 3185 and 3186) from which Middle and Middle to Late Iron Age pottery was recovered.

Period 6: Early Roman

3.11 Two features (ditches 3164 and 3195) containing Early Roman pottery were present, one at each end of the site. Both were parallel and perpendicular to the Late Iron Age ditches, suggesting some degree of continuity. The pottery from ditch 3164 dated to the 1st to 2nd centuries AD whilst that from ditch 3195 was Late Iron Age or Early Roman.

Period 9: Medieval

3.12 At the edge of the central gravel band a series of ditches (3055, 3061, 3063 and 3091) may have defined several small adjoining enclosures/paddocks. Ditch 3063 contained a series of fills, the second of which (3065) contained two sherds of medieval pottery, dateable to after the 11th century. However, ditches 3061, 3063 and 3091 contained Iron Age pottery and further analysis is required to determine whether this was residual within medieval ditches, or whether the medieval material is intrusive. Ditch 3103 and other small ditches on this alignment nearby may have been part of these enclosures or the remains of furrows.

Period 10: Post-medieval

3.13 Ditch 3043 was located east of the medieval enclosures/paddocks but was only partially exposed. Its fill contained a sherd of pottery dating to the 16th century or later. The furrows across the site remained largely undated but 19th-century pottery was recovered from furrow fill 3038.

Undated

3.14 Throughout the northern field, a small number of undated narrow ditches, isolated postholes and small pits were present. Some of the ditches were parallel to those of the Late Iron Age and Early Roman periods, but also with the possibly medieval enclosures/paddocks. Of these, two parallel ditches running through the central gravel band may have flanked a trackway. Some of the small pits may be tree-throw pits, but others, including pits close to the southern end of the field were more certainly anthropogenic in origin.

Long Leys House, Cumnor

3.15 The site to the west of Cumnor was centred on SP 453 044 and was examined with five evaluation trenches (Fig. 1, T11-T15). A single ditch was found in Trench 15 of the evaluation (Fig. 2, inset A) and the site did not progress to excavation. North-east/south-west ditch 1510 contained ?Anglo-Saxon as well as ?residual Roman pottery. Further excavation of this ditch during the subsequent watching brief (ditch 20004) retrieved more Roman pottery (fill 20005). North-west/south-east ditch 20006 was also identified during the watching brief and contained post-medieval pottery (fill 20007). Furrows were also recorded.

Kingston Hill Farm, Kingston Bagpuize with Southmoor

- 3.16 The site lies 1.2km south of the Thames on the edge of the Corallian Ridge at 90m AOD (centred on SP 406 001; Figs. 4 and 10). Nothing of significance had been found on the aerial photograph interpretation (Air Photo Services UK 2001, fig. 12), although the geophysical survey had revealed a dense pattern of linear anomalies at 90° to one another in the field to the north-west of the farm, of uncertain significance (GeoQuest 2002, fig. 9). Trial trenching was undertaken in two fields, the western field revealing a number of medieval ditches (Fig. 4A).
- 3.17 The underlying geology is mapped as Sandstone, Siltstone and Mudstone (BGS 2011). Yellow to orange-brown clay silt was exposed throughout the excavation,

sealed by 0.3m–0.45m of topsoil (Fig. 10). Although the site lay within pasture at the time of the excavation, the absence of subsoil suggests that it had been ploughed previously to the natural substrate, potentially truncating the archaeological deposits. An area 220m long and 10m wide was excavated. With the exception of furrows and two pits, all of the features were contained within the western field. In addition to the features described below, ten flints were recovered as residual finds and these included a possible Mesolithic bladelet as well as flake debitage, probably dating to the Neolithic or Early Bronze Age.

Period 7: Late Roman

3.18 A small quantity of Roman pottery was recovered from the site. Where closely dateable, it was Late Roman but some was residual within medieval and later features. Pits 2025 and 2040 and ditch 2030 all contained exclusively Roman pottery. However, pit 2040 truncated an Anglo-Saxon ditch and is likely to be medieval or later and ditch 2030, whilst potentially Roman, contained only a single sherd of pottery broadly dateable as Roman and could instead be associated with Anglo-Saxon ditches to its immediate south. Pit 2025 was oval with vertical sides and a flat base, and up to 0.9m wide and 0.2m deep. It contained a single fill from which limestone fragments, burnt clay, charcoal, animal bone and a small sherd of ?Roman pottery were recovered.

Period 8: Middle Anglo-Saxon

- 3.19 A small number of features contained Early to Middle Anglo-Saxon pottery. Where closely dateable, this was late 8th-century or later in style and it seems likely that all of the Anglo-Saxon pottery is of this date.
- 3.20 At the western end of the site, east/west ditch 2042 contained two sherds pottery dateable to the late 8th century or later. Although undated, ditch 2036 to its immediate west would seem to have been associated with ditch 2042, with an entrance between the two. It is also possible that ?Roman ditch 2030 was in fact associated with these features. Ditch segment 2065, 5m to the east of ditch 2042 contained a single Anglo-Saxon pottery sherd and was probably associated with otherwise undated ditch segment 2078 to its immediate north. Together, this group of features may have defined the north-east corner of an enclosure.
- 3.21 Early to Middle Anglo-Saxon pottery was also recovered from ditch segment 2019,40m to the east, although the purpose of this feature is currently unclear.

Period 9: Medieval

3.22 The majority of features dated to the medieval period, centring on the 11th to 13th centuries, and comprised a series of ditches and a small number of pits. Some of the ditches (2004/2006 and 2063/2014/2074/2067) were very regular and potentially defined adjoining rectilinear enclosures which would appear, based on the paucity of finds, to have been fields or paddocks. These ditches were typically 0.8m wide and 0.15m–0.35m deep. They contained one to two fills, all of which appeared to have accumulated naturally, and contained little artefactual material. Fill 2068 of ditch 2067 contained a bone pin (RA 2). Ditch 2046 may have been associated with these fields/paddocks, given its alignment.

Period 10: Post-medieval/modern

3.23 Furrows containing post-medieval finds, as well as residual Roman and medieval pottery, were distributed across the site. Two adjacent oval pits, 2020 and 2023, each 2.3m long, 0.55m wide and 0.2m deep, lay in the eastern field. Fill 2022 of pit 2020 contained a single small sherd of 19th-century pottery. Although grave-shaped, no human remains were found within these pits.

Duxford Farm, Hinton Waldrist

- 3.24 The site lies within the Thames Valley at 65m AOD, 1km south of the River Thames (centred on SU 2362 9920; Figs 5 and 6). The site was known from aerial photography and was interpreted as a trackway with associated settlement or stock pens of Iron Age/Roman date (Air Photo Services 2001, 16 & fig. 10). Geophysical survey confirmed this picture, indicating enclosures either side of a wide drove/trackway which opens into a funnel at its northern end apparently containing small ditched plots (GeoQuest 2002, fig. 6).
- 3.25 The whole field containing the geophysical plot (Sites A and B), and the field to the west (Site C), were stripped of topsoil to the width of the pipe easement (14m) The majority of the features were within Site A as the geophysical survey had indicated. The underlying geology is mapped as Northmoor Sand and Gravel. Pale grey-brown sand was exposed throughout the site, sealed by 0.4m of topsoil. No subsoil was present, and this may indicate that ploughing has truncated the site to some extent. North-west/south-east aligned furrows were present throughout much of the site but archaeological deposits survived well between these and relationships between features were established with a high degree of confidence.

Period 2: Middle Neolithic

- 3.26 A concentration of Neolithic pits was identified at the eastern end of Site A (Fig. 6A). Most were cut into 0.25m deep red-brown sandy silt deposit 1105, which was probably a palaeochannel fill or palaeosol. The pits were dated to the Middle Neolithic period based on the presence of Peterborough Ware and of two arrowheads (from pits 1167 and 1007) characteristic of this period. Further indication of this dating is provided by the presence of polished Neolithic flint axe fragments from pits 1007, 1041 and 1337, an occurrence comparable with other Middle Neolithic pits in the Thames Valley (Appendix 2).
- 3.27 The pits were varied in size and irregular in morphology. Smaller examples included pit 1167, 0.7m in diameter and 0.25m deep, which had steep edges and a rounded base. Its fill, 1168, included struck flints and seven sherds of Middle Neolithic pottery as well as a small sherd (1g) of probable Roman pottery, likely to be intrusive. A similarly small Roman sherd from fill 1170 of otherwise undated pit 1169 in this location is possibly also intrusive and the pit may be Neolithic, although this requires further analysis. The larger examples included pit 1041, up to 2.9m wide and 0.35m deep, which had gently sloping edges and a flattish base. Its single fill, 1042, contained worked and struck flints, animal bone, Middle Neolithic pottery and a cylindrical loom-weight (RA 26). Samples from the pits were relatively productive and included molluscs indicative of an open environment and charcoal from species likely to have grown locally, as well as charred plant remains, including hazelnut shells. The pits also included fragmented and eroded animal bone, apparently dominated by red deer, although from meat-poor elements such as metapodials and phalanges.
- 3.28 Pit 1007 containing Middle Neolithic pottery was located 18m west of the main concentration, whilst a further 22m to the west, pit 1017 contained a single large (81g) sherd of Middle Neolithic pottery (fill 1020) and a small (2g) sherd of probably intrusive Iron Age pottery. The feature coincides closely with Middle Bronze Age pit 1019 and it is possible that both sherds are residual within pit 1019. Some of the undated pits may also be of Neolithic date.

Period 3: Middle Bronze Age

3.29 Middle Bronze Age activity was restricted to pit 1019 within the western half of the site which contained a Globular Urn shoulder fragment. This sherd is well-preserved,

and unlikely to be residual. The presence of an isolated pit of this period would be unusual (Edwards, Appendix 3) and hints at further activity of this date nearby, a possibility also raised by two Early Bronze Age barbed-and-tanged arrowheads found within Early Roman curvilinear ditch 1079/1114.

Period 4: Middle Iron Age

- 3.30 A small number of Iron Age features were found, mostly towards the western end of Site A. Where closely diagnostic the pottery was Middle to Late Iron Age, although much was only broadly dateable as Iron Age. Some Middle Iron Age wares in the region continue in use into the Late Iron Age, but the absence of specifically Late Iron Age wares suggests that this material is more likely to date to the Middle Iron Age, and that a Late Iron Age phase seems to be absent, although this requires further analysis.
- 3.31 North/south ditch 1124 was 4.5m wide and up to 0.85m deep, and its profile suggests that it included at least one re-cut. A single sherd of currently undated pottery was recovered from fill 1125 of the westernmost cut, whilst the easternmost cut contained 10 sherds of Middle Iron Age pottery (fill 1117). The final fill was truncated by Late Roman pit 1193. Parallel ditch 1173 was 12m to the west and comparable in size and morphology, also with possible re-cuts. Its earliest fills remained undated but two sherds of pottery recovered from upper fill 1181 date to either the prehistoric or Saxon periods. Further analysis is required to refine this dating, although the earlier date would seem more probable. It is possible that ditches 1124 and 1173 flanked a 12m-wide trackway/droveway.
- 3.32 The easternmost possible trackway ditch was re-cut as ditch 1066. Northeast/south-west ditch 1122 adjoined the eastern edge of this re-cut and contained a single fill (1123) which yielded seven sherds of pottery broadly dateable as Iron Age. This fill was indistinguishable from that of ditch 1066 and it is possible that the two features were contemporary, perhaps with ditch 1122 defining adjoining fields/enclosures.
- 3.33 To the east, pit 1013 was oval and 1.6m long, 0.85m wide and 0.35m deep. It had steeply-sloping sides and a rounded base and was filled by sandy clay 1014 which contained burnt and unburned animal bone and a sherd of Middle Iron Age pottery. A single sherd of probably intrusive Iron Age pottery was recovered from Neolithic pit 1017, although the date of this pit requires further analysis.

3.34 Three ditches in Site C contained Iron Age pottery. Ditch 2021 was curvilinear, 4.5m long, 1.2m wide and 0.55m deep. Its single fill, 2024, contained Early to Middle Iron Age pottery and it had been re-cut along its length by 2019, the fill of which (2010) yielded 55 sherds of Middle Iron Age pottery, along with a sherd of probably intrusive medieval pottery. North/south ditch 2013, 3.5m to the east, was 4m wide and 0.95m deep with steep sides and a flattish base and contained a series of fills, the second of which (2014) included Middle Iron Age pottery. Ditch 2007 was 3.4m wide and 1m deep with a composite profile and rounded base. It contained three fills, the uppermost of which (2008) included Middle and Middle to Late Iron Age pottery.

Period 6: Early Roman

- 3.35 Features containing Early Roman pottery were found within the western half of Site A. North/south ditch 1047 lay inside the possible Iron Age trackway and its fill (1048) contained 2nd-century or later Roman pottery. Together with parallel Late Roman ditch 1030, this may represent a re-alignment of the Iron Age trackway during the Roman period.
- 3.36 To the west of the possible trackway lay ditch 1054. Very little survived as it had been re-cut along its length by ditch 1056, which was 2m wide and 0.65m deep with a u-shaped profile. Pottery broadly dateable as Roman was recovered from second fill 1058 of the re-cut whilst pottery dateable to the Iron Age to 2nd-century AD was recovered from fill 1072, also likely to have been a fill of the re-cut. Its north-western terminus had been truncated by Late Roman ditches.
- 3.37 Curvilinear ditch 1114/1079 was only partially exposed within the excavation and was 1.6m–3m wide and 0.2m–0.3m deep with a broad u-shaped profile. It contained a single pale fill throughout which yielded one 2g sherd of Early to Middle Iron Age pottery (fill 1115) and small sherds of Roman pottery (one 0.5g sherd of 2nd-century pottery from fill 1080 and three small sherds broadly identifiable as Roman from fills 1111 and 1113). It was truncated by Late Roman ditch 1147, but further analysis is required to determine whether it dates to the Iron Age or the Early Roman periods and to assess whether it was, for example, part of a roundhouse eavesdrip or a small enclosure.

Period 7: Late Roman

- 3.38 Late Roman features were found towards the western end of Site A and a single ditch of this date was found within Site C. In addition to Late Roman pottery, three Late Roman coins were recovered. Early Roman trackway ditch 1047 had been recut by ditch 1049, the primary and main fills of which (1053 and 1050 respectively) contained 4th and late 4th-century pottery, including shelly ware, dateable to the last quarter of the 4th century or later and probably amongst the latest Roman deposits on site. The same type of ware, and a coin of c. 364 to 378 AD (RA 1), was also recovered from the latest re-cut of the westernmost trackway ditch (1030), together suggesting that Roman material collected from the site into the trackway at least until the late 4th century. A probable medieval or early post-medieval belt buckle from this ditch (fill 1004, RA 16) may be intrusive,. The westernmost trackway ditch was adjoined by ditch 1147 which may have been a field boundary or part of an enclosure. It too had been re-cut and both phases of this ditch included 4th-century AD pottery in addition to which fills 1151 and 1197 contained late 3rd or early 4thcentury coins (RA 60 and 73).
- 3.39 To the west, ditch 1092 had a u-shaped profile with a possible cleaning slot. It had been re-cut along its western edge by ditch 1096 which also had a u-shaped profile and was 1.4m wide and 0.55m deep. The fills of both contained Roman pottery, with 3rd-century or later material found within ditch 1092 (fill 1093), along with a Roman-style rotary quern fragment (fill 1095). Two parallel northeast/southwest-aligned ditches (1138/1140 and 1143) truncated ditch 1092 but appeared to respect ditch 1096, perhaps as contemporary features. Ditch 1138 contained Middle to Late Iron Age and Roman pottery, whilst possibly Roman pottery was recovered from ditch 1143, but a Late Roman date is likely for both since they truncated Late Roman ditch 1092. Together with ditch 1147, these ditches potentially defined enclosures to the west of the trackway.
- 3.40 Late Roman pit 1193 was cut into the final fill of Iron Age trackway ditch 1066. It had vertical sides and a flat base and was 0.8m in diameter and 0.4m deep. Its lower fill, 1194, comprised charcoal and burnt clay, potentially representing *in situ* stored material, and included late 3rd-century or later pottery. The remaining fills were probably backfills. Further pits of this size containing Roman pottery were present within Site A. In each case, the pottery within them was only broadly dateable as Roman, although pits 1051 and 1132 truncated Late Roman ditch 1030.

3.41 Within Site C, north/south ditch 2011 was 1.3m wide and 0.5m deep with a u-shaped profile. It included two fills, the uppermost of which contained mid to late 3rd-century AD pottery, although the ditch itself may have been earlier.

Period 9/10: Medieval and post-medieval

3.42 Plough furrows were found throughout the site and are likely to be the remains of medieval or later ridge and furrow cultivation.

Undated

3.43 Undated features were found throughout Site A, with smaller numbers in Sites B and C. The majority comprised pits. One cluster was located around the dated Late Neolithic pits and might also be of this date. Others could potentially date to the Neolithic, Bronze Age, Iron Age or Roman periods, based on the presence of other pits of these dates within Site A. An undated animal burial was located in pit 1099, Site A.

Faringdon Compound, Faringdon

3.44 The site to the west of Faringdon is centred on SU 2685 9575 (Fig. 1). Five evaluation trenches were excavated, three of which contained undated ditches.

Pennyswick Farm, Coleshill

- 3.45 The site is located within the Oxford Clay Vale at 80m AOD, 1km north-west of the high ground of Coleshill (centred on SU 2285 9495; Fig. 7). No archaeological remains have been recorded previously within the locality. The site was identified during the watching brief along the easement strip and the natural substrate, comprising green-grey clay with rounded flints, was exposed throughout. It was covered by 0.3m thickness of topsoil and the absence of subsoil suggests that the site may have been truncated by ploughing. At the time of the fieldwork, the site lay within an arable field. In addition to the feature described below, a worn silver medieval penny, probably of Henry V (1413–22), was recovered from topsoil 2001.
- 3.46 A single feature was identified, a sub-rectangular enclosure 50m long and 8m wide (internally 46m long and 5.5m wide). It was defined by a single ditch 1m–2.2m wide and 0.1m–0.2m deep with steep/vertical sides and a flat base. A 10m wide entrance was present at its south-eastern corner and an internal division was present at the enclosure's western end, although this was poorly-defined and it is unclear if it comprised two terminals (2019 and 2022) with an entrance or was formerly a

continuous ditch. A layer of limestone fragments (2005) set onto the natural substrate within the enclosure was overlain by concentrations of animal bone, suggesting that it formed a surface. The bone was mainly of sheep/goat, some of which was articulated. Dense concentrations of animal bone were found within the western sub-division, and outside the western end of the enclosure. The surface also included nails and a post-medieval or later harness fitting or machine component.

3.47 The ditch was filled with a very compact light yellow-brown clay silt from which animal bone and medieval Minety roof ridge tiles, dateable to the 14th century, were recovered, along with iron nails. Interpretation of this enclosure will require further analysis which should assess whether the surrounding ditch was a foundation trench for a sill beam supporting a timber or timber and cob building, and if so, whether the tiles were part of this building. Analysis should also assess whether the sheep bones, particularly the articulated remains, relate to the use of the structure, in which case it might be comparable to shielings noted in upland 'marginal' locations and associated with transhumance (EH 2011).

Watching Brief

3.48 A small number of isolated flints were recovered from the topsoil along the pipeline route. Within Field X, west of Appleton (Figs 1 and 2), a notable find comprised the tip of a fine Neolithic or Early Bronze Age arrowhead (Appendix 2). The only significant concentration of flints came from Field AA (Figs 1 and 2), which yielded a surface scatter of 65 Mesolithic flints, mainly comprising flake debitage with a good proportion of blades. Field AA, south-west of Appleton, is located 1.5km west of three large Early Mesolithic flint scatters at Tubney Wood (Appendix 2). Field AA also yielded significant assemblage of Roman pottery (503 sherds), a Roman glass fragment, a Roman stylus and five Late Roman coins as well as a significant assemblage of Anglo-Saxon pottery (123 sherds) and an Anglo-Saxon bead.

Swindon Fieldwork Summary

Broad Blunsdon

3.49 The site is located near the northern edge of Swindon, between Broad Blunsdon and Highworth (centred on SU 1650 9045; Figs 1 and 7). Area A and Trench 1 are situated on the eastern edge of Stubb's Hill, at around 120m AOD, with Trenches 2– 8 following the fall of slope to the east. The same high ground includes a hillfort at Castle Hill, 0.6km north-west of the site. Significant features were found within Trench 1 of the evaluation and this part of the pipeline was stripped to the top of the natural substrate for a length of 110m and to a width of 13m. The natural substrate comprised white/yellow sand with outcrops of Corallian ragstone. This was sealed by 0.25m thickness of topsoil and subsoil. At the time of the excavation, the site lay within pasture.

Area A (including Trench 1)

Period 6: Roman

3.50 North-east/south-west ditch 105 was located at the western end of the site (Fig. 7). It comprised a u-profiled cut, 0.6m wide and 0.1m–0.2m deep, which contained a pale silty fill from which small quantities of Roman pottery and residual struck flints were recovered.

Period 8: Anglo-Saxon

3.51 Poorly defined shallow pit 108 was identified during the evaluation, truncating the top of the Roman ditch. Its dark fill, 106, contained a large quantity (580g) of Anglo-Saxon pottery. Postholes 1015 and 1018 lay beyond either end of the pit and although both were undated, their fills were similar to that of the pit and one truncated the Roman ditch.

Period 9: Medieval

3.52 Large pit 1030 was exposed within Trench 1 at the western end of the site and was more fully exposed during the excavation, extending beyond the limit of excavation. It was irregular in plan and at least 11.5m long, 5m wide and 1m deep with almost vertical sides and a flat base. It contained two stony fills. During the evaluation, small quantities of animal bone, Anglo-Saxon pottery (8g), medieval pottery (7g) and a late medieval or post-medieval copper lace end (RA 1) were recovered from upper fill 104. The feature seems likely to be medieval, or perhaps later, and may have been a quarry pit.

Undated

3.53 A series of shallow, irregular pits was present across the site. These varied widely in size between pit 1011 which was 1.25m in diameter and 0.2m deep, and pit 1051 which was at least 20m in diameter and 0.35m deep. Although superficially similar in plan to feature 103, those examined were shallower and may be unrelated but would appear to represent quarrying.

Trenches 2–8 (not illustrated)

- 3.54 Within Trench 4, narrow east/west ditch 404 and north-east/south-west ditch 408 contained Roman pottery (fills 405 and 409 respectively).
- 3.55 A series of furrows were identified within Trenches 2 and 3. Within Trenches 7 and 8, three spreads of charcoal and burnt clay were present, up to 1.4m in diameter and 0.05m deep. These remained undated. No archaeological features were present within Trenches 5 and 6.

Stratigraphic Record: factual data

3.56 Following the completion of the excavation an ordered, indexed, and internally consistent site archive was compiled in accordance with specifications presented in the *Management of Archaeological Projects* (EH 1991). A database of all contextual evidence was also compiled and cross-referenced to spot-dating. The paper archive comprises the following records:

Site	Context records	Drawing sheets	Monochrome films	Colour slide films
Filchampstead Excavation	198	51	3	3
Long Leys Farm	25	0	0	0
Kingston Hill Farm Evaluation	64	10	1	1
Kingston Hill Farm Excavation	108	32	2	2
Faringdon Compound Evaluation	24	3	1	1
Duxford Farm	417	137	12	12
Pennyswick Farm	24	5	0	0
Watching brief	20	3	0	0
Broad Blunsdon (Area A)	56	11	7	6
Broad Blunsdon Evaluation	73	16	1	1
TOTALS	1009	271	27	26

3.57 The survival and intelligibility of the site stratigraphy was good and, despite a relative paucity of stratigraphic relationships, most features have been assigned a preliminary period (Appendix 1).

Stratigraphic record: statement of potential

3.58 A secure stratigraphic sequence is essential to elucidating the form, purpose, date, organisation and development of the various phases of activity represented. This can be achieved through detailed analysis of the sequence and further integration of the artefactual dating evidence. The refined sequence will then serve as the spatial and temporal framework within which other artefactual and biological evidence can be understood.

Artefactual record: factual data

3.59 All finds collected during the excavation have been cleaned, marked, quantified and catalogued by context.

Туре	Category	Count	Weight (g)
Flint	Worked or burnt	216	1143
Pottery	Early Prehistoric	159	577
	Late Prehistoric	364	3956
	Roman	1702	17417
	Saxon	320	1092
	medieval	380	1289
	Post-medieval/modern	70	383
	Total	2995	24714
CBM	Brick and tile	137	3689
Fired Clay	Objects/structural	77	333
Coins	Silver	2	-
	Copper alloy	9	-
Metals	Iron	91	-
	Copper alloy	2	-
	Lead alloy	5	-
Glass	Vessel/window	9	83
	Object (bead)	1	-
Residues	Fuel ash	-	146
	Ironworking slag	-	605
Stone	Polished stone axe	1	-
	Other worked or burnt	4	-
Other	Clay pipe	19	83

Worked flint (and prehistoric polished axe) (Appendix 2)

3.60 The excavations and watching brief yielded 216 worked flints, a polished stone axehead and one piece of burnt unworked flint (Appendix 2). The majority of the flint assemblage was recovered from Middle Neolithic pits and later prehistoric features at Duxford Farm. The polished stone axehead was recovered from a special deposit in an Iron Age ditch at Filchampstead. During the watching brief, a surface scatter of Mesolithic flint was recovered from Field AA (near Appleton Lower Common) and the tip of an exceptionally fine Neolithic or Early Bronze Age arrowhead was recovered from Field X (west of Appleton).

Pottery (Appendix 3)

3.61 Pottery from the Middle Neolithic to the modern periods was recovered. The earliest material, belonging to Middle Neolithic Peterborough traditions, comes from Duxford Farm. A single Beaker sherd and quantities of Middle Bronze Age pottery were also recorded (Appendix 3). Material of Late Prehistoric type, principally Iron Age, was recovered from a number of locations with stratified material from

Filchampstead and Duxford Farm. The largest quantities of pottery relate to the Roman period with the bulk of stratified material from Duxford Farm. Earlier Anglo-Saxon pottery occurs mainly among surface collected material, in particular from Field AA, near Appleton Lower Common. The most significant stratified group of this date, which includes stamp-decorated sherds of 6th century type, comes from Broad Blunsdon from a pit. Pottery of medieval and later date makes up only a small proportion of the assemblage. The largest stratified groups derive from Duxford and Kingston Hill Farms.

Ceramic building material (brick and tile) (Appendix 4)

3.62 A moderately small assemblage was recorded from across the excavated sites and among surface-collected material (Appendix 4). Very little Roman material was identified and most pieces of this date are small fragments where identification of form was not always possible. The large bulk of the recovered material (113 fragments) comprises ridge tile fragments of later medieval type from Broad Blunsdon and Pennyswick Farm.

Fired clay (Appendix 5)

3.63 A small quantity of fired clay was recovered, the majority comprising small amorphous fragments of uncertain function or date (Appendix 5). A single dateable item is plate fragment of Iron Age type which was recovered as a surface collected find from Field AA (Appleton Lower Common).

Coins (Appendix 6)

3.64 Eleven coins dating to the Late Iron Age, Roman, medieval and later periods were recovered (Appendix 6). Only three coins, all later Roman issues from Duxford Farm (RAs 1, 60 and 73), were stratified finds. The remaining coins were surface-recovered mostly from Watching Brief Field AA (Appleton Lower Common). A silver penny of Henry V was a topsoil find from from Pennyswick Farm. Of greatest interest is a Late Iron Age silver coin, a unit of the Attrebatic ruler Eppilus which was a surface find from watching brief field G (west of Cumnor).

Metalwork (Appendix 7)

3.65 A total of 98 items of metal were recovered from excavation/evaluation at Broad Blunsdon, Pennywick Farm, Duxford Farm and Kingshill Farm and as surface finds from watching brief areas (Appendix 7). The majority are of iron and comprise nail or nail fragments of indeterminate date. Among more notable objects are an iron reaping hook of Iron Age or Roman type from Duxford Farm and a stylus of Roman type also of iron, from watching brief Field AA (Appleton Lower Common).

