Early Roman occupation at Jubilee Villa, 21 The Moorlands, Benson, Oxfordshire

by JO PINE

with contributions by Euan Affleck, Siân Anthony, Lucy Cramp and Jane Timby

SUMMARY

A small area excavation revealed early Roman pits, enclosure ditches and what is probably a ditched droveway, all dating to the 1st century AD, possibly extending into the 2nd. A moderately large assemblage of pottery and a small group of other finds attest to occupation nearby.

As part of a scheme to redevelop a site towards the southern outskirts of Benson for housing, an archaeological investigation was carried out by Thames Valley Archaeological Services at Jubilee Villa, 21 The Moorlands, Benson, Oxfordshire (SU 6202 9152) (Fig. 1). The underlying geology, according to the British Geological Survey¹ is Terrace Gravels, the river Thames being 700 m. to the west of the site. An orange sandy clay natural was also observed during the fieldwork. The site code is JVB98/57 and the archive will be deposited with Oxfordshire Museum Service with the accession number OXCMS:1998.144.

This region of the Thames Valley is known for its rich, well-studied range of archaeological deposits in general.² The background for the immediate environs of the site has recently been summarized in these pages (Pine and Ford 2004).³ There is evidence of both Iron Age and Roman activity in the vicinity (Fig. 1). At St Helen's Avenue pits, gullies and post holes of late Bronze Age/early Iron Age date were recorded together with two possible Roman ditches.⁴ Iron Age pottery and a bronze coin of Addedomaros were discovered at Mill Lane and Roman pits observed in gravel workings to the east of the church contained pottery and other domestic evidence.⁵

A small evaluation in 1998 showed a high density of archaeological features in the southeast of the site (Fig. 2). All of these features were included in the area subsequently excavated and are discussed below.

OVERVIEW AND DISCUSSION

The Roman occupation on the site comprised at least five phases of activity. The features include pits, enclosure ditches, a droveway and post holes. The pottery recovered indicates that the site was occupied for a relatively short duration in the later 1st century, possibly into the early 2nd. Such a short span of occupation could reflect a dynamic settlement pattern in contrast to the evidence of stability provided by more long-lived sites. However, it is not clear if this apparently short span of use is merely a product of settlement shift with occupation at other times located in adjacent unexcavated areas.

² G. Briggs, J. Cook and T. Rowley (eds.), The Archaeology of the Oxford Region (1986).

British Geological Survey, 1:50 000, Sheet 254, Solid and Drift Edition (1980).

³ S. Ford and J. Pine, 'Excavations of Neolithic, Late Bronze Age, Early Iron Age and Early Saxon features at St Helen's Avenue, Benson, Oxfordshire', Oxoniensia, lxviii (2004), 131–66.
⁴ Ibid.

⁵ Information from Oxfordshire SMR.

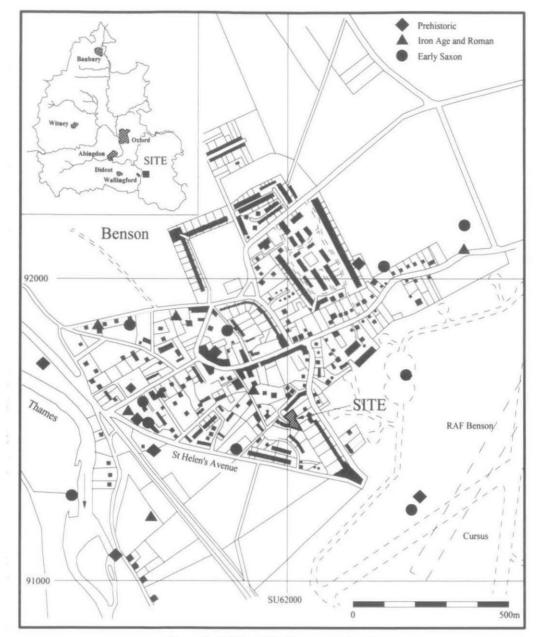


Figure 1: Jubilee Villa, Benson; site location

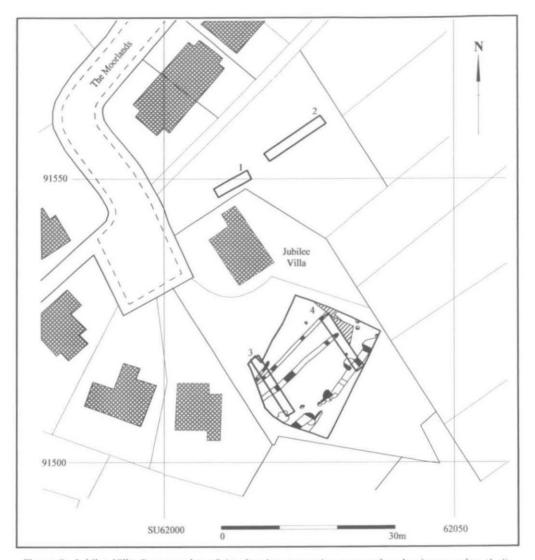


Figure 2: Jubilee Villa, Benson; plan of site showing excavation area and evaluation trenches (1-4).

