Roman Cemetery, The Babraham Institute, Cambridgeshire

An Archaeological Excavation









Simon Timberlake, Natasha Dodwell and Nick Armour





The Roman Cemetery, The Babraham Institute, Cambridgeshire

An Archaeological Excavation

Simon Timberlake, Natasha Dodwell & Nick Armour

With contributions by
Emma Beadsmoore, Katie Anderson,
Dave Webb, Anne de Vareilles and Chris Swaysland

and illustrations by J. Matthews

© Cambridge Archaeological Unit UNIVERSITY OF CAMBRIDGE February 2007

Report No. 754

ECB 2480

Summary

Between August and September 2006 the Cambridge Archaeological Unit undertook an excavation of a Roman cremation and inhumation cemetery identified during the course of an archaeological trench evaluation carried out in advance of the construction of anew access road to Babraham Hall from the A1037. This revealed a narrow (approx. 8m wide) NE-SW aligned strip of burials containing upwards of 36 late 2nd to early 4th century AD graves with at least 42 individuals represented (possibly up > 40% of the entire cemetery). Initially this appears to have been centred upon an earlier circular cremation cemetery, possibly a Roman cremation barrow containing up to seven cremations ranging from the late 1st to the early 3rd century AD. However, the alignment of the later inhumation cemetery appears to respect that of the putative Roman Road some 70m to the west.

Burials seemed to be equally divided between males and females and included evidence for the presence of family groups (at least 10 infants and juveniles). Four possibly five (14%) of the skeletons (predominantly male adults) showed evidence for post-mortem decapitation, whilst the average age of death was probably around 40 years. At least four coffin burials were recognized, whilst the presence of grave goods including local (E. Anglian) made pottery beakers, jars and flagons, hob-nailed footwear (male) and bracelets, rings and necklaces (female)would seem to suggest a moderately wealthy civilian population, but without evidence for rich burials. However, an unusual jet necklace of a type more common in prehistoric (Early Bronze Age) graves accompanied one of the skeletons.

CONTENTS

INTRODUCTION Geology and Topography Historical and Archaeological Background Prehistoric		2
		2 2 4 4 8 9
Method	ology	9
RESULTS		10
Area A	NNE-SSW graves N-S grave	13 17 21
Area B	NNE-SSW graves NE-SW graves WNW-ESE graves Burial pits Cremations	21 21 23 23 25 25
Area C	Cremations Partial child burials NE-SW graves Medieval pit	26 26 27 28 31
Area D	NW-SE graves E-W graves NNE-SSW graves Burial pits and bone scatter Western extension – bone scatters Medieval or post-Medieval plough feature	32 32 34 34 35 35 36
DISCUSSIO	N	36
	Phasing Phase 1 Phase 2 Phase 3 (Cremation and Inhumation Cemetery) 3a 3b 3c 3d Phase 4 (Inhumation Cemetery) 4a 4b 4c	36 37 37 37 37 37 40 40 40 40 42 42

	4d	42
	4e	43
	Phase 5	43
	Phase 6	43
Cemetery analysis		45
Cremations		45
Inhur	nations	48
	Size and lay-out of cemetery	48
	Grave alignment and position	49
	Grave morphology	51
	Paired and inter-cutting graves	51
	Attitude and characterisation of burial	52
	Demography	54
	Sex	54
	Family groups	54
	Age of death	55
	Cause of death and pathological condition	55
	Decapitation	57
	Coffin burials	58
	Grave goods	59
	Pottery	59
	Footwear	61
	Bracelets, rings and necklaces	63
	The cemetery environment	68
CONCLUSIONS		69
Acknowledgements		71
BIBLIOGRAPHY	,	71
APPENDICES		80
APPENDIX 1 Lithics	(Emma Beadsmoore)	80
	Pottery (Katie Anderson)	82
APPENDIX 3 Small F		89
	nent of Bulk Environmental Samples (A. de Vareilles)	105
APPENDIX 5 Animal		110
APPENDIX 6 Human		110
APPENDIX 7 Feature	· · ·	118

LIST OF FIGURES

Figure 1. Location plan	1
Figure 2. Map of archaeological investigations, Babraham Research Campus	3
Figure 3. Map of Roman cemeteries in South Cambridgeshire	7
Figure 4. View of cemetery excavation with Babraham Hall to rear	11
Figure 5. Plan of cemetery excavation	12
Figure 6. 6a Section through Neolithic pits (F.87 + F.88)	14
6b Section through excavation sondage at south end of cemetery	14
Figure 7. Photographs of excavated graves: F.132, F.79, F.127, F.124	15
Figure 8. Photographs of excavated graves: F.82, F.111, F.81, F.95	16
Figure 9. Phase plan: Phases 1+2	38
Figure 10. Phase plan: Phase 3	39
Figure 11. Phase plan: Phase 4	41
Figure 12. Phase plan: Phases 5+6	43
Figure 13. Cremation urns: F.118 & F.115	47
Figure 14. Thematic maps of cemetery	50
14a Inhumation and cremation cemetery - cemetery areas	50
14b Inhumation cemetery - sex and age of skeletons	50
14c Inhumation cemetery - burial details and attitude	50
Figure 15. Grave goods - pottery vessels: F.131, F.86, F.112, F.80	60
Figure 16. Footwear: Under excavation and plan of hobnails from same R shoe or boot (F.129)	62
Figure 17. Grave goods - copper alloy and shale bracelets: bracelet (F.123), snakes head bracelet	
(F.123), copper alloy twisted wire bracelet (F.123), carved shale bracelet (F.131), bracelets <i>in situ</i> .in the process of being excavated (F.123)	64
Figure 18. Grave goods - copper alloy rings and brooches: copper ring (F.79), ring (F.124),	04
earring (F.131), ring in the process of excavation (F.79), and copper and iron	
circular brooch (SF 28)	65
Coffin metalwork: iron coffin nails	65
Figure 19. Grave goods - jet bead necklace (F.131)	66
Figure 20. Grave goods - glass bead necklace (F.123)	67
Figure 21. Human bone pathology: Healed fracture of scapula (F.259), Bone cancer in pelvic bon	e
(F.127), Post-mortem decapitation - chop marks on clavicle (F.82)	117
LIST OF TABLES	
Table 1. Flint types and quantities	80
Table 2. Division of finewares vs coarsewares	85
Table 3. All pottery by fabric	85
Table 4. Assemblage material types	89
Table 5. Table of glass bead dimensions	
Table 6. Inhumations with hobnails	95 102
Table 7. Grave details and grave furniture	104
Table 8 . Carbonised macroplants from cremations	107
Table 9. Carbonised macroplants from graves	108
Table 10a+b. Snails	109
Table 11. Animal bones	110
Table 12. Age at death of immature individuals (under the age of 17 years) in graves	112
Table 13. Age at death of adult individuals in graves	112
Table 14. Sites of identified arthritis within skeletons	113
Table 15. Skeletons with fractures	114
Table 16. Decapitated burials – position of cut-marks	115
Table 17. Cremation burials	116

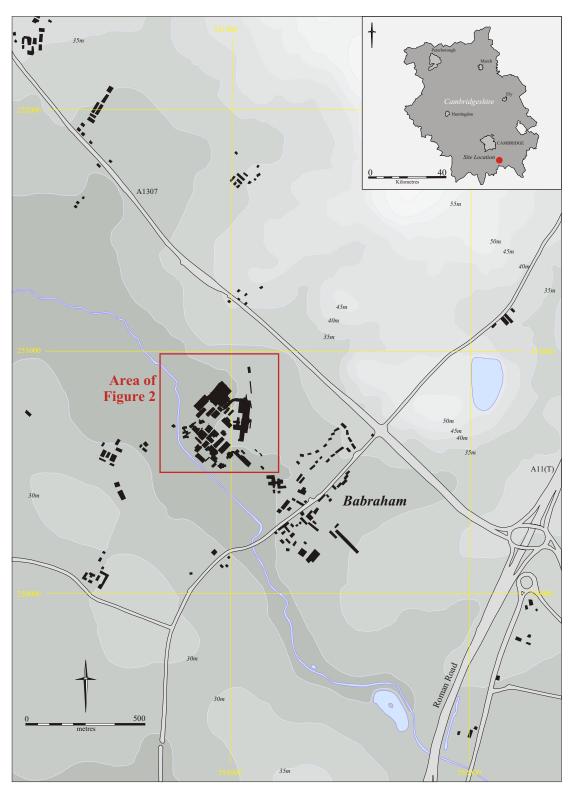


Figure 1. Location plan

INTRODUCTION

From the 30th August to the 20th September 2006 a team from the Cambridge Archaeological Unit (CAU) undertook an excavation of part of a Roman cremation and inhumation cemetery identified during the course of an archaeological trench evaluation carried out during July and August 2006 at the southern end of the corridor for the proposed new access road running northwards from the front of Babraham Hall to the A1307. The excavation was centred on NGR 5507/2571 and covered an area of approximately 0.35 of a hectare. The investigation was commissioned on behalf of Babraham Bioscience Technologies Ltd.

The area consisted of a fairly narrow strip of land (c. 20 m wide) which included part of the existing roadway on its eastern side and part of the roadside verge and area fronting the recently demolished 1950s built Calcutta Building of the Babraham Institute. Formerly, this land was part of the parkland of Babraham Hall.

Geology and Topography

The underlying geology within this part of the Babraham site consists of the chalk outcrop at the base of the Holywell Nodular Chalk Formation of the Middle Chalk (Turonian), immediately above the top of the Melbourn Rock (an aquifer and spring line). Just to the south, beneath Babraham Hall, lies the northern edge of the River Terrace Deposits $(1^{st} - 2^{nd}$ Terrace) of the River Granta (British Geological Survey 2002).

This area of moderately elevated ground, between 25.6 m and 26.3 m, OD lies on the very edge of the shallow Granta valley, the ground surface of the cemetery sloping away at a gentle angle towards the south-west. This part of the cemetery appears to be sited at the top of a small rise.

Historical and Archaeological Background

Since 1994 a significant amount of archaeological work has been undertaken by the CAU within the grounds of the Babraham Institute (Butler 1994, Robinson 1995, Regan 1995, Wills 2004, Swaysland 2005, Timberlake & Armour 2006, Armour 2006b and Armour *et al.* 2007), whilst immediately adjacent to the cemetery site a watching brief was undertaken by the Cambridgeshire County Council Archaeological Field Unit (CCCAFU) following the discovery of human remains in 1996 (Hatton 1997). The current work is part of an on-going series of archaeological investigations associated with the continuing development of the site, the latest phase of which began in July 2005. The historical and archaeological background to this work is best covered within a recent desktop assessment by the CAU (Hall 2003) and addresses the likelihood of encountering remains from the prehistoric, Roman and Medieval periods across the entire 23 hectare Babraham Research Campus.

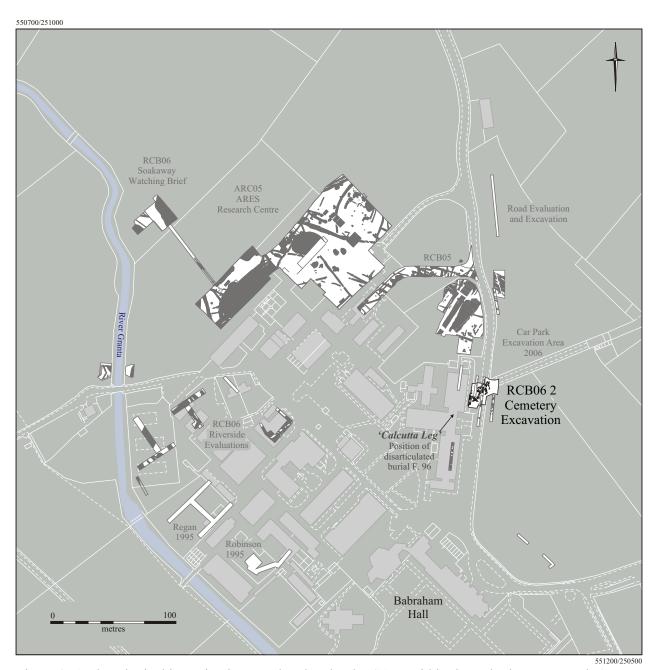


Figure 2. Archaeological investigations, undertaken by the CAU, within the Babraham Research Campus

Prehistoric

Intense prehistoric utilisation of the gravel terrace, particularly for flint exploitation, has been recorded at sites in the Granta Valley within 5 km of Babraham, such as at Bourn Bridge, Pampisford, where a phase of Late Mesolithic activity was followed by Early Neolithic 'industrial' extraction and a later phase of Late Bronze Age land utilisation (Pollard 1995), whilst at Granta Park, Great Abington, excavation on the gravel terrace and its junction with the chalk has revealed significant evidence for flint extraction and working dating from the Mesolithic to Early Bronze Age, with some rarer examples of Iron Age flint knapping (Cooper & Hinman 1997: Kemp 1999; Armour 2006a). At Babraham examples of Late Mesolithic and Neolithic-Early Bronze Age flint knapping appear to be associated with periglacial hollows located above the level of the floodplain (Armour 2006b; Armour et al. 2007), as with the riverside palaeo-channels, some of which include spreads of burnt flint or even burnt flint mounds which may have been linked to seasonal hunting camps (Timberlake & Armour 2006). Excavations carried out in 1991/1992 at the Hinxton Quarry Site in the neighbouring Cam Valley revealed a rather similar picture of Neolithic – Bronze Age flint exploitation and probably seasonal settlement (Evans 1993).

Within a three kilometre radius of Babraham Hall there are at least six known Bronze Age barrows or ring-ditches, the majority of which are situated overlooking Babraham and the Granta Valley upon the high chalk ridge to the north and east of the site. The close association between settlement sites and such monuments has been repeatedly witnessed within the Cambridgeshire Fenland (Hall 2003).

The crossing of the Granta by the Icknield Way, an important northeast-southwest prehistoric route which follows the high ground between Fulbourn and Great Chesterford, is thought to lie within the grounds of the Babraham campus, although its exact position has yet to be located. Associated with the alignment of this route are further Bronze Age barrows.

The hillforts at Wandlebury (3 km to the north-west) and Sawston, at a similar distance to the south-west, dominate the river valleys to the south of Cambridge. Large concentrations of cropmarks hereabout suggest that these chalk-lands to the south of Cambridge were part of an intensively utilised agricultural landscape dotted with small-scale settlements (Evans 2002).

Roman

There is good evidence for Romano-British occupation within the hinterland of Babraham. The walled town at Great Chesterford lies 6.4 km due south, whilst a possible Roman villa site close to Babraham has been identified from aerial photographs. The exact location of this on the ground remains a little uncertain, although the HER record [06244] suggest this lies between Wormwood and Copley Hills some 2.5 km north of the Babraham Institute (TL 505 532). The area indicated by cropmarks is c. 150 m square; no trace of any features survive at the surface, although plough disturbance has at times revealed fragments of tile and pottery (Flood 1980).

Within this general area of chalk land dissected by the valleys of the Cam and Granta (to the south of Cambridge) lies an extensive system of agrarian field boundaries and farmsteads (Hall 2003). Good excavated evidence for this has been found locally. At Hinxton to the south of Babraham, archaeological work carried out by the CAU uncovered a Romano-British field system, droveway and associated settlement compounds (Evans 1993), whilst closer still along the floor of the Granta valley at Bourn Bridge, excavations by Pollard (1996) revealed a system of large rectangular pastoral enclosures of Late Iron Age or immediately post-Conquest Roman date. However, at Granta Park just a short distance to the south-west, a series of archaeological investigations revealed little, if any, evidence for Roman activity (Armour 2006a).

Accompanying this Roman presence was a well-established communications network. There are at least two Roman roads which pass close by or through the grounds of the Babraham Institute. Indeed, the site is situated close to the crossing point of the River Granta by the road from Great Chesterford (which follows the present course of the A11), whilst just to the north lies the intersection between this and Worstead Street, another Roman Road coming from Cambridge (also known as the Via Devana) which traces a northwest-southeast course along the edge of the Gog Magog Hills. Recent archaeological excavation within the area of the car park development at the Babraham Institute (some 50 m to the north-west of the current cemetery) appears to have identified yet another possible section of road which may have Roman origins, the latter perhaps a short-cut between the two described above which forded the Granta somewhere just to the west of Babraham Hall (Armour 2007 forthcoming).

Prior to the most recent archaeological work by the CAU, evidence for Roman settlement at Babraham was limited to the recovery of chance finds. This included the recovery of pottery in 1956 from close to the bridge across the Granta (north-east of the Hall), copper-alloy brooches (fibulae) discovered by metal detectorists within the same general area, and a Roman barrel lock which came from the opposite side of the river [HER 06208]. Pottery has also been recovered from the small-scale archaeological evaluations; a single sherd of coarse grey-ware pot in 1994, and a 1st – 2nd century AD pottery assemblage recovered from several 'gravel extraction' pits excavated in October 1995 (Regan 1995). Subsequently, during the course of the Access Roadway evaluation (June – July 2005), at least four Romano-British features were identified. This included a ditch of 1st - 2nd century date, a boundary ditch of the late Romano-British period (3rd – 4th century AD), several pits, and a natural hollow into which pot had been deposited (Armour 2006b).

In July-August 2005, a section of Romano-British wall and some probable beam-slots were found during excavations carried out in advance of the construction of the new ARES Project building. The discovery of a box-flue tile and considerable amounts of burnt grain here associated with a layer of *in situ* burning above a masonry floor suggested the destruction of a possible grain-drier. Together with finds of 1st – 2nd century AD pottery, these initial discoveries hinted at the presence of an early villa/farmstead close by (Swaysland 2005). Subsequent excavations undertaken between October and December 2005 identified the remains of a possible Conquest period (AD 43-60) farmhouse (Structure A) within this area associated with a rectilinear field system (Armour *et al.* 2007). It appears that this had become redundant by the later 1st century, with a shift in the orientation of the field system and the settlement focus

towards the north-west of the site, with a possible change of use of Structure A to a barn/cattle-shed/stables. Activity continued throughout the 2^{nd} - 3^{rd} centuries AD, as indicated by cereal processing and a shift in animal rearing suggested by horse bone forming a greater proportion of the faunal assemblage from the 2^{nd} century onwards.

The continuing deposition of metalwork, particularly coinage, on site right up until the end of the 4th century (as shown by its recovery from rubbish layers deposited within Hollow B, a large area of damp ground, possibly a pond, located at the southern end of the site) attests to the continuity of settlement. Indeed, the degree of coin loss could be interpreted as suggesting a possible 'burst of activity' sometime between AD 330 and 370, although this evidence is countered by a decline in non-local ceramics during the late 3rd and 4th centuries. The latter evidence appears to suggest a slow decline in occupation. An evaluation of the Riverside site located to the north and west of the weir during May-June 2006 revealed evidence for enclosure ditches, a Roman causeway over part of the seasonally inundated floodplain, some quarry pits, and several beam-slots for a possible wooden building (Timberlake & Armour 2006). It seems likely that any settlement or traces of intensive agricultural activity undertaken here were abandoned by the 2nd century, due to increasing problems with flooding.

Prior to the July 2006 archaeological evaluation which 'discovered' the Roman cemetery, there had been some limited finds of burials at Babraham. The ARES site excavation had uncovered an isolated pair of Conquest Period burials with grave goods consistent with an Aylesford-Swarling cremation tradition (Armour et al. 2007). The accompanying pottery was dissimilar to the ceramics of contemporary settlements, but showed some degree of parallel with those found within the Late Iron Age cemetery at Hinxton Hall (Hill & Alexander 1999). The discovery of a Colchester type brooch suggested an internment date of between 40 - 60 AD. This implies burial, but as yet no formal cemetery, from the very beginning of the Roman period. Just to the east of the current cemetery site, human bones were recovered during the excavation of a pipe trench for a water main (on the east side of the former 1952 Access Road) in August 1996. The site was examined and a small-scale excavation undertaken by Cambridgeshire County Council's Archaeological Field Unit (CCCAFU). However, in the absence of any associated grave goods or pottery, it was assumed that this was probably Anglo-Saxon in date, the pottery recovered from nearby pits being Early Medieval (Hatton 1997).

In Cambridgeshire, Roman cremation cemeteries dating from the first two centuries AD are known from the roads leading out of Cambridge and Godmanchester, whilst other amply furnished cremations include those from Hauxton, Huntingdon, Milton, St.Ives and St.Neots, though some of the most impressive are to be found within large cemeteries adjacent to the villas at Godmanchester, Litlington and Guilden Morden (Taylor 2000). Whilst many take the form of simple urned cremations placed in a shallow pit, others underlie Roman round barrows, by far the most impressive group being the Bartlow Hills on the Cambridgeshire/ Essex border. Other examples of known or suspected barrows are to be found at Barton, Bourn, Girton, Godmanchester, Great Stukely, Hildersham, Litlington, Meldreth, Tetworth and Whittlesford. From the end of the 2nd century, inhumation burials become more common, many of them now centred upon existing cremation cemeteries at roadside locations close to towns or villas, with the inhumations sometimes in rows, and

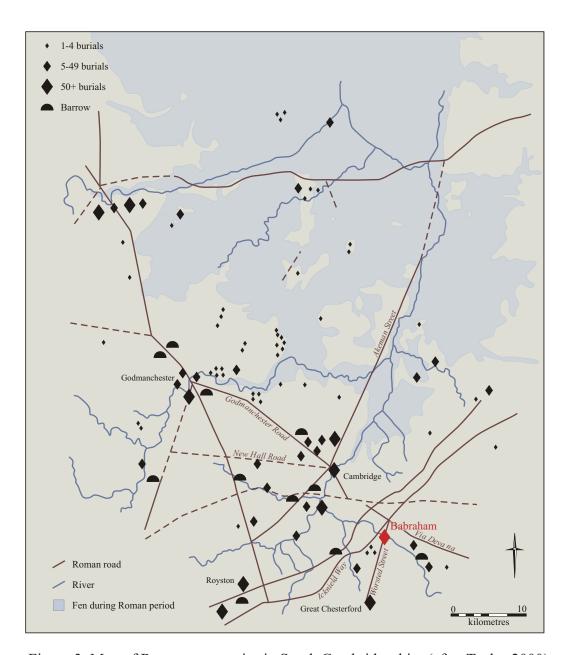


Figure 3. Map of Roman cemeteries in South Cambridgeshire (after Taylor 2000)

commonly aligned with the road direction or to encompassing ditches (Alexander *et al.* 2003; Jones 2003). More than a dozen Roman inhumation cemeteries have now been identified within Cambridgeshire, the largest being at Godmanchester, Litlington (250 burials) and Guilden Morden (153 burials), whilst in and around Roman Cambridge, cemeteries have been located alongside Akeman Street in Arbury (some with mausolea containing stone and lead coffins (see Wilkes & Elrington 1978)), on Jesus Lane (Alexander et al 2003) and possibly at Newnham College (Webb *et al.* 2006), with numerous other smaller cemeteries scattered around South Cambridgeshire. Close to Babraham, late Roman cemeteries have been found at Foxton (23 burials), Great Chesterford and Linton.

Saxon and Medieval

Excavations undertaken in 2004 prior to the construction of the new 'Minerva' building located an area of Saxon settlement established during the 6th century AD; this included a sunken floored building (SFB) from which a fine bone spindle whorl, a knife blade, and the head of an early Saxon square-headed copper-alloy brooch were recovered (Wills 2004). Potsherds and animal bone fragments were also recovered from the backfill of this feature. These attest to an early presence that continued with the cutting of two parallel gullies during the Middle Saxon period followed by the excavation of up to eight pits backfilled with material containing pottery sherds dating to the 10th and 11th centuries AD. Other evidence for Saxon settlement nearby has been found at Hinxton, where a single Grubenhauser (SFB) was found during excavation and a Saxon copper alloy brooch was picked up during the course of fieldwalking (Evans 1993). Closer still, at Bourn Bridge, a more substantial Saxon settlement consisting of at least six sunken feature buildings with numerous pits and a very substantial assemblage of pottery and bone was excavated in November 1993 (Pollard 1996). The large linear earthworks such as Brent Ditch, Fleam Dyke and Devil's Dyke which cross the Icknield Way either side of Babraham are generally considered to be Early Saxon, perhaps dating to the 6th century AD.

The original Medieval settlement at Babraham was almost certainly centred around the church of St. Peter, located just to the south of Babraham Hall, although an earlier church may have been founded in the same place during Saxon times. The current church appears to date from the twelfth century. At this riverside location to the south-east of the hall, inter-cutting northeast-southwest and northwest-southeast aligned ditches dating to the 12th-14th century probably represent the creation of formal Medieval field systems (Wills 2004). The settlement itself was moved to the current location following landscaping of the surrounding parkland in the 16th century. Immediately to the east of the current cemetery site additional evidence for the extent of the Medieval settlement was found in the form of ditches and pits within the base of the trench excavated for the new water main in 1996 (Hatton 1997). The artefacts recovered from these pits, including sherds of pottery wares from Essex and Hertfordshire (1200-1350 AD), a St. Neots ware jug (1100-1300 AD), and a late Medieval Sible Hedingham drinking jug (1400-1550 AD) along with much animal bone is suggestive of midden deposits, perhaps the digging of rubbish pits over a period of several hundred years on the outskirts of the village. To the north-west of the cemetery area recent finds of 12th-13th century Medieval pottery associated with gravel quarrying and the re-use of a north-south Roman road excavated beneath the new Car Park (Armour pers comm.) suggests that the area of Medieval settlement

activity may extend further to the west. Meanwhile, evidence for the contemporary use of the river comes from finds of pottery associated with a channel-fill sequence of the former river channel investigated at the Riverside site (Timberlake & Armour 2006), a channel which had evidently been abandoned following the canalisation of the river in 1735 (VCH 1978). It is thought that these channels may have been periodically dredged and deepened long before this, since evidence for what was considered to be a late Anglo-Saxon to Early Medieval 'hard' or bank-side mooring was uncovered during earlier evaluations of this riverside area (Wills 2004).

Post-medieval

The various phases of archaeological work at Babraham have revealed limited evidence for the building and re-building of the Hall, its drive and ancillary buildings, as well as for the management and use of the river channels from 1500 onwards. This is summarised in a desk-top study by Hall (2003), as well as within recent evaluation and excavation reports undertaken by Armour (2006 & 2007) and Timberlake & Armour (2006). Recent excavations on the Car Park site have confirmed the continuing use of the Roman Road into the post-Medieval period; this can be identified with a trackway shown on the 1808 Ordnance Survey drawing by William Hyatt published in 1838. Gravel quarrying for the metalling of this road was undertaken from the Medieval period right up until the early 1600s (Armour *pers comm.*). Another post-Medieval roadway, the rammed chalk track which crosses the area of the cemetery, post-dating this early way, was used as the first road access to the present house.

Methodology

Both the initial evaluation trenches (Trenches 12, 13 & 16) and the open (stripped) area excavation (12X) were excavated using a 360° tracked excavator with a 2.10m wide toothless ditching bucket in order to remove turf or plough soil, and where agreed subsoil down to the required level. Due to live services criss-crossing the site each trench footprint was scanned using a Cable Avoidance Tool. Trench, open-area and test pit location(s) were enabled through a Global Positioning system, and machine excavation was directed by an experienced archaeologist.

Cut features were sampled by hand, after which each trench or area was planned at a scale of 1: 50 and recorded in section at a scale of 1:10 or 1:20. The Unit-modified version of the MoLAS recording system was employed throughout (Spence 1990). Features were photographed using an Olympus digital camera and the photographs entered onto an electronic database. Trench bases, open areas and spoil heaps were metal-detected where features had been identified.

As part of the continuing Access Roadway evaluation, three trenches (Trenches 12, 13 & 16) were excavated, then subsequently extended, with the aim of re-locating the area of burial(s) identified by the CCCAFU in 1996 (Hatton 1997). Trench 12 (20m long) was machined from the south, but did not encounter any archaeology. This was then extended northwards, and almost straight away revealed burials (F.78, F.79 & F.80), thus establishing the probable south-eastern edge of the cemetery. Following this, a further parallel trench (Trench 16) was cut to the west in order to try and pick

up any extension of the burials in this direction. The first 20 m trench was positioned slightly too far to the north, and once again this encountered no features. The southern end was excavated to a final depth of about 80-90 cm (the upper surface of the underlying gravels), the route of it just missing the cremations which lay either side. As a check, the trench was further extended southwards in order to confirm the absence of archaeology. Machined from the southern end, the extension missed one cremation (F.115) but then revealed the top of another (F.60/F.117). The possible alignment or extension of burials was thus established, and a decision was made to strip the whole of the area down to the top of the shallow sub-soil layer, where this still remained, to the west of Trench 12. The area was first machined westwards from the edge of Trench 12, then eastwards from here as far as the water-main pipe trench, and finally stripped from the effective western limit of the area available to excavation defined by a modern north-south drain trench.

During excavation, test-pitting was undertaken to characterise and test the depth and composition of the sub-soil layer(s) outside of the burial cuts (Test Pits 1 & 2), whilst an east-west sondage trench was also excavated into the sub-soil layer at the point where this contained a complex arrangement of partial, and possibly quite disturbed juvenile burials. All such work was undertaken by hand.

Following the granting of an archaeological license for the removal of human remains from the Babraham Institute (license no. 06-0173), the skeletons were lifted following their excavation and planning *in situ.*, in some cases the skulls or hands being removed together with blocks of surrounding soil for further excavation under controlled conditions within the CAU Finds Department. This work was carried out where necklaces, rings or bracelets were either known about, or else suspected, attached or adjacent to the skeletal elements.

RESULTS

The cemetery contained the complete or partial interred remains of at least 42 individuals (this includes the 1997 Hatton burial and the bones from below the Calcutta Building; F.96), although only 37 distinct graves were recognised. Additionally, some mixed disarticulated skeletal remains have been found deposited within pits, either as contemporary or else as late re-internments, or as disturbed scatters of bones present within or on the surface of the sub-soil. The latter bone elements may represent the skeletons of just a few additional individuals, if that, bearing in mind that truncation of existing burials could account for much of what we are witnessing. Medieval cultivation, post-Medieval ploughing and road-building, and modern machining for services and archaeology may all have contributed to this disturbance.

Broadly speaking, the burials seemed to be arranged within two closely parallel northeast-southwest rows, although due to the inter-cutting and the slightly mixed alignments of the graves, this was difficult to determine. Altogether the cemetery layout took the form a swathe of burials about 8 m wide, but of unknown length, with the cremations forming a discrete group about 6 - 7 m in diameter located towards its south-western end. The prevailing orientation of the graves was NNE- SSW to NE-SW, with the head-end (of the burials) pointing south.



Figure 4. View of cemetery excavation with Babraham Hall to rear



Figure 5. Plan of excavation area

Seven cremations were identified within a circular cremation cemetery or possible remains of a former cremation barrow at the south-west corner of the site. Most of these were associated with almost intact or broken cremation urns.

Only a few non-burial/ cremation related features were encountered. These consisted of pits, some containing prehistoric flint, along with a post-Medieval roadway, some postholes, and plough-scar damage.

For the purposes of best describing the burials and their relationship, the cemetery has been divided into areas (A-D) consisting of groups of burials or cremations. By and large this division is purely arbitrary, based on spatial arrangement, although in some cases these group relationships may be significant.

Area A

This north-eastern end of the cemetery (Area A) is principally defined by a number of paired and/or intercutting shallow north-northeast - south-southwest orientated burials. These lie beneath and are partly truncated by the 1840s rammed chalk road and the later (post-1952) access road.

However, the earliest features within this area are a group of three intercutting pits (**F.87**, **F.88** and **F.89**) containing flint-working waste, but no later pottery or artefacts (see Figures 5 and 6a). These appear to be prehistoric, probably Neolithic in date.

F.87 An irregular oval-shaped north-south orientated pit 2.60 m long by 1.20 m wide and 0.60m deep cut into natural, with near vertical sides to the west end, more gently sloping on the east, with a flat round bottom. The two layers of fill [287] & [236] consisting of silty sand(s) with inclusions of small angular gravel, both contain worked and un-worked flint nodules and flakes, the flint-working apparently Late Neolithic in character. This has been interpreted as a possible Neolithic rubbish pit, truncated on its north-western side by the later cut of the Roman burial F.80.

F.88 An oval to oblong-shaped E-W pit, or short section of ditch, truncated by adjacent pits F.87 and F.89. This was between 1.11 and 1.5 m wide, shallow (0.26 m deep) and at least 2.72 m long (the west end of this was truncated by Trench 12, the east end by the service trench for the 11 kV cable), with gentle sloping sides and a shallow concave base, cut into natural (a yellow-brown sand). The single fill [239] consisted of a sandy silt with inclusions of medium-small stones and worked flint flakes. Considered also to be a prehistoric pit of similar age (Late Neolithic?) to F.87 and F.89, though marginally earlier.

F.89 A small oblong/oval-shaped pit (1.45 m long x 0.60 m wide) with a NE-SW orientation that cuts feature F.88 along its northern edge. This has concave and shallow sides (up to 0.16 m deep) with an oval and gently concave base. The feature has one main fill [241] consisting of a mid brown-grey sandy silt [241] with small angular gravel inclusions, but no obvious worked flint. This was interpreted as being one of a small group of prehistoric pits centred around this north-eastern edge of the site.

Almost all of the inhumations at this end of the Roman cemetery followed the typical north-northeast - south-southwest alignment, and were buried either within single graves (F.80, F.85 and F.109), within loosely paired and parallel graves (F.81 and F.82, F.86), or within parallel paired and intercutting grave groups (F.78 and F.79, F.83 and F.84, F.129 and F.130-F.131); the latter quite possibly representing the burials of related individuals. Paired burials predominated. Most of the burials were of adults, typically with the head orientated to the south.

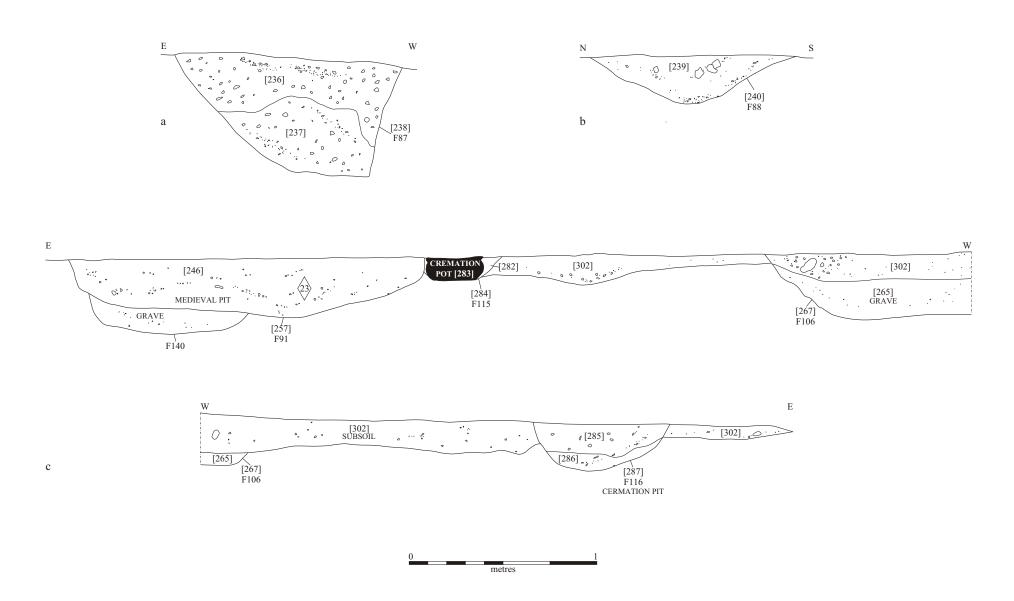


Figure 6. (a) and (b) Sections through Neolithic pits F. 87 and F. 88

(c) Sections through excavation sondage at south end of cemetery, showing relationship between graves, cremation and medieval pit



Figure 7. Photographs of excavated graves



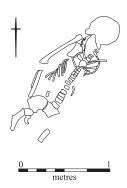






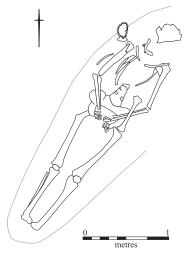
Figure 8. Photographs of excavated graves

F.78



A short (approx. 1.1 m long), narrow (approx 0.4 m wide) and shallow NNE-SSW orientated oval-shaped grave of unrecorded depth. This contained the truncated and partial remains of an older juvenile skeleton (9-11 yrs old) with its head placed at the SW end, and the body laid on its back in a supine posture (see plan to RH side). The bones were moderately well preserved, but the lower legs were missing, and the right arm and hand truncated, probably as a result of modern surface disturbance. The grave is cut by a later burial (F.79) which contains the skeleton of an adult female. This lies parallel to it on the west side. The grave fill [210] consisted of a dark red grey silty sand with gravel and flint inclusions and flecks of charcoal. There were no accompanying grave goods or even residual finds associated with this layer.

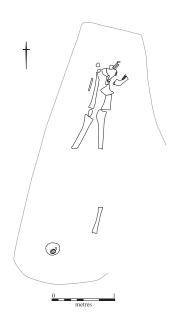
F.79



A NNE-SSW orientated elongate-oval shaped grave up to 1.6 m long and 0.6 m wide, with steep sides and a flat bottom, though now fairly well truncated (only 0.14 m deep). The partial and moderately well preserved remains of a mature adult female skeleton, articulated apart from the head The latter appears to have

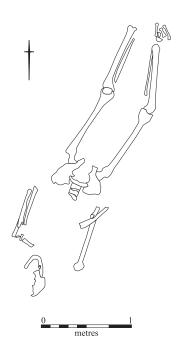
been removed accidentally. The skeleton had been laid out in a supine extended position, with the feet placed towards the north. Accompanying grave goods included an almost complete pot (SF21), a 3rd – 4th century colour coat mini beaker, which had been placed next to the right shoulder, a copperalloy finger ring on the left hand third finger (SF20), and the remains of an iron brooch/ shroud pin (SF18) found beneath the lower left leg. From the grave fill [212], which consisted of a red-grey silty sand containing gravel plus the occasional charcoal inclusion came an iron nail (SF18) and redeposited flint. The burial seems to have truncated the slightly earlier juvenile grave F.78 on its east side. Roman, probably 3rd century.

F.80



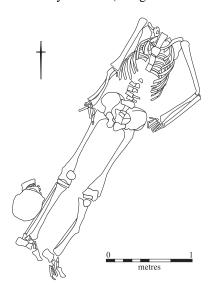
A NNE-SSW orientated irregular elongateoval shaped grave; 2.05 m long, 0.86 m wide and 0.24 m deep, with steep, slightly concave sides and a gently concave base. This contained the poorly preserved disarticulated remains of an unsexed middle adult, minus much of the upper torso, including ribs, spine, most of the arms and the top of the skull. The body appears to have been laid out in a supine extended position with the feet pointing to the north. The skull had been removed (decapitated) post-mortem and placed across the left shin, in which position it appears to have collapsed. A Hadham redslipped flagon dating to the 3rd- 4th century (SF 25) had been placed at the head end, presumably as a grave offering, whilst a group of iron hobnails laid around the feet (SF10-13 + 15-17) suggested a burial with footwear, possibly as worn shoes, sandals or boots. Other finds included iron coffin nails attachments (SF 1-9 + 14), particularly at the head end of the burial. The former existence of a wooden coffin was also suggested by the width and length of the cut. The discovery of a loose juvenile finger bone (phalange) with a green verdigris stain suggests the presence of a copper-alloy finger ring which has not survived. No other juvenile bones were found. The source of this therefore is unknown. The northern end of the grave cut appears to have cut into a prehistoric pit (F.87), the source for some of the redeposited flint encountered within the grave fill [217]. This consisted of a mid grey brown silty sand with round to subangular stone inclusions. The finds support a probable 3rd century AD date for this burial.

F.81



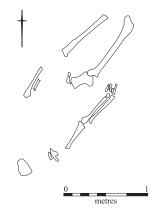
A NNE-SSW orientated elongate-oval shaped grave cut 1.85 m long by 0.80 m wide (but of unrecorded depth) with steep sides and a flat base. This contained the articulated skeleton of a female adult, minus the ribs, upper spine, part of the skull and hands. It had been laid on its back in a supine position, with its head towards the south. No grave goods were found with this burial, although a small amount of residual flint was recovered from the grave fill [205]. The latter consisted of a typical dark red grey silty sand with frequent fine-medium gravel sized inclusions and charcoal flecks. Some of the skeleton appears truncated, yet the condition of the bone was also variable, the preservation reflecting degree of underlying differences in geology; the bones of the chest and pelvis areas overlying sand.

F.82 An oval-elongate shaped NNE-SSW orientated grave, 1.55 m long by 0.65m wide and evidently shallow (though of unknown



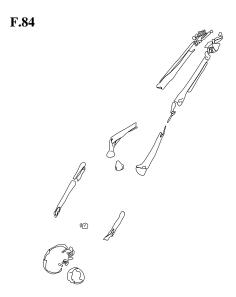
depth). This moderately steep-sided and flatbottomed grave contained a near complete and well-preserved articulated skeleton of an older sub-adult (14-17 years) minus the head. The latter had been decapitated post-mortem and partly removed, the skull having been placed adjacent to the lower right leg, with the feet pointing to the north. The body lay in a supine position with the left arm bent outwards at a right angle. No grave goods were found accompanying the skeleton, although residual flint plus a single sherd of early Roman pottery (dating to the mid $1^{st} - 2^{nd}$ century AD) was recovered from the grave fill [215]. The latter fill consisted of a mid red-grey silty sand with occasional gravel inclusions and charcoal. Roman, probably 3rd – 4thcentury AD date.

F.83



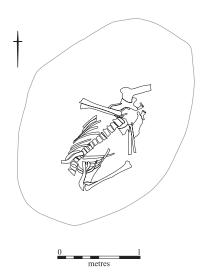
An oval-elongate shaped NNE-SSW orientated grave, c. 1.55 m long, 0.85m wide, and 0.2 m deep with gentle (35-40°) angled sides, but without any well defined cut. This contained the semi-articulate but well-preserved remains

of a mature adult female, probably of an individual between 53 and 63 years old. The skeleton was incomplete with the lower legs, feet, ribs, vertebrae, scapulae and most of the skull missing. This lay in a supine position, the head end facing south, with no accompanying grave goods. The fill consisted of a mid brown silty sand [220] with inclusions of angular flint. The grave-cut, [222], appeared to truncate the west side of an earlier parallel grave (F.84), with which it may have been related. The north-west edge of the burial was truncated by a modern service trench (11 kV cable).