Glass (Appendix 8)

3.66 The glass assemblage consisted of six vessel fragments and a glass bead. Two of the vessel fragments were identified as Roman and the glass bead was of earlier Anglo-Saxon date (Appendix 8). The remaining glass assemblage was of late postmedieval and modern bottle glass.

Metallurgical and other residues (Appendix 9)

3.67 Small quantities of metallurgical residues were recovered from Duxford Farm, Filchampstead and Kingston Hill sites (Appendix 9). Most material comes from undated deposits, though some material from Filchampstead occurred in association with Late Iron Age pottery. All of the recovered material comprises indeterminate ironworking slag which might relate to iron smithing or smelting processes. In addition to the ironworking slag, small quantities of 'fuel ash' which can be generated from non-specific heat-intense processes were recovered from Duxford Farm.

Stone (Appendix 10)

3.68 A small number worked or otherwise utilised stone items were recorded (Appendix 10), including a Roman quern fragment from Duxford Farm and a whetstone from a medieval-dated deposit at Kingston Hill Farm.

Clay tobacco pipe (Appendix 11)

3.69 A small group of 19 fragments of clay tobacco pipe (83g) was recovered. Almost all was recovered as unstratified material, mostly as surface finds from the 2004 watching brief (Appendix 11). A bowl fragment from Duxford Farm can be dated to the second half of the 17th century. The remainder can be assigned very broad dating spanning the later 16th to 19th centuries.

Artefactual record: statement of potential

Worked flint

3.70 The lithic assemblage has several aspects with the potential to enhance our understanding of the Mesolithic and Neolithic periods in the region. The Mesolithic flint scatter identified in Field AA (Appleton Lower Common) can be added to a growing corpus of Oxfordshire sites indicating that the Corallian Ridge was a significant focus for activity. However, this group has no potential for further analytical

investigation. The Middle Neolithic pits, and the associated flint assemblage at Duxford Farm, are of regional importance. Such sites are rare, although they have been encountered at a few locations in the Upper Thames Valley. The flint assemblage from these features has the potential inform us about the character of Neolithic occupation. As part of further work recommended for this group, refitting between the flints from the Neolithic pits has the potential to determine if any of the features are directly related. No other analytical work is recommended, but a summary publication report should be produced. The report should focus on the Middle Neolithic assemblage from Duxford Farm, and will include comparisons with other assemblages in the region. The Mesolithic assemblage from Field AA, and the Neolithic polished stone axe from Filchampstead also warrant further comparisons and discussion.

Pottery

- 3.71 The Middle Neolithic group from Duxford Farm is of some significance and unusual in regional terms. Full recording of fabric, form and decoration will enable the group to be put within its national context. Reconstruction and illustration for publication is recommended for this group and the sherd of Middle Bronze Age Globular Urn from this site. Illustration is recommended for all the featured sherds (7), in order to convey form and decoration.
- 3.72 The later prehistoric and Roman assemblages from Duxford and Filchampstead have little potential for further examination but are worth short publication notes, utilising existing recording, as they contribute towards a greater understanding of landscape development in the area. The group from Kingston Hill is too small to allow much interpretation other than a brief note.
- 3.73 Other than the stratified Early Anglo-Saxon group from Broad Blunsdon, which is of some regional interest, the bulk of the post-Roman pottery is of limited significance. For publication a discussion of the Broad Blunsdon group from context 106 considered in its local and regional context, along with illustrations and catalogue, would be of value. Up to 12 illustrations are anticipated for the entire post-Roman assemblage. The possible Anglo-Saxon pottery from Field AA (Appleton Lower Common) has the potential for firmer identification and comparison with the material from Broad Blunsdon, but as a superficial group there is limited value in detailed analysis and presentation.

Ceramic building material (brick and tile)

3.74 The small and well-dispersed Roman group presents no potential for further work. The larger medieval group from Pennyswick Farm which is made up of ridge tile fragments of 14th century type known to be made at Minety, north Wiltshire is of some interest as implying the presence of a structure possibly of higher status. A note recording this material should be included in any published report, but further recording or detailed reporting is not recommended.

Fired clay

3.75 The fired clay assemblage was of very limited archaeological significance and no further work is recommended.

Coins

3.76 The coins, in particular those that are stratified, are of some significance as dating evidence enhancing that provided by the pottery. Of greater intrinsic significance is the Late Iron Age silver unit from Watching Brief field G. A full coin list accompanied by RIC and other identifiers should be prepared for the archive, and a brief report prepared for publication, to include an illustration of the Iron Age coin with comparisons.

Metalwork

3.77 The metalwork assemblage is restricted in size and range and for the most part is of very limited archaeological significance. Recording undertaken for the assessment is adequate for the purposes of the archive. Some further work is recommended on four selected objects of iron of Iron Age and Roman date from Duxford Farm (Appendix 7), to include the x-radiography to clarify form, and descriptions and drawings for publication.

Glass

3.79 The Anglo-Saxon glass bead is of intrinsic interest and should be described fully and illustrated or photographed for publication. The remaining glass was of limited archaeological significance and no further work is required.

Metallurgical and other residues

3.80 As a small and dispersed group of residues and as material not indicative of a particular process, there exists no potential for further analysis and further work is not recommended.

Stone

3.81 The stone assemblage was of very limited archaeological significance and little additional work is required. The catalogue descriptions for worked stone items might be included in the final publication.

Clay tobacco pipe

3.82 As a small and largely unstratified group, the clay pipe is of very limited significance and presents no potential for further analysis. Recording undertaken as part of this assessment are sufficient for the purposes of the archive and no further work is recommended.

Biological record: factual data

3.83 All ecofacts recovered from the excavation have been cleaned, marked, quantified and catalogued by context. A total of 21 bulk samples were taken for the recovery of environmental remains. A 20 litre sub-sample of each environmental sample taken was processed for the purposes of this assessment.

Туре	Category	Count
Animal Bone	fragments	2027
Environmental	samples	21

Animal bone (Appendix 12)

3.84 The total animal bone collection comprised 2,027 fragments (23,706g) and displayed a varied level of preservation. The earliest remains date to the Middle Neolithic from Duxford Farm and included bones from cattle (*Bos taurus*), caprovine (*Ovis aries/Capra hircus*), pig (*Sus sp.*) and red deer (*Cervus elaphus*). Iron Age and Roman deposits on Filchampstead and Duxford Farm were dominated by cattle and caprovine bones, followed by horse (*Equus caballus*), pig, dog (*Canis familiaris*) and bird bones (*Aves sp.*). Medieval bones came from Kingston Hill Farm and Pennyswick, where remains of cattle, caprovine, pig, horse and dog were identified.

Molluscs (Appendix 13)

3.85 The processed soil samples from Middle Neolithic, Iron Age and Roman features contained variable and sometimes significant quantities of molluscs which help interpret the local environment at those sites. Of particular significance were the assemblages from the Middle Neolithic pits at Duxford Farm, which on the whole suggest an open environment. The sample from the Iron Age 'box' at Filchampstead was also noteworthy as it contained a large number of freshwater snails. The Iron Age and Roman samples from Duxford Farm indicate mostly open conditions, and these are less remarkable, confirming expectations.

Charred plants and charcoal (Appendix 14)

3.86 Charcoal and plant macrofossils were assessed from 21 samples, two from Filchampstead, Cumnor, and 19 samples from Duxford Farm, Hinton Waldrist. The samples from Filchampstead were retrieved from fills within a possible box within an Iron Age ditch. The samples from Duxford Farm were recovered from Neolithic pits, an Iron Age trackway and a Roman pit and trackway, as well as an Iron Age or Roman curving ditch. The plant macrofossils and charcoal were recovered in small to moderate quantities and were moderately to well preserved. The plant macrofossils from all of the floats were assessed.

Biological record: statement of potential

Animal bone

- 3.87 Identifications to element and species and quantifications have been undertaken and this provides a firm basis for summarising the main conclusions in a publication. Further analysis will not, for the most part, add significant new information due to the generally small numbers of identifiable bones on each site, and the narrow corridor of the excavations which hinder and understanding of the nature of the sites. There are, however, several significant aspects of the assemblages which have greater potential:
 - The assemblage of Middle Neolithic red deer (and other) bones from Duxford Farm have potential to shed light on hunting/domestic strategies in this period;
 - The possible Iron Age structured deposit at Filchampstead (which appears have included a burnt Neolithic stone axe-head) may also have included horse skull and pelvis. An examination, intrinsically and contextually, of all

the bones from related deposits has the potential to elucidate nature of the rite that may have been practised;

• The assemblage from the medieval structure at Pennyswick may have a direct bearing on the use of the structure as a sheep pen and a detailed osteological examination and comparisons may have a significant bearing on the interpretation of such features generally.

Molluscs

3.88 The main potential of the molluscs relates to the information they can provide for the Middle Neolithic landscape at Duxford Farm. The prevalence of open country species is of interest, but this needs confirming with a full analysis of the residues (as well as the floats) from selected samples. The molluscs from the Filchampstead Iron Age 'box' have the potential to shed light on this possible structured deposit. The presence of freshwater species is of interest but unclear significance at present. The general range of species from the Iron Age ditch and Roman trackway at Duxford Farm appears unremarkable, the further analysis of one of the samples (that from the Iron Age ditch) will allow an in-depth comparison with the Middle Neolithic assemblage, and may shed light on the unusual character of the Iron Age assemblage from Filchampstead (eg. how are the freshwater species from both sites to be interpreted?).

Charred plants and charcoal

3.89 The charred plants and charcoal from six of the samples from the Middle Neolithic pits at Duxford Farm have considerable potential to add to an understanding of the environment and diet at this time. The assessment has shown that hazelnut shells were common, but there was some indication of cereals as well. The charcoal indicates a range of wood species. Any of the carbonised cereal remains, hazelnut shells and fragments of identifiable charcoal (with the exception of oak) would be suitable for radiocarbon dating. The two Iron Age samples from Filchampstead were retrieved from the fill of 'box' 3123 and present good potential for further analysis as it may be possible to deduce the material the 'box' was constructed from, and its contents. Roman samples from Duxford Farm contained frequent carbonised cereal remains and weed seeds. The cereal remains will allow an indication of crop preferences and husbandry whilst the weed seeds may give an indication of soil types in the area and in particular vetches/vetchlings may indicate a crop perhaps cultivated to improve soil quality. There is the potential for useful comparisons to be

made and trends confirmed with full analysis of a limited number of samples (Pit 1193, sample 11 and ditch 1030, sample 22).

4. SUMMARY STATEMENT OF POTENTIAL

4.1 Significant archaeological remains were found at six sites:

1) Filchampstead, Cumnor. Part of an ?Early Iron Age to Early Roman occupation. There is little potential to refine the dating and sequence as the site plan is partial and the finds not common. One of the main findings of interest is a possible structured deposit of a Neolithic polished stone axe-head, perhaps associated with a burnt wooden box and deposits of animal bones. The full range of evidence will be used to characterise these deposits. (It is not likely that radiocarbon will improve the precision of the Late Iron Age pottery dating).

2) Appleton Lower Common, Appleton with Eaton (Field AA). A significant collection of unstratified remains, including 65 Mesolithic flints with the potential for comparison with nearby sites, a large collection (500 sherds) of Roman pottery, a Roman glass vessel, a Roman stylus, a large collection (120 sherds) of possibly Anglo-Saxon pottery, and an Anglo-Saxon bead. This corpus of material from an apparently new 'site' deserves summary publication.

3) Kingston Hill Farm, Kingston Bagpuize. A pattern of Middle Saxon and medieval paddocks or enclosures with the potential to contribute to the picture of occupation on the Corallian Ridge at these times.

4) Duxford Farm, Hinton Waldrist. A rare group of Middle Neolithic pits containing Peterborough Ware, flintwork, animal bones, charred plant remains, charcoal and molluscs. There is high potential to gain insights into activity and environment at this time through the combination of different analyses. The Iron Age and Roman settlement remains may be typical of a Thames Valley farmstead, and appear to include a drove/trackway, enclosures and a roundhouse. Despite the wider picture provided by the geophysical survey of the site, there would seem to be low potential for new insights into the character, economy and environment of the site.

5) Pennyswick Farm, Coleshill. An unusual medieval enclosure or structure which seems likely to have been a stock pen. This seems to be a poorly recorded class of

feature. There is the potential for the detailed characterisation these remains, including the associated animal bones, with research into how these features may have fitted into the local settlement pattern.

6) Broad Blunsdon, Swindon (Area A). The Anglo-Saxon pit with a large deposit of pottery (probably of 6th-century date) is rare and deserves publication with local and regional comparisons. There is no potential for further analysis of other aspects of the site which appear to comprise mainly quarry pits and residual finds.

5. STORAGE AND CURATION

5.1 The archive is currently held at CA's Kemble offices whilst post-excavation work proceeds. With the agreement of the landowners, the artefacts will be deposited with the Oxfordshire County Museums Service (Oxfordshire sites) and Swindon Museum and Art Gallery (Swindon sites), along with the site archives.

6. UPDATED AIMS AND OBJECTIVES

6.1 The principal objectives identified in the CA Project design were to ensure that a full and detailed record of the site was compiled, to elucidate the form, function and status of the archaeology on the site, to establish its chronology and phasing, and to compile information to form the basis of a fully detailed report for publication. To achieve this, the following updated objectives have been set out with reference (where applicable) to the research aims identified in Solent-Thames Archaeological Research Framework (STARF) draft agendas for archaeology, accessed August 2011:

Objective 1: Discuss the evidence for Mesolithic activity at Appleton Lower Common (Field AA)

What is the significance of the Mesolithic flint scatter and how does it relate to other finds of this date in the vicinity and wider region?

The STARF recognises that 'The contribution of small scatters of flint should be recognised (for) their importance in understanding the full range of Mesolithic settlement and economic activity'. The character and date of the flints will be examined and compared to other known assemblages of this date in the region.

Objective 2: Examine the character and significance of the Middle Neolithic activity at Duxford Farm

What is the significance of the Neolithic pits and the artefactual and environmental material contained within them? How do they compare to activity of this date in the region and what do they tell us about economic and social activity and the nature of the local environment? A key theme for this period within the STARF is regional diversity. The STARF also highlights the need to investigate sites with good environmental sequences and to analyse well dated lithic sequences in order to aid dating of surface finds recovered during fieldwalking surveys.

The Middle Neolithic pits at Duxford Farm and the material within them have the potential to contribute to a understanding of the range of activity undertaken, particularly through:

- 1 The characterisation of the sealed lithic and associated pottery assemblages;
- 2 Possible re-fitting of lithics, pottery and animal bones between pits to see if any were in contemporaneous use;
- 3 Examination of animal bones and butchery/breakages to determine whether wild or domestic species and pattern of consumption;
- 4 Examine charred plants to determine contribution of wild and cultivated resources;
- 5 Broad characterisation of charcoal deposits to characterise local woodland and fuel selection
- 6 Examine mollusc and charcoal to elucidate local environment
- 7 Submit two HNS samples from different pits for radiocarbon dating.

Objective 3: Examine the character and significance of the Iron Age activity at Filchampstead and Duxford Farm

What is the chronology and nature of the Iron Age activity at these sites and how do they relate to the suggested regional pattern? The STARF indentifies the Late Iron Age settlement shift as an area requiring further investigation, and the presence of Middle Iron Age remains at Duxford Farm and of Late Iron Age remains at Filchampstead may contribute to that research aim. What is the significance of the possible structured deposit at Filchampstead? The STARF identifies investigation of the significance of special deposits as a research aim.

The chronology of the sites will be refined through analysis of the stratigraphic and artefactual record. The site morphology will be used in conjunction with the artefactual and ecofactual record to suggest the nature of the activity represented by the features and the sites will be placed in their regional context.

Particular emphasis will be placed upon the possible structured 'box' deposit at Filchampstead, with detailed contextual examinations of pottery, animal bones, charred plants, charcoal and molluscs, in order to elucidate circumstances of deposition.

The mollusc assemblage from Iron Age ditch 1114 at Duxford will provide palaeoenvironmental information to compare with the Middle Neolithic environment, and with the Iron Age sample from Filchampstead.

Objective 4: Examine the character and significance of the Roman activity at Filchampstead and Duxford Farm

What is the chronology and nature of the Roman activity at these sites and how do they relate to the regional pattern? A key theme for this period within the STARF is the transition from Late Iron Age settlement patterns.

There was Roman activity at Filchampstead, Duxford Farm, Kingston Hill Farm and Broad Blunsdon, but remains from the latter two sites was very limited. The remains at Filchampstead, although restricted, have significance in that they appear to relate to the Late Iron Age and earlier activity with some potential to examine topics of continuity and hiatus through stratigraphic and pottery analysis. The Roman remains at Duxford Farm were more extensive and have similar potential, although in both cases the sites were only partially examined limiting the confidence that can be put upon interpretations. The economic and environmental evidence from Duxford Farm in the form of charred plant remains will be analysed in detail from two samples and put in its regional context. The animal bone evidence for both sites will be summarised for publication.

Objective 5: Examine the character and significance of the Roman and Anglo-Saxon activity at Appleton Lower Common (Field AA)

What is the chronology and nature of the Roman and Anglo-Saxon activity at this site and how does it relate to the regional pattern? The STARF acknowledges that there is a relatively low level of data for this period.

The evidence for activity in the Roman and Anglo-Saxon periods derives exclusively from superficial finds since no archaeological features were revealed. The quantity of late Roman and Anglo-Saxon pottery was remarkable, however, and other finds include glass, a stylus and a bead. The basic information will be presented and regional comparisons sought.
Objective 6: Examine the character and significance of the Anglo-Saxon pottery from Broad Blunsdon

What is the date and character of the Anglo-Saxon pottery from the pit at this site, and how does it relate to the regional pattern?

The group of pottery from pit 108 is remarkable and will be reported on in detail with decorated sherds illustrated. There are also small quantities of residual sherds elsewhere. Little can be made of the site itself which was badly disturbed by quarrying.

Objective 7: Refine the chronology, character and function of the medieval/post-medieval feature at Pennyswick Farm

What is the date and function of the feature identified at Pennyswick Farm? Does the 'ditch' represent a ditched enclosure, or a foundation trench for a sill-beam building. Was the building domestic, or a barn/store and did its function change over time. Do the medieval artefacts date to the use of the feature, and is there any evidence that it was used in the post-medieval period? How does it compare with agricultural features such as shielings, recorded elsewhere in Britain?

The morphology and chronology of the feature at Pennyswick Farm will be examined using the stratigraphic record. Dating using the artefactual record is likely to be limited, but further information may be available through analysis of the faunal remains. The feature should be compared to agricultural features recorded elsewhere and its longevity assessed.

7. PUBLICATION

7.1 The results from this series of excavations are mixed, with some significant findings which should be published in appropriate detail, and other more mundane results which can be summarised briefly with the detail kept in the archive. It is proposed that the results be published in the appropriate regional journals, the excavations at Broad Blunsdon, Swindon, in *Wiltshire Archaeological Magazine,* and those from the other sites in *Oxoniensia*. The pipeline scheme as a whole does not provide thematic unity and it is envisaged that the excavations will largely be treated as individual sites, with regional comparisons as appropriate.

Synopsis of Proposed Report for Oxoniesia

Farmoor to Blunsdon Water Main: Excavations along the pipeline route 2001 to 2004

by Jonathan Hart and others	
Abstract	200 words
Introduction	
Project background, topography, geology, site summaries	1000 words
Discussions	
Appleton Lower Common	
Mesolithic flints	600 words
Duxford Farm	
Middle Neolithic pits	1000 words
Bronze Age pit	100 words
Iron Age and Roman occupation	500 words
Filchampstead	
Iron Age and Roman occupations	1000 words
Appleton Lower Common	
Roman and Anglo-Saxon finds	400 words
Kingston Hill Farm	
Later Anglo-Saxon and Medieval ditches	500 words
Pennyswick Farm	
Medieval enclosure	1000 words
Excavation Results	
Duxford Farm Middle Neolithic, Iron Age and Roman occupations	1200 words
Filchampstead	700 words
Kingston Hill Farm	700 words
Pennyswick Farm	700 words
The Finds	
Worked flint and stone (Hugo Anderson-Whymark)	1000 words
Pottery	
Prehistoric (Emily Edwards)	1000 words
Iron Age/Romano-British (Ed McSloy)	1000 words
Post-Roman (Jane Timby)	800 words
Metal Artefacts, Coins and Glass bead (Ed McSloy)	500 words
Animal bone (Jonny Geber)	1000 words
Mollusca (Michael J. Allen)	800 words

Plant macrofossils & charcoal (Sarah Cobain) Acknowledgements	1000 words 300 words
	(c. 24 pages @ 700 wpp) 17,000 words
Illustrations:	
Location of sites	1 page
Site plans with phasing	6 pages
Worked flint and stone	2 pages
Pottery	3 pages
Coin	0.5 page
Animal bone	1 page
Mollusca	0.5 page
	14 pages
Tables:	
Worked flint and stone	1 page
Pottery	1 page
Mollusca	1 page
Plant macrofossils & charcoal	1 page
	4 pages
Total Publication Estimate	c. 42 pages

Synopsis of proposed note report for Wiltshire Archaeological Magazine

An Anglo-Saxon pit at Broad Blundon, Swindon By Jonathan Hart and Paul Blinkhorn

Introduction, archaeological background, description	700 words
Anglo-Saxon Pottery description and discussion (Paul Blinkhorn)	700 words
Site illustration	0.5 page
Pottery illustration	1 page
Total Publication Estimate	3.5 pages

8. PROJECT TEAM

8.1 The post-excavation and publication programme will be quality assured by Martin Watts MIfA (Head of Publications: HoP) and managed by Andrew Mudd FSA MIfA (Post-excavation Manager: PXM), who will contribute to the discussion as senior author and co-ordinate the work of the following personnel:

Jonathan Hart AlfA (Publications Officer: PO):

Post-excavation phasing, draft report preparation, research and archive.

Ed McSloy MIFA (Finds Officer: FO) with **Angus Crawford** (Assistant Finds Officer: AFO):

Specialist report preparation and liaison, post-excavation phasing, Iron Age and Roman pottery and miscellaneous finds.

Sarah Cobain AlfA (Environmental Officer (Archaeobotanist): EO):

Specialist report preparation and liaison, plant macrofossil and charcoal remains.

Jonny Geber MIAI MIfA (Environmental Officer (Osteologist): EO)

Specialist report preparation and liaison, human and animal remains.

Peter Moore (Senior Illustrator: SI):

Production of all site plans, sections and artefact drawings (exc. pottery).

8.2 Contributions by the following external consultants will be managed by the Finds Officer:

Dr Hugo Anderson-Whymark FSA Scot MIfA: lithics analysis
Emily Edwards: prehistoric pottery
Dr Jane Timby FSA MIfA; Anglo-Saxon pottery from Appleton Lower Common
Paul Blinkhorn: post-Roman pottery
Karen Barker (Antiquities Conservation): metalwork conservation

8.3 Contributions by the following external consultants will be managed by the Environmental Officer (Archaeobotanist):

Dr Michael J. Allen FLS FSA MifA (Allen Environmental Archaeology): mollusca SUERC: radiocarbon dating

8.4 The final publication report will be edited and refereed internally by CA senior project management.

9. TASK LIST

TASK	PERSONNEL	DURATION (DAYS) / COST
Project Management	PXM	4
Stratigraphic analysis & database	PO	5
Research, comparanda		
	Senior Author	1
	PO	1
Pottery		
Prehistoric: analysis and report	Specialist	FEE
IA/RB: analysis and report	FO/AFO	3
Post-Roman: analysis and report	Specialist	FEE
Illustration (prehistoric & Saxon)	SI	4.5
Worked flint & stone		
Analysis and report	Specialist	FEE
Illustration	SI	3
Metal artefacts and coins		
Conservation	Specialist	FEE
Report preparation	FO/AFO	2
Illustration	SI	0.5
Glass Illustration	SI	0.25
Animal bone Analysis and report	EO	6
Mollusca		
Analysis and report	Specialist	FEE
Plant macrofossils & charcoal		
Analysis and report	EO	6
Radiocarbon dating (x4)	Specialist	FEE
PREPARATION OF PUBLICATION REPORT		
Abstract and introduction	PO	1
Excavation results	PO	5
Illustration	SI	5.5
Compilation of specialist reports, tables etc.	PO	2
Discussion	PO	2
	Senior Author	4
Acknowledgements, bibliography	PO	1
Submission to internal referees		
QA	HoP	1
Editing	PXM	3
SUBMISSION OF PUBLICATION TEXT		
Archive		
Research archive completion	FA	2
Deposition		FEE
Publication	Oxoniensia	FEE
Publication	WAM	FEE

10. TIMETABLE

10.1 For this scale of publication project, CA would normally aim to have completed a publication draft within one year of approval of the updated publication project design. A detailed programme will be produced on approval of the updated publication project design.

11. **REFERENCES**

- APS (Air Photo Services) 2001 Farmoor to Blunsdon Main Stage 1: Aerial Photographic Interpretation & mapping: Archaeology APS typescript report No. **164**
- BGS (British Geological Survey) 2011 *Geology of Britain viewer* BGS website accessed 16 December 2011 http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html
- CA (Cotswold Archaeology) 2001a Farmoor to Blunsdon Water Pipeline (Oxfordshire Section): Project Design for a Programme of Archaeological Recording
- CA (Cotswold Archaeology) 2001b Farmoor to Blunsdon Water Pipeline (Wiltshire Section): Project Design for a Programme of Archaeological Recording
- CA (Cotswold Archaeology) 2004 Farmoor to Blunsdon Water Pipeline (Oxfordshire Section) Kingston Hill Farm, Kingston Bagpuize and Long Leys House, Cumnor: Archaeological Evaluation Interim Summary CA typescript report No. **04022**
- EH (English Heritage) 2011 Sheilings. English Heritage Introduction to Heritage Assets
- GQA (GeoQuest Associates) 2002 Geophysical Survey on the Route of the Farmoor to Blunsdon Water Main. Stage 3 unpublished typescript report

Google Earth 2011 satellite image accessed online 29 March 2011

- Lambrick, G. and Robinson, M. 1979 *Iron Age and Roman riverside settlements at Farmoor, Oxfordshire*, Oxfordshire Archaeological Unit Report 2, OAU/CBA
- LHA (Lang Hall Archaeology) 2001 Farmoor to Blunsdon Main Stage 1 (Scheme 4JTC): Brief for Geophysical Survey
- Stratascan 2004 Kingston Hill to Farmoor Main, Oxfordshire: Geophysical Survey Report Stratascan typescript report No. **J1829**

STARF (Solent-Thames Archaeological Research Framework) *A Framework for Berkshire, Buckinghamshire, Oxfordshire, Hampshire and the Isle of Wight* Oxford Archaeology Website accessed 30 August 2011 <u>http://thehumanjourney.net/index.php?option=com_content&task=view&id=553&Ite</u> <u>mid=277</u>

APPENDIX 1: STRATIGRAPHIC ASSESSMENT by Jonathan Hart

A total of 1050 contexts was recorded during the evaluations, excavations and watching brief as detailed below:-

Site	Context records
Filchampstead Excavation	198
Long Leys Farm	25
Kingston Hill Farm Evaluation	105
Kingston Hill Farm Excavation	108
Faringdon Compound Evaluation	24
Duxford Farm	417
Pennyswick Farm	24
Watching brief	20
Broad Blunsdon (Area A)	56
Broad Blunsdon Evaluation	73
TOTALS	1050

The preservation of the sites was good throughout the pipeline route. However, the interpretation of the exposed features is hindered by the narrow width of the pipeline strip which means that each site represents only a transect through the archaeological activity. As a result, discussion on site morphology is likely to be restricted, but the results do have greater potential for elucidating the chronology of the activity exposed at each site. Features and deposits were assigned to provisional periods as detailed in the table below, although voided contexts and deposits of non-archaeological origin were excluded unless the latter were of potential archaeological significance (such as tree-throw pits or palaeosols):

Period 1: Mesolithic Period 2: Neolithic Period 3: Bronze Age Period 4: Early to Middle and Middle Iron Age Period 5: Late Iron Age Period 6: Roman/Early Roman Period 6: Roman/Early Roman Period 7: Late Roman Period 8: Anglo-Saxon Period 8: Anglo-Saxon Period 9: Medieval Period 10: Post-medieval/modern U: Undated

							Ρ	eriod					
		1	2	3	4	5	6	7	8	9	10	U	Total
	Filchampstead	-	-	-	37	38	8	-	-	18	18	71	190
	Long Leys Farm	-	-	-	-	-	-	-	-	-	1	5	6
ç	Kingston Hill Farm	-	-	-	-	-	-	7	14	47	57	69	194
I	Faringdon Compound	-	-	-	-	-	-	-	-	-	5	8	13
т	Duxford Farm	-	31	-	38	1	22	80	-	2	50	157	381
E	Pennyswick Farm	-	-	-	-	-	-	-	-	21	2	-	23
	Broad Blunsdon	-	-	-	-	-	18	-	9	5	20	65	117
	Total	0	31	0	75	39	48	87	23	93	153	375	824

Of the contexts assigned to provisional periods, those relating to Periods 1-9 and undated contexts are of archaeological significance and should be analysed prior to publication. Periods 1 and 3 were present in the form of artefactual material, although it appears at this stage that no cut features or deposits of these periods were present. Contexts from Period 10 relate to modern agricultural activities and are not worthy of further analysis. **671** contexts therefore require further consideration in addition to a small number of contexts recorded during the watching brief.

