tibias were all present to some degree. These bones were all in varying states of preservation ranging from poor to quite good. Poor fragments showed extensive exfoliation of the cortical surface, while quite good fragments had cortical surfaces that were reasonably unabraded and intact.

All of the long bones had suffered breaks. The appearance of these fracture edges indicated that they were post-mortem but were not recent. They were smoothed and coloured by the soil, and the fragments did not rejoin comfortably. None of these breaks displayed morphological characteristics associated with peri-mortem fracturing (i.e. breaks occurring around the time of death). Instead, fractures were linear and the edges were rough, features typical of bones that have suffered post-mortem breakage (Hurlbut 2000). The nature of these breaks was not consistent with breaks that occur as the result of sediment pressure (Villa and Mahieu 1991), but they may possibly be due to trampling by animals (Olsen and Shipman 1988).

Parallel and sub-parallel clusters of score marks were identified on the lateral border of the right tibia and on the lateral border of the left femur. Nine score marks were present on the antero-lateral side of the middle portion of the femur and three on the antero-lateral side of the middle portion of the tibia. These were orientated perpendicular and obliquely to the long axis of the bones and had the macroscopic appearance of broad, flat-bottomed grooves. Two small pits accompanied the score marks on the femur. These pits and scores are characteristic of the marks that rodent's teeth make when gnawing bone (Shipman 1981). The position of these marks on prominent parts of bone and the clustering of these marks confirms this diagnosis.

The general size of these bones suggests that they represent a perinate (around the time of birth), although a more precise age cannot be determined because the relevant features were not present.

Comment

The human remains recovered represent one adult of unknown sex and one perinate. Provided the bones are well preserved it is usually possible to age perinates to within about two weeks by measuring their long bones. In terms of cause of death, assigning finer ages in this way can be extremely informative. For example, a perinate aged at full term (gestational age of 38–40 weeks) suggests a death associated with the physiological health of the mother instead of an older perinate for which environmental factors are more likely (Saunders 1992). Unfortunately the condition of the present specimen precludes this level of analysis.

The adult remains were well preserved while the perinatal remains showed varying degrees of preservation ranging from good to poor. Parallel and sub-parallel score marks and pits were noted on the perinatal bones. These have the appearance of rodent gnaw marks.

It is typical for the skeletal remains of children from an archaeological context to be poorly preserved because their light fragile bones are less resistant to post depositional agents compared to adult bones (Johnston and Zimmer 1989; Guy *et al.* 1997). These particular remains show changes that suggest they underwent considerable disturbance in their burial environment including separation, movement and animal scavenging. In addition to their varying states of preservation and the presence of gnaw marks the bones had suffered numerous breaks that relate to events that occurred some time between deposition and excavation, possibly as the result of trampling by animals.

None of the skeletal remains showed any evidence for pathology or trauma. There was nothing on these remains that suggested cause of death.

The Animal Remains

Ellen Hambleton

Introduction

A sample of animal bones (approximately 2400 fragments) was recovered from the excavations. Faunal remains were recovered from all periods (1–4) of activity, including Romano-British and post-medieval/modern material, although the majority of the assemblage is of Romano-British date. Following the recommendations of the initial assessment of the faunal assemblage, detailed recording and analysis was restricted to the Romano-British material from Period 1 (1st century AD), Period 2 (2nd to 3rd centuries AD) and Period 3 (4th century AD). The aim was to investigate the nature of the animal economy, husbandry strategies and disposal practices across the site and thus improve understanding of the site in its immediate local context and the broader region during the Romano-British period.

Methodology

All bones and teeth were examined and where possible identified to species and skeletal element using reference material from the comparative skeletal collection housed in the School of Conservation Sciences, Bournemouth University. Where appropriate, the following information was recorded for each fragment: context; element; anatomical zone; % completeness; fragmentation; surface condition; gnawing; fusion data; porosity; tooth ageing data; butchery marks; metrical data; other comments such as pathologies or association/articulation with other

recorded fragments. Groups of four or more bones that belonged to the same skeleton (i.e. articulating bones or elements closely matched by size and age) were assigned an 'Associated Bone Group number'. The information was recorded onto a relational database (Microsoft Access) and cross-referenced with relevant contextual information such as date and feature type. This database together with supporting spreadsheets forms part of the site archive.