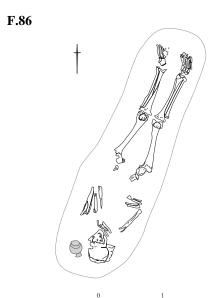


An oval-elongate shaped NNE-SSW orientated shallow truncated grave, 1.8 m + long, 0.55m wide, and 0.15m+ deep, the base of which sloped towards the south-west, the exact edges of which could not be determined due to the similarity of the grave fill to the surrounding soil and natural. This consisted an orange brown silty sand [226] with inclusions of angular flint. The grave contained the skeleton of an articulated (unsexed) adult, minus the ribs, vertebrae, front of skull, hands and pelvis. The preservation (condition) of the bone was good. The skeleton lay in a supine position with the head facing south, parts of it truncated by the cut for grave F.83 to the north, the service trench and a posthole for a modern fence. A complete 2nd - 4th century shelltempered jar (SF 19) had been placed next to (on the south-east side of) the skull. Roman, probably 3rd century AD burial.

F.85 A short (1.45 m long), 1 m wide oval-shaped grave cut aligned in a NNE-SSW orientation typical of the cemetery, with shallow sides and an uneven concave base up



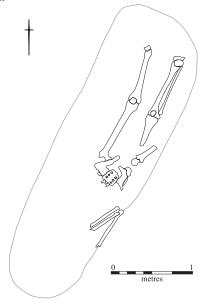
to 0.28 m deep at its deepest point. This contained the moderately well preserved articulated skeleton of a mature adult male (51 yrs +), lying in a supine position with the hands folded over the pelvis area and the skull removed (probably a post-mortem decapitation). In all probability the skull had been placed by the feet at the north end of the grave, but had since been lost through truncation. The lower half of this burial appears to have been destroyed (removed) as a result of the digging of the modern 11 kV cable service trench. The grave fill [223] consists of a fairly typical mid brown-grey sandy silt with occasional angular and subangular flint inclusions. A single residual worked flint flake was recovered.



An oval-rectangular NNE-SSW orientated grave containing the articulated skeleton of an adult male (45 years +), supine and orientated with head end to the south, the skull lying on

its side facing west. The legs and feet have been laid together whilst the arms appear to be crossing the chest with the left hand resting near the chin. The body appeared to have been 'badly buried with the skull and upper body compressed'. The bones were indifferently preserved due to the local presence of sandy and partially acidic soil conditions. A small, and near complete Nene Valley colour-coated beaker, suggested as being 4th century, had been dropped or else placed above and to the right of the head, possibly during the backfilling of the grave, whilst 13 hobnails were found in situ around the feet, indicated footwear. There were other pottery sherds dating to between the 2nd - 4th century AD recovered from the fill itself. The fill consisted of a mottled mid orange-brown silty sand with patches of angular flint [232]. Roman, probably early 4th century AD.

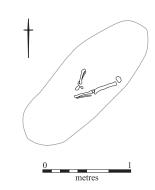
F.129



An elongate-oval NNE-SSW aligned grave, 1.45 m long by 0.56 m wide and of unknown depth, with straight but gently sloping sides and a slightly concave base. This contains the well-preserved articulated skeleton of an adult male lying in a supine extended position, with the head pointing south. The feet and upper half of the body except for the right arm appears to be missing; the south-east end of the grave truncated by the construction of the post-Medieval (circa 1840s) chalk road, whilst its eastern edge has been clipped by the grave slightly later grave for an adult female burial (F.131). Hobnails (SF 67 + 69) were recovered from either side of the right and left lower legs, and suggests the presence of footwear. The size and shape of the left shoe could be determined by the in situ position of up to 45

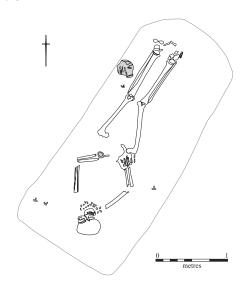
nails. The grave fill [322] consisted of an orange-brown sandy silt with some stone inclusions. Roman, probably 3rd century AD.

F.130



A small elongate - oval shaped NNE-SSW aligned grave (c. 1m long and 0.5 m wide, but of unknown depth) has been inserted into the top of an adult female burial (F.131) aligned in the same direction, and to which this is probably related (mother?). The grave contains the articulated but truncated skeleton of a young infant (probably of about a year old) now consisting of only a moderately well preserved femur, two humerii, and a fragment of pelvis. The skeleton had probably been laid out in a supine position, the missing head end (unusually) orientated to the north. The fill [325] of the grave cut consisted of an orangebrown sandy silt with small stone inclusions. There were no accompanying grave goods.

F.131



An elongate-rectangular shaped NNE-SSW orientated grave with straight edges and steep sides, 1.8 m long, 0.8 m wide and of unknown depth (but 'deeper than the other burials'). This grave clips the edge of an earlier and parallel grave of an adult male (F.129), to which it may well be related, along with the

later insertion of a child burial (F.130) above it. The skeleton is of a young adult female laid out in a supine extended posture, with the head end to the south, the bones well articulated and moderately well preserved, yet missing the bones of the entire upper mid section (ribs and vertebrae) of the body alongside a proportion of the pelvis. Relatively, the burial is richly adorned. A complete jet bead necklace (SF 71) encircled the neck, whilst copper-alloy earrings (SF 91) were found adjacent to the left temporal bone (the position of the ear lobes), a shale bracelet (SF 70) was found by the left wrist, whilst a near complete and beautifully decorated 3rd century AD Pakenham colour coat beaker (SF 87) had been placed just below the left knee. A number of iron nails (SF 88-90) surrounded the skeleton; almost certainly coffin nails associated with a (former) wooden coffin up to 1.6 m long. Other pottery sherds recovered from the grave included some of residual early Roman type and others dating to the 2^{nd} - 4^{th} century \overrightarrow{AD} . The grave fill [339] consisted of an orangebrown sandy silt with stone and gravel

inclusions, and chalk flecks throughout. A Roman, probably 3rd century burial.

North-South Grave

F.109

An oval to sub-rectangular shaped grave on a north-south alignment with straight near vertical sides and a concave base, 2.0 m long by 0.55 m wide and 0.27 m deep. This contained an articulated adult male skeleton in supine position, with the head typically aligned to the south, but with the skull lying on its side facing east, the left fist clenched. The skeleton had been heavily truncated, first by the trench for the 11kV cable which partly concealed it, and secondly by the evaluation trench (Trench 12). The long bones (arm and leg) on the left side of the skeleton have survived, although most of the right side including the leg bones, pelvis, rib bones and vertebrae were removed during machining. The bone preservation was

Area B

The area lies to the west of the post-Medieval chalk road, and contains a small number of graves and burial pits which show evidence for at least two distinct burial alignments. Two single graves (**F.132** and **F.93**) and a pair of intercutting graves (**F.121** and **F.133**) seem to be orientated on the same north-northeast - south-southwest alignment found within Area A. However, another possibly different northeast-southwest alignment can be seen within graves **F.119** and **F.122**. In contrast to this, there are three graves (**F.112**, **F.123** and **F.141**) that are all aligned west-northwest – east-southeast, in other words, at right angles to the prevailing orientation of the inhumation cemetery. It is possible that these could be respecting the northern edge of an earlier small cremation cemetery within Area C (i.e. south of Area B).

North-northeast - South-southwest Graves

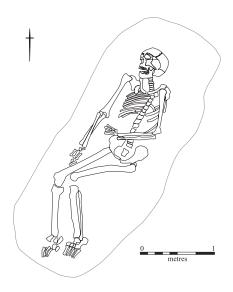
F.93

An elongated-oval NNE-SSW orientated poorly defined grave, 1.54 m long by 0.77 m wide and 0.2 m deep, with steep sides and a flat base. This was truncated at the east end by the roadway which had compressed the ground and partly destroyed the archaeology. At the north end, this grave cuts an earlier burial (F.139). The grave contains an incomplete but articulated skeleton of an adult female, in supine position, orientated with the head to the south. The skull appears to have been removed



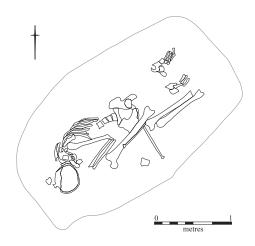
in antiquity and placed by the right knee (a post-mortem decapitation), whilst the lower half of the skeleton (including the right leg and foot and left leg below knee) were truncated during the course of construction of the Medieval/ post-Medieval road. The pelvis on the other hand, was removed during the most recent machining of the excavation cut. The grave fill [250] was composed of an orangemid brown silt with stone inclusions and one residual worked flint (a micro-blade). No grave goods accompanied the burial. Roman.

F.132



NNE-SSW orientated oval-rectangular grave, 2.03 m long, 0.76 m wide and 0.25 m deep, with steep sloping sides and a flattish slightly concave base. The north end of the grave lies beneath the post-Medieval chalk road, but was not truncated by it. A shallower but altogether quite unrelated east-west burial (F.112) overlies this but does not truncate it at its northern end. A pot, perhaps an earlier unrelated cremation (F.113), lies adjacent to this burial on its western side. The grave itself contains a well preserved and partly flexed articulated skeleton of a mature adult male lying upon its back, with the head end orientated northwards, and the skull lying on its side facing west. The flexing of the burial may have been response to digging too short a grave. There were no accompanying grave goods, although two pieces of Roman pot dating to the $2^{nd} - 4^{th}$ century AD and some animal bone were recovered from the grave fill [328], the latter consisting of a mid orangebrown sandy silt with stone inclusions. Roman, probably 3rd century AD.

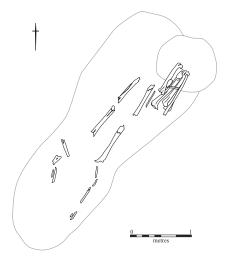
F.121



An oval NNE-SSW orientated grave 1.55 m long and 0.91 m wide and approx. 0.2 m deep, with steep sides and a concave base, excavated into sub-soil. This contained an unusual burial consisting of an elderly adult male skeleton lying on its right side, flexed and virtually in a crouched position, with the head facing towards the south-west. The position this was inserted into the grave may well have something to do with the bent posture of the body on death; the individual in life had a leg and spine deformity (see Dodwell; Appendix 6). This was still fairly well articulated, although the top of the spine was jumbled and the right arm and ribs missing, along with one of the femurs. One suggestion is that the burial may have been disturbed, perhaps even moved whilst still articulated, in order that this could be fitted into a smaller grave. No grave goods were found with the burial, although a single sherd from a Horningsea greyware wide mouth jar dating to the $2^{nd} - 4^{th}$ century was recovered from the grave fill, the latter consisting of an orange-brown silt [303]. The grave is one of a pair. It truncates an earlier similarly aligned burial [F.133], with which it may be related. To the north-east, the edge of the grave is truncated by a small circular pit (F.128) which may be a later re-internment. There may also be some disturbance associated with the cutting of burial F.112. Roman, probably a 3rd century AD burial.

F.133

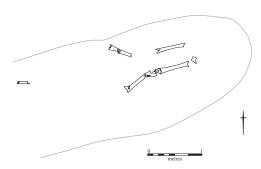
A NNE-SSW orientated elongate-oval shaped grave up to 2.2 m long and 0.85 m wide (at its widest point) but of unknown depth. This deeper burial has been truncated slightly along its eastern edge by an overlying east-west aligned grave (F.112) which contains the remains of an unsexed adult. At its northern end, this grave was truncated by a small



(possibly Medieval) pit F.128 which seems to contain some of the bones belonging to this burial. The grave contains a poorly preserved and badly truncated adult skeleton [332], laid out in supine extended posture, the missing head end orientated to the south. Only the long bones of the legs (minus the fibulae) and fragments of the arms survive. No grave goods accompany the burial, yet some residual flint was recovered from the grave fill [331], the latter consisting of a mid greyish-brown sandy-silt

Northeast-Southwest Graves

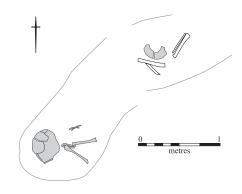
F.119



A large elongate-oval shaped NE-SW orientated grave dug to a slightly greater depth, and now buried beneath the Medieval/ post-Medieval road. The west end of this was not fully excavated beyond this. The grave itself was approx 2.5 m + long and 1m wide with gently sloping sides and a slightly concave base. This contained the rather incomplete and poorly preserved remains of an unsexed adult skeleton, of which little survived apart from the long bones of the legs (both femurs were broken), a fragment of humerus and a tarsal. The articulation of these, however, suggested that the body was buried with the head to the south, a typical orientation within the cemetery. No grave goods were encountered,

the fill [296] consisting of a mid orange-brown clay silt with the occasional pebbles and flecks of chalk.

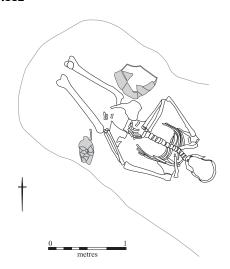
F.122



A small elongate-oval shaped grave (0.6 m long and 0.4 m wide, but of unknown depth) with gently sloping sides and a concave base cut into the natural. Aligned in a NE-SW direction, this contained the poorly preserved articulated skeleton of a 7 year old juvenile, with its head orientated to the south. These remains consisted of a skull, two humerii and some ribs, whilst the lower half of the body was missing. The grave lay beneath another east-west child burial (F.123) which appears to have truncated its northern end. There was one grave good found; a near complete pot (SF 66) placed towards the north end, and identified as an imitation black-burnished ware, probably from Mucking, Essex and dating to around the 2nd – 4th centuries AD. The grave fill [306] consisted of a mottled mid brown-orange silt. This contained one or two iron nails. Roman, probably 3rd century AD.

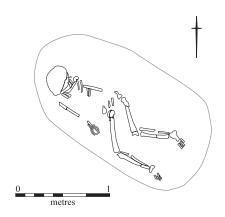
West-northwest – East-southeast aligned graves

F.112



A poorly defined oval- rectangular shaped WNW-ESE orientated grave, 1.47 m long by 0.82 m wide and 0.26 m deep, with steep sides and concave base overlying sub-soil. This contained a substantially intact skeleton of a mature adult male lying supine with the head facing east and truncated at the knee, the latter perhaps foreshortened to make way for the burial lying immediately to the west (F.133). The right arm appears bent at the elbow with a clenched hand positioned against the lower spine. The left arm appears slightly bent with the hand on the left pelvis. Both wrists may have been bound before burial, hence the unusual positioning. A small, decorated, and near complete Pakenham colour coat beaker (dating to the late 2nd-3rd century AD) had been carefully positioned next to the pelvis/upper leg on the south side. Opposite this, alongside the left hand pelvis had been placed a pot containing a cremation (F.118); possibly an earlier cremation pit which had inadvertently been intersected by the grave, which was then respected, and left intact. The surrounding grave fill consisted of an orange-brown clay and silt [289]. Roman, probably 3rd century AD.

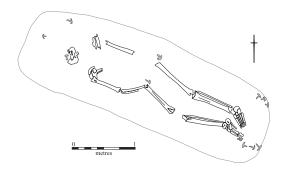
F.123



A small WNW-ENE oval-rectangular shaped grave cut, 1.02 m long by 0.55 m wide and approx. 0.2 m deep, with steep sides and a clearly defined concave base. This contained a poor to moderately well preserved skeleton of an older infant (of c. 4 years), partly flexed with its head towards the north-west, and the skull on its side facing south. Although the limbs were well articulated, most of the ribs had not survived, and the arms seemed to be fragmented. The skeleton was accompanied by personal adornments: two copper-alloy bracelets (SF 53 + 54) around the right lower

forearm, and another (SF 64) just over the left hand. The clasp of a bronze necklace (SF 65) was visible poking out from beneath the skull when recorded *in situ*. The presence of this type of jewellery suggests that the skeleton is of a young girl. The skull was subsequently removed to the CAU Finds Dept. for careful excavation of the beads. This grave truncates the slightly earlier child burial F.122 to the south, to which it may be related. The grave fill consists of a fairly compact orange-brown sandy silt [309]. Roman, probably 3rd century AD.

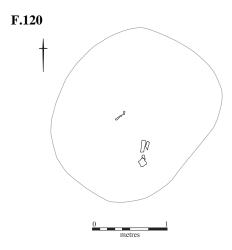
F.141



A shallow east-west (WNW-ESE) aligned grave, rectangular with steep to vertical sides and a flat base (1.06 m+ long, 0.68 m wide and 0.2 m deep). A shallow pit burial (F.139) cuts the north-west end of the grave, whilst another pit (F.120) filled with human bones overlies the grave at its eastern end. There is no obvious relationship between grave F.141 and the other surrounding burials. This contained the moderate to poorly preserved remains of an adult female skeleton in supine extended position, with the head to the north-west. Much of the skull is missing along with most of the vertebrae and ribs and parts of the clavicles, pelvis and hands. The loss of bone may be due to burial in sand. Three sherds of Roman (2nd – 4th century AD) pottery were found separately within the grave fill, scattered over the pelvis area, whilst the presence of three iron nails around the head (SF 92-94), two either side of the pelvis (SF 95-96), and six (SF 97-102) around the feet suggests the (former) presence of a wooden coffin. The grave fill [362] consists of a dark orangebrown silty sand. Roman, probably a 3rd century AD burial.

Burial Pits

Three burial pits represent contemporary child graves (F.139), or possible Late Roman re-internments (F.120 and F.128), the latter perhaps a partial re-burial of bones from a disturbed grave (F.121).

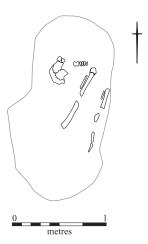


A small (1.3 m long and 0.7 m wide) ovalshaped NE-SW aligned Roman burial pit containing a number of disarticulated and poorly preserved human bones; this included an adult metatarsal and two phalanges plus a badly degraded fragment of a calcaneum, alongside fragments of lower leg bones. These lay within a fill consisting of a light orangebrown clay and silt [299].

F.128 A circular pit (0.55 x 0.6 m diameter and 0.3 m deep) which cuts the north end of burials F.133, F.121 and F.112, and which contains a jumble of sub-vertically placed long bones which may either have fallen-in or else been purposefully re-interred therein. Some or all of these bones may have become detached from the skeleton in F.133. A fragment of 2nd – 4th century pot was recovered from the upper fill [320] of this pit; a dark grey-brown sandysilt. The skeletal fragments sit in/ on the top of the lower fill [334], the latter a reddish-brown sandy silt with occasional small gravel inclusions. The feature is most probably a Late

Roman (probably 3rd century AD) reinternment.

F.139 A squat-rectangular shaped pit 0.97 m long and 0.5 m wide (and c. 0.1 m deep) orientated roughly NNE-SSW with steep sides and a flat base. A probable Roman pit burial or small box grave containing the partially disarticulated remains of an adult and an infant. This included the lower long bones (left



and right femur, tibia and fibula) of an infant, and a portion of the left maxilla and the back of a skull belonging to a young adult. The approximate position in which the adult head and child's bones were found suggests that the skeletal remains were laid with their heads pointing south. The burial pit cuts the western end of the east-west coffin burial F.141, an association which could be intentional if the burials in some way relate. The pit in turn is cut by burial F.93..

Cremations

The evidence for the northern edge of this cremation cemetery may be apparent in the single cremation (**F.118**) preserved in the side of grave F.112. This appears to have been recognized and respected during the original digging for this burial, and was left *in situ*. Another cremation pot (**F.113**) was located immediately to the west of burial F.132. However, this lay just outside of the grave cut.

F.113 Fragments of a pottery vessel (SF no. 46) recovered from a cut [275] made for a possible cremation urn which lies immediately to the west of burial F.132. Whilst the pit for this wasn't that clearly defined, it seems as if this had been dug into the natural rather than into the side of a grave, and was then infilled with a mid orange-brown clay and silt [274]. The pot was removed to the laboratory or further analysis. The pottery urn is of a fine oxidised sandy ware (Roman $2^{nd} - 4^{th}$ century AD), the most likely date for the cremation being the late 2^{nd} to early 3^{rd} century AD.

F.118 A near complete urn, probably a Horningsea greyware wide mouthed jar (Roman $2^{nd} - 3^{rd}$ century AD) deposited within a poorly defined cremation pit [293]. This may or may not have been truncated by the burial cut which either includes it or circumvents it on the north side of grave F.112. The cut for the urn was between 0.35 x 0.30 m in diameter, but the depth and the shape of its sides could not be determined. The urn was surrounded by a fill of dark brown silty clay [291], from which another Roman pot sherd(s) dating to the 1^{st} - 3^{rd} century AD was recovered. This fill of this pit was difficult to distinguish from that of the grave.

Area C

Cremations

Area C includes the greater part of a small late 2^{nd} – early 3^{rd} century AD cremation cemetery, the latter consisting of six clearly identifiable pits containing urned cremations (**F.90**, **F.92**, **F.115**, **F.116**, **F.117** and **F.134**). Taking into account the two other cremations present in Area B, the cemetery appears to be defined by a roughly circular group of pits surrounding F.134; a central and almost certainly earlier (1^{st} – 2^{nd} century AD) cremation. The emptiness of this particular area, within what is otherwise a rather densely packed swathe of burials both to the north and south of these pits, suggests either respect for this zone, or else the presence here of a formerly overlying feature such as an earthen barrow.

F.90 A truncated circular pit $(0.5 \times 0.4 \text{ m})$ wide and 0.15 m deep) with moderate to steep sides and a concave base containing a cremation pot. The bottom of this was excavated into natural (an orange sandy silt). The single fill [243] consisted of a compact mid grey-brown silt containing two pieces of pot, indicating that this had been broken in antiquity. It seems likely that this urn had been placed in whole, then immediately backfilled; the breaks within this appeared to be modern. The lack of evidence for burning within the surrounding cremation fill suggests that this was not taken directly from the pyre. Burnt bone but not charcoal was present within the remains of the pot. This was removed as one and excavated within the laboratory. The pottery urn was a Horningsea greyware jar, of a type dating to the $2^{\rm nd}$ - $3^{\rm rd}$ century AD. Sherds from two other vessels were recovered from within the same feature; one sherd from a lid-seated sandy greyware jar, and 11 sherds from a Hadham reduced ware jar with a beaded rim, both dating to the $2^{\rm nd}$ - $4^{\rm th}$ century AD. In all probability, the cremation itself dates to the late $2^{\rm nd}$ to early $3^{\rm rd}$ century AD.

F.92 A circular steep-sided pit $(0.66 \times 0.61 \text{ m})$ wide and 0.3 m deep) with a concave base containing a broken cremation urn. This was enclosed within a fill consisting of a firm mid-orange brown sandy silt [247] containing frequent charcoal (close to the surroundings of the pot) and stones along with burnt bone and pot sherds. The cremation urn [248] appears to have collapsed in on itself in antiquity; the upper portion of this (a pot originally 0.25 m diameter by 0.13 m deep) was filled with an orange-brown sandy silt mixed with fairly large fragments of burnt bone – probably a mixture of cremation pyre and natural soil, with the bone not fully burnt. The urn was identified as a Hadham reduced burnished ware jar, dating to the late 2^{nd} century AD. The cremation itself is Roman, probably late 2^{nd} to early 3^{rd} century.

F.115 A rectangular pit (0.95 m long, 0.60 m wide and 0.2 m deep) with near vertical straight sides and a flat base containing a cremation urn. This was identified as a Roman $2^{nd} - 4^{th}$ century oxidised sandy globular jar. The pit, which either cuts or abuts a larger pit to the west, appears to have been deliberately backfilled around the flat-bottomed urn [283], the fill consisting of a mid brown sandy silt

and gravel [282]. The pot had evidently broken and spilled cremated bone into the fill, which was otherwise difficult to distinguish from the underlying sub-soil. The cremation is Roman, probably of the late 2nd to early 3rd century AD.

F.116 A shallow and irregular oval-shaped pit $(0.62 \log x \ 0.54 \text{ m})$ wide $x \ 0.24 \text{ m}$ deep) with near vertical slightly concave sides and a concave base containing a broken cremation urn. This together with its spilled contents of cremated bone survive within the upper fill of the pit, a mid brown sandy silt and gravel [285]. The urn had evidently been knocked over in antiquity, spilling the cremated contents and smashing the pot. Beneath this, the basal fill [286] consisted of a mid brown sandy silt and gravel with lighter and darker patches in it and some other fragments of cremated bone. This layer had probably been packed around the pot after placing it in the ground. The pottery urn was of a sandy greyware type, which probably dates to the $2^{nd} - 3^{rd}$ century AD. However, the exact form of this was unclear. The most likely date for this cremation is once again late 2^{nd} – early 3^{rd} century AD.

F.117 A shallow circular cremation pit (0.47 m wide and 0.10 m deep) with gently sloping concave sides and a concave base cut into the sub-soil layer [271]. This contained the broken remains of three almost whole pots; a more or less complete shallow Samian dish, a Nene Valley jar, and a large greyware storage jar or urn containing the cremated bone. These were contained within a fill consisting of a fine mid brown sandy silt with rounded to sub-angular gravel [294]. The top of the cremation urn was hit by the machine whilst digging the second evaluation trench, Trench 16. The edge of this cremation pit had previously been truncated by the digging of another Roman pit (F.91) of uncertain function on its east side. The urn, which consisted of a sandy greyware globular jar, can be dated to the 2nd – early 3rd century AD (which reflects the probable date of the cremation). However, the associated pottery vessels suggest both early and late dates; the Samian dish mid-late 2nd century, whilst the Nene Valley colour-coat flagon or jar is 3rd century AD. There were also sherds of Late Iron Age/ Early Roman and Romano-British pottery types associated with the cremation fill.

F.134 Pit with broken cremation urn. A circular pit (0.44 m wide x 0.15 m deep) cut for a cremation urn [277], the fill surrounding this [276] consisting of a light orange-brown clayey silt with gravel and small burnt bone fragments throughout. Amongst this was found a small amount of re-deposited prehistoric flint. Some of the burnt bone appears to have been recovered from the pit fill below the level of the pot, suggesting that either there was an earlier cremation, or else that some of the pyre debris was used to fill this before the insertion of the pot. Most of the broken pot fragments appear to have been contained *in situ*. due to the circular shape of the surrounding fill. The urn enclosing the cremation has been identified as being early Roman (1st-2nd century AD), indicating that this was probably the first and central cremation within the cemetery.

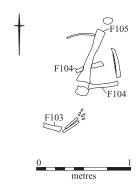
To the south-west of this lay a group of four or five disturbed burials within the subsoil layer (302), most of them of juveniles (**F.103**, **F.104**, **F105**, **F.110** and **F.126**) and probably early in the cemetery sequence. To the south-east of the cremations lay a group of northeast-southwest orientated adult burials. The latter included a pair of intercutting graves (**F.94** and **F.111**) which contained the remains of at least three individuals, plus an overlying pit burial containing scattered bones (**F.114**). Within the same group were two adjacent but probably unrelated graves (**F.95** and **F.140**), and a pair of intercutting north-facing graves (**F.124** and **F.135**), one of which was a coffin burial.

Partial Child Burials

F.103

A partial infant burial consisting of articulated right arm of a small child or infant with some of the surviving digits found within the subsoil layer [302], immediately to the west of a later burial F.106, which also truncates it. The orientation of the articulated arm suggests that

the child was buried in a NE-SW orientation with its head to the south. A round copperalloy pen annular brooch (SF 28) found close by might be associated with either this or with one of the other two adjacent burials (F.104 & F.105). Animal bone and a number of iron nails were also recovered from the sub-soil [302] surrounding the bones, the soil layer here consisting of a mid brown-orange sandy silt.

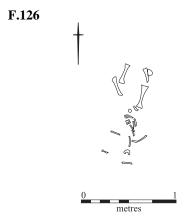


These partial burials (F.103-5 + F.126) may be associated with several very shallow and now imperceptible grave cut(s) within this same area, some of which may be superimposed over each other, and almost certainly truncated and disturbed. Roman, undated, but possibly of the late 2^{nd} or early 3^{rd} century AD.

F.104 A partial infant burial consisting of an articulated right arm and disarticulated femur belonging to a small infant. These were found within the sub-soil layer [302] immediately to the west of burial F.106, and were truncated by it. The orientation of the articulated arm suggests that the child was buried in a NE-SW orientation with its head to the south. Roman, undated, but possibly late 2nd to early 3rd century AD.

F.105 The partial burial of an adult consisting of a single tibia and patella. This was found immediately adjacent to the skeletal remains of F.103 & F.104 within the sub-soil layer [302] immediately to the west of burial F.106. The orientation of these partially articulated bones suggests that the individual may have been buried in a NE-SW orientation with its head to the south. A round copper-alloy brooch (SF 28) might be associated with this or else with one of the other burials in the group. Roman, undated, but possibly late 2nd to early 3rd century AD.

F.110 The crushed remains of an infant's skull [269] which might be associated with other disarticulated infant bones found within the same sub-soil layer [302] nearby. The skull might also belong to one of the skull-less juvenile burial(s) F.103,105 and F.126 which are to be found less than a metre or two distance to the north. The bone preservation was poor. By inference this was a burial of Roman date.

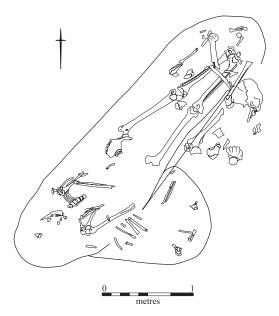


A shallow, poorly defined, north-south orientated burial, consisting of the partial skeleton of a child. This contained a disarticulated scatter of bones disturbed by animal burrowing or ploughing; amongst these were long bones, ribs and vertebrae amongst other fragments, all seemingly deposited within a shallow depression in the sub-soil layer [302]. Their partly articulated nature and the sequence of these suggests an original burial with the head facing south. No associated finds apart from a single iron pin or nail (SF 49) were recovered from this scatter. This burial lies on the edge of the cremation cemetery, a metre or so to the north of burials F.103-105, perhaps an insertion into the barrow. Roman, undated, but possibly late 2nd to early 3rd century AD.

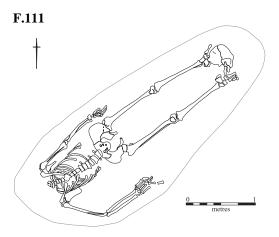
Northeast-Southwest Graves

F.94

An elongated-oval NNE-SSW orientated grave (1.85 m long by 0.90 m wide and 0.2 m deep) with irregular sides and base which contains the remains of two adult skeletons. One of these, an incomplete mature adult female skeleton [255] lay in a supine posture with its head orientated towards the southwest, and with parts of the top of the skull, scapulae, ribs, pelvis and hands missing. The associated grave fill of this internment consisted of a mid grey-brown silty sand and gravel [253]. This contained no obvious grave goods although sherds of Roman pot (2nd- 4th century AD) and some residual prehistoric worked flint were recovered from the south end of the grave. Above and partly overlying this was a second burial [256]. This seems to



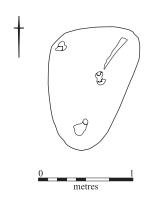
have been inserted shortly after the internment of the first, with the head orientated due south. The placing of this subsequent, slightly less complete, though still articulated internment involved a partial re-cut of the eastern side of the grave (seen in plan view). Some random disarticulation of these bones appears to have taken place, perhaps resulting from a further burial on top (F.114). The bottom of this grave truncates the upper half of grave F.111, which lies immediately underneath it. Roman, probably 3rd century AD.



An oval-rectangular NE-SW orientated grave (2 m long by 0.9 m wide and 0.2 to 0.3 m deep) with irregular/concave sides and a flat base. This contained the decapitated skeleton of a sub-adult male [270], the head end facing south, and the body laid out in supine extended posture with the detached skull placed between the feet. The orientation of the skeleton suggests that the body had been placed 'half sitting/ half lying within the grave', perhaps on account of the shortness of the cut. The bones were well articulated, and preservation was

good (the greater depth of this burial appears to have ensured the survival of the skeleton). The grave fill of F.111 consists of two layers overlying an orange-yellow sand (natural); a lower dark grey-brown-yellow silty sand [272] containing occasional worked flints and rare sherds of residual Romano-British pot, and an upper layer [271] of grey-brown silty sand with inclusions of gravel and flecks of charcoal. No associated grave goods were found. The super-position of these burials ([255] & [256] of F.94 overlying [270] of F.111) may have been determined by familial relationship. The northernmost tip of this grave cuts the earlier pit F.91, and the still earlier NE-SW aligned burial F.140. However, it is assumed that this is Roman and of broadly comparable date (3rd century AD).

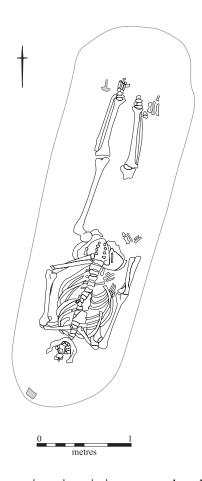
F.114



An irregular-circular shaped burial pit (c. 0.7 m x 0.8 m wide and 0.1 m deep) with irregular sides and an imperceptible base containing a scatter of disarticulated bones [279] including a tibia and calcaneum from an adult male skeleton amongst it. The pit appeared to truncate the top of grave F.94, the fill of this (a mid grey-brown-orange silty sand with gravel [280]) merging with that of the latter [253]. Perhaps the remains of a scattered Roman burial, opportunistically re-interred within the top of a known grave.

F.95

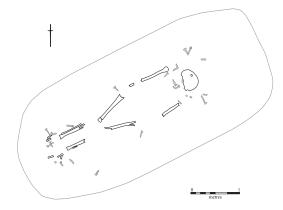
Grave with well preserved skeleton. An irregular elongated-oval shaped NNE-SSW orientated grave (2.2 m long by 0.70 m wide and of unknown depth) containing the well preserved articulated skeleton of an adult male with the head orientated to the south.



The cranium is missing, even though the mandible, axis, atlas and even the hyoid bone are well preserved and located in anatomical position. Also missing is the right femur, pubis and ischium, the latter perhaps due to later truncation on the east side of the burial. Other missing bones include the metacarpals and digits of the hands, and a few of the phalanges. The skeleton is laid out in a supine extended posture with no obvious accompanying grave goods. A residual sherd of prehistoric pot was found near the left foot, along with an iron nail (SF 43), the latter probably contemporary with, perhaps in some way related to the burial. The soil fill [258] surrounding the skeleton consisted of a mid orange-brown sandy silt with inclusions of stone and gravel. Probably Roman, of 3rd century AD date.

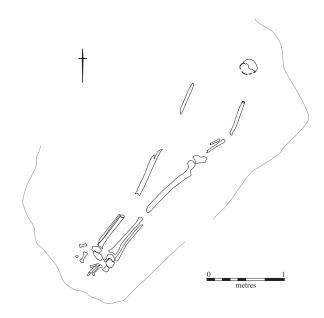
F.140

A NNE-SSW aligned oval to squat-rectangular shaped grave (2.72 m long and 1.21 m wide) with steep sides and a flat base containing a probable coffin burial. This consisted of the



poorly preserved remains of an adult male [355]; the articulated skeleton lying in a supine position, with the legs/pelvis turned and the lower legs apparently crossed, left leg uppermost, with the head pointing to the north (the same orientation as neighbouring burials F.124 and F.135). The skeleton was incomplete; both feet, most of the long bones and part of the skull had survived, but the ribs and spine were missing. A perforation within the centre of the cranium suggests a antemortem injury. The presence of 23 iron nails (SF 78-86 and 105-110) around the head and feet, plus one either side of the pelvis area, appears to confirm the former presence of a wooden coffin. The grave fill [354] consisted of a mid orange-brown sandy silt with gravel and chalk inclusions. The top of this grave appears to have been severely truncated by an Early Medieval pit (F.91), whilst the grave itself cuts through the south end of burials F.135 and F.124. Roman, possibly 3rd century AD.

F.124

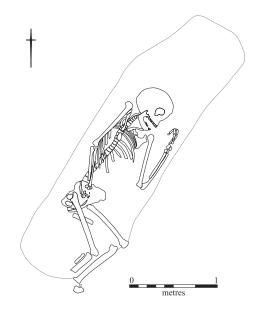


A large oval-shaped NW-SE orientated grave (2.08 m long, 0.8 m wide and approx 0.2 m deep) with straight near vertical sides and a concave base containing an incomplete skeleton. This was of an unsexed adult [312], the latter in an extended supine posture, with the head pointing to the north. The major limb bones were present, although the base of the skull, ribs, spine plus some of the phalanges and digits of the feet and hands were missing. The bone is also in poor condition, in part due to the sandy soil. The large number of iron nails (SF 52-63) and fittings recovered from around the outline of the skeleton, particularly at the head and feet ends, suggests the former presence of a wooden coffin. A bronze finger ring (SF 52) also accompanied this burial; this was discovered on the left hand side of the head. The grave fill [313] consisted of a friable mid brown sandy silt with inclusions of subangular flint gravel and chalk. Roman, probably 3rd century AD.

F.135

Grave containing a near complete partly flexed adult female skeleton. A NNE-SSW orientated oval to sub-rectangular shaped grave, 1.58 m long by 0.57 m wide and 0.38 m deep, with straight near vertical sides and an almost flat base. This narrow grave cuts the eastern edge of a much larger parallel grave (F.124), to which it might be related. The reduced size of this burial (F.135) may be a response to the accidental discovery of F.124, and an intention to limit any further disturbance of this. The

grave contains the partly flexed burial of an adult male with its head orientated to the north, and the skull lying flat, facing east. It appears that this may have been turned on its side in



order that the body could be fitted into the grave. Apart from the truncation of the right lower leg and foot and left foot (on the edge of the grave cut) the skeleton is complete and the bones well preserved. There are no accompanying grave goods. The backfill [336] of the grave consists of a dark brown sandy silt containing inclusions of gravel and chalk. Roman, probably 3rd century AD.

Medieval Pit

The latest feature within this area was the large pit (or series of conjoined pits) **F.91**. This truncated the edges of several of the graves within the south-eastern grave group, as well as the cremation F.117 to the north-west (see Figure 6b). It appears to be Early Medieval (12th - 13th century) rather than Roman in date, and its function remains uncertain.

F.91 An irregular looking round-oval shaped pit, 1.87 m long by 1.2 m wide and 0.31 m deep, with steep sides and a gently concave base, and an approximate N-S orientation. There remains a slightly uncertain relationship between this and some of the earlier features which it appears to have cut, also with at least one disturbed Roman burial on its east side (F.140). The truncation into the top of this grave, combined with a certain amount of subsidence into the underlying grave fill, has resulted in the apparent bi-lobate outline of this feature. The pit also truncates the cremation pit F.117, and on the south side the tips of the burials F.94 and F.111. The pit has a single, possibly disturbed and mixed fill consisting of a dark grey-brown silt with small stones and chalk nodules above its base [246]. The mixed assemblage of finds recovered from this pit implies that there must have been some inadvertent sampling of several disturbed, but originally discrete features. This includes fragments of disarticulated human bone, suggesting disturbance from F.140 or neighbouring burials, whilst the presence of unburnt and finely flaked Neolithic flint blade tools mixed with some Roman pottery suggests redeposition following the possible truncation of an earlier prehistoric feature. Other finds include burnt

animal bone, burnt flint and some fired metal objects including a spear, knife blade, and some lead scrap, suggestive perhaps of accidental or purposeful inclusions of these within a hearth associated with feasting. Whilst the three sherds of Roman pottery recorded from this feature have been interpreted as being residual (e.g. late Roman shelly wares), there are still other examples of freshly broken adjoining sherds of pot which are not; the latter include a number of sherds of 12th-13th century AD shell-tempered St. Neots Ware (inturned rims, jar sides and bases) and Thetford ware pots. It is these items which most probably date the excavation of this feature. A very small amount of post-Medieval pot was also recovered, but it seems likely that this was intrusive, relating to later ground disturbance. The function of this pit remains unclear - it may have had a domestic function, or have been associated in some way with cultivation.

Area D

This includes the extreme south-west limit of the excavated or known extent of this cemetery. Only a couple of large graves (**F.106** and **F.127**) and one paired groups of graves (**F.142** and **F.143**) were located in this area, three of these being aligned northwest-southeast (**F.136**, **F.142** and **F.143**), one north-northwest - south-southeast (**F.106**), two east-west (**F.147** and **F.148**), and another two (**F.127** and **F.149**) on the commonest north-northeast - south-southwest cemetery alignment. A couple of burial pits, perhaps re-internments, were located towards the south end of Area D (**F.138** and **F.150**), along with several bone scatters which probably reflect grave disturbances (**F.137**, **F.144** and **F.146**).

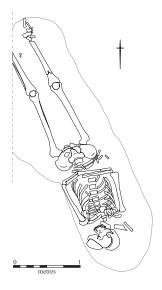
To the west of here, extensive truncation of the sub-soil layers associated with the construction of former buildings of the Babraham Institute may have removed all or most of the burials. However, the chance recovery of a group of disarticulated bones (**F.96**) found 10 m to the south-west of the excavation (on the site of the former Calcutta Building), attests to the continuation of the cemetery in this direction.

A long, narrow, shallow, north-south linear feature (**F.145**) which cuts all of the graves it intersects, and which lies parallel to the excavation edge, is a late feature, probably a Medieval or post-Medieval plough scar.

Northwest-Southeast Graves

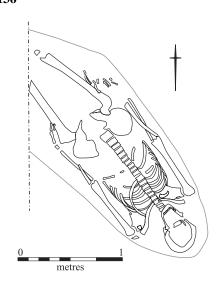
F.106

A narrow oval to sub-rectangular grave (1.93 m long by 0.7 m wide and up to 0.3 m deep) with straight and steep (45°) sides and a concave base orientated on a marginally different NNW-SSE alignment. This contained an articulated and near complete supine adult male inhumation laid out with the head to the south, facing west, and the arms tightly crossed over the stomach. The skull appeared to have been split in half; damage inflicted post-burial, but in antiquity, perhaps sliced by a spade during the course of Medieval cultivation. The burial seems to have truncated a number of earlier child burials on its east side, as well as an E-W orientated child grave on its west side, neither of these apparently related. Grave goods included green and blue



glass beads (SF 32 + 36) recovered from the area of the ribs, and a set of small iron hobnails associated with the left foot (suggesting the presence of a leather shoe or boot). Roman pottery dating to the mid 1st - 2nd century and to the 1st - 3rd century AD was recovered from this grave fill [265], the latter consisting of a mid brown sandy silt and gravel. Within this fill were found a number of disarticulated human infant bones, most likely derived from the earlier truncated child burials located to the west (F.147) and east (F.103 & F.104) of the grave. Possibly one of the earliest cemetery burials; Roman possibly late 2nd century to early 3rd century AD.