APPENDIX 2: THE WORKED FLINT AND STONE by Hugo Anderson-Whymark

Introduction and quantification

The excavations and watching brief yielded 216 worked flints, a polished stone axehead and one piece of burnt unworked flint (Table 1). The majority of the flint assemblage was recovered from Middle Neolithic pits and later prehistoric features at Duxford Farm. The polished stone axehead was recovered from a special deposit in an Iron Age ditch at Filchampstead. During the watching brief, a surface scatter of Mesolithic flint was recovered from Field AA (to the south west of Appleton) and the tip of an exceptionally fine Neolithic or Early Bronze Age arrowhead was recovered from Field X (west of Appleton). This assessment characterises the assemblage and presents recommendations for further work.

Methodology

The artefacts were catalogued according to broad artefact/debitage type and retouched pieces were classified following standard morphological descriptions (Bamford 1985, 72-77; Healy 1988, 48-49; Bradley 1999, 211-227; Butler 2005). Additional information was recorded on the condition of the artefacts including burning, breakage, the degree of edge-damage and the degree of cortication. Unworked burnt stone was quantified by weight and number.

Condition

The lithic assemblage was in variable condition. Flints from the Neolithic features at Duxford Farm were typically in fresh condition, whilst those from Iron Age and Roman features commonly exhibited slight to moderate edgedamage. Lithic artefacts recovered during the watching brief exhibited moderate to heavy edge-damage, consistent with ploughing. The majority of the assemblage exhibited a light to moderate white surface cortication, but a few flints were free from this and two were lightly iron-stained.

Raw material

The raw material for the struck lithics was flint. The majority of this flint, including all from the Neolithic pits, was opaque whitish-grey and, where present, the cortex was thick and unabraded. This flint was obtained from a chalk region, the closest source being the Berkshire downs 13km to the south. In addition, several other types of flint were noted, including a blade of a high quality chocolate-brown flint, a flake of Bullhead Bed flint, the tip of an arrowhead manufactured from a translucent bright orange flint and several pieces of a translucent light to mid brown flint. A few of the latter pieces exhibited thin abraded cortical surfaces indicating that this flint had been obtained from a secondary fluvial source, such as river gravels. The local river gravels from the Thames do not contain flint, so it is likely this material was obtained from gravel deposits on or close to the chalk region to the south.

The assemblage

Duxford Farm

In total, 131 worked flints and one burnt, unworked flint were recovered. Small lithic assemblages of between one and ten flints were recovered from 15 Mid to Late Neolithic pits (Pits 1005, 1007, 1009, 1015, 1017, 1028, 1041, 1089, 1167, 1296, 1314, 1320, 1322, 1337 and 1341; Table 2). In addition, an otherwise undated ditch (1368) towards the eastern end of the site yielded a single Neolithic flint. The remaining flints were recovered as residual finds from later archaeological features and the topsoil.

The flint assemblage from the Neolithic pits is dominated by regular flakes and blades of an opaque whitish-grey chalk flint. Several of these flints exhibit evidence of use indicating that this material is not primary knapping debitage; the absence of cores, chips and irregular waste supports this view, although a fragment of a well used hammerstone was recovered from Pit 1005.

Fourteen retouched flake tools were recovered from the Neolithic pits. These comprise five scrapers, three minimally edge-retouched flakes, two transverse arrowheads, two piercing tools, a serrated flake and a backed knife. The scrapers are notably large and well manufactured, including a horseshoe-shaped end and side scraper and two fine disc scrapers. The arrowheads comprise a chisel type (Pit 1167) and a petit tranchet derivative form (Pit 1007); these forms are characteristic of the Middle Neolithic and are most commonly associated with Peterborough Ware. The backed knife is a fine example that exhibits convex backing retouch and a concave blade edge with coarse retouched serrations.

In addition to the flake tools, an extensively reworked fragment of a Neolithic polished flint axe was recovered from Pit 1007 and flakes struck from polished implements were recovered from Pits 1041 and 1337. The flake from pit 1041 exhibits a good portion of the blade edge of an axe. The presence of these artefacts is significant as the inclusion of fragments of polished flint implements is a common feature of Middle Neolithic pit deposits in the Thames Valley (Lamdin-Whymark 2008).

The residual flint from later archaeological features is broadly comparable to the material recovered from the Neolithic pits and much of it is likely to be broadly contemporary with the Middle Neolithic activity. Two Early Bronze Age barbed and tanged arrowheads were recovered from Mid to late Iron Age curvilinear ditch 1079/1114. Both exhibit edge-damage, with minor breaks to the barbs and tangs, indicating that they are residual. Of these, arrowhead SF44 (ditch section 1079) is a very large and fine arrowhead of Sutton type Bk (Green 1980), >34mm long, >25mm wide and 5.5mm thick. Its size and quality is striking and it may have been manufactured as a grave good (Devaney 2005). The arrowhead from ditch section 1114 is smaller and more crudely manufactured, measuring >22mm long, >15.5mm wide and 4mm thick. The arrowhead is probably a Sutton Type B, but the absence of both barbs precludes precise identification.

Filchampstead

Two flint flakes and a Neolithic polished stone axe-head were recovered. The latter was found within what appears to have been a special deposit in Iron Age ditch 3120. The axe-head is complete, 79mm long, 50mm wide and 25mm thick, weighing 121g. It is heavily burnt and the surface is reddened and has begun to spall. The burning may have occurred as part of the deposition process in the Iron Age since although the surface is brittle, it is well preserved. The heat damage precludes accurate identification of the raw material, but it is possible to determine that it was manufactured from a dark-coloured, fine grained, igneous rock. Raw materials of this character are typically found in Wales and Northern Britain, and possible sources include Langdale, Cumbria, (Group VI) and Penmaenmawr, North Wales (Group VII: Clough and Cummins 1979; Clough and Cummins 1988; Pitts 1996). The axe was manufactured by flaking and the surface was subsequently ground to a high polish, removing virtually all trace of the flake scars. The axe exhibits poorly developed facets and the blade edge is rounded from use. As is common with most Neolithic stone axes, closer dating for this item is not possible on current knowledge.

Kingston Hill Farm

Ten flints were recovered from the evaluation and excavation; all were residual within later deposits and included one possible Mesolithic bladelet as well as flake debitage probably dating to the Neolithic or early Bronze Age.

Watching Brief

The watching brief yielded a small number of flints from several fields within the eastern half of the pipeline. The majority of these are single stray finds, but Field AA yielded 65 flints of Mesolithic date and Field X yielded the tip of a fine Neolithic or Early Bronze Age arrowhead. The flints from Field AA were recovered as a surface scatter and mainly comprised flake debitage with a good proportion of blades, including one item 65mm long, as well as a retouched Mesolithic truncated blade. Field AA is located within an area of considerable early Mesolithic activity, with three large flint scatters located at Tubney Wood *c*. 1.5km to the east (Bradley and Hey 1993; Simmonds *et al.* forthcoming).

The Neolithic or Early Bronze Age arrowhead tip from Field X is manufactured from a translucent orange flint and the workmanship is of exceptionally high quality. The retouch is perfectly executed and at one point has been applied at an angle to the edge, producing regular narrow scars comparable to ripple flaking. The surviving fragment is 21mm long, 11.5 m wide and 2.5mm thick and it is clear the arrowhead was originally of long and slender proportions. The original form of the arrowhead is uncertain, although a leaf-shaped or oblique form is most probable.

Potential

The lithic assemblage includes several aspects that have potential enhance our understanding of the Mesolithic and Neolithic periods in the region. The Mesolithic flint scatter identified in Field AA can be added to a growing corpus of Oxfordshire sites indicating that the Corallian Ridge was a significant focus for activity. However, the assemblage has no potential for further analytical investigation.

The Mid to Late Neolithic pits, and the associated flint assemblage, are of regional importance as the pipeline has clearly bisected as significant Neolithic occupation site. Such sites are rare, although they have been encountered at several locations in the Upper Thames Valley, often in comparable locations on gravel terraces close the River Thames (e.g. Lamdin-Whymark *et al.* 2009; Powell *et al.* 2010). The distinct clustering of seven of the pits is unusual as most later Neolithic pits in the region are isolated, paired or in groups of three pits; larger groups are rarely encountered. The flint assemblages from these features therefore has the potential inform us about the character and temporality of Neolithic occupation, through refitting and the comparison of artefact assemblages with other sites in the region (Anderson-Whymark and Thomas Forthcoming).

The Neolithic polished stone axehead from the Iron Age at Filchampstead has the potential to provide an insight into the perception of earlier stone tools in the Iron Age. Neolithic tools, particularly flint and stone axeheads, are frequently recovered from Bronze Age and Iron Age features, and many are found in positions that imply deliberate deposition.

Recommendations

Refitting should be attempted between the flints from the Neolithic pits to try and determine if any of the features are related. Refitting has been used to great success on other Neolithic pit sites, revealing temporal patterns of pit excavation (e.g. Garrow *et al.* 2005). No other analytical work is recommended, but a full publication report should be produced. This report should focus on the Neolithic assemblage from Duxford Farm, providing a

detailed characterisation of the assemblages recovered from Neolithic features and comparisons with other assemblages in the region. The Mesolithic assemblage from Field AA and the Neolithic axe from Filchampstead also warrant further discussion. A publication text of *c*. 2000 words with two tables should be prepared. Approximately 20 flints should be illustrated to highlight artefact forms and demonstrate the technology employed.

References

Bamford, H. 1985 Briar Hill: excavation 1974-1978. Northampton, Northampton Development Corporation

- Bradley, P. 1999 Worked flint. Excavations at Barrow Hills, Radley, Oxfordshire. Volume 1: The Neolithic and Bronze Age monument complex. Oxford, Oxford Archaeology
- Bradley, P. and Hey, G. 1993 'A Mesolithic site at New Plantation, Fyfield and Tubney Oxfordshire', *Oxoniensia* **38**, 1 26
- Butler, C. 2005 Prehistoric flintwork. Stroud, Tempus
- Clough, T. H. M. and Cummins, W. A. 1979 Stone axe studies: Volume 1. London, Council for British Archaeology
- Clough, T. H. M. and Cummins, W. A. 1988 Stone axe studies: Volume 2. London, Council for British Archaeology
- Devaney, R. 2005 'Ceremonial and domestic flint arrowheads', *Lithics: The Journal of the Lithic Studies Society* **26**, 9-22
- Garrow, D., Beadsmoore, E. and Knight, M. 2005 'Pit clusters and the temporality of occupation: an earlier Neolithic site at Kilverstone, Thetford, Norfolk', *Proceedings of the Prehistoric Society* **71**, 139-157
- Green, H. S. 1980 The flint arrowheads of the British Isles: a detailed study of material from England and Wales with comparanda from Scotland and Ireland. Oxford, British Archaeological Reports
- Healy, F. 1988 The Anglo-Saxon cemetery at Spong Hill, North Elmham. Part VI: Occupation in the seventh to second millennia BC. Gressenhall, Norfolk Archaeological Unit
- Lamdin-Whymark, H. 2008 The residue of ritualised action: Neolithic deposition practices in the Middle Thames Valley. Oxford, British Archaeological Report
- Lamdin-Whymark, H., Brady, K. and Smith, A. 2009 'Excavation of a Neolithic to Roman Landscape at Horcott Pit near Fairford, Gloucestershire, in 2002 and 2003', *Trans. Bristol Gloucestershire Archaeol. Soc.* **127**, 45-131
- Anderson-Whymark, H. and Thomas, J., Eds. Forthcoming *Beyond the mundane: regional perspectives on Neolithic pit deposition.* Oxford, Oxbow
- Pitts, M. 1996 'The stone axe in Neolithic Britain', Proceedings of the Prehistoric Society 62, 311-372
- Powell, K., Smith, A. and Laws, G. 2010 Evolution of a farming community in the Upper Thames Valley: excavation of a Prehistoric, Roman and Post-Roman landscape at Cotswold Community, Gloucestershre and Wiltshire. Volume 1: site narrative and overview. Oxford, Oxford Archaeology
- Simmonds, A., Anderson-Whymark, H. and Norton, A. Forthcoming 'Excavations at Tubney Wood Quarry, Oxfordshire, 2001-2009', Oxoniensia

	BTF 02			BTF 04		BTF 04 Watching Brief					
	Duxford		Kingston Hill Farm	Kingston Hill		Field	Field	Field	Field	Field	Grand
CATEGORY TYPE	Farm	U/S	Eval	Farm	Filchampstead	AA	DA	EA	FA	Х	Total
Flake	77	2	5	1	1	46		1			133
Blade	6					3					9
Bladelet	5		1	1		8					15
Blade-like	2			1		4	1		1		9
Irregular waste	2				1						3
Chip	3					2					5
Flake from ground											
implement	2										2
Bipolar blade core						1					1
Single platform flake core	1			1							2
Transverse arrowhead	2										2
Barbed and tanged											
arrowhead	2										2
Fragmentary arrowhead										1	1
End scraper	8										8
Side scraper	1										1
End and side scraper	3										3
Disc scraper	2										2
Scraper on a non-flake											
blank	1										1
Other scraper	1	1									2
Piercer	1										1
Spurred piece	1										1
Serrated blade/flake	3										3
Backed knife	1										1
Retouched flake	5								1		6
Polished flint axe	1										1
Truncated flake						1					1
Polished stone axe					1						1
Hammerstone	1										1
Burnt unworked flint	1										1
Grand total	132	3	6	4	3	65	1	1	2	1	218

Table 1: The flint assemblage from the Farmoor to Blunsdon pipeline by site

						Neolit	thic Pits						Neolithic			
	Pit	Pit	Pit	Pit	Pit	Pit	Pit	Pit	F	Pit	Pit	Pit	Pits	Undated	Other	Grand
	1005	1007	1009	1015	1041	1089	1167	1296	13	337	1340	1017	Sub-	pits*	contexts	total
												1018	total			
CATEGORY TYPE	1006	1008	1010	1016	1042	1090	1168	1297	1338	1339	1341					
Flake	5	5	2	3	6	2	3	3	1		1		31	7	39	77
Blade	1						1	1					3		3	6
Bladelet		1						1					2		3	5
Blade-like	1												1		1	2
Irregular waste															2	2
Chip														3		3
Flake from ground																
implement					1					1			2			2
Single platform flake core															1	1
Transverse arrowhead		1					1						2			2
Barbed and tanged																
arrowhead															2	2
End scraper														2	6	8
Side scraper															1	1
End and side scraper					2								2		1	3
Disc scraper					1		1						2			2
Scraper on a non-flake																
blank															1	1
Other scraper										1			1			1
Piercer												1	1			1
Spurred piece		1											1			1
Serrated blade/flake								1					1		2	3
Backed knife				1									1			1
Retouched flake		1		1						1			3		2	5
Polished flint axe																
fragment		1											1			1
Hammerstone	1												1			1
Burnt unworked flint															1	1
Grand total	8	10	2	5	10	2	6	6	1	3	1	1	55	12	65	132
No. burnt worked flints			1			1		1					3	1	14	18
(%)**			(50)			(50)		(16.7)					(5.5)	(8.3)	(21.9)	(14.1)
No. broken worked flints	1	1		3	1	2	2	2	1	1			14	3	34	51
(%)**	(12.5)	(10)		(60)	(10)	(100)	(33.3)	(33.3)	(100)	(33.3)			(25.5)	(25)	(53.1)	(39.8)
		4		2	4		2	1		3		1	17	2		35
No. tools (%)**		(40)		(40)	(40)		(33.3)	(16.7)		(100)		(100)	(30.9)	(16.7)	16 (25)	(27.3)

Table 2: The flint assemblage from Duxford Farm by feature and fill * Pits 1021, 1028, 1132, 1314, 1320, 1322 and 1368. ** Percentages exclude chips.

APPENDIX 3: THE POTTERY by Paul Blinkhorn, Emily Edwards and Jane Timby

Early Prehistoric Pottery from Duxford Farm by Emily Edwards

Introduction

A total of 159 sherds (577g) of pottery was recovered from prehistoric pits at Duxford Farm. These largely comprised Middle Neolithic Peterborough Ware sherds, with the one exception of a sherd of Middle Bronze Age Globular Urn from pit 1019. The sherds were fragmented, but included refits and diagnostic, featured sherds with well-preserved decoration.

Methodology

The assemblage has been quantified using weight and sherd number. Vessels were identified by rim count and, where very evident, decoration or other vessel element. The principal fabric groups were determined through examination of visible inclusions (using a x20 hand lens) and recorded using standard codes for prehistoric pottery (PCRG 1997). A brief note of decoration, surface treatment and presence of residue was also made.

Condition

The single Middle Bronze Age Globular Urn shoulder fragment from pit 1019 is well preserved with surfaces and decoration intact. The Peterborough Ware was very fragmented, the sherds being small, with very few rims or other key body elements being present; four vessels are represented by rims and significant other vessel elements. Surfaces and decoration were intact on most sherds and refits may be possible within several of the pits.

Dating

Generally, in excess of 20 sherds or several diagnostic sherds are required from a single prehistoric context to allow some precision of dating, taking into account residuality (Shennan 1981; De Roche 1977; Lambrick 1984). This is usually taken into account, especially where there are fewer than five sherds. Having given this cautionary note, all of these sherds were recovered from discrete, secure pits and the sherds present can be regarded as providing secure dating.

The Assemblage (Table 3)

Small collections of middle Neolithic pottery were recovered from pits 1089, 1337, 1007, 1340, 1167 and 1015, with larger groups deriving from pit 1009 (34 sherds, 133 g) and pit 1296 (48 sherds, 161 g). Notable items were found within pit 1337, which contained a beautifully preserved shoulder sherd; in pit 1009, which yielded a group of 34 chevron-decorated body sherds and in pit 1296, which contained a group of 48 body sherds from several vessels and two refitting rims from one vessel. Due to the small size of the collar, shoulder and rim sherds present, it is difficult to make stylistic judgements at this stage but both Mortlake and Fengate Ware are present.

A single middle Bronze Age Globular Urn shoulder sherd was recovered from pit 1019. This was decorated with chevrons and horizontal bands above and below a pierced lug and was manufactured from a flint fabric.

Potential

The pipeline has cut through a significant Middle Neolithic site. Although several sizeable Peterborough Ware assemblages have been recovered from the Upper Thames Valley (Barclay and Edwards forthcoming; Edwards 2009), sites including dense, closely packed groups of pits containing Peterborough Ware remain unusual. It is more often the case that assemblages are recovered from scattered and isolated pits. The flint tempered Globular Urn may indicate a greater general level of Middle Bronze Age activity in the vicinity since it is unusual to find isolated Middle Bronze Age pits containing Deverel Rimbury deposits.

Recommendations for further work

The pottery fabrics, decoration and form need to be recorded in full and the Middle Neolithic component of the assemblage would benefit from a short refitting exercise in order to glean evidence for form and condition upon deposition. Illustration is recommended for all the featured sherds in order to illustrate form and decoration; a minimum of seven would be required. A report of *c*. 1500 words, with three tables, should be prepared.

Method statement

The potential can be addressed using a programme of detailed pottery recording, focusing on the fabrics, forms, and decoration. It is proposed that the methodology approved by the Prehistoric Ceramics Research Group (PCRG 2009) should be employed. The bulk of recording work has been carried out and a future programme of analysis should include analysis of fabrics (including sources of materials), condition (size, degree of brokenness, condition of surfaces, percentage of vessel represented); refitting of larger sherds and a search for cross feature refits. Refitting may enable some analysis of vessel form, variation and size.

References

- Barclay, A. J. and Edwards, E. J. forthcoming 'The prehistoric pottery', in *Yarnton Floodplain* Hey, G. *et al.*, Thames Valley Landscapes Monograph, Oxford Archaeology
- De Roche 1977 Analysis of selected groups of early Iron Age pottery from the Oxford Region Oxford, B.Litt thesis
- Edwards, E. 2009 'The Pottery', in Lamdin-Whymark, H., Brady, K. and Smith, A. 'Excavation of a Neolithic to Roman Landscape at Horcott Pit near Fairford, Gloucestershire, in 2002 and 2003', *Trans Bristol and Gloucestershire Arch. Soc.* **127**, 45-131

PCRG 1997 The study of later prehistoric pottery: general policies and guidelines for publication, Prehistoric Ceramics Research Gp, Occas papers nos 1 and 2 (revised)

- PCRG 2009 The study of later prehistoric pottery: general policies and guidelines for analysis and publication, Occasional Papers 1 and 2
- Lambrick, G. 1984 'Pitfalls and possibilities in Iron Age pottery studies experiences in the Upper Thames Valley', in Cunliffe, B. and Miles, D. (eds) *Aspects of the Iron Age in Central Southern Britain* University of Oxford Committee for Archaeology Monograph **2**, 162-177
- Shennan S. J. 1981 'Settlement History in east Hampshire', in Shennan, S. J. and Schadla-Hall, R. T. (eds) *The Archaeology of Hampshire from the Palaeolithic to the Industrial Revolution* Hants Field Club Arch. Soc. Mono. **1**, 106-21

FEATURE	FEATURE	FILL	NO.	WEIGHT (G)	DATE	WARE
1007	pit	1008	22	61	Mid Neolithic	pw
1009	pit	1010	34	133	Mid Neolithic	pw
1015	pit	1016	5	27	Mid Neolithic	pw
1019	pit	1020	1	81	Mid Bronze Age	gu/dr
1089	pit	1090	5	7	Early prehistoric	-
1167	pit	1168	11	17	Mid Neolithic	pw
1296	pit	1297	48	161	Mid Neolithic	pw
1337	pit	1338	7	34	Mid Neolithic	pw
1337	pit	1339	13	23	Early prehistoric	-
1340	pit	1341	13	33	Mid Neolithic	pw
Total			159	577		

Table 3:	Prehistoric	potterv	from	Duxford	Farm
1 4010 01		pottoly		Daniela	

The Iron Age and Roman Pottery from all sites by Jane Timby

Introduction

An assemblage of some 2450 sherds of pottery (200kg) was recovered, mainly from Filchampstead, Kingston Hill Farm, Duxford Farm and from the watching brief. As well as Iron Age and Roman pottery, further analysis showed that some of the sherds dated to other periods; these are included in the discussion below but should be integrated with the other assemblages for their respective periods during future analysis.

Methodology

The assemblage was sorted into fabrics based on the size and frequency of inclusions. Prehistoric material is coded using the main components in the fabric following the prehistoric ceramics research guidelines (PCRG 1997). Known traded Roman wares are coded using the National Roman reference collection codes (Tomber and Dore 1998) whilst less known locally wares have been coded more generically. Saxon and later sherds are similarly coded to fabric characteristics unless of known source. The sorted sherds were quantified by sherd count and weight. These have been summarised by fabrics for each site and by main period in the accompanying spot dating tables.

Filchampstead (Table 4)

....

A total of 217 sherds of pottery (1650g) was recovered, mainly dating to the Iron Age with a few Roman pieces. Pottery was associated with 30 contexts ranging from single sherds up to a maximum of 49 sherds from fill 3073 (ditch 3120). The material was generally poorly preserved with a low average sherd weight of just 7.3g. There are only nine rims present.

Table 4: Iron Age and Roman pottery from Filchampstead

US = unstra	atified					
Context	Туре	Prehistoric	Roman	No.	Wt (g)	Date
3002	Subsoil	0	1	1	2	Roman
3006	Posthole 3005	1	0	1	2	E-MIA
3007	Posthole 3005	1	0	1	3	MIA
US	-	3	0	3	36	MIA

Total		166	51	217	1604.75	
3192	Ditch 3195	1	4	5	19.5	IA/Roman
3186	Ditch 3191	5	0	5	9	M-LIA
3185	Ditch 3191	10	0	10	35.5	MIA
3184	Ditch 3191	10	0	10	128	M-LIA
3165	Ditch 3164	1	34	35	82	C1-C2
3111	Ditch 3120	2	0	2	48	MIA
3110	Ditch 3120	8	0	8	48	MIA
3098	Ditch 3119	1	1	2	14	LIA
3097	Box 3123 (ditch 3120)	1	0	1	18	MIA
3094	Ditch 3091	1	0	1	20	MIA
3086	Ditch 3085	2	0	2	3	MIA
3084	Pit 3083	3	0	3	5	LIA
3075	Ditch 3074	4	0	4	12	MIA
3073	Ditch 3120	49	0	49	600	M-LIA
3072	Ditch 3120	23	0	23	247	M-LIA
3071	Ditch 3121	2	0	2	18.5	MIA
3070	Ditch 3122	8	0	8	106	M-LIA
3069	Ditch 3122	2	0	2	20	LIA
3068	Ditch 3063	0	1	1	1	LIA
3066	Ditch 3063	2	0	2	21	LIA
3065	Ditch 3063	1	0	1	9	LIA
3062	Ditch 3061	4	0	4	0.25	IA
3060	Ditch 3059 (= 3055)	3	10	13	16	
3036	Posthole 3035	1	0	1	0.5	E-MIA
3032	Ditch 3031	9	0	9	17	E-MIA
3030	Pit 3029	8	0	8	63.5	FIA

Early to Middle Iron Age

Calcareous wares account for 27.1% by count, sandy ware with limestone for 33.1%, sandy wares for 12.6% and grog-tempered wares 26.5%. At face value this would suggest a mix of Early, Mid and Late Iron Age material. On the basis of the pottery, postholes 3005, 3035, pit 3029 and curvilinear ditch 3031 appear to be the earliest features since all contained small assemblages of shell and limestone-tempered ware, typical of the Early Iron Age but in use into the early part of the Mid Iron Age. Of particular note is a sherd from pit 3029 with incised random 'geometric-style' decoration. This is an unusual style of decoration. The next phase appears to include ditches 3074, 3085 and 3121 which yielded sherds of sandy ware with limestone a fabric more typical of the Middle Iron Age. It should be emphasised however, that the groups are extremely small. Possible 'box' deposit 3123 within ditch 3120 also yielded Middle Iron Age sandy ware with limestone a fabric but was found alongside Late Iron Age material.

Late Iron Age

The larger assemblages appear to belong to the Later Iron Age and are characterised by the presence of grog-tempered ware. Ditch 3120 with 84 sherds (26% of the total recovered assemblage) produced a mixture of sandy, sandy with limestone and grog-tempered wares the latter including a cordoned vessel. Also from this group are several sherds from a single jar in a sandy ware with limestone. Parallel ditch 3122 with 10 sherds seems broadly contemporary. Other ditches belonging with this phase of activity include 3063, 3119 and 3191, along with pit 3083. The wares are all local types with the exception of a fragment of amphora from ditch 3119. The fabric is not very distinctive but from this period it is likely to

be a Dressel 1/ 2-4 type. Residual pottery of this date was recovered from fill 3060 (medieval/postmedieval ditch 3056).

Early Roman

The latest features belong to the Early Roman period and include ditches 3164 and 3195. Ditch 3164 contained 34 small sherds from a single flagon in a buff sandy ware, possibly a Verulamium-type ware. Ditch 3195 included three sherds of Wiltshire grey ware and a fine grey ware. It is likely that these wares date to the Flavian period or later and that the Late Iron Age phase continued into the Early Roman period.