Fragment counts of all identified specimens (NISP) include dorsal ends of ribs, vertebral bodies, and un-zoned fragments of long bone shaft and skull provided they could be securely identified to species. Specimens represented by several shards that could be rejoined were recorded as a single unit and the fragmentation was noted. Minimum numbers counts were derived from the most common zone of a bone and the frequency of each bone in the skeleton. Tooth eruption and wear for cattle, sheep/goat and pig mandibular teeth were recorded and analysed using the system devised by Grant (1982). Standard measurements were taken following von den Driesch (1976), plus a few additions.

Preservation

Bone preservation in the majority of contexts was recorded as quite poor (66 contexts) or moderate (61 contexts). A further 14 contexts showed poor bone preservation while only 8 were recorded as exhibiting quite good bone preservation. Bones in most contexts have slightly eroded surfaces and many are also fragmentary. Contexts recorded as having quite good bone preservation include some which were noted as containing an abundance of particular elements; for example context 1116 (a fill of pit 1115) contained a significantly high proportion of cattle mandibles and horn cores.

The surface condition and other taphonomic indicators were recorded for all identified bone fragments and these also reflect the generally quite poor state of preservation; within the identified bone assemblage a fair proportion of fragments were recorded as showing evidence of surface erosion (19%) and gnawing (16%). Only a small proportion of identified fragments (<2%) showed any evidence of having been burnt, although the proportion may have been marginally greater among the unidentified remains. In keeping with the quite poor state of preservation overall, only two identified fragments (<1%) of ivoried appearance were noted. Human modification in the form of butchery marks was noted on 13% of identified fragments and was particularly prevalent among the cattle assemblage. Overall the levels of fragmentation in the identified assemblage were fairly high, with 18% of fragments exhibiting refitted modern or ancient breaks. The percentage of loose teeth in the identified assemblage (17%) may also be interpreted as indicative of fairly high levels of fragmentation (Maltby 1985).

The Romano-British assemblage

A total of 2312 fragments, 877 (38%) of which could be assigned to species, were recovered by hand from 149 Romano-British contexts from Sites A, B, C, D, F and G. In addition, a very small sample of bone was recovered from the sieved samples (9 sheep/goat, 21 small mammal and *c.* 100 unidentified fragments). This report will consider only the hand-recovered assemblage. Sites A and B yielded the largest collections of bone (1457 and 652 fragments respectively), while the other excavation areas produced only small samples of animal bone. Of the Romano-British material, only 24 fragments of animal bone were recovered from Period 1 deposits, the majority of bone fragments (1990) were from Period 2 deposits, while 298 fragments of animal bone were recovered from Period 3 contexts. Much of the Period 2 assemblage came from Site A (1166 fragments), which also produced the majority of Period 3 material (267 fragments) and all 24 of the Period 1 fragments. Sites B to G were similarly dominated by Period 2 material, with only a few fragments from Period 3.

The majority of faunal remains came from pits (547 fragments), quarry pits (502 fragments) and ditches (456 fragments). Other features yielding bone include layers, cobbled surfaces, tracks, ovens, hearths and postholes. The largest bone assemblage from a single context came from context 2004, a Period 2 midden, which yielded 203 fragments. Another large assemblage (192 fragments) came from context 1116, a fill of large quarry pit 1115, and was particularly noted for its abundance of cattle horn cores and mandibles.

Species abundance

The number of fragments recorded for each species (NISP) and their relative abundance are given in Table 19. The remains of cattle (59%) dominate the assemblage with sheep/goat (29%) the second most abundant species followed by pig (5%) and horse (5%). Dog, cat and domestic fowl are also represented. The dog NISP count is slightly inflated by the presence of eight fragments from a single associated bone group from context 1147, Site A, Period 2. Wild species are represented only by red and roe deer in very small numbers. Minimum numbers of individuals (MNI) counts show the same order of relative species abundance.