F.136

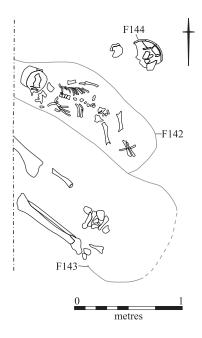


A NW-SE orientated oval to sub-rectangular shaped grave, up to 1.2 m long, 0.53 m wide and 0.2 m deep, with near vertical sides and a concave base which slopes from east to west. This contained a fairly complete skeleton of an adult male laid in supine position with the head at the south-east end, and slightly raised up. Because of its elevated position, the front of the skull had inadvertently been removed (probably truncated by ploughing), whilst the legs below the knee had been cut by a modern pipe trench. There were no grave goods or finds, the grave backfill [342] consisting of a soft yellowish-brown sandy silt with flint gravel and chalk inclusions. Roman, probably 3rd century AD.

F.142 A small and poorly defined NW-SE aligned oval-shaped grave, 0.63 m long by 0.25 m wide and 0.03 m deep, with moderately steep concave sides and a flat base. This contained the moderately complete and moderately well preserved skeleton of a juvenile which was still partially articulated. This was laid out in a supine position, with the

legs and pelvis turned and the lower legs apparently crossed, left leg uppermost, the crushed skull apparently facing

towards the south-west. There were no accompanying grave goods, the fill of this grave consisting of a mid grey-brown sandy silt [369] with inclusions of flint gravel and chalk.

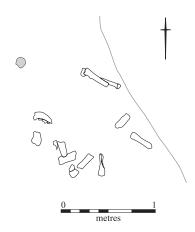


This was truncated along its south-western edge by the intercut grave of an adult burial (F.143), to which it is probably related, whilst on its northern side, F.142 truncates the upper part an earlier but quite unrelated burial F.127. Roman, probably 3rd century AD.

F.143 A shallow NW-SE aligned subrectangular to oval shaped grave truncated at its north-west end by a modern drainage trench. The grave appears to be at least 0.9 m long, 0.5 m wide and 0.19 m deep, with steep straight sides to the north, straight and shallow sides to the east, and with a slightly concave base. This cuts the earlier and probably related parallel child burial (F.142) on its north side, suggesting that this may have been a parent/ sibling group. This contained the incomplete but still largely articulated skeleton of an adult female (the upper parts had been removed, but the lower legs and feet survived). This was laid out in supine extended position, with the head pointing north (north-west), the bones moderately well preserved. No grave goods accompanied this burial. The gravel fill [372] consisted of a mid brown silt with gravel and chalk inclusions. Roman probably 3rd century

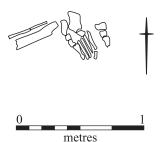
East - West Graves

F.147



A spread of disarticulated human bones mixed with animal bone and associated with a poorly defined grave feature. The 'grave' fill [378] surrounding the bones consisted of a patch of mid orange-brown sandy silt 2 m+ long, 1 m+ wide, and about 0.3 m deep, which also appeared to extend over the edge of grave F.136 to the south. This also contained animal bone (including an animal jaw), some residual flint, as well as Roman pottery dating to the 2nd- 4th century AD. This may not be part of any burial cut, yet the feature also appears to have been cut by a later grave F.106 to the east. Probably a disturbed (or possibly reinterred) 3rd century burial.

F.148

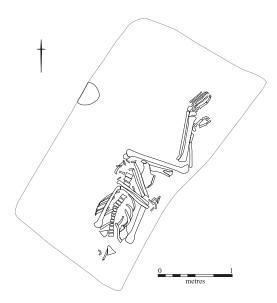


The east end of a truncated east-west oval shaped grave containing the remains of an unsexed adult burial. Only a very small part of the skeleton was revealed; this consisted of the lower right leg and foot and a bit of the left foot, the rest of this having been truncated by a modern drain trench which forms the western edge of the excavated area. The skeleton was probably originally orientated with the head to the west, although it is difficult now to be certain whether this was a supine or flexed burial. The bone preservation was indifferent. The fill [375] of the grave was similar to that

in F.147, i.e. a mid orange-brown sandy silt. Probably Roman, 3rd century AD.

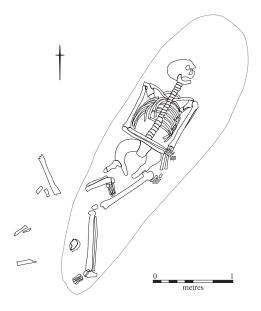
NNE- SSW graves

F.127



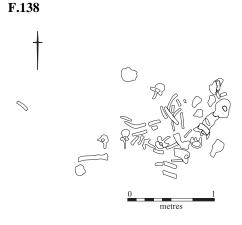
A sub-rectangular NNE-SSW orientated grave, 1.8 m long x 0.8 m wide x 0.3 m deep, with a slightly concave base and well defined, straight, near vertical sides, except for the south-west end which had a shallow concave profile. The sides of the cut may have originally been boarded (a box burial); this contained an adult male flexed inhumation with its feet pointing north, the (missing) head facing east. The skeleton is complete minus the hands and most of the skull, only the top of the cranium survives in situ. The position of the skeleton shows that the legs were drawn up and the left arm drawn tightly across the body at the time of burial, the right arm beside it, angled across the pelvis. The head seems to have been disturbed post-burial, whilst the femurs were truncated during the course of excavation. The bone preservation is good. Several pieces of Roman pot were recovered from the fill of the grave; dates for these ranged from the $1^{st} - 3^{rd}$ to the mid $2^{nd} - 4^{th}$ century AD. This fill [317] consisted of a mid yellowish-brown sandy silt with inclusions of flint gravel and chalk and traces of charcoal. The south end of the grave was truncated by a later unrelated NW-SE aligned burial F.142. Roman, probably 3rd century AD.

F.149



An oval to rectangular shaped NNE-SSW grave, 1.81 m long, 0.5 m wide and 0.15 m deep, with steep sides and a concave base containing the articulated, well preserved, and near complete skeleton of an adult female. The skeleton was laid out in a supine position, with the legs slightly flexed, and the right arm crossed over the lower body, the head pointing north and facing towards the east. Complete except for the right leg which had become broken and disarticulated, and which was partly missing. An iron nail (SF 111) was recovered from the grave fill [380], a mid orange-brown sandy silt and gravel. This was the southernmost burial excavated within the cemetery, and does not appear to have been inter-cut with any other graves. A feature containing jumbled disarticulated human bone (F.150) which overlies this grave, might contain bone derived from it. Roman. probably 3rd century AD.

Burial Pits and Bone Scatters



Includes the disarticulated fragments of an adult male skeleton [366]; including pelvis, vertebrae and ribs, and fragments of long bones. Either deposited on the surface, or else within the fill [365] of a poorly defined pit [367], the bones surrounded by a dark orangebrown silty sand and stones. Possibly the reinterred remains of an earlier disturbed burial, probably also associated with the skull F.137 which may have been disturbed by modern machining or perhaps by earlier plough activity. Roman 3rd century AD?

F.137 The disarticulated fragments of an adult skull surrounded by sub-soil [345] and lying within a poorly defined pit or hollow. The fill consists of a dark orange-brown clay silt with minor inclusions of chalk. The skull may have been hit by a machine, and thus it could be related to (or may be part of) burial F.138.

F.144 Part of an incomplete adult female skull consisting of the back of a crushed cranium [374], and probably also half of a lower jaw bone found close by. These were found lying on the sub-soil just above the edge of F.127, thus may have inadvertently been removed from a nearby burial (either F.127 or F.123).

F.146 A stray bone associated with the post-Medieval plough scar (F.145). Found at surface after stripping, almost certainly disturbed and removed from its original burial context.

F.150 A spread of human bones lying within a patch [383] of mid orange-brown sandy silt and stones. There seems to be no clearly defined feature or cut associated with this; rather it appears to be a thin layer lying over the sub-soil, just above and to the west of burial F.149, with which it may be associated.

Western Extension – Bone Scatter

F.96 Part of a leg bone found with other long bone fragments beneath it. Recovered as a surface find lying on the sub-soil approx. 10 m to the south-west of the excavation following the demolition of the Calcutta Building (see Figure 2). This may indicate the presence of an *in situ*. burial, or else may be fragment(s) of bone moved only a short distance from an original burial location. Either way this suggests a possible extension to the cemetery in this direction.

Medieval or post-Medieval plough feature

F.145 Plough scar. A long narrow N-S linear feature of uncertain length (but at least 6m+), and up to 0.3 m wide, parallel to the western edge of the excavation. A 0.5 m long slot was cut into this at its southern end; the cut [358] for the base of this was 0.15 m deep into the chalk, with steep sides and a sharp break of slope as would be expected of a plough furrow. The fill [357] consisted of a firmly compacted dark orange-brown clay silt, containing rare small sized stones and a single find of a redeposited human foot bone (F.146). Possibly an example of Medieval, although most likely post-Medieval deep ploughing.

DISCUSSION

The archaeology of this small strip of the Babraham site is dominated by this northeast-southwest linear inhumation cemetery which probably dates from around the end of the 2nd century to the early 4th century AD. This appears to be share the same alignment as a putative Roman road, ditches and other features recently discovered some 50 m to the north-west during the course of excavations carried out in advance of the construction of a new car park (Armour 2007). The location of this burial ground may also have been influenced by the establishment of a slightly earlier (late 2nd – early 3rd century AD) and much smaller cremation cemetery, the latter consisting of little more than a half a dozen satellite cremations inserted around an earlier central cremation, perhaps buried under a shallow earth barrow. The burials lie to the north-east, south, and south-west of this barrow, a few of them appearing to be orientated parallel to its north-eastern and south-western edges.

Up to 40-50% of the area of the inhumation cemetery may have been sampled within the excavation area, probably little now survives of any burials which may once have existed to the north-east and south-west of here. However, the extension of the cemetery in either direction is attested to by the discovery of a burial to the east of the former access road to Babraham Hall (Hatton 1997), as well as by recent finds of disarticulated human remains to the west of the excavation beneath the now demolished Calcutta Building. Both of these areas are now heavily truncated and cut by service trenches. Within the current area of excavation the top of the sub-soil has also suffered truncation as a result of post-Medieval ploughing and the construction of the 1840s and 1952 roads to the Hall. Whilst the majority of the grave cuts and most of the burials have survived, the tops of some of these have been removed, and several skeletons have become disarticulated and scattered.

Few earlier or later features were identified within the area of this late Roman cemetery. This included a number of earlier prehistoric pits of uncertain function, plus later evidence for Medieval and post-Medieval disturbance, perhaps associated with cultivation.

Phasing

The difficulties in accurately dating the graves and cremations based on the pottery assemblages present has meant that only a provisional phasing of these has been possible; the cremations and some of the burials being grouped under Phase 3, with

most of the burials assigned to Phase 4; the burials sub-divided according to what may be a sequence of changing alignments and inter-cutting relationships, and possibly also changing burial practice.

Phase 1

A small amount of probable Late Neolithic activity associated with deposition of flint waste from the production of blade production and blanks has been identified from a series of intercutting oval-shaped pits (F.87-F.89) located beneath the north end of the cemetery, just to the east of the line of graves. These have been interpreted as possible rubbish pits. Examples of Neolithic flint working appears to be commonplace across the Babraham site (Armour 2006, 2007; Timberlake & Armour 2006), but mostly this represents an accumulation of waste from flint tool production within natural hollows, thus primary features are rare. The dating of the pits is based on the presence of fresh flint and the complete absence of any later deposited or residual pottery. Small amounts of residual flint have also been recovered from some of the grave fills, suggesting rather more widespread evidence of earlier activity over the entire area.

Phase 2

Residual pottery, which has been dated to the Early Roman period, clearly pre-dating both the cremation and the inhumation cemeteries, has turned up within the fills of a number of the graves (F.84, F.111 & F.131). The distribution shows no particular spatial grouping, and probably reflects a general level of small-scale activity at the Babraham site post-Conquest through to the end of the 1st century AD. This accords with the evidence from the ARES site for Early Romano-British burials and the establishment of a contemporary dwelling and farmstead (Structure A) (Armour 2007).

Cremation and Inhumation Cemetery – Phase 3

Phase 3a

The earliest evidence for funerary activity was the off-centre deposition of the cremation urn F.134 either inserted into or beneath the putative cremation barrow, the mound of which has long since disappeared, possibly as a result of Medieval or post-Medieval cultivation. The position of the subsequent satellite cremations and that of the encircling and respective graves suggests an original diameter of about 8 m. The insertion position of the satellite cremations implies that the original mound was shallow, perhaps no more than 30-50 cm high. The pottery (cremation urn) date suggests a mid/late $1^{\rm st}$ - $2^{\rm nd}$ century AD date.

Phase 3b

Seven satellite cremations (F.90, F.92, F.113, and F.115-F.118), all of them dating from the late 2^{nd} to 3^{rd} century AD, encircle the putative barrow edge. The pottery

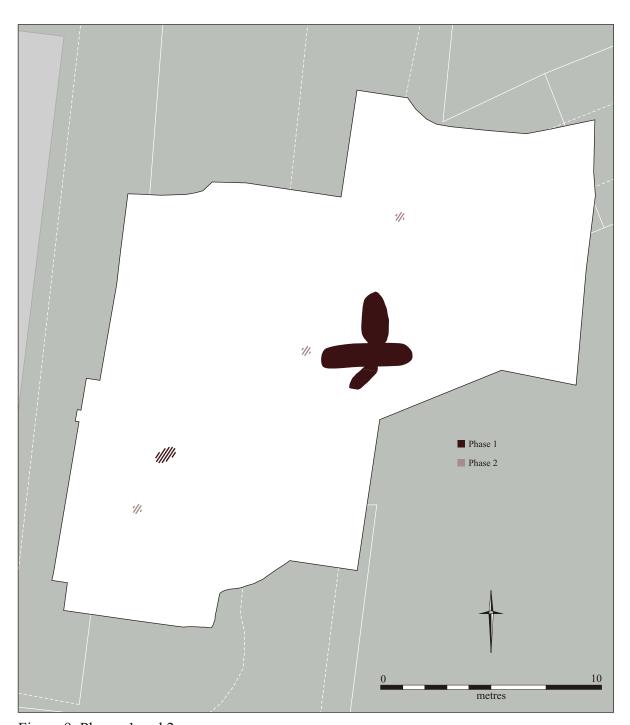


Figure 9. Phases 1 and 2

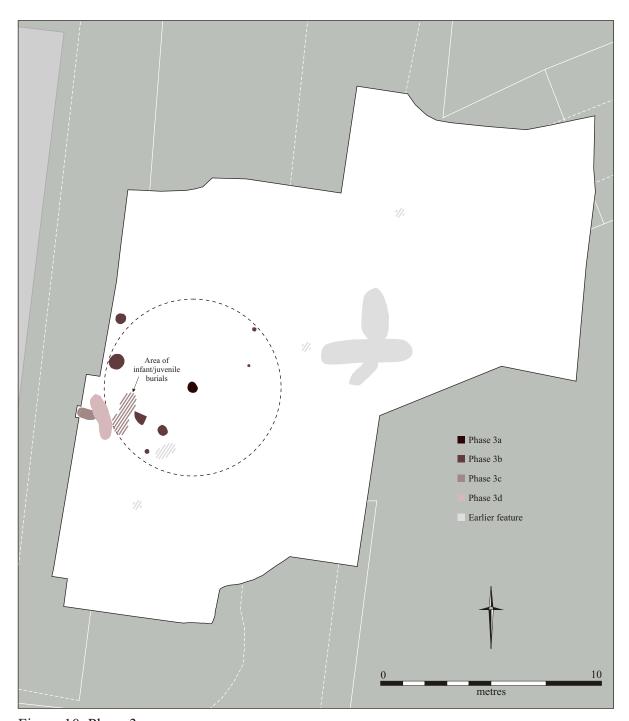


Figure 10. Phase 3

dates for the accompanying urns suggested that these were approximately contemporary, even though there were other pottery sherds recovered from the cremation fills which seemed to be earlier (residual) or later (intrusive). The urn dates suggest that the peak in cremations occurred before the mid-3rd century AD (see Anderson, Appendix 2). Furthermore, this phase of use of the small cremation cemetery may well have been short-lived. However, there is some accompanying evidence for the curation as well as use of earlier pottery items. For instance, four sherds of Samian Dragondorff 31 ware which made up approximately one third of a vessel accompanied cremation F.117; this was part of a broken pot which *could* have been used as a lid for the urn itself.

Phase 3c

A group of several (now partly disarticulated and mostly truncated) infant burials seem to have been placed around the south-western margin of the putative cremation barrow (F.103-F.105, F.126 & F.147). On account of their position, the shallowness of their burial 'within the sub-soil layer', and the lack of any properly defined grave cuts, it is suggested that these may simply have been late insertions into the side of the barrow. Several of these skeletons may be of neonates. The position of the now partial burial F.126 within the 'empty area' of the putative barrow, as defined by the circle of cremations, also support this idea, as does the apparently elevated position of these burials when compared to the other graves. Already the approximate northeastsouthwest orientation of the partial skeletons F.103-105 and F.126, with their 'head' ends pointing south, anticipates the later orientation of the cemetery. One oddity is F.147, the spread of disarticulated bones to the west of F.106 which is approximately aligned east-west. The latter was associated with pottery, possibly mid-2nd century or later in date, and animal bone, the latter including individual bones of pig, dog and horse (see Swaysland, Appendix 5), an unusual and interesting assemblage which might suggest some form of token and associated animal burial. No independent dates for the other juvenile burials are available from either pottery or other grave artefacts: however, the group is clearly cut by grave F.106 (Phase 3d), therefore these must date to the late 2nd or early 3rd centuries AD.

Phase 3d

Grave F.106 is another burial located along the south-west margin of the cremation barrow. Its north-northwest - south-southeast orientation is unique, as this lies adjacent to and parallels the edge of the barrow, whilst the pottery accompanying the grave fill of this adult male burial suggests a similar range of dates (late 2nd to early 3rd century AD). This may represent the first proper inhumation burial of the cemetery, since it post-dates the juvenile burials and is clearly external to the barrow, yet sited upon it.



Figure 11. Phase 4

Phase 4a

Whilst any form of exact dating is difficult due to the period covered by the pottery ranges, the first main group of cemetery burials can be found amongst the north-northeast - south-southwest group of graves which happens to form the dominant inhumation alignment. Quite possibly, those groups of cemetery burials included within Phase 4 span a range of dates from the beginning of the 3rd century through to the beginning of the 4th century AD, there being a spatial as well as a familial relationship between paired and intercutting graves, some of which may indicate close internments over a number of generations. The grouping of these graves is tentative in chronological terms, yet the changing relationships are interesting and this seems to suggest some sort of phasing of burials, although the intricacies of this are not clearly understood. Pottery dates suggest that burial continues on this alignment throughout the use of the cemetery.

The earliest internments on the north-northeast - south-southwest alignment in Phase 4a appear to include graves F.84, F.131, F.129, F.132, and F.127, which probably date to the 3rd century AD.

Phase 4b

A group of northeast-southwest aligned burials (F.94-95, F.111, F.119, F.121, F.122, F.124, F.133, F.135 surrounds the cremation cemetery on its north, east and south sides. These have been deposited within a series of large, moderately deep and well-defined graves. Where this relationship is evident (such as with F.127 and F.133) it seems likely that this group of burials pre-dates the few east-west (northwest-southeast) graves within the cemetery. Pottery found accompanying these burials fit within the range 2nd -4th century AD; most probably these are 3rd century.

Phase 4c

A further group of graves following an east-west (west-northwest – east-southeast) orientation appear to be aligned to the north and south edges of the cremation cemetery. These graves (F.112, F.141-F.143) clearly post-date some of the earlier north-northeast - south-southwest graves (as well as the northeast-southwest grave group (Phase 4b)), although it is difficult to know how significant this was chronologically, or why the alignment should change. Grave F.112 immediately to the north of the cremation cemetery may be a little earlier than this, as suggested by the accompanying grave pottery (a Pakenham colour-coat beaker of the late 2nd- early 3rd century AD). However, the probable date for this burial is later 3rd century, given that it cuts grave F.132 which contains pottery that is much more likely to be of this date.

Phase 4d

Some of the latest burials within this cemetery appear to belong to the same generic group of graves conforming to the dominant north-northeast - south-southwest Roman road alignment, rather than to the edges of the cremation cemetery. This includes some of the northerly burials F.79, F.80 & F.86. The presence of an abraded Horningsea colour-coated beaker within grave F.79 suggests the curation of vessels, since in all other respects this grave would seem to be late. Realistic dates for these, supported in part by the pottery, is between the late 3rd and early 4th century AD. Credibly, burial F.86 is amongst the very last internments within this area of the cemetery. A Nene Valley colour coat beaker of the 4th century AD was deposited along side this.

Phase 4e

Grouped within this last phase of burials are the various pit burials or later (Roman?) re-internments of disarticulated human bone inserted into the top of pre-existing graves (F114, F.120, F.128, F.138, & F.150). No pottery dates are available for these features, except for the re-burial F.128 which contains sherd(s) of $2^{nd} - 4^{th}$ century wares. However, these may be residual. The late phasing of this phase (possibly 4^{th} century AD) refers to the stratigraphic relationship of these features with existing graves.

Phase 5

This represents a phase of probable Early Medieval disturbance relating to cultivation and/or digging of rubbish pits within the general area of the cemetery. Amongst this is the clear post-burial (but evidently early) disturbance to burial F.106, the skull of which appears to have been sliced by a spade. Other disturbances may be linked to possible Medieval postholes, although none of these have actually been dated. The most convincing evidence for Medieval activity is the digging of the large pit F.91.

The excavation of F.91 appears to have disturbed existing burials, and earlier features still, the fill including residual flint as well as Roman pottery. The more reliable dating evidence for this consists of finds of adjoining and less weathered sherds of 12th - 13th century shell-tempered St. Neots ware.

Phase 6

Evidence for post-Medieval cultivation is present in the form of a single north-south orientated plough scar which cuts the edges of all the burials it crosses. This is probably the inadvertent result of deep ploughing. A small intrusive sherd of 16th - 17th century pottery was found within the upper part of pit F.91. The rammed chalk road which has truncated the tops of graves within the northern area of the excavation dates from the beginning of the 19th century.



Figure 12. Phases 5 and 6

Cemetery Analysis

Cremations

Even by Cambridgeshire standards the number of individual cremations here (7) is small. However, there are several sites either in or else close to Cambridge where just a few cremations have been recorded (The Hutchison Site, Addenbrookes (Evans *et al.* 2004), Vicar's Farm (Lucas & Whittaker 2001) and 35-37 Jesus Lane (Alexander *et al.* 2003). The 'flat' cremation cemeteries recorded from Rectory Farm, Godmanchester (55), Guilden Morden (160) and the walled cemetery at Litlington (80) are clearly associated with larger settlements and also longer and more continuous periods of occupation (1st - 4th century AD) than we find here at Babraham (Taylor 2000). At many sites in the region there is also a continuation of the cremation tradition alongside that of inhumation well into the 3rd or 4th century (Philpott 1991). This seems to be the case at Kelvedon, Essex where cremations span the whole of the Roman period from the late 1st to the end of the 4th century AD, a century longer than the inhumations with which they are associated (Rodwell 1988)

A number of parallels might be drawn between Babraham and other small Roman cremation cemeteries in Cambridgeshire, in particular as regards to the emplacement of cremations under barrows. The following numbers of cremations under barrows are to be found at Barton (2), Bourn (3), Girton (3), Whittlesford (5), and of course the Bartlow Hills (6), although in marked contrast to Babraham, these all appear to be well furnished with accompanying grave goods (Taylor 2000). In contrast though, there seems to be no tradition for accompanying satellite cremations. In fact, at Babraham the only cremation which might have accompanying grave goods is the satellite cremation F.117, the latter inserted in a pit on the south side of the putative barrow. Unfortunately, the contemporaneity of this pot grouping even now seems to be in question, including as it does a mid-late 2nd century Le Martres-de-Veyre Dragendorff 31 Samian dish alongside a distinctly later 3rd century Nene Valley flagon. The latter could, however, be a disturbed item from a later burial, inadvertently included with the feature as a result of re-deposition carried out over a short distance following machining or earlier truncation of the site (see Anderson: Appendix 2). The earlier Samian pottery may have a different history; some parallels could be drawn between this and other examples of 'broken' pottery vessels incorporated as 'heirloom' items; for example, a stamped Samian fragment recovered from the fill of the cremation pit F.26 at the Parks, Godmanchester (Jones 2003).

At Babraham, the grouping of the six cremations around a centrally placed one, which could have been emplaced anything up to 50 years earlier, begs the question as to the presence and nature of this putative barrow (or to some other feature of which no trace now survives). A possible parallel with this is to be found at Vicar's Farm, West Cambridge (Lucas & Whittaker 2001). Here a small cremation cemetery consisting of a sub-circular area of eight urned cremations which date to the 2^{nd} century AD would seem to represent the site of a former barrow. There is yet another parallel here in the form of an $3^{rd} - 4^{th}$ century inhumation cemetery which lies to the south of the settlement. The latter consists of 29 graves which appear to nucleate around an earlier centrally placed urned cremation. The changed alignment of graves within the vicinity

of this cremation suggests that its presence here was still being respected, perhaps anything up to a century later

At Kelvedon cemetery in Essex, a circular gravel-filled ditch was interpreted as the foundation trench for a circular mausoleum (F324). Into this ditch had been inserted a number of small cremation pits and urns, whilst it also enclosed a number of coffin burials, some of which clearly post-dated this and did not appear to respect it (Rodwell 1988). At 7 m diameter, the size of this feature seems comparable to the (now lost) Babraham example. There are indeed several other examples of enigmatic circular or sub-circular monuments associated with Roman burial practice. This includes a group of three found on Overton Down in Wiltshire (Smith & Simpson 1964). The largest of these was c. 7m diameter and preserved traces of postholes and a circular ditch with a robbed cremation pit in the middle. Whilst the latter might be considered as the model of a very small barrow, other similar examples such as found within the late pagan Saxon cemeteries of Polhill and Finglesham in Kent. These appear to be just annular and penannular ditches rather than any form of distinct mound (Philp 1973). The latter are much more likely to be the antecedents of chambered grave burials, as are many of the non-mound Roman examples associated with burials which are generically referred to as mausoleums. Dunning & Jessop (1936) refer to the average diameter of a Roman barrow as being 24 m. However, as

examples of prehistoric barrows or cairns which overlie cremations, a wide range in size of these is commonplace. The restricted area of the allotted burial ground may thus account for the small size of the barrow and the numbers of associated cremations.

Within this, the central cremation vessel (F.134) appeared to be heavily burnt and sooted, and thus might itself have been part of the original funeral pyre. However, there was no evidence for the barrow being the pyre site, even though any charcoal present might just have been removed along with the overlying earth. The only artefacts now present within this circular empty space surrounding the cremation are a collection of iron nails. Normally, these are not what one might expect of a cremation; there is a slim chance therefore that these relate to the former existence of a wooden byre or perhaps even a box at the base of a barrow, the latter commonly used as receptacle for a cinerary vessel or else as an accompanying grave good (Taylor 2000). Otherwise, we are most likely witnessing post-burial disturbance from neighbouring graves. Just to the south-east of the cremations a considerable amount of burnt animal bone, flint and metalwork associated with the backfill of the Early Medieval pit F.91 (some of it burnt and almost certainly Roman in date), suggests that this might well be the site of the primary or subsequent cremation pyre.

Environmental evidence from the cremations has proved interesting. Within all of the cremations except F.117, the presence of carbonised cereal grains including wheat (*Triticum spelta/ dicoccum*), barley (*Triticum/ Hordeum* sp.), wild or cultivated oats (*Triticum/ Avena* sp.) and crop weed species alongside that of grass roots and straw, is thought to have indicated that whole, up-rooted plants, as opposed to individual grains, may have been included within the cremations. Possibly, therefore, these were cereal grain offerings, perhaps ones thrown into funeral pyre, or else carefully burnt then included within the urned ashes (see de Vareilles, Appendix 6).



Cremation F. 118



Figure 13. Cremation urns

Based on the sum total of pottery evidence and stratigraphy it would appear that the cremation barrow and its small accompanying cemetery went out of use by the middle of the 3rd century AD. In terms of the transition in funerary practice from cremations to burial this is interesting, since it raises the possibility that the later cremations and earliest burials were contemporary with one another.

Inhumations

Size and Layout of Cemetery

The known area of the Babraham cemetery (36 graves or burials and at least 42 individuals) is comparable in size to the excavated section of cemetery at 35-37 Jesus Lane, Cambridge (with 32 burials; Alexander et al. 2003), perhaps also with The Parks, Godmanchester (Jones 2003). The latter site was totally excavated, and with 62 burials, this may in fact be closer (in terms of numbers of graves) to the former extent of the cemetery at Babraham; thus the latter could be a fairly typical size for Cambridgeshire rural settlements during the 3rd - 4th century AD. However, there are both substantially larger and also much smaller South Cambridgeshire examples; for example Guilden Morden (153), Litlington (250), and within the hinterland of Babraham, Foxton (23) (Taylor 2000). Smaller cemeteries are also to be found at Addenbrooke's (16) (Evans et al. 2004) and Vicar's Farm, West Cambridge (Lucas 2001). However, burial numbers are a function of both the continuity and duration of use as much as the size of the original population. At Babraham the period of burial probably covers 80 to 120 years, or 4-6 generations, thus is comparable demographically with the mid-late 2nd to 3rd century cemetery at Jesus Lane and the late 3rd to early 4th century cemetery at The Parks, Godmanchester. Not unsurprisingly, the best documented studies of Roman cemeteries are weighted towards the statistically larger ones such as Cirencester, Lankhills, Poundbury, the Eastern cemetery of Roman London and Ilchester, the majority of these being linked to urban Roman environments.

The layout of the cemetery shares a common northeast-southwest alignment and south-facing grave orientation with a number of other Cambridgeshire examples, including 35-37 Jesus Lane. At the latter site the north-northeast – south-southwest alignment seems to relate to and respect a Roman ditch enclosure (Alexander et al. *ibid.*). Elsewhere, this orientation is not so strongly adhered to. At The Parks, Godmanchester, the majority of graves were likewise aligned northeast-southwest along the axis of the plot, although up to 42% were aligned at right angles to this direction (west-southwest – east-northeast) (Jones 2003). In general terms the latter alignment seems more typical of graves within (non-Christian) Roman cemeteries, an orientation which might relate to the position of sun-rise at the time of burial (Rahtz 1978, Kendall 1982). However, the layout and orientation of a roadside cemetery is much more likely to be influenced by the road alignment itself, although some choices might still be made about those roads chosen for burial grounds. In Cambridgeshire, the northeast-southwest alignment of cemeteries seems to have been influenced by the presence of a dominant and much older axial alignment within the landscape. This would be particularly evident within areas of well established Late Iron Age -Romano-British field systems. However, at the Hutchison (Addenbrookes) site on the edge of the Gog Magog hills the mid-late 1st century AD burial ground contained

graves which were dominantly aligned northwest-southeast and north-south (Evans *et al.* 2004), that is, against the grain of this axial Iron Age – Roman grid.

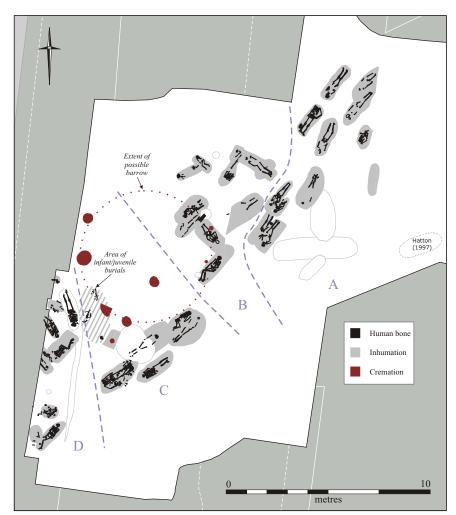
According to Woodward (1993), regular alignment of cemeteries with respect to existing boundaries was of paramount importance by the 4th century AD. At Cirencester cemetery limits were defined by ditches which could have been military in origin (McWhirr *et al.* 1982). This was also the case at Lankhills (Clarke 1979) and at Ilchester (Leach 1982). However, it has not been possible to determine whether or not the narrow linear lay-out of the Babraham cemetery was defined by any sort of enclosing ditch or bank. What is clear is that its orientation mimics (and thus presumably post-dates) the putative Roman road and a series of roadside ditches which lie some 50m to the north-west (Armour 2007).

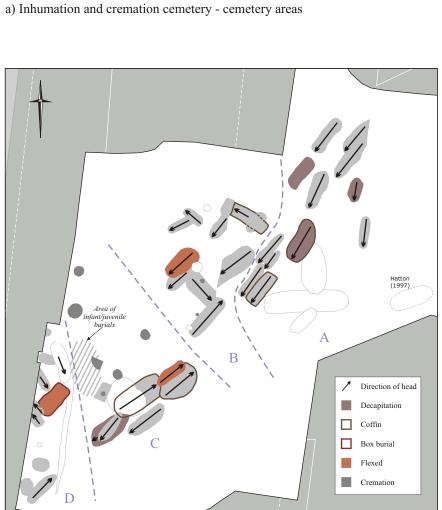
Grave Alignment and Position

There appear to be no obvious distinctions between the north-northeast - south-southwest, northeast-southwest and west-northwest - east-southeast (approximately east-west) aligned burials in terms of the age, sex or status of the individuals concerned, and there are no obvious reasons why this should have changed during succeeding phases of burial. Indeed it is now difficult to know how significant these changes in alignment were, as they may have taken place gradually and imperceptibly over time, with little conscious intention of change. The northeast-southwest burials (Phase 4b) and then handful of west-northwest - east-southeast burials (Phase 4c) are graves which appear to respect the presence and orientation of the cremations. These may simply reflect ancestral links between individuals or else some degree of renewed veneration. Otherwise, there appear to be no obvious differences in burial practice or in deposition of grave goods. Within some of the largest excavated Roman cemeteries such as at Poundbury, Lankhills and Cannington, are examples of groups of burials arranged around and/or aligned to earlier important or ancestral graves, or else to shrines, chapels or mounds (Woodward 1992).

Grave F.112 was evidently sited parallel to the northern edge of the putative cremation barrow, but without knowledge of the cremation/cremation pit (F.118) which underlay it. This seems to suggest that there were no cremation markers, or that the cremation markers had long since disappeared. Alternatively the putative barrow was no longer in existence, or else much reduced in size. Nevertheless, given the otherwise crowded conditions and fairly haphazard arrangement of cemetery burials, this area had been carefully avoided.

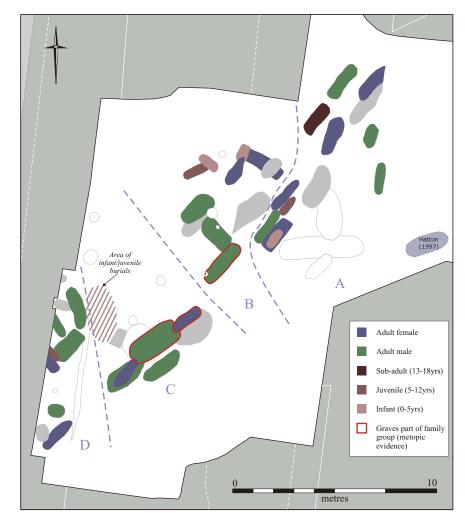
All except six individuals were laid in their graves with their heads (or the head-end of the body) facing south. Most of the north-facing burials are to be found at the south end of the cemetery (or south and to the east of the central zone of cremations), although it is not clear how significant this difference might be. There appears to be no one particular direction which is standard for Roman burials, yet there is frequently some internal consistency within cemeteries, hence at Jesus Lane, Cambridge, with all but a handful of burials the head is orientated to the south (Alexander *et al.* 2003.). Meanwhile at The Parks, Godmanchester, differently aligned burials show particular preferences of orientation, hence with north-south burials the head was more often



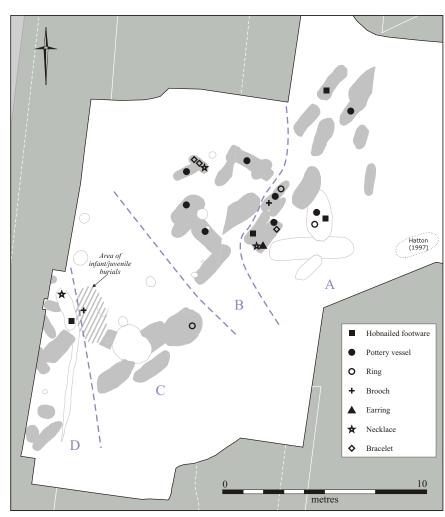


c) Inhumation cemetery - burial details and attitude

Figure 14. Thematic maps of cemetery



b) Inhumation cemetery - age and sex of skeletons



d) Inhumation cemetery - grave goods

than not found at the north end, whilst with east-west burials the head typically faced east (Jones 2003).

Grave Morphology

In terms of the overall grave morphology there appears to be a clear preference for narrow, elongate-oval shaped grave cuts (>20 examples), commonly rounded at both ends, and generally with little evidence for tapering or enlargement around the skull. However, just a few of the north-northeast - south-southwest aligned grave cuts present within the northern part of the cemetery (F.79, F,78 & F.129) were tapered towards the feet, an analogous situation to most of the burials recorded from the cemetery at Jesus Lane, Cambridge (Alexander *et al.* 2003). Together with the evidence for absence of coffin nails, this suggests the predominance of shroud burials. More than a quarter of the elongate-oval graves at Babraham were less than 1.4 m long, and thus probably for juveniles. One double grave cut (F.111) was identified.

The cuts for up to half a dozen other graves were classed as sub-rectangular to oval, a few of these a good deal broader (up to 1 m wide) than most, with steeper sides and flat bottoms. Finds of nails hinted at the presence of coffins, although in most cases the evidence for this was ambiguous. However, at least four rectangular grave cuts with vertical sides and flat bottoms attest to the likelihood of wooden coffin or box burials. Another five rounded to rectangular-shaped pits had been dug for the internment of juveniles or disarticulated skeletons, possibly as re-internments within an existing grave. At The Parks, Godmanchester, the most common grave shape encountered was rectangular, but many of these were rounded at both the head and foot, and thus only nine (on the basis of recovered nails) could be confirmed as coffin burials, although many more were suspected (Jones 2003). At Babraham, the narrowness of most grave cuts suggests this would have been unlikely.

Paired and Inter-cutting Graves

There are some indications at Babraham of the intention to arrange burials within double row of paired graves (this is particularly evident at the north end with F.83 & F.84, F.86 etc.), although this had clearly not been adhered to over time. A similar pairing of inter-cutting graves within a tight double line was found beneath the North Room at 36 Jesus Lane (Alexander *et al.* 2003), whilst at The Parks, Godmanchester there was likewise the suggestion of ordered rows both in the north-east and south-west grave groups, but then gradually, a breakdown in the overall arrangement and management, a similar situation to that at the Lankhills (Jones 2003). Alternatively, the possible rows could have been the result of fairly random distribution within cemetery plots, perhaps saturation-use of the limited available space, as we find with the neatly arranged graves at Poundbury (Farwell & Molleson 1993). At Babraham, the burial plots may simply have been confined by the narrow width of the cemetery. These cemetery limits could have been defined by hedgerows (as suggested at The Parks, Godmanchester), thus leaving no trace in the archaeological record (Jones 2003).

At Babraham we find at least nine paired graves, at least eight pairs of which share common characteristics such as parallel grave cuts, similar head orientation, and small:large (juvenile:adult) relationships, and six pairs of which are inter-cutting. Such pairing and inter-cutting are common features. At The Parks, Godmanchester, it was suggested that these could represent family burial plots within which graves had already been 'pre-booked' (*ibid.*). Alternatively, this may have been a good deal less organized, perhaps a much later choice of site reflecting a desire to be close to an earlier focal group, either an ancestor, family or social group, as has been proposed was the case at Lankhills (Clarke 1979) and also Poundbury (Farwell & Molleson 1993).

Where inter-cutting, but not intentional pairing of graves is evident (as apparently with graves F.142 and F.127, F.112 and F.132 & F.133) the super-position of graves may just reflect a '20 year rule' elapse of time before sites were re-dug and graves encroached upon, as has been suggested at Lankhills (Clarke 1979). Such a situation is much more likely to be the norm within an urban cemetery than one in a rural setting (such as Babraham). However, there may yet be another reason why the burial ground here was restricted to such a narrow strip. At Lankhills it was suggested that above-ground mounds placed over each of the graves facilitated their avoidance during later burial (*ibid.*), presumably also their regular positioning within rows. Another factor might have been the former presence of grave markers which would likely have survived beyond the period (5-10 years) during which a grave mound might be expected to have settled down or eroded away.

The slightly haphazard arrangement of burials we find at Babraham, some with the clear intention for internment in paired or family groups, yet including evidence of mistaken alignment (e.g. F.81 and F.82) and the accidental inter-cutting of graves resulting in the truncation of former burials (e.g. F.135 and F.124), suggests that some or all of these graves were not marked, and that the plots themselves were never properly defined. However, there are other cases where the exact position of graves appears to be known. Most typically this relates to child and parent burials where the actual time elapse between internments may have been brief (e.g. F.130 and F.131, F.78 and F.79). In cases where there has been accidental disturbance of skeletons during the digging of graves, there are indications of at least some attempt at reinternment, and the avoidance of skeletons or cremation urns once these had been discovered. The intentional cutting of a grave either shorter or narrower than required when digging alongside another may simply have reflected the level of uncertainty as to the latter's original position (e.g. F.124 and F.135, F.94 and F.111).

Attitude and characteristics of burial

Supine burial appears to mark the adoption of a Romanised inhumation burial custom, although this was a practise which appears to have antecedents in the Late Iron Age (Stead & Rigby 1986). The laying of bodies in supine extended posture within graves is fairly standard within 3rd century cemeteries. At Jesus Lane, Cambridge, all except one of the burials was supine, whilst at The Parks, Godmanchester this figure was 87% (Jones 2003). Crouch burials are considerably rarer, and may represent the continuation of an Iron Age rite within some Romano-British cemeteries (Whimster 1981). This was a practise which persisted into the late Roman period in those rural

areas which had escaped the strongest influence of 'Romanization' (Philpott 1991). Prone (face down) burials were still less common, perhaps reflecting outcast status or dishonour (McWhirr *et al.* 1982), or else to prevent the individual from coming back to haunt the living or from being re-born (Philpott 1991).