Long Leys House, Cumnor

One sherd of Roman pottery (2g) was recovered from fill 1510 of ditch 1509, the re-cut of ditch 1507.

Kingston Hill Farm (Table 5)

A small assemblage of six Roman sherds was recovered from ditch 408 and and pits 103 and 107 during the evaluation. The subsequent excavation yielded a further nine sherds from seven different features. All the pieces are likely to be of Roman date although some are very small and all are Oxfordshire grey wares or local wares, along with a single colour-coated sherd from pit 2020 which suggests this is a late Roman feature. The other sherds could date anywhere between the 2nd and 4th centuries.

Table 5: Roman pottery from Kingston Hill Farm

Context	Туре	Roman	No.	Wt (g)	Date
104	Pit 105	3	3	22	C2+
106	Pit 107	1	1	120	Roman
Unstrat.	-	2	2	5	C2+
2021	Pit 2020	1	1	2	IC3-C4
2031	Ditch 2030	1	1	11	Roman
2041	Pit 2040	2	2	12	C4
2066	Ditch 2065	1	1	14	C2
2070	Furrow	1	1	13	Roman
2083	Ditch 2082	2	2	2	Roman
2096	Ditch 2095	1	1	0.5	Roman
Total		15	15	203.5	

Duxford Farm (Table 6)

The assemblage is one of the larger groups of pottery from the pipeline comprising 1069 sherds (9761.5 g). Most of the pottery dates to the later prehistoric and Roman periods some post-Roman material also present.

Early Prehistoric

The earliest activity appears to date to the earlier prehistoric with calcined flint-tempered wares. In all cases the sherds are single occurrences and comprise very small fragments. These sherds were associated with ditch 1066, pits 1310, 1320 and 1368. A small residual sherd came from ring ditch 1116 with an impressed 'oval' perhaps from a decorated urn. A single fossil shell tempered fragment came from ring ditch 1114 which could also be of earlier prehistoric date. Although not closely dateable due to

their size, these sherds may be comparable to the other early prehistoric pottery recovered from the site (see Edwards, this report).

.

US = unst	ratified; U/D =	undate	ed; PH = po	osthole						
Context	Туре	Pre	Roman	Saxon	Med	Pmed	U/D	No.	Wt (g)	Date
1001	Topsoil	1	53	0	7	3	0	64	310	Preh/Ro/Med/Pm
1004	Ditch 1003	1	56	0	0	0	0	57	556.75	late C4
1006	Pit 1005	3	0	0	0	0	0	3	0.75	IA
1008	Pit 1007	0	0	0	0	0	0	0	0	ND
1014	Pit 1013	1	0	0	0	0	0	1	13	MIA
1016	Pit 1015	0	1	0	0	0	0	1	45	C2+
1018	Pit 1017	1	9	0	0	0	0	10	88	mid C3+
1018	Pit 1017	1	0	0	0	0	0	1	1	MIA
1020	Pit 1019	1	9	0	0	0	0	10	61	IA/Ro
1022	Pit 1021	1	3	0	0	0	0	4	7	Preh/Ro
1022	Pit 1021	1	0	0	0	0	0	1	3	E-MIA
1027	Furrow	0	3	0	0	0	0	3	4	Roman
1035	Ditch 1037	0	4	0	0	0	0	4	51	Roman
1036	Ditch 1030	0	1	0	0	0	0	1	21	C1
1038	Ditch 1037	0	25	0	0	0	0	25	176.5	mid-late C3+
1046	PH 1045	0	1	0	0	0	0	1	3	Roman
1048	Ditch 1047	0	8	0	0	0	0	8	128	C2+
1050	Ditch 1049	0	35	0	0	0	0	35	492.5	C4
1052	Pit 1051	0	1	0	0	0	0	1	4	Roman
1053	Ditch 1049	0	13	0	0	0	0	13	335	late C4
1058	Ditch 1056	0	5	0	0	0	0	5	14	Roman
1062	Ditch 1061	1	0	0	0	0	0	1	5	M-LIA
1067	Ditch 1066	1	0	0	0	0	0	1	0.5	Preh
1069	Furrow	0	1	0	0	0	0	1	8	Roman
1072	Ditch 1070	1	7	0	0	0	0	8	56.5	ia/c2
1076	Ditch 1073	0	7	0	0	0	0	7	53.5	mid C3-C4
1078	Furrow	0	30	0	0	0	0	30	319	mid C2+
1080	Ditch 1079	0	1	0	0	0	0	1	0.5	c2
1082	Furrow	0 0	38	0	0	0	0	.38	136 25	mid C3+
1088	Pit 1087	1	0	0	0	0	0	1	100.20	
1000	Ditch 1092	0	1	0	0	0	0	1	18	C3+
1005	Ditch 1092	0	2	0	0	0	0	2	10	Roman
1095	Ditch 1096	0	- 1	0	0	0	0	2 1	05	C2+
1111	Ditch 1110	0	י 2	0	0	0	0	י 2	0.5	Boman
1113	Ditch 1112	0	- 1	0	0	0	0	2 1	2.5	Roman
1115	Ditch 1114	1	۱ 0	0	0	0	0	1	2	
1117	Ditch 1116	10	0	0	0	0	0	י 10	275	
1102	Ditch 1122	5	0	0	0	0	2	10	27.5	
1125	Ditch 1124	0	0	0	0	0	2 1	1	23.5	IA no doto
1120	Ditch 1129	0	0	0	0	0	1	1	40	no uale Domon
1101	Pit 1132	0	ن 10	0	0	0	0	3 40	10	Roman
1133	Ditch 1138	0	12	0	0	0	0	12	389	C3+
1139	Ditch 1140	1	0	0	0	0	0	1	4	M-LIA
1142	Ditch 1140	0	1	0	0	0	0	1	0.5	Roman
1146	Ditch 1143	0	1	0	0	0	2	3	31	?Roman
1148	Ditch 1147	0	50	0	0	0	0	50	521	C4
1150	Ditch 1149	0	10	0	0	0	0	10	139	C3+
1151	Ditch 1149	0	15	0	0	0	0	15	331	C2+
1152	Ditch 1149	0	92	0	0	0	0	92	563	C4

Table 6: Iron Age and Roman pottery from Duxford Farm

Context	Туре	Pre	Roman	Saxon	Med	Pmed	U/D	No.	Wt (g)	Date
1153	Ditch 1149	1	28	0	0	0	0	29	274	C4
1168	Ditch 1167 Ditches 1173, 1175,	1	0	0	0	0	1	2	0.25	Preh
1181	1177, 1179	0	1	1	0	0	0	2	14	nreh/sx
110/	Pit 1193	0	י 110	0	0	0	0	110	651	late C3+
1197	Ditch 1195	0	50	0	0	0	0	50	401	mid C3
1199	Ditch 1198	0	100	0	0	0	0	100	1063	C4
1263	Furrow	0	100	0	0	0	0	100	8	Roman
1282	Ditch 1281 Modern	0	1	0	0	0	0	1	5	Roman
1285	drain	0	1	0	0	0	0	1	2	Roman
1291	Pit 1290	1	0	0	0	0	0	1	3	E-MIA
1311	PH 1310	1	0	0	0	0	0	1	1	Preh
1321	Pit 1320	1	0	0	0	0	0	1	1	Preh
1323	Pit 1322	0	0	0	0	0	0	0	0	ND
1332	Furrow	0	1	0	0	0	0	1	2	Roman
1352	Ditch 1351	0	0	0	0	0	0	0	0	nd
1369	Pit 1368	1	0	0	0	0	0	1	1	Preh
1373	Furrow	0	2	0	0	0	0	2	2	C2
2008	Ditch 2007	0	5	0	0	0	0	5	57	C2
2008	Ditch 2007	4	0	0	0	0	0	4	33	MIA
2008	Ditch 2007	15	0	0	0	0	0	15	244	M-LIA
2010	Ditch 2009	55	0	0	0	0	0	55	424.5	MIA
2012	Ditch 2011	0	30	0	0	0	0	30	440	m-IC3
2014	Ditch 2013	33	0	0	0	0	0	33	276	MIA
2018	Ditch 2009	2	0	0	0	0	0	2	94	MIA
2020	Ditch 2019	0	0	0	1	0	0	1	7	Med
2020	Ditch 2019	1	0	0	0	0	0	1	11	MIA
2024	Ditch 2023	4	0	0	0	0	0	4	14	E-MIA
2027	Ditch 2026	2	0	0	0	0	0	2	16	MIA
2029	Ditch 2028	1	0	0	0	0	0	1	3	MIA
2032	Ditch 2013	10	0	0	0	0	0	10	207	MIA
2033	Ditch 2013	8	0	0	0	0	0	8	115	MIA
2034	Ditch 2013	2	0	0	0	0	0	2	28	MIA
2036	Ditch 2007	1	0	0	0	0	0	1	37	MIA
US	-	0	27	0	3	2	2	34	313.5	Roman/med/pmed
Total		176	868	1	11	5	8	1069	9761.5	·

Middle Iron Age

In total 176 sherds of Middle Iron Age pottery were recovered, with an average sherd weight of 9g. The fabrics are dominated by sandy wares with limestone (21% by sherd count) and sandy wares (52%). Such wares typically replaced the mainly calcareous wares of the earlier Iron Age in the Upper Thames valley. The only recognisable import is a single sherd of Malvernian limestone-tempered ware from ditch 2013. Most of the groups are quite small but larger assemblages were recovered from ditch 1116 (10 sherds); curvilinear ditch recut 2009 (55 sherds) and trackway ditch 2013 (51 sherds), accounting for 76% of the total Iron Age assemblage.

Some sherds show evidence of use in the form of sooting on the interior or exterior surfaces. Featured sherds are limited to five rims from jar forms. Of particular note are two decorated sherds, one from ditch 2007 with tooled diagonal lines; the other a base sherd with an incised spiral from curvilinear ditch recut 2009.

Roman

Roman pottery comprised 869 sherds including a mixture of continental and regional imports and more local wares, all spanning the 2nd through to the 4th centuries AD, with the emphasis on the later material.

Early Roman

The earlier Roman pottery occurred in very small groups with little diagnostic material. It includes Central Gaulish samian, Savernake ware, some of the Oxfordshire grey wares and shelly wares and a small proportion of the Dorset black burnished ware. The sherds are extreme small and most features only have one or two unfeatured pieces. Amongst the features that can be singled out are pits 1015, 1019, 1022, 1051 and 1331; furrows 1026, 1068 and 1077; ditch recut 1037; ditches 1030, 1056, 1070, 1079, 1129, 1138,1143 and 1281 and posthole 1045. Many of the sherds occur residually in later deposits.

Late Roman

The later Roman assemblage is more distinctive with a significant number of Oxfordshire colour-coated wares including several mortaria (Young 1977) type C97. Other colour-coated forms include mortaria C100; bowls C45, C51, C55 and C75 and beaker C26 all dating to after the mid 3rd century. Overall products of the Oxfordshire industry are very prominent with a high proportion of grey wares, white ware mortaria and white-slipped mortaria. Amongst the white-wares are several sherds from a wall-sided flagon (ibid) type W9 dated AD 240-300 from ditch 2011. Collectively the products of this industry account for *c*. 64.4% of the Duxford Farm Roman assemblage.

Other late regional imports to the site include three sherds of Lower Nene Valley colour-coated ware, Alice Holt grey ware, Midlands Late Roman shelly and pink grog-tempered ware and Dorset black burnished wares. This latter product accounts for around 9% of the assemblage by sherd count and include the profile of a jar (SF 58) from pit 1132.

Modified wares include a Oxfordshire grey ware closed vessel wall sherd from ditch recut 1049 with a drilled hole and a basesherd from ditch 1198 in a Savernake-type ware with two holes drilled through from the inside (SF 83).

In summary the Duxford site shows a small amount of activity in the Middle Iron Age. The site then appears to have been used from the later 1st or 2nd centuries through to the later 4th century with the greatest amount of pottery dating to the later Roman period. There is no evidence in the ceramic record for continuity of use throughout. The character of the assemblage suggests a fairly low status settlement.

The watching Brief (Table 7)

During the watching brief, 1173 sherds of pottery (8694g) were collected from topsoil and subsoil deposits. The assemblage includes material dating from the early prehistoric through to the post-medieval periods. Most of the sherds were small and abraded.

Prehistoric

The prehistoric material comprised 11 sherds, although it should be noted that some fabrics are almost indistinguishable from Saxon pottery in small pieces and a several sherds could not be dated ('nd' in Table 4). Prehistoric sherds are noted from Fields AA, C, DA, EA, NA and Q. The sherd from NA may be from a beaker with faint traces of lines of impressed cord decoration. A calcined flint-tempered piece from Field EA is probably Later Bronze Age or Early Iron Age and similarly a thick-walled limestone-tempered sherd from Field Q may be from a Bronze Age urn. One carinated sherd with slash decoration from Field AA is probably Iron Age. This has an organic-tempered sandy fabric and whilst such fabrics have been noted in the Cotswold Water Park dating to the Mid Iron Age, they are not common but do raise the possibility that some of the 'Saxon' sherds are earlier.

Roman

Roman pottery comprised 709 sherds with the highest concentration from Field AA (503 sherds, 71% of the total Roman assemblage). The emphasis of the material from Field AA is very much towards the later Roman period, with various Oxfordshire grey wares and colour-coated ware, Oxfordshire mortaria, Overwey white ware, later Roman shelly ware, Dorset black burnished wares and copies of BB1 forms. One jar in the latter category has two post-firing cuts on the rim.

Further concentrations of Roman pottery with in excess of 12 sherds came from fields DA, EA, F, G and O. None of these collections are very diagnostic but seem to lack anything particularly early or late, apart form a single sherd of Oxfordshire colour-coated ware of mid 3rd to 4th-century from Field G, and a date within the 2nd century is appropriate on present evidence. Of note from the remaining finds is a flanged rim conical DOR BB1 bowl from Field C of 4th-century date and an Oxfordshire mortarium (Young 1977, type M17) of 3rd-century date from Field K.

Anglo-Saxon

Possible Anglo-Saxon pottery comprised 180 sherds. The most significant concentration of these came from Field AA with 123 pieces, 68% of the assemblage. Several fabrics could be discerned including organic-tempered, sandy, quartzite and possible calcareous. There are no decorated sherds and just three simple everted jar rims. The sandy wares are distinctive in that Saxon potters often used facetted quartz which reflects light. Further concentration of Saxon material, mainly dominated by organic-tempered sherds, came from Field DA and just seven sherds from Field G. The tradition of using organic temper appears to start in the 6th century in this region.

Medieval and post-medieval

A small group of medieval and post-medieval wares are also present. All are very small, often with the glaze worn away, and are probably associated with manuring rather than settlement.

US = unstratified

Site	Field	Context	Preh	Roman	Sax	Med	Pmed	undated	No.	Wt (g)	Date
BTF02	0	US	0	17	0	0	0	2	19	120	C2
BTF02	0	US	0	1	0	1	0	0	2	5.5	ro/med
BTF02	10	US	0	1	0	0	0	0	1	1	Roman
BTF02	11	US	0	1	0	0	1	0	2	7	ro/pmed
BTF02	12	US	0	1	0	0	0	0	1	22	Roman
BTF02	23	US	0	2	0	1	0	0	3	9	ro/med
BTF02	25	US	0	1	0	1	0	0	2	81	ro/med
BTF02	26	US	0	2	0	0	1	0	3	49	Roman
BTF02	28	US	0	1	0	0	0	0	1	19	Roman LIA-
BTF04	AA	1000	4	424	89	17	1	38	680	5797	C4/Sx/Med+
BTF04	AA	1002	0	17	0	0	0	0	17	125	C4
BTF04	AA	1003	0	32	15	3	0	8	58	479	C4/Sx/Med
BTF04	AA	1004	1	14	2	0	0	6	23	74	?Preh/Ro/Sx
BTF04	AA	US	0	16	16	0	0	10	42	139	Ro/Sx
BTF04	С	US	0	0	0	0	3	1	4	117	c4/Pmed
BTF04	С	US	1	0	0	0	0	0	1	4	Preh?
BTF04	CA	US	0	0	0	1	0	0	1	1	Med
BTF04	DA	US	2	16	51	4	0	0	73	357	Pre/Ro/Sx/Med
BTF04	Е	US	0	2	0	0	0	0	2	4	Roman
BTF04	EA	US	1	14	0	0	0	0	15	57	LBA/EIA/Roman
BTF04	F	US	0	13	0	4	0	6	23	119	Ro/Med
BTF04	G	US	0	43	7	15	1	4	70	328	Ro/Sx/Med/Pm
BTF04	GA	US	0	1	0	0	0	0	1	10	Roman
BTF04	н	US	0	7	0	8	0	2	17	48	Roman
BTF04	IA	US	0	2	0	0	0	2	4	14	Roman
BTF04	J	US	0	6	0	0	2	0	8	49	Ro/Pmed
BTF04	К	US	0	2	0	0	1	0	3	42	C3
BTF04	L	US	0	4	0	0	0	0	4	39	Roman
BTF04	LA	US	0	7	0	2	0	0	9	77	Ro/Med
BTF04	MA	US	0	0	0	1	0	0	1	7	Med
BTF04	NA	US	1	0	0	0	0	0	1	7	?Beaker
BTF04	0	US	0	29	0	3	0	0	32	234.5	Ro/Med
BTF04	Р	US	0	6	0	3	1	1	11	33.5	Ro/Med/Pmed
BTF04	Q	US	1	0	0	0	0	0	1	17	BA
BTF04	QA	US	0	3	0	0	0	0	3	8	Roman
BTF04	R	US	0	1	0	0	0	0	1	6	Roman
BTF04	R	US	0	0	0	0	0	0	0	0	nd
BTF04	S	US	0	6	0	0	2	1	9	36.5	Ro/Pmed
BTF04	U	US	0	3	0	0	1	0	4	35	Ro/Pmed
BTF04	W	US	0	4	0	1	0	0	5	29	Ro/med
BTF04	х	US	0	2	0	0	0	1	3	19	Roman
BTF04	Y	US	0	6	0	2	0	2	10	52	Roman
BTF04	Z	US	0	2	0	1	0	0	3	16	Ro/Med
TOTAL			11	709	180	68	14	84	1173	8694	

Table 7: Prehistoric and Roman pottery recovered during the watching brief

Potential and recommendations for further work

No further analysis is recommended for the watching brief material. One sherd from Field AA with a tally mark or similar could be illustrated, along with the Bronze Age urn.

The later prehistoric and Roman assemblages from Duxford and Filchampstead are worth short publication notes as they contribute towards a greater understanding of landscape development in the area. The actual assemblages are not particularly noteworthy and are typical of the other rural assemblages in the area. The group from Kingston Hill is too small to allow much interpretation other than a brief note.

Table 8 summarises sherds worth illustration. These are split into minimum where pieces are of intrinsic interest should be drawn and maximum if specific associated groups are required for the late Roman ditches. The forms are largely well-known types but illustration would give a visual demonstration of the late nature of the material.

Γable 8: Vessels for illustration								
Site	Minimum	Maximum						
Duxford Farm	10	30						
Kingston Hill	0	0						
Filchampstead	3	3						
Field collection	2	2						

References

PCRG 1997 The study of later prehistoric pottery: general policies and guidelines for publication, Prehistoric Ceramics Research Gp, Occas. papers nos 1 and 2 (revised)

Tomber, R. and Dore, J. 1998 *The National Roman fabric reference collection: a handbook*, Museum of London/ English Heritage/British Museum

Young, C. J. 1977 Oxfordshire Roman pottery, BAR 43, Oxford

Post-Roman Pottery by Paul Blinkhorn

Methodology

The pottery from each context was recorded by number and weight of sherds per fabric type, with featureless body sherds of the same fabric counted, weighed and recorded. Feature sherds such as rims, bases and lugs were individually recorded, with individual codes used for the various types. Decorated sherds were similarly treated. In the case of the rimsherds, the form, diameter and the percentage remaining of the original complete circumference were recorded. This figure was summed for each fabric type to obtain the estimated vessel equivalent (EVE).

The terminology used is that defined by the Medieval Pottery Research Group's Guide to the Classification of Medieval Ceramic Forms (MPRG 1998) and to the minimum standards laid out in the Minimum Standards for the Processing, Recording, Analysis and Publication of post-roman Ceramics (MPRG 2001). Statistical analyses were carried out to the minimum standards suggested by Orton (1998-9, 135-7).

The pottery was recorded using the conventions of the Oxfordshire County type-series (Mellor 1984 and 1994). Early and Middle Anglo-Saxon hand-built pottery (5th–mid 9th centuries) is not covered by the type-series and in the case of these, the following fabrics were noted:

Fabric F1: Fine and lightly sandy with few visible inclusions except rare sub-rounded quartz < 0.5mm.

Fabric F2: As F1, with rare to sparse to moderate organic voids.

- *Fabric F3*: Sparse to moderate sub-rounded quartz up to 2mm, angular limestone fragments up to 5mm, scatter of fine silver mica, sparse organic voids.
- Fabric F4: Moderate to dense organic voids up to 10mm.
- *Fabric F5*: Moderate to dense calcite-cemented sandstone up to 1mm, many 'free' angular quartz grains up to 0.5mm.

Filchampstead

11 sherds (79g) were recovered (Table 9):

F200:	OXAC: Cotswold-type ware,	AD975-1350.	2 sherds, $10q$, EVE = 0.
			, - , - , - , ,

F202: OXBF: North-East Wiltshire Ware, AD1050 – 1400. 6 sherds, 52g, EVE = 0.

F352: OXAM: Brill/Boarstall ware, AD1200 - 1600. 1 sherd, 2g, EVE = 0.

F425: OXDR: Red Earthenwares, 1550+. 1 sherd, 3g. 1 sherd, 9g.

F1000: WHEW: Mass-produced white earthenwares, 19th - 20th C. 1 sherd, 6g.

The wares are all typical finds in the region, and the entirely assemblage comprised plain bodysherds. In addition, 3 sherds (13g) of Roman pottery and a single Iron Age sherd (2g) were present. The material occurred within the subsoil, a furrow and from ditches 3043 and 3063.

Assessment

The assemblage does not require further analysis.

 Table 9: Pottery occurrence by number and weight (in g) of sherds per context by fabric type,

 Filchampstead (Each date should be regarded as a *terminus post quem*)

	F200)	F202		F352		F425		F100	0		
Cntxt	No	Wt	Date									
3002 subsoil			6	52	1	2					13thC	
3038 furrow fill									1	6	19thC	
3044 ditch 3043							1	9			M16thC	
3065 ditch 3063	2	10									M11thC	
Total	2	10	6	52	1	2	1	9	1	6		

Kingston Hill Farm

During the evaluation at total of 37 sherds (199g) was recovered. A further 52 sherds (229g) were recovered from watching brief deposits (Table 2.1-2.2). The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference was 0.03. The pottery occurrence was as follows:

- F1: Early/Middle Saxon hand-built ware, 5th–9th century. 6 sherds, 16g, EVE = 0.
- F2: Early/Middle Saxon hand-built ware, 5th–9th century. 8 sherds, 28g, EVE = 0.
- F3: Early/Middle Saxon hand-built ware, 5th–9th century. 1 sherd, 3g, EVE = 0.
- F4: Early/Middle Saxon hand-built ware, 5th–9th century. 1 sherd, 3g, EVE = 0.
- F5: Early/Middle Saxon hand-built ware, 5th–9th century. 6 sherds, 24g, EVE = 0.

F200: OXAC: Cotswold-type ware, AD975-1350. 78 sherds, 95g, EVE = 0.
F202: OXBF: North-East Wiltshire Ware, AD1050 – 1400. 21 sherds, 186g, EVE = 0.03.
F300: OXY: Medieval Oxford ware, AD1075 – 1350. 11 sherds, 48g, EVE = 0.

The range of fabric types indicates activity in the Early or Middle Saxon period and during the 11th–12th centuries. Overall, the assemblage is somewhat fragmented, with just a single rimsherd, from a bowl, present. The fabric types are all common finds in the region. In addition, 12 sherds (25g) of Roman pottery was also present.

The pottery assemblage from the excavation comprised 28 sherds (265g) (Table 10). The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference was 0.19. The pottery occurrence was as follows:

- F1: Early/Middle Saxon hand-built ware, 5th–9th century. 6 sherds, 24g, EVE = 0.
- F2: Early/Middle Saxon hand-built ware, 5th–9th century. 1 sherd, 10g, EVE = 0.
- F4: Early/Middle Saxon hand-built ware, 5th–9th century. 1 sherd, 3g, EVE = 0.
- F101: OXB: Saxon Oxford Ware. Late 8th-early 11th century. 3 sherds, 46g, EVE = 0.19
- F200: OXAC: Cotswold-type ware, AD975-1350. 3 sherds, 4g, EVE = 0.
- F202: OXBF: North-East Wiltshire Ware, AD1050–1400. 4 sherds, 70g, EVE = 0.

F425: OXDR: Red Earthenwares, 1550+. 1 sherd, 3g.

F1000: WHEW: Mass-produced white earthenwares, 19th - 20th century. 2 sherds, 2g.

The most significant material is the Early/Middle Saxon hand-built wares and the Saxon Oxford ware (fabric OXB). None of the former is decorated, and so is difficult to date other than to within the broad period, but the latter dates to before the Norman Conquest, and could conceivably be of late Middle Saxon date. The three OXB sherds include a large, well-preserved rimsherd, and appear reliably stratified.

In addition, 3 sherds (13g) of Roman pottery and a single sherd of Iron Age material (2g) were present.

Assessment

The Early/Middle Saxon hand-built pottery and the Saxon Oxford Ware are worthy of a short discussion placing them in their regional context, and the OXB rimsherd is worthy of illustration.

Table 10 Pottery occurrence by number and weight (in g) of sherds per context by fabric type,Kingston Hill evaluation (Each date should be regarded as a *terminus post quem*)

	F	1	F	2	F2	01	F	202	
Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	Date
104					2	3			M11thC
118					2	4			M11thC
120					3	20			M11thC
206	1	3			6	6			M11thC
208	1	4							C5
212	2	5	2	9	1	7	11	99	M11thC
220					3	28			M11thC
222							1	4	M11thC

214			1	4					C5
1508	1	3							C5?
Total	5	15	3	13	17	68	12	103	

Table 11 Pottery occurrence by number and weight (in g) of sherds per context by fabric type, watching brief (Each date should be regarded as a *terminus post quem*)

	wald	aning	puer	(⊏au	n uate	5 51100	na pe	regai	ueu a	15 a le	;,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	15μ 08	si que	III)						
		F100)1	F1		F2		F3		F4		F5		F20	0	F20	2	F30	0	
Cntxt	Field	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date
294		2	7													3	13			M11thC
1000	AA	5	9									1	1	2	7	2	12	11	48	L11thC
1002	AA	1	1							1	3	5	23	1	5	1	9			M11thC
1003	AA	3	6			1	9	1	3					1	4	2	40			M11thC
1004	AA			1	1	4	6							1	7	1	9			M11thC
1019														1	4					M11thC
1020		1	2																	RB??
Total		12	25	1	1	5	15	1	3	1	3	6	24	6	27	9	83	11	48	

Table 12: Pottery occurrence by number and weight (in g) of sherds per context by fabric type, Kingston Hill Excavation (Each date should be regarded as a *terminus post quem*)

•	F10	02	F10	01	F1	aon a	F2	louiu	F4	jaraco	F10	1	F20))	F202	2	F42	5	F10	00	
Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date
2007																	1	3			M16thC
2016																			1	1	19thC
2019					1	3			1	3											E/MS
2022																			1	1	19thC
2026			1	3																	RB??
2029															1	5					M11thC
2039															1	24					M11thC
2043			1	8							1	7									L8thC
2045													1	2							M11thC
2047													1	1							M11thC
2050											1	7									L8thC
2064							1	10							1	38					M11thC
2066											1	32									L8thC
2068					3	10															E/MS
2073	1	2			2	11															E/MS
2075			1	2																	RB??
2085													1	1							M11thC
2096															1	3					M11thC
Total	1	2	3	13	6	24	1	10	1	3	3	46	3	4	4	70	1	3	2	2	

Duxford Farm

The pottery assemblage comprised 160 sherds (1011g) (Table 14). The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference was 0.35. It comprised mainly medieval wares, and *c*. 50% of the assemblage (83 sherds, 621g, EVE = 0.20) was unstratified. The pottery occurrence was as follows:

F4:	Early/M	iddle Saxon hand-built ware, 5th–9th century. 1 sherd, 4g, EVE = 0.
F200:	OXAC:	Cotswold-type ware, AD975-1350. 41 sherds, 172g, EVE = 0.05.
F202:	OXBF:	North-East Wiltshire Ware, AD1050 – 1400. 29 sherds, 187g, EVE = 0.11.
F300:	OXY:	Medieval Oxford ware, AD1075 – 1350. 5 sherds, 24g, EVE = 0.