In general there is little difference in the relative abundance of the main domestic species seen in Periods 2 and 3 (Table 20). Cattle are the most abundant species in both the Period 2 and Period 3 samples. Horse is more abundant in the earlier sample. There is a slight increase in the abundance of cattle relative to sheep/goat in the later period, however this may be as much a reflection of

spatial variation in species proportions within the assemblage as it is of a change through time. There is some variation in the relative abundance of the main domestic species between different areas of the site (Table 21). The general trend of cattle being more abundant than sheep/goat is true for assemblages from all excavation areas with the exception of Site C. However, the Site C sample is extremely small and as such subject to bias and should be treated with caution when comparing species abundance with other areas. Similarly, there is a small degree of variation in the overall pattern of species abundance between different feature types (Table 22). Cattle are more abundant than sheep in all feature types with the exception of ovens and postholes, both of which contribute extremely small samples. Cattle are somewhat more abundant and sheep less abundant in the ditch fills than in the pits, which is a pattern typical of many Romano-British settlement sites (Maltby 1981). Horse occurs in most feature types but is most abundant in the track contexts from Period 3 and quarry pits mostly belonging to Period 2.

The following sections provide a detailed analysis and discussion of the major species.

Cattle

Cattle were the most abundant species in Periods 1, 2 and 3 and this is also true in the majority of deposits across the site. The fragmentary nature of the assemblage limited the available metrical data, however the small number of cattle measurements taken appear to fall within the ranges observed by Hamshaw-Thomas (1993) for the material from the 1990–2 excavations. Despite being the most abundant element, very few horn cores remained sufficiently intact to attribute type and sex. Based on the method of Armitage and Clutton-Brock (1976) using greatest length measurement and an index of the basal breadth and depth, four horn cores may be tentatively ascribed as follows: three short horned males and one medium horned castrate. It is possible that the high incidence of males reflects choice of larger horns for working which were subsequently disposed of together, rather than representing the sex distribution of the cattle population as a whole. As with the 1990–2 assemblage (***Wilcote*** I) the horn cores display a range of sizes that appear to fall into two size groups, possibly representing a varied herd at Wilcote or cattle from several different outside trade sources.

Pathological or congenital skeletal abnormalities are not especially frequent in this assemblage, but a few cases were noted. Two mandibular third molars from different contexts exhibited congenital absence of the third cusp, while another mandible displayed alveolar resorption indicative of periodontal disease around the first molar socket. A single horn core displayed a constriction or indentation around part of the circumference near the horn core base and a metacarpal and metatarsal both exhibited slight splaying of the distal articular surface. Some extension/splaying of the articular surface was also observed on a proximal metacarpal, while another proximal metacarpal displayed some swelling and extra bony growth (exostoses) at the proximal end of the shaft. The changes described above for horncore and metapodials may be associated with the use of individuals as draft animals (Bartosiewicz *et al.* 1997), however in the absence of any other more extensive pathological changes the suggestion remains tentative.

BODY PART REPRESENTATION

All areas of the body were represented in the cattle assemblage, although certain elements were noticeably more abundant than others when minimum numbers (MNE) counts were compared (Fig. 13). As mentioned previously, horn cores were abundant in the cattle assemblage and mandibles were also well represented. Concentrations of these elements occur in a small number of contexts and as such may represent deposits of processing waste from small-scale industrial activity such as butchery or horn working. Fill 1116 of quarry pit 1115 contained a collection of at least five horn cores and six mandibles, none of which appear to be matched pairs. At least seven horn cores were recovered from fill 4008 of ditch 4007, and midden 2004 was also noted as containing several horn cores and mandibles. These deposits represent some of the larger contexts in the assemblage so it is likely that any differences in body part representation between different feature types or site areas result directly from the contexts mentioned above rather than any consistent strategy of deposition and disposal.

AGEING

Ageing information from cattle is limited by the small sample size. Only 13 mandibles could provide estimated mandible wear stage values using Grant's (1982) method (Fig. 14). A few additional incomplete mandibular tooth rows and loose teeth could be assigned broader wear stage and age ranges (Hambleton 1999). The general pattern apparent from the toothwear is that there is no evidence of very young infant or neonates in the assemblage and at least half the cattle died as adults. There appear to be two main peaks in the toothwear data; just under half the individuals died with the third molar erupting (*c.* two years), and just over half died as adults of between *c.* three and a half and ten years, many with the third molar in mid wear probably around five to six years of age. The available fusion data also suggests the majority of cattle died as adults. This suggests a combination of younger animals exploited for meat and older individuals kept for meat, milk and traction. It should be noted that five of the eight adult mandibles came from a single deposit (fill 1116 of quarry pit 1065) and that the majority of younger individuals came from Period 2 contexts in a different location (Site B). It is

therefore unlikely that this provides a true indication of husbandry strategy, but rather a mortality pattern affected by differential deposition across different areas of the site.