At Babraham four of the supine burials were laid with their heads facing towards the east or south-east, with just two facing west, the remainder followed the typical extended supine posture with the skull laid facing upwards. The significance of this is unknown, and the attitudes of burial do not appear to be age or gender related. The significance of variation in the position of the arms and hands is little understood (Woodward 1993), although with some the arm positions are considered to be particular to a cemetery. Most of the burials within the Babraham cemetery conform to the commonest posture; those of arms by the side or hands on the pelvis (McWhirr et al. 1982), although five were found with their hands folded over the pelvis or stomach areas, or with the hands clasped together (in one instance it was suggested that the wrists may have been 'bound before burial'). In one instance the left fist of a male burial was found clenched (F.109). At The Parks, Godmanchester seven individuals had one arm bent, nine individuals had both arms bent, whilst three had left or right arms folded double along the side of the body. Within the same cemetery five cases of individuals found with their arms folded tightly over their chest suggested an indication of Christian burial (Jones 2003). At Babraham no such examples of this (or indeed of any east-west Christian burial alignment) were found, suggesting it to be a pagan cemetery throughout.

The exceptions to the standard supine burial were few. There were four flexed burials (F.127, F.121, F.123 & F.149), one of which (F.121) was heavily crouched, perhaps on account of a leg and spine deformity which made any attempt at a burial in a supine position impossible. None of these exceptions exhibited any sign of spatial separation from the rest, the only possible significance being that they were centred upon (located to the north and south of) the earlier cremation cemetery, and thus did not include any of the earlier north-northeast - south-southwest graves (Phase 4a). In the case of the flexed burials, all of the heads had been placed facing the same direction (east or south-east relative to the grave), perhaps an orientation facing the rising sun (Rahtz 1978). The single crouch burial, however, was facing the opposite direction (south-west). For purposes of comparison, there seems to be little data available on the frequency of flexed burials, although the percentage incidence of crouched burials (in foetal position) in Roman cemeteries is consistently small, and approximately of the same magnitude i.e. 2.7% of total burials at Cirencester (McWhirr et al1982), 5% at Lankhills (Clarke 1979) and Ilchester (Leach 1982), and 3.2% at The Parks, Godmanchester (Jones 2003). Single crouch burials at Jesus Lane, Cambridge (Alexander et al. 2003) and at Babraham, both represent a similar proportion (approx 2.5%) of known burials.

Crouched burials may just reflect the continuation of an earlier Iron Age tradition (Whimster 1981), one which then extends into the Anglo-Saxon period (Philpott 1991; McWhirr *et al.* 1982). The Babraham burial (F.121) appears to be that of an elderly man (as suggested by the curvature of the spine), and thus age may well be a common reason for such burials. The latter skeleton also appears to have been moved whilst still articulated. It seems possible therefore that this may have been re-interred in this position rather than it having been an original burial posture. At The Parks,

Godmanchester, both of the crouched burials seem to have been rather hastily or carelessly interred into existing features, thus the significance of these may need to be looked at afresh.

Demography

Certain reservations must be applied to any interpretation of the settlement population, based on the number and make-up of individuals recovered, given that only a proportion (estimated at between 40-50%) of the burials in the cemetery were excavated. Furthermore, certain age/gender groups may be over or under-represented due to the spatial separation and co-existence of different age or gender-related burial areas (some of which may not have been sampled), as well as to the uncertainty of presence of more than one burial ground.

Sex

At least 13 adult male and 13 adult female burials have been identified along with 7 partial to complete but unsexed adult individuals (based on skeletal morphology alone), one unsexed sub-adult, and 9 - 10 juveniles or infants. This suggests that the living population was stable and not adversely affected by migration or other cultural factors. The equal proportion of male to female burials is similar to that encountered at The Parks, Godmanchester (Jones 2003), yet contrasts with the 2:1 male-female gender split recorded at Jesus Lane, Cambridge (Alexander et al. 2003). The former (which probably represents a much bigger sample of the cemetery) would seem to more accurately reflect the composition of the broader population (Woodward 1993), as is also the case at Poundbury, Lankhills (western zone) and at Bradley Hill (Leech 1981). In some places where males predominate, such as at Circncester, Ilchester and Lynch Farm, the presence of veterans has been suggested (McWhirr et al. 1982). There seems little justification for arguing this at Babraham, moreover the late date here reflects the height of the civil burial tradition. At Lankhills (Clarke 1979), particular areas of the cemetery seem to have been reserved for gender groups, but at Babraham, as with many other small cemeteries, there seems to be no evidence for segregation.

Family Groups

With the exception of the metopic suture, non-metric traits, seen as familial or inherited markers on the bone, were not systematically recorded in the assessment of the skeletal material. Retained metopic sutures were recorded in three adult individuals; skeletons [329], [337] and [355]. Their graves lie on the same northwest-southeast alignment, bounding the SW side of the cremation cemetery and within 4 meters of each other (F. 135 cutting F140 and F135 being less than 2 meters from F132). Metopism is found in *c*. 3% of modern British populations and whilst only DNA analysis can confirm their familiarity the proximity of the graves to each other suggests that these three individuals were probably related.

Age at Death

The age of adult individuals was determined according to bone and teeth measurement parameters as defined by Bass 1997; McMinn & Hutchings 1988; Brothwell 1981; Brooks & Suchey 1990; Lovejoy *et al.* 1985). The age of immature individuals was determined using long bone measurements (Scheuer & Black 2000) and the degree of dental development and eruption age (Brown 1985; Ubelaker 1989). The age categories employed were:

<6months
0-4years
5-12years
13-18years
19-25years
26-44years
45 years

Using this criteria, a single young adult, one young to middle adult, five middle adults, one older middle adult, two older middle to young mature adults, two middle mature adults, 14 mature adults, and eight 'adults' were identified. This age profile amongst adults is 'normal'.

Amongst the child population represented, three young infants, two older infants, one older infant or young juvenile, one younger juvenile, one older juvenile, and a single older sub-adult were identified; in total nine articulated immature skeletons (i.e. those under the age of 18 years). This was equivalent to 21.4% of the cemetery population. Of these, infants under the age of 5 years accounted for 11.9% of the cemetery population.

The cemetery at Babraham is interesting in that young infants, the youngest recorded dying at c. 6months old (skeleton [315], F.126), were being buried in the same burial ground as adults. Moreover, a single neonate occipital bone was recovered from the grave fill of F.13 (that of a mature adult male). This suggested that new-borns were interred close by or even within shallow graves in the main cemetery area which had then been disturbed by later graves or else truncated.

Around the south-western edge of the small cremation cemetery or barrow, an association of shallowly buried and disarticulated infant burials might indicate the presence of an incipient child burial ground. The paucity of individuals (F.103, F.104, F.105, F.126 & F,147) doesn't really provide a convincing case for this, and thus this cannot be compared easily with other small rural cemeteries such as Owlesbury, Hants, where infants under the age of about 18 months (corresponding to the age of walking and talking) were buried outside of the zone of adult burials (Collis 1988).

Cause of Death and Pathological Condition

Though not a likely cause of death, dental diseases such as calculus, caries, abscesses and ante-mortem tooth loss were inter-related and prevalent, particularly within the adult population, the incidence and manifestation of these being more severe within

the more mature individuals. No immature skeletons exhibited evidence of dental pathology.

Like dental disease, osteoarthritis is one of the commonest pathological conditions recorded both today and in archaeological human bone. Ten adults exhibited bony changes (osteophytes, eburnation, and increased porosity) predominantly in the spine. The changes ranged (visually) from mild or incipient where marginal osteophytes had developed around a joint to severe, where a whole joint surface is eburnated and the morphology is grossly altered. Again, prevalence rates need to be calculated but the joint affected and how many individuals were affected are presented in tabular form (see Dodwell, Appendix 6).

Six (possibly seven) of the adults showed evidence of traumatic injury such as fractures, and one of these had multiple fractures. A single case of cranial trauma was recorded. Skeleton [288], a mature adult male, had a depressed fracture on his right parietal, one of the commonest types of head injury seen in archaeological contexts. The latter injury may have resulted in brain damage.

A total of six (possibly seven) post-cranial fractures were found in five (possibly six) individuals at Babraham. Skeleton [206], an older sub-adult who had also been decapitated and had cut marks on his right clavicle had a fractured left tibia. The fracture had occurred at approximately the middle of the shaft and was well healed although poorly aligned. Vertebral distortions recorded in the lower spines of two individuals, skeletons [266] and [270] were probably the result of a single event either a heavy fall onto the feet, or an impact from above. In skeleton [266] the lower spine may have been congenitally weak, as this had also been affected by a fracture type known as spondylolysis where the neural arches separate from the vertebral body. Meanwhile, skeleton [259] exhibited multiple injuries which in all probability resulted from the same incident, probably a fall from a significant height. This man had a fracture to the left scapula (see Figure 21), a bone that is rarely broken and today represents only 1% of all broken bones.

Skeleton [304], F 121 has a malformed left fibula; the shaft bends medially towards the tibia which has a normal appearance. Its aetiology need to be investigated further but possible diagnoses are fibrous dysplasia or a childhood fracture which has healed unusually.

A small dense round bump of bone, known as a button osteoma (a benign tumour) was recorded on the left frontal bone of skeleton [355] from grave F.140. This benign lesion would have been asymptomatic. However, a possible incidence of some form of bone cancer was identified in skeleton [318] from grave F.127, the lesions manifesting themselves as raised areas of new bone having the appearance of crystals or coral. The lesions are most florid on the pelvis (Figure 21), particularly the wings of the ilea. In addition to the production of new bone the disease process appears to be destructive.

Deep pits were recorded on the dorsal aspect of the pubic symphysis of the female skeleton [337], F135. These were interpreted as being the scars of parturition. This dorsal pitting is thought to result from stresses on the ligament and tendon attachments to this area during pregnancy.

Decapitation

Four probable and one possible post-mortem decapitations have been identified within the excavated cemetery assemblage. Based on this sample the percentage incidence of decapitation as a burial rite here at Babraham (14%) far exceeds the national average of about 2.5-2.6% (Philpott 1991). However, when compared with other similar sized Roman cemeteries in Cambridgeshire, Jesus Lane, Cambridge, 9%, The Parks, Godmanchester, 13%, this figure does not seem that high.

At least three of the decapitated burials were of adult males, none were of children. In this respect Babraham is more similar to Jesus Lane, where all decapitated individuals were adult males (Alexander *et al.* 2003). However, at The Parks, Godmanchester there were examples both of decapitated infants (between 3-5 yrs and 6-10 yrs) and adults, all of these severances clearly part of a post-mortem burial ritual. Nationally the latter situation is something of an anomaly; typically decapitations amongst juveniles are absent, whilst those of infants are very rare (Philpott 1991).

The association with adult male burials may be the only distinctive feature of these decapitations within the Babraham cemetery. Four out of the five examples exhibit the standard cemetery burial orientation with the head pointing to the south, whilst one of these (F.80) is a coffin burial with grave goods including a Hadham redslipped flagon (carefully placed at the head end in place of the skull) and hob-nailed footwear. Typically, few decapitated burials are associated with grave furniture (*ibid.*), but where present, the replacement of the skull with a pot is part of a fairly well established ritual. The positions of the decapitated skulls within the graves in relation to the surviving skeletal remains is also interesting. The skull of burial F.93 had been carefully placed by the right hand knee, an analogous situation to that of the decapitated skeleton [091] at Jesus Lane, whilst the skull in grave F.111 had been deposited by the feet (see Figure 8b). Both of these are common positions for the placement of detached heads in graves (Alexander *et al.* 2003).

There are many views concerning the significance of decapitation ritual. These range from those provided as explanations for prone burials, i.e. to prevent the ghosts of the dead from walking, criminal execution, mutilation after execution, and religious sacrifice (Taylor 2003), to gladiator burials within the cemetery at 6 Driffield Terrace, York (Hunter-Mann 2006), as a representation of social outcast status or exclusion (Woodward 1993), and finally, as a pagan religious belief undertaken to confound the Christian notion that a body should be left intact for resurrection (Petts 2003), or else symbolically as a form of respect for the head as the seat of the soul (Henig 1984, Philpott 1991). Quite possibly decapitation after death was the closest thing to ritual killing permitted, human sacrifice now being unacceptable in the Roman context (Jones 2003).

The cut marks, where they could be observed were all located on the 4th, 5th, 6th or 7th cervical vertebrae with the 4th and 5th being the most commonly cut. Harman *et al.* study of Roman and Anglo Saxon decapitations found that the majority of cuts were found between the 2nd and the 4th cervical vertebrae (1981, table 7). All of the cuts were inflicted from the front which suggests that they were post-mortem (although the

use of comatising drugs has been postulated as enabling decapitation from the front of a living individual). The marks on the vertebrae suggest that between one and two cuts were required to remove the head from the body. A similar method of decapitation was also recorded from the cemetery at Jesus Lane (Alexander *et al.* 2003).

Reece (1988) refers to post-mortem decapitation being undertaken skilfully using a sharp knife inserted in between the 3rd and 4th vertebrae, the evidence of cut marks being slight and delicate, only leaving traces as this exits the centrum at the rear. However, there is one case of peri-mortem decapitation from Jesus Lane, Cambridge; in that case the other injuries that were inflicted on the body suggested that the victim was stunned then decapitated. Taylor (2003) refers to further decapitated Roman skeletons found in Cambridge, one with contemporary sword cuts around his head.

On one of the Babraham examples (skeleton [206] from grave F.82) a series of five cut marks were recorded on the superior surface of the right clavicle (Figure 21). In addition, the lateral end of the bone is missing, possibly the result of a 6th cut. The cuts are parallel to each other, and are aligned across the shaft and are regularly spaced. They measure between 10-12mm long and penetrate the bone to a depth of between 2-9mm. The cuts are angled suggesting that the blows were struck from the shoulder towards the head. There is no evidence of healing and it seems probable that these cuts to the clavicle are contemporary with the decapitation and possibly part of a funerary ritual.

Coffin Burials

The identification of up to 10 or even 19 iron coffin nails concentrated at the feet and head ends of some of these burials, alongside the rectangular or broad oval to subrectangular shape of some of the grave cuts, suggests the presence of at least four wooden coffin burials. A few surviving finds of nails within some of the other graves may indicate the presence of still further coffins. McWhirr (1982) considered three nails as indicative of a coffin burial within the Circnester cemetery, although coffins could conceivably have been pegged rather than nailed, as has been suggested at Ilchester (Leach 1994). Other options for burial consist of boxed inhumations (graves lined with placed or pegged timbers), plaster (gypsum) burials, or the much commoner shroud burials. An example of a probable box burial was identified within grave F.127 at Babraham. Given the data available, the percentage of coffin burials at Babraham is thus small (14%) compared to that of other rural cemeteries in East Anglia, particularly those which persisted into the 4th century, for example Kelvedon in Essex (a cemetery with 60 inhumations), where more than 50% of the burials were interred within nailed coffins (Rodwell 1988.). By the late 2nd century the use of coffins appears commonplace, and was probably an indication of status (Philpott 1991). The latter assertion would seem to be supported (at least in part) by the presence of accompanying grave goods with some of these burials at Babraham. Probably the richest adorned burial is that of an adult female (F.131) who was interred within a nailed coffin. The burial was clearly part of a family group; this was accompanied by an earlier (shrouded?) burial of an adult male within an adjacent grave (F.129), plus a later child burial (F.130), probably her offspring, which had been inserted into the same grave over the coffin. Another coffin burial (F.80), that of an adult male, was accompanied with a pottery grave vessel. A number of the other better furnished burials may once have contained coffins, an assumption based on the sub-rectangular shape of the graves (e.g. F.140 & F.141). None of the juveniles, including some whom were of moderately high status as suggested by the inclusion by personally worn items of jewellery, appeared to have been buried in coffins.

In contrast to the Kelvedon cemetery, the numbers of nails used in sealing coffins at Babraham, and the sophistication of their construction, appears minimal. Only those Babraham graves with evidence of good preservation of iron nails (such as F.80, F.124, F.140 and F.141) have been used for purposes of comparison. The suggested method(s) of construction are based on the nail patterns and surviving wood stain features as recorded within the much better preserved Kelvedon graves (Rodwell 1988). Construction seems to have involved the use of two side boards overlapping a two to three plank base and end pieces without the use of joints; thus iron finds representing this 3-dimensional arrangement of nails were found concentrated at the four corners, whilst in most cases there were single rows of nails in between, the latter used for nailing the sides to the base along each of the coffin sides. Typically, the lids were not nailed down, but were either pegged, tied, or else just rested on top. The most obvious examples from Babraham (e.g. F.140) show this use of nails just at the corners (as with coffins G36 and G41 at Kelvedon), some show this along the head and footboards, but none along the baseboards and sides. In some cases (such as with F.140 & F.141) we find just a few nails securing the sideboards to the baseboard at the mid-point of the coffin; typically these are found either side of the pelvis area (a similar arrangement was noted with coffin G69 at Kelvedon). As regards other coffin ironwork, an example of what might have been an iron handle or furnishing for a coffin (perhaps even a handle attached to a chest subsequently re-used as a coffin, as in G4 at Kelvedon) came from the grave fill of F.80.

Grave goods

Pottery

Pottery types associated with the Babraham cemetery are dominated by coarseware fabrics and by fineware and coarseware vessels produced at local and regional kilns (Horningsea, Nene Valley, Pakenham, Colchester, and Hadham and Mucking), the majority of the accompanying grave good pots being fineware drinking vessels such as beakers (e.g. Pakenham, Hadham, Nene Valley and Horningsea slipped or colourcoated types) with just single examples of coarseware jars (F.84) and a blackburnished dish (F.122). The absence of imported wares at Babraham is interesting; to some extent this reflects the 3rd century date for these burials. However, at The Parks cemetery. Godmanchester, earlier Samian ware sherds were associated with 3rd - 4th century burials accompanied by Nene Valley beakers, the former possibly as broken vessels, perhaps as curated heirloom items (at Babraham a single example accompanies cremation F.117). This contrasts with cemeteries such as Kelvedon with slightly earlier 2nd century burials – at this latter site imported Gaulish wares and Samian dishes and platters more regularly accompany locally made beakers and flagons (Rodwell 1988). The latest date for the use of the Babraham cemetery is suggested by the deposition of a complete 4th century AD Nene Valley colour-coat beaker in the upper backfill of grave F.86. The latter was not apparently 'placed' with



Figure 15. Grave good - pottery vessels

the body, but appears to have been 'tipped in' before the grave was sealed. There appears to be a predominance of beakers as funerary offerings in the area to the north of the Thames (Philpott 1991), such vessels may have been connected with a funeral feast, or may have been an offering to the deceased.

At Babraham grave pots were typically placed towards the feet, but invariably within the area of the lower half of the body, the single exception being the decapitated burial F.80, where the flagon was placed at the head end in place of the skull. There are parallels, at least to the feet placements, which seems to suggest that this was part of a well established ritual (Alexander et.al. 2003, Jones 2003). At Kelvedon, however, it was noted that pottery could be found at either end of a grave, either inside or outside the coffin (Rodwell ibid.). As at Babraham, complete pots were found in both male and female graves. Another factor to consider is the deliberate selection of slightly damaged pots, seconds, or kiln wasters for the purposes of holding cremations, but also occasionally for use as grave pots, such as are found both at The Parks, Godmanchester (Jones 2003) and Kelvedon, Essex (Rodwell 1988). At the latter site, what could have been intentionally damaged plates and dishes, or perhaps "killed" items, have been purposefully deposited in graves. At Babraham there is only one example of a poorly-fired beaker associated with grave F.79, although there are a number of examples of damaged vessels or kiln seconds used for holding cremations. There may have been a much more pragmatic and economic reason for this, since the urns themselves were never intended to be seen, and also were not strictly speaking grave goods or personal items accompanying the dead.

When plotted on a plan of the cemetery (Figure 9d) there appears to be an interesting division between burials with grave goods and those without, with the more richly furnished graves located to the north of the cremations. This seems to suggest a distinct difference in social or economic status between individuals buried at the south and north ends of the cemetery. This distinction is largely based on the presence of complete or near complete pottery vessels, although an analysis of the metalwork (in particular the incidence of jewellery items) largely supports this. With such a small excavated sample it is obviously difficult to seek straight comparisons with some of the larger cemeteries. However, the presence of high status graves around mausoleums and shrines which acted as nucleii for subsequent burials, are evident at the Lankhills, Ilchester and Poundbury cemeteries (Woodward 1992), whilst the same sort of thing can also be seen at Kelvedon. All the same, this doesn't provide analogous evidence for high and low status burial areas, instead it just reinforces the idea of the importance of burial plots and ancestral areas.

Footwear

Sexual differentiation on the basis of grave goods is evident. For example, the presence of hob-nailed footwear, probably as sandals, is a strong indication of male adult burials (although not exclusively so). As at Jesus Lane, Cambridge, some of the individuals buried at Babraham appear to have been laid to rest wearing footwear (e.g. as with burial F.86), whilst in other cases the sandals or boots had clearly been removed and placed carefully placed by the side of the feet (e.g. F.129) or lower legs. The latter custom has often been considered as a feature of earlier (2nd – 3rd century AD) burials (as perhaps we find here in graves F.106 and F.129) and rural cemeteries

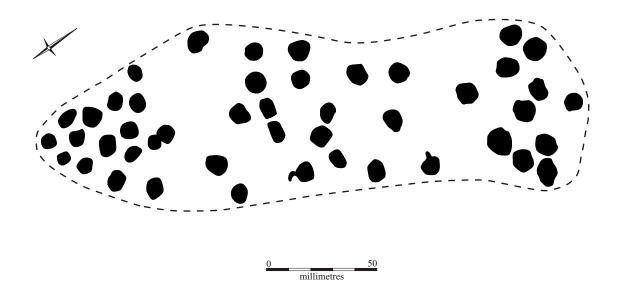




Figure 16. Footware: Under excavation and plan of hobnails from the same right-foot shoe or boot (F. 129)

(Clarke 1979). At Kelvedon in Essex, footwear was clearly not worn, instead this was found placed at either end of the grave (Rodwell 1988). In contrast to this, hob-nails were conspicuous by their absence within male graves at The Parks, Godmanchester. It has been suggested that here this relates to poor post-depositional preservation (Jones *ibid.*), an alternative explanation being that the shoes were made without hobnails, as was considered to be the case at the Lankhills (Clarke *ibid.*). Based on the preservation of hob-nail patterns on the soles, only one footwear type was provisionally identified.

Bracelets, Rings and Necklaces

Bracelets and bead necklaces, as might be expected, are associated with adult female burials, but probably also with female juveniles (F.123). Two copper-alloy bracelets (a pen annular and three wire-stranded type) and a single pen annular snakes-head bracelet were found around the right and left hand respective wrists of the latter skeleton. Such bracelet types are considered to be an affirmation of regional identity, or as evidence of original identity, whilst the wearing of several bracelets on one arm is considered to be a trait of Pannonian origin (Swift 2000). However, much more commonplace interpretations have been offered; for example, very occasionally large numbers of bracelets are found accompanying burials, such as the 16 worn bracelets from Rochester (Cool 1981). The implication being that the one or two that we find may simply be those that were left with the dead, rather than removed from them before burial (Cool 1981). The stylized snakes-head form of bracelet was most popular during the late 3rd to early 4th century AD, and might have been worn as an apotropaic charm (Cool 2000). A shale bracelet was found with the adult female skeleton interred in the 'rich' coffin burial (F.131).

Whilst bracelets invariably have a strong female association, and are commonly worn or else found placed by the wrists (Philpott 1991), rings, both ear-rings and finger rings seem to be associated with both male (F.124) and female (F.79) burials. The hexagonal copper-alloy finger ring found with burial F.124 was evidently unworn. Philpott (*ibid.*) discusses the significance of these unworn rings, noting their rarity as unaccompanied grave goods, most being late, and the majority associated with late 3rd to 4th century AD burials.

The three possible necklaces found as grave goods consisted of one copper wire and glass bead necklace, and two unique jet necklaces, the latter consisting of a four-strand necklace strung with substantial carved barrel-shaped cylindrical beads plus a single strand necklace of small and thin annular pierced discs or spacers of jet, both of these associated with the same adult female burial (F.131). The annular jet necklace had far fewer spacer discs and may originally have been strung with wooden beads or beads of some other organic material since decayed. Both sets of beads proved to be in an exceptional condition of preservation. The faceted hexagonal to octagonal barrel-shaped bead necklace has parallels with a number of Early Bronze Age examples, such as from Masterton, Pitreavie in Fife (Henshall *et al.* 1963), from Eglingham, Yorkshire (Greenwell 1877), and from Barrow Hills, Radley in Oxfordshire (Leeds 1938). However, it is suggested (based on bead form) that as Roman beads these could have a German origin, with other parallels shown in Hagen's catalogue of jet jewellery (see D. Webb, Appendix 3). Jet beads and



Figure 17. Grave goods - copper alloy and shale bracelets





Figure 18. Grave goods- copper alloy rings and brooches, and iron coffin nails



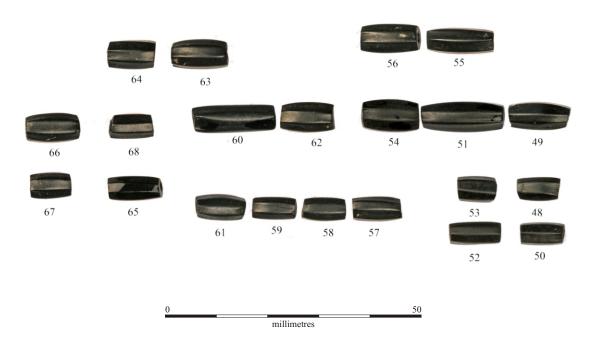


Figure 19. Grave goods - jet bead necklace (F. 131)





Figure 20. Grave goods - glass bead necklace (F. 123)

necklaces become gradually more common in Romano-British contexts from the 3rd century onwards, most of these being lathe-turned rather than fashioned by hand, as suggested by the Babraham examples (Allason-Jones 1996). Nevertheless, these are not that common as grave goods. Several examples which exhibit a more contemporary 'Roman' design of bead form (and stringing) have been found associated with burials at the East London Cemetery (Barber & Bowsher 2000). There still remains a small but distinct possibility that these unusual Babraham beads are earlier, possibly prehistoric and subsequently curated items.

The evidence for accompanying grave goods at Babraham clearly indicates the presence of just one or two moderately 'wealthy' or higher status graves, chief amongst which is the adult female coffin burial F.131, located roughly in the centre of the cemetery north of the cremations. There remains the possibility that other graves present within the 'concentration' of burials here are in some way grouped around this more richly adorned example. Such a comparison has proved difficult to determine, both from the phasing of the cemetery or from a study of local grave-cut relationships. However, both this and the accompanying familial burials appear to conform to the early and dominant (north-northeast - south-southwest) cemetery alignment.

The Cemetery Environment

A background environmental assessment of the Babraham site suggests that by the end of the 2nd century AD the river floodplain up to the edge of the chalk was being annually inundated by silt, and had largely been abandoned, perhaps covered by damp-loving flora and scrub (Timberlake 2006; Armour forthcoming). The edge of this lay some 100-200 m south of the cemetery site, whilst 150 m to the north-west of here beneath the ARES building the mollusca and plant remains from the contemporary 2nd - 3rd century ponds or rubbish-filled damp areas (Hollows A + B) suggested the presence of shrubs and trees (Armour et al. 2007). Within the cemetery area burnt cereal grain and grass seeds indicative of open and cultivated ground, but seemingly residual and/or poorly preserved, appear to have been accidentally incorporated into some of the grave fills. The combination of cereal and wild plant species suggests that this site lay on the edge of open fields, perhaps on the very margins of the settlement (see de Vareilles, Appendix 4), within an area consisting of isolated trees or hedgerows yet devoid of woodland. The range of seeds represented are similar to those found within the cremations, however, it is not impossible that they are the remains of everyday consumption or of crop processing.

The molluscan assemblage which is sparse apart from a profusion of the blind-burrowing snail (*Ceciloides acicula*) is indicative of ground disturbance as well as the rapid infilling of graves. Taken as a whole, this indicates that the natural vegetation and hydrology did not alter much throughout the time span represented (see Table 10). The ground of the cemetery was dry and appears to have been grassy, possibly with some trees.

Associated with some of the individual cremations we find larger amounts of grass seed and cereal grain, some of the latter associated with grass roots and cereal roots as well as with straw, suggesting that plants (herbs or wild flowers?) may have been uprooted and burnt with the cremations upon the funeral pyre(s), perhaps as offerings,

the latter gathered from the field(s) or meadows surrounding the cemetery. The presence of burnt parenchyma tissue within the charcoal from cremation F.92 suggests the inclusion of plant tubers, or even fruit offerings on top of the funeral pyre. Meanwhile, an analysis of tree species used as fuel indicates the presence of Scot's Pine, suggesting that this was probably growing hereabouts.

Because of the on-going nature of cereal processing, it was not possible to determine the season from the assemblage of grain and crop weed species gathered, therefore the exact time of year that cremation was being practised. The exception to this was cremation F.92, within which a carbonised nut of the great fen-sedge (*Cladium mariscus*) was found. Typically, these sedges are found growing on undisturbed wet ground, sometimes around the edges of ponds, of which several examples are known from the Babraham site. The implication therefore is that the body was burnt outside on a pyre sometime during the late summer or early autumn, most likely a little distance away from the burial ground, although conceivably still within a few hundred metres of the site.

The environmental evidence from pit F.91, a feature dug through the former area of cremations and burials, suggests that some sort of fine-sieved and hand-sorted grain waste resulting from cereal processing had been burnt, then discarded into the pit. Although it was not possible to prove its post-Roman date, it seems most likely on the basis of associated pottery that this took place during the Early Medieval period (12th – 13th century AD). The burnt grain consisted of cereal grain, including oats (which may have been looked upon as a crop contaminant) and considerable amounts of seed from wild plants. The processing waste suggests domestic scale milling and possibly even food preparation nearby, perhaps undertaken at this 'open field' location. The occurrence of animal bone, including that of cattle and sheep/goat supports the notion of feasting. However, on this basis and the presence of small amounts of pottery, one cannot conclude that it was a midden or rubbish pit. Most likely this again became cultivated ground during the Medieval and post-Medieval periods, at which time digging disinterred some of the shallower burials. Thereafter, it seems likely that at least some of the area around the barrow and burials would have been avoided.

CONCLUSIONS

The site is a slightly a-typical example of a late Roman/Romano-British linear inhumation and cremation cemetery associated with a small-medium sized rural settlement. The focus for the inhumation cemetery seems to have been a circular group of six 'satellite' 2^{nd} - 3^{rd} century cremations emplaced around the edge of a possible mound or small barrow which covered a 1^{st} - 2^{nd} century AD cremation. There is little evidence for the well-managed separation of burials into distinct rows or plots such as we find at major cemetery sites, even though some attempt at this is still evident in the alignment and grouping of what are possibly related, family graves. Unusual for a cemetery of this size (> 40 skeletons) the burials are quite constricted and overlapping, confined to a narrow band little more than 8 m wide, within which graves have been cut too narrow for coffins, sometimes even for shroud burials. Some 70% of these appear to have been intercut, sometimes quite haphazardly, on at least

five different burial orientations. The whole cemetery plot therefore appears to be confined, presumably within some sort of perimeter boundary, although no corresponding archaeological features for this seem to be present. One suggestion is that these boundaries were hedgerows. With respect to this, there seems to a predominant north-northeast - south-southwest orientation to the cemetery and its enclosed burials, no doubt influenced by the parallel alignment of the probable Roman road and roadside ditches found only some 50 m to the north-west of this site.

Although a little difficult to determine on the current spread of pottery dates, some nine phases of Roman cremation and burial have been identified, these based largely on perceived changes in alignment and inter-cutting grave relationships. The range of dates for these spans the period from the late 1st - early 2nd century to the beginning of the 4th century AD. Evidence for still earlier activity on site is present in the form of a group of probable Neolithic pits and some residual Late Iron Age/Conquest to 1st century AD Romano-British pottery sherds included within grave fills, whilst post-Roman activity is limited to an Early Medieval (12th - 13th century) pit and post-Medieval cultivation features and a roadway which truncates some of the burials along the eastern edge of the site.

The identified (sexed) cemetery population consists of exactly equal numbers of adult males and females (13 each), with a single sub-adult and at least 10 juveniles or infants. This implies the presence of a civilian cemetery. In addition there seems to be some evidence for an early grouping of infant burials around the south-western edge of the cremation cemetery. Infant burial grounds are sometimes common within larger cemeteries, but the case for this here is not at all conclusive. At least three individuals show common genetic traits (i.e. the presence of metopic sutures – a condition which today affects no more than 3% of the UK population). This would seem to imply the presence of at least one family group.

There is little suggestion at Babraham of rich burials accompanied by high status grave goods, but neither were many of these obviously poor. More interesting is the grouping of the 'richer' graves (those which include pottery grave goods) within the northern part of the cemetery. Up to 16 of these graves had pottery vessels largely dominated by locally made 3rd century beakers (including Hadham slipped and Pakenham colour-coat ware), with only one example (a Nene Valley colour-coat beaker) which could be dated early 4th century AD. The richest burial was that of an adult female (F.131) interred within a coffin accompanied by items of jewellery including rare jet bead necklace(s), a shale bracelet and copper ear-rings. A child (probably sibling) burial had been interred on top of her within the same grave. One of the well preserved necklaces associated with this adult burial is of unusual design, composed of faceted barrel-shaped jet beads which strongly mimic a number of Early Bronze Age examples. There is the slim possibility therefore that this is a curated item. Several juvenile (female?) burials were excavated who were found to be wearing copper-alloy bracelets; no male juveniles and few male adults had accompanying grave goods, although some of the male skeletons were (typically) accompanied by hob-nailed footwear, found either worn or else placed alongside the feet or lower legs.

The percentage of decapitations within the excavated cemetery population (approx. 14%) was high for a cemetery of this size, even when taking into consideration the

higher regional incidence. All of the decapitations occurred post-mortem and probably of male adults, but otherwise there were no clear associations or reasons for these. The cemetery therefore is probably only a little unusual in this respect - more interesting was the placing of a grave-good vessel at the head instead of the skull.

As a whole, the excavation assemblage provides a useful record of this type of rural settlement cemetery, which is perhaps slightly different from what one might expect, yet adds to the database of information on late Roman burial practice and provides a study worthy of regional comparison.

Acknowledgements

Specific thanks are due to Stephen Woolverton (Building and Engineering Services, Babraham Bioscience) who provided technical support and equipment, and also Rowland Estall for facilitating our stay at the Institute. Jemima Woolverton volunteered her help on the excavation. Robin Standring and Chris Evans were Project Managers (CAU). Jane Matthews produced the graphics and Grahame Appleby proof-read the text. Dave Webb prepared and photographed a number of the finds. We would like to thank all the CAU excavation staff who dug on this site. Lattenburys Services undertook the machining during the excavation. The site was monitored by Kasia Gdaniec (CAPCA).

BIBLIOGRAPHY

Alexander, M., Dodwell, N. and Evans, C. 2003 *The Roman Cemetery at 35-37 Jesus Lane, Cambridge*, Cambridge Archaeological Unit Report no.581, University of Cambridge, November 2003

Alexander, M., Dodwell, N. and Evans, C. 2004 A Roman Cemetery in Jesus Lane, Cambridge, *Proceedings of the Cambridge Antiquarian Society Vol. XCIII*

Alföldi, M.R., Barkóczi, L., Fitz, J., Poczy, K.S., Radnoti, A., Salamon, A., Sagi, K., Szilagyi, J. and Vabo, E.B. 1957 Intercisa II (Dunapentele), *Geschichte der Stadt in der Römerzeit*, Budapest

Allason-Jones, L. 1989 Ear-rings IN Roman Britain BAR British Series 201, Oxford

Allason-Jones, L. 1993 Small Finds IN Casey, P., Davies, J. and Evans, J. 1993 Excavations at Segontium (Caernarfon) Roman Fort, 1975-1979 CBA Research Report 90

Allason-Jones, L. 1996 Roman Jet in the Yorkshire Museum

Anderson, A.S., Wacher, J.S. and Fitzpatrick, A.P 2001 The Romano-British 'small town' at Wanborough, Wiltshire: excavations, 1966-1976, *Britannia Monograph series no. 19*, London: Society for the Promotion of Roman Studies

Armour, N. 2006a. *Archaeological excavation at the Rickett Field Site, Granta Park, Great Abington*, Cambridge Archaeological Unit Report no.737, University of Cambridge, September 2006

Armour, N. 2006b A report on the trenching evaluation of the Babraham Research Centre Access Roadway, Cambridge Archaeological Unit Report no.725, University of Cambridge, May 2006

Armour, N. 2007 Archaeological Investigations at Babraham Research Campus, Cambridgeshire 2005-2007: *ARES Access Roadway, Campus Road and Car Park Excavations plus site watching briefs*, Cambridge Archaeological Unit Report No. 763, University of Cambridge, March 2007

Armour, N., Appleby, G. & Timberlake, S. 2007 *The ARES Site, Babraham Research Campus, Cambridgeshire: An Archaeological Excavation,* Cambridge Archaeological Unit Report No. 752, University of Cambridge, January 2007

Bagnall Smith, J. 1999 Votive Objects and Objects of Votive Significance from Great Walsingham, *Britannia Vol 30*

Barber, B. and Bowsher, D. 2000 The Eastern Cemetery of Roman London: Excavations 1983-1990, *Museum of London Archaeology Service Monograph 4*

Bass, W.M. 1987 Human Osteology Columbia, Missouri Archaeology Society

Beedham, G.E. 1972. *Identification of the British Mollusca*. Bath: Pitman Press

Black.E.W. 1986 Romano-British burial customs and religious beliefs in south-east England. *Archaeological Journal vol* 143 p.201-39

Brickley, M. and Mckinley, J.I. (eds.) 2004 *Guidelines to the Standards for Recording Human Remains* IFA Paper No. 7

Boardman, S. and Jones, G. 1990. Experiments on the effects of charring on cereal plant components. *Journal of Archaeological Science* 17: 1-11

Booth. P. 1991 A Roman Burial near Welford-on-Avon, Warwickshire. Birmingham and Warwickshire Archaeological Society Transactions 1991-92 vol 97

British Geological Survey (BGS) 2002 England & Wales, Sheet 205 Saffron Walden Solid & Drift Geology, Keyworth, Notts.

Brooks, S. and Suchey, J. 1990 Skeletal Age Determination Based on the Os Pubis: A Comparison of the Acsádi-Nemeskéri and Suchey-Brooks Methods *Human Evolution* 5:227-238

Brothwell, D. 1981 Digging Up Bones British Museum (Natural History) London

Brown, R. 1986 The Iron Age and Romano-British Settlement at Woodcock Hall, Saham Toney, Norfolk, *Britannia Vol. 17*, 1-58

Brown, W.A.B. 1985 *Identification of Human Teeth* Adlard & Son Ltd, Bartholomew Press, Dorking, Surrey

Bushe-Fox, J.P. 1932 *Third Report on the Excavations of the Roman Fort at Richborough, Kent*, Reports of the Research Committee of the Society of Antiquaries of London

Butcher, DW. 1954. A short history of Babraham Hall and Estate, Cambridge (unpublished)

Butler, R. 1994. *Archaeological Investigations at Babraham Hall Institute*. Cambridge Archaeological Unit Report no.99, University of Cambridge, March 1994

Clarke, G. 1979 Winchester studies 3: pre-Roman and Roman Winchester - Part 2, The Roman cemetery at Lankhills

Collis, J. 1988 Owlesbury (Hants) and the problems of burials on rural settlements IN Rodwell, K.A. 1988

Cool, H.E.M. 1979 A Newly Found Inscription on a Pair of Silver Bracelets from Castlethorpe, Buckinghamshire, *Britannia Vol 10*, 165-168

Cool, H.E.M. 1981 In Harrison, A.C., 'Rochester 1974-75', *Archaeologia Cantiana* 97: 95-136.

Cool, H.E.M. 1993a The Copper Alloy and Silver Gravegoods, In Farwell, D.E. and Mollison, T.L. (1993) Excavations at Poundbury 1966-80, vol. 2: The cemeteries, *Dorset Natural History and Archaeological Society Monograph no. 11*

Cool, H.E.M. 1993b The Small Finds *in* Darling,M. and Gurney,M. 1993 Caistor-on-Sea Excavations 1951-55 by Charles Green, *East Anglian Archaeology no. 60*

Cool, H.E.M. 2000 The Significance of Snake Jewellery Hoards, *Britannia Vol 31*, 29-40

Cool, H.E.M 2005 The metal small finds from 124-130 London Road, Gloucester (LRG02) *in* 124-130 London Road, Gloucester: Archaeological Excavation Report http://www.foundations.co.uk/reports/gloucestershire/lrg.shtml

Cooper, A. 2004 Broom Quarry Bedfordshire: Archaeological Excavation (Phase 9A). Cambridge Archaeological Unit Report No. 666, University of Cambridge, April 2004

Cooper, S. & Hinman, M. 1997 Later Prehistoric Remains at the Welding Institute, Abington Park, Great Abington: An Archaeological Evaluation, CCCAFU Report no. 146

Crummy 1983 The Roman small finds from excavations in Colchester 1971-1979, *Colchester Archaeological Report 2*, ISBN 0 9503727 3 0

Davis, S.J.M. 1992 A rapid method for recording information about mammal bones from archaeological sites HBMC AM Lab. Report 19/92

Duhig, C., Going, C. J., Green, M., & Taylor, A. 1997 A Roman Child Burial with Animal Figurines and Pottery, from Godmanchester, Cambridgeshire, *Britannia Vol* 28, 386-393

Dunning, G.C. & Jessop, R.F. 1936 Roman Barrows, Antiquity 10, 37-53

Evans, C. 1993 Archaeological investigations at Hinxton Quarry, Cambridgeshire, Cambridge Archaeological Unit Report No.88, University of Cambridge, Sep 1993

Evans, C. 2002. *The Archaeology of the Addenbrooke's Environs. A Desktop Essay.* Cambridge Archaeological Unit Report No.497, University of Cambridge, July 2002

Evans, C., Mackay, D. & Webley, L. 2004 Excavations at Addenbrooke's Hospital: the Hutchinson Site, CAU Report No.609, Cambridge, April 2004

Farwell, D.E. & Molleson, T.I. 1993 Poundbury Volume2: The Cemeteries, *Dorset Natural History and Archaeological Society Monograph Series No.11*

Flood, R.J. 1980 The Cambridge Archaeology Field Group Second Annual Report, *PCAS 69*: xiv-xvi

Fowler, E. 1960 The origins and development of the Penannular Brooch in Europe, *Proceedings of the Prehistoric Society vol. XXVI*

Frere et.al. 1982 The Bignor Villa, Britannia Vol 13, 135-195

Greenwell, G. 1877 British barrows: a record of the examination of sepulchral mounds in various parts of England

Hagen, W. 1937 Kaiserzeitliche Gagatarbeiten aus dem rheinischen Germanien. Bonner Jahrbücher 142, 77–144.