F361: OXAG: Abingdon ware, mid/late 11th-mid 14th century. 1 sherd, 6g, EVE = 0.
F355: OXBB: Minety-type ware. Early 12th-16th century. 19 sherds, 124g, EVE = 0.
F352: OXAM: Brill/Boarstall ware, AD1200-1600. 14 sherds, 101g, EVE = 0.14
F403: OXBN: Tudor Green Ware, late 14th century - *c*. 1500. 1 sherd, 1g, EVE = 0.
F405: OXST: Rhenish Stoneware, AD1480-1700. 1 sherd, 15g, EVE = 0.
F425: OXDR: Red Earthenwares, 1550+. 15 sherds, 220g.
F413: OXST: Westerwald stoneware. <u>c</u>. 1590-1800. 1 sherd, 11g.
F1000: WHEW: Mass-produced white earthenwares, 19th-20th century. 5 sherds, 16g.

The stratified material comprises small groups of individual sherds, many of which are worn and appear to be the products of secondary deposition. The ware types are regionally common, and no unusual forms were noted. The range of fabric types indicates activity from the mid/late 11th–13th/14th centuries. In addition, 27 sherds (130g) of Roman pottery was also present.

Assessment

No further analysis is required.

Faringdon Compound Evaluation

The pottery assemblage comprised five sherds (60g), all of which was post-medieval, apart from a single small Roman sherd (7g).

The following pottery types were present:

F425: OXDR: Red Earthenwares, 1550+. 2 sherds, 11g.F1000: WHEW: Mass-produced white earthenwares, 19th-20th centuries. 2 sherds, 42g.

The sherds of OXDR occurred in context 4009, those of WHEW in 5004, and the Roman sherd in 4004.

Assessment

No further analysis is required.

Broad Blunsdon

Evaluation (Table 13)

The pottery assemblage comprised 92 sherds (655g). The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference was 0.48.

Most of the assemblage comprised Early Saxon hand-built fabrics, as follows:

Fabric F1: 46 sherds, 284g, EVE = 0.48 Fabric F2: 28 sherds, 158g, EVE = 0. Fabric F3: 3 sherds, 148g, EVE = 0. Fabric F4: 1 sherd, 9g, EVE = 0.

Only one medieval pottery type was present:

F202: OXBF: North-East Wiltshire Ware, AD1050 – 1400. 4 sherds, 9g, EVE = 0.

In addition, 6 sherds (33g) of probable Iron Age material and 4 sherds (14g) of Roman pottery were also present.

 Table 13: Pottery occurrence by number and weight (in g) of sherds per context by fabric type,

 Broad Blunston Evaluation (Each date should be regarded as a *terminus post quem*)

	IA F		RB	RB		F1			F3		F4		F202	2	
Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date
104	4	4	2	11	3	4	1	4					3	7	M11thC?
106	2	29			39	272	26	151	3	148	1	9			6thC?
124					3	7	1	3							E/MS
134					1	1							1	2	M11thC
206			2	3											RB
Total	6	33	4	14	46	284	28	158	3	148	1	9	4	9	

Excavation

This yielded just three bodysherds, one each from fills 1006 and 1010 of Roman ditch 1005 and from fill 1042 of pit 1041. These have a total weight of 4g and are all Roman.

Assessment

The bulk of the pottery came from fill 106 of pit 108 and included a number of sherds with linear and/or stamped decoration. The range of decorative schemes, the only way of reliably dating such material, suggests that the assemblage is largely of 6th-century date. At the reporting stage, a discussion of the group from 106 in its local and regional context, along with illustrations at a catalogue of both these and a few feature sherds, would be of value. The remaining evaluation assemblage comprises small and scattered sherds, and requires no further work. No more than 10 illustrations are anticipated.

Watching Brief

The pottery assemblage from the watching briefs comprised 127 sherds (798g) (Table 15). The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference was 0.19. It was all unstratified. The pottery occurrence was as follows:

- F1: Early/Middle Saxon hand-built ware, 5th– 9th century. 9 sherd, 96g, EVE = 0.19
- F2: Early/Middle Saxon hand-built ware, 5th– 9th century. 5 sherds, 19g, EVE = 0.
- F3: Early/Middle Saxon hand-built ware, 5th– 9th century. 4 sherd, 13g, EVE = 0.
- F4: Early/Middle Saxon hand-built ware, 5th– 9th century. 5 sherd, 29g, EVE = 0.
- F5: Early/Middle Saxon hand-built ware, 5th– 9th century. 7 sherds, 35g, EVE = 0.
- F200: OXAC: Cotswold-type ware, AD975–1350. 11 sherds, 65g, EVE = 0.
- F202: OXBF: North-East Wiltshire Ware, AD1050–1400. 27 sherds, 129g, EVE = 0.
- F300: OXY: Medieval Oxford ware, AD1075–1350. 7 sherds, 30g, EVE =0.
- F352: OXAM: Brill/Boarstall ware, AD1200–1600. 13 sherds, 101g, EVE = 0.
- F404: OXCL: Cistercian ware, 1475–1700. 1 sherd, 14g, EVE = 0.
- F405: OXST: Rhenish Stoneware, AD1480–1700. 2 sherds, 11g.
- F410: OXCE: Tin-glazed Earthenware, 1613–1800. 1 sherd, 4g.
- F414: OXBEW: Staffordshire manganese wares. c. 1700–1800. 1 sherd, 14g.
- F425: OXDR: Red Earthenwares, 1550+. 1 sherd, 3g. 6 sherds, 41g.

F438: OXEST: London stoneware. *c.* 1680 plus. 2 sherds, 7g.
F451: OXFH: Border wares, 1550–1700. 4 sherds, 44g.
F1000: WHEW: Mass-produced white earthenwares, 19th–20th centuries. 2 sherds, 29g.

The range of fabric types is generally typical of the region, although the presence of a small assemblage of Border Ware (fabric OXFH) at the northern end of the pipeline, in fields J, KA, MA and NA is worthy of comment. Such pottery often occurs in early post-medieval assemblages in large towns in the Thames Valley, such as Oxford and Reading (e.g. Blinkhorn 2006, 365), but is extremely rare at rural sites, other than those of relatively high status. However, given the proximity of these fields to Oxford, it the material may have been deposited during manuring.

The group of Early/Middle Saxon handmade wares is noteworthy. These include a relatively large sherd from field EA which, although damaged, has a sharp carination and a fragment of incised line decoration. This indicates an Early Saxon date, probably in the 5th century, and such forms are amongst the earliest types of Anglo-Saxon pottery known in England (Myres 1977). The rest of the assemblage is undecorated and fairly fragmented, as would be expected with unstratified pottery of this type, although a fairly large rimsherd was noted in field DA.

In addition, 8 sherds (99g) of Roman pottery and a single sherd of Iron Age material (10g) were present

Assessment

The unstratified pottery from the watching brief is largely unworthy of further analysis, other than the Early Anglo-Saxon material, which should be included as a brief discussion in the final report. Illustration and catalogue of the two sherds noted above would be helpful.

Overall Assessment

As stated above, some discussion of the Anglo-Saxon pottery from some of these sites would be useful, concentrating particularly on their local and regional significance, with around 10–12 sherds illustrated.

References

- Blinkhorn, P. 2006 'Pottery', in Norton, A. 'Excavations at 67-69 St. Thomas' St, Oxford', Oxoniensia **71**, 364-71
- Mellor, M. 1984 'A summary of the key assemblages. A study of pottery, clay pipes, glass and other finds from fourteen pits, dating from the 16th to the 19th century', in Hassall T. G. *et al.*, 'Excavations at St Ebbe's', *Oxoniensia* 49, 181-219
- Mellor, M. 1994 'Oxford Pottery: A Synthesis of middle and late Saxon, medieval and early postmedieval pottery in the Oxford Region', *Oxoniensia* **59**, 17-217
- MPRG, 1998 *Guide to the Classification of Medieval Ceramic Forms* Medieval Pottery Res. Group Occ. Paper **1**
- MPRG, 2001 Minimum Standards for the Processing, Recording, Analysis and Publication of postroman Ceramics Medieval Pottery Res. Group Occ. Paper 2
- Myres, J. N. L. 1977 A Corpus of Anglo-Saxon Pottery of the Pagan Period Cambridge
- Orton, C. 1998-9 'Minimum Standards in Statistics and Sampling', Medieval Ceramics 22-23, 135-8

	RB		RB E/MS		MS	F200		F202		F300		F361		F3	355	F3	352	F403		F405		F425		F4	13	F1	000	
Cntxt	Field	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date
0	0	4	61			3	13	1	9					3	35	4	15					4	38			1	1	U/S
0	11							1	2																			U/S
0	12																			1	15							U/S
0	16					1	12																					U/S
0	21	1	3			3	11	1	5	4	20																	U/S
0	22							1	7																			U/S
0	23							1	7																			U/S
0	25					8	38	8	62					2	7							3	87			1	12	U/S
0	26	1	6			5	16	1	1							1	9					1	8					U/S
0	28					1	5															1	10					U/S
0	29					1	1																					U/S
0	30					1	7	2	7													1	34					U/S
0	31					4	10	2	15							3	27											U/S
0	32																									1	1	U/S
114	0					1	2	2	2																			M11thC
1001	0	2	12			3	9	2	34					1	4	1	6					2	9			1	1	U/S
1027	0							3	12																			M11thC
1065	0					1	4																					M11thC
1076	0	1	3																									RB??
1082	0													1	11													E12thC
1135	0	1	2													1	13											13thC
1170	0	1	1																									RB??
1263	0													4	27													E12thC
1273	0	2	4			3	10			1	4																	L11thC
1275	0	7	13											1	4							1	28					M16thC
1278	0							1	10																			M11thC
1280	0																											M11thC
1282	0					2	18	1	1					1	4									1	11			17thC
1289	0																					1	2					M16thC
1332	0					3	14																					11thC
1363	0																									1	1	19thC
1373	0	1	9											3	16	1	5	1	1			1	4					M16thC

Table 14: Pottery occurrence by number and weight (in g) of sherds per context by fabric type, Duxford Farm (Each date should be regarded as a terminus post quem)

© Cotswold Archaeology

		RB		RB E/MS		F200		F202		F300		F361		F355		F352		F403		F405		F4	125	F4	13	F1	000	
Cntxt	Field	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date
1375	0	1	6					1	3			1	6	2	11													E12thC
1377	0	1	1			1	2							1	5	3	26											13thC
2006	0	2	2																									RB?
2089	0			1	4																							E/MS
	Total	25	123	1	4	41	172	28	177	5	24	1	6	19	124	14	101	1	1	1	15	15	220	1	11	5	16	

© Cotswold Archaeology

Table 15: Pottery occurrence by number and weight (in g) of sherds per context by fabric type, watching briefs

F1002 F1001		F1		F2		F3		F4		F	F5		F200		202	F3	300	F	352	F4	04	F4	405	F4	125	F4	151	F4	10	F4	14	F4	38	F10	000			
Field	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt										
А																											2	6					1	14				
CA			1	3																																		
D																																						
DA					8	84	3	13	2	9	4	11			1	1									1	2												
EA			2	12	1	12					1	18	1	3																								
FA									2	4			3	7																								
G			1	10			2	6					2	24			1	5																				
GA													1	1			1	8			1	15																
Н																											1	19									1	2
HA																	1	11																				
IA			1	1													3	20			3	27			1	9												
J																					1	3							1	9								
KA			2	5													1	2			1	29							1	11								
L																			1	6	1	8													1	3		
LA			1	4											2	5	1	2	2	4																		
MA																			1	6									1	19					1	4		
NA																													1	5								
0			4	11											7	58	5	16	1	5	3	10	1	14			1	4			1	4					1	27
Ρ	1	10	1	6											1	1	2	8	2	9	2	5					1	6										
Q																	3	7																				
QA																											1	6										
S			2	8																																		
U																	3	8																				
V																					1	4																
W																	1	16																				
Х																	1	5																				
Y			3	39													4	21																				
Total	1	10	18	99	9	96	5	19	4	13	5	29	7	35	11	65	27	129	7	30	13	101	1	14	2	11	6	41	4	44	1	4	1	14	2	7	2	29
APPENDIX 4: CERAMIC BUILDING MATERIAL by A. Crawford

The ceramic building material assemblage comprises 137 fragments weighing 3689g. The material was examined, counted and weighed and variations in fabric type identified. The condition of the material is varied and a range of recognisable forms were recorded. All of the ceramic building material dates from the Roman period onwards.

Fabrics

Tile

- T1: hard orange sandy fabric with reduced core, frequent voids and mineral-like inclusions, rare buff clay pellets
- T2: orange sandy fabric with occasional small voids
- T3: hard orange moderately sandy fabric
- T4: deep reddish-brown fabric, some calcareous inclusions and voids (probably leached T5)
- T5: mid brown fine fabric with frequent calcareous inclusions
- T6: hard orange and fine fabric with reduced core, occasional fine organic tempering
- T7: hard reddish-orange sandy fabric with reduced core, poorly mixed clay with frequent limestone inclusions
- T8: orangey-brown fabric with common sand; possibly a brick fabric
- T9: soft pinkish-orange fabric, common sand, some ironstone? and calcareous inclusions
- T10: medieval tile: orange fabric with common sand; glazed

Brick

B1: hard orange-brown fabric, frequent/common sand, moderate quartz-like inclusions, rare buff to pale grey clay pellets

Miscellaneous modern

M1: Inclusive modern brick and field drain fabric number

Summary by Site

Broad Blunsdon (evaluation)

Fragments of ceramic building material were recovered from deposits 104 and 206. The material from deposit 206 was highly fragmented and undiagnostic. A total of 12 fragments of Minety ridge tile were present within deposit 104 and date to the 14th century.

Pennyswick farm

101 fragments of Minety roof tile weighing 2795g were recovered from deposits 2005, 2007, 2009, 2018, 2023 and as unstratified material. Whilst flat roof tiles were present, the assemblage also includes crested ridge tiles of 'cocks-comb' type, and this group probably dates to the 14th century.

Farringdon Compound (evaluation)

Three fragments of ceramic building material were recovered from deposit 4009. While a secure identification was not possible, they are probably Roman brick or *tegula* fragments.

Duxford Farm

Four fragments of ceramic building material were identified. A likely fragment of Roman *imbrex* was recovered from deposit 1332, and a flat medieval roof tile fragment from deposit 1363. The remaining material includes a small tile fragment from fill 2004 and ceramic field drain fragments from deposit 1363, dating from the 19th or 20th centuries.

Kingston Hill Farm (evaluation)

Three fragments of ceramic tile were recovered from the topsoil. Two were flat medieval roof tiles and the third appears to be a residual fragment of Roman box-flue tile.

Kingston Hill Farm

A single fragment of medieval flat roof tile was recorded as residual material from modern ditch fill 2050. Two very small fragments of ceramic building material from fills 2011 and 2022 could not be further identified.

Statement of potential and recommendations for further analysis

The small and well-dispersed Roman group presents no potential for further work. The larger medieval group from Pennyswick Farm is of interest because this material may shed further light on the nature of the structure identified there. A note recording this material should be included in any published report, however further recording or detailed reporting is not recommended.

APPENDIX 5: FIRED CLAY by A. Crawford

In total, 78 fragments of fired clay weighing 457g were recovered. The material was counted, weighed and recorded by fabric group with 9 distinct fabrics recorded based on hardness, firing colour and inclusions. Only one fired clay object was recorded. The remaining material comprises small amorphous fragments from which little information could be retrieved and is not discussed further.

Fabrics

- FC1: mid-brown sandy fabric, rare mica
- FC2: mid-brown sandy fabric, rare mica; common iron pellets/flecks
- FC3: burnt, fine fabric
- FC4: mid-brown fabric; occasional sand, clay pellets and reddish brown sandstone
- FC5: mid-brown fabric; coarse texture with calcareous inclusions
- FC6: orange to brown, fine fabric with bands of occasional bands of greyish clay
- FC7: Pale brown, coarse and sandy fabric
- FC8: Mid to dark brown, coarse and sandy fabric
- FC9: soft, pale orange fine fabric, frequent pale grey clay pellets, quartz-like inclusions, rare ironstone and reddish brown sandstone.

Summary

Watching brief (field AA)

A fragment of clay plate was recovered from layer 1000. The plate was of low-fired clay with a smooth surface and a body that thickened away from the rim. Plates of this type are of undetermined function although comparable examples have been recovered from Early or Middle Iron Age deposits (Barclay and Wait 2004, 384-5).

Statement of potential and recommendations for further analysis

The fired clay assemblage was of very limited archaeological potential and no further work is required. The assessment report and catalogue would provide an adequate record for the purpose of the archive.

References

Barclay, A. and Wait, G. A. 2004 'Fired Clay', in Lambrick, G. and Allen, T. Gravelly Guy, Stanton Harcourt: The Development of a Prehistoric and Romano-British Community, Oxford Archaeology, Thames Valley Monograph No.21

APPENDIX 6: COINS by A. Crawford And E.R. McSloy

Eleven coins were identified with provisional identifications in Table 16. A single Iron Age issue was recorded as an unstratified find from Watching Brief Field G. Roman coins were recorded together with single issues of medieval and post-medieval date. Identification was difficult in some instances due to surface wear as well as soil and corrosion products obscuring surface detail. Some coins will require cleaning to enable full identification.

Summary by Site

Pennyswick Farm

A worn silver medieval penny, probably of Henry V (1413–22), was recorded from deposit 2001.

Duxford Farm

Single coins from deposits 1197 (RA 73) and 1151 (RA 60) were identified as Roman Radiate coins of late 3rd or early 4th-century date. A nummus of the House of Valentinian from deposit 1004 (RA 1) dates *c*. 364 to 378 AD.

Watching brief Field AA

Five Roman coins were recovered from deposit 1000. All were Late Roman bronze types with two identified as nummi issued between *c*. 354 and 361 during the reign of Constantius II. Two more nummi were tentatively dated to 337–341 and 364–378.

Watching brief Field G

An unstratified Iron Age silver coin of Eppilus of the Atrebates, probably struck at *Calleva* (Silchester) in the later 1st century BC or early 1st century AD was recovered. The obverse featured a bearded head facing right within a pelleted border and the reverse shows a lion walking right and the partial legend EPP COMF (Van Arsdell, 417).

Watching Brief Field IA

A George III 1797 copper 'Cartwheel' or 'Soho' one penny coin was recovered as an unstratified find.

Statement of potential and recommendations for further analysis

The stratified (Roman) coins are of significance as chronological markers for site activity and for refining the dates provided by the pottery. The surface-collected Roman issues are of less significance in this respect, although these are in good condition. The (unstratified) Iron Age silver unit is of some intrinsic interest as an example of a coin type more common from counties to the south and east and warrants photographing for publication and some comment with regard to the distribution of comparable coins. A full coin list providing RIC/LRBC (Kent *et al.* 1960) and other identifiers as appropriate should be prepared for the Iron Age, Roman and medieval coins for publication/archive purposes. Five Roman coins will require cleaning by a specialist conservator in order to confirm identification.

Site		context	Fill of	RA. no.	Classification	Date
Watching Field G	brief	-	(topsoil)	-	Silver Unit of Eppilus	LC1BC-EC1
Watching Field AA	brief	1000	(topsoil)	-	AE4 unidentified	C4
Watching Field AA	brief	1000	(topsoil)	-	AE4, Obverse: Deceased Constantine I; Reverse: Quadriga going upwards r.	337-341
Watching Field AA	brief	1000	(topsoil)	-	AE3, Reverse: Victory walking left with a wreath	364-378
Watching Field AA	brief	1000	(topsoil)	-	AE4 (copy), Reverse: soldier spearing barbarian fallen from a horse	354-361
Watching Field AA	brief	1000	(topsoil)	-	AE4 (copy), Reverse: soldier spearing barbarian fallen from a horse	354-361
Duxford Fa	rm	1197	1195	73	Unidentified radiate	LC3-EC4
Duxford Fa	rm	1151	1151	60	Unidentified radiate	LC3-EC4
Duxford Fa	rm	1004	(layer)	1	AE4, Reverse: Emperor with standard going r. dragging a captive	364-378
Pennywick Farm		2001	(topsoil)	_	Penny: Henry V	1413-22
Watching Field IA	Brief	U.S.	_	_	Penny: George III 'Cartwheel' coinage	c. 1797

Table 16: Coins summary

References

Kent, P. V. Carson, J. P. C. and Hill, R. A. G. 1960 Late Roman Bronze Coinage: A.D. 324-498, London, Spink and Son

Van Arsdell, R. D. 1989 Celtic coinage of Britain, London, Spink

APPENDIX 7: METALWORK by A. Crawford

In total, 98 items of metal were recovered from Broad Blunsdon, Pennyswick Farm, Duxford Farm and Kingshill Farm and as surface finds during the watching brief. The majority of items are iron and the condition of most material is poor with the ironwork brittle and exhibiting extensive corrosion. All objects are currently stable and stored appropriately within sealed plastic boxes and with humidity controlled.

Summary by material class and area

Lead

Watching brief (Field AA) Fragments of irregularly-shaped lead waste/spills were recovered from deposit 1000.

Watching brief (Field G)

Fragments of irregular waste lead were recovered as unstratified finds.

Copper alloy

Broad Blunsdon (evaluation)

A copper alloy lace-end was recovered from fill 104. Lace ends were utilised to sheath the ends of leather 'points' used in medieval and later dress, in particular to fasten doublet to hose. Being riveted, this example may be late medieval.

Duxford Farm

A belt buckle of single square frame type with a riveted folded plate and punched decoration (RA 16) was recovered from deposit 1004. It was of a type with a potentially long lifespan, probably during the late medieval or early post-medieval periods.

Iron

Objects of iron consisted of nails and household or agricultural tools. Identification was difficult in some instances due to general condition and corrosion products. The nails were of handmade types produced from the Roman period onwards. Where present they featured flat rounded-disc heads and a square or rectangular cross section. The majority of nails were shaft fragments only and are not discussed in detail. A number of iron objects will require X-raying to enable full identification.

Broad Blunsdon (evaluation)

Six nail fragments from deposits 104, 106 and 132.

Pennyswick Farm

Eight nails were recorded from deposits 2005, 2007, 2009, 2018 and 2021. An iron ring from deposit 2005 appeared to be a post-medieval or later harness fitting or machine component. A possible machine bucket 'tooth' from the same deposit is of 20th century date.

Farringdon Compound (evaluation)

A single piece of iron slag was recovered from deposit 4009

Duxford Farm

Nine nails were recovered from deposits 1148, 1275, 1135, 1119 and 1194 along with a reaping hook from deposit 2014 (Manning 1985, 55) and a knife or chisel fragment (RA 82) from deposit 1197 (ibid., 21). Another implement of forked form with a flat tang (RA 81) was recovered from deposit 1194 and is similar to Manning's F67 baling fork (ibid.), although an X-ray would be required to confirm this. Unidentified iron objects included a cube of iron (RA 80) from deposit 1199 and a small sheet fragment from deposit 1065.

Kingston Hill Farm

A quantity of iron fragments from deposit 2017 included pieces of either a knife blade or a set of shears (RA 1).

Watching brief (Field AA)

A Roman stylus (Manning type 1a) was recorded from deposit 1000. It was in corroded condition and bent in the middle at roughly 45 degrees. X-ray analysis may determine if the object was decorated and reveal any features hidden by corrosion. Further iron finds included a nail and nail fragments from deposits 1000 1003 1004 and 1006.

Watching brief (Field DA)

Nine highly corroded and fragmentary objects were recovered as unstratified material. The majority appear to be nail fragments and are not discussed further.

Watching brief (Field G)

Ten highly corroded and fragmentary objects were recovered as unstratified material. The majority appear to be nail fragments and the material is not discussed further.

Statement of potential and recommendations for further analysis

The metalwork assemblage is restricted in size and range and is of very limited archaeological significance. For the most part, recording undertaken for the assessment is adequate for the purposes of the archive. Some further work is recommended for selected objects of iron, to include X-radiography to clarify form and description/drawing for publication.

Such further work is recommended for 5 items: the stylus from Watching brief deposit 1000 (Field AA); the possible reaping hook from Duxford Iron Age ditch 2013, deposit 2014; the knife or chisel fragment (RA 82) from Duxford enclosure ditch 1195, deposit 1197; the forked object (RA 81) from Duxford late Roman pit 1193, deposit 1194 and the knife blade/shears from Kingston Hill Farm modern deposit 2017 (RA 1).

References

Manning, W.H., 1985 Catalogue of the Romano-British Iron Tools, Fittings and Weapons in the British Museum, London

APPENDIX 8: GLASS by A. Crawford

The glass assemblage comprises six vessel fragments and a glass bead. Two of the vessel fragments were identified as Roman and the glass bead is of earlier Anglo-Saxon date. The remaining glass assemblage comprises late post-medieval and modern bottle glass and is not discussed further.

Filchampstead

A Roman glass vessel lip in pale green glass was recovered from deposit 3060.

Watching brief (Field AA)

A slightly pinched rim fragment in natural green glass of probable Roman date was recovered as unstratified material. A glass bead of sub-melon type was recovered from deposit 1000 and is 'black' coloured and multilobed, or gadrooned. The bead is probably Anglo-Saxon, although beads of this type were made at Trier from the late 4th century onwards (Guido and Welch 1999).

Statement of potential and recommendations for further analysis

The glass bead should be described fully and illustrated or photographed for publication. The remaining glass is of limited archaeological significance and no further work is required.

References

Guido, M. and Welch, M. 1999 The glass beads of Anglo-Saxon England c. AD 400-700: a preliminary visual classification of the more definitive and diagnostic types. Rochester: Reports of the Research Committee of the Society of Antiquaries of London 56

APPENDIX 9: RESIDUES (METALLURGICAL AND OTHER) by E.R. McSloy

Metallurgical residues

Small quantities (401g) of metallurgical residues were recovered from Duxford Farm, Fichampstead and Kingston Hill (Table 17). Most came from undated deposits, although material from Filchampstead ditch fill 3073 occurred in association with Late Iron Age pottery. All of the recovered material comprises indeterminate ironworking slag of moderate density and blocky form which is likely to be of mainly iron silicate composition. Such material is undiagnostic of process, with visually similar material produced by both iron smithing or smelting processes. The absence of slags with the dense and 'ropey' structure common to smelting slags is perhaps an indication that most material relates to smithing activity.

Fuel ash

In addition to the ironworking slag, small quantities of 'fuel ash' (146g) were recovered from Iron Age deposits at Duxford Farm. The formation of fuel ash slag results from elevated temperatures and the reaction between alkaline fuel ash and silicates present in either a clay lining or in sandy ground surfaces. As such it can result from non-metallurgical, heat-intense processes.

Statement of potential and recommendations for further analysis

As a small and dispersed group comprising material not indicative of a particular process, there is no potential for further analysis.

Table 17: residues summary

Site	Context	Class	Weight(g)
Duxford Farm	1001	indet. ironworking slag	9
	1006	indet. ironworking slag	24
	1050	indet. ironworking slag	134
	2008	fuel_ash	101
	2014	fuel_ash	44
	2034	fuel_ash	1
Filchampstead	3073	indet. ironworking slag	160
-	3086	indet. ironworking slag	1
Kingston Hill Farm	2068	indet. ironworking slag	6
	2094	indet. ironworking slag	58
Kingston Hill Farm (eval)	1001	indet. ironworking slag	9

APPENDIX 10: WORKED STONE by F. Roe and A. Crawford

Small quantities of utilised or burnt stone were recovered. A quern stone fragment and utilised items are described below.

