

The assemblage is small, so the conclusions that can be drawn from it should therefore be regarded with circumspection.

V.17.i Taxa represented in the bones from 1990

Table 28 summarises the identifications. The majority of the bones were not identified to taxon because of their fragmentary and weathered nature. As with the bones from the earlier excavations there was a restricted range of taxa (only three or four non-domestic taxa are present) and the major mammalian domesticates predominated. This is typical of Roman villa assemblages; hunting was not an important activity, and even on Roman sites where sieving is undertaken small mammal, bird or fish bones are rare. The rabbit bone is very probably intrusive as rabbit is thought not to have been present in Britain at this time.

	p/e villa		l/p villa		total	
	N	%	N	%	N	%
Cattle	19	40	90	40	109	40
Sheep/goat	10	21	81	36	91	33
Pig	15	32	39	17	54	20
Horse	2	4	7	3	9	3
Dog			4	2	4	1
Cat			1	<1	1	<1
Rabbit			1	<1	1	<1
Red deer			2	1	2	1
Field vole	1	2			1	<1
Sub-total	47	34	225	36	272	36
Domestic fowl	1	100	7	88	8	89
Duck			1	13	1	11
Sub-total	1	1	8	1	9	1
Unidentified:						
Large mammal	43	47	239	61	282	59
Medium mammal	47	51	147	38	194	40
Small mammal			1	<1	1	<1
Bird	1	1	3	1	4	1
Fish	1	1			1	<1
Sub-total	92	66	390	63	482	63
Total	140	18	623	82	763	

p/e villa — pre/early villa; l/p villa — late/post-villa.
1 human bone from l/p villa; 14 sheep from l/p villa

Table 28 Summary of vertebrate remains from the 1990 excavation

All of the sheep/goat bones that could be identified to species are sheep. Horse, dog and cat all occur in the later phase, but only horse in the earlier phase. However the numbers of bones are very small indeed and in all probability these taxa were simply not very common. The two red deer bones (a metacarpal and a first phalanx) imply

that hunting may have occurred very occasionally. The field vole bone may well be intrusive.

Two bird taxa are present: domestic fowl and duck (probably domestic). Both are commonly found on similar sites in small numbers. Domestic fowl was probably much more numerous than these results imply, but their bones are far more likely to have been destroyed during meals and by scavenging than any of the mammalian taxa. The single fish bone is a portion of dentary from a small-sized fish.

V.17.j Lateral variation in the bones from 1990

Table 69 on Fiche 2#91 summarises the taxa from Buildings III and IV. Building IV was an aisled building with several ovens, possibly used as a kitchen; Building III was a domestic building containing hypocausts and living rooms. There is very little difference in sheep/goat representation between the two buildings, but cattle are much more common in Building III than IV, and for pig the reverse is the case. The numbers of bones from each building may be related to their different functions, but in any case, the major refuse deposits would not have been in the buildings themselves but in pits and ditches some distance away (see Introduction above).

V.17.k Cattle bones from the 1990 excavation

The skeletal element representation of cattle bones and bones of the other major taxa agrees with the results from the earlier excavations. The majority of the ageable cattle bones were from adults. A few of the early fusing long bones had unfused epiphyses (and at least two were very young), but most were fused, and similarly with the later fusing bones. Two mandibles had teeth present, one with a third molar in wear (state k of Grant's scheme Grant 1983), and one with a permanent fourth premolar at state e. Three loose third molars were all in wear, ranging from state h to k. No deciduous teeth were found.

A large proportion of the cattle bones bore butchery markings (especially if the large mammal ribs are counted as cattle). Most parts of the skeleton bore some evidence of butchery, ranging from superficial cuts to deep gouges and chops and one or two bones with sawing marks. No unusual butchery was noted.

A metatarsal with extreme modification of the proximal end (exostoses, eburnation, erosion of the joint surface) was the only pathological specimen.

Measurements were obtained for only three bones, but these, and the general size of the other bones, indicate that the cattle were of average size for the period.

V.17.1 Sheep/goat bones from the 1990 excavation

No juvenile or younger sheep were indicated by the epiphysal fusion evidence, but two mandibles show that there were lambs (one with first molar at state a and second molar not erupted, and one with a deciduous fourth premolar at state g). Most of the mandibles/loose teeth, however, are of adults (though at the younger end of the age: mandibles/loose teeth with third molar wear states: a, d (2) and g).