Hall, A. 2003, Babraham Research Campus: An Archaeological Desk Based Assessment, Cambridge Archaeological Unit Report No. 567, University of Cambridge, September 2003

Harman M., Molleson T.I., Price J.L. 1981 Burials, bodies and beheading in Romano-British and Anglo-Saxon cemeteries, Bulletin of the British Museum Natural History (Geology) 35: 145-80.

Hatton, A. 1997. *Human remains and Medieval pits at Babraham Hall*. CCCAFU Report No. 109, Cambridge

Hawkes, C. and Hull, M. 1947 Camulodunum First Report on the Excavations at Colchester 1930-1939, Reports of the Research Committee of the Society of Antiquaries of London no. XIV

Henig, M. 1974 A corpus of Roman engraved gemstones from British sites: Part I, Discussion; Part II, Catalogue and plates, *BAR British Series no.* 8

Henig, M. 1984 Religion in Roman Britain, Batsford, London

Henkel, F. 1913 Die römischen Fingerringe der Rheinlande und der benachbarten Gebiete: Mit Unterstützung der Rőmisch-germanischen Kommission des Kaiserlich Archäologischen Instituts / hrsg. von F. Henkel. Berlin: G. Riemer

Henshall, A. S. and Wallace, J. C. 1963 'A Bronze Age Cist Burial at Masterton, Pitreavie, Fife', *Proc. Soc. Antiquaries Scotland 96* (1962-3), 145-54

Hercules Read, C. 1920 A Guide to the Antiquities of the Bronze Age in the Department of British and Mediæval Antiquities, British Museum

Hill, J.D., Evans, C., Alexander, M. 1999 The Hinxton Rings – A Late Iron Age Cemetery, with a Reconsideration of Northern Aylesford-Swarling Distributions IN *Proceedings of the Prehistoric Society* 65, 243-273

Hooley, D. 2001 Copper Alloy and Silver Objects IN Anderson, A.S., Wacher, J.S and Fitzpatrick, A.P. 2001 The Romano-British 'Small Town' at Wanborough, Wiltshire. Excavations 1966-1976, *Britannia Monograph Series no. 19*

Hunter-Mann, K. 2005 Romans Lose their Heads: An Unusual Cemetery at The Mount, York, *The Archaeology of York Web Series No.6* (http://www.yorkarchaeology.co.uk/)

Jackson, D. and Ambrose, T. 1978 Excavations at Wakerley, Northants. 1972-75, *Britannia Vol. 9*, 115-242

Jackson, R. 1978 The Surgical Instruments from Stanway, Essex, *Colchester Archaeologist no. 11*

Johns, K. 1996 Bracelets In Potter, T. W. and Jackson, R. P. J., *The Roman site of Stonea, Cambridgeshire 1980-85*, British Museum Press, London

Jones, A. (ed.). 2003 Settlement, Burial and Industry in Roman Godmanchester, Birmingham University Field Archaeology Unit Monograph Series 6, *BAR British Series 346*

Kemp, S. 1999 A Middle Iron Age site at Granta Park, Great Abington, Cambs. CCCAFU Report 161

Kendall, G. 1982 A study of grave orientation in several Roman and post-Roman cemeteries from Southern Britain, *Archaeological Journal vol.* 139, 101-123

Kinnes, I. and Longworth, I. 1985 Catalogue of the Excavated Prehistoric and Romano-British Material in the Greenwell Collection, ISBN: 0714113719

Kreuz, A. 2000. Functional and conceptual archaeobotanical data from Roman cremations. In: J. Pearce, M. Millett and M. Struck (eds.). *Burial, Society and context in the Roman World*. Oxford: Oxbow Books; 45-51

Lawson, A. 1975 Shale and Jet Objects from Silchester, Archaeologia Vol CV

Leach, P. 1986 The Excavation of a Romano-Celtic Temple and a Later Cemetery on Lamyatt Beacon, Somerset, *Britannia Vol. 17*, 259-328.

Leach, P.J. 1982 Ilchester Volume I Excavations 1974-5, Western Archaeological Trust Monograph No.3

Leach, P. (ed.) 1994 Ilchester. Vol.2, Archaeology, excavations and fieldwork to 1984, *Sheffield Monographs No. 2*

Leach, P. 1998 Great Witcombe Roman Villa, Gloucestershire. A report on excavations by Ernest Greenfield 1960-1973, *BAR British Series 266*

Leech, R.H. 1981 The excavation of a Romano-British farmstead and cemetery on Bradley Hill, Somerton, Somerset, *Britannia 12*, 177-252

Leeds, E.T. 1938 Further excavations in Barrow Hills Field, Radley, Berks. *Oxoniensia vol III*

Lethbridge, T.C. 1936 Further Excavations in the Early Iron Age and Romano-British Cemetery at Guilden Morden, *Proceedings of the Cambridge Antiquarian Society 36*, 109–120

Lethbridge, T.C. 1937 Romano-British Burials at Linton, Cambridgeshire. *Proceedings of the Cambridge Antiquarian Society* 37, 68-71

Lloyd-Morgan, G. 1994 Copper alloy objects excluding brooches. In Cracknell, S. and Mahany, C. 1994 Roman Alcester: Southern Extramural Area 1964-1966 Excavations Part 2: Finds and Discussion, *CBA Research Report 97*

Lovejoy, C. O., Meindl, R. S., Pryzbeck, T. R. and Mensforth, R.P 1985 Chronological Metamorphosis of the Auricular Surface of the Ilium: A New method for the Determination of Age at Death *American Journal of Physical Anthropology* 68: 15-28

Lucas, G. 1999. *Roman Pottery Production in Cambridgeshire*. Supplement Report to CUMAA/Crowther-Benyon Fund.

Lucas, G. 2001 Vicar's Farm, Cambridge Post-Excavation Assessment Report. Vols 1 & 2, Camberidge Archaeological Unit Report No. 425, University of Cambridge, March 2001

McWhirr, A., Viner, L. and Wells, C. 1982 Romano-British Cemeteries at Cirencester, *Cirencester Excavations II*.

Manning, W.H. 1985 Catalogue of the Romano-British iron tools, fittings and weapons in the British Museum

Matthews, C.L. 1981 The Roman Cemetery at Dunstable, Durocobrivae, *Bedfordshire Archaeological Journal vol. 15*

Miller, L. and Rhodes, M. 1980 Leather IN Jones, D. and Rhodes, M. 1980 Excavations at Billingsgate Buildings 'Triangle', Lower Thames Street, 1974, London Middlesex Archaeological Society Special Paper vol. 4 ISBN 0 903290 20 0

Mould, Q. 2004 Leather report IN Cool, H. 2004 The Roman cemetery at Brougham, Cumbria: excavations 1966-67

Munro, R. 1899 Prehistoric Scotland and its place in European civilisation: being a general introduction to the "County Histories of Scotland" Edinburgh, London: W. Blackwood and Sons

Ottaway, P. and Rogers, N. 2002 Craft, Industry and Everyday Life: Finds from Medieval York

Perrin, J. R. 1999. Roman Pottery from Excavations at and near to the Roman Small Town of Durobrivae, Water Newton, Cambridgeshire, 1956-58, Journal of Roman Pottery Studies Volume 8

Petts, D. 2003 Christianity in Roman Britain, Stroud Tempus

Philp, B. 1973 Excavations in West Kent 1960-1970

Philpott, R. 1991 Burial Practices in Roman Britain. A Survey of Grave Treatment and Furnishing AD 43-410, *BAR British Series 219*, Oxford

Pollard, J. 1995. Archaeological Investigations at Bourn Bridge, Pampisford: Part 1 – Prehistoric occupation, Cambridge Archaeological Unit Report No.140, University of Cambridge, July 1995

Pollard, J. 1996 Excavations at Bourn Bridge, Pampisford, Cambridgeshire: Part 2, Roman and Saxon, Cambridge Archaeological Unit Report No.165, UIniversity of Cambridge, April 1996

Rahtz, P. 1978 'Grave orientation', Archaeological Journal 135, 1-14

Reece, R. 1988 My Roman Britain, Cotswold Studies Vol.3. Oxbow Books, Oxford

Regan, R. 1995 Archaeological investigations at Babraham Hall Institute, Babraham, Cambs. Cambridge Archaeological Unit Report No.155, University of Cambridge, December 1995

Robinson, M. 1995 Archaeological investigations at Babraham Hall, Babraham, Cambs. Cambridge Archaeological Unit Report No.123, University of Cambridge, February 1995

Rodwell, K. 1988 The Prehistoric and Roman settlement at Kelvedon, Essex, Chelmsford Archaeological Trust Report no.6, CBA Research Report 63

Salter, C. J. 1999 The Iron Objects IN Boyle, A. and Early, R. 1999 Excavations at Springhead Roman Town, Southfleet, Kent, *OAU Occasional Paper No. 1*

Scheuer, L. and Black, S. 2000 Developmental Juvenile Osteology Academic Press

Smith, I.F. and Simpson, D.D. 1964 Excavation of three Roman tombs and a prehistoric pit on Overton Down, Wiltshire, *Archaeol. Natur. Hist. Mag.* 59, 68-85

Spence. 1990 Archaeological Site Manual. Museum of London Archaeology Service. London

Stace, C. 1997. New Flora of the British Isles. Cambridge: Cambridge Univ. Press

Swaysland, C. 2005 An archaeological evaluation at the ARES Project Site MRC, Babraham Institute, Cambs. Cambridge Archaeological Unit Report No.691, University of Cambridge, September 2005

Swift, E. 2000 Regionality in Dress Accessories in the late Roman West, *Monographies Instrumentum no. 11*

Taylor, A. 2000 Roman Burial IN *An Atlas of Cambridgeshire and Huntingdonshire History*, Kirby, T. & Oosthuizen, S. (eds.), 17, Centre for Regional Studies, Anglia Polytechnic University

Taylor, A. 2003 Burial with the Romans, *British Archaeology* 69, March 2003

Ubelaker, D.H. 1989 Human Skeletal Remains: Excavation, Analysis, and Interpretation Taraxacum Press, Washington, D.C

Van Driel-Murray, C. 2001 Vindolanda and the Dating of Roman Footwear, *Britannia Vol. 32*

Waugh, H. and Goodburn, R. 1972 The non ferrous objects IN Frere, S. 1972 *Verulamium excavations 1*

Webb, D., Timberlake, S. & Armour, N. 2006 Newnham College Buttery, Cambridge: An archaeological evaluation and watching brief, Cambridge Archaeological Unit Report No. 718, University of Cambridge, April 2006

Wheeler, R. 1930 London in Roman Times, London Museum Catalogues no. 3

Whitehall Farm Roman Villa http://www.whitehallvilla.co.uk/index.html (internet)

Whimster, R. 1981 Burial Practices in Iron Age Britain, BAR British Series no.90, Oxford

Whiting, W., Hawley, W. and May, T. 1931 Report on the excavation of the Roman cemetery at Ospringe, Kent, *Reports of the Research Committee of the Society of Antiquaries of London No. VIII*, London Society of Antiquaries

Wilkes & Elrington 1978 Victoria County History of Cambridge and the Isle of Ely, Volume V

Wills, J. 2004a *An archaeological excavation at the Babraham Research Campus, Babraham, Cambs*. Cambridge Archaeological Unit Report No.597, University of Cambridge, March 2004

Wills, J. 2004b Knobbs Farm, Somersham, Cambridgeshire, Phase 5: An Archaeological Evaluation. Cambridge Archaeological Unit Report No.651, University of Cambridge, May 2004

Woodward, A. 1992 Book of Shrines and Sacrifice, B.T.Blatsford/English Heritage

Woodward, A. 1993 'Discussion' IN Farwell, D.E. & Molleson, T.I. 1993, 216-239

Zienkieweiz, J. 1986 The legionary fortress baths at Caerleon, Vol III: the finds

APPENDICES

Appendix 1: Lithics (Emma Beadsmoore)

The site yielded a total of 249 (<2547g) flints, 205 (<2096g) of which were worked, whilst 5 (135g) were worked and then burnt and 39 (<316g) were just burnt. Three pits yielded 39 (<570g) flints, 13 (<85g) were recovered from cremations, inhumations yielded 109 (<862g), and the remaining 88 (<1030g) were either collected as stray finds, from a subsoil layer or found in a test pit. These are listed in Table 1 below.

	Туре	9																						i
Feature/ context/ test pit	chip/chunk	secondary blade	tertiary blade	primary flake			irregular core	ingle platform ccore	single platform core	opposed platform core	multiple platform core	core rejuvenation flake	retouched core rej flake	edge used blade	retouched /worn blade	serrated blade	retouched flake	edge used flake	serrated flake	flake knife	end scraper	hammerstone	unworked burnt chunk	Totals
F. 79					1	2																		3
F. 80					2																			2
F. 81						1																		1
F. 82		1			1										1		1	2						6
F. 84						1																		1
F. 85						1																		1
F. 86					1	2																		3
F. 87	3	4	1		16	2			2	1	1	1		1		1	1	1	2					37
F. 88					1	1																		2
F. 91	4		1		11	7	1	1															26	51
F. 92																							11	11
F. 94	3				3	2	1																1	10
F. 96						1																		1
F. 106					1																			1
F. 111						2																		2
F. 112					2	1											1						1	5
F. 113						1																		1
F. 117		1																						1
F. 121						1																		1
F. 122		1			2	1																		4
F. 124	1				1	1							1											4
F. 131	1				1																			2
F. 133						1																		1
F. 135					3	1																		4
F. 143	1				3	1														1				6
[302]	11		3	5	22	7	3		3		3	1					3					1		62
[316]					5	4																		9
TP2	2			1	2	1																		6
stray		1	1		4	2	1											1			1			11
Sub																								
totals	26	8	6	6	82	44	6	1	5	1	4	2	1	1	1	1	6	4	2	1	1	1	39	249

Table 1: Flint types and quantities

Pits

The majority of the 39 flints recovered from pits F. 87 and F. 88 were in pit F. 87. The material comprises flint working waste and several utilised flakes and blades. Three of the four cores were systematically reduced to produce blades and predominantly narrow flakes; the platforms were sometimes prepared and strategies were employed to sustain the use lives of the core. Two of the cores refitted and two flakes, potentially struck from the same nodule of flint were also recovered from the pit. Once the core was split, two opposed platforms were established on one of the cores, and worked until it became increasingly difficult to produce the desired narrow flakes and blades, the core was then discarded. The other core was also worked to produce flakes, but less extensively or systematically. The fourth core was more expediently reduced. Nearly half of the flakes in the pit had been struck to deliberately remove the awkward scars of earlier flake removals from the cores; short step and hinge fracture terminations are visible on the dorsal surfaces. A core rejuvenation flake provided further evidence for a systematic approach to maintaining the working face of the cores and prolonging their use lives

The pit also yielded several utilised flakes and blades, two of which were broken. The flakes and blades were either utilised as they were or modified with retouch or serrated edges before they were used. The assemblage recovered from the pit comprises incomplete, systematic reduction sequences; discarded flint working waste, exhausted cores, unwanted informal core rejuvenation flakes and utilised and worn tools. Systematic core reduction focused on the production of narrow flakes and blades was prevalent during the earlier Neolithic, whilst serrated flakes and blades are also characteristic of earlier Neolithic assemblages. The adjacent pit F. 88 yielded only two waste flakes.

Cremations and inhumations

The 122 flints recovered from the cremations and inhumations included a limited quantity of comparable material to the flint recovered from pit F. 87; material that was the product of systematic Neolithic flake production/core reduction, which had been inadvertently incorporated into the later features. Flake and blade blanks as well as cores provide evidence for flint working, whilst several utilised flakes suggested that other activities were carried out at the site. However, a flake knife that is more likely to be later Neolithic was also recovered from the cremations and inhumations suggesting that the residual flint in the features is not a single period coherent assemblage.

Stray finds and Test Pit 2

Six of the remaining 88 flints were recovered from Test Pit 2. The material is chronologically non-diagnostic flint working waste. A further 71 flints were in a layer of subsoil and include systematically produced flint working waste, waste flakes and blades, cores and a core rejuvenation flake, material that is comparable with the flint recovered from pit F. 87. However, a few flints were more expediently produced and are potentially later prehistoric. Finally, ten chronologically non-diagnostic flints were recovered as stray finds from across the area.

Pit F. 87 yielded an assemblage of discarded earlier Neolithic flint working waste and used flints that was potentially broadly contemporary with the feature. The character of the assemblage suggests that flint was utilised as well as manufactured at the site. Comparable flints were recovered from inhumations, cremations, subsoil layers and collected as stray finds at the site, which, although residual in the later features or subsoil, provides further evidence for an earlier phase of activity at the site. Another possible phase of activity was hinted at by the recovery of a potentially later Neolithic knife. The remaining material from the cremations, inhumations and subsoil layers/stray finds was chronologically non-diagnostic and could either be the unidentifiable by-products of Neolithic flake production/core reduction, or the result of later prehistoric, more expedient exploitation of flint at the site.

Appendix 2: Roman Pottery (Katie Anderson)

The Cemetery area yielded a total of 703 sherds, weighing 12130g and representing 11.26 EVEs. Of this 225 sherds (1894g, 5.58 EVEs) can be attributed to burials within the cemetery, with a further 325 sherds (8384g, 4.76 EVEs) associated with cremations. All of the material was examined, and details of fabric, form, decoration, useware, EVE and date were recorded, along with any other information considered to be of importance. For the purpose of this report each of the burials and cremations with associated pottery will be considered separately, with a discussion of the assemblage as a whole to follow.

Cremations

A total of eight cremations had associated pottery, specifically vessels used as containers for the burnt remains. Details of other sherds which were found alongside the cremation vessels are also documented.

Feature 90

A number of different vessels were collected from the primary fill of this cremation. The cremation vessel itself was a medium sized Horningsea greyware jar (70 sherds 888g), of which the top half of the vessel had been truncated by later activity, thus no rim remained. The base had a diameter of 6cm and the vessel had bands of horizontally combed lines. The fabric and form suggest a 2nd-3rd century AD date. Two other vessels were recovered from within the same feature, comprising one sherd from a lid-seated, sandy greyware jar dating 2nd-4th century AD and 11 sherds from a Hadham reduced ware jar with a beaded rim, dating 2nd-4th century AD. These sherds may have been caught up in the backfill of this feature, or their probable later date suggests that they might be intrusive.

Feature 92

The cremation jar from this feature comprised 52 sherds weighing 1480g from a large, globular Hadham reduced, burnished ware jar. This was a large globular jar dating late 2nd-3rd century AD. This vessel also had no rim as a result of truncation; however the base was complete and had a 12cm diameter. Interestingly the base is badly damaged, which appears to be from firing, suggesting this vessel was a waster or at least a 'second'. No other pottery sherds were recovered from this feature.

Feature 113

This was yet another feature which had suffered damage through truncation, resulting in only a handful of body sherds from the cremation vessel remaining (8 sherds, 81g). The fabric was a fine, oxidised sandy ware, probably from a closed vessel form. Due to the lack of any identifiable vessel form, this vessel could only be dated 2nd-4th century AD, with the likelihood that it was 2nd-3rd century AD, based on what is know about the nature of this cemetery. The remains of four other vessels were recovered from the same context, although it is unclear whether they are contemporary or whether they are intrusive within this feature. This included three sherds from a shell-tempered vessel, one large body sherd from a Horningsea greyware storage jar and two other sandy greyware vessels, one of which was a beaded rim jar. It is unclear whether this other material was from backfilling or the later truncation.

Feature 134

Feature 134 stands out as seemingly being the earliest cremation in the cemetery. It contained five sherds (284g) from a reduced sandy jar, dating mid/late 1st-2nd century AD. This vessel had some

sooting on the exterior and had been poorly fired or burnt, thus raising the possibility that it had been part of the pyre. There were several other sherds from the upper fill of the cremation context, including two sherds from a small, black-slipped jar, and four non-diagnostic sandy sherds. These sherds are the same date as the cremation vessel, suggesting that they were part of the backfill.

Feature 115

This feature contained 47 sherds, weighing 2206g, from a large, globular, beaded rim jar. The fabric was a moderately coarse, oxidised sandy ware with bands of burnishing, not dissimilar to some Hadham products, though lacking the mica and with coarser sand inclusions. This vessel has a rim diameter of 28cm and dates 2nd-3rd century AD. The vessel is almost complete and no other sherds of pottery were recovered from this feature.

Feature 116

The cremation vessel from this feature comprised 18 sherds (120g) from a badly damaged sandy greyware vessel. Due to the condition of this vessel, the form could not be identified, although it is likely to have been a closed vessel. This vessel is broadly dated 2^{nd} - 4^{th} century AD, but given that it is part of a cremation it is likely that a 2^{nd} - 3^{rd} century AD date is more appropriate. The other sherd from this context was a Swanspool white-slipped ware, weighing 3g and dating 2^{nd} - 4^{th} century AD. It seems likely that this sherd was park of the backfill of the feature.

Feature 117

Two almost complete vessels were recovered from this feature. The cremation vessel comprised 44 sherds, weighing 1462g from a Hadham reduced ware large, globular jar. The rim diameter of this vessel was 28cm and it dates late 2nd-4th century AD. The second almost complete vessel was a Nene Valley colour-coated flagon or jar (19 sherds 292g), of which the upper third of the vessel was missing. The vessel had rouletted decoration on the body and dates to the 3rd century AD. Sherds from four other vessels were also recovered, including four sherds from a Les Martres-de-Veyre Samian Dragendorff 31 with a partial stamp, dating mid-late 2nd century AD. There were also four shelltempered sherds, which do not appear to be Roman in date, and one grog-tempered sherd. It is unclear whether these other vessels were simply residual and/or intrusive sherds or whether the Samian vessel, in particular, was part of the cremation group. Since these are some of the few sherds of Samian recovered from the assemblage and the Babraham excavations as a whole, and since approximately one third of the vessel was present, there seems a good likelihood that this was a special vessel and thus may have been associated with the cremation. The presence of the Nene Valley vessel is harder to explain, since it is likely to be later than the cremation vessel and would make this cremation contemporary with the burials. Although this is a possibility, it seems more likely that this particular vessel was not part of the cremation group but was intrusive in this feature. This feature was badly truncated during the excavation because it was relatively shallow, which may support the view that the Nene Valley vessel was not part of the cremation.

Feature 118

The cremation vessel from this feature consisted of 24 sherds (954g) from a Horningsea greyware wide-mouthed, globular jar, with bands of burnishing. This vessel has a rim diameter of 24cm and dates 2nd-3rd century AD date. A sherd from this vessel was also found in a grave, Feature 121, proving that the grave was later in date. One further black-slipped sherd was recovered from the same feature, though not the same context, dating mid 1st-3rd century AD.

Burials

Of the 53 inhumations excavated, 16 had associated pottery in the form of grave goods.

Feature 79

The vessel from this feature comprised 30 sherds, weighing 256g from a miniature, colour-coated beaker. The vessel measures 13cm high, with a piriform body and a pedestal base. This vessel is poorly finished, and in moderately abraded, although it is unclear if this took place before of after deposition. This vessel is difficult to date, since the fabric is not sourced and no exact parallels for the vessel form can be found. Vessels which are similar were produced at Horningsea (Lucas 1999), suggesting this vessel dates 2nd-3rd century AD. This date therefore implies that this grave may have been contemporary with some of the cremations, which would be unexpected. Therefore this raises the possibility that this vessel may have been curated before being used as a grave good. If this was the case than it might explain the condition of the vessel.

Feature 80

The grave good in this burial comprised a Hadham red-slipped flagon, with a cupped rim and a narrow ledge on the neck, with a single handle. The vessel comprised 65 sherds and weighed 258g, with a rim diameter of 3cm, and dates 3rd-4th century AD.

Feature 84

A small shell-tempered jar was collected from this burial (13 sherds, 198g). The vessel was globular with an everted rim, which had a diameter of 10cm. The vessel was fairly thin-walled and similar in fabric to sherds from the car park extension excavation (Anderson in Armour 2007). This is one of the few coarseware vessels used as a grave good, perhaps suggesting it may have been used as a container for something, rather than being a grave good in its own rights, although there is no residue on the interior to support this view.

Feature 86

12 sherds (265g) from a Nene Valley colour-coated pentice moulded beaker was recovered from this burial. The beaked had rouletting and a funnel neck, although the rim was missing thus the exact form could not be established. The vessel has parallels with vessels excavated form Water Newton (Perrin 1999) suggesting a 4th century AD date. There were also two sherds from different vessels within this context, although they are likely to have been caught up in the backfill of the grave, as both are slightly earlier in date (2nd-3rd century AD).

Feature 112

A total of 33 sherds (219g) from a Pakenham colour-coated beaker were recovered from this feature. The vessel had a funnel neck and cornice rim, with barbotine swirl and leave decoration and dates late 2nd-3rd century AD.

Feature 122

The probable grave good in this feature comprised six sherds (161g) from a straight-sided, shallow dish, in a fabric imitating Dorset Black Burnished ware, which is similar in composition to Mucking black-burnished ware (Tomber and Dore 1998). This vessel dates 2^{nd} - 3^{rd} century AD. This was one of the few coarseware vessels used as a grave good.

Feature 131

17 sherds (199g) from a Pakenham colour-coat beaker was recovered from this burial. The vessel was a small globular beaker, with a funnel neck, slight beaded rim, with a rim diameter of 5cm. The beaker was also decorated with white painted line and dot decoration. This vessel dates to the 3rd century AD.

Assemblage Composition

As well as the vessels which were used as cremation vessels and grave goods, there were also a large number of sherds which were collected from the cemetery, but appear to be there as a result of back-filling and truncation rather than purposeful deposition. There were also sherds recovered from features other than inhumations and cremations, with approximately 34% of the assemblage being comprised of sherds which do not appear to have been specifically used as part of funerary practice.

The assemblage is dominated by coarseware vessels, which is perhaps slightly surprising since a cemetery assemblage might be considered to be complied of mainly finewares. One reason for this is that most of the cremation vessels were coarseware jars, thus when calculating this figure using only number of sherds (or weight) the number of coarsewares is greatly increased by the presence of these semi-complete vessels. There is however, little difference when these categories are applied to just the cremation and burials, remaining sherds, and all pottery from the assemblage (see Table2).

	% Finewares	% Coarsewares
All Pottery	30	70
Cremations and Burials only	35	65
Cremations and Burials removed	20	80

Table 2: Division of finewares vs coarseware

A variety of vessel fabrics were present within the assemblage (see Table3), most of which come from the local area; those which are not from the vicinity are from the large industries. No fabric source stands out as being dominant, though the un-sourced sandy greywares are well represented.

Fabric	No.	Wt(g)	MNV
Black-slipped	23	179	9
Central Gaulish Samian	6	276	3
Colour-coat (unsourced)	30	256	1
Coarse sandy greyware	146	1981	25
Early Colchester colour-coat	5	26	1
Fine oxidise sandy	11	117	4
Fine sandy greyware	7	25	5
Grog-tempered	4	33	4
Hadham reduced ware	55	1524	1
Hadham reduced burnished	52	1480	1
Hadham red-slipped	68	268	3
Horningsea greyware	98	1973	4
Imitation black-burnished (Mucking?)	6	161	1
Nene Valley colour-coat	41	654	8
Coarse oxidised sandy	59	2362	5
Pakenham colour-coat	50	418	3
Shell-tempered	34	309	10
Swanspool white-slipped	1	3	1
Verulamium whiteware	2	37	1
Wattisfield reduced ware	5	48	3
TOTAL	703	12130	93

Table 3: All pottery by fabric

There was a lack of imported wares at the site, with only six sherds of Central Gaulish Samian. This could be due to several reasons, firstly that the site did not have access to a wide range of imported wares. This may be because of the sites status, or more likely it may be because the apparent peak in the use of the cemetery appears to be between the mid 2nd and mid/late 3rd century AD, and the burials in particular date to the period when imported wares were in the decline. Finally the lack of imports may be explained by the nature of the site, since this is not an ordinary domestic assemblage, thus the pottery in many ways is very limited, thus a lack of imported wares may simply represent a preference for other types of pottery as cremation vessels and grave goods.

When compared to other Babraham excavations, the lack of imported wares does not seem so unusual. The car park extension and the Riverside evaluation, yielded no imported wares. The ARC05 evaluation which had an assemblage of 1349 sherds of Roman pottery, only 14 sherds of Samian were recovered, and imports represented less than 1% of the assemblage of 610 sherds. Given that archaeology at Babraham has recovered in excess of 3000 Roman sherds, dating from the mid 1st century AD to the 4th century AD. Although all of the assemblages appear to peak around the mid/late 2nd-3rd century AD, the consistent lack of imported wares is very interesting and suggests that supply is the primary explanation. Although the site does not stand out as being particularly wealthy, nor does the evidence, especially that from the cemetery, suggest that the site was very poor either. Also, the presence of wares from outside of the immediate area suggest that the site did have access to trade networks. Therefore the lack of imported wares in the assemblage raises interesting questions about the exact nature of the site.

The range of vessel forms present in this assemblage was very limited, with only four groups identified, comprising beakers, dishes, flagons and jars (although c. 25% were non-diagnostic). Given the nature of this assemblage, however, this is not surprising, since this is not an ordinary domestic assemblage. Dividing the assemblage by vessel form, shows that finewares are slightly more dominant than when the assemblage is divided by fabric, representing approximately 38%. However, coarsewares are still clearly dominant.

Most of the vessels used as grave goods were finewares, including one Nene Valley colour-coated ware, two Pakenham colour-coated vessels and one Hadham red-slipped ware. The only exceptions to this were a small shell-tempered jar recovered from Feature 84, an imitation black-burnished ware dish (possibly from Mucking) collected from Feature 122 and a Horningsea greyware jar from Feature 121. There is no useware evidence on any of the coarseware vessels to prove that they were used as containers for something, rather than as grave goods themselves, however, it does seem possible that this was the case, since there is clearly a distinction between the fineware and coarseware vessels.

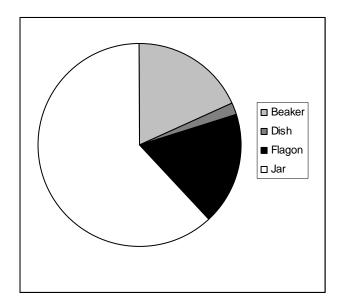


Chart 1: Percentages of all vessel forms (not including non-diagnostic)

This cemetery is important because it saw the transition from cremation to burial, over what appears to be a relatively short period of time. Cremation Feature 134 appears to have been the earliest on the site, in terms of pottery, dating mid/late 1st-2nd century AD. It is located in the middle of a cluster of other cremations, which are all later in date (mid 2nd-3rd century AD). It is unclear as to whether there was a 'break' in the use of the cemetery, but Feature 134 stands out as containing earlier material. However, it should be remembered that pottery associated with inhumations has the potential for being curated. Either way, it seems most likely that Feature 134 was the earliest, with the remaining cremations occurring within a shorter period of time. A peak in cremations appears to have come in the period between the mid 2nd to the mid 3rd century AD.

The dating of some of the cremations is quite problematic. In the case of Feature 117 there were several sherds from different vessels recovered, including four sherds from a Le Martres-de-Veyre Dr31, dating mid-late 2nd century AD, in the same context as a large Hadham reduced jar and a Nene Valley flagon, both of which date 3rd-4th century AD, both of which were relatively complete, suggesting that they may have been deposited while being complete. It seems most likely that the Nene Valley vessel had been deposited at a later date. A further sherd from this vessel was recovered from [302], a dark subsoil layer, covering the southwest corner of the site, suggesting there had been quite a lot of disturbance in this area of the site.

There was one other refit on the site, from the Horningsea greyware cremation jar from Feature 118, of which a further sherd was recovered from a grave, Feature 121. This again proves that the grave was later and did cause some disturbance to the earlier cremation.

Based on the pottery, the earliest burials (those with grave goods) in the cemetery appear to be Features 112 and 121, both of which contained vessels dating mid/late 2nd-3rd century AD. However, the both of these inhumations appear to cut earlier inhumations (Features 133 and 118?), thus suggesting that they are likely to date towards the end of this range (mid-late 3rd century AD), or that the vessels from these two inhumations had been curated for a period of time before being used as grave goods. Feature 122 is also relatively early in date (2nd-3rd century AD), and was truncated by Feature 123, supporting its earlier date. Feature 84, with pottery dating 2nd-4th century AD, was cut by a later grave, Feature 83, implying that it is more likely to be 3rd century AD in date. The latest dating inhumations to contain pottery were Features 79, 80 and 86, with Feature 86 dating 4th century AD. Features 79 and 80 cut earlier features.

Therefore the transition in funerary practice, from cremations to burial took place relatively late on this site, and since some of the burial goods also date 2^{nd} - 3^{rd} century AD, this raises the possibility that the later cremations and earliest burials were contemporary with one another. It is more common for the two types of burial to be chronologically different. For example Knobb's Farm, Somersham (Wills 2004), is an example of a small cemetery which contained both burials and cremations. However, the cremations (five in total) all dated to the early Roman period, mid-late 1^{st} century AD. While the three burials which contained associated Roman pottery, dated 2^{nd} - 3^{rd} and 2^{nd} - 4^{th} century AD, thus showing a clear separation in date between the two practices. However, the occurrence of the two alongside one another is not

entirely unusual to have cremations and burials occurring at the same time and examples can be seen at Vicar's Farm, Cambridge (Lucas 2001.), Kelvedon, Essex Rodwell 1988).

When plotted on the plan of the cemetery, there is an interesting division between burials that contained grave goods and those which did not. All of those that did, were located in the northern group (using the cremation cluster as the mid point), whilst none of the burials in the southern cluster contained vessels as grave goods. Analysis of the spatial division of other grave goods, namely metalwork, shows that the northern group of inhumations again seems to contain more than those to the south. This is a very distinct division, which suggests that this may reflect a difference in status of people buried in this cemetery, with those to the north, being of higher status.

This assemblage can be used to try and answer questions about the nature of grave goods and cremation vessels, concerning their use before deposition in inhumations, and whether they were specifically made/bought for the purposes of being used in the cemetery, or vessels which were already owned. An examination of the vessels in this assemblage, shows most were in good condition, with little evidence that they had been previously used for domestic use, for example there was no evidence of sooting or burnt residues on either the cremation vessels or those used as grave goods. However, due to the level of truncation it is difficult to assess if all of the vessels were complete when deposited, or as seen at other sites, vessels that were slightly damaged (or worse) were still used. Kelvedon in Essex, had evidence of 'seconds' used as grave goods with a number of vessels with poor slip adhesion as well as some which were poorly fired (Rodwell 1988). This could certainly be true of the small beaker from Feature 79, which has a low standard of colour-coat and has been poorly fired, and the base of the jar from cremation 92, which appears to be a waster or second. Overall the vessels used in cremations are of a poorer standard than those used in inhumations.

Another factor noted was that several of the vessels have poorly trimmed bases, which result in them being slightly uneven, and in the case of Feature 92, could be considered a waster. Although this does not affect their ability to stand upright, it raises interesting questions about whether they were specifically made or bought to be used in a cremation or burial, and although they are not necessarily seconds, are also not the highest quality. This factor has been noted by the author with a number of vessels from other sites used as grave goods (e.g. Broom Cooper 2005). However, it is unclear whether this is only noticeable with vessels associated with cemeteries because the pots appear to have had no use-life before, and are likely to be more preserved than domestic vessels, whereas it might be more problematic to identify on vessels which were used over a longer period for domestic use.

The lack of useware evidence also suggests that the cremation vessels had not been part of the pyre, but had been included in the process after the burning. The types of vessels used for the cremations (medium to large sized jars), appear to be used solely to hold the remains, rather than having any extra significance, with the possible exception of Feature 117, which contained the Samian vessel, which ,may have held more significance, but equally may have been used as a 'lid' over the cremation jar.

Overall the pottery from the cemetery assemblage, is comparable to the material collected from the other Babraham excavations, particularly the Car park extension (Armour forthcoming). Although most of the inhumation grave goods were finewares, the assemblage as a whole is dominated by coarseware vessels, most of which were locally made. The lack of imports (six sherds in total) is seen in other Babraham assemblages and suggests either a lack of wealth or a lack of access to wider trade networks. With the exception of the cremation Feature 134, all of the remaining burials to contain pottery date from the mid 2nd-4th century AD, with an apparent peak in the 3rd century AD, when there is the possibility that cremations and inhumations were taking place simultaneously. This assemblage therefore gives an interesting insight into aspects which for once are not domestic. However, it is only by analysing all available sources of material that the site as a whole can be more fully understood.

Appendix 3: Small Finds (Dave Webb)

A total of 188 small finds (excluding ceramic and organic material reported elsewhere) were catalogued for the Babraham Cemetery site. These range in date from the Roman to the Medieval period. The overall number of artefacts given is a minimum, as both hobnails and some of the beads were collected as groups, and therefore these were allocated only one small find number per group.

Material	Number of Small finds
copper-alloy	8
lead(-alloy)	4
iron	98
Jet, shale	63
Glass	13
Total	188

Table 4: Assemblage material types

The bulk of the 98 artefacts recovered were ferrous, with the majority being nails or hobnails from grave contexts. Eight copper alloy artefacts were recovered from grave contexts along with other categories of personal ornaments. These included 13 glass and 63 jet beads. Metal detectors were employed to ensure the recovery of all metal artefacts from grave contexts, and further checks were also carried out on the sub-soil, and on spoil recovered from hand excavation and from the backfilling of features. The ferrous artefacts were highly corroded with surface details obscured by iron oxide and associated corrosion products. Without being subject to X-ray examination, the proper identification of these artefacts is at this stage speculative. The hobnails were generally highly corroded and fragmentary, and as these haven't been subject to any conservation treatment, only estimates of total numbers of items are currently available. The copper-alloy artefacts are generally in good condition, with the exception of a finger ring <216> which is fragmentary. The copper-alloy items are easier to identify as types, but cleaning is required in most cases to reveal detail. The jet beads were all in good condition except for one bead which has fragmented. The glass beads are in a stable condition, however, the copper wire supporting the glass beads is very fragile, and only a few fragments have survived.

The finds are divided into two groups, the first are those associated with burials, and the second include those from other contexts. The finds are then further grouped by type, and listed by catalogue number, together with the original small finds number, feature number and context number listed.

Small finds associated with burials

Brooches

<249> SF 28 [302] Subsoil. A pen annular brooch was recovered from sub-soil immediately adjacent to three disturbed burials consisting of the disarticulated remains of two infants (F.103 & F.104) and part of an adult burial. These were truncated by a later adult burial within grave F.106. The body of the brooch was in the form of a penannular ring, and was made of copper-alloy with a rectangular cross-section, the pin was of heavily corroded iron and appeared round in cross-section. The termini were curled over forming coils at right angles to the plane of the ring. This form of penannular brooch matches Fowlers' Type C classification (Fowler 1960) and appears throughout the Roman period. Similar copper-alloy examples were noted from Woodcock Hall (Brown 1986), Kelvedon (Rodwell 1988), Camulodunum (Hawkes 1947) and Wakerley (Jackson 1978), whilst an example with an iron pin was recovered from Great Witcombe (Leach 1998, p. 85 fig 23 no 5). The mis-match in material and also in the cross-sectional profile of the pin and the hoop of the brooch might suggest that the pin is a replacement for an original round copper pin. This form is common throughout the Roman period. Dimensions: outer diameter 37mm, inner diameter 29mm, width of ring 4mm, thickness 2mm, weight 8g. Length of pin 46mm, width 4mm.

The pen annular brooch <249> was recovered from the sub-soil [302] adjacent to the disturbed burials F.103-F.105 and the adult male inhumation F.106. The majority of brooches recovered from Romano British inhumations are from adult burials. However, Philpott notes a number of child burials which are accompanied by brooches that span a range of dates throughout the Roman period (Philpott 1991, p141). Usually the brooches are worn in burial, where they are assumed to be fastening a cloak, scarf or shroud. The brooch <249> may well have been a shroud pin for one of the burials. However, since the artefact was no longer *in situ*., this can only be suggested. In relation to the disturbed burials, the artefact was closest to F.103 and F.104, and therefore should be considered as being part of the grave furniture of the infant burials.

Copper-alloy Bracelets

<69> SF 53 F.123 [310]. A penannular copper-alloy bracelet with a flat 'D' shaped cross-section. This was worn on the right wrist of a juvenile together with bracelet <70>. The bracelet is decorated with regular diagonal grooves across the width of the band. One end tapers towards the termini of the bracelet with the diagonal décor being replaced by transverse grooves. The other terminus appears to be broken and is decorated with diagonal grooves. A similar pattern of decoration is noted on the termini of a bracelet fragment from Caister-on-Sea (Cool 1993b, p. 83 fig. 50, no 181) and also from Bignor Villa (Frere 1982, p.178 fig. 26, no. 8). The shortening of one end of the bracelet might have been deliberate, so as to make the bracelet more suitable for a child's wrist. The Caister-on-Sea example is grouped with bracelets of the 4th century AD (Cool 1993b), whilst the Bignor Villa example is from the period 1 phase of the villa dating to the early 3rd century AD (Frere 1982). The condition of this bracelet is incomplete. The dimensions are as follows: external diameter 43mm, width 7mm, thickness 2 mm, weight 9g.