Summary by site

Duxford Farm

A single quern fragment (RA 46) was recovered from ditch 1092 (fill 1095). It is of rotary type of Late Iron Age or Roman date and the stone type is identifiable as Upper Old Red Sandstone quartz conglomerate originating from the Forest of Dean/Wye Valley. It is a small fragment and it is unclear whether from an upper or lower stone.

Kingston Hill farm

A flat fragment of fine-grained, grey-coloured sandstone (RA 3) appears to be a river-worn cobble, although it exhibits wear and smoothing consistent with use as a whetstone. It was recovered from medieval deposit 2085.

Filchampstead

A quartzite cobble from Late Iron Age/1st century AD ditch fill 3073 is discoloured to a reddish pink and is partially heat shattered. Uses as a pot boiler for heating water or food, or merely as burnt stone resulting from domestic or other processes are possible. Another quartzite cobble from deposit 3111 was disc-shaped and exhibits percussion damage possibly resulting from use as a hammerstone.

Longleys House

A small worked chalk object was recorded from deposit 1168 (RA 74). The item was 24mm long and roughly cylindrical in shape and of unknown usage.

Statement of potential and recommendations for further analysis

The stone assemblage is of very limited archaeological potential and little additional work is required. The assessment report and catalogue serve to provide an adequate record for the purpose of the archive. The catalogue descriptions for worked stone items might be included in the final publication, although it is not considered necessary to illustrate these items.

Site	Context	Context type	R. a	Description	Stone
Duxford Farm	1095	3rd fill of ditch 1092	46	Fragment with part of grinding surface, probably from rotary quern	Upper Old Red Sandstone quartz conglomerate, from Forest of Dean/Wye Valley
Kingston Hill	2085	fill of ditch 2084	3	Whetstone fragment	Fine-grained sandstone

Table 18: Worked stone catalogue

APPENDIX 11: CLAY TOBACCO PIPE by E.R. McSloy

A total of 19 fragments of clay tobacco pipe (83g) was recovered. Almost all fragments were recovered as unstratified material, mostly as surface finds from the watching brief (Fields E, G, I, L, P, R, S, V, AA). Stratified pieces include stem fragments from Filchamstead (furrow fill 3038) and Kingston Hill (ditch fill 2007). Two bowl fragments were recovered as unstratified finds from Duxford Farm. Neither these nor the stem fragments are marked but one bowl fragment from Duxford Farm was sufficiently complete to enable comparison with Oswald's simplified typology (1975), suggesting a date in the second half of the 17th century. The remainder can be assigned very broad dating spanning the later 16th to 19th centuries. The 17th century bowl fragment and (unstratified) stems from Duxford Farm and Watching brief Field S exhibit the sandy fabric exhibited by pipes made in Oxford.

Statement of potential and recommendations for further analysis

As a small and largely unstratified group, the clay pipe assemblage is of very limited significance and presents no potential for further analysis. Recording undertaken as part of this assessment is sufficient for the purposes of the archive and no further work is recommended.

References

Oswald, A. 1975 Clay Pipes for the Archaeologist Oxford, British Archaeological Reports 14,

APPENDIX 12: THE ANIMAL BONE by Jonny Geber

Animal bone was recovered from Filchampstead, Kingston Hill Farm, Duxford Farm, Pennyswick Farm and Broad Blunsdon. This report quantifies the osteological assemblage, summarises the preliminary findings, gives recommendations for future work, and assesses the scientific potential and significance of the bone material (see EH 2002; Payne 1991).

The total collection comprises 2027 fragments (23706g). The majority is moderately well preserved with occasional cortical erosion and root etching (Table 19). The dominant negative taphonomical impact on this material comprises post-depositional fragmentation which limits the potential for metrical analysis and the likelihood of identifying slaughter/butchery cut marks.

Table 19 The animal bone assemblage in quantity by site

Site	Fragments	Weight (g)	Preservation
Filchampstead	190	2282.86	Moderate
Kingston Hill Farm	317	397.00	Good
Duxford Farm	1180	14,620.86	Moderate
Pennyswick Farm	70	1632.96	Excellent
Broad Blunsdon	280	1124.18	Good
Total	2027	23705.51	Moderate/Good

Methodology

The assemblage was primarily hand collected during the fieldwork and this has inevitably resulted in a bias towards larger species and an absence of micromammals. The bones were processed, washed and labelled inhouse within a controlled laboratory environment.

The bones were quickly scanned and identified to species (with the aid of an osteological reference collection and Ellenberger and Baum (1912), Iregren (ed.) (2002), Prummel (1988), Schmid (1972) and Wolsan (1982) and quantified by potential in terms of age and sex determinations and metric analysis, and the study of slaughter/butchery marks, pathologies and taphonomy. The assemblage was quantified by refitted fragment counts and weight.

Results

Filchampstead

Animal bone comprising 190 fragments (2331g) was recovered (Tables 20 and 26). The bone is moderately well preserved and derived from contexts dated to the Early to Middle Iron Age and Late Iron Age, with the emphasis on the latter. The bone from both periods is typical of ordinary domestic waste. No clear slaughter/butchery marks were identified.

Early to Middle Iron Age

The Early to Middle Iron Age assemblage comprised 39 fragments from pits 3030, 3048 and 3084 and ditches 3032 and 3075. Nine fragments were identified to species, of which six were of caprovine (*Ovis aries/Capra hircus*) and three cattle (*Bos taurus*).

Late Iron Age

The Late Iron Age assemblage comprised 134 fragments, all from ditch fills (Table 20). 55 fragments were identifiable to species, of which an equal proportion of caprovine and cattle were noted, with an additional seven fragments of horse, five of pig (*Sus sp.*) and one of dog (*Canis familiaris*).

A feature of particular interest is possible box 3123 within ditch 3120 which was associated with possible structured deposition. The upper fill of this box included notable finds such as a Neolithic stone axe and the left and right coxae (pelvis) of a horse were found (*Equus caballus*). These were both from the same animal and were articulated when discovered. Considering that these bones are the only specimens noted in this deposit, they are of potential significance as part of a possible structured deposit.

Also noteworthy is a horse skull found in fill 3110 of the same ditch (3120). This specimen displayed a large apposition of either cement or enamel at the cementoenamel junction of the buccal surface of a premolar tooth. This pathology is likely to be either an enamel pearl or hypercementosis. An additional alternative diagnosis is a dental benign cementoma, which is a rare odontogenic neoplasm (Kreutzer *et al.* 2007). It is anticipated that further investigation will be able to confirm a definite diagnosis of this pathology.

Table 20 Identified ani	mal specie	s at Filch	ampstead,	by preliminary	phases.	BOS = Cattle	; S/G =
Sneep/Goat; SUS = Pig; E	QU = Horse	; CAN = Do	g; indet. = in	determinable.			
Period	BOS	S/G	SUS	EQU	CAN	Indet.	Total
Early to Middle Iron Age	3	6	-	-	-	30	39
Late Iron Age	20	22	5	7	1	79	134
Undated	3	8	-	-	-	6	17
Total	26	36	5	7	1	115	190
%NISP	34.67	48.00	6.67	9.33	1.33	-	-

Kingston Hill Farm

A total of 317 fragments of animal bones were recovered, primarily from medieval contexts, with three bone fragments within furrows (Table 21). The assemblage displayed a good degree of preservation. Bones from cattle and caprovine were found in equal quantities, with the remaining identified bone being from pig, horse, dog, cat *(Felis catus)* and bird *(Aves sp.)*. Three bones displayed clear butchery marks, and nine fragments were burnt.

The main domesticates were present in both ditches and pits. of potential note is the general lack of pig bones in ditch fills and of caprovine bones in pits which may reflect differences in household management of slaughter and food waste..

Table 21 Identifie	d animal s	species at	Kingstor	h Hill Far	m, by type	e of cor	text. BOS	S = Cattle	e; S/G =
Sheep/Goat; SUS =	Pig; EQU =	= Horse; CA	N = Dog;	FEL = Cat;	AVE = Birc	d; Indet. =	Indetermi	nable.	
Feature type	BOS	S/G	SUS	EQU	CAN	FEL	AVE	Indet.	Total
Medieval									
Ditch	10) 21	2	3	1	-	1	38	76
Pit	21	7	12	18	-	-	-	150	208
Post-medieval									
Furrow	-	- 1	1	-	-	-	-	1	3
Indet.									
Layer	-		-	-	-	-	-	5	5
n/a	3	3 6	1	-	-	1	-	14	25
Total	34	4 35	16	21	1	1	1	208	317
%NISP	10.73	3 11.04	5.05	6.62	0.32	0.32	0.32	-	-

Duxford Farm

In total 1180 fragments (14,621g) of animal bone were recovered (Table 22). Butchery marks were noted on 13 bones, and 19 fragments had been burnt.

Middle Neolithic

The assemblage from the Middle Neolithic pits comprised 118 poorly preserved bone fragments. These were dominated by remains of red deer (*Cervus elaphus*), and comprised meat poor elements such as metapodials and phalanges. A large proportion of the bone from these pits remained unidentifiable at the assessment, but more detailed analysis may confirm these as additional red deer elements. No butchery marks were noted on these remains, perhaps due to the considerable cortical erosion but such marks might be identified through further analysis. An additional ten bones were identified as cattle, caprovine and pig. The pig bones may be of wild boar (*Sus scrofa*), and would therefore require metric analysis (e.g. Albarella *et al.* 2009; Payne and Bull 1988).

Middle to Late Iron Age

Middle to Late Iron Age features produced 30 fragments of animal bone, of which five were identified to species. Fill 1014 of pit 1013 contained 19 bones (206g), of which one bone each of cattle, caprovine and pig were identified. Fill 1115 of curvilinear ditch 1114 contained four bones (42g), of which one was identified as caprovine. Fill 1125 of ditch 1124 included seven poorly preserved bones (21g), of which one was positively identified as caprovine.

Early Roman

Fills 1123 and 1148 of Early Roman ditches 1122 and 1147 contained 23 animal bones (278g), of which only three fragments could be identified. These comprised one cattle and two caprovine bones from fill 1123.

Late Roman

Late Roman contexts contained a total of 61 fragments (1061g), primarily from ditch fills with a lesser quantity (17 fragments; 56g) from 1194 of pit 1193. There were eleven fragments identified as cattle, nine as caprovine, two as pig, one as horse and two as bird, the latter of a wild species.

Undated

A further 533 fragments derived from undated contexts. A large proportion of these (n: 217) constitute the remains of a cattle skeleton (1101) found buried in pit 1099. This skeleton displayed porotic osseous pathological changes to the proximal articular surface of the left metatarsal diagnosed as a spavin. These are the result of an inflammatory reaction of the tarsal joint, and some suggested aetiologies include severe concussion due to faulty shoeing and heavy work, and from working an animal on a hard surface (Baker and Brothwell 1980, 118). They are most commonly identified in horses, but also frequently noted in archaeological cattle remains.

There is also a left mandible of a badger (*Meles meles*) present the third fill 1152 of ditch 1149. The bone displayed apposition of remodelled bone along the buccal margin of the alveolar process, which is indicative of periodontal disease. Other elements identified to species from undated contexts include bones from caprovine, pig, horse, dog (or possibly fox (*Vulpes vulpes*)), cat and amphibian (*Amphibia sp.*).

Table 22 Identified animal species at Duxford Farm by period BOS = Cattle; S/G = Sheep/Goat; SUS = Pig; EQU = Horse; CAN = Dog; FEL = Cat; CER = Red deer; MEL = Bagder; AVE = Bird; AMP = Amphibian; Indet. = Indeterminable

Period	BOS	S/G	SUS	EQU	CAN	FEL	CER	MEL	AVE	AMP	Indet.	Total
M/L Neolithic	1	5	4	-	-	-	14	-	-	-	94	118
M to L Iron Age	1	3	1	-	-	-	-	-	-	-	25	30
L Iron Age/E Roman	1	2	-	-	-	-	-	-	-	-	20	23
L Roman	11	9	2	1	-	-	-	-	2	-	36	61
Undated	306	78	6	6	15	1	1	1	-	1	533	948
Total	320	97	13	7	15	1	15	1	2	1	708	1,180
%NISP	67.80	20.55	2.75	1.48	3.18	0.21	3.18	0.21	0.42	0.21	-	-

Pennyswick Farm

Animal bones from this site were recovered from four contexts, of which the majority were found in layer 2005, a possible surface or make-up layer (63 fragments; 1448g). The assemblage is dominated by juvenile and mature caprovine remains from a minimum of five animals (Table 23). An additional three bones of cattle and bones of pig, horse and dog were also present in this context.

Table 23 Id	lentified	animal	bones	by MI	IE ((minimum	number	of	elements)	and	MNI	(minimum	number	of
individuals) in layeı	r contex	ct 2005	at Per	ny	swick Farn	n							

Таха	Element	MNE					
		Left	Axial	Right			
Caprovine	Skull	-	1	-	1		
-	Mandible	5	-	3	5		
	Cerv.vert.	-	1	-	1		
	Lumb.vert.	-	2	-	1		
	Humerus	1	-	1	1		
	Radius	1	-	-	1		
	Coxae	-	-	2	2		
	Femur	2	-	1	1		
	Tibia	3	-	2	3		
	Metatarsal	1	-	1	1		
Cattle	Humerus	1	-	-	1		
	Rib	1	-	-	1		
Horse	Humerus	1	-	-	1		
	Tibia	-	-	1	1		
Pig	Coxae	1	-	-	1		
Dog	Metatarsus III	1	-	-	1		

The fact that articulated remains were identified during the archaeological excavation could suggest that these remains could constitute carcasses rather than food waste. No slaughter/butchery marks were noted on the bones. Considering the dominance of caprovine bones, it may be suggested that the structure is the physical remains of a sheep pen (Larje 2008, 276).

The foundation trench/ditch associated with the surface (contexts 2007, 2009, and 2018) yielded seven fragments of bone (185g), of which the fill 2018 contained one caprovine bone fragment (Table 24).

Table 24 Identified animal species at Pennyswick by period BOS = Cattle; S/G = Sheep/Goat;	SUS = Pig;
EQU = Horse; CAN = Dog; Indet. = Indeterminable.	

Period	BOS	S/G	SUS	EQU	CAN	Indet.	Total
Medieval	4	41	1	1	1	16	64
Undated	2	3	-	-	1	0	6
Total	6	44	1	1	2	16	70
%NISP	11.11	81.48	1.85	1.85	3.70	-	-

275

280

Broad Blunsdon

A total of 280 fragments (1124g) of animal bone were recovered (Table 25). A large proportion are currently from undated contexts and the assemblage is dominated by caprovine bones (n: 57), followed by cattle remains (n: 24). Of the rest, 19 bird bones, nine pig bones and one dog bone were present. One cattle bone (from ditch fill 106) displayed a clear butchery cut mark. Three burnt bone fragments were also present.

Roman

Fill 1006 of Roman ditch 1005 contained an unidentifiable burnt bone fragment (1g).

57

58

52.25

24

24

21.62

Anglo-Saxon

Undated

%NISP

Total

Four bones were present in second fill 1017 of posthole 1015, one of which was identified as caprovine.

Table 25 Identified a	inimal spe	cies at Br	oad Blunsdo	on, by perio	d BOS = Cat	tle; S/G = S	Sheep/Goat;	SUS =
Pig; CAN = Dog; AVE	= Bird; Ind	et. = Indete	erminable					
Period	BOS	S/G	SUS	CAN	AVE	Indet.	Total	
Roman		-	-	-	-	-	1	1
Saxon		-	1	-	-	-	3	4

9

9

8.11

1

1

0.90

19

19

17.12

165

169

Potential and recommendations

The animal bones have been washed and labelled, and need no further pre-treatment. Considerable fragmentation and occasional poor preservation inhibits any detailed metric analysis of the remains, as well as any discussion on slaughter/butchery practices. The main potential of the assemblage is in indicating the site - specific animal husbandry practices. This would be conducted through species and element identifications, and discussion of the remains with regards to the stratigraphy.

Detailed analysis should be undertaken on the material from the Neolithic pits at Duxford Farm, which would include re-fitting the bone fragments to determine whether individual bones occurred in different pits, and the overall number of bones present. Considering the identified elements of red deer, it seems likely that these would have constituted articulated segments of game carcasses, and further analysis would be able to investigate this. Detailed analysis might also identify cut marks, even though much of the outer cortical surfaces were eroded, which would investigate the possibility that these remains are of hunted game. Considering the very few reported instances of such specimens (Bradley 1978, 86; Thomas 1991, 21), this find would add to our knowledge of prehistoric hunting in Britain.

It is recommended that further research into the osteological findings associated with potential sheep pen at Pennyswick Farm is made, as this has the potential to make a significant contribution to the archaeological identification of such features in the future. This could mainly be achieved through a literature review of similar archaeological features and animal bone deposits in Britain and elsewhere.

For the final publication text, it is recommended that the animal bone assemblage from each site is discussed separately. Particular attention should be given to the material from the Neolithic pits at Duxford Farm and the possible sheep pen at Pennyswick Farm. It is recommended that photographs are taken of the pathological specimens for illustrative purposes, and that definite diagnoses of the pathologies are made.

References

- Albarella, U., Dobney, K. and Rowley-Conwy, P. 2009 'Size and shape of the Eurasian wild boar (Sus scrofa), with a view to the reconstruction of its Holocene history', *Environmental Archaeology* **14**, 103-136
- Baker, J. and Brothwell, D. 1980 Animal diseases in archaeology. London, Academic Press
- Bradley, R. 1978 The prehistoric settlement of Britain. London, Routledge & Kegan Paul Ltd
- Clark, G.R., O'Connor, S. and Leach, F. (eds) 2008 Islands of inquiry. Colonisation, seafaring and the archaeology of maritime landscapes. Canberra, ANU E Press
- Ellenberger, W. and Baum, H. 1912 Handbuch der vergleichenden Anatomie der Haustiere. Berlin, Verlag von August Hirschwald
- EH (English Heritage) 2002 Environmental archaeology. A guide to the theory and practice of methods, from sampling and recovery to post-excavation. London, English Heritage
- Iregren, E. (ed.) 2002 Bildkompendium i historisk osteologi Department of Archaeology and Ancient History Report Series 85. Lund, University of Lund
- Kreutzer, R., Wohlsein, P., Staszyk, C., Nowak, M., Sill, V. and Baumgärtner, W. 2007 'Dental benign cementomas in three horses', *Veterinary Pathology* **44**, 533-536
- Larje, R. 2008 'Stora Karlsö. A tiny Baltic island with a puzzling past', in Clark et al. 2008, 265-279
- Payne, S. 1991 Assessment of animal bone collections from excavations Ancient Monuments Laboratory (AML) Technical Note. London, English Heritage
- Payne, S. and Bull, G. 1988 'Components of variations in measurements of pig bones and teeth, and the use of measurements to distinguish wild from domestic pig remains', *Archaeozoologica* **2**, 27-66
- Prummel, W. 1988 Distinguising features on postcranial skeletal elements of cattle, Bos primigenius f. taurus, and red deer, Cervus elaphus Schriften aus der Archäologisch-Zoologischen Arbeitsgruppe Schleswig-Kiel Heft 12 Kiel, Archäologisch-Zoologische Arbeitsgruppe Schleswig-Kiel
- Schmid, E. 1972 Atlas of animal bones for prehistorians, archaeologists and quaternary geologists. London, Elsevier Publishing Company
- Thomas, J. 1991 Rethinking the Neolithic. Cambridge, Cambridge University Press
- Wolsan, M. 1982 'A comparative analysis of the ribs of ungulates for archaeozoological purposes', *Acta Zoologica Cracoviensia* **26**, 167-228

Table 26 Quantity of animal bones by fragment count (NISP), weight and scientific potential from Filchamstead by context BOS = Cattle; S/G = Sheep/Goat; SUS = Pig; EQU = Horse; CAN = Dog; LM = Large sized mammal; MM = Medium sized mammal; Indet. = Indeterminable; Taph. = Taphonomy; A = Ageing; S = Sexing; M = Metrics; P = Pathologies; BU = Butchery; B = Burnt.

Contoxt	Таха								Total	Weight	Po	tentia	I		Tapł	า.	Proconvotion
Context	BOS	S/G	SUS	EQU	CAN	LM	MM	Indet.	rotar	(g)	А	Μ	S	Ρ	ΒU	В	FIESEIVALION
3008	-	-	-	-	-	-	-	1	1	0.85	-	-	-	-	-	-	Moderate
3030	1	-	-	-	-	5	-	9	15	30.12	-	1	-	-	-	1	Poor
3032	-	2	-	-	-	2	-	5	9	22.88	-	-	-	-	-	-	Moderate
3048	-	1	-	-	-	-	-	-	1	4.18	-	1	-	-	-	-	Very poor
3056	1	-	-	-	-	3	-	-	4	43.30	-	-	-	-	-	-	Moderate
3060	-	8	-	-	-	1	-	-	9	35.19	2	-	-	-	-	-	Good
3065	-	1	-	-	-	-	2	-	3	5.20	-	-	-	-	-	2	Moderate
3068	-	1	-	-	-	-	-	-	1	0.82	-	-	-	-	-	-	Good
3070	4	-	-	3	-	11	-	-	18	222.10	-	-	-	-	-	-	Moderate
3071	-	1	-	-	-	-	-	-	1	7.20	-	1	-	-	-	-	Moderate
3072	3	2	-	1	-	8	2	-	16	133.88	1	2	-	-	-	-	Moderate
3073	5	1	1	2	-	3	-	-	12	670.10	2	5	-	-	-	-	Moderate
3075	2	2	-	-	-	-	-	6	10	34.42	-	1	-	-	-	-	Very poor
3084	-	1	-	-	-	-	-	3	4	6.99	-	-	-	-	-	-	Very poor
3094	2	-	-	-	-	-	-	-	2	9.94	-	-	-	-	-	-	Good
3096	1	5	-	-	1	3	-	-	10	73.01	-	2	-	-	-	-	Moderate
3097	1	-	-	-	-	-	-	-	1	39.84	-	-	-	-	-	-	Moderate
3098	-	1	-	-	-	-	-	-	1	7.79	-	1	-	-	-	-	Poor
3109	-	1	-	-	-	-	-	-	1	19.21	1	1	-	-	-	-	Good
3110	-	1	1	1	-	-	1	-	4	660.22	2	2	-	1	-	-	Moderate
3129	-	-	-	-	-	1	-	-	1	1.72	-	-	-	-	-	-	Moderate
3184	3	3	3	-	-	12	-	16	37	150.41	-	-	-	-	-	-	Moderate
3185	1	4	-	-	-	5	7	-	17	75.98	-	1	-	-	-	-	Poor
3186	-	1	-	-	-	-	6	-	7	6.39	-	-	-	-	-	-	Poor
3192	1	-	-	-	-	3	-	-	4	8.78	-	-	-	-	-	-	Moderate
3198	1	-	-	-	-	-	-	-	1	12.34	-	-	-	-	-	-	Moderate
All	26	36	5	7	1	57	18	40	190	2,330.54	8	18	0	1	0	3	Moderate
%NISP	34.67	48.00	6.67	9.33	1.33	-	-	-	-	-	-	-	-	-	-	-	-

Table 27 Quantity of animal bones by fragment count (NISP), weight and scientific potential from Kingston Hill Farm by context BOS = Cattle; S/G = Sheep/Goat; SUS = Pig; EQU = Horse; CAN = Dog; FEL = Cat; AVE = Bird; LM = Large sized mammal; MM = Medium sized mammal; Indet. = Indeterminable; Taph. = Taphonomy; A = Ageing; M = Metrics; S = Sexing; P = Pathologies; BU = Butchery; B = Burnt

Contout	Таха										Total	Weight	Pote	entia			Tapł	ו.	Droconvotion
Context	BOS	S/G	SUS	EQU	CAN	FEL	AVE	LM	MM	Indet.	Total	(g)	Α	Μ	S	Ρ	ΒÚ	В	Preservation
1000	3	6	1	-	-	1	-	5	-	8	24	100.15	1	-	1	-	1	-	Moderate
1002	-	-	-	-	-	-	-	-	-	4	4	1.85	-	-	-	-	-	-	Moderate
1003	-	-	-	-	-	-	-	1	-	-	1	1.83	-	-	-	-	-	-	Moderate
1019	-	-	-	-	-	-	-	-	-	1	1	0.67	-	-	-	-	-	1	Good
2011	15	4	10	17	-	-	-	49	37	39	171	2,696.59	12	1	11	-	-	-	Good
2013	1	3	-	-	1	-	-	1	2	-	8	45.48	-	-	1	-	-	-	Moderate
2015	-	-	-	-	-	-	-	3	1	-	4	29.83	-	-	-	-	-	-	Good
2017	-	5	1	-	-	-	-	-	-	5	11	15.85	-	-	-	-	-	7	Poor
2019	-	1	-	1	-	-	-	-	-	1	3	164.04	1	-	1	1	-	-	Good
2026	1	-	-	-	-	-	-	-	-	-	1	23.40	1	-	-	-	-	-	Moderate
2028	2	-	-	-	-	-	-	-	-	-	2	26.37	1	-	2	-	-	-	Moderate
2031	-	1	1	-	-	-	-	-	-	2	4	19.03	-	-	-	-	-	-	Good
2039	-	1	1	1	-	-	-	-	-	8	11	36.45	1	-	1	-	-	-	Good
2041	-	1	-	-	-	-	-	-	-	-	1	0.96	-	-	-	-	-	-	Good
2043	1	-	-	-	-	-	-	-	-	5	6	39.61	-	-	-	-	-	-	Good
2047	-	-	-	-	-	-	-	-	-	1	1	0.62	-	-	-	-	-	-	Moderate
2048	-	1	-	-	-	-	-	-	1	-	2	5.54	-	-	1	-	1	-	Good
2050	1	-	-	-	-	-	-	-	-	-	1	58.44	1	-	-	-	-	-	Good
2054	-	-	-	-	-	-	-	-	-	1	1	0.75	-	-	-	-	-	-	Moderate
2056	2	-	-	-	-	-	-	3	-	-	5	22.15	1	-	1	-	-	-	Good
2058	-	-	1	-	-	-	-	_	-	3	4	5.86	-	-	-	-	-	-	Moderate
2061	1	-	-	1	-	-	-	6	-	-	8	108.68	-	-	-	-	-	-	Good
2064	1	-	-	-	-	-	1	2	1	-	5	23.81	1	-	2	-	-	-	Good
2066	-	-	-	-	-	-	-	-	-	2	2	1.04	-	-	-	-	-	-	Moderate
2068	1	1	-	-	-	-	-	1	-	-	3	86.48	1	-	-	-	-	-	Good
2070	-	1	1	-	-	-	-	-	-	-	2	52.24	1	-	2	-	-	-	Good
2073	-	6	-	-	-	-	-	-	-	2	8	38.09	1	-	1	-	-	-	Good
2077	1	1	-	-	-	-	-	-	1	-	3	186.60	1	1	2	-	-	-	Good
2079	1	-	-	-	-	-	-	-	-	-	1	50.78	-	-	-	-	-	-	Moderate
2081	3	2	-	-	-	-	-	7	-	-	12	39.38	1	-	2	-	-	-	Good
2083	-	1	-	-	-	-	-	-	-	-	1	4.00	_	-	_	-	1	_	Good
2087	-	-	-	-	-	-	-	-	-	-	3	3.06	-	-	-	-	_	-	Moderate
2094	-	-	-	1	-	-	-	1	-	1	3	107.37	-	-	_	_	_	1	Good
All	34	35	16	21	1	1	1	79	43	83	317	3.997.00	25	2	28	1	3	9	Good
%NISP	31.19	32.11	14.68	19.27	0.92	0.92	0.92	-	-	-	-		-	-	-	-	-	-	-

Table 28 Quantity of animal bones by fragment count (NISP), weight and scientific potential from Duxford Farm by context BOS = Cattle; S/G = Sheep/Goat; SUS =Pig; EQU = Horse; CAN = Dog; FEL = Cat; CER = Red deer; MEL = Badger; AVE = Bird; AMP = Amphibian; LM = Large sized mammal; MM = Medium sized mammal; Indet.= Indeterminable; Taph. = Taphonomy; A = Ageing; M = Metrics; S = Sexing; P = Pathologies; BU = Butchery; B = Burnt