An interesting aspect of the site are four probably contemporary pre-Flavian pits (102, 105, 112 and 114). It is plausible to suggest these are a pit alignment, a boundary type more frequently encountered in the Midlands and northern England. These pits could be a precursor to the later enclosure, formed of ditches 1002 and 1004, which follow the same alignment. Excavated pit alignments, of course, are usually of late Bronze Age or Iron Age date, such as at Tallington,6 Briars Hill and Gretton7 and St Ives.8 However, a number remain undated such as that at Plant's Farm⁹ and one alignment at Lower Horton is of early Roman date. 10

It could be that the pits from this site were not part of a pit alignment and were simply rubbish pits, their linear alignment being purely coincidental or a reflection of the boundary of the excavation area; however, the fact that the same line was marked by the construction of the two main ditches (1002, 1004), and with the terminus of 1002 almost exactly coincident with pit 105, does suggest the possibility of the pre-existence of a boundary here. These pits also attest to nearby occupation, given the large assemblage of pottery, of earlier 1st-century date. The spatial distribution suggests they lie on the western edge of the settlement, with fields to the west. The occupants appear (somewhat unusually) to be reliant on sheep more than cattle for meat.

Pit 105 contained an articulated horse burial. This individual was small, equivalent in size to a modern New Forest pony, and was between 9-10 years old. There are no pathologies on the bones to indicate how this horse died, but there are no butchery marks or gnaw marks suggesting it was buried soon after death. The significant point is the meat on the animal was not consumed. One explanation is that it was a votive offering. It has been recognized for some time that grain/storage pits had 'unusual' deposits placed at their base11 and horse burials may be connected with site foundation, territorial claims and seasonal festivities. 12 This gives more credence to the pit alignment theory, however an equally plausible explanation could be that the animal was not fit for consumption (being diseased) and was quickly buried, on the edge of the human habitation zone. Given its age and lack of signs of having been worked hard, it may simply have been a favoured animal treated with special care.

The next phase is represented by the western edge of a probable large enclosure and a droveway, which ran just to the west. The enclosure ditches replaced the line of the phase 3 pits. It could be that the droveway led down to the River Thames to the south. A similar alignment of ditches was recorded at St Helen's Avenue.13 Finds from this phase were

⁶ C.A.I. French, D.A. Gurney, F.M. Pryor and W.G. Simpson, , 'A double pit alignment and other features at field OS 29, Tallington, Lincolnshire', in W.G. Simpson, D.A. Gurney, J. Neve and F.M. Pryor, The Fenland Project No 7: Excavations in Peterborough and the Lower Welland Valley 1960-1969 (E. Anglian Archaeol. 61, 1993), 29-68.

⁷ D.A. Jackson, 'Two new Pit Alignments and a Hoard of Currency Bars from Northamptonshire'. Northamptonshire Archaeol. 9 (1974), 13-45.

⁸ J. Pollard, 'Iron Age riverside pit alignments at St Ives, Cambridgeshire', Proc. Prehistoric Soc. 62 (1996), 93-115.

⁹ D.A. Gurney, F.M. Pryor and W.G. Simpson, 'Excavations at Plant's Farm, Maxey, Cambridgeshire', in W.G. Simpson, D.A. Gurney, J. Neve and F.M. Pryor, The Fenland Project No 7: Excavations in Peterborough and the Lower Welland Valley 1960-1969 (E. Anglian Archaeol. 61, 1993), 69-101.

¹⁰ S. Ford and J. Pine, 'Neolithic ring ditches and Roman landscape features at Horton, (1989–1996)' in S. Preston (ed.), Prehistoric, Roman and Saxon sites in Eastern Berkshire (TVAS monogr. 2, 2003), 78.

¹¹ A.P. Fitzpatrick 'Everyday Life in Iron Age Wessex', in A. Gwilt and C. Haselgrove (eds.), Reconstructing Iron Age Societies (1997), 79.

¹² R.J. Moore-Colyer, 'The Horse in British Prehistory; some Speculations', Archaeol. Inl. 151 (1994), $^{1-15}$. S. Ford and J. Pine, op. cit. note 3.

relatively prolific, suggesting that settlement was very close by. No structural remains were discovered and these probably lie beyond the excavated area to the east, within the presumed core of the enclosure. The faunal remains recovered were again dominated by sheep.