<70> SF 54 F.123 [310]. A copper-alloy bracelet constructed of three strands of wire twisted into a cable. This was worn on the right wrist of a juvenile together with bracelet cat.no.69. Two outer strands

of wire, sub-rectangular in cross-section, have been tightly twisted around an inner core consisting of a wire with a round cross-section. One of the outer strands forms a collar at the terminus of five turns, with the other strand tucked underneath. The bracelet was probably fastened with a hook and eye fastener formed from the inner core wire, as with the example from Wanborough (Hooley 2001, p.83 fig 32 no 41), or else with a double hook fastening formed in the same manner as an example from Colchester (Crummy 1983, p.39 fig 41 no 1628). However, since the inner strand of the terminus was broken in antiquity, the precise form is currently not identifiable. One terminus was truncated at the collar, whilst at the other end the inner strand was folded over into a tight flat loop. It is unclear now whether this was intended as a fastening loop, or whether this was simply the remains of a broken hook termini which had been folded back. Both termini and collars have been folded around into a loop, this may have been to enable the ends to be looped together in a similar manner to the example from London (Barber 2000, p.199 B461.5 F<628>) where the termini of the bracelet, consisting of a broken hook and eye, have been knotted together to facilitate fastening. An alternative is that the termini were folded around in order to reduce the circumference of the bracelet and make it more suitable for a juvenile's wrist. Similar examples were recovered from the Poundbury (Cool 1993a, p. 91 fig 65, no 7), Wanborough (Hooley 2001, p. 83 fig 32, no 41), Lankhills, Winchester (Clarke 1979, p. 303 fig 79, no 187), and London (Barber & Bowsher 2000, p1.57 B205 1 G<31>, p.199 B461 5 F<628>) cemeteries. Clarke (1979) categorises the form as Type A2, a three strand cable bracelet, and dates the ones at Lankhill to between 350-370 AD, whilst he suggests that the form was at its most popular in the latter part of the 4th century AD. Dimensions: external diameter 49 mm, inner diameter 45 mm, thickness 2mm, weight 5g.

<71> SF 64 F.123 [310]. A cast penannular bracelet with stylised snakes head termini worn on the left wrist of a juvenile. The hoop of the bracelet is 'D' shaped in cross-section becoming more flattened towards the termini, and broadening out into a lozenge shape, thus forming stylized snake's heads. An incised line flows around the front edges of the snake's "head", and is crossed by several short irregular incised lines. The back of the "heads" are decorated with a regular pattern of short transverse incised lines which cross the central part of the termini. The decoration may be a stylised representation of scales. The rest of the hoop is undecorated. Similar examples of snakes head bracelets have been recovered from Stonea (Johns p.334), Walsingham (Bagnall–Smith 1999, p.33 fig. 3, no 6), London (Barber & Bowsher 2000, p.156 B 201.1 G<109>, p.165 B 291.2-1 F<581>), Ospringe (Whiting et al. 1931), Godmanchester (Duhig et al. 1997, p.386 fig. 14), Kelvedon (Rodwell 1988, p.65 fig. 50, no.82-83) Vicar's Farm, West Cambridge (Lucas 2001), and Caister-on-Sea (Cool 1993b p 81 fig 49 no 168). Stylized snakes head bracelets occur from the late 1st to 4th centuries AD (Johns 1996) being most popular in the late 3rd to 4th centuries AD (Cool 1979). The bracelet was complete and in good condition. Dimensions diameter (outer) 44mm diameter (inner) 39mm thickness 2.5mm width of band 3mm width of snake head terminus 5mm

Shale Bracelet

<3> S.F70 F.131 [339] A plain annular shale bracelet, 'D' shaped in cross-section, worn on the wrist of an adult female. Cutting and turning marks are visible on the inner surfaces of the bracelet. The bracelet is complete and in good condition. Similar examples have been recovered from London (Barber & Bowsher 2000 p.191 B425 1 G<283>, p.158 B206 1 G<77>, p.218 B651 1 D<496>), Caister-on-Sea (Cool 1993b p.84-85) and Lankhills, Winchester (Clarke 1979 graves 256, 183, 105, 100, 85). Plain annular shale bracelets have been recovered from pre-Roman contexts. Lawson notes their appearance at several sites (Lawson 1975 p.242). The form appears throughout the Roman period from the 1st century AD at Caerleon (Zienkieweiz 1986) to the 4th century at Lankhills, Winchester (Clarke 1979) and Caister-on-Sea (Cool 1993b). Bracelet dimensions; internal diameter 56mm, external diameter 86mm, depth 15mm, width 18mm, weight 62gr.

Four bracelets were recovered from the site, all were clearly worn at the time of burial with the bracelets encircling the surviving lower arm bones. One such bracelet from an adult female inhumation F.131 was of a plain annular shale type and was accompanied by a jet necklace, a copper earring and a colour coated beaker. The three other bracelets were of copper alloy and recovered from a juvenile (female?)

inhumation accompanied by a glass bead necklace. Two of the bracelets were worn on the right wrist whilst the remaining bracelet was worn on the left wrist. The wearing of several bracelets in inhumations is not uncommon, for example a burial at Rochester (Cool 1981) included 16 bracelets.

Bracelets appear throughout the Roman-British period but they appear most frequently in the late 3rd and 4th centuries AD with earlier examples being really quite scarce. Of the forms recovered from Babraham, the three strand cable twist bracelet <70> with hook and eye fastenings are of a common and wide spread type in Romano British contexts. The form occurs in the late 1st to 3rd centuries, but was most frequent in 4th century (Cool 1993). Swift in her examination of dress accessories of the Roman period notes the wide spread distribution of 3 strand cable bracelets throughout Roman Britain, northern France, Belgium, and along the Rhine and the Danube provinces during the 4th century AD (Swift 2000). An early example of the form was noted in a Cambridgeshire cemetery at Guilden Morden (Lethbridge 1936) within an early to mid 2nd century AD cremation context (Lethbridge 1936).

Snakes head bracelets occur in Romano-British contexts from the late 1st to 4th century AD (Johns 1996) being most popular in the late 3rd to 4th century (Cool 1979). The earlier snakes head bracelets are more naturalistic in the depiction of the snakes form and often in precious metal. The copper alloy fabricated and more highly stylized snakes head bracelets appear more frequently within the later contexts. Although no exact parallels were found for the remaining bracelet <69> the style of décor and form have similarities with many of the type D from Lankhills dated to the late 3rd – 4th century. All the forms at Babraham have earlier precedents but are at their most widespread in the late 4th century, it would seem most likely that the copper alloy bracelets were made some time during the late 3rd to early 4th century AD. Plain annular shale bracelets are widespread as grave furniture. They appear in the Iron Age and occur throughout the Romano-British period and

Of the three bracelets found worn in the juvenile inhumation F.123, two appear to have been modified for the child to wear. As previously discussed, one terminal of <69> was broken, and had been moulded into a truncated form of the original. The cable twist bracelet <70> also appears to have been damaged and its form then modified in order to reduce its diameter. What is not clear is whether the artefacts were deliberately broken in order to adapt them for the child to wear or whether previously broken items had simply been 'recycled' for inclusion in the burial. The bracelets were not the only artefacts modified in this manner, the ring <216> found worn on a female inhumation F.79 appears actually to have been a modified bracelet. Crummy noted similar modification to a ring at Colchester (Crummy 1983 no 1774).

The wearing of the snake bracelet may have had significance well beyond personal ornamentation. In Roman mythology snakes were considered beneficent and associated with death and rebirth (Cool 2000). The wearing of snake bracelets may thus have been as a form of apotropaic charm. Snakes were associated with several deities including Asclepius (Aesculapius - Latin) the Greek demigod of medicine. It is possible therefore that this particular bracelet was worn to protect a sickly child. A similar snake's head bracelet was also associated with a child cremation at Godmanchester (Duhig 1997).

Rings

<216> S.F. 20 F.79 [212 or 213]. A cast copper alloy pen annular ring worn on the ring finger of an adult female inhumation. The ring is 'D' shaped in cross-section, with regular transverse grooves on the outer surface of band. It was recovered as three fragments. The terminus on one side has a slightly oval broader shape with a slight protrusion, possibly a rivet, on the inner surface. The other terminus is thinner and rectangular in shape, the edge of the terminus is irregular and most likely broken. The slight protrusion on the inner surface is an unusual feature for a ring and along with the broken edge this suggests that the ring is actually a modified bracelet. Crummy notes an example of a similar modified bracelet from Colchester (Crummy 1983 p. 49 no 1774, p. 48 no 1774). The protruding rivet is similar to examples at Lankhills, Winchester, where several bracelets were found within Grave 143 which had narrow 'D' shaped cross sections and overlapping termini, the latter secured by small rivets. There is also an example of a bracelet from Colchester (Crummy 1983 p 46 no 1726) which has similar grooved decoration and is fastened by a small rivet at the termini. If this example had been modified to form a ring it would be a close parallel to <216>. The Colchester bracelet (no 1726) was dated 3rd – 4th century AD. Dimensions; external diameter 15x20mm, width 4mm, depth 1mm, weight 2gr.

<218> S.F52 F.124 [313]. A copper alloy ring, rectangular in cross-section, with the external face being octagonal in shape, the internal face circular, and with the exterior facets of the ring left undecorated. The ring was deposited adjacent to the skull on the left side of an unsexed adult. Similar rings have also been recovered from Wanborough (Hooley 2001 p.91 fig35 no 98), Cirencester (McWhirr 1982), Ospringe (Whiting 1931), Henley Wood (Henig 1996, cat no 38) and Alcester (Lloyd-Morgan 1994). Polygonal rings (similar in form but varying in detail) have been recovered from a variety of sites. A ring parallel in form with slight transverse decoration was recovered from Henley Wood (Henig 1996 cat no 37), one with votive inscriptions on it from Owlesbury (Collis 1970a), and another from Henley Wood (Henig 1996 cat no 36). The form is also repeated in other metals. An example from Verulamium (Waugh 1972 p.119 fig. 32 no. 25) was in gold, whilst a ring from Colchester (Crummy 1983) was in a white metal. Henig lists this form of polygonal ring as type IX (Henig 1974). Meanwhile, the distribution of octagonal rings is not confined to Britain, Henkel catalogues several examples (Henkel 1913, cat.nos. 651-668) and notes their distribution in Luxemburg and along the Rhine, as well as from other find spots in Germany. A late 4th century date was suggested for the ring from Veralamium (Waugh 1972), Crummy also suggests that a 4th century date is appropriate for polygonal rings of this type whilst Henig suggests an earlier date within the 3rd century for the rings from Henley Wood. A date range of the late 3rd century to 4th century is probably appropriate for <218>. Dimensions: external diameter 18 mm, inner diameter 16mm, depth 2mm, width 4mm, weight 1gr.

Two copper alloy rings were recovered from the site, whilst the presence of a third may be suggested by the presence of verdigris staining noted on a loose phalange (finger bone) of a juvenile that appears to be associated with the adult skeleton in grave F.80. It was established that this phalange could not have come from the neighbouring juvenile grave F.78, currently its origin is unknown. This staining may have resulted from a copper alloy ring being worn at the time of burial.. However, no fragments of any such ring were recovered in order to help identify type. The hexagonal ring recovered from F.124 is of a type common in late 3rd and 4th century AD contexts. The ring was not worn, instead it had been placed adjacent to the head within the coffin. Philpott (1991 p.147) in discussing the deposition of unworn personal ornaments, notes there was a deliberate intention to provide such ornaments and speculates on the motives for such placements. These may well have been familiar objects that were included in order to offer comfort and solace to the dead or else they were seen as indicators of status. However in comparison to earlier cremation assemblages, the range of artefacts which accompany inhumations appears more restrictive, resembling that of a ritual rather than of individual deposits of personal effects. Here, the positioning of the ring in a manner analogous to that of coins found in burials is suggestive of a votive deposition. The hexagonal form of ring, complete with inscriptions has been strongly linked with votive offerings at the Henley Wood shrine (Henig 1974). Although this example is not inscribed, its form may have influenced its selection for inclusion as an offering. However, the deposition of unworn rings unaccompanied by other personal ornaments is uncommon, of burials with only a single unworn item, Philpott cites only one example pre-dating the 4th century AD (Philpott p.147).

The second ring recovered was from an adult female burial and was worn at the time of burial, the ring appears to be a modified bracelet of a form similar to examples dated $3^{rd} - 4^{th}$ century AD from Colchester.

Earrings

<219> S.F91 F.131 [340]. A plain pen annular copper alloy hoop slightly 'D' shaped in cross-section and tapering towards the termini (Figure 18). The hoop was recovered from the left hand side of the skull adjacent to the mastoid process, suggesting that the hoop was worn as an earring. Similar plain penannular hoops with slight overlaps were recovered from Poundbury (Cool 1993a) and catalogued with the rings but Cool also notes their similarity to Allason-Jones' type 1 earrings (Allason-Jones 1989. A rather similar example was also recovered from Segontium, Caernarfon (Allason-Jones 1993 p 173 fig 10.4 no 62) but wasn't dated, as earrings of this same general type occur throughout Roman period. Dimensions: external diameter 18mm, internal diameter 14mm, depth 2mm, weight less than 1gr.

Earrings are scarce in burial contexts, perhaps due to their fragility (Philpott 1991 p.152) or else their being interpreted as rings. Although copper alloy is not best suited for earrings (Crummy 1983 p50), the position of the ring on the skeleton clearly suggests that this is the case. The plain form of the ring does not allow for any closer dating than its being the Roman period.

Necklaces and Beads

<1> S.F32 F.106 [261]. Cylindrical bluish green glass bead, circular in cross section, recovered from fill of adult male inhumation. Similar examples have been recovered from Lankhills, Winchester (Clarke 1979, Fig.80 G188 no 248 E) and Dunstable (Matthews 1981, p.45 no 28). Dimensions length 23mm diameter 5mm.

<2> S.F36 F.106 [261]. Small blue rectangular parallelepiped glass bead, recovered from fill of adult male inhumation. A similar example was recovered from an inhumation at Dunstable (Matthews 1981, p.44 no7). Dimensions length 7mm width 2mm.

The beads were recovered from the backfill of a later adult inhumation F.106. Initially it was thought that the beads were associated with the adult male inhumation, but beads are more frequently found with female and juvenile burials, often being components of bracelets, necklaces or earrings. Although not unknown, beads are rare in the context of male inhumations. It is more likely that the beads originated with the truncated infant burials (F.103, F.104 or F.147).

Glass Bead Necklace

<618 a,b,c,d> - <627> S.F.53 - 54 F.123 [123]. Thirteen translucent bluish green sub- rectangular glass beads with flat oval cross sections (see Figure 20). Bead <618 d> has a fragment of copper wire remaining from the linking strand of the necklace. The fragment is a double twist of wire around the base of a broken loop. Two other copper alloy wire fragments were recovered with beads <618 a,b,c,d>, one fragment was further double loop, the other a 6mm strand of wire with a loose strand of wire twisted around the inner wire. The pattern of looping was most likely repeated to connect all the beads.

Cat. No	Length	Width	Depth	Weight gr
	mm	mm	mm	
618 a	7	4	2	< 0.2
618 b	6	5	3	< 0.2
618 c	9	4	2	< 0.2
618 d	9	4	3	< 0.2
619	9	5	3	< 0.2
620	9	5	3	< 0.2
621	9	5	3	< 0.2
622	8	5	3	< 0.2
623	8	5	3	< 0.2
624	9	6	4	< 0.2
625	8	5	3	< 0.2
626	9	5	3	< 0.2
627	9	5	3	< 0.2

Table 5: Table of glass bead dimensions.

Copper Alloy Clasp

<217> S.F65 F.123 [310] A copper wire bent to form a closed loop at one end and an open flared loop at the other end. A second wire has been tightly twisted round the closed loop half of the shaft to help reinforce the artefact. The form is recognisable as the 'hook' segment of a clasp. Similar examples have been recovered at Alcester (Lloyd-Morgan 1994, p.186 Fig. 84 no. 36) Great Witcombe (Leach 1998, p.85 Fig. 23 no. 7) as copper-alloy clasps on a bracelet and at Kelvedon (Rodwell 1988, p.76 Fig 61.1) in a clasp made of silver wire. The hook may have been used in conjunction with a closed loop at the other terminus of the necklace so as to form a hook and eye clasp (as in the previously mentioned examples). Alternatively, the fastener could have been a double hook as at Lankhills, Winchester (Clarke 1979, Fig 98 G438 no 560). Dimensions; length 31mm, weight 1gr.

The thirteen glass beads and copper alloy clasp were recovered from a juvenile inhumation F.123, the beads were located around and beneath the jaw, whilst a copper alloy fastener was recovered from the rear of the skull in such a position to suggest these were worn as a necklace at the time of burial. Seven of the beads were found in situ beneath the jaw, and aligned in a linear pattern with a 5mm-3mm spacing. The beads were linked with copper wire twisted into a loop and secured with a double twist around the wire. This pattern was most likely repeated to connect all the beads together. Similarly linked examples have been recovered at Alcester (Lloyd-Morgan 1994, p.179 no. 36 p.186 fig. 84 no. 36) and Great Witcombe (Leach 1998, p.85 Fig. 23 no. 7). The latter provides a close parallel for the clasp and linkage but not for the form of beads on bracelet. The form of clasp and linkage are seen in 3rd to 4th century AD examples as listed above.

Jet Bead Necklace (see Figure 19)

<4> - <11>, <13> - <44>, <46 - 66> Bead 1-11, 12-68 F. 131 [340] Sixty one faceted barrel shaped jet beads were recovered from an adult female inhumation, the beads were located around and beneath the jaw in such a position to suggest they were worn as a necklace at the time of burial. The ellipsoid beads are predominantly (54) octagonal in cross-section with the others being hexagonal (3), pentagonal (1) and septagonal (3). Two of the beads are straight in profile, seventeen have a slight curve to their profile forming an elliptical shape with the majority (68%) having a distinct barrel shape. The length of the beads spread over a range 7-16mm (with the slightly curved beads having a narrower range of 7-13mm) however with both types the majority (80%) of beads fitted within the 8-12mm range. In diameter the beads had a range of 3-8mm with the majority (83%) fitting into a range of 4-5mm.

A few faceted jet beads of a similar profile have been recovered from Roman contexts, a cylinder bead with shallow longitudinal faceting was recovered from the North side of York railway station (Allason-Jones YORYM H.320.4), other examples are noted from the continent, a similar hexagonal faceted barrel shaped bead is listed in Hagen's catalogue of jet jewellery in Germany (Hagen) cat. no. D.31 pg121 Abb. 6 text pg 124, whilst a similar form was recovered from the Danube region at Intercisa (Alföldi et. al.). Faceted ellipsoid beads jet beads have also been recovered from earlier contexts and several examples of necklaces from Bronze Age burials have been recovered in Scotland (Mountstuart House, Bute (Munro), Masterton, Pitreavie, Fife (Henshall) and Melfort, Argyllshire (Hercules Read)). Faceted ellipsoid beads have also been recovered from Bronze Age burials in Yorkshire, Eglingham (Greenwell p420 fig 159) Lythe (Kinnes cat. no 274.4) and Berkshire, Radley barrow 16 (Leeds). Dimensions; length (range) 7-16mm; diameter (range) 3-8mm; weight less than 1gr.

<45> S.F70 - 71 F. 131 [340] Sixteen annular jet beads were recovered from an adult female inhumation, the beads were located below and to the front of the jaw. Several of the beads were in situ in a linear pattern suggesting the beads formed part of a necklace. The beads have been manufactured by lathe turning jet to produce a rod which was then scored around the circumference and broken into individual segments to produce the annular beads. Dimensions external diameter 5mm, inner diameter 2mm, depth 1mm weight less than 1gr.

Two forms of bead were recovered, the majority (61 examples) being ellipsoid in shape and faceted, these were evenly distributed to the front and rear of the jaw. A smaller group of 16 annular beads (cat.no. <45>) were evenly distributed below the ellipsoid beads at the front of the jaw. The absence of any metallic clasp or wire suggests that any necklace was fastened and suspended with organic material. Post depositional decay of the organic suspension material has allowed a shift in the position of many of the beads however some retained their alignment. The in situ alignment of two or three ellipsoid beads in parallel with another similar sequence of beads occurred at the front of the jaw and also to the rear and underneath of the jaw suggesting that the necklace was composed of at least a double strand (though possibly two single strands) of ellipsoid beads distributed around the circumference. An alternative arrangement could be similar to that of a Bronze Age necklace from Masterton, Fife which was composed of five parallel strands of barrel shaped beads with the beads distributed towards the front and a gap to the rear for fastening. Since the vertebrae of the skeleton in F. 131 had decayed and there was a degree of postdepositional disturbance of the beads, the location of putative strands in relation to the front and back of the neck cannot be discerned with any accuracy. The reconstruction of the Masterton necklace (Bronze Age) shows annular beads arranged at either end of the strands of ellipsoid beads. However, in this case the annular type beads were evenly spaced below the strands of ellipsoid beads, both to the front and left of the jaw (none were located beneath the jaw) with none interleaved with ellipsoid beads. At the front a sequence of five annular beads appeared aligned with regular spacing.

This may have been caused by the decay of organic matter, with the beads knotted into position or else alternating with wooden beads. Wooden bead have been recovered from Romano-British contexts at the bath house at Whitehall Farm (see www.whitehallvilla.co.uk).

The most likely arrangement would appear to be two necklaces, one a single strand necklace composed of annular beads spaced with some form of organic spacers and a second necklace consisting of barrel shaped beads with four strands of beads grouped to the front and some form of organic fastener or tie to the rear. Such an arrangement would be similar in form to the Bronze Age example from Masterton however no putative reconstruction of this is possible at present. The wearing of two or more necklaces was not uncommon in the Roman period, the practise has been depicted in Roman coffin portraits from Egypt (Allason-Jones.L 1996).

A Roman period parallel could not be found for the Barrel shaped Jet bead necklace. Although jet beads and necklaces are widely distributed (though still uncommon) from the 3rd century AD onwards in Romano British contexts, only three vaguely similar examples of this bead form could be located. This includes one at York, one in Germany and the other from the Danube region at Intercisa (Alföldi 1957). It is possible that more beads have been recovered from Romano-British sites, yet with only brief mentions of ellipsoid or hexagonal beads in texts, and with no comparative illustrations for parallels available, these remain beyond the scope of the current report at present. Other necklaces with jet beads have been recovered in Cambridgeshire. A child burial at Linton included a necklace composed of 148 jet beads, although of a different form to the one at Babraham. The grave furniture of the child burial included several copper-alloy bracelets, rings and a glass vessel (Lethbridge 1937). As indicated faceted barrel shaped beads appear to be scarce in Roman contexts but are more frequent in Bronze Age contexts, although unlikely it is not improbable that the barrel shaped beads are from a curated Bronze Age necklace. The annular beads however were manufactured by lathe turning, a processes introduced during the Roman period (Allason-Jones 1996.). The variety in shape and form of the barrel shaped beads strongly suggests they were hand crafted rather than lathe turned allowing the possibility of manufacture in either the Bronze age or Roman period. Further analysis of the beads would be required to determine if the beads had been lathe turned as would most likely be the case if they were Roman or else fashioned individually by hand, as would be the case if these were Bronze Age beads. If the barrel shaped beads are of Roman manufacture the style could still have been copied from earlier Bronze Ag beads. Allason Jones considers that a German or Rheinish origin for the barrel shaped beads remains a strong possibility (pers. comm.), further research is required before a definitive origin and period can be given.

Nails and Coffin fittings

Burials

<222> S.F. 18 F.79 [212]. Three fragments of highly corroded thin curved iron rod, circular in cross-section, was recovered from beneath the left lower leg of an adult female inhumation. The fragments refit to form a semi-circular loop with an external diameter of 65mm. The ends of the rod flatten out suggesting termini however the ends are broken. The artefact is incomplete. The form is suggestive of a drop-handle (Manning 1985 R1), possibly from grave furniture. Dimensions; external diameter 65mm; thickness termini 2mm; shaft thickness 4mm, weight 12gr

- <271-275>, <284- 286> F. 80 [217]. Eight iron coffin nails (Manning 1985, type 1b) were recovered from around the head, mid section and feet of an adult male inhumation. <285> had traces of mineralised wood attached to the shank. The position of the nails suggests a rectangular coffin approximately 1.90m in length and 0.4m in width.
- <276> F. 80 [217]. An iron cleat with traces of mineralised wood attached recovered from an adult male inhumation. The depth of the wood attached to the shank of the cleat was 18mm. A similar example was recovered from Caistor-on-Sea (Cool 1993b cat. no 500). The cleat is possibly a coffin fitting. Dimensions length 26mm shank 4mm weight 3gr.
- <231> F.95 [258]. One iron nail (Manning 1985, type 1b) was recovered from the area adjacent to the left foot an adult male inhumation. The skull, pelvis, right femur and feet had been truncated by later activity possibly removing other nails from the grave in the processes.
- <312> F.96 [Surface]. One iron nail (Manning 1985, type 1b) was recovered from a severely disturbed adult inhumation (only one femur remained with fragments of other bones).
- <233-234> F.111 [271]. Two iron nails (Manning 1985, type 1b) were recovered from the grave fill of an adult male inhumation which had been decapitated. The body position with the skull between the feet and the right arm outstretched from the body does not appear to indicate use of shroud or burial within a coffin, suggesting that the nails were residual in the backfill.
- <239> F. 122 [306] Fragment of nail shank recovered from the fill of a truncated juvenile inhumation.
- <221>, <240-245>, <317- 318> F.124 [313]. Nine iron coffin nails (Manning 1985, type 1b) were recovered from around the head, mid point and feet of an adult male inhumation. Two nails <317> and <318> retained traces of mineralised wood.
- <246> F.126 [315]. A complete iron nail (56mm in length) was recovered from an infant inhumation. The central location of the nail above the chest of the body could suggest the nails use as a shroud pin.
- <250- 252> F.131 [339]. Three iron nails (Manning 1985, type 1b) were recovered from around the head, mid point, and knees of an adult female inhumation
- <253-25>, <287-289>, <297-311>, <319, 320>. F.140 [354]. Twenty five iron coffin nails (Manning 1985, type 1b) were recovered from around the head, mid section and feet of an adult male inhumation. Eleven of the nails retained traces of mineralised wood. The position of the nails suggests a rectangular coffin approximately 1.80m in length and 0.5m in width. Although the number of nails recovered is considerably higher than the other graves the total is not exceptional; a grave at Lankhills, Winchester (Clarke 1979, p.337) produced more than fifty nails.
- <258-26>. F.141 [362]. Eleven iron coffin nails (Manning 1985, type 1b) were recovered from around the head, mid section and feet of an adult male inhumation. The position of the nails suggests a rectangular coffin approximately 1.70m in length and 0.4m in width.
- <270>. F.144 [380]. One iron nail fragment from a disturbed adult inhumation.
- <269>.F. 147 [379]. One iron nail fragment (probable Manning 1985, type 1b) from disturbed deposit of human and animal bone.

Cremations

<236> F.116 [285] An iron nail fragment from a small nail type, recovered from the fill adjacent to a pot containing cremation related material. The pot appeared to have been disturbed during deposition resulting in some of the contents spilling over, it was not clear if the nail fragment was part of cremation-related deposit or residual in backfill of the cut for the cremation burial.

<235> F.134 [276] A Nail fragment of a small nail type residual in fill adjacent to fragmented pot containing cremation-related material.

From layers adjacent to cremations

<291> S.F. 39. [Sub-soil]. An iron nail with a shank square in cross-section and a sub rectangular head. The nail is complete. Dimensions; length of shank 43mm. Weight 2gr.

<292> S.F. 40 [sub-soil]. An iron nail with a shank square in cross-section and a sub square head. The nail is complete. Dimensions; length of shank 28mm. Weight 3gr.

<293> S.F. 41 [sub-soil]. An iron nail with a shank square in cross-section and a sub square head. The nail is complete and bent at 90°. Dimensions; length of shank 53mm. Weight 8gr.

<294> S.F42 [sub-soil]. An iron bar, rectangular in cross section, folded at both ends forming a flat 'U' shaped profile. Both ends taper towards the termini. One terminus is irregular and appears broken. The artefact is most likely a 'joiner's dog' used to staple wood together. Similar to examples from Caister-on-Sea (Darling 1997 p103 no 476 fig 78) Hod Hill (Manning *R53*) and Colchester (Crummy 1983 p 120 no 4072). Dimensions diameter 42mm length of shank 56mm width 5mm depth 3mm weight 5gr.

<295> S.F. 44 [subsoil]. An iron nail with a shank square in cross-section and a sub rectangular head. The shank tapers to tip. The nail is complete. Dimensions; length of shank 37mm. Weight 3gr.

A total of 68 nails (excluding hobnails) were recovered from the site. Of these, 59 came from grave contexts, two came from cremation related deposits, with a further seven nails recovered from subsoil in close proximity to the cremation related deposits. The soil conditions on site were unfavourable for the preservation of organic material, this resulted in the absence of clear outlines or of any staining being preserved to indicate the outlines of timber coffins. No differential fills were noted that might have distinguished the inner and outer fills relating to coffins. The only positive evidence for timbered coffins was the presence and location of nails in the grave fills with some retaining traces of mineralised wood.

The number of nails contained within individual graves ranged from 1 to 25 and this is likely to only represent a fraction of the nails used in construction of any coffins. Many of the nails were in poor condition being corroded and fragmentary and it is likely therefore that some nails would not have survived or else be too altered to recognise. The intensive use and re-use of the site with later burials cutting and disturbing earlier ones, is likely to have led to the redistribution of nails from earlier graves into the back-fills of subsequent burials and the adjacent sub-soil. To aid in the distinction between residual nails and those outlining the presence of a coffin, McWhir (McWhir et al 1982 p.86) suggests that a minimum number of three nails should be required to indicate the presence of a coffin. Using these criteria five of the graves F.80 (8 nails), F.124 (9 nails), F.131 (3 nails), F.140 (25 nails) and, F.no. 141 (11 nails) had timber coffins constructed with nails. One grave F.95 had a solitary nail located by the left foot. However, this grave had been disturbed by later activity, which may well have removed the other nails from the grave. This would allow for a possible total of six of the 39 graves having timber coffins constructed with nails. Where less than three nails were recovered, then other possibilities for the construction of coffins need to be considered, this might include joinery techniques and wooden pegs (Leach 1994) or even organic ties (McWhirr 1982). At Kelvedon (Rodwell 1988) a combined technique of using iron nails and wooden pegs was proposed in the case of two coffins. This helped to explain the small number of nails involved in the construction of coffins.

Of the 68 nails recovered from timbered coffin burials only ten were complete, with a shank length fitting within a range of 59-95mm (nine of the nails fit within a range of 59mm-71mm, with one from F.141 being 95mm in length. All of these nails had flat rounded to sub rectangular heads with tapering shafts, and thus could be classified as Manning type 1b (Manning 1985). The thickness of the coffin timbers could not be estimated from the surviving mineralised wood, as this survival was only fragmentary in most cases. In just a few cases survival was along the full length of the shank, most likely this was because the nails had remained within conjoined timbers. Several of the nails had been bent at 90°, suggesting these had penetrated the timber and then been bent over flat with the planking (Salter 1999). The measurement of such nails indicates a depth of timber between 22mm to 35mm. In fact the nails from graves f.124 and F.140 form two distinct groupings of bent nails ranging from 22-25mm and 30-35mm. This suggests that at least two different thickness of timber were used in the construction of both coffins.

Amongst those graves from which one to three nails were recovered (F.96, F.111, F.122, F.126, & F.144), there were none which suggested the use of coffins (with the exception of F.95). The presence of nails therefore is most likely to be residual except in the case of the infant inhumation F.126 where the accompanying nail may have been used as a shroud pin. Of the remaining graves many were truncated shallow ones with some degree of disturbance, and within these coffins may have been present. This would account for some of the nails in the subsoil, and also backfilling of graves, even though no clear evidence for these original coffin burials remain. The small number of nails present in some of the burials may have a less functional explanation than that of coffin construction. A high status burial in a lead coffin at Welford-on Avon included three nails within the coffin, with two being positioned beneath the body. Decay of the wooden coffin and other post deposition processes could not account for the location of the nails beneath the body (Booth 1991). Booth considers that it was unlikely that iron nails would have been used as shroud pins in a high status burial. The deliberate inclusion of nails in burials in a non functional manner may have held some symbolic value (Black 1986) in connection with the passage of the dead or the confining of the spirit of the dead. However, there is no clear evidence for the deliberate deposition of small numbers of nails at Babraham.

Two nails <235-236> came from fills connected with cremation related deposits. Both these nails were of a smaller type than the Manning's type 1b associated with the coffin burials. One of the nails <236> associated with F.116 shows markedly less corrosion material associated with it than other nails recovered on-site. Ferrous artefacts with little or no corrosion may have been subject to burning (Cool 2005). Similar nails and a joiners 'dog' were recovered from the sub soil adjacent to the cluster of cremations on the west of the cemetery. The presence of small nails and a joiners 'dog' within the cremation related deposits and adjacent subsoil may be indicative of the use of biers in the cremation process, Mould suggests that small nails may be associated with the construction of biers for placing over cremation pyres (Mould 2005). However it is not certain that this is the explanation for the presence of

these nails as they could equally have originated with wood burnt as fuel in the cremation process

Hobnails

<223>, <277-283>, <290> S.F10-13 & 16-17 F. 80 [217]. A total of forty two dome headed hobnail fragments with a shank square in cross-section (Manning 1985, Type 10 p133) were recovered from a decapitated coffin inhumation of an adult male. No outline or nail pattern remained of the shoes. The location of hobnails and their distribution over the feet suggests that the footwear was either worn or placed on top of the feet.

<224-225>. F.86 [232]A quantity of hobnails (at least 20 plus for each foot) with domed heads and shanks square in cross-section (Manning 1985, Type 10 p133) were recovered from around both feet of an adult male inhumation. The fragmentary condition of the nails did not allow for a precise number of hobnails to be measured. No outline or nail pattern remained of the shoes. The location of hobnails and their distribution in close proximity to the soles of the feet suggests that the footwear was worn at the time of burial.

<232> S.F37 F. 106 [265]. Six dome headed hobnails (Manning 1985, Type 10 p133) with a square cross-sectioned shank were recovered from the vicinity of the left foot of an adult male inhumation. No outline or nail pattern remained of the shoe. No hobnails were recovered from the vicinity of the right foot however this area had been disturbed by machining, thus any hobnails present may have been inadvertently removed and redeposited. The location of hobnails and their distribution over the foot suggests that the footwear was either worn or else had been carefully placed directly above the foot (feet).

<247–248> S.F69 F.129 [322]. A pair of hobnail boots positioned either side and parallel with the lower legs of an adult male inhumation. Forty nine hobnails (Manning 1985, Type 10 p.133) with domed heads and shanks square in cross-section were recovered from the vicinity of the lower left leg. However the hobnails appeared to have been subjected to post-depositional disturbance and thus no nail pattern was discernible. Thirty four hobnails with domed heads and shanks square in cross-section were recovered *in situ* from around the right boot. Although no trace of any leather survived, a partial nail pattern was preserved on the left hand side of the body of a right foot shoe placed sole down with the toe of the footwear toward s the skull. The nail pattern consisted of an outer ring of hobnails around the edge of the footwear with a partial line of hobnails aligned along the length of the boot. The nail pattern is similar to a type 'C' (Miller & Rhodes 1980). The outline for the right footwear was approximately 250mm in length comparable with a UK. adult size 5 shoe.

One hundred and seventy six plus hobnails were recovered from four of the inhumation burials (F.80, F.86, F.106 and F.129). Although elsewhere hobnails have been recovered from both male and female burials in this case all the inhumations were those of adult males, that of F.80 being within a coffin. All of the hobnails were highly corroded with many being fragmentary. This made any assessment of quantities and precise dimensions difficult. Where discernible, all the hobnails were domed headed and in addition had a square shank in cross section matching Manning's type 10 nail (Manning 1985). The length of shank, when complete, fitted within the range of 14mm to 18mm and moreover the shank was invariably clenched. A small number of straight nails were recovered from F.80, F.106 and F.129 suggesting a possible later repairs to the footwear. Only one partial nail pattern was recorded from F.129 and this was closest to a type 'C' (Miller & Rhodes 1980), a pattern normally associated with the military Caligae style of footwear.

The earliest recorded burial with hobnails is of a mid 1st to 2nd century AD date from Sutton Poyntz, Dorset and consider to be native, however, other early burials with hobnails are from military contexts and likely to be intrusive (Philpott p.167). The inclusion of hobnailed footwear becomes more wide spread in the late 2nd and 3rd

century AD with the occurrence being most common in rural contexts rather than urban. Clarke, in light of evidence from Poundbury, Ancaster, Cirencester and Lankhills suggests that the custom of burial with footwear was declining during the late 4th century AD. The positioning of hobnailed footwear at Lankhills was seen to have some chronological variation (Clarke 1979); the placing of footwear away from the feet was more frequent in earlier contexts, whilst the positioning of footwear on or above and below the feet was seen as a latter development. The deposition of and/or wearing of footwear occurs in a similar pattern at Babraham, with the only example of footwear deposited away from the feet (F.129) coming from the earlier phase. A similar period rural cemetery at Vicars Farm, West Cambridge had six of the twenty nine inhumations accompanied by hobnailed footwear which was either worn or placed on or above the feet (Lucas 2001). However, there are variations. In the mid 2nd to 3rd century AD cemetery at Jesus Lane, Cambridge an inhumation burial with footwear placed adjacent to the lower legs truncated an earlier burial with hobnail footwear worn or placed on or above the feet demonstrating a reversal of the pattern (Alexander 2004).

Feature no	Quantity	Weight	Left & Right	Coffin	Sex	Position
80	42	75	L&R	Coffin	Adult Male ?	Placed over or Worn on feet
86	45	80	L&R	Unknown	Adult Male	Worn on feet
106	6	5	L	Unknown	Adult Male	Placed over or Worn on feet
129	83	239	L&R	Unknown	Adult Male	Placed either side of lower leg

Table 6. Inhumations with hobnails

The distribution and frequency of hobnailed footwear occurring in inhumations appears to vary geographically and is discussed at length by Philpot (p.171), the pattern of hobnail inclusion at Babraham is typical of that described for rural settlement in the late 3rd to 4th century AD within the South East of England. The presence of hobnails is unlikely to give the precise number of burials with footwear as several forms of Roman footwear appear to be constructed without hobnails (Van Driel-Murray 2001). The soil conditions at Babraham would not have left any trace of leather, this may account for the lack of any recorded footwear in the juvenile and female graves. It is with these graves that footwear made without hobnails is most likely to be associated.

Small finds from contexts not associated with burials

Lead

<313> S.F29 F.91 [246] An irregular scrap of lead, possibly heavily fired, recovered from a fill of an Early Medieval Pit that truncates a Roman cremation burial. Possibly Roman in origin. Weight 32gr.

<314> Subsoil. A lead musket ball recovered from the subsoil. Post Medieval. Dimensions diameter 11mm weight 8gr.

Iron

<227> F.91 [246] A highly corroded 'U' shaped iron bar, rectangular in cross-section, tapering to a point at both termini. One terminus is bent at ninety degrees. The artefact is complete and appears to be a type of double spiked loop (Manning R39-R50) used in carpentry. The spikes were usually driven through planks with any projecting part bent over (Manning 1985, p130). Dimensions overall length 50mm width point to point 30mm weight 19gr.

<229> F.91 [246] A corroded 'spear head' shaped artefact broken at both the tip and end of shaft. The length of the remainder is 145mm in length with a width of 19mm at the shoulder tapering to a width of 8mm towards the point. The shaft is round in cross-section and 6mm in diameter, the 'head' is a flat lozenge in cross-section, 4mm at its thickest. The artefact is incomplete, an exact parallel was not found, however the form of the shoulder and the overall shape bear a strong semblance to examples of 'spatulas' from London (Wheeler plate XXXVII) and Colchester (Crummy p 63 fig 68 n 1947). The examples noted in the references are copper alloy but examples of iron medical instruments are known from Stanway (Jackson). Weight 20gr.

<230> F.91 [246] A single edged small knife, highly corroded, flat in cross section, with the tang offset and overlapping the blade. The overall length is 86mm and the artefact is complete. Similar to an unprovenanced find from a Roman period site at Lamyatt Beacon (Leach 1986 p296 fig 25 no 5). The form is not securely dated to the Roman period and a similar example was recovered from a Medieval context at Coppergate, York (Ottaway 2002 p2754 fig 1357 no 11826). A date range of Roman to Medieval is suggested. Dimensions overall length 86mm, blade length 50mm, tang length 41mm, depth 7mm, width 2.5mm weight 7gr.

Three artefacts of possible Romano-British origin were recovered from the fill of pit F.91. However, the pit contained ceramic St. Neots Ware dating to the $12^{th} - 13^{th}$ century AD, suggesting that the feature was Early Medieval rather than Roman. The pit truncated several Romano-British cremations (F.117 and F.115) as well as two inhumations (F.94 and F.111), whilst evidence for earlier Roman and Neolithic activity is present within the re-deposited pottery and flint in the backfill. The double spiked loop could have been a coffin fitting or may have come from any timber associated with the cremation related deposits, however its form is not exclusive to the Roman period and it could equally have come from the same source as the St. Neots Ware. The 'Spatula' and small knife appear closest in form to artefacts from the Roman period, although medical instruments have been recorded as grave furniture in early Romano-British contexts, the normal practise for grave furniture in the 3rd to 4th century is for the inclusion of personal ornaments with other artefact types being scarce. It would seem most likely that the artefacts came from a Romano-British surface level that had been disturbed by the cutting of the Medieval pit rather than the graves and cremations truncated by it although a Medieval origin cannot be ruled out. One possibility is that this was the site of a cremation pyre.

Caution should be exercised when considering any patterns within the assemblage of small finds from the Babraham cemetery as the graves excavated are likely to only represent a segment of a larger cemetery, possibly only 50% (see discussion in main text). Only five of the 37 inhumations included personal ornaments, a sixth is possible if the green verdigris staining noted on a finger bone with F.80 is accepted as traces of a ring. The combination of artefact forms and their deposition as worn items in inhumations at Babraham conform with Philpott's suggestion of a degree of homogeneity in burial rites towards and during the 4th century AD (Philpott 1991). At first glance the assemblage of grave furniture might indicate rich or wealthy burials

however none of the items are of a precious metal (even the earring is of copper alloy) and several items exhibit signs of 'recycling' or modification. The only exceptional item is the jet necklace with barrel shaped beads which may be of Germanic origin (Allason-Jones per. comm.) or else curated from an earlier period. If the beads are imported items then the necklace might indicate a high status burial. Alternatively, if the necklace was only a chance find from a disturbed Bronze Age burial, reused during the Roman period, then a quite different interpretation might be placed on its status. The low proportion of burials accompanied by personal ornaments and as well as their condition, might suggest that the provision of grave furniture in these cases could have had more to do with the deceased relatives desire to provide comfort and solace to the dead in particular circumstances rather than displays of wealth and status (Philpott p231). The slight clustering of inhumations with personal ornaments in the north-west of the excavated area may reflect changes in burial custom within the cemetery, such as differing religious beliefs or the desire to express status via the inclusion of personal effects, however any pattern is only partial as the excavated burials only represent a fraction of a larger cemetery.