BUTCHERY

Butchery marks were present on at least 17% of cattle fragments from the assemblage. Butchery marks on the major limb bones (humerus, radius, femur and tibia) typically included shallow scoop or scrape marks on the shaft made by a blade run along the length of the bone to remove meat, heavy chop marks around the epiphyseal ends associated with disarticulation of the carcass and axial splitting of bones for the removal of marrow. Butchery marks on the scapulae were mostly those associated with filleting, consisting of several fine knife cuts along the length of the blade on the lateral surface and chops near the neck of the scapula from a cleaver or heavy blade removing the spine. One metatarsal bore horizontal knife cuts on the anterior of the shaft but the majority of butchery on the other metapodials consisted of superficial chop marks around the proximal end, associated with disarticulation, and longitudinal splitting from the distal end for marrow extraction. Small medio-lateral knife cuts observed on the posterior aspect of the shaft of first phalanges in the assemblage are indicative of skinning.

Butchery on the mandibles included chop marks on the ramus, sometimes on the caudal aspect below the mandibular condyle, but most often across the ramus on the lateral or sometimes the medial surface. Chops on or though the diastema near the cheek tooth row were also common. Only one of the collection of six mandibles from fill 1116 of quarry pit 1065 exhibited a clear butchery mark, however all the mandibles were broken in the same manner, cranio-caudally across the ramus and dorso-ventrally though the front of the cheek tooth row. Despite the absence of obvious tool marks, the consistent ordered pattern of breakage in this group of mandibles suggests butchery modification. Several of the horn cores bore chop and heavy blade marks on or through the base associated with the removal of the horn core from the skull. As with the mandibles, even in the absence of clear butchery marks, there is a uniform pattern of breakage of the horn core bases that suggests deliberate removal from the skull. Knife cuts were observed on some bones but the majority of recorded butchery marks (70%) were chops from cleavers of heavy blades. The pattern of butchery described above is typical of that observed on cattle bones from Romanised/urban settlements (Maltby 1989).

Sheep/goat

Sheep/goat were the second most abundant species in both Periods 2 and 3. Sheep bones were more abundant than cattle in some contexts but these were generally those of very small sample size. Equal numbers of sheep (20 fragments) and cattle were recovered from fill 2067 of pit 2027 where the sheep assemblage was dominated by mandibles and metapodials. Fewer than five fragments from Wilcote could be positively identified as sheep based on morphological and metrical characteristics (Boessneck 1969; Prummel and Frisch 1986) and none were positively identified as goat. The assumption made by Hamshaw-Thomas (1993) that the vast majority of sheep/goat remains from Hands' 1990–2 excavations should be classified as sheep, would also seem appropriate for the current Wilcote assemblage. The degree of fragmentation has limited the number of available measurements. The eight available distal tibia breadth measurements have a range (22–25.9mm) and mean (24.8mm) consistent with those present in the 1990–2 assemblage (***Wilcote* I**) and at Shakenoak villa (Cram 1978). Very few skull fragments were recovered but one skull fragment clearly belonged to a horned sheep. There were no examples of pathological abnormalities with the exception of a single mandible with the second premolar congenitally absent.

BODY PART REPRESENTATION

All areas of the body were represented in the sheep/goat assemblage, but it is apparent from the MNE counts (Fig. 15) that mandible, tibia and metatarsal bones were noticeably more abundant than other elements. This observed pattern of element abundance may be explained by differential preservation as the mandible, tibia and metapodial shafts are among the densest elements and are therefore more likely to survive in a quite poorly preserved and fragmentary assemblage such as Wilcote. However, it is also possible that this pattern results from concentrations of these elements in particular contexts representing deposits of discard from carcass processing as the mandible and lower hind limb are low meat bearing 'waste' elements. The latter is probably the more likely explanation given the presence of a concentration of mandible and metapodials in fill 2067 of pit 2027 which was among the larger samples and one of the few contexts recorded as having quite good bone preservation.