A later 1st- or early 2nd-century phase consists of just two post holes and a gully. It is by no means certain that this phase need be later than phase 4, nor is it possible to hypothesize on the nature of this occupation given the small number of features. Abandonment or relocation of sites in the first quarter of the 2nd century seems to be a marked Oxfordshire trend, although causes of this dislocation remain to be established.¹⁴

Despite the small size of this excavation, the early Roman evidence adds further detail to our understanding of the early development of Benson.

THE EXCAVATION

Methodology

Over much of the site, the development works did not penetrate to the archaeologically relevant level, and so any archaeology present will have been preserved *in situ*. In the area of the footprints of the new buildings (c. 320 sq. m.) topsoil and subsoil were removed by mechanical excavator to reveal a series of ditches and gullies oriented NE.–SW., pits and post holes (Fig. 3). Slots totalling at least 20% of the length were excavated across the linear features while pits and post holes were half-sectioned. Fourteen bulk soil samples were taken for the recovery of charred plant remains and finds. Only two of these produced charred plant remains worth analysis. A small number of undated and modern features are not discussed in the text and have been removed from plans for clarity.

RESULTS (FIGS. 3 AND 4)

Phase 1: Prehistoric

The earliest activity on the site is represented by seven struck flints (one scraper, two blades, three flakes and a spall) all recovered as residual finds in later deposits. The blades are possibly of Mesolithic–Neolithic date and the remainder are probably of Neolithic or Bronze Age date. These pieces suggest prehistoric activity in the near vicinity but this is not surprising in an area known for its dense prehistoric evidence.

Phase 2: Early to mid 1st century AD

Stratigraphically the earliest feature on site was a stretch of narrow gully (1005) aligned SW.–NE. This was c.4 m. long, 0.6 m. wide and 0.22 m. deep. It contained a small pottery assemblage from the 1st century AD. It had been truncated by Phase 3 pit 114 and so cannot be later than this date.

Phase 3: Pre-Flavian (mid 1st century AD)

The next phase of site activity appears to be the excavation of four pits (102, 105, 112 and 114), broadly contemporary with one another, with similar pottery dates and stratigraphy, all being truncated by the Phase 4 enclosure represented by ditches 1002 and 1004. Given that the ditches follow the same line, these pits may represent the first definition of this boundary.

Pit 102 was a substantial pit at least 2.00 m. by 1.30 m. and at least 0.80 m. deep (not bottomed). It contained five fills (152–6) from which pottery and animal bone were retrieved. Pit 112 was of similar dimensions, 1.90 m. in diameter and although not bottomed, due to water ingress, at least 0.68 m. deep. It contained at least five fills (171–5) and these contained pottery, especially (like pits 102 and 105) butt beakers, and animal bone. Pit 114 towards the south of the excavation area was 1.20 m. in diameter and 0.55 m. deep. It contained six fills (183–8) from which pottery and a copper alloy brooch

¹⁴ M. Henig and P.M. Booth, Roman Oxfordshire (2000), 106-7.

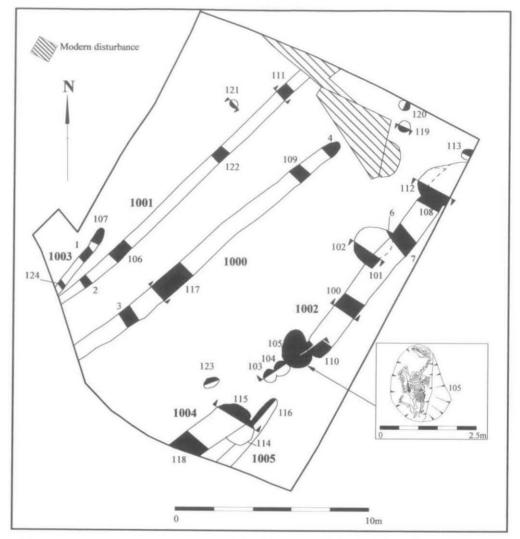


Figure 3: Jubilee Villa, Benson; plan of all dated features with detailed plan of horse skeleton in pit 105 inset.

were recovered. Although the pottery assemblage did not suggest a pre-Flavian date so strongly as for the other pits, it would not be out of place in the 1st century, and the brooch was of La Tène III type. Stratigraphically this pit is contemporary with the other pits of this phase, cutting gully 1005 and in turn being truncated by ditch 1004. Pit 105 was roughly oval in plan, 1.77 m. by 1.90 m. and 0.70 m. deep. Placed at the base of this feature were the articulated remains of a horse (Fig. 3, inset). This animal did not fit easily within the pit and appears to have been squeezed in, lying on its right side with its back legs slightly raised (see below).