The pattern within the excavated area suggests a low ratio of inhumations with grave furniture, However, the forms of artefacts present as grave furniture, the inclusion of hobnailed footwear and the presence of decapitations are all quite typical of a rural Romano-British settlement cemetery of the late 3rd to mid 4th century AD (Philpot 1991, p226).

Phase	Feature no.	Coffin	Sex	Pot	Ring	Earring	Bracelet	Necklace	Brooch	Footwear Location
4d	79		Adult female	Pot	worn					
4d	80	Yes	Adult male	2 Pots	Possibl e					Feet
4d	86		Adult male	Pot						Feet
3c	103 – 105		Juvenile					2 beads	unknown	
3d	106		Adult male							Feet
	123		Juvenile				3 worn	1 worn		
4b	124		Adult male		unworn					
4a	129		Adult male							Adjacent to Legs
4a	131	Yes	Adult female	Pot		worn	worn	2 worn		

Table 7: Grave details and grave furniture

Appendix 4: Assessment of Bulk Environmental Samples (A. de Vareilles)

Nine grave fill samples, 9 cremation samples and one sample from a pit were examined using an Ankara-type flotation machine. Ms N. Dodwell processed four more cremation samples by bucket flotation: F.90, F.92 [247] and [248], and F.118. The flots were collected in a 300µm mesh and the remaining heavy residue washed over a 1mm mesh. Flots were dried indoors and scanned for the presence of charred plant remains and molluscs.

Sorting and identification of macro remains were carried out under a low power binocular microscope. Identifications were made using the reference collection of the G. Pitt-Rivers Laboratory, Department of Archaeology, University of Cambridge. Nomenclature follows Stace (1997) for plants and Beedham (1972) for molluscs. All environmental remains are listed in full in Tables 8, 9 & 10.

All of the features sampled presented preservation by carbonisation. Most of the samples contained thin intrusive rootlets and the blind-burrowing snail *Ceciloides acicula*, both indicative of bioturbation through which plant remains may have been disturbed or lost. On the whole, the better preserved grains all came from the pit, allowing for more specific identifications. The cremations and graves contained vitrified charcoal and some heavily puffed and/or distorted grains, all of which indicate high firing temperatures and/or long burning fires (Boardman and Jones 1990). The abrasion on some grains also suggests that the later are not *in situ*.

Romano-British Cremations

Unlike the graves, the cremations did not appear to have been disturbed by later Medieval activity, suggesting that the plant remains are not intrusive. The addition of food plants to Roman cremations is not unusual (Kreuz 2000), however, the conceptual meaning behind such offerings can only be guessed at. From the low levels of charcoal and the un-burnt nature of the urns it is evident that the bones were collected for burial from the funerary pyre. As a result, an unknown part of the botanical material involved in the funerary rite is represented.

Wheat, probably only glume varieties (Triticum spelta/dicoccum), was found in all cremations except for F.117 that contained no cereal grains. Wild or cultivated oats (Avena sp.) occurred in F.115 and perhaps F.118 (Triticum/Avena), and possible finds of barley (Triticum/Hordeum) occurred in F.92, F.115 and F.118. The wild plant seeds were most probably crop weeds. It is therefore impossible to know the season in which the cremations occurred since crops can be stored over several months. An exception may be F.92 where a great fen-sedge (Cladium mariscus) nut was found. Great-fen sedge can not grow on ploughed soil; it requires undisturbed, wet ground and may have grown around local pools, still found in the area today (a result of where the chalk bedrock meets beds of clay). During the burning of the deceased surrounding plants may char and become part of the pyre. Although one seed can not be used as conclusive evidence, it raises the possibility that the body in F.92 was burnt outside in late summer or early autumn. In F.92 most of the botanical material from the pyre was deposited around the urn (see the osteological report for the bone distribution), in context [247]. The presence of possible grass roots could indicate that cereals were offered as whole, uprooted plants as opposed to individual grains. A fragment of straw was also found in F.90. Sample <20> from [247] contained an unusual assemblage of parenchyma (plant storage tissue). Whereas charcoal was not very common and mostly ≤4mm, the frequent parenchyma pieces ranged from 24mm to <1mm. These fragments of plant storage tissue often relate to roots, tubers or even fruits, and probably testify to the addition of other food stuffs to the funerary pyre (the pieces are potentially large enough to be identified). The absence of similarly sized charcoal suggests that the parenchyma fragments were specifically selected for

burial. Scots pine (*Pinus sylvestris*) and a deciduous wood were identified within the charcoal (Beresford-Jones *pers. comm.*).

Romano-British Grave fills

The graves sampled contained no more than nine cereal grains (including oat) and seven wild plant seeds each, the majority of which are large grass seeds. Other than grass seeds, one seed of stinking chamomile and one seed of corncockle (*Agrostema githago*) – both common Romano-British and later crop weeds – were found. The low quantities of charcoal, mostly smaller than 2mm, appear to be residual. Apart from barley (also found in the pit), the range of seeds resembles that found in the cremations, and it is not impossible that they are remnants of everyday consumption or even ritual feasting. During excavation, however, it was noted that most of the graves had been heavily disturbed by later Medieval activity. Consequently, the plant remains may all be intrusive.

Pit (probably 12th - 13th century AD assemblage)

The 10 litre sample was rich in cereal grains and wild plant seeds, none of which can confirm its post-Roman date. It contained between three and eight hulled barley grains (*H. vulgare sensu lato*), a minimum of 30 wheat grains and at least 68 oat grains. Without any oat chaff it is impossible to tell whether or not the latter were cultivated, but it seems that they were treated as a contaminant weed rather than a food plant. The fact that there are as many if not more wild grass seeds than oat grains, and 28 other wild plant seeds, suggests that the assemblage represents fine-sieving and hand-sorting waste from cereal processing. Although not all seeds could be identified to species, red bartsia (*Odontites vernus*) and stinking chamomile (*Anthemis cotula*) suggest that crops were grown on damp, clay-rich soils. Not all the wild plant seeds were necessarily crop weeds. Black bog-rush, for example, does not grow on cultivated soil, but, like the great fen-sedge in F.92, could probably be found around local pools or possibly field margins.

The Molluscan Assemblages

Other than the blind-burrowing snail, no species was present in any significant quantities. The poor representation of molluscs may be a result of the rapid infilling of graves. Taken as a whole, however, the assemblage indicates that the natural vegetation and hydrology did not alter much throughout the time span represented. The ground was not particularly dry and seems to have been grassy with possibly some trees.

Cereal grain and possible tuber of fruit offerings were found in the cremations. Charred grass roots suggest that the whole plants, rather than loose grain, were added, along with crop weeds 'hiding' within the cereals. Whilst it is not impossible that burnt food offerings were also placed in inhumations, the low quantities of remains and the disturbed nature of the graves seem to indicate that all botanical remains are intrusive.

The pit contained a rich assemblage, pointing to the use of wheat, barley and possibly oat. The nearby presence of a Medieval settlement seems likely. Snails present in the flots point to a grassy cemetery with perhaps a few trees.

Table 8: Carbonised Plant Macro Remains from Romano-British Cremations

Sample number / context description		Top fill of urn	Middle of urn	Bottom of urn	Urn fill	<20>	Around urn	Urn fill	<25>		
Context		[283]	[283]	[283]	[244]	[247]	[247]	[248]	[276]	[294]	[292]
Feature			115		90		92	•	114	117	118
Feature type			Romano-British Cremations								
Sample volume - litres		≤1	7	± 0.5	?	11	?	?	3	± 0. 5	?
T. spelta / dicoccum	Spelt or Emmer wheat		3	3		1					
Triticum sp.	Unspecific wheat grain		5	7	3	1		1	1		
Triticum / Hordeum	Wheat / Barley grain	1	1	5		5					1
Avena sp. (cf. Avena sp.)	Oat grain (Possible oat grain)			1(1)							
Triticum / Avena	Wheat or Oat grain		2								1
Hordeum / Avena	Barley or Oat grain	1									
Indeterminate cereal grain fragm	ents		2	3		1					
Charcoal > 4mm			-	-		++				-	-
2 - 4mm		-	+	+	-	+++	+	+	+	-	
< 2mm		++	++	++	++	+++	+++	+++	+++	+	+
Vitrified		-		-		-			-		
Culm node	Straw node				1						
Possible grass root						4	1				
Indet. Parenchyma	undifferentiated storage tissue	+	+	+		+++				-	
Wild Plant Seeds		_	_		_	_		_	_		
Chenopodium sp.	Goosefoot								1		
Medicago / Trifolium	Medics or Clovers					7	1				
Cladium mariscus	Great Fen-sedge					1					
Poaceae fragments	Grass fragments	1	4	1		1				2	1
Large Poaceae	Large wild grass seed		1								1
Medium Poaceae	Medium wild grass seed		1								
Small Poaceae	Small wild grass seed					1					
Indeterminate wild plant seeds						1					

Key: '-' 1 or 2 items, '+' <10 items, '++' >50 items, '+++' >50 items. The Poaceae fragment category may contain pieces of cereal grains and oats as well as wild grass seeds. The large wild grass seeds are as long, but not as thick as the cereal grains. Flots were sorted in their entirety.

Table 9: Carbonised Plant Macro Remains from Romano-British Grave fills and a Pit (probably 12th century AD)Key: same as for Table 8

Sample number		<15>	<18>	<17>	<10>			<22>	<30>	<50>	<51>	<55>	<66>	<23>
Context		[212]	[217]	[205]	[220]	[227]		[250]	[272]	[339]	[340]	[362]	[380]	[246]
Feature		79	80	81	83	84	86	93	111	131	131	141	149	91
Feature type														Pit
Sample volume - litres		4	5	5	7			4. 5	1.5	4	0. 25	2. 5	7	10
Hordeum vulgare sensu lato	Hulled Barley grains	1										1		3
T. spelta / dicoccum	Spelt or Emmer wheat				1	3			1					4
Triticum sp.	Unspecific wheat grain	1		1	1	4	1	1		1	3			26
Triticum / Hordeum	Wheat / Barley grain	1	2	1	1	1	1	1				1	2	8
Avena sp. (cf. Avena sp.)	Oat grain (Possible oat grain)			(1)		(1)				1			2	68 (13)
Triticum / Avena	Wheat or Oat grain								1					1
Hordeum / Avena	Barley or Oat grain													7
Indeterminate cereal grain fragment	S		1	1										32
Triticum sp. glume base	Unspecific Wheat glume base		3											
Charcoal > 4mm										-	-			++
2 - 4mm			+	-	-	+			-	-				+++
< 2mm		++	++	++	++	++	+	++	+	+	+	+	++	+++
Vitrified		-	-		-	-		-	-			-		-
Indet. Parenchyma	undifferentiated storage tissue	+	+	-	-			+	-	+		-	-	+++
Wild Plant Seeds				•	•	•				•				•
Papaver sp.	Рорру													1
Corylus avellana shell frag.	Hazel-nut shell fragment													3
Chenopodium sp.	Goosefoot		1											1
Spergularia sp.	Sea-spurreys													2
Agrostema githago	Corncockle											1		
Silene sp.	Campions													1
Rumex sp.	Dock													2
Lithospermum arvense	Field gromwell													4
Odontites vernus	Red bartsia													1
Anthemis cotula	Stinking chamomile	1												1
Schoenus nigricans	Black bog-rush													8
Poaceae fragments	Grass fragments	1	2			1	3		1					105
Festuca / Lolium	Fescue / Rye grass													4
Large Poaceae	Large wild grass seed	2	2	1	1	1	1	1		1	1	1	2	68
Medium Poaceae	Medium wild grass seed	1	1							1				3
Small Poaceae	Small wild grass seed													2
Indeterminate wild plant seeds														4

Table 10a: Molluscs, Bones, and other Remains from Cremations

Context		[283]	[283]	[283]	[244]	[247]	[247]	[248]	[276]	[294]	[292]
Feature		Top fill	Middle	Bottom	90	92	92	92	114	117	118
Cochlicopa lubrica / lubricella	Damp areas, moss, etc.		-								
Vertigo antivertigo	Most moist and damp places								-		-
Columella edentula	Damp areas, marshes, woods		++			+					
Lauria / Pupilla		-		-		+		-	-		-
Vallonia sp.			+			+					-
Vallonia cf. excentrica / pulchella	Moist / damp, shady areas	+	++	-	+	++		+	+		+
Ceciloides acicula	Blind burrowing snail	+++	+++	++	+++	+++	+	+++	+++	++	+++
Trichia sp.	Various habitats		++	+	+	+	-	+	+		-
Oxychilus / Aegopinella	Damp, shady										
Burnt bone fragments				+	-	+					
Intrusive rootlets		+++	+++	++	+++	+++			+++	+	

Table 10b: Molluscs, Bones, and other Remains from Grave fills and the Pit

Context		[212]	[217]	[205]	[220]	[227]	F. 86	[250]	[272]	[339]	[340]	[362]	[380]	[246]
Anisus leucostama	Ditches, ponds, resists drying													-
Cochlicopa lubrica / lubricella	Damp areas, moss, etc.		-				-							
Vertigo antivertigo	Most moist and damp places		-		+									
Columella edentula	Damp areas, marshes, woods					+								++
Lauria / Pupilla		-	-	+	+			+	+	-			+	
Vallonia sp.			-	-		+						-		
Vallonia cf. excentrica / pulchella	Moist / damp, shady areas	+	+	+	+	+++	+	-	-				+	++
Ceciloides acicula	Blind burrowing snail	+++	+++	+++	+++	+	+	+++	+++	+++	+++	+++	+++	+++
Trichia sp.	Various habitats	-	-		-			+	-	+		-	+	+
Oxychilus / Aegopinella	Damp, shady					++			-				-	+
Burnt bone fragments							-				-			-
Carbonised insect larvea / worm														1
Intrusive rootlets		++	++	++	++	+++		+++	+++	+++		+++	+++	+++

Key: '-' 1 or 2 items, '+' <10 items, '++' 10-50 items, '+++' >50 items.

Appendix 5: Animal bone (C.Swaysland)

The animal bones were identified using the reference collection of the Cambridge Archaeological Unit. The assemblage was quantified using a modified version of the methodology of Davis (1992). In brief, all mandibular and maxillary teeth and a predetermined restricted suite of elements, predominantly the distal articulations, are counted. Results are presented by NISP (Number of Identified Specimens). Information on gnawing, butchery and pathology was recorded where present.

Feature no.	Feature type	Cattle	Sheep/ goat	Pig	Horse	Dog
F.85	Truncated human burial	1	-	•	-	-
F.91	Refuse pit	2	7	-	-	-
F.94	Human burial, cuts F.91	1	-	-	-	-
F.132	Human burial	1	-	ı	-	-
F.147	Spread	_	-	2	1	1

Table 11: Animal bones

The animal bones recovered from the site were found in different types of feature. The condition of the assemblage was variable. The largest assemblages come from F.91 a refuse pit, and from F.147 a spread of human bone within a juvenile grave. The latter shows a quite interesting range of species. Several bones were recovered from other burials; however, most of these appear to be residual inclusions. None have the characteristics of grave goods. These included bones recovered from a burial that had been truncated (F.85) and from one which had been disturbed by a latter refuse pit (F.94). The bone from F.132 would be the best candidate for a grave good since this came from an undisturbed burial containing a pot identified as a possible grave good. However, it was noted that this pot was high up in the grave and so was probably a late inclusion inserted during backfilling. The bone from F.132 is a fragmentary astragulus; this is not a good quality meat bearing bone and so makes an improbable grave good. Presumably animal bones could represent joints of meat placed as food offerings alongside pottery beakers for drink.

The assemblage from the Roman cemetery at Babraham is small and much of the animal bone associated with these graves may be residual. The worth of this assemblage is therefore rather limited. No further work is recommended on the assemblage.

Appendix 6: Human Bone (Natasha Dodwell)

The excavated human remains comprised of seven urned cremation burials, 42 inhumations and disarticulated material from a further 14 contexts (grave fills, pits and subsoil). Excavations in 1997 (Hatton) uncovered an adult burial which is part of this small inhumation cemetery. The inhumation graves are predominantly on a northeast-southwest alignment and may respect a contemporary track-way. They also appear to respect the small cremation cemetery.

An inventory of each of the skeletons excavated and all of the disarticulated human bone was completed. Information relating to the condition of the bone, the age and sex of an individual and any pathological changes observed was recorded.

The age of adult individuals was determined using the degree of epiphyseal union (Bass 1997, McMinn and Hutchings 1988), and where possible the degree of dental wear (Brothwell 1981) and changes to the pubic symphysis and auricular surface (Brooks and Suchey 1990, Lovejoy *et al* 1985). The age of immature individuals was determined using long bone measurements (Scheuer & Black 2000) and the degree of dental development and eruption Age (Brown 1985, Ubelaker 1989). The age categories employed are:

Neonate <6months
Infant 0-4years
Juvenile 5-12years
Subadult 13-18years
Young adult 19-25years
Middle adult 26-44years
Mature adult 45 years

For the cremation burials, each deposit was subject to 100% recovery as whole earth samples which were then wet sieved and the bone >5mm weighed and extracted for analysis. The cremated bone was scanned to establish where possible the age/sex of the individual, whether there were any duplications of skeletal element (i.e. if more than 1 individual were represented in a burial) and to identify any grave/pyre goods. Methods for the identification, aging and sexing of cremated bones are the same as those used for unburnt bone (see above). However, because of the degree of disturbance, bone fragmentation and often small quantity of bone recovered less detailed demographic information could be obtained.

The skeletons ranged greatly in their completeness. Whilst some skeletons had been truncated by later graves or Medieval and later features, others had been severely compromised by the aggressive burial environment. The micro geology meant that an area of a skeleton might be completely missing whilst the rest of the skeleton in the grave was in perfectly preserved. The completeness of each skeleton was assessed during recording and assigned to one of three categories; <25% complete, 26%-75% complete and >76% complete. Amongst the articulated skeletons identified at it was found that 31 % (13) were <25% complete, 45% (19) were 26-75% complete and 24% (10) were >76% complete. This data shows that the majority of the skeletons from Babraham were largely complete. The condition of the bone itself varied from excellent to being extremely abraded and root/insect damaged. This variation in bone preservation could often be seen in a single skeleton, and often in a single bone element. The completeness of a skeleton and the condition of the bone obviously affects the information which can be gleaned with regards the age and sex of an individual and the identification of pathological conditions.

Information relating to the age and sex of each individual and any pathological changes identified are presented in the summary tables below.

Demography

Amongst the known graves in the linear cemetery which contained articulated skeletons 40 individuals were identified. Of these individuals 31 were adult (over 18years) and 9 were immature. If the grave identified ten years ago in the east of the excavated area (Hatton 1997) and the bones (F96) recovered from below the Calcutta Building c.10m southwest of the area are included then the number of known individuals rises to 42. Disarticulated bone was recovered from grave fills and later features in the cemetery area (table?). Almost all of it can be confidently attributed to known skeletons i.e. the disarticulated elements recovered from a grave fill correspond in terms of age/sex and element to a grave it truncates. There are instances where this is not the case, for example the immature elements from F.80 and F.137.

Nine articulated immature skeletons, i.e. those under the age of 18 years (21.4% of the cemetery population) were identified in the graves. Infants under the age of 5 years account for 11.9% of the known cemetery population. Immature burials are very often underrepresented in Romano-British cemeteries and this is usually attributed to differential burial practices, or to shallower graves. The latter would mean that they are more susceptible to truncation and this combined with their fragility would make them more vulnerable to taphonomic processes. Philpott has noted that in rural areas infants were often buried in separate cemeteries, not close to formal adult cemeteries (1991; 98). The cemetery at Babraham is interesting in that young infants, the youngest recorded dieing at c.6months old, sk [315] F.126, were being buried in the same burial ground as adults. There is a concentration of immature burials in the in the west of the cemetery to the immediate south of the small cremation cemetery. Interestingly a neonate occipital bone was recovered from the grave fill of sk [329], F.132, a mature adult male suggesting that new-borns were being interred close by or even in shallow graves in the main cemetery area which have been disturbed by later graves or truncated.

Age Category	No. of individuals
younger infant	3
older infant	2
older infant/younger juvenile	1
younger juvenile	1
older juvenile	1
younger subadult	0
older subadult	1

Table 12: Age at death of immature individuals (under the age of 17 years) in graves

	M	M	F	F?	?	total
		?				
young adult			1			1
young/middle				1		1
middle adult	1	1	1		2	5
older middle	1					1
older middle/young mature	1		1			2
middle/mature	1		1			2
mature	6	2	4	1	1	14
adult				3	5	8
total	10	3	8	5	8	34

Table 13: Age of death of adult individuals in graves

Of the 33 adults, 13 were identified as male or ?male and 13 as female or ? female. Sex could not to attributed to 7 of the adults and this was largely due to the do to the diagnostic parts of the skeleton being poorly preserved or missing. The older subadult in F. 82 had several male characteristics but as a non adult skeleton this has not been

included in the statistics. The ratio of males to females of exactly 1:1 in the cemetery population suggests that the living population was stable and not affected by migration or other cultural factors. Likewise the age profile amongst the adults is 'normal' with most individuals dying in older age.

Non-metric Traits

With the exception of the metopic suture, non-metric traits, seen as familial or inherited markers on the bone, were not systematically recorded in the assessment of the skeletal material. Retained metopic sutures were recorded in three adult individuals; skeletons [329], [337] and [355]. Their graves lie on the same northwest-southeast alignment, bounding the SW side of the cremation cemetery and within 4 meters of each other (F. 135 cutting F140 and F135 being less than 2 meters from F132). Metopism is found in c. 3% of modern British populations and whilst only DNA analysis can confirm their familiarity the proximity of the graves to each other suggests that these three individuals were probably related.

Pathology

Dental Disease

Calculus, caries, abscesses and ante-mortem tooth loss are inter-related. The prevalence rates of each need to be calculated but as one might expect their incidence is more frequent and manifestation more severe amongst the more mature individuals. No immature skeletons exhibited evidence of any dental pathology.

Osteoarthritis

Like dental disease, osteoarthritis is one of the commonest pathological conditions recorded both today and in archaeological human bone. Ten adults exhibited bony changes (osteophytes, eburnation, and increased porosity) predominantly in the spine. The changes ranged (visually) from mild or incipient where marginal osteophytes had developed around a joint to severe where a whole joint surface is eburnated and the morphology is grossly altered. Again, prevalence rates need to be calculated but the joint affected and how many individuals were affected are presented in tabular form.

site of 0A	No of individuals
spine	7
hip	3
knee	2
ankle	3
foot	2
shoulder	5
elbow	1
wrist	2
hand	0

Table 14: Sites of identified osteoarthritis (OA)

Trauma

Six (possibly seven) of the adults had fractures and one of these had multiple fractures. The skeletal element affected is presented in the table below. All of the sexed individuals were male. A single case of cranial trauma was recorded. Skeleton [288], a mature adult male, had a depressed fracture on his right parietal, one of the commonest seen types of head injury seen in archaeological contexts, which may have resulted in brain damage.

Feature	skeleton	sex	age	fracture
F82	[206]	?	older subadult	1.tibia
F.95	[259]	male	older middle adult	l. scapula, L4,
				r. rib
F.106	[266]	male	older middle/young mature	L5
F.111	[270]	male	middle adult	L5
F.112	[288]	male	mature adult	skull
F.121	[304]	male	mature adult	1.rib
F.132	[329]	male	mature adult	? l. ulna

Table 15: Skeletons with fractures

A total of six (possibly seven) postcranial fractures were found in five (possibly six) individuals at Babraham. Skeleton [206], an older subadult who had also been decapitated and had cut marks on his right clavicle had a fractured left tibia. The fracture had occurred at approximately the middle of the shaft and was well healed although poorly aligned. The anterior-posterior wedging of the vertebral body recorded in the lower spines (L5) of two individuals, skeletons [266] and [270] was probably the result of a single event - either a heavy fall onto the feet or an impact from above. In skeleton 266 L5 may have been congenitally weak as it has also been affected by a fracture type known as spondylolysis where the neural arches separate from the vertebral body.

Skeleton [259] exhibits multiple injuries which probably resulted from the same incident, probably a fall from a significant height. This man had a fracture to the left scapula, a bone that is rarely broken and today represents only 1% of all broken bones. The fracture occurred in the body of the scapula in the region of the infra spinous /subscapula fossa down to the inferior angle. The medial border has been displaced laterally, ventral to the main body of the scapula. Healing and remodelling of the bone are advanced. It is likely to have resulted from a direct traumatic blow or a fall from a significant height. Fractures to the scapula are often associated with pulmonary trauma and rib fractures and this true of this individual who exhibited a well healed fracture on the shaft of the 4th right rib and deposits of new lamellar bone on the pulmonary surfaces of 4 left ribs. The depressed fracture to the body of L4 and the extensive non -specific infection, recorded on the pelvis, lower legs and feet, probably the result of the same accident which resulted in the fractured scapula.

The well healed fracture of the left rib of skeleton [304] will have been caused either by a direct blow to the rib cage or a fall. A possible fracture was recorded on the shaft of the left ulna of skeleton [329]; a raised callous of new bone was recorded around the shaft indicating that if this was the site of a fracture, the bones had realigned themselves perfectly and healed well.

Neoplasia

A small dense round bump of bone, known as a button osteoma was recorded on the left frontal bone of skeleton [355], F.140. This benign lesion would have been asymptomatic.

Other Conditions

'Scars of parturition' - Deep pits were recorded on the dorsal aspect of the pubic symphyses of the female skeleton [337], F135. This dorsal pitting is thought to result from stresses on the ligament and tendon attachments to this area during pregnancy.

Other observations

Several pathological changes to the skeleton were recorded whose aetiology is uncertain. The changes observed are described below but their diagnoses need further investigation.

Skeleton [318] F.127 exhibits gross lesions on several parts of his skeleton which *may* result from some form of cancer. The lesions manifest themselves as raised areas of new bone having the appearance of crystals or coral. The lesions are most florid on the pelvis, particularly the wings of the ilea. In addition to the production of new bone the disease process appears to be destructive; the superior part of the right ilium exhibits severe erosive lesions some of which penetrate the inner surface of the pelvis and some of which penetrate through the bone giving the rim of the wing a ragged appearance. The left

acetabulum has plaques of smooth cream bone, but also areas of prolific, dense growths of bone. The femoral head is unaffected but the posterior neck has an area of disorganised, raised new bone. Other elements which have areas of this florid bone formation are the anterior of the sacral body, the right scapula and the ribs. In addition, the vertebrae are also affected with this lacy new bone growth focused on the anterior of the bodies of L5- L1. The margins of the bodies of L2-L4 are ragged and have been destroyed by an aggressive disease process. Where the pelvis and vertebrae have broken post-mortem the trabecular bone is revealed to be extremely dense.

Skeleton [304], F 121 has a malformed left fibula; the shaft bends medially towards the tibia which has a normal appearance. Its aetiology need to be investigated further but possible diagnoses are fibrous dysplasia or a childhood fracture which has healed oddly. Severe osteoarthritic changes, possibly induced by the malformed lower leg, have deformed the morphology of the joints in both feet. In addition cervical vertebrae 2 and 3, and 5 and 6 are fused neatly at the articular facets. The malformed fibula and the fused vertebrae could account for the awkward burial position of this man.

Decapitated burials

Four, probably five adult skeletons had been decapitated and information relating to the position of cut marks and the head in the grave are presented in the table below.

feature/skeleton	age	sex	position of cut marks	position of skull
F.80 [218]	middle adult	?	no vertebrae to analyse	skull frags. by feet
F.82 [206]	older subadult	?	C4 & C5 & r. clavicle	beside r. tibia
F.85 [224]	mature adult	?male	C7 & ?C4	no skull
F. 93[251]	mature adult	?female	poss. C4 or C5	skull frags by r. knee
F.111 [270]	middle adult	male	C4-C6	skull between feet

Table 16: Decapitated burials – position of cut marks

The cut marks, where they could be observed were all located on the 4th, 5th, 6th or 7th cervical vertebrae with the 4th and 5th being the most commonly cut. Harman *et al* study of Roman and Anglo Saxon decapitations found that the majority of cuts were found between the 2nd and the 4th cervical vertebrae (1981, table 7). All of the cuts were inflicted from the front which suggests that they were post-mortem (although the use of comatising drugs has been postulated as enabling decapitation from the front of a living individual). The marks on the vertebrae suggest that between one and two cuts were required to remove the head from the body. Unlike the decapitated individuals recorded at Jesus Lane (Alexander et al 2003) no cuts were recorded on the mandibles or skulls suggesting that the decapitation process was efficient. However, a series of five cut marks were recorded on the superior surface of the right clavicle of the decapitated skeleton [206]. The lateral end of the bone is missing, possibly the result of a 6th cut. The cuts are parallel to each other, are aligned across the shaft and are regularly spaced. They measure between 10-12mm long and penetrate the bone to a depth of between 2-9mm. The cuts are angled suggesting that the blows were struck from the shoulder towards the head. There is no evidence of healing and it seems probable that these cuts to the clavicle are contemporary with the decapitation and possibly part of a funerary ritual.

Cremation Burials

Cremated human bone was recovered from seven features. All of the burials are urned i.e. the cremated bone was contained within an urn, and one, F117 had two accompanying vessels. The bone is generally well calcined, indicative of high temperatures on the pyre, although bone fragments recovered from F.115 and F117 were poorly fired, blue/black in colour or even charred (femur shaft). The fragment size is generally large, probably because the bone has been protected to an extent by the vessels. Small quantities of burnt flint were recovered from F.115 and F117 and animal bone (burnt and/or unburnt) was identified in features F.90, F115, F.116, F117 and F.118. No pyre site was identified in the area of excavation

A small quantity (5g) of burnt bone (unidentifiable as human or animal) was recovered from the pot buried in F.84 with skeleton [227]. Burnt bone was also identified in F114, [276] (23g), in [247], (41g), and in [316] <526> (32g).

feature	context	age & sex	pathology	pyre goods	human bone >5mm weight (g)	largest fragment
F.90	[244]	young adult ?male		animal bone (burnt & unburnt)	490	75.5mm
F.92	[247]	adult		Fe nail, lots of burnt flint & stone	176	40mm
	[248]				413	90mm
F.115	[282]	adult ?male		burnt animal	0 g	
	[283]		osteophytes on margins of glenoid cavity	animal bone (burnt) 7g	536	65mm
F.116	[285]	adult		animal bone (unburnt)	66	34mm
	[286]				3	
F.117	[294]	adult		animal burnt	323	71mm
	[294] accessory vessel	no bone				
F.118	[291]	adult			27g	31mm
	[292]	adult		Fe nail, ? burnt animal bone	107	55mm
F.134	[276]	?			1g	
	[277]	missing				

Table 17: Cremation Burials

There are several recommendations for further work on the human bone prior to publication. For the cremated bone, each sieved fraction still needs to be sorted to areas of the skeleton (e.g. skull, upper limb, lower limb, axial skeleton) and weighed by these subdivisions to identify any possible bias in the collection/preference of body part of the cremated bone from the pyre and also so that the data can be used for comparative purposes.

For the inhumations, prevalence rates need to be calculated for the various disease processes e.g. dental disease, arthropathies and trauma. This will enable inter and intra site comparisons to be made, for example differing prevalence rates between the sexes. The gross lesions exhibited on the bones of skeleton 318 need to be studied in more detail and a more definitive diagnosis made, if possible. Detailed photographs need to be taken of all of the cut marks recorded on the decapitated individuals, the fractures and the gross pathological changes.

Bone has been extracted for stable isotope analysis and C14 dating and the analysis of the cemetery may need to be reviewed and developed in the light of these results

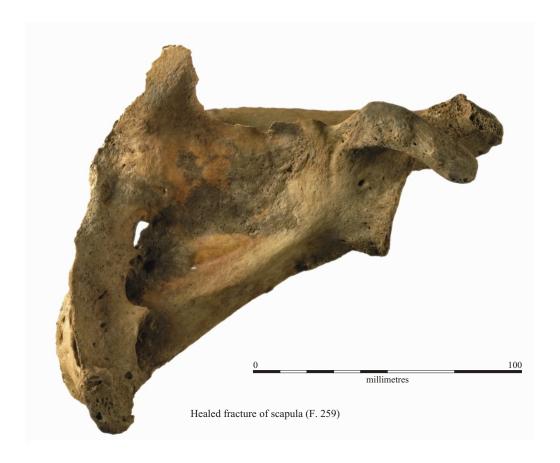




Figure 21. Human bone pathology

Appendix 7: Feature descriptions

Pits and ditches

F.87 – Pit. An irregular oval-shaped cut [238] 2.60 m long x 1.20 m wide x 0.60 and flint m deep cut into natural. Orientated N-S and rounded at the north end with a sharp top break of slope and near vertical sides to the west end, more gently sloping on the east. Base is flat and round, the bottom break in slope is likewise sharp along the west side, and gentle along the east. The lower fill (287) up to 0.3-0.4 m deep consists of a dark grey/brown vertically banded silty sand with inclusions of small angular gravel and flint, some of it worked, and seemingly Late Neolithic in character. The upper fill (236) between 0.2 - 0.35 m deep is made up of an orange dark brown silty sand with dark grey inclusions of angular gravel (3-5 cm diameter), and further worked flint. The pit was half-sectioned and 50% of it excavated. This has been interpreted as a possible rubbish pit of Neolithic date, truncated on its northwestern side by the later cut of the Roman burial F.80.

F.88 – Pit. An oval to oblong-shaped E-W pit or short section of ditch truncated by adjacent pits F.87 and F.89. The cut for this [240] is between 1.11 and 1.5 m wide, shallow (0.26 m deep) and at least 2.72 m long (truncated at either end by Trench 12 and the trench for the 11 kV cable) with gentle sloping sides and top and bottom break of slope and elongate concave base. The single fill of this feature (239) consists of a mottled mid-orange and dark brown sandy silt with rare inclusions of medium and small-sized stones and worked flint flakes. Three worked flakes were recovered from just above the clear basal boundary to this feature overlying a bright yellow to mottled brown sand (natural). Interpreted as being a prehistoric pit of similar age to F.87 and F.89, thus probably Neolithic in date.

F.89 – Pit. A small oblong/oval-shaped pit $(1.45 \text{ m} \log \times 0.60 \text{ m} \text{ wide})$ with a NE-SW orientation which cuts the much wider feature F.88 along its northern edge. The cut [242] of this feature has concave and shallow sides (up to 0.16 m deep) with a gradual top and bottom break of slope and oval-shaped profile-tapered base. The feature has one main fill (241) with a well defined basal boundary, consisting of a mid brown-grey sandy silt with flecks of orange, of moderate to loose compaction, and with rare (< 5%) small angular gravel inclusions (but no obvious worked flint). This is interpreted as being one of a small group of prehistoric pits centring upon the eastern edge of this site.

F.91 – Pit. An irregular looking rounded to oval-shaped pit 1.87 m x >1.2 m wide and 0.31 m deep with steep sides and a gently concave base. The feature cut [257] has an approximate N-S orientation. There remains a slightly uncertain relationship between this and possible earlier feature(s) which it may have cut, also with at least one disturbed Roman burial on its east side (F.140) which immediately underlies it. The truncation into the top of this, plus a certain amount of subsidence into the underlying fill has resulted in the bi-lobate outline of the later pit. There is, however, a much clearer truncation relationship with the earlier Roman cremation F.117, the side of which was just clipped by the feature edge. On the south side the burials F.94 and F.111 appear to be later. Pit F.91 has a single possibly disturbed and mixed fill of fairly compact dark grey-brown silt with rare small stones, pea-grit gravel and small chalk nodules near its base (246). The mixed assemblage of finds recovered from this implies the inadvertent sampling of several disturbed but originally discrete features; for example, fragments of disarticulated human bone suggests disturbance from F.140 or neighbouring burials, whilst the presence of unburnt and finely flaked Neolithic flint blade tools mixed with some Roman pottery suggests re-deposition following the possible truncation of an earlier prehistoric feature. Other finds include much burnt animal bone, burnt flint and some fired metal objects, suggestive perhaps of accidental inclusions of these within a hearth associated with feasting. Whilst the three sherds of Roman pottery recorded from this feature have been interpreted as being residual, there are still other examples of freshly broken adjoining sherds of pot which are not, this includes some 12th-13th century shell-tempered St.Neot's Ware. These most probably date the excavation of this feature. A very small amount of post-Medieval pot was also recovered. It seems likely that the pit is of Early Medieval date. It may have had a domestic function, or be associated with cultivation.

F.145 – Plough scar. A long narrow N-S linear feature of uncertain length (at least 6m+), but up to 0.3 m wide, parallel to the western edge of the excavation. Where sampled (within a 0.5 m long slot) at its southern end, the base of the cut for this [358] down into the natural (chalk) was at least 0.15 m deep,

with steep sides and a sharp break of slope as would be expected of a plough furrow. The fill of this (357) consisted of a dark orange-brown clay silt, firmly compacted, containing rare small sized stones and pea grit and a single find of a re-deposited human foot bone. The plough-scar is probably indicative of post-Medieval cultivation.

Cremations

F.90 – Pit with remains of pot. A truncated circular pit (0.5 x 0.4 m wide and 0.15 m deep) with moderate to steep sides, a sharp basal break of slope, and concave base. The diffuse basal boundary of this cut [244] is excavated into a natural mottled orange sandy silt. The single fill (243) consists of a compact mid grey-brown silt with inclusions of rare small stones and 'pea-grit' gravel. There were two pieces of cremation pot within the fill indicating that the pot had been broken in antiquity. It seems likely that the pot had been placed in the pit whole together with the enclosed remains of the cremation, then immediately backfilled. The broken pot (244) seems to have been found close to its original position, although the breaks within this appeared to be modern. The lack of evidence for burning within the surrounding cremation fill suggests that this was not taken directly from the pyre. Burnt bone but not charcoal was present within the remains of the pot itself. This was removed as one and excavated within the laboratory. The cremation is Roman and has been dated on pottery type to the 2nd-3rd century AD.

F.92 – Pit with broken cremation urn. The latter was contained within a fill (247) consisting of a firm mid-orange brown sandy silt with frequent inclusions of charcoal (close to the surroundings of the pot) and rare small size stones with some burnt bone and pot sherds. The cremation urn (248) appears to have collapsed in on itself in antiquity, the upper portion of which (originally 0.25 m diameter by 0.13 m deep) was filled with an orange-brown sandy silt mixed with fairly large fragments of burnt bone – probably a mixture of cremation pyre and natural soil, with the bone not fully burnt. The pit itself was defined by a circular steep-sided cut [249] with a sharp basal break of slope and concave base (0.66 x 0.61 m wide and 0.3 m deep). The cremation pot was half sectioned *in situ*. and cleaned down to the basal bone fill, then bagged and removed for further sampling. The cremation is Roman and has been dated on pottery type to the 2nd-3rd century AD.

F.113 – Possible cremation pot. Fragments of a pottery vessel (small find no. 46) recovered from a cut [275] which lies immediately to the west of burial F.132. The insertion for this was not a clearly defined pit, yet was cut into the natural and infilled with a mid orange-brown clay silt with inclusions of rare gravel and pebbles (274). This was removed for further analysis in the laboratory. The pot is Roman and has been dated to the 2nd-3rd century AD.

F.115 – Pit with broken cremation urn. Contained within a roughly rectangular cut [284] up to 0.95 m long, 0.60 m wide and 0.2 m deep, with near vertical and straight sides (west side shorter than the north) and a sharp surface and moderate basal break of slope and a flat base. This either cuts or abuts a larger pit to the west. The pit appears to have been deliberately backfilled with a fine grained friable mid brown sandy silt (282) with occasional lenses of reddish orange sand and inclusions of rounded and sub-angular gravel (< 40 mm) around a flat-bottomed urn (283) made of a red oxidised fabric containing the cremation itself. This had broken and spilled cremated bone into the fill. The latter was difficult to distinguish from the sub-soil. The pot is Roman and has been dated to the 2nd-3rd century AD.

F.116 – Pit with broken cremation urn. Contained within an irregular oval cut [287] with near vertical slightly concave sides, a sharp surface and moderate basal break of slope and slightly concave base. The shallow cremation pit (0.62 long x 0.54 m wide x 0.24 m deep) would have contained a pot for the pyre residue, the broken remains of which together with the spilled contents of cremated bone survive within the upper fill of the pit (285), a fine friable mid brown sandy silt with dark brown-black patches and occasional round to sub-angular gravel (<60 mm). The urn had evidently been knocked over in antiquity, spilling the cremated contents and smashing the pot. Beneath this, the basal fill (286) consisting of a friable mid brown sandy silt with light brown/orange and dark brown/black patches of sandy silt with rounded to sub-angular gravel inclusions (< 30mm) contained other fragments of cremated bone. This layer had probably been packed around the pot after placing it in the ground. The cremation is Roman and has been dated to the 2nd-3rd century AD.

F.117 – Cremation pit containing the remnants of three (whole) pots. These were contained within a shallow circular cut [295] defined by gently sloping concave sides, a gentle surface and basal break of slope, and shallow concave base. The latter pit (0.47 m wide and 0.10 m deep) appears to be cut into the sub-soil layer (271) rather than into the natural, and contains a fill consisting of a fine friable mid brown sandy silt with occasional rounded to sub-angular gravel inclusions (<30 mm). Within this were found the more or less complete remains of a shallow Samian dish, a Nene Valley jar, and the large greyware storage jar or urn containing the cremated bone. The top of the latter was hit by the machine whilst digging the second evaluation trench, Trench 16. The edge of this cremation pit has been truncated by the digging of another Roman pit (F.91) of uncertain function on its east side. The cremation is Roman and has been dated to the 2nd-3rd century AD.

F.118 – Cremation and complete pot associated either with a cremation pit or later burial. The cut for the cremation [293] was clearly invisible in plan, thus it couldn't be ascertained whether or not this had been truncated by the burial cut which either includes it or circumvents it on the north side of the grave (F.112). The cut was between 0.35 x 0.30 m in diameter, but its depth and the shape of its sides could not be determined. The pot and the enclosed cremation were Roman (2nd-3rd century AD), and this was surrounded by a fill of dark brown silty clay with rare inclusions of pea-grit, gravel and small-sized stones (291). This was difficult to distinguish from the fill of the grave, thus its identity as a cremation rather than as a grave offering was only established following the examination of its contents.

F.134 – Pit with broken cremation urn. A circular cut [278] (0.44 m wide x 0.15 m deep) for a cremation urn (277) and surrounding fill (276) consisting of a light orange brown clayey silt with occasional small pebble and gravel inclusions and small burnt bone fragments throughout. Amongst this was found a small amount of re-deposited prehistoric flint. Some of the burnt bone appears to have been recovered from the pit fill below the level of the pot, whilst above this, most of the broken pot fragments appear to have been contained *in situ*. due to the circular shape of the surrounding fill. The pot and the enclosed cremation were Roman (mid/late 1st-2nd century AD).