AGEING

Ageing information was limited to 14 mandibles that provided estimates of mandibular wear stages following Grant's (1982) method (Fig. 16). A few more incomplete mandibles and loose teeth could be assigned to Payne's (1973) broader wear stage and age ranges. The mandible sample includes a single very young individual with first molar unerupted (less than six months old), some individuals with the third molar erupting or in very early wear (*c.* one and a half to two years) but the majority of individuals belong to adult animals with third molar in wear. There does appear to be some emphasis on young adults killed between three and five years, but several individuals do survive much later into adulthood. The available fusion data is limited by small sample size but does not contradict the pattern of mortality suggested by

the mandibular toothwear. The age profile suggests most sheep were killed slightly later than at many Romano-British sites where they tend to have been killed for meat mainly in their second and third years (Maltby 1981). However, it is likely that the majority of Wilcote sheep still represent those kept for meat, although they may also have had some importance for secondary products such as wool or even milk. The general lack of neonatal material might be the result of poor preservation and small sample size, but it may be the case that the Wilcote remains do not represent those of a large breeding flock, and that many of the adult sheep represent animals imported for meat.

BUTCHERY

A much smaller proportion of the sheep bones were butchered (7%) compared to those of cattle. This is typical of other Romano-British settlements and unsurprising given that carcasses of smaller animals such as sheep generally require less extensive processing in terms of jointing and filleting than those of large animals such as cattle. The butchered sheep sample is very small but the pattern of butchery would appear to be broadly similar to that observed for the 1990–2 material (***Wilcote*** I). Butchery marks observed include chops to the shaft on radius, tibia and humerus bones and knife cuts on the distal ends of radius and tibia. Several vertebrae have been chopped axially through the centre or to the lateral edge of the vertebral body. There are two examples of metapodials split longitudinally by a chop to the distal end. One metatarsal bore knife cuts at the proximal end indicative of careful disarticulation and the same bone has a circular hole bored or drilled in the centre of the proximal articulation. Eight similarly modified metatarsals were recovered from a variety of contexts during Hands' (***Wilcote*** I, 176) 1990–2 excavations and have been interpreted as bone working rejects, possibly from handle manufacture.

Other species

Other species are present but the sample sizes are generally too small to merit detailed analysis.

PIG

Pig is the third most abundant species in Period 2 with horse fourth, but in Period 3 the situation is reversed with horse being more abundant than pig. The incidence of pig is much lower than observed in the 1990–2 Wilcote assemblage. The available ageing information indicates that pigs were mainly killed before reaching adulthood and were exploited for meat as evidenced by the presence of butchery marks on several fragments.

HORSE

Horse is somewhat better represented in this assemblage than in the 1990–2 assemblage where the low incidence was considered surprising (***Wilcote*** I). The relative abundance of horse (approximately 5%) in the overall sample is similar to that observed on other urban settlements particularly where assemblages included deposits of butchery and industrial waste (Maltby 1998). Butchery marks in the form of fine knife cuts were noted on two distal horse humeri but there is no evidence to suggest horse made any regular or substantial contribution to the meat diet.

DOG

Only 12 fragments of dog were recovered, 8 of which come from fill 1147 of quarry pit 1115 and represent the partial remains of a single adult individual which showed evidence of having been butchered (ulna cut through at the proximal end). The remains from the pit included both sides of a complete mandible, the right side of which had the crown missing from both premolars 2 and 3 with a slight polish on the root stumps which might suggest the teeth were broken during life.

CAT

A single fragment of cat ulna was recovered from fill 7008 of ditch 7006.

DOMESTIC FOWL

A single fragment of domestic fowl tibia was recovered from fill 1116 of quarry pit 1065.

DEER

Deer were the only wild species present in the assemblage. Two fragments of red deer bone were recovered, consisting of articulating proximal radius and ulna, which had been butchered. Roe deer was represented by a single adult mandible. A small piece of burnt and fragmented deer antler was also recovered but was too poorly preserved to be assigned to species. The presence of butchered skeletal elements indicated that deer were consumed at the site although they did not constitute a significant part of the meat diet.