Phase 4: Later 1st century AD

Two stretches of ditch (1002 and 1004) represented the western side of, and entrance to, an enclosure, whose other elements must lie outside the excavation area to the south and east. Associated with the entranceway was a gateway structure (post hole 104, later replaced by post hole 103). The ditches were

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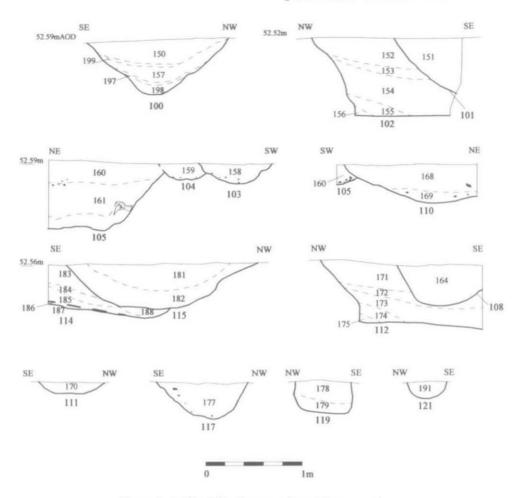


Figure 4: Jubilee Villa, Benson; selected feature sections.

aligned NE.-SW. but ditch 1002 curved abruptly round to the east at the northern edge of the site. They were between 1.20 m. and 1.50 m. wide and 0.42 m. to 0.59 m. deep and the gap between the terminal ends was 4.3 m. The fills of these ditches contained a large assemblage of pottery, animal bone and a single iron nail.

Further parallel linear features (1000 and 1001) aligned SW.–NE. could represent a droveway to the west of the enclosure. These would appear to be broadly contemporary both with one another and with enclosure ditches 1002 and 1004. If these were marking a droveway, the gap between them was just over 2 m. with an entrance at the north of the site shown by the termination of 1000 (slot 4). However, there are no stratigraphic relationships to clarify whether these linear features belong to the same phase of site development, and ditch 1000 had a completely different profile from gully 1001. Ditch 1000 was both wider (0.9 m. to 1 m. compared to 0.6 m.) and deeper (0.38 m. to 0.12 m.) although this could be explained, say, by its having been protected by a more substantial hedge than 1001. Another possibility is that these features represent successive reworkings of the same enclosure boundary, in what sequence it is impossible to say. A substantial assemblage of later 1st-century pottery was recovered together with animal bone and two copper alloy pins, probably broken off from brooches, and a near complete brooch, metal-detected from the surface of 1000. This brooch dates from the early part of the 1st century AD and thus may have been old when lost.

Three features (113, 121 and 123) contained small assemblages of later 1st-century pottery and had no stratigraphic relationships. Post hole 113 was 0.63 m. in diameter and 0.28 m. deep. Post hole 121 was 0.53 m. in diameter and 0.25 m. deep. Scoop 123 was 0.88 m. in diameter and 0.07 m. deep. Post holes alongside ditches like this could be related to stock control gates or pens.

Phase 5: Later 1st to early 2nd century

Based on pottery, rather than stratigraphy, a later 1st- to 2nd-century phase of activity is represented by gully 1003 and post holes 119 and 120. Post hole 119 was 0.60 m. in diameter and 0.35 m. deep and contained pottery including a barbotine decorated fine black ware beaker sherd, samian and Dorset black burnished ware. Post hole 120 was 0.27 m. in diameter and 0.15 m. deep and is likely to be of similar date. Narrow gully 1003 ran 4 m. north from the southern edge of the excavation. It was between 0.44 m. and 0.65 m. wide and 0.20 m. deep. Its function is far from clear given the small stretch examined.

POTTERY by JANE TIMBY

An assemblage of some 680 sherds of pottery weighing 10.2 kg. was recovered. With the exception of single sherds each of medieval and post-medieval date almost the entire group dates to the early Roman period. A quantified summary is provided in Table 1. The assemblage was sorted using the Oxford Archaeology Roman fabric reference system. ¹⁵ The sherds were moderately well preserved with an average sherd weight of 14.9 g. No complete profiles could be reconstructed. A full quantified analysis is deposited with the site archive.

Fabrics and forms

On balance the assemblage has quite a conservative range of fabrics dominated by local wares. The group comprises a mixture of handmade and wheel-made wares reflecting the persistence of late Iron Age traditions into the later 1st century AD. Native or 'Belgic' type wares are well represented: in particular fabric E80, grog-tempered ware, found in both handmade and wheel-made forms, accounts for 36.5% of the assemblage by count, 48.9% by weight. Forms include necked jars with rolled rims, storage jars, platters and necked bowls. One vessel from ditch 1002 (Fig. 5.1) has horizontal scratching where the interior has been scraped in antiquity. Other native wares present in smaller quantities include fabrics E60, a flint-tempered ware and E20, a fine sandy, handmade ware.