Inhumations

F.78 – Grave cut with truncated skeleton. A short, narrow and highly truncated NNE-SSW orientated oval-shaped grave cut [211] of shallow depth (unrecorded), length (approx. 1.1 m) and width (approx 0.4 m). This is cut by a later burial (F.79) which lies parallel to it on the west side. Because of the level of disturbance engendered by the laying of the Medieval – post-Medieval/modern road above this, the actual relationship between these two graves is now difficult to determine. The grave contains the partial remains of a juvenile (210) with its head placed at the SW end and with the body laid out on its back in a supine posture. The lower legs are missing, probably due to modern surface disturbance, whilst the right arm and hand are likewise truncated. The grave fill consists of a dark red grey silty sand with common medium-fine size gravel and flint inclusions and occasional flecks of charcoal. Although there were no associated finds, the association with the cemetery and burial orientation suggests a late Roman date.

F.79 – Grave cut with skeleton. A NNE-SSW orientated elongate-oval shaped grave [214] up to 1.6 m long and 0.6 m wide, with steep sides and a flat bottom, though now fairly well truncated (only 0.14 m deep). The partial skeletal remains of a mature adult female (213), intact and articulated apart from the head which appears to have been removed accidentally. This had been lain in a supine extended position within the grave with the feet placed towards the north. The grave fill consists of a reddish grey silty sand with frequent fine-medium sized gravel inclusions and occasional charcoal flecks (212). Buried grave goods included most of a 2nd-3rd century pottery vessel, a Horningsea colour-coat beaker (SF21), which had been placed next to the right shoulder, a copper-alloy finger ring (suggested as being 3rd-4th century AD) placed on the left hand third finger (SF20), and the remains of an iron brooch/ shroud pin (SF18) found beneath the lower left leg. Other finds from the grave fill include a nail (SF18) and redeposited flint. The burial seems to have truncated the slightly earlier juvenile grave F.78 on its east side, to which it might well be related. Together the pot and metal finds suggest a 3rd century AD date.

F.80 – Grave cut with partial remains of skeleton. A NNE-SSW orientated irregular elongate-oval shaped grave [219], 2.05 m long, 0.86 m wide and 0.24 m deep, with steep and slightly concave sides

and a slightly concave base which contains the poorly preserved and disarticulated remains of an unsexed adult (218), minus much of the upper torso, including the ribs, spine, most of the arms and the top of the skull. The body appears to have been laid out in a supine extended position with the feet pointing to the north. Prior to burial the skull appears to have been removed (decapitated) and placed across the left shin, where it subsequently seems to have collapsed. In its place at the head end, a 3rd-4th century Hadham red-slipped flagon (SF 25) had been placed as a grave offering, whilst a group of possible iron hobnails around the feet (SF10-13 + 15-17) suggests a burial with boots. This implies that the burial is probably of a male. Other finds include possible iron coffin nails and attachments (SF 1-9 + 14) found towards the head end. The existence of a wooden coffin was also suggested by the width and length of the cut. The discovery of a loose finger bone with a green verdegris stain upon it suggests the former presence of a copper-alloy finger ring which has not survived. However, this phalange bone came from a juvenile individual who is otherwise not represented in this grave. The northern end of the grave cut appears to have cut into a prehistoric pit (F.87), the source for some of the redeposited flint encountered within the grave fill (217). This consisted of a mid grey brown silty sand with patches of yellow silty sand. This included the occasional rounded to sub-angular stone and gravel inclusions (<70 mm). The finds suggest a probable 3rd century AD Roman date for the burial.

F.81 – Grave cut with incomplete skeleton. A NNE-SSW to N-S orientated elongate-oval shaped steep-sided and flat-bottomed grave, 1.85 m long by 0.80 m wide (at its widest point), but of unknown (unrecorded) depth. The grave cut [208] contained the remains of an adult female skeleton (207), articulate but minus the ribs and upper spine, part of the skull, and hands, and lying on its back in a supine position with the head at the south end. No grave goods were found with this burial, although a small amount of residual flint was recovered from the grave fill (205). The latter consisted of a typical dark red grey silty sand with frequent fine-medium gravel sized inclusions and charcoal flecks. The preservation of the bone was variable, reflecting the underlying differences in geology; the poorly preserved chest and pelvis overlying sand.

F.82 – Grave with well-preserved skeleton. An oval-elongate shaped NNE-SSW orientated moderately steep-sided and flat-bottomed shallow grave, 1.55 m long and 0.65m wide, but of unknown (unrecorded) depth. The partly truncated grave cut [216] contained a near complete and articulated skeleton of an unsexed sub-adult individual (206), apart from the head. This had been decapitated postmortem and partly removed, and the skull placed adjacent to the lower right leg, with the feet pointing to the north. The body had been laid out in a supine position with the left arm bent outwards at a right angle. No grave goods were found accompanying the skeleton, although residual flint plus a small amount of residual Roman pot was recovered from the grave fill (215). This consisted of a compact mid reddish grey silty sand with fine-medium sized gravel inclusions and occasional charcoal. Roman, probably of 3rd century AD date.

F.83 – Grave with partial remains of a skeleton. An oval-elongate shaped NNE-SSW orientated shallow truncated grave, approx.1.55 m long and 0.85m wide, and 0.2 m deep with gently angled sides (at a 35-40° angle). There appeared to be no well defined grave cut, the partial remains of an adult female skeleton (221) with lower legs, feet, ribs, vertebrae, scapulae and most of the skull missing and semi-articulate, lying in a supine position within a hollow [222], the head end facing south. The grave fill (220) consisted of a mid brown silty sand, moderately compacted, with frequent inclusions of angular flint (15-70 mm diameter). The 'cut' appeared to truncate the west side of an earlier parallel grave (F.84), to which it may have been related. The north-west edge of the burial was truncated by a modern service trench (11 kV cable). No grave goods accompanied the burial. Roman, probably 3rd century AD.

F.84 – Grave with incomplete skeleton. An oval-elongate shaped NNE-SSW orientated shallow truncated grave, 1.8 m + long, 0.55m wide, and 0.15m + deep. The exact edges of the grave cut could not be determined due to the similarity of the grave fill (226) with the surrounding soil. The burial lay just beneath the topsoil. The base of the cut [228] sloped towards the south-west. Within this the fill consisted of a moderately compact mid orange brown silty sand with inclusions of angular flint, the basal boundary of this with the underlying natural being almost imperceptible. The incomplete articulated skeleton (227)of an adult (minus ribs, vertebrae, front of skull, hands and pelvis) lies in a supine position with the head to the south, parts of it truncated by burial F.83 to the north, the service trench and a modern fence posthole. A complete pot (SF 19), a small coarseware shell-tempered jar (dating to 2nd-4th century AD) had been placed just next to (south-east of) the skull. The bones are moderately well preserved. Roman, probably 3rd century AD.

F.85 – Grave with truncated skeleton. This lies within a shortened oval-shaped cut [225] aligned in a NNE-SSW orientation typical of the cemetery, 1.45 m long by 1 m wide and 0.28 m deep at its deepest point with shallow sides and with an uneven concave base. The lower half of this articulated male skeleton (224) has been truncated and removed by the digging of the modern 11 kV cable service trench, whilst the skull appears to have been removed post-mortem (decapitation) in antiquity. Possibly this had been placed by the feet at the north end of the grave, since lost through truncation. The hands had been folded over the pelvis, the body laid out in a supine position. The grave fill (223) consists of a fairly typical mid brown-grey sandy silt mixed with flecks and patches of orange brown, moderate to loose compaction, and with occasional (<20%) angular and sub-angular flint inclusions. A worked flint flake was recovered from this. Roman, probably 3rd century AD.

F.86 – Grave with well preserved skeleton. An oval-rectangular NNE-SSW aligned grave cut [234] containing the articulated skeleton of an adult male (233), supine and orientated with head end to the south, the skull lying on its side facing west. The legs and feet have been laid together whilst the arms appear to be crossing the chest with the left hand resting near the chin. The body appeared to have been 'badly buried ..with the skull and upper body compressed'. The bones were indifferently preserved due to the local presence of sandy and partially acidic soil conditions. A small complete Nene Valley type pot (with a suggested date of the 4th century AD) had been placed above and to the right of the head, possibly during the backfilling of the grave, whilst 13 hobnails were found *in situ*. around the feet, suggesting the former presence of footwear. The grave fill (232) consisted of a moderately compacted mottled mid orange brown silty sand with patches of grey and rare, small angular flint gravel inclusions, especially towards the top of the fill. Roman, possibly early 4th century AD.

F.93 – Grave with truncated skeleton. An elongated-oval NNE-SSW orientated poorly defined grave cut [252], 1.54 m long by 0.77 m wide and 0.2 m deep, with steep sides and a flat base lying above the natural, truncated at the east end by the roadway which has compressed the ground and partly destroyed the archaeology. At the north end this grave cuts an earlier burial (F.139). The grave itself contains a truncated and incomplete articulated adult female skeleton (251), in supine position, orientated with the head end to the south. The skull appears to have been removed in antiquity and placed by the right knee (a post-mortem decapitation), whilst the lower half of the skeleton (including the right leg and foot and left leg below knee) had been removed during the course of construction of the Medieval/ post-Medieval road, the pelvis during the most recent machining of the trench and excavation cut. The grave fill (250) was composed of a mottled orange/ mid brown silt with frequent inclusions of small to medium sized stones including one worked flint micro-blade. No grave goods accompanied the burial. Roman, probably 3rd century AD date.

F.94 – Grave containing two skeletons. An elongated-oval NNE-SSW orientated shallow grave cut [254], 1.85 m long by 0.90 m wide and 0.2 m deep, with irregular sides and a base, and sharp upper and imperceptible basal break of slope. This contained an incomplete adult female skeleton (255) which had parts of the top of the skull, scapulae, ribs, pelvis and hands missing, the head end facing south. An associated grave fill (253) of this internment, consisting of a mid grey-brown moderately compacted silty sand with occasional small angular gravel inclusions (2-4 cm diameter) contained no obvious grave goods. However, residual Roman pot and some prehistoric worked flint were recovered from the south end of the grave. Above and partly overlying this was a second burial (256) which seems to have been inserted shortly after internment of the first, this time with the head end orientated due south. This secondary, but slightly less complete and still articulated internment, seems to have resulted in a part re-cut of the eastern side of the grave. Some random disarticulation of some of these bones appears to have taken place. This disturbance may relate to further burials on top (F.111 and F.114). Roman 3rd century AD?

F.95 – Grave with well preserved skeleton. A slightly irregular elongate-oval NNE-SSW orientated grave cut [254], 2.2 m long by 0.70 m wide and of unknown (unrecorded) depth. This contained the skeleton of an adult male, the head end recorded from The Parks, Godmanchester (Jones *ibid.*) typically to the south, with most of the articulated skeleton (259) well preserved and in anatomical position. The cranium is missing, even though the mandible, axis, atlas and even the hyoid bone are well preserved and located in the right position. The right femur, pubis and ischium are also missing, perhaps due to the later truncation on the east side of the burial. Other missing bones include the metacarpals and digits of the hands, and a few of the phalanges. The skeleton is laid out in a supine extended posture with no obvious grave goods accompanying it. A sherd of pot and a nail (SF 43)

found near the left foot may be residual, or in the latter case, relate in some way to the burial. The soil fill (258) surrounding the skeleton consisted of a mid orange-brown sandy silt with frequent inclusions of loosely compacted stone and gravel. Roman probably 3rd century AD.

- **F.96** Isolated bone find to the west of main excavation. Part of a leg bone associated with other long bone fragments underneath, the latter found at surface lying on top of the sub-soil approx. 10 m to the south-west of the 12X excavation site following the demolition of the Calcutta Building (see Figure 2). This may have been *in situ*. or else moved only a short distance from its original burial location, either way suggesting a possible extension to the cemetery in this direction. Probably Roman burial.
- **F.103** Partial child burial. The articulated right arm of a small infant with some of the digits remaining found within the sub-soil layer (302) immediately to the west of burial F.106, and clearly truncated by it. This plus several other partial burials (F.104-5 + F.126) may be associated with several very shallow and now imperceptible grave cut(s) within this area, some of which may be superimposed, and almost certainly truncated and disturbed. The orientation of the articulated arm suggests that the child was buried following the typical cemetery orientation (NNE-SSW) with its head to the south. A round copper-alloy brooch (SF 28) may be associated with this or else one of the three other burials. Animal bone and a number of iron nails were recovered from the sub-soil (302) surrounding the bones, the 'fill' here consisting of a fine friable mid brown slightly sandy silt with reddish orange mottling towards the base. This included moderate quantities of rounded and sub-angular gravel inclusions (<110 mm) and small chalk fragments (<30mm). Roman.
- **F.104** Partial child burial. An articulated right arm and disarticulated femur of small infant found within the sub-soil layer (302) immediately to the west of burial F.106, and clearly truncated by it. This plus several other partial burials (F.103, 105 + F.126) may be associated with several very shallow and now imperceptible grave cut(s) within this area, some of which may be superimposed, and almost certainly truncated and disturbed. The orientation of the articulated arm suggests that the child was buried following the typical cemetery orientation (NNE-SSW) with its head to the south. A round copper-alloy brooch (SF 28) may be associated with this or else one of the three other burials. Roman.
- **F.105** Partial adult (?) burial. One tibia and patella which seem to be from the same individual found within the sub-soil layer (302) immediately to the west of burial F.106, and clearly truncated by it. This plus several other partial burials (F.103, 104 + F.126) may be associated with shallow and now imperceptible grave cut(s) within this area, several of which could be superimposed, and almost certainly truncated and disturbed. The orientation of these articulated bones suggests that the individual may have been buried following the typical cemetery orientation (NNE-SSW) with its head to the south. A round copper-alloy brooch (SF 28) might be associated with this or else with one of the three other burials. Roman.
- F.106 Grave with fairly well preserved skeleton. A NW-SE orientated elongate-oval to subrectangular shaped narrow grave cut [267], 1.93 m long by 0.7 m wide and up to 0.3 m deep, with straight and moderately steep (45°) sides (steeper at the south end), a sharp upper and gentle basal break of slope, and a slightly concave base. This contained an articulated and more or less complete supine adult male inhumation (266) laid out with the head to the south and facing west, and the arms tightly crossed over the stomach. The skull appeared to have been split in half. It was thought that this latter damage might have been inflicted post-burial but in antiquity, one possibility being that this was sliced by a spade during the course of Medieval cultivation. The burial itself seems to have truncated a number of earlier child burials on its east side, as well as an E-W orientated child grave on its west side, neither of these apparently related. Grave goods include green and blue glass beads (SF 32 + 36) recovered from the area of the ribs, and a set of small iron hobnails associated with the left foot (suggesting the former presence of a leather boot). The glass beads are more likely to have been derived from one of the truncated juvenile burials. Roman pottery of the 1st-3rd century AD was recovered from the grave fill (265), a soft friable mid brown sandy silt with occasional reddish orange mottling and inclusions of round and sub-angular gravel (<90 mm). The latter layer was interpreted as a deliberate backfill, within which were found a number of disarticulated human infant bones, most likely derived from the truncated burial (F.147) to the west. Roman, possibly 2nd-3rd century AD burial.
- **F.109** Grave with incomplete truncated burial. A NNW-SSE elongate-oval to sub-rectangular shaped cut with straight near vertical sides and a concave base, 2.0 m long by 0.55 m wide and 0.27 m deep.

This contained a supine articulated adult male skeleton (268) laid out with the head in fairly typical south-facing orientation, but with the skull lying on its side facing east, and the left fist clenched. The skeleton had been heavily truncated, first by the service trench for the 11kV cable which partly concealed it (some of the burial lay underneath), and secondly by the machine trench (Trench 12) associated with the archaeological evaluation. The long bones (arm and leg) on the left side of the skeleton have survived, although most of the right side including the leg bones, pelvis, rib bones and vertebrae were removed during machining. The bone preservation was poor. Roman burial.

F.110 – Remains of infant's skull. The crushed remains of an infant's skull (269) loosely associated with other disarticulated infant bones within sub-soil layer 302 nearby, some of which may be related. There appears to be no cut for this burial. The disarticulated skull may be linked to the skull-less juvenile burial(s) F.103,105 and F.126which lie less than a metre distance to the north. The bone preservation was poor. By inference (part of) a burial of Roman date.

F.111 - Grave with a well preserved skeleton. An irregular oval-rectangular NE-SW orientated grave cut [273], 2 m long by 0.9 m wide and 0.2 to 0.3 m deep, with irregular/concave sides and a sharp upper break and gradual bottom break of slope, and a flat base. This contained the decapitated skeleton of an adult male (270), the head end facing south and the body laid out in a supine extended posture with the detached skull placed between the feet. The orientation of the skeleton suggests that the body had been placed 'half sitting/ half lying within the grave', perhaps on account of the shortness of the cut. The bones were well articulated and intact, and bone preservation was good. The greater depth of burial here has ensured survival of the skeleton despite the presence of a burial cut (F.94) and the two burials overlying this, the location of which could have been determined by familial relationship. The northernmost tip of this grave cuts the earlier pit F.91 and the edge of the still earlier NE-SW aligned burial F.140. The grave fill of F.111 consists of two layers overlying an orange-yellow sand (natural); a lower dark brown-grey/ brown-yellow silty sand (272) containing patches of brown-grey and brownyellow sand plus the occasional inclusion of worked flint and rare sherds of Roman pot, and an upper layer (271) of dark grey-brown silty sand with laminae of dark grey and dark brown sand and inclusions of sparse angular gravel, stones (5-7 cm diameter) and occasional flecks of charcoal. No grave goods were found associated with the burial. However, it is assumed that this is Roman and of broadly comparable date.

F.112 – Grave with a well preserved skeleton. An oval- rectangular NW -SE orientated but poorly defined grave cut [290], 1.47 m long by 0.82 m wide and 0.26 m deep, with steep sides and concave base overlying a sub-soil (?) of orange-brown sandy silt. This contained an intact supine adult male skeleton (288) laid out with the head end facing east and truncated at the knee, perhaps foreshortened to make way for the burial lying immediately to the west (F.133). The right arm appears bent at the elbow with a clenched hand positioned against the lower spine. The left arm appears slightly bent with the hand on the left pelvis. Both wrists may have been bound before burial, hence the unusual positioning. A small Barbotine decorated and near complete Pakenham colour-coat beaker (dating to the late 2nd-3rd century) had been carefully positioned next to the pelvis/upper leg on the south side. Opposite against the north side of the pelvis lay an insertion for a pot containing a cremation (F.118), perhaps an earlier cremation pit inadvertently intersected by the grave, but then respected by it and left intact. The surrounding grave fill (289) consisted of a moderately compact orange-brown clay silt with rare inclusions of small sized stone and pea grit. Roman, probably 3rd century AD burial.

F.114 - A pit containing the remains of a scattered burial. An irregular circular shaped pit (approx. 0.7 m x 0.8 m wide and 0.1 m deep) with a diffuse outline to the cut [281], irregular sides and an imperceptible upper and basal break of slope and base to the feature. The feature contained a scatter of disarticulated bones (279) including the tibia and calcaenus of an adult female. These appeared to truncate the top of grave F.94. The fill of the pit, consisting of a mid grey-brown silty sand (280) with bedded patches of brown-orange silty sand and inclusions of small angular gravel (2-4 cm diameter), appeared to merged into the fill of F.94 (253), the latter being slightly darker in colour. Probably the remains of a scattered Roman burial, perhaps opportunistically re-interred within the top of a known grave.

F.119 – Grave with partial remains of a skeleton. A large elongate oval NE-SW orientated grave discovered at a slightly greater (though unrecorded) depth beneath the Medieval/ Post-medieval road. The west end of this was not fully excavated beyond the edge of the road. The cut for this [298] was approx 2m + long and 1m wide with gently sloping sides and a gradual break of slope at the bottom

and top of the feature, together with a slightly concave base. The grave contained the rather incomplete and quite poorly preserved remains of an unsexed adult skeleton (297). Little survived of this apart from the long bones of the legs (both of the femurs were broken), a degraded fragment of humerus and a tarsal. However, their articulation suggested that the body was buried with the head to the south, a typical orientation within the cemetery. No grave goods were encountered, the fill (296) consisting of a mid orange-brown clay silt with the occasional small-medium sized pebbles and flecks of chalk throughout. Roman burial.

F.120 – Grave or pit with bone scatter. A small NE-SW aligned oval pit or short grave cut [301] (approx. 1.3 m long and 0.7 m wide but of unknown depth) containing a number of poorly preserved and generally disarticulated human bones. A metatarsal and two phalanges plus a badly degraded fragment of a calcaneus were present along with lower leg fragments. These lay within a fill consisting of a light orange-brown clay silt with frequent gravel inclusions. Probable Roman burial.

F.121 – Grave with well preserved flexed burial of a mature adult male. An oval NNE-SSW orientated grave cut [308] 1.55 m long and 0.91 m wide and approx. 0.2 m deep, with steep sides and a concave base cutting into sub-soil. The burial was of an elderly, possibly slightly deformed individual lying on its right side virtually in a crouch position, with the head facing towards the south-west (304). The body was fairly well articulated, although the top of the spine was jumbled and the right arm and ribs were missing, along with one of the femurs. The burial may have been disturbed, perhaps even moved whilst still articulated, perhaps to fit into a smaller grave. No grave goods were found with the burial, although a single Roman pot sherd was recovered from the grave fill (303). The latter consisted of a mid orange-brown silt with inclusions of rare small sized stones and pea grit. The grave truncates an earlier similarly aligned burial (F.133) to which it could be related. To the north-east, the edge of the grave is truncated by a small circular pit (F.128), perhaps a Medieval re-internment of disturbed human bones. There may also be some disturbance associated with the cutting of burial F.112. Roman, probably 3rd century AD.

F.122 – Grave with incomplete child burial. A small elongate oval grave (0.6 m long and 0.4 m wide, but of unknown (unrecorded) depth) with gently sloping sides and a concave base cut into the natural. This was orientated NW-SE with the head facing south, and contained the partly articulated truncated skeleton of a juvenile consisting of a skull, two humerii and some ribs of an infant minus the lower half of the body. This lay beneath another east-west child burial (F.123) which appears to have truncated its northern end. One grave good was found; this consisted of six sherds from a straight-sided shallow dish (SF 66) which imitated Dorset Black Burnished Ware (and which was dated to around the 2nd-3rd century AD) which had been placed towards the north end of the grave. The grave fill (306) consisting of a mottled mid brown-orange silt with rare pea grit and small size stone inclusions contained just one or two metal objects, most likely iron nails. Roman, probably 3rd century AD.

F.123 – Grave with a fairly complete child burial. A small WNW-ENE aligned oval-rectangular grave cut (1.02 m long by 0.55 m wide and approx. 0.2 m deep) with steep sides, a sharp bottom break of slope, and clearly defined concave base. This cut [311] contained a poor to moderately well preserved, but fairly complete skeleton of an infant (310) in partly flexed posture, with the head towards the northwest and the skull on its side facing south. Although the limbs are well articulated, most of the ribs have not survived, and the arms seem to be fragmented. The burial is accompanied by grave goods including personal adornments: two copper-alloy bracelets (SF 53 +54) around the right lower forearm, and another, a penannular stylized snakes-head bracelet (SF 64) just over the left hand. The latter were most popular between the late 3rd and early 4th century AD. The clasp of a copper-alloy necklace (SF 65) was visible poking out from beneath the skull whilst recorded *in situ*. This was subsequently removed and taken back to CAU Finds Dept. for careful excavation. This later grave truncates the slightly earlier child burial F.122, to which it may be related. The grave fill (309) consisted of a fairly compact mid brown-orange sandy silt with rare pea grit and small-sized stones. Roman, most likely late 3rd century AD.

F.124 – Grave with incomplete skeleton. A large oval-shaped NW-SE orientated grave (2.08 m long by 0.8 m wide and approx 0.2 m deep) with a concave base and straight near vertical sides, particularly at the north-east end along with a sharp basal break of slope, though becoming more gently sloping towards the south-west. The cut [314] contained the articulated but incomplete skeleton of an unsexed adult (312), the latter laid out in an extended supine posture, but with the head end facing north, contrary to the typical direction of burials within the cemetery. The major limb bones are present,

although the base of the skull, the ribs and spine plus some of the phalanges and digits of the feet and hands are missing. The bone is also in poor condition, in part due to the sandy soil. The large number of iron nails and fittings (SF 52-63) recovered from around the outline of the skeleton, particularly from the feet and head ends, suggest the former presence of a wooden coffin. A hexagonal bronze finger ring (SF 52), probably dating to the 3rd-4th century AD was the only grave good accompanying the burial; this was located on the left hand side of the head. The grave fill (313) consisted of a soft fine friable mid brown slightly sandy silt with occasional rounded to sub-angular flint gravel (<40 mm) and rounded chalk (<10 mm) inclusions, the latter interpreted as a deliberate backfill. Roman, probably late 3rd century AD.

F.126 – Shallow poorly defined grave containing a partial child burial. A poorly defined approx. N-S orientated shallow burial within the sub-soil layer (302). This contains a disarticulated scatter of bones of a single infant (315), the latter disturbed by animal burrowing or ploughing. Included amongst these were long bones, ribs and vertebrae amongst other fragments, most caught up in or else deposited within a shallow depression in the sub-soil. The semi-articulate nature of some of these bones and their sequence suggests an original burial with the head facing south. No associated finds apart from a single iron pin or nail (SF 49) were recovered from this scatter. Burial F.126 probably underlies the adjacent partial burials F.103-105, evidently deposited within the same sub-soil layer, although this particular relationship is far from certain. Roman burial.

F.127 – Grave with fairly complete adult skeleton. A sub-rectangular cut NNE-SSW orientated grave cut [319] (1.8 m long x 0.8 m wide x 0.3 m deep) with well defined, straight, near vertical sides except for the south-west end which has a shallow concave profile. Elsewhere there is a sharp break of slope to a slightly concave base. The south end of the grave was truncated by a later unrelated NW-SE aligned burial F.142. The sides of the cut may have originally been boarded (a box burial), and this contained the flexed skeleton of an adult male (318), with its feet pointing north, and the position of the missing head facing east. The skeleton is complete minus the hands and most of the skull (the top of the cranium survives *in situ*, hence this is not a decapitation),. Bone preservation is good. The position of the skeleton shows that the legs were drawn up and the left arm drawn tightly across the body at burial, the right arm beside it and angled across the pelvis. The head seems to have been disturbed postburial, whilst the femurs were truncated during excavation. One piece of Roman pot was recovered from the grave fill (317), a fine friable mid yellowish-brown slightly sandy silt with occasional rounded to sub-angular gravel inclusions (<50 mm) and modest quantities of rounded chalk (<20 mm) and charcoal. Roman, possibly 3rd century AD.

F.128 – A pit or posthole containing a jumble of re-interred long bones. A circular pit (0.55 x 0.6 m diameter and 0.3 m deep) cutting the north end of burials F.133 (also the sides of F.121 and F.112) and containing a jumble of sub-vertically placed long bones (335) which may have fallen-in or been placed (re-interred), possibly detached from the skeleton in F.133.[321]. A fragment of pot was recovered from the upper fill (320) of the cut [321] for this pit; this consisted of a loosely compacted dark greybrown sandy-silt with occasional small chalk flecks and stone inclusions, which may be Medieval in date. The skeletal fragments sit in/ on the top of the lower fill (334) of the pit: this fill consisting of a reddish-brown sandy silt with occasional small gravel inclusions. Probably a late Roman feature

F.129 – Grave containing an incomplete burial of an adult male. An elongate-oval NNE-SSW aligned grave 1.45 m long by 0.56 m wide and of unknown (un-recorded) depth, with straight but gently sloping sides, a gentle lower break of slope and a slightly concave base. The south-east end of the burial and grave cut [324] has been truncated by the construction of the post-Medieval chalk road, whilst its eastern edge appears to have been clipped by the slightly later but parallel adult female burial (F.131) and also the juvenile burial (F.130) to which it may be related. This heavily truncated articulated skeleton (the feet and upper half of the body except for the right arm is missing) was laid out in a supine extended position (323), orientated to the south. Hobnails (SF 67 + 69) were recovered from either side of the right and left lower legs, and suggests the presence of boots. The size and shape of the left shoe could be determined by the *in situ*. position of up to 45 iron hobnails. The grave fill (322) consists of a compact orange-brown sandy silt with rare inclusions of pea grit and small-sized stones. Roman, possibly 3rd century AD.

F.130 – A grave containing an incomplete infant burial. This small elongate - oval shaped NNE-SSW aligned grave (approx 1m long by 0.5 m wide and of unknown (un-recorded) depth) has been inserted into the top of an adult female burial (F.131) which is aligned in the same direction, and to which it is

probably related (mother). The heavily truncated burial (326) now consisting of only a moderately well preserved femur, two humerii, and a fragment of pelvis. This was probably laid out in a supine position, the missing head end (unusually) orientated to the north. The fill (325) of the grave cut [327] consists of a compact mid orange-brown sandy silt with rare small-sized stones. There were no accompanying grave goods. Roman.

F.131 – A grave containing an incomplete skeleton with accompanying grave goods. An elongate-rectangular NNE-SSW orientated grave cut [341] 1.8 m long by 0.8 m wide, but of unknown (unrecorded) depth, with straight edges and steep sides, and 'deeper than the other burials'. The grave clips the edge of an earlier and parallel grave of an adult male (F.129), to which it is probably related, along with the later insertion of a child burial (F.130) above it. The skeleton is of an adult female (340) laid out in a supine extended posture, with the head end to the south; the bones well articulated and moderately well preserved, but with the entire upper mid section (ribs and vertebrae) missing, alongside a proportion of the pelvis. Relatively, the burial is richly adorned.

A complete jet bead necklace (SF 71) encircled the neck, whilst copper ear-rings (SF 91) were found adjacent to the left temporal bone (the position of the ear lobes), a shale bracelet (SF 70) was found by the left wrist, whilst a near complete and beautifully decorated 3rd century Pakenham colour-coat beaker (SF 87) was found just below the left knee. A number of iron nails (SF 88-90) surrounded the skeleton within the fill of the cut; almost certainly certainly coffin nails associated with a wooden coffin up to 1.6 m long. The grave fill (339) consisted of a mid orange-brown sandy silt with occasional small stones and gravel inclusions, and chalk flecks throughout. Roman, 3rd century AD.

F.132 – Grave containing a complete adult male skeleton. A NNE-SSW orientated oval-rectangular grave cut [330] up to 2.03 m long, 0.76 m wide and 0.25 m deep, with steep sloping sides and sharp bottom break of slope and concave base. The north end of the grave lies beneath the post-Medieval chalk road, but was not truncated by it. A shallower but altogether quite unrelated east-west burial (F.112) overlies this but does not truncate it at its northern end. A pot, perhaps one containing a later and quite un-related cremation (F.113), or perhaps a grave good accompanying this burial, lies immediately adjacent to this on its western side. The grave itself contains a partly flexed and well articulated and well preserved skeleton of an adult individual (329) lying on its back, with the head end orientated northwards and the skull lying on its side facing west. The flexing of the burial may have been response to the digging of slightly too short a grave. There were no accompanying grave goods, although two pieces of red pot and some animal bone were recovered from the grave fill (328). This consisted of a moderately compact mid orangey-brown sandy silt with inclusions of rare pea grit and small-sized stones. Roman, probably 3rd century AD.

F.133 – A grave with a very incomplete adult skeleton. A NNE-SSW orientated elongate-oval shaped grave cut [333] up to 2.2 m long and 0.85 m wide at its widest point, but of unknown (un-recorded) depth. This deeper burial has been truncated slightly along its eastern edge by an overlying grave (F.112) which contains the remains of an adult male, to which this might be related. At its northern end, this grave is truncated by a small (possibly Medieval) pit (F.128) which contains an unusual assemblage of re-interred long bones, including perhaps some of the bones belonging to this burial. The grave itself contains only a poorly preserved and badly truncated skeleton of an unsexed adult individual (332).. This was laid out in supine extended posture, the missing head end orientated to the south. Only the degraded long bones of the legs (minus the fibulae) and fragments of the arms survive. No grave goods but some residual flint was recovered from the grave fill (331), the latter consisting of a mid greyish-brown to mottled red sandy-silt containing moderate amounts of small-medium sized stone inclusions. Roman.

F.135 – Grave containing a near complete partly flexed adult skeleton. A NNE-SSW orientated elongate-oval to sub-rectangular shaped grave cut [338] 1.58 m long by 0.57 m wide and 0.38 m deep with straight near vertical sides, a sharp basal break of slope, and almost flat base. This narrow grave cuts the eastern edge of a much larger parallel grave (F.124), to which it might be related. The reduced size of this burial (F.135) may be a response to the accidental discovery of F.124, and an intention to limit any possible disturbance. The grave contains the partly flexed burial of an adult female which it appears may have been turned on its side to fit into this small grave. The head is orientated to the north, the skull lying flat facing east. Apart from the truncation of the right lower leg and foot and left foot (on the edge of the grave cut) the skeleton is complete and the bones well preserved. There are no accompanying grave goods. The backfill (336) of the grave consists of a soft fine friable dark brown

sandy silt containing occasional rounded and sub-angular inclusions of gravel (<50 mm) and chalk (<20 mm). Roman, possibly 3rd century AD.

- **F.136** Grave containing a near complete skeleton. A NW-SE orientated elongate-oval to sub-rectangular shaped cut [344] up to 1.2 m long and 0.53 m wide and 0.2 m deep, with near vertical sides and a sharp surface but gentle basal break(s) of slope and a concave base sloping from SE to NW. This contains the truncated supine burial of an adult male (343), with the head at the south-east end and raised up. Because of its position the front of the skull had inadvertently been removed (probably truncated away) by ploughing, whilst the legs below the knee have been cut by a modern pipe trench. There were no grave goods or finds, the grave backfill (342) consisting of a soft friable pale yellowish-brown sandy silt with occasional rounded to sub-angular flint gravel inclusions (<50mm) and rounded chalk (<10 mm). Roman, possibly 3rd century.
- **F.137** Fragments of a skull. Disarticulated fragments of an adult (?) skull (346) surrounded by subsoil (345) and lying within a poorly defined pit or hollow. This may have been hit by a machine, and thus related to (or else part of) burial F.138. The skull is surrounded a firm dark orangey-brown clay silt with rare chalk inclusions. Roman.
- **F.138** Parts of a re-burial from a disturbed grave. Disarticulated fragments of an adult male skeleton (366); a jumble of bones including a pelvis, vertebrae and ribs, and fragments of long bones deposited on the surface, or else within the fill(365) of an ill-defined pit [367], the bones surrounded by a dark orange-brown silty sand with occasional inclusions of small-medium sized stones. Possibly the reinterred remains of an earlier disturbed burial, one probably associated with the skull F.137 which may have been subsequently disturbed/moved by machining or earlier plough activity. Roman.
- **F.139** A possible pit burial containing the partial remains of an adult and child. An oval squatrectangular shaped pit 0.97m long and 0.5 m wide (and approx. 0.1 m deep) orientated roughly NNE-SSW with steep sides and a flat base. This contained the partial disarticulated remains of a young adult and an infant; the lower long bones (left and right femur, tibia and fibula of a child, and a portion of the left maxilla and the back of a skull of an individual of young adult proportions. The approximate position in which the head and bones were found suggests that the skeletal remains were laid down with their heads pointing south. The pit cuts the east-west coffin grave F.141, and in turn is cut by the unrelated burial F.93. This pit burial may have intentionally been interred over the west end of grave F.141, Roman.
- **F.140** A coffin burial containing an incomplete adult skeleton. A NNE-SSW aligned oval to squatrectangular shaped large grave cut [356] 2.72 m long and 1.21 m wide but of unknown (unrecorded) depth with steep sides and a flat base. The western edge and top of this was slightly truncated by a large Early Medieval pit (F.91), whilst the grave cuts through the south end of burials F.135 and F.124. Both these are aligned in the same direction, and could be related. The grave contains the articulated but poorly preserved skeleton of an adult male (355) laid out in a supine extended posture, with the legs/pelvis turned and the lower legs apparently crossed, with the left leg uppermost, and the head pointing north (the latter the same orientation as the neighbouring burials F.124 and F.135). The skeleton is incomplete (the feet and long bones and part of the skull survive, whilst the ribs and spine are missing). A perforation noted within the centre of the cranium suggests a pre-mortem injury. The presence of 23 iron nails (SF 78-86 and 105-110) around the head and feet, plus one either side of the pelvis area, confirms this as being a probable wooden coffin burial. The grave fill (354) consists of a mid orangey-brown sandy silt with moderate gravel and chalk inclusions. Roman, probably 3rd century AD.
- **F.141** A coffin burial containing an incomplete skeleton of an adult female. A shallow with steep to vertical sides and a flat base east-west (NW-SE) orientated rectangular grave 1.06 m+ long, 0.68 m wide and 0.2 m deep. A later shallow pit burial (F.139) cuts the north-west end of the grave, and there is also another pit (F.120) with human bones in it overlying the grave at its eastern end. There is no obvious relationship between grave F.141 and the other surrounding burials. The grave cut [363] contains the remains of a moderate to poorly preserved adult skeleton (364) laid out in a supine extended position, with the head end to the north-west. Much of the skull is missing along with most of the vertebrae and ribs (chest area), parts of the clavicles, pelvis and hands. The loss of bone may be due to the burial in sand. Three fragments of pot were found separately in the grave fill over the pelvis area, whilst the presence of three iron nails around the head (SF 92-94), two either side of the pelvis (SF 95-

96), and six (SF 97-102) around the feet suggest the former presence of a wooden coffin surround. The grave fill (362) consists of a mid to dark orangey-brown silty sand grave fill with moderate to large stone inclusions and occasional charcoal flecking. Roman, probably 3rd century AD.

- **F.142** A small grave containing a complete juvenile skeleton. A shallow and poorly defined NW-SE aligned oval shaped grave cut [370] 0.63 m long, 0.25 m wide and 0.03 m deep with moderately steep and slightly concave sides and a flat base. This shallow burial is truncated along its south-west edge by the grave containing an adult (and probably related) burial, whilst on the north side F.142 truncates the upper part an earlier but quite unrelated burial F.127. The grave contains the moderately complete skeleton of a juvenile (368), partially articulated, and laid out in a supine position with the legs/pelvis turned and the lower legs apparently crossed, left leg uppermost, the crushed skull apparently facing towards the south-west. The fill of the grave (369) consists of a mid grey-brown sandy silt with occasional small gravel stones and flints (<30 mm) and occasional moderate-small chalk fragments and flecks (<25 mm). Roman, possibly 3rd century AD.
- **F.143** Grave containing the incomplete skeleton of an adult female. The shallow NW-SE aligned subrectangular to elongate-oval shaped grave cut [373] is truncated at its north-west end by a modern drainage trench, but appears to be at least 0.9 m long, 0.5 m wide and 0.19 m deep, with straight and steep sides to the north, and straight and shallow sides to the east, with a sharp surface break and gentle basal break of slope, and a slightly concave base. The grave cuts the earlier and probably related parallel child burial (F.142) on its northern side, suggesting perhaps, that this is a parent: sibling group. The burial cut contains the incomplete truncated but probably articulated skeleton of an adult (the upper parts have been removed, but the lower legs and feet survive). This appears to have been laid out in a supine extended position, the head end to the north (north-west). The bones are moderately well preserved. No grave goods accompanied the burial (371). The gravel fill (372) consisted of a fine friable mid brown silt with occasional gravel (<40 mm) and rounded chalk (<20 mm) inclusions. Roman, possibly 3rd century AD.
- **F.144** Part of an incomplete adult(?) skull. Not associated directly with any pit or grave, the skull may have inadvertently been removed from a nearby burial, either F.127 or F.123. It was found lying on the sub-soil just above the edge of F.127. The remains consisted of the back of a crushed and very incomplete skull (374), whilst half of a lower jaw bone was recovered close by.
- **F.146** A stray bone (surface find) found associated with the post-medieval plough scar (F.145). Almost certainly disturbed and removed from its original burial context.
- **F.147** A spread of human bones mixed with animal bone associated with a poorly defined feature. The spread of fill (378) surrounding the bones consisted of a patch >2 m long, >1 m wide, and about 0.3 m deep. The fill consisted of a mid orangey-brown sandy silt which also appeared to extend over the edge of grave F.136 to the south. This may not be part of any burial cut, yet the feature appears to have been cut by a later grave F.106 to the east of it. The bone jumble (379) included disarticulated human remains along with some mixed up animal bone (certainly one animal jaw) plus residual flint and pot. Probably Roman, perhaps associated with a disturbed burial.
- **F.148** A partly excavated grave containing the remains of an adult. The east end of a probable eastwest or NW-SE aligned oval shaped grave [377], most of which has been truncated away by a modern drainage which forms the western edge of the excavated area. Only a very small part of the burial (376) was revealed, consisting of the lower right leg and foot and a bit of the left foot, the rest having been removed through truncation. The skeleton was probably orientated with the head end to the west, although it is difficult to be certain now whether or not this had been laid out in a supine or flexed posture. The bone preservation was indifferent. The fill (375) of the grave was similar to that in F.147, i.e. a mid orangey-brown sandy silt. Roman burial.
- **F.149** Grave containing a near complete adult female skeleton. The grave cut [382] was orientated NNE-SSW in accordance with the predominant alignment of the cemetery. The elongate-oval to rectangular cut (with rounded corners) was up to 1.81 m long, 0.5 m wide and 0.15 m deep, with steep sides, a sharp bottom break of slope and a concave base. This is the southernmost burial within the excavated cemetery, and does not appear to inter-cut with any other graves, although a patch containing jumbled disarticulated human bone (F.150) which overlies the grave may well be related (disturbed bone from F.149?). The skeleton has been laid out in a supine position, but with the legs ever so

slightly flexed, and the right arm crossed over the lower body, and the head facing towards the east. Complete except for the right leg which had become broken and disarticulated, and was partly missing. An iron nail (SF 111) was recovered from the grave fill (380), a mid orangey-brown sandy silt with rare inclusions of pea grit and gravel. Roman, probable 3rd century AD.

F.150 – A spread of human bones. Consists of a patch (383) of mid orangey-brown sandy silt containing occasional small stones and a spread of human bone mixed up within it. No defined feature or cut was associated with this; it appears to be a thin layer lying on the sub-soil surface just above and to the west of burial F.149, with which it may be associated (these are bones which may have been disturbed).