Summary/Discussion

The predominance of domestic species is a common feature among Romano-British assemblages. The ratio of cattle:sheep at approximately 2:1 is in stark contrast to the faunal assemblage from previous excavations at Wilcote by Hands in 1990–2, where the situation is reversed and sheep are generally twice as abundant as cattle (***Wilcote*** I). Sheep are also generally more abundant than cattle in the Romano-British assemblages from the nearby roadside settlement at Asthall (Powell *et al.* 1997). The abundance of cattle relative to sheep in the Wilcote sample is more similar to that observed in the later phases (AD 250–400) at Shakenoak villa (Cram 1973), as is the abundance of horse, although pig and deer have a greater importance at Shakenoak than in the Wilcote assemblage.

So called 'Romanised' settlements such as villas, roadside

settlements, towns and military sites tend to have fewer sheep than contemporary 'native' rural settlements (King 1978; 1999). The high proportions of cattle in this Wilcote assemblage may point to a more 'Romanised' diet and economy, although whether this might be a result of military influence during the early settlement associated with the building of Akeman Street, an influence of the local villa economies as seen at nearby Shakenoak (Cram 1973), or the development of a more urban pattern reflecting the role of a small town is uncertain. The abundance of pig characteristic of military and Romanised urban settlements is certainly not a feature of the Wilcote assemblage, although the relatively low incidence of horse is consistent with small towns and larger urban settlements from the region (Maltby 1998). The pattern of species proportions observed in the Wilcote assemblage does not lend itself to straightforward urban/rural/military/villa classification along the lines proposed by King (1978; 1999), although it is suggestive of a more 'Romanised' settlement. It is possible that, as suggested at Asthall (Powell *et al.* 1997), the assemblage reflects a mixture of economic influences peculiar to the varied role and requirements of a roadside settlement. However, when one considers the considerable differences between the current assemblage and those of earlier excavations at the same settlement, it is likely that the species proportions observed might be more indicative of particular processing activities associated with this area of the settlement rather than of the relative economic importance of different species across the settlement as a whole.

Areas of deposition of processing waste from possible horn working activity at Wilcote are indicated by contexts containing concentrations of cattle horn cores and it is likely that some of the inhabitants specialised in this activity. In addition to the small groups observed in the current assemblage, a group of 25 cattle horn cores was noted from the earlier excavations at (***Wilcote* I**). No such accumulations were recorded from the nearby roadside settlement at Asthall (Powell *et al.* 1997). Similar concentrations of horn cores representing the disposal waste from large-scale horn working activity have been found on several Roman urban sites such as Winchester (Maltby 1989), and less frequently on rural settlements such as Brighton Hill South, Hampshire (Maltby 1995). It is likely that horn cores may have been imported for this purpose, perhaps from a variety of different sources. Interestingly, it was noted that at Shakenoak villa there were 'few horn cores and these bones probably went elsewhere with the raw material for leather and horn working' (Cram 1973, 151) and it is tempting to suggest that one possible destination for the Shakenoak horn cores may have been Wilcote.

The deposition of several similarly broken/butchered cattle mandibles in the same context with a collection of horn cores might suggest that, in addition to specialist horn processing, there may also have been some level of industrial butchery of small groups of carcasses, or parts of carcasses, rather than individual processing of single animals at household level. Although such groups do not equate to the large accumulations of cattle bones dominated by particular elements characteristic of the large-scale processing of carcasses by specialist butchers in Roman towns (Maltby 1989), the small accumulations of similarly butchered bones at Wilcote still suggest some specialist butchery on a smaller scale. In the Wilcote sample, the butchery marks themselves are primarily cleaver or heavy blade marks rather than fine knife cuts and include the presence on cattle long bone shafts of superficial blade marks running longitudinally to remove meat and the longitudinal splitting of limb bones. Similar patterns of butchery marks were observed in the 1990–2 Wilcote assemblage, the assemblage from the Asthall roadside settlement and several urban centres such as Winchester (Powell *et al.* 1997). The type of marks and the uniformity with which they occur on particular elements reflect a specialist Roman/urban style of butchery at Wilcote rather than traditional native/rural practices.