The Roman assemblage has just two imported continental vessels, a sherd of Central Gaulish samian from pit 119, and a flange from a 1st-century Central Gaulish mortarium from ditch 1000 (terminal 4). The mortarium is a slightly unusual find in such a moderately small group but has been documented from Claydon Pike, near Lechlade¹⁶ and from the Claudio-Neronian fortress at Kingsholm, Gloucester.¹⁷

Regional imports are restricted to a single Dorset black burnished ware dish (Fig. 5.9) from pit 119 and 27 sherds of Savernake ware potentially from Wiltshire. A closely similar fabric to this latter ware was made in the Oxfordshire region (fabric R97) and the two are often difficult to distinguish from one another, one diagnostic feature being the presence of sparse flint inclusions in the former.

The remainder of the assemblage comprises a mixture of local fine and coarse wares. The fine wares are of interest in that most of them are from a single source and that they are so well represented, accounting for 21.5% by count of the total assemblage. Most of the sherds are from butt beakers (Fig. 5.5, 6 and 8) with combed or rouletted decoration and in several cases applied bosses. The fabric ranges from very fine to a slightly pimply, well-fired sandy paste (fabrics O17–19) ranging in colour from cream, pink and orange to light grey. This ware has recently been recognized on a number of early

¹⁵ P. Booth, Roman Pottery Recording System, Oxford Archaeology (undated); P. Booth, Asthall, Oxfordshire: Excavations in a Roman 'Small Town' (Thames Valley Landscapes monogr. 9, 1997).

¹⁶ P. Booth, pers. comm.

¹⁷ H. Hurst, Kingsholm (Gloucester Archaeol. Rep. 1, 1985), 72, fig. 27, 91–2.

Roman sites in the Abingdon-Dorchester area18 and recent work suggests a source somewhere in the Abingdon area in the Claudio-Neronian period. 19 The style and techniques used point to the work of immigrant potters establishing themselves shortly after the conquest, the butt beaker having a strong continental pedigree.

TABLE 1. POTTERY QUANTIFICATION (wt in g., EVE x100)

	Fabric	Description	$N\sigma$	%	Wt	%	EVE	%
LIA-ERO	E20	fine sand-tempered	12	1.8	135	1.3		
	E60	flint-tempered	11	1.6	91	0.9	10	1.7
	E80	Belgic type grog-tempered	248	36.5	4991	48.9	167	28.1
ROMAN								
Imports	Samian	Central Gaulish samian	1	0.1	24	0.2	10	1.7
	M15	Central Gaulish mortaria	1	0.1	30	0.3		
	B11	Dorset black burnished ware	1	0.1	91	0.9	7	1.2
Local	F51	Oxford red slipped	1	0.1	3	0.0		
	O10	fine oxidized sandy	3	0.4	12	0.1	5	0.8
	O17-O19	oxidized butt beakers	146	21.5	754	7.4	121	20.3
	O20	medium sandy oxidized	2	0.3	7	0.1		
	O71	oxidized, burnt exterior	1	0.1	5	0.0		
	Q21	Oxford white-slipped	2	0.3	23	0.2		
	R10	fine grey/black ware	33	4.9	465	4.6	5	0.8
	R20	medium grey sandy	106	15.6	1159	11.3	103	17.3
	R28	black sandy	27	4.0	254	2.5	22	3.7
	R90	grey sandy with grog	42	6.2	515	5.0	74	12.4
	R95	Savernake ware	27	4.0	1455	14.2	54	9.1
	R97	Savernake type ware	6	0.9	119	1.2	7	1.2
	R00	misc. grey ware	5	0.7	35	0.3	10	1.7
	W10	fine white ware	2	0.3	12	0.1		
	W22	Oxford white ware sandy	1	0.1	4	0.0		
	W23	Oxford burnt whiteware	2	0.3	30	0.3		
TOTAL			680	100.0	10214	100.0	595	100.0

Other finewares are limited to fine grey or black wares (fabric R10), largely bodysherds but including at least one barbotine decorated beaker from pit 119 (Young's form R64).20 A single sherd of later Roman Oxfordshire colour-coated ware (F51) was recovered from ditch 1002 (terminal 110), where it may be intrusive.

Valley' (unpub. report, Oxford Archaeol., 1997).