Context	Taxa													Total	Weight	Poter	ntial			Taph		Preservation
	BOS	S/G	SUS	EQU	CAN	FEL	CER	MEL	AVE	AMP	LM	MM	Indet.		(g)	А	Μ	S	Ρ	BU	В	
1004	4	3	2	1	1	-	-	-	-	-	8	2	10	31	311.50	1	3	-	-	1	2	Good
1006	-	-	3	-	-	-	-	-	-	-	-	-	-	3	43.95	-	1	-	-	-	-	Poor
1008	-	-	1	-	-	-	10	-	-	-	11	10	38	70	355.74	4	4	-	-	-	-	Poor
1010	-	2	-	-	-	-	-	-	-	-	-	-	-	2	2.00	-	-	-	-	-	-	Poor
1012	-	-	1	-	-	-	-	-	-	-	1	-	-	2	72.03	1	1	-	-	-	-	Poor
1014	1	1	1	-	-	-	-	-	-	-	-	-	16	19	205.58	-	1	-	-	1	2	Moderate
1016	1	3	-	-	-	-	-	-	-	-	-	1	1	6	35.12	1	-	-	-	-	-	Good
1020	-	1	-	-	-	-	-	-	-	-	2	5	3	11	19.91	-	-	-	-	-	-	Moderate
1022	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2.48	-	-	-	-	-	-	Moderate
1029	-	-	-	-	-	-	-	-	-	-	-	-	2	2	0.71	-	-	-	-	-	2	Poor
1038	1	-	-	-	-	-	-	-	-	-	-	-	-	1	144.14	-	-	-	-	-	-	Moderate
1040	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1.27	-	-	-	-	-	-	Moderate
1042	-	-	-	-	-	-	-	-	-	-	2	-	-	2	24.34	-	-	-	-	-	-	Poor
1048	-	1	-	-	-	-	-	-	2	-	-	-	-	3	4.97	-	-	-	-	-	-	Moderate
1050	4	4	1	-	-	-	-	-	-	-	12	-	1	22	180.90	-	-	-	-	-	-	Moderate
1053	2	1	-	-	-	-	-	-	-	-		-	-	3	80.20	-	-	-	-	-	-	Moderate
1058	1	-	-	-	-	-	-	-	-	-	2	-	-	3	94.47	-	-	-	-	-	-	Good
1062	2	-	-	-	13	-	-	-	-	-	1	-	-	16	260.97	-	-	-	-	-	-	Moderate
1064	1	-	-	-	-	-	-	-	-	-		-	-	1	9.61	-	-	-	-	-	-	Good
1068	6	-	-	-	-	1	-	-	-	-	4	-	-	11	238.23	3	1	-	-	3	-	Good
1072	-	1	-	-	-	-	1	-	-	-		-	-	2	75.36	-	1	-	-	-	-	Moderate
1076	6	1	-	1	-	-	-	-	-	-	8	-	-	16	895.89	3	7	1	-	1	-	Moderate
1078	-	2	-	-	-	-	-	-	-	-	6	-	-	8	19.76	-	-	-	-	-	-	Poor
1080	2	-	-	-	-	-	-	-	-	-	5	-	-	7	94.28	-	1	-	-	-	-	Moderate
1082	-	-	-	-	-	-	-	-	-	-	-	1	3	4	8.01	-	-	-	-	-	-	Moderate
1095	2	-	-	-	-	-	-	-	-	-	-	-	8	10	91.82	-	2	1	-	-	-	Moderate
1100	6	-	-	-	-	-	-	-	-	-	20	11	-	37	97.48	-	-	-	-	-	-	Moderate
1101	217	-	-	-	-	-	-	-	-	-	167	-	165	549	5,989.13	40	59	1	1	2	-	Good
1111	-	-	-	-	-	-	-	-	-	1	-	-	1	2	1.29	-	-	-	-	-	-	Good
1113	3	-	-	-	-	-	-	-	-	-	8	-	-	11	294.29	-	2	-	-	1	-	Moderate
1115	-	1	-	-	-	-	-	-	-	-	3	-	-	4	41.76	-	1	-	-	-	-	Moderate
1117	5	39	1	-	-	-	-	-	-	-	-	1	5	51	388.17	35	7	-	-	1	-	Moderate
1123	1	2	-	-	-	-	-	-	-	-	-	-	14	17	269.06	3	3	-	-	-	-	Moderate
1125	-	1	-	-	-	-	-	-	-	-	1	-	5	7	21.04	-	-	-	-	-	-	Poor
1131	3	1	-	-	-	-	-	-	-	-	-	-	-	4	316.19	-	3	-	-	-	-	Good
1142	-	1	-	1	-	-	-	-	-	-	-	-	-	2	521.50	2	2	-	-	-	-	Good
1146	1	-	-	-	-	-	-	-	-	-	-	-	-	1	30.81	-	-	-	-	-	-	Moderate
1148	-	-	-	-	-	-	-	-	-	-	1	5	-	6	8.99	-	-	-	-	-	-	Moderate

Context	Taxa													Total	Weight	Pote	ntial			Tapl	า.	Preservation
	BOS	S/G	SUS	EQU	CAN	FEL	CER	MEL	AVE	AMP	LM	MM	Indet.		(g)	А	М	S	Р	ВÚ	В	
1150	2	1	-	-	-	-	-	-	-	-	-	-	-	3	123.71	1	1	-	-	-	-	Moderate
1151	1	-	-	-	-	-	-	-	-	-	-	-	-	1	20.94	-	-	-	-	-	-	Moderate
1152	2	6	-	-	-	-	-	1	-	-	1	5	5	20	116.98	1	-	-	-	-	1	Moderate
1153	-	1	-	-	-	-	-	-	-	-	1	-	2	4	4.37	-	-	-	-	-	1	Good
1168	-	-	-	-	-	-	1	-	-	-	11	-	7	19	28.09	1	1	-	-	-	11	Poor
1187	-	-	-	-	-	-	-	-	-	-	-	-	2	2	0.55	-	-	-	-	-	-	Poor
1194	1	2	1	-	-	-	-	-	-	-	-	-	13	17	56.44	1	-	1	-	-	-	Moderate
1197	3	1	-	-	-	-	-	-	-	-	6	-	-	10	88.05	-	1	-	-	1	-	Moderate
1199	16	-	-	-	-	-	-	-	-	-	2	4	-	22	450.05	1	1	-	-	-	-	Good
1287	-	-	-	-	-	-	-	-	-	-	7	-	-	7	46.27	-	-	-	-	-	-	Moderate
1297	-	-	-	-	-	-	-	-	-	-	-	-	5	5	7.83	-	-	-	-	-	-	Poor
1338	-	-	-	-	-	-	1	-	-	-	-	-	1	2	9.36	-	-	-	-	-	-	Poor
1339	-	-	-	-	-	-	-	-	-	-	2	-	-	2	4.72	-	-	-	-	-	-	Moderate
1341	-	-	-	-	-	-	2	-	-	-	10	-	-	12	32.30	1	1	-	-	-	-	Poor
1352	-	-	-	-	-	-	-	-	-	-	-	-	2	2	0.55	-	-	-	-	-	-	Moderate
1375	-	1	-	-	-	-	-	-	-	-	1	-	-	2	9.15	-	-	-	-	-	-	Poor
1377	-	-	-	-	-	-	-	-	-	-	-	-	1	1	0.25	-	-	-	-	-	-	Poor
2008	8	8	-	1	1	-	-	-	-	-	11	4	-	33	856.69	8	10	1	-	-	-	Good
2012	1	3	-	-	-	-	-	-	-	-	-	-	-	4	38.66	2	3	-	-	-	-	Good
2014	9	5	2	2	-	-	-	-	-	-	11	6	-	35	949.73	9	10	1	-	2	-	Good
2020	2	-	-	-	-	-	-	-	-	-	-	1	-	3	159.45	1	1	-	-	-	-	Good
2023	-	3	-	-	-	-	-	-	-	-	-	-	-	3	55.29	1	2	-	-	-	-	Good
2024	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1.28	-	-	-	-	-	-	Moderate
2027	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1.56	-	-	-	-	-	-	Moderate
2032	1	-	-	-	-	-	-	-	-	-	-	-	-	1	12.00	-	-	-	-	-	-	Good
2033	4	1	-	-	-	-	-	-	-	-	9	-	-	14	261.99	1	2	-	-	-	-	Good
2034	1	-	-	1	-	-	-	-	-	-	-	-	-	2	20.38	-	-	-	-	-	-	Good
2036	-	-	-	-	-	-	-	-	-	-	-	-	3	3	11.27	-	-	-	-	-	-	Good
All	320	97	13	7	15	1	15	1	2	1	334	57	317	1,180	14,620.86	121	132	6	1	13	19	Moderate
%NISP	67.80	20.55	2.75	1.48	3.18	0.21	3.18	0.21	0.42	0.21	-	-	-	-	-	-	-	-	-	-	-	-

Table 29 Quantity of animal bones by fragment count (NISP), weight and scientific potential from Pennyswick by context BOS = Cattle; S/G = Sheep/Goat; SUS = Pig; EQU = Horse; CAN = Dog; LM = Large sized mammal; MM = Medium sized mammal; Indet. = Indeterminable; Taph. = Taphonomy; A = Ageing; M = Metrics; BU = Butchery; B = Burnt

Context	Таха								Total	Weight	Pote	ential	Tapł	า.	Preservation
	BOS	S/G	SUS	EQU	CAN	LM	MM	Indet.		(g)	А	Μ	ΒU	В	
2005	3	40	1	2	1	15	1	-	63	1,448.03	22	19	-	-	Excellent
2007	-	2	-	-	1	-	-	-	3	18.43	1	2	-	-	Good
2009	2	1	-	-	-	-	-	-	3	152.83	2	1	1	-	Excellent
2018	-	1	-	-	-	-	-	-	1	13.67	-	1	-	-	Excellent
All	8	44	1	1	2	15	1	-	70	1,632.96	25	23	1	-	Excellent
%NISP	14.29	78.57	1.79	1.79	3.57	-	-	-	-	-	-	-	-	-	-

Table 30 Quantity of animal bones by fragment count (NISP), weight and scientific potential from Broad Blunsdon by context

Context	Таха	-		-	•		•		Total	Weight	Pot	ential			Tapł	า.	Preservation
	BOS	S/G	SUS	CAN	AVE	LM	MM	Indet.		(g)	А	Μ	S	Ρ	ВÚ	В	
104	-	2	-	-	-	1	-	5	8	9.74	-	-	-	-	-	-	Poor
106	17	55	8	-	19	23	59	48	229	920.74	13	14	-	-	1	1	Good
124	7	-	-	-	-	11	2	12	32	134.79	2	-	-	-	-	1	Moderate
132	-	-	-	1	-	-	-	-	1	1.34	-	-	-	-	-	-	Poor
134	-	-	-	-	-	-	-	2	2	0.39	-	-	-	-	-	-	Good
206	-	-	1	-	-	-	2	-	3	33.55	-	1	-	-	-	-	Good
1006	-	-	-	-	-	-	-	1	1	1.07	-	-	-	-	-	1	Good
1017	-	1	-	-	-	1	2	-	4	22.56	-	-	-	-	-	-	Moderate
All	24	58	9	1	19	36	65	68	280	1,124.18	15	15	0	0	1	3	Good
%NISP	21.62	52.25	8.11	0.90	17.12	-	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 13: MOLLUSCA by Michael. J. Allen

Methodology

Flots from 19 samples were assessed. These comprised one from Filchampstead and 18 from Duxford Farm (Table 32). Flotation commonly produces a single clean flot to assess, but most flots supplied here included three fractions (Table 30) requiring assessment of: >250 μ flot fraction, >1mm flot fraction and a collection of mollusc fragments. Many of the flots were very rooty and contained a large proportion of non-flot material (i.e. small stones normally retained in the residue, see below) making rapid scanning of shells to select samples for assessment impossible. The two or three flot fractions of all the samples were therefore assessed; a total of 53 flot elements were fully assessed from the 19 samples supplied (Table 31).

The flots (comprising >250 μ , >1mm and retrieved shell fragments) were examined under a ×10- ×30 stereobinocular microscope. The species/taxa present were quasi quantified and recorded in Table 31 by habitat groups following Evans (1984) and Entwistle and Bowden (1991). The approximate shell numbers of the flots were also estimated (Table 31). Nomenclature follows Anderson (2005).

Sample	Fl	ot	Frags
	0.25mm	1mm	
2	✓	✓	\checkmark
3	✓	~	-
5	✓	~	✓
6	✓	~	✓
7	✓	~	✓
8	✓	~	✓
10	✓	~	×
15	✓	✓	✓
12	✓	✓	×
13	✓	✓	✓
14	✓	✓	×
16	\checkmark	✓	\checkmark
11	✓	~	✓
17	\checkmark	✓	\checkmark
18	✓	✓	\checkmark
19	✓	✓	\checkmark
21	\checkmark	~	\checkmark
22	\checkmark	~	\checkmark
3003	\checkmark	\checkmark	\checkmark

Table 31: Sample flot fractions received

Examination of the flots alone may indicate whether there are likely to be enough shell numbers to make analysis statistically viable, though a larger proportion of the assemblage may reside in the unsorted residues. The flot assemblages, however, also provide the general range of taxa present that aid in determining the presence of changes in palaeo-environments and land-use. The assessed flot assemblages are biased towards species that tend to survive as whole specimens and float, and against larger and more robust species that may be found in the residues as apical fragments. If full palaeo-environmental analysis is required, then full sorting and extraction of the residues is necessary. In some deposits the assemblages may be more fragmented and often *c*. 60% of the entire assemblage may be recovered from the residues.

Results

The flots contained a significant quantity of fine roots, but also contained fine particulate material that does not float. On drying much of the fine particulate sediment material (especially sample 3003) had adhered to itself

resulting a cemented mass of flot and residue containing molluscs and charcoal which were not possible to observe or quantify satisfactorily. These flots will require re-floating if analysis is required. Contamination, in the form of small plastic fragments (clear, blue and green), recent vegetative material (grass/straw), recent fibres (string/wool) were present in a large proportion of the flots. A recent broken shirt or blouse button was found in sample 6 and a part of the same button in sample 17.

Palaeo-environmental assessment of the flots by Cotswold Archaeology indicated that most samples contained >40 molluscs (++++), and their Environmental Officer (Sarah Cobain) reports that 'there are probably 300-1000 molluscs/sample' (S. Cobain pers. comm. 3.8.2011). This estimate, however, records *Cecilioides acicula* which occurs in profusion (Table 32) but was introduced into Britain in the medieval period and burrows to depths of up to 2m (Evans 1972, 168), and is thus palaeo-ecologically insignificant. In analysis, although *C. acicula* are identified and quantified, they are excluded from the totals and from palaeo-ecological analysis (Evans 1972, 80). The assessment below discusses the assemblages excluding *C. acicula*.

The snail assemblages varied from fragments of a single species (samples 12, 13 and 14), to about 1000 shells (sample 21), excluding *C. acicula*. Shell numbers from the Neolithic pits were variable but samples with more than 60-70 shells are probably statistically viable (i.e. >100 shells) once shells have been sorted and extracted from the residues. In contrast, shell numbers from the Neolithic stakeholes are too low, and the taphonomy of shells in these contexts is also in question. The Roman trackway samples (Duxford Farm) and that from the Iron Age 'box' (Filchampstead) contained high shell numbers and statistically viable analysis is possible on all of these samples (Table 32).

Filchampstead

The sample from the fill or subsequent collapse/infilling of the possible Iron Age box contained over 200 shells in the flot, principally freshwater taxa, *Lymnaea* spp. and Planorbids. This could suggest that this may have been a water-filled tank. The terrestrial assemblage is limited (<50 shells) and is mixed.

Duxford Farm

Mid Neolithic

The assemblages are dominated by open county species with shade-loving taxa present only in pit 1296, where they occur in low numbers (Table 32). The open country element is dominated by *Vallonia* spp. with the xerophile *H. itala* and accompanied by a range of catholic species; typically *Troculus hispidus* and *Cochlicopa* spp. These are typical of well-established open conditions and the almost total lack of shade-loving taxa is surprising especially in Mid Neolithic assemblages where evidence of the former woodland habitats, or of more local shade-loving and mesic (damp microenvironments created by taller plants) habitats might be expected. The only assemblage with a number of shade-loving taxa is from pit 1169, which was undated but located within the cluster dated Neolithic pits and possibly also of this date. The stakeholes contain too few shells to comment and the origin and taphonomy of shells in these contexts is questionable.

Iron Age

The sample from Iron Age curvilinear ditch 1114 was shell-rich and dominated by open country species (*Vallonia* spp., *H. itala*, *Vertigo* cf. *pygmaea* and *Pupilla muscorum*) with a few catholic or intermediate taxa (*Cochlicopa* spp., *Cepaea* spp. and Limacidae). This indicates general open conditions (arable/grassland/pasture/short-grazed or trampled grassland etc). The value of this sample is in providing evidence of the long-term land-use history of the site in combination with samples from the Neolithic and Roman periods.

Roman

The Roman samples are dominated by open country species, particularly *Trochulus hispidus*, a catholic species often found in grassland and arable habitats. The assemblage from pit 1193 is too small to comment upon or consider for further analysis but those from the trackway ditches are very rich and significantly contain a number of shade-loving species, along with the Zonitids (*Oxychilus/Aegopinella*) which are in relatively high numbers, tentatively suggesting more mesic conditions. Also of significance is the presence of freshwater species (*Lymnaea* spp. and the Planorbids) in all but one of the Roman samples (including that from pit 1193). Their persistence suggests wet and damp conditions, if not standing or flowing water.

Palaeo-environmental Potential

Filchampstead

The sample from the Iron Age 'box' is dominated by freshwater taxa and has the potential to determine if it was specifically designed for long-term water storage or had accumulated water incidentally. It might also be possible to determine the nature and possibly the origin of the water, as well as the local conditions. The more limited terrestrial assemblage may complement this.

Duxford Farm

The assemblages for the Mid Neolithic pits are of particular interest in view of the total absence (in the flots) of shade-loving elements. The lack of shade-loving taxa is surprising as evidence of the former woodland habitats, and of more local shady conditions would be expected and confirmation of long and established open country conditions indicates either long-term activity prior to the Mid Neolithic activity represented by the pits themselves, or the absence of post-glacial woodland cover locally (cf. Allen and Scaife 2007; Allen and Gardiner 2009; French *et al.* 2007).

The Iron Age and Roman samples tend to confirm that general open habitats prevailed, but the Roman trackway ditches may indicate more local mesic habitats and the presence of damp and wet conditions. The assemblages have the potential to determine if this was permanent flowing water or temporary pools or puddles, as well as if it was clear and fresh or muddy de-oxygenated (stagnant) water, and if it supported wetland plants.

Recommendations

Those samples recommended for analysis are indicated in Table 32 although the precise selection of samples from the Neolithic pits and Roman trackway ditches is in part dependent upon the stratigraphic evidence. It is recommended that the following 8 samples are analysed for mollusca:

Filchampstead

Iron Age box 3123 (sample 3003)

Duxford Farm

- the sequence of samples in Neolithic pit 1007 (samples 2 and 3);
- three of the remaining 4 samples with >40 shells (suggest samples 6, 7 and 15);
- Iron Age ditch 1114 (sample 16); and
- at least two of the Romano-British track way samples (suggest samples 18/21 and 14/16, but dependent upon archaeology and stratigraphy as well as the mollusc assemblages).

Tasks

Pre- analysis tasks

- 1. Pre-analysis refloating/soaking of some flots with congealed/cemented residue and flot
- 2. Snails to be microscope sorted from the flot fractions of the samples
- 3. The residue fractions to be supplied for sorting (and possibly subsampling)
- 4. Identification and quantification of the sorted and extracted snails

Analysis tasks

5. Research, analysis and report writing

Requirements

For analysis to be undertaken it will be necessary for Cotswold Archaeology to supply the following:-

- Aid with final selection of and confirmation of samples based on the archaeology, stratigraphy and mollusc assemblages
- Context summaries and section drawings of the relevant features/sections
- Relevant phasing / dating information
- Residues of the samples
- Intended publication format / synopsis etc (publication requirements)

References

- Allen, M. J. and Gardiner, J. 2009 'If you go down to the woods today; a re-evaluation of the chalkland postglacial woodland; implications for prehistoric communities', in Allen, M. J., Sharples, N. and O'Connor, T. P. (eds), Land and People; papers in memory of John G. Evans, 49-66. Prehistoric Society Research Paper 2
- Allen, M. J. and Scaife, R. 2007 'A new downland prehistory: long-term environmental change on the southern English chalklands', in Fleming A. and Hingley R. (eds), *Prehistoric and Roman Landscapes; landscape history after Hoskins,* 16-32. Windgather Press
- Anderson, R. 2005 'An annotated list of the non-marine Mollusca of Britain and Ireland', *Journal of Conchology* **38 (6)**, 607-637
- Evans, J. G. 1972 Land Snails in Archaeology. London, Seminar Press
- Evans, J. G. 1984 'Stonehenge the environment in the Late Neolithic and Early Bronze Age and a Beaker burial', *Wiltshire Archaeological and Natural History Magazine* **78**, 7-30
- Entwistle, R. and Bowden, M. 1991 'Cranborne Chase; the molluscan evidence', in Barrett, J., Bradley, R. and Hall, M. (eds), *Papers on the prehistoric archaeology of Cranborne Chase*, 20-48. Oxford, Oxbow Monograph 11
- French, C., Lewis, H., Allen, M. J., Green, M., Scaife, R. G. and Gardiner, J. 2007 Prehistoric landscape development and human impact in the upper Allen valley, Cranborne Chase, Dorset. Cambridge, McDonald Institute Monograph

Table 32 Mollusc assessment from Duxford Farm, Hinton Waldrist (BTF 02) and Filchsampstead, Cumnor (BTF 04). Note totals exclude the burrowing and palaeo-ecologically insignificant mollusc *C. acicula*.

SITE									DU>	(FORD	FARM								Filchampstead
Period					Mi	d Neo	lithic					Iron Age			Ro	man			Iron Age
FEATURE TYPE					Pits					Stake	e holes	Ditch	Pit						Box
With Neolithic pottery	✓	✓		✓	\checkmark		$\checkmark\checkmark$	$\checkmark\checkmark$											
FEATURE	1007	1007	1041	1015	1167	1169	1009	1296	1304	1306	1308	1114	1193	1003	1037	1037	1030	1030	3123
CONTEXT	1025	1008	1042	1016	1168	1170	1010	1297	1305	1307	1309	1111	1194	1004	1035	1038	1026	1044	3124
SAMPLE	3	2	5	6	7	8	10	15	12	13	14	16	11	17	21	18	19	22	3003
VOLUME (L)	15	10	16	20	14	14	14	13	4	2	2	16	5	13	16	11	14	16	7
PROPOSED	✓	✓		✓	✓			✓	×	×	×	✓	×		1	of	1	of	✓
ANALYSIS																			
Open country												-							
	<u> </u>			1	1	.	-	<u> </u>	1	1	1	•	6	•	۸**	•	۸*	•	
Pupilia muscorum				-	-	Ť	-	C	-	-	-	A *	C	A	A	A	A	A	C
Verligo CI. pygriaea			-	-	-	۰ ۸*	-	-	-	-	-	A **	-	D ^*	- ^**	-	<u>ر</u>	-	-
		- D	A ^*	A ^*	A *	A ^**	A ^*	A ^*	+	C	-	A ***		A	A	A ***	A	A	<u>ر</u>
Vallonia spp.	A	Б	A	A	A	A	A C	A	-	-		A	A	A	A	A	A	A	A
Catholic species	-	-	-	C	-	-	C	-	-	-	-	-	-	-	-	-	-	U	-
Domotion closens	C	1		1	Γ		r –	r	<u> </u>	1	<u> </u>	I	<u>т</u>	1					ł
Fomalias elegans		-	-	-	-		-	-	-	-	-	-	T C	- ^***	- ^***		- ^*	- ^**	- B
Nocovitroa hammonia			-	C	C		-	C	-	-	-	-	C	A	A	A	A	A	В
Punctum	C	-	-	-	-	U	C	-	-	-	-	-	-	-	-	-	-	-	-
Cochlicona spp	- C	-	-	_	- C	- C	-	-	_		_	B	_		~	B		B	- -
Limacidae	0	-		-	0	U	C					B	-	0			0		
Censes snn	-	-		-	_	- C		C	-			Δ	C	B	B	-	- C	- C	-
Monacha spp.		<u> </u>	-	_	_	-		-		_		-	-	C			-	-	
Cornu aspersum		-	-	-	_	_	-	_	<u> </u>	-			_	-	C	C	_	_	
Shade-loving				1											Ū	Ŭ			
species																			
Carvchium	-	-	-	-	-	С	-	-	-	-	-	-	-	Α	С	С	В	-	-
Discus rotundatus	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	C	-	С	-
Aegopinella/Oxychilus	-	- 1	-	-	-	-	-	-	-	- 1	-	-	-	Α	A*	A*	С	C	С
Vitrea	-	- 1	-	-	-	С	-	С	-	-	-	-	-	-	-	-	-	-	-
Vitrina	-	- 1	-	-	-	-	-	-	-	- 1	-	-	-	- 1	- 1	-	-	-	С
Clausilia	-	- 1	-	-	-	С	-	-	- 1	- 1	-	-	-	- 1	- 1	-	-	-	-
Merdigera	-	1 -	-	- 1	- 1	-	- 1	-	1 -	1 -	1 -	-	-	1 -	В	- 1	-	-	-

Fresh/Brackish water sp																			
<i>Lynmaea</i> spp.	-	-	-	-	-	-	-	-	-	-	-	-	-	В	С	-	В	С	A***
Planorbids	-	-	-	-	-	-	-	-	-	-	-	-	С	-	-	-	С	С	A**
Burrowing species																			
Cecilioides acicula	A***	A**	A***	A***	A***	A**	A***	A**	Α	Α	В	A	В	A**	A**	A**	A**	A**	В
Marine species																			
Ostrea	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mytilus	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	-
Approx totals	35	10	45	70	50	100	50	60	+	1	1	500	20	600	1000	360	250	200	220

KEY: C= <5; B= 6-10; A=10-24; A*=25-49; A** = 50-99; A*** = >100

APPENDIX 14: PLANT MACROFOSSIL AND CHARCOAL by Sarah Cobain

Introduction

In total 21 bulk soil samples were taken for plant macrofossil and charcoal assessment, two from Filchampstead and 19 from Duxford Farm. Those from Filchampstead were from fills associated with a possible Iron Age box whilst those from Duxford Farm were from Neolithic pits and stakeholes, an Iron Age curvilinear ditch and trackway and a Roman pit and trackway. The aim of this assessment is to determine the type, preservation and quantity of plant macrofossil and charcoal remains recovered and use this to assess the potential of these remains to provide evidence of socio-economic activities being undertaken on the site (crop husbandry, diet, living conditions of communities, exploitation of woodlands for fuel, woodland management), and to infer the composition of the local flora and woodlands.

Methodology

Following flotation, the residue was dried and sorted by eye and the floated material scanned and seeds identified using a low power stereo-microscope (Brunel MX1) at magnifications of x10 to x40. Identifications were carried out with reference to images and descriptions by Cappers *et al.* (2006), Berggren (1981) and Anderberg (1994). Nomenclature follows Stace (1997).

Selected charcoal fragments were hand fractured to reveal the wood anatomy on radial, tangential and transverse planes. The pieces were then identified under an epi-illuminating microscope (Brunel SP400) at magnifications from x40 to x400. Identifications were carried out with reference to images and descriptions by Cutler and Gale (2000), Heller *et al.* (2004) and Baas *et al.* (1989). Nomenclature of species follows Stace (1997).

Results

Filchampstead, Cumnor

Two samples were taken from the possible Iron Age box. Possible charcoal lining 3097 (sample 3002) contained carbonised remains of barley cereal grains, culm nodes (cereal chaff), hazelnut shells, cherry spp (*Prunus* spp) pip and dock spp and pale persicaria (*Persicaria lapathifolia*) seeds. The charcoal included alder/hazel and oak fragments. Fill 3124 (sample 3003) of the possible box contained carbonised remains of indeterminate cereal grain, pale persicaria and modern black-bindweed seeds along with oak charcoal fragments. The well preserved plant macrofossils from lining 3097 and the charcoal from both samples are recommended for full analysis.