The accumulations of skeletal material, particularly from cattle, which are the residue of industrial activities such as horn working may be biased towards concentrations of older individuals. This makes the age profiles of the cattle and sheep assemblages difficult to interpret, particularly as the assemblages are likely to represent a combination of locally bred and imported stock.

The assemblage from the roadside settlement at Wilcote suggests the exploitation of animals concentrated mainly on domestic species, primarily cattle. Animals were probably utilised for a number of different resources such as traction, milk or wool but the main focus of exploitation was probably for meat. Cattle were also exploited as a source of horn, and there is evidence of specialist horn working having taken place on the site, and doubtless leather as well. Populations of cattle, sheep and pig were probably bred and kept in the immediate vicinity. However, it is likely that the faunal assemblage represents a combination of these standing herds together with livestock and animal remains traded both in and out of the settlement as part of an exchange system involving other local communities. The pattern of animal exploitation and deposition of remains at Wilcote has more in common with the broad pattern detected at urban and villa sites than contemporary Romano-British lower status rural settlements.

Table 19: Animal bone fragments count (NISP), all periods

Species	No. frags	%
cattle	521	59.4
sheep/goat	252	28.7
pig	44	5.0
horse	42	4.8
dog	12	1.4
red deer	2	0.2
roe deer	1	0.1
deer (species indeterminate)	1	0.1
cat	1	0.1
domestic fowl	1	0.1
Total identified	**877**	
unidentified bird	1	
unidentified mammal	1434	
Total	**2312**	

Table 20: Animal bone fragments count (NISP) of main domestic species by period

No. frags	Period 1	Period 2	Period 3
cattle	3	452	66
sheep/goat	6	224	22
pig	1	40	3
horse		34	8
dog		11	1
Total	**10**	**761**	**100**
%	Period 1	Period 2	Period 3
cattle	30.0	59.4	66.0
sheep/goat	60.0	29.4	22.0
pig	10.0	5.3	3.0
horse	0.0	4.5	8.0
dog	0.0	1.4	1.0

Table 21: Animal bone fragments count (NISP) of main domestic species by area

No. frags	Site A	Site B	Site C	Site D	Site F	Site G
cattle	290	145	4	48	14	20
sheep/goat	136	95	6	9	3	3
pig	23	15	1	1	2	2
horse	28	11		3		
dog	9	1		2		
Total	**486**	**267**	**11**	**63**	**19**	**25**
%	**Site A**	**Site B**	**Site C**	**Site D**	**Site F**	**Site G**
cattle	59.7	54.3	36.4	76.2	73.7	80.0
sheep/goat	28.0	35.6	54.5	14.3	15.8	12.0
pig	4.7	5.6	9.1	1.6	10.5	8.0
horse	5.8	4.1	0.0	4.8	0.0	0.0
dog	1.9	0.4	0.0	3.2	0.0	0.0

Table 22: Animal bone fragments count (NISP) of main domestic species by feature type

No. frags	Pit	Ditch	Quarry Pit	Layer	Track	Cobbled surface	Oven	Hearth	Posthole
cattle	122	135	113	49	40	41	13	6	2
sheep/goat	76	41	49	36	20	6	19	1	4
pig	13	9	10	7	2	3			
horse	6	5	14	7	8	2			
dog	1	10			1				
Total	**218**	**200**	**186**	**99**	**71**	**52**	**32**	**7**	**6**
%	**Pit**	**Ditch**	**Quarry Pit**	**Layer**	**Track**	**Cobbled surface**	**Oven**	**Hearth**	**Posthole**
cattle	56.0	67.5	60.8	49.5	56.3	78.8	40.6	85.7	33.3
sheep/goat	34.9	20.5	26.3	36.4	28.2	11.5	59.4	14.3	66.7
pig	6.0	4.5	5.4	7.1	2.8	5.8	0.0	0.0	0.0
horse	2.8	2.5	7.5	7.1	11.3	3.8	0.0	0.0	0.0
dog	0.5	5.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0