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

¹⁸ M. Parrington, The Excavation of an Iron Age settlement, Bronze Age Ring Ditches and Roman Features at Ashville Trading Estate, Abingdon, Oxfordshire, 1974-76 (CBA Res. Rep. 28,1978), figs 373-4; S. S. Frere, 'Excavations at Dorchester-on-Thames, 1962', Archaeol. Jnl. 119 (1962), 133 and fig. 12, 9.

19 J. Timby, P. Booth and T. G. Allen, 'A new early Roman fineware industry in the Upper Thames

Reduced wares, mainly fabrics R20, R28, R90 and R97 collectively accounting for 26.7% by count of the total assemblage, dominate the coarsewares. Most of the vessels are jars but also present are a lid knob and a carinated bowl (Fig. 5.7). One jar base from ditch 1002 has a perforation in the base. A sherd in fabric R28 from pit 112 has been fashioned into a counter (25 by 22 mm.). Other local coarsewares include small quantities of oxidized, white-slipped and whiteware.

TABLE 2. POTTERY BY FORM

Forms	Eve (x100)	%	
Jar	264	44.4	
Storage jar	58	9.7	
Bowl/dish	124	20.8	
Cup	10	1.7	
Platter	31	5.2	
Beaker	108	18.2	
Total	595	100.0	

In terms of forms the group is dominated by jars, 54.1% by estimated vessel equivalent (EVE) (Table 2) of which 9.7% are storage jar, followed by bowls/dishes at 20.8% and beakers at 18.2%. The remainder of the recorded assemblage comprises a single cup and platters.

Discussion

With the exception of gully 1003 and post holes 119 and possibly 120, all the features to produce pottery appear to date to the second half of the 1st century AD. Ditch 1000 produced 86 sherds (937 g.) including seven fine ware butt beaker / jar sherds, the Central Gaulish mortarium and three Savernake wares. Two Oxfordshire white-slipped sherds may be intrusive along with a single medieval sherd. Gully 1001 produced a smaller group of 27 sherds (298 g.) with two sherds of Oxfordshire burnt white ware and one fine Oxfordshire whiteware amongst largely grog-tempered and grey Roman wares. Ditch 1002 produced a particularly large group, some 163 pieces (3143 g.). Grog-tempered 'Belgic' type wares are well represented alongside fine ware butt beaker sherds and grog-tempered Roman wares. A single sherd of F51 from the gully terminal is likely to be intrusive. Gully 1003 produced just 29 sherds (230 g.), mainly fine grey and black wares alongside two sherds each of E80, R95 and O10 and three of R20. The absence of fabrics O17–19 and the preponderance of Roman grey wares could indicate a later 1st- to early 2nd-century date for this feature. Ditch 1004 with a good complement of E80, O17–19 and Savernake ware would appear to be contemporary with ditches 1000–1002. Gully 1005 is less easy to date closely with just seven sherds in grog-tempered ware E80 and fabric R90.

The pits, like the ditch fills, yielded moderately large assemblages of pottery. Significant amounts of butt beaker were recovered from pits 102, 105 and 112 and post hole 103, suggesting a pre-Flavian date. A mixture of grog-tempered 'Belgic' ware and Roman wares was recovered from pits 113, 114 and post holes 104, 120 and 121 indicative of a date in the 1st century AD. Post hole 119 contained an assemblage of 19 sherds including the barbotine decorated fine black ware beaker sherd, samian and Dorset black burnished ware indicative of a date in the later 1st or early 2nd century. Post hole 120 with just three sherds of reduced ware may similarly date from the 1st or early 2nd century.

Catalogue of illustrated sherds (Fig. 5)

- Wheelmade necked bowl, black sandy ware, fabric R28. Wavy band of sooting on the upper body and scored horizontal lines on the interior made in antiquity when the vessel appears to have been scraped out. Ditch 1002, slot 100 (157).
- 2. Handmade shallow dish with a divided rim. Red-brown surfaces, Fabric E80. Ditch 1002, slot 108 (164).

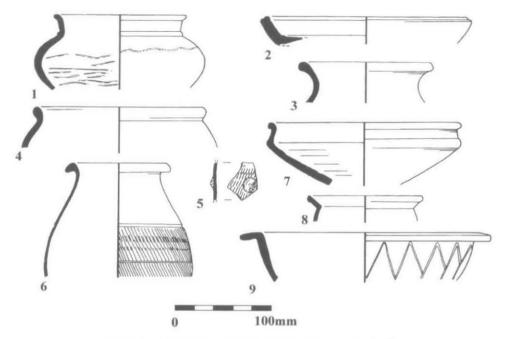


Figure 5: Jubilee Villa, Benson; pottery (see text for details).