Only 3 sheep bones bore any butchery marks, but the deposit was typical of butchered remains. However sheep undergo less intensive butchery than cattle and this might partially explain the lack of direct evidence. One of the butchered bones (a metatarsal) was also worked with a hole drilled into the proximal end and at the posterior of the proximal end.

A pair of lower hind limbs were found which come from one individual, the left metatarsal of which measured 143.3 mm in length. Some sheep measurements are given in Ch. 5.17.b on Fiche 2#91.

V.17.m Pig bones from the 1990 excavation

In contrast to sheep/goat, most of the pig bones were from young animals (*eg* only two out of seven metapodials had fused distal epiphyses). This is typical for pig on such sites. As with sheep/goat, very few pig bones had butchery marks. The interpretation is the same as for sheep/goat.

Eight of the bones from the pre/early villa are from a foetal skeleton (skull, left humerus, both femora, right tibia, two ribs and a metapodial).

V.18 Charred plant and molluscan remains

by John Letts and Mark Robinson

V.18.a Introduction

Five flotation samples containing charred and mineralized plant remains recovered during the 1990 excavation were submitted for analysis. Only haphazard environmental sampling had been carried out during previous excavations at the site (see Ch. 5.18 on Fiche 2#92). All of the 1990 samples derived from 2nd to 3rd century features associated with an aisled Roman building, Building IV. Samples 1016, 1014 and 1000 were from ovens within the central nave of the building, samples 1001 and 1017 came from an adjacent boundary ditch.

Sampling for plant remains was prompted by assessment of a sample which contained free-threshing bread-type wheat (*Triticum aestivum s.l.*) — an uncommon find

on Roman sites in Britain. The small number of samples available and their poor preservation limited analysis to documenting the presence of bread-type wheat and outlining the restricted range of weed taxa that was recovered.

V.18.b Results

Table 70 on Fiche 2#92

Taxa were identified by comparison with modern reference specimens, and plant nomenclature follows that of Clapham, Tutin and Moore (1989).

Sample 1000 contained no cultigen or weed seed remains. Within the wood charcoal which dominated the sample twiggy material was common, in addition to frequent specimens of 10–20 mm diameter branches, some of which appeared to be thickened stem bases possibly cut from coppiced stumps. One specimen was tentatively identified as ash (*Fraxinus excelsior*), but a range of woody taxa is likely to be present.

Samples 1016 and 1014 contained few remains of cereal grain or chaff. The cereal grains were very poorly preserved and could not be identified even to generic level. Two fragments of oat (*Avena* sp.) awn were recovered from sample 1016. Both samples contained small numbers of grass (*Gramineae*) seed, as well as a range of charred seeds of herbaceous annuals that are common to open grassy and disturbed habitats including arable fields.

Sample 1014 presented the richest assortment of weed species of the 5 samples. It contained 92 mineralized and charred achenes of spikerush (*Eleocharis* sp. — probably *E. palustris* L. Roem. and Schult.) and sedge (*Carex* sp.) — both native, rhizomatous and herbaceous perennials common throughout the British Isles, and which frequent damp to wet places, including poorly drained and infertile arable fields. 77 of the spikerush specimens were mineralized — a result of silica deposits in the epidermal cells of the seed fusing during heating under oxidizing conditions. This commonly occurs in members of the family Cyperaceae, as well as in the Boraginaceae as evidenced by the single specimen of corn gromwell (*Lithospermum arvense*) also recovered in a mineralized state. Under oxidizing conditions, grain and most weed seeds would be burnt away. The 15 remaining spikerush seeds had been charred in the absence of oxygen.

Interesting identifications include a probable specimen of restharrow (*Ononis* sp.), a small, procumbent and spiny shrub characteristic of rough open grassland, and a single specimen of purging flax (*Linum catharticum*), also native and common to short grassland throughout the British Isles.

Cereals were particularly abundant and much better preserved in sample 1001. Oat (*Avena* sp.) is attested by the presence of two small fragments of awn. Barley is represented by 9 grains, one lateral grain being from a 6-row hulled form (*Hordeum vulgare* sbsp. *hexastichum*). The