Duxford Farm

Neolithic

First fill 1025 (sample 3) and second fill 1008 (sample 2) of pit 1007 contained carbonised hazelnut (*Corylus avellana*) shells; fill 1025 also contained modern fat hen (*Chenopodium album*) seeds. The charcoal from fill 1025 included alder/hazel (*Alnus glutinosa/Corylus avellana*) and hawthorn/rowan/crab apple (*Maloideae* spp – *Crateagus monogyna*, *Sorbus* spp/*Malus sylvestris*) whilst the charcoal from fill 1008 included alder/hazel and hawthorn/rowan/crab apple fragments.

Fill 1016 (sample 6; pit 1015) contained carbonised hazelnut shells but the charcoal was too small to identify.

Fill 1168 (sample 7; pit 1167) contained carbonised hazelnut shells and alder/hazel charcoal.

Fill 1010 (sample 10; pit 1009) contained carbonised hazelnut shells and possible barley (*Hordeum vulgare*) grain. The charcoal from this feature comprised alder/hazel and oak fragments.

Fill 1297 (sample 15; pit 1296) contained carbonised remains of hazelnut shells, emmer/spelt (*Triticum dicoccum/spelta*) wheat grain and a modern common chickweed (*Stellaria media*) seed. The charcoal included alder/hazel and hawthorn/rowan/crab apple fragments.

The well preserved plant macrofossils from all these pits, with additional soil washed where available, is suitable for further analysis. The moderately to well preserved charcoal from fills 1025 (sample 3), 1167 (sample 7), 1010 (sample 10) and 1297 (sample 15) is suitable for broad characterisation analysis.

Fill 1170 (sample 8; pit 1169) contained an indeterminate carbonised cereal grain but the charcoal was too small to identify.

Pits 1041 (sample 5) and 1304 (sample 12) and stakeholes 1306 (sample 13) and 1308 (sample 14) contained no plant macrofossil material and the charcoal was too small to identify. The paucity of these samples means no further work is recommended on any of these features.

Iron Age

Fill 1111 (sample 16) of curvilinear ditch 1114 contained a possible carbonised barley cereal grain and modern fat hen seeds but the charcoal from this feature was too small to identify. Lower fill 1178 (sample 20) of trackway ditch 1177 contained an indeterminate carbonised cereal grain and modern fat hen and common chickweed seeds but the charcoal was too small to identify. The poor preservation of these samples means further work is not recommended.

Roman

Fill 1194 (sample 11; pit 1193) contained carbonised barley, emmer/spelt wheat, possible bread wheat (*Triticum aestivum*) and oat (*Avena* spp) cereal grains and carbonised chess seeds. This well preserved plant macrofossil assemblage is suitable for full analysis. The charcoal was too small to identify and is not recommended for further analysis.

Several fills were sampled from the westernmost trackway ditch. Fill 1036 (sample 19) contained carbonised remains including a possible barley cereal grain, a glume base (cereal chaff) and a mustard/cabbage/charlock (*Brassica* spp/*Sinapsis* spp) seed. The charcoal within this fill was too small to identify. Fill 1044 (sample 22) contained carbonised remains including possible emmer/spelt wheat and indeterminate cereal grains, a glume base (cereal chaff) and vetch/vetchlings seeds (*Vicia* spp/*Lathyrus* spp). The charcoal was too small to identify.

Fill 1035 (sample 21) contained carbonised remains including barley, emmer/spelt wheat, wheat spp and indeterminate cereal grains, a glume base (cereal chaff) and common chickweed and modern fat hen seeds. The charcoal was too small to identify. Fill 1038 (sample 18) contained carbonised remains including barley and indeterminate cereal grains and dock spp (*Rumex* spp), vetch/vetchlings and modern fat hen seeds. The charcoal was too small to identify. Fill 1004 (sample 17) contained carbonised remains including barley, oat and indeterminate cereal grains, vetch/vetchings seeds and gorse/broom (*Ulex* spp/*Cytisus* spp) and oak charcoal fragments. The well preserved plant macrofossils from all the trackway fills, with additional soil processed where available, are recommended for full analysis. The paucity of the charcoal from all these fills means no further work is recommended.

Discussion

The plant macrofossil and charcoal material was recovered in small to moderate quantities. The plant remains varied between very good to moderate preservation and the charcoal, where large enough to identify, was generally moderately to well preserved. There were some modern plant macrofossils identified in samples across the site, most likely incorporated into features by bioturbation. However since these were recovered in small quantities, it is not thought that they represent a significant risk of contamination.

Filchampstead

The samples from the possible Iron Age box contained an interesting assemblage of plant macrofossil remains. The charcoal from possible lining 3097 and fill 3124 consisted of oak and alder/hazel. If full analysis is carried out on both these samples (Table 33) and a dominance of one of these species is found, it may be possible to deduce whether the possible box was burnt before being placed in the ditch and to deduce the type of wood it was constructed from. It might be possible to determine whether the barley, cherry pip and hazelnut shells represent material within the box when it was burnt.

Duxford Farm

Neolithic

A moderate quantity of well preserved carbonised plant macrofossils was recovered. The hazelnut shells indicate hand collection of foodstuffs from the locality. There was also evidence of arable agriculture indicated by the barley and emmer/spelt wheat. As only a brief scan of floated plant macrofossil remains was undertaken, if additional soil is processed from the recommended samples in Table 34, full analysis may provide further evidence of hand collected food. Full analysis of cereal remains may also give a clearer indication of crop preferences and husbandry.

The charcoal (alder/hazel, oak and hawthorn/rowan/crab apple) is from species probably occurring in local woodlands. By undertaking a broad characterisation analysis on the samples recommended (Table 33) it will be possible to ascertain the range of species used as fuel and characterise the woodland resource. These types of plant macrofossil and charcoal remains are typical of Neolithic assemblages and the full analysis stage will involve comparison of this assemblage with other sites such as Heyford Road, Steeple Aston (Pelling 2000, 200), Cotswold Community, Gloucestershire (Smith 2010, 169-181, Challinor 2010, 1956) and Gravelly Guy, Stanton Harcourt, Oxfordshire (Moffett 2004, 423).

Iron Age

The Iron Age samples contained a small, poorly preserved assemblage of plant macrofossils and charcoal, and no further analysis is recommended.

Roman

A moderate quantity of well preserved carbonised cereal remains was recovered. The main crops (emmer/spelt wheat, bread wheat, barley and oat) are typical species cultivated during this period (Cool 2006, 69). Small amounts of cereal chaff and some weed seeds indicative of arable cultivation (chess, vetch/vetchlings) and disturbed ground (dock, common chickweed) were also present. Vetch/vetchlings are common arable weeds, but were also deliberately grown to fix nitrogen, possibly indicating a response to soil impoverishment. This type of assemblage is typical of Roman sites such as Birdlip Quarry, Gloucestershire (Pelling 1999, 479-94) and Gravelly Guy, Oxfordshire (Moffet 2004, 444). As only a brief scan of plant macrofossil material was undertaken at the assessment stage, if additional soil is processed from the recommended samples in Table 34 full analysis will give a clearer indication of crop preferences and husbandry. The paucity of the charcoal means no further work is recommended.

Potential for radiocarbon dating

Any of the carbonised cereal remains and fragments of identifiable charcoal (with the exception of oak) would be suitable for radiocarbon dating.

References

- Anderberg A.-L. 1994 Atlas of Seeds: Part 4, Swedish Museum of Natural History, Uddevalla, Risbergs, Tryckeri AB
- Baas, P., Gasson, P. E. and Wheeler E. A. 1989 IAWA list of microscopic features for hardwood identification IAWA Bulletin ns, **10**, 219-332
- Berggren, G. 1981 Atlas of Seeds: Part 3, Swedish Museum of Natural History, Arlöv, Berlings
- Cappers, R.T.J., Bekker R.M., and, Jans, J.E.A. 2006 Digital seed atlas of the Netherlands, Groningen Archaeological Studies 4, Eelde, Barkhuis Publishing, Online version, <u>www.seedatlas.nl</u>
- Challinor, D. 2010 'Charcoal' in Laws, G., Powell, K. and Smith, A. 2010, 195-202
- Cook, S. and Hayden, C. 2000 'Prehistoric and Roman settlement near Heyford Road, Steeple Aston, Oxfordshire', Oxoniensia, 65, 161-210
- Cool, H. E .M. 2006 Eating and Drinking in Roman Britain Cambridge, Cambridge University Press
- Cutler, D. F. and Gale, R. 2000 Plants in Archaeology Identification Manual of Artefacts of plant origin from Europe and the Mediterranean Kew, Westbury Scientific Publishing
- Heller, I., Kienast, F., Schoch, W., Schweingruber, F. H. 2004 Wood Anatomy of Central European Species Online version - <u>www.woodanatomy.ch</u>
- Lambrick, G. and Allen, T. 2004 *Gravelly Guy Stanton Harcourt Oxfordshire: The Development of a Prehistoric* and Romano-British Community Oxford, Oxford Archaeology Thames Valley Landscapes Monograph No **21** Oxford, Oxford Archaeology/Oxford University School of Archaeology
- Laws, G., Powell, K. and Smith, A. 2010 *Evolution of a farming community in the Upper Thames Valley* Oxford, Oxford Archaeology
- Lupton A., Mudd, A. and Williams, R. J. 1999 *Excavations alongside Roman Ermin Street, Gloucestershire and Wiltshire: The archaeology of the A419.A417 Swindon to Gloucester Road Scheme* Oxford, Oxford Archaeological Unit
- Moffet, L. 2004 'Charred plant remains', in Lambrick, G. and Allen, T. 2004, 421-456
- Pelling, R. 1999 'Charred and waterlogged plant remains', in Lupton A., Mudd, A. and Williams, R. J., 1999, 469-490
- Pelling, R. 2000 'The charred plant remains', in Cook, S. and Hayden, C. 2000, 200-203
- Smith, W. 2010 'Charred plant remains', in Laws, G., Powell, K. and Smith, A. 2010, 169-193
- Stace, C. 1997 A New British Flora Cambridge, Cambridge University Press

Table 33: Charcoal assessment results

Sample	Context	Description	Period	Soil volume processed	Flot volume	Description	Таха	Quantity	Suitable for Radiocarbon Dating	Potential for Further work	Recommend ations for further work
Filcha	mpstea	d									
3002	3097	Charcoal lining or fill of box 3123	IA	7L	331ml	Small stones, silt, sand	Alder/hazel (2) Oak (3)	++++	Y	А	Full analysis
3003	3124	Fill of box 3123	IA	7L	89ml	Small stones, silt, sand	Oak (5)	++++	N	А	Full analysis
Duxfo	rd Farm	1		-		-	-	_	_		
2	1008	Second fill of pit 1007	Neo	10L	29ml	Small stones, silt, sand	Alder/hazel (3) Hawthorn/rowan/crab apple (2)	++	Y	В	N/A
3	1025	First fill of pit 1007	Neo	15L	12ml	Small stones, silt, modern roots	Alder/hazel (2) Hawthorn/rowan/crab apple (1) Oak (1)	++	Y	В	Broad characterisation
5	1042	Fill of pit 1041	Neo	16L	34ml	Small stones, silt, modern roots	Too small to identify	+ (s)	N	D	N/A
6	1016	Fill of pit 1015	Neo	20L	35ml	Small stones, silt, modern roots	Too small to identify	+++ (s)	N	D	N/A
7	1168	Fill of pit 1167	Neo	14L	26ml	Small stones, silt, modern roots	Alder/hazel (5)	+++ (s)	Y	В	Broad characterisation (process additional 10L of soil)
8	1170	Fill of pit 1169	Neo	14L	30ml	Small stones, silt	Too small to identify	+ (s)	N	D	N/A
10	1010	Fill of pit 1009	Neo	14L	36ml	Small stones, silt	Alder/hazel (4) Oak (1)	++++	Y	В	Broad characterisation
11	1194	First fill of pit 1193	RB	5L	27ml	Small stones, silt, sand	Too small to identify	+ (s)	N	D	N/A
12	1305	Fill of pit 1304	Neo	4L	4ml	Small stones, silt, sand	Too small to identify	+ (s)	Ν	D	N/A
13	1307	Fill of stakehole 1306	Neo	2L	3ml	Small stones, silt, sand	Too small to identify	+++ (s)	Ν	D	N/A
14	1309	Fill of stakehole 1308	Neo	2L	2ml	Small stones, silt, sand	Too small to identify	+ (s)	Ν	D	N/A
15	1297	Fill of pit 1296	Neo	13L	61ml	Small stones, silt, sand	Alder/hazel (4) Hawthorn/rowan/crab apple (1)	++ (s)	Y	В	Broad characterisation
16	1111	Fill of ditch 1110 (=1114)	IA	16L	28ml	Small stones, silt, sand	Too small to identify	+ (s)	Ν	D	N/A
17	1004	Fill of recut 1003 of westernmost N/S trackway ditch	RB	13L	28ml	Small stones, silt, sand	Gorse/broom (1) Oak (4)	++	Y	В	N/A
18	1038	Second fill of recut 1037	RB	11L	43ml	Small stones, silt, sand	Too small to identify	+ (s)	Ν	D	N/A

Sample	Context	Description	Period	Soil volume processed	Flot volume	Description	Таха	Quantity	Suitable for Radiocarbon Dating	Potential for Further work	Recommend ations for further work
		of westernmost N/S trackway ditch									
19	1036	Fill of earliest phase of westernmost N/S trackway ditch 1030	RB	14L	23ml	Small stones, silt, sand	Too small to identify	+ (s)	N	D	N/A
20	1178	First fill of trackway ditch 1177	IA	14L	33ml	Small stones, silt, sand	Too small to identify	+ (s)	N	D	N/A
21	1035	First fill of recut 1037 of westernmost N/S trackway ditch	RB	16L	40ml	Small stones, silt, sand, modern roots	Too small to identify	+ (s)	N	D	N/A
22	1044	Fill of earliest phase of westernmost N/S trackway ditch 1030	RB	16L	36ml	Small stones, silt, sand	Too small to identify	+ (s)	N	D	N/A

+ = 1-5 fragments ++ = 6-20 fragments +++ = 21-40 fragments ++++ = >40 fragments

(s) = most fragments too small to identify

Potential for further analysis are graded on scale A, B, C and D. A = High potential - well preserved or frequent material

B = Good potential. Identifiable remains are present in reasonable quantities.
 C = Charcoal remains scarce or poorly preserved. Not recommended for further analysis
 D = No or unidentifiable charcoal remains. Not recommended for further analysis

Taxa List

Family	Species	Common Name
Betulaceae	Alnus glutinosa/Corylus avellana	Alder/Hazel
Fabaceae	<i>Ulex</i> spp/ <i>Cytisus</i> spp	Gorse/broom
Fagaceae	Quercus robur/petraea	Sessile/pedunculate oak
Pomoideae	Maloideae spp (Crateagus monogyna/Sorbus spp/Malus sylvestris)	Hawthown/rowan/ crab apple

Table 34: Plant macrofossil assessment results

Sample	Context	Description	Period	Soil volume processed	Flot volume	Description	Таха	CPR Suitable for Radiocarbon Dating	Potential for further work	Recommendation s for further work	
Filchampstead											
3002	3097	Charcoal lining or fill of box 3123	IA	7L	331ml	Small stones, silt, sand Bone ++ Burnt bone + Charcoal ++++ Fish bone ++ Molluscs ++++	Barley + cf cherry spp pip + Culm node (cereal chaff) + Dock spp + Hazelnut shell + Pale persicaria +	Y	A	Full analysis	
3003	3124	Fill of box 3123	IA	7L	89ml	Small stones, silt, sand Bone + Burnt bone + Molluscs ++++	Indeterminate cereal grains + Black-bindweed (modern) + Pale persicaria +	N	С	N/A	
Duxford Farm											
2	1008	Second fill of pit 1007	Neo	10L	29ml	Small stones, silt, sand Bone ++ Burnt bone + Charcoal ++ Molluscs ++++	Hazelnut shells ++++	Y	A	Full analysis	
3	1025	First fill of pit 1007	Neo	15L	12ml	Small stones, silt, modern roots Burnt bone + Charcoal ++ Molluscs ++++	Fat hen (modern) + Hazelnut shells ++++	Y	A	Full analysis	
5	1042	Fill of pit 1041	Neo	16L	34ml	Small stones, silt, modern roots Charcoal + Molluscs ++++	Nil	N	D	N/A	
6	1016	Fill of pit 1015	Neo	20L	35ml	Small stones, silt, modern roots Bone ++ Burnt bone + Charcoal +++ Molluscs ++++	Hazelnut shells +++	Y	A	Full analysis	

Sample	Context	Description	Period	Soil volume processed	Flot volume	Description	Таха	CPR Suitable for Radiocarbon Dating	Potential for further work	Recommendation s for further work
7	1168	Fill of pit 1167	Neo	14L	26ml	Small stones, silt, modern roots Bone ++ Charcoal +++ Molluscs ++++	Hazelnut shells +++	Y	A	Full analysis (process additional 10L of soil)
8	1170	Fill of pit 1169	Neo	14L	30ml	Small stones, silt Charcoal + Molluscs ++++	Indeterminate cereal grain +	Y	D	N/A
10	1010	Fill of pit 1009	Neo	14L	36ml	Small stones, silt Charcoal ++++ Molluscs ++++	cf barley + Hazelnut shells ++++	Y	A	Full analysis
11	1194	First fill of pit 1193	RB	5L	27ml	Small stones, silt, sand Charcoal + Molluscs ++	Barley +++ cf bread wheat + Chess + Emmer/spelt wheat ++ Oat ++	Y	А	Full analysis
12	1305	Fill of pit 1304	Neo	4L	4ml	Small stones, silt, sand Bone + Charcoal + Molluscs ++++	Nil	N	D	N/A
13	1307	Fill of stakehole 1306	Neo	2L	3ml	Small stones, silt, sand Charcoal +++ Molluscs +++	Nil	N	D	N/A
14	1309	Fill of stakehole 1308	Neo	2L	2ml	Small stones, silt, sand Charcoal + Molluscs ++	Nil	N	D	N/A
15	1297	Fill of pit 1296	Neo	13L	61ml	Small stones, silt, sand Charcoal ++ Molluscs ++++	Common chickweed (modern) + Emmer/spelt wheat + Hazelnut shells ++++	Y	A	Full analysis
16	1111	Fill of ring ditch 1110	IA	16L	28ml	Small stones, silt, sand Charcoal + Molluscs ++++	cf barley + Fat hen (modern) +	Y	С	N/A
17	1004	Fill of recut 1003 of westernmost N/S trackway ditch	RB	13L	28ml	Small stones, silt, sand Charcoal ++ Molluscs ++++	Barley ++ Indeterminate cereal grains +++ Oat + Vetch/vetchlings +	Y	A	Full analysis
Sample	Context	Description	Period	Soil volume processed	Flot volume	Description	Таха	CPR Suitable for Radiocarbon Dating	Potential for further work	Recommendation s for further work
--------	---------	---	--------	--------------------------	-------------	---	---	---	-------------------------------	--
18	1038	Second fill of recut 1037 of westernmost N/S trackway ditch	RB	11L	43ml	Small stones, silt, sand Bone + Burnt bone + Charcoal + Molluscs ++++	Barley + Dock spp + Fat hen (modern) + Indeterminate cereal grains + Vetch/vetchlings +	Y		Full analysis (process additional 10L of soil)
19	1036	Fill of earliest phase of westernmost N/S trackway ditch 1030	RB	14L	23ml	Small stones, silt, sand Bone + Charcoal + Fish bone + Molluscs ++++	cf barley + Glume base (cereal chaff) + Mustard/cabbage/charlock +	Y		Full analysis (process additional 10L of soil)
20	1178	First fill of trackway ditch 1177	IA	14L	33ml	Small stones, silt, sand Bone + Charcoal + Molluscs ++++	Common chickweed (modern) + Fat hen (modern) + Indeterminate cereal grain +	N		Full analysis (process additional 10L of soil)
21	1035	First fill of recut 1037 of westernmost N/S trackway ditch	RB	16L	40ml	Small stones, silt, sand, modern roots Bone ++ Burnt bone + Charcoal + Molluscs ++++	Barley + Common chickweed + Emmer/spelt wheat + Fat hen (modern) + Glume base + Indeterminate cereal grains + Wheat spp +	Y		Full analysis (process additional 10L of soil)
22	1044	Fill of earliest phase of westernmost N/S trackway ditch 1030	RB	16L	36ml	Small stones, silt, sand Bone ++ Burnt bone + Charcoal + Molluscs ++++	cf emmer/spelt wheat Glume base (cereal chaff) + Indeterminate cereal grain + Vetch/vetchlings +	Y		Full analysis

+ = 1-5 fragments ++ = 6-20 fragments +++ = 21-40 fragments ++++ = >40 fragments Potential for further analysis are graded on scale A, B, C and D.

A = High potential - well preserved or frequent material

B = Good potential. Identifiable remains are present in reasonable quantities.

C = Remains scarce or poorly preserved. Not recommended for further analysis

D = No or unidentifiable charcoal remains. Not recommended for further analysis

Family	Species	Common Name	Habitat Code
Amaranthaceae	Chenopodium album	Fat hen	D
Betulaceae	Corylus avellana	Hazelnut shells	HSW
Brassicaceae	Brassica spp/Sinapsis spp	Mustard/cabbage/charlock	D
Caryophyllaceae	Stellaria media	Common chickweed	D
Fabaceae	Vicia spp/Lathyrus spp	Vetches/Vetchlings	A/D
Poaceae	Avena spp	Oat	E
	Bromus spp	Chess	A
	Hordeum vulgare	Barley	E
	Triticum spp	Wheat	E
	Triticum aestivum	Free threshing wheat	E
	Triticum dicoccum	Emmer wheat	E
	Triticum spelta	Spelt wheat	E
	Poaceae spp	Glume base (cereal chaff)	E
	Poaceae spp	Culm node (cereal chaff)	E
	Poaceae spp	Indeterminate cereal grain	E
Polygonaceae	Fallopia convolvulus	Black-bindweed	D
	Persicaria lapathifolia	Pale persicaria	D
	Rumex spp	Dock spp	D
Rosaceae	Prunus spp	Cherry spp	HSW

Taxa List and habitat distribution

Key: HSW = hedgerow, scrub, woodland; D = disturbed; A = arable weeds; G = grassland; E = economic plants; M = marshland

APPENDIX 15: OASIS REPORT FORM

PROJECT DETAILS

Project Name	Farmoor to Blunsdon Water Main				
Short description (250 words maximum)	Significant discoveries were made along the pipeline route at sites within Oxfordshire and Swindon, ranging in date from the Mesolithic through to the Anglo-Saxon periods.				
	At Filchampstead, Oxfordshire, evidence of Iron Age settlement was identified, including a probable burnt box within a ditch. More limited activity dating to the Early Roman and medieval periods was also present on the same site.				
	At Kingston Hill, Oxfordshire, traces of Mid-Saxon enclosures were present. The majority of the features were medieval paddocks				
	Duxford Farm, Oxfordshire, included a concentration of Middle Neolithic pits, a Middle Iron Age trackway and a small number of associated features. Most features dated to the Roman period including a re-alignment of the trackway, with adjoining field boundaries and a curvilinear ditch.				
	At Pennyswick Farm, Oxfordshire, a medieval or post-medieval feature was found. Initial analysis suggests that this may have been the remains of a stock pen, possibly of timber and cob construction.				
	A significant concentration Mesolithic, Roman and Anglo-Saxon finds came from an Oxfordshire field near Appleton, recorded during the watching brief.				
	In Swindon, a site at Broad Blunsdon included a Roman ditch and pit, an Anglo- Saxon pit and a number of undated guarry pits.				
Project dates	9 July 2001–15 August 2004				
Project type	Evaluation, excavation and watching brief				
(e.g. desk-based, field					
evaluation etc)					
Previous work	Aerial Photographic Interpretation & mapping, 2001 (Air Photo Services)				
(reference to organisation or	Geophysical Survey, 2002 (GeoQuest Associates)				
Sivik humbers etc)	Archaeological Evaluation 2004 (Cotswold Archaeology)				
Future work	Unknown				
PROJECT LOCATION					
Site Location	Oxfordshire and Swindon				
Study area (M ² /ha)					
Site co-ordinates (8 Fig Grid Reference)	SP 4510 0790 to SU 1470 9020				
PROJECT CREATORS					
Name of organisation	Cotswold Archaeology				
Project Brief originator	Lang Hall Archaeology				
Project Design (WSI)	Cotswold Archaeology				
originator					
Project Manager	UIII Bateman				
	Settlement enlosed settlement trackway shoon house. Grubenhous field				
	boundary flint scatter				
SIGNIFICANT FINDS	Pottery, Glass bead, Coin, Stylus, Reaping hook, Polished axe head, Flint,				

PROJECT ARCHIVES	To be deposited with Oxford Service and Swindon Museum a			d County and Art G	Museum allery	seum Content (e.g. pottery, ry animal bone etc)			pottery,
Physical	Type Category				Cou	nt	Weight (g)		
	Flint Wor		Work	ked or burnt		2	16	1143	
		Pottery	Early	ly Prehistoric		1	59	577	
		,	Late	Prehistoric		30	64	3956	
		F		nan		17	02	17417	
			Saxo	n		32	20	1092	
			medi	eval		38	80	1289	
			Post- medi	eval/moder	n	-	70	383	
			Tota	1		29	95	24714	
		CBM	Brick	and tile		1:	37	3689	
		Fired Clay	Obje	cts/structura	al	-	77	333	
		Coins	Silve	r			2	-	-
			Copp	er alloy			9	-	
		Metals	Iron			ę	91	-	
			Copp	er alloy			2	-	
			Lead	alloy			5	-	
		Glass	Vess	el/window			9	83	
			Obje	ct (bead)			1	-	
		Residues	Fuel ash			-	146		
			Ironworking slag			-	605		
		Stone	Polished stone axe			1	-		
			Othe	r worked or	burnt		4	-	_
		Other	Clay	pipe			19	83	
		Animal Bone	Frag	ments		202	27		
		Samples	Envir	onmental		4	21		
Paper	Site	Context Drawin records sheets		ng E f	3&W ilms	Colour slide films			
	Filcha	champstead Excavation		198	Ę	51	3	3 3	
	Long	ong Leys Farm		25		0	(0 0	
	Kings Evalu	ton Hill Farm		64	-	10	1	1 1	
	Kings	ston Hill Farm		108	3	32	2	2 2	
	Farin	gdon Compound		24		3	1	1 1	
	Duxf	ord Farm		417	13	37	12	2 12	
	Penn	vswick Farm		24		5		0 0	
	Watc	hing brief		20		3	C	0 0	
	Broad	d Blunsdon (Area	ı A)	56		11	7	7 6	
	Broad	ad Blunsdon		73	-	16	1	1 1	
	Evalu	ation	4000			71	27	7 96	
BIBLIOGRAPHY	1017	120		1009	21	, 1	21	<u> </u>	

CA (Cotswold Archaeology) 2011 Farmoor to Blunsdon Water Main, Oxfordshire and Swindon. *Post-Excavation Assessment and Updated Project Design*. CA report **11201**

















8 9	Filchampstead: the site, looking north Filchampstead: possible box within ditch 3120, looking south-west. (Scale 1m)	PROJECT TITLE Farmoor to Blunsdon Water Main Oxfordshire and Wiltshire					
		FIGURE TITLE Photographs					
		PROJECT NO. 9012 DATE 19-10-2011 FIGURE NO. DRAWN BY LG REVISION 00 8 to 9 APPROVED BY PJM SCALE@A4 N/A 8 to 9					







10 Kingston Hill Farm: the site, looking west	t 01285 771022 f 01285 771033 w www.cotswoldarchaeology.co.uk e enquiries@cotswoldarchaeology.co.uk
11 Broad Blunsdon: the site, looking north-east	PROJECT TITLE Farmoor to Blunsdon Water Main Oxfordshire and Wiltshire
	FIGURE TITLE Photographs

PROJECT NO. 9012 DRAWN BY LG APPROVED BY PJM
 DATE
 19-10-2011

 REVISION
 00

 SCALE@A4
 N/A

FIGURE NO.