- 3. Wheelmade jar with a rolled rim. Fabric E80. Ditch 1002, slot 108 (164).
- Wheelmade narrow necked jar. Black surfaces with a grey sandy core with red margins. Fabric R28. Ditch 1002, slot 108 (164).
- Bodysherd from a butt beaker with rouletted decoration and an applied boss. Fabric O17–19. Pit 102 (153).
- 6. Butt beaker with rouletted decoration. Fabric O17-19. Pit 112 (171).
- 7. Carinated bowl with a roughly burnished exterior. Grev sandy ware (R20). Pit 112 (171).
- 8. Butt beaker, dark orange in colour. Fabric O17-19. Pit 105 (160).
- 9. Flat rim dish, Dorset black burnished ware (B11). Post hole 119 (178).

FAUNAL REMAINS by SIÂN ANTHONY

A total of 615 bones were analysed. An articulated horse skeleton consisting of 206 bones has been counted as one, as the results would have been substantially skewed by their inclusion as separate pieces. This gives a total of 409 separate bones, of which 370 can be phased (Table 3). Almost all contexts produced bone; all the sieved samples also produced bone although most of this was identified to mammalian only. The bone was almost all in an excellent state of preservation with little or no cortical exfoliation, indicating rapid burial after deposition. The archive contains further detail not presented in the text, including methodology and the very limited age-at-death determinations.

The amount of butchery observed is surprisingly small considering the preservation of the bones. Only one bone was chopped and two have cut marks.

The assemblage although small, shows a distinct distribution towards ovicaprids rather than cattle: there are only 11 (3%) identified cattle bones with a further 65 (16%) cow-sized, compared to 50 (12%) ovicaprid bones with a further 140 (34%) sheep-sized pieces. This clear bias is maintained across the phases. The small number of pigs accords with data from other sites of this period. Other species identified are dog, fowl, fish, amphibian bones and a potential deer bone. A dog mandible was recovered from the upper fill of pit 105, above the articulated horse skeleton.

A horse pelvis from ditch 1000 (slot 109) is from a juvenile animal which was already larger than the

articulated adult individual found in pit 105. It has severe pathological change in the acetabulum, a large swollen area of woven bone caudal to the lip shows an active periosteal reaction at the time of death. It is likely that the horse would have had a similar reaction in the femoral head, affecting the surrounding ligaments and muscles and thus was likely to have been noticeably injured.

TABLE 3. ANIMAL BONE SUMMARY BY PHASE

Phase	Cow	CSZ	S/G	SSZ	Pig	Horse	Mam	Other	Total
2	*	-	~	2			2	-	2
3	1	13	10	34	2	2	36	2Dog	100
4	9	42	30	85	9	2	63	11	251
%	1	17	12	34	I	<1	25	4	
5	-	2	5	7	1	2	4	2	17
%		12	29	41	6	12	24	12	

^{&#}x27;Other' in Phase 4 include 4 frog, 4 bird, 1 dog, 1 fish and 1 ?deer.

Horse skeleton

The articulated skeleton was recovered from the bottom fill of pit 105. No other bone was recovered from this context. The majority of the skeleton was recovered and overall it was in excellent condition with only modern excavation damage. There are no signs of dismemberment. All of the bones have fused epiphyses and the crown heights of the teeth indicate an animal of about 9–10 years at death. The anterior sections of the jaws were not recovered to show the sex of the horse. The bones are sturdy overall with a moderate amount of muscle and ligament scars. No pathology was found.

Most of the bones are measurable and estimates of the withers height can be calculated. The individual values vary between 12.1 hh. from the metacarpal and 12.5 hh. from the radius.²² This equates roughly to the size of a modern New Forest pony rather than a horse. Horses are generally much larger, from about 15 hh. The size compares well to other Iron Age or Roman horses: Luff²³ describes ponies of between 10–13 hh. as very common in the 1st century AD, although later in the Roman period the size of horses rises. Comparisons also accord well with examples from the Animal Bone Metrical Archive Project of these periods.²⁴

Excavations in the area attest to the importance of horses in the region. Barton Court Farm²⁵ had horses that were larger in the Roman period and that were kept beyond maturity with pathologies showing stress on the hocks and hooves consistent with heavy workloads. Horse burials are also present in the local area, from the Iron Age at the entrance to Blewburton hillfort,²⁶ a double dismembered

²¹ M.A. Levine, 'The use of Crown Height Measurements and Eruption-wear Sequences to age Horse Teeth', in B. Wilson, C. Grigson and S. Payne (eds.), Ageing and Sexing Animal Bones from Archaeological Sites, (BAR 109, 1982), 223–50.

²² Calculated using Kiesswalter 1888; as described in A. von den Driesch and J. Boessneck, 'Kritische Anmerkungen Zur iderristhohenberechnung aus Langenmaßen vor- und fruhgeschichtlicher Tierknochen', Saugetierkundliche Mitteilungen 22 (1974), 325–48.

Saugetierkundliche Mitteilungen 22 (1974), 325–48.
 R. M. Luff, A Zooarchaeological Study of the Roman North-Western Provinces (BAR Int. Ser. 137, 1982).
 Animal Bone Metrical Archive Project, online at http://ads.ahds.ac.uk/catalogue/specColl/abmap

²⁵ D. Miles (ed.), Archaeology at Barton Court Farm, Abingdon, Oxon (CBA Res. Rep. 50/ Oxford Archaeol. Rep. 3, 1986).

burial at Farmoor,²⁷ and at Watkins Farm, Northmoor, a later burial placed at the centre of an Iron Age ring gully.²⁸

Overall the animal bone assemblage is quite small for detailed analysis however an interesting feature is the predominance of ovicaprids over cattle. Previous assessments of bone assemblages in the area show that the low-lying settlements tended to be dominated by cattle, although sheep are represented, 29 with sheep more dominant on sites higher up the valley. This pattern continues from the Iron Age to the Roman period, but it is clear that sheep cannot be underestimated as a resource on this site. The presence of the articulated horse skeleton is also unusual. The horse was adult but had no visible signs of pathology, it may represent burial of a diseased animal or a burial of some cultural or ritual significance.

HUMAN BONE by SIÂN ANTHONY

Two thoracic vertebrae from an adult human were recovered from ditch 1005 (terminus 116). They articulate well together and are likely to be midway through the thoracic vertebrae. There are slight osteophytes on the lip of the centrum (Grade 1)³⁰ in both examples showing possible evidence of stress on the spine, however there are no Schmorls nodes that are commonly associated with stress on the spine. It is therefore likely that it indicates a mature adult rather than a younger individual.

METALWORK by EUAN AFFLECK

The only iron objects recovered were two badly corroded nails. Two copper alloy pin fragments, probably brooch fastenings, were recovered from ditch 1000, while two brooches came from the surface of ditch 1000 and from pit 114.

1. Ditch 1000 surface find, metal detected. A well-preserved copper alloy brooch, 33 mm. in length with a width of 15 mm., it appears to be of the Colchester Group 'F' type, dated at Colchester AD 1–60. A parallel can be found from Richborough.³¹ A very plain brooch, it has some decoration of vertical grooves around the spring area, while the plate remains plain except for the inclusion of two holes.

2. Pit 114. This copper alloy brooch is in good condition with only the pin missing. It is 42 mm. long and 6 mm. wide. This is of the La Tène III type and is shaped with a bow of a narrow rounded section. It tapers to a pointed foot and has a gentle curve in profile. A similar example found at Owmby, Lincolnshire³² is of 1st century date.

CHARRED PLANT REMAINS by LUCY CRAMP

Only two samples produced more than a few plant remains (details in archive). The cereal grains were mostly of spelt wheat and hulled barley, which are typical crops from a site of this date. There was very little cereal chaff, although some spelt glumes were recovered. However, vast quantities (tens of thousands) of silica awn fragments were present in phase 5 post hole 119. This is mineralized material, formed by the fusing of phytoliths during burning ³³ and its abundance indicates crop de-husking. The husks were burned in fully oxidizing conditions, possibly as fuel or as a means of disposal. There were

26 D.W. Harding, The Iron Age in the Upper Thames Basin (1972).

27 G. Lambrick and M. Robinson, Iron Age and Roman Riverside Settlements at Farmoor, Oxfordshire (Oxfordshire Archaeol. Unit Rep. 2/CBA Res. Rep. 32, 1979).

28 T. G. Allen, An Iron Age and Romano-British enclosed settlement at Watkins Farm, Northmoor, Oxon (Thames Valley Landscapes: the Windrush Valley, 1, 1990).

29 C. Young, 'The Upper Thames Valley in the Roman period', in G. Briggs, J. Cook and T. Rowley (eds.), The Archaeology of the Oxford Region (1986), 58-63.

30 D. Brothwell, Digging up Bones (1972).

31 R.G. Collingwood and I. Richmond, The Archaeology of Roman Britain (1969), 287, illus. 9.

32 R. Hattatt, Iron Age and Roman Brooches (1985), 245 and fig. 243.

33 M.A. Robinson and V. Straker, 'Silica skeletons and macroscopic plant remins from ash', in J. Renfew (ed.), New Light on Early Farming: recent Developments in Palaeoethnobotany (1991), 3–13.

few identifiable fragments of charcoal, but those which were present included *Quercus* sp. (oak), Pomoideae (hawthorn) and *Alnus* or *Corylus* (alder or hazel). This is consistent with the exploitation of woodland and thorn scrub as a fuel type.

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