Fig. 13: Cattle skeletal element representation

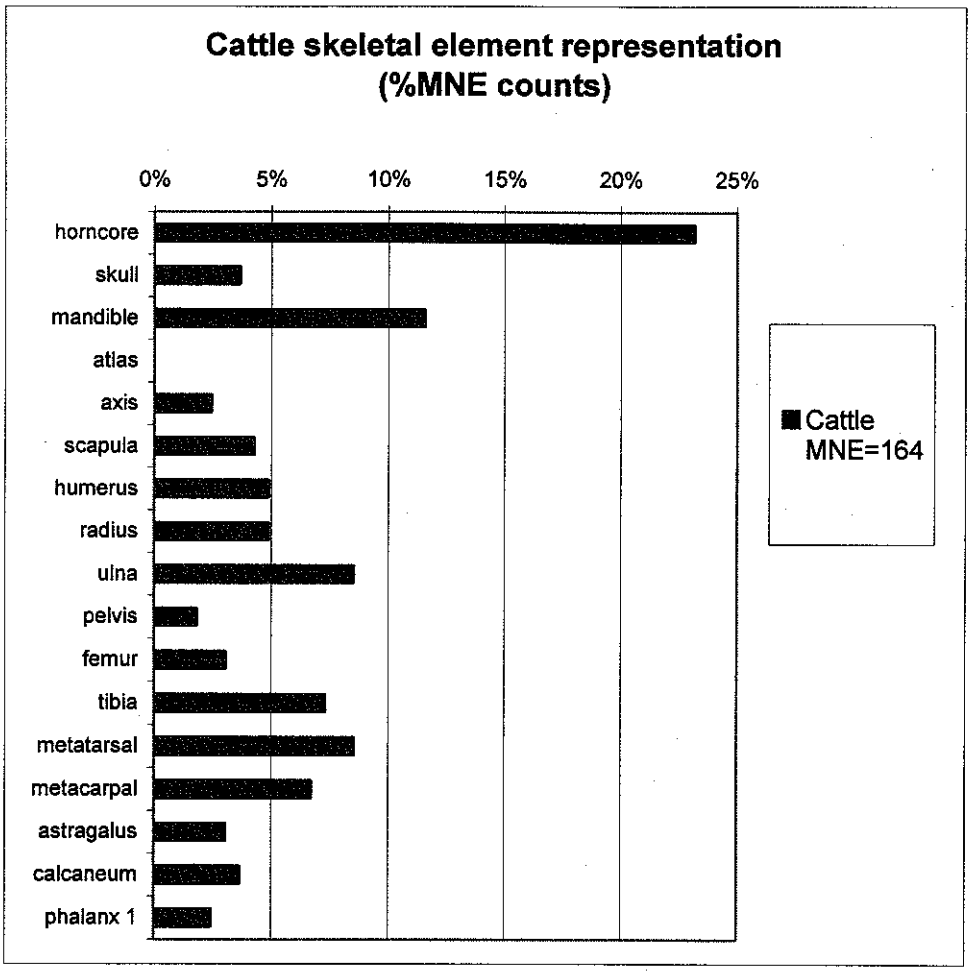

Fig. 14: Cattle mandible wear stages

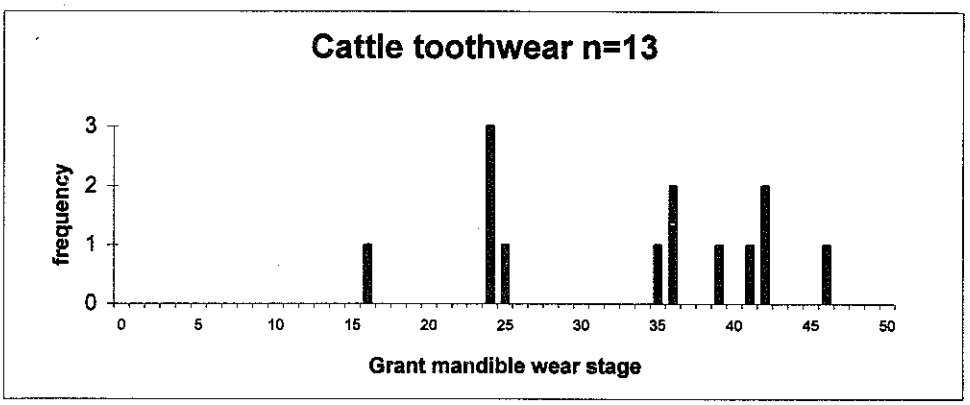

Fig. 15: Sheep/goat skeletal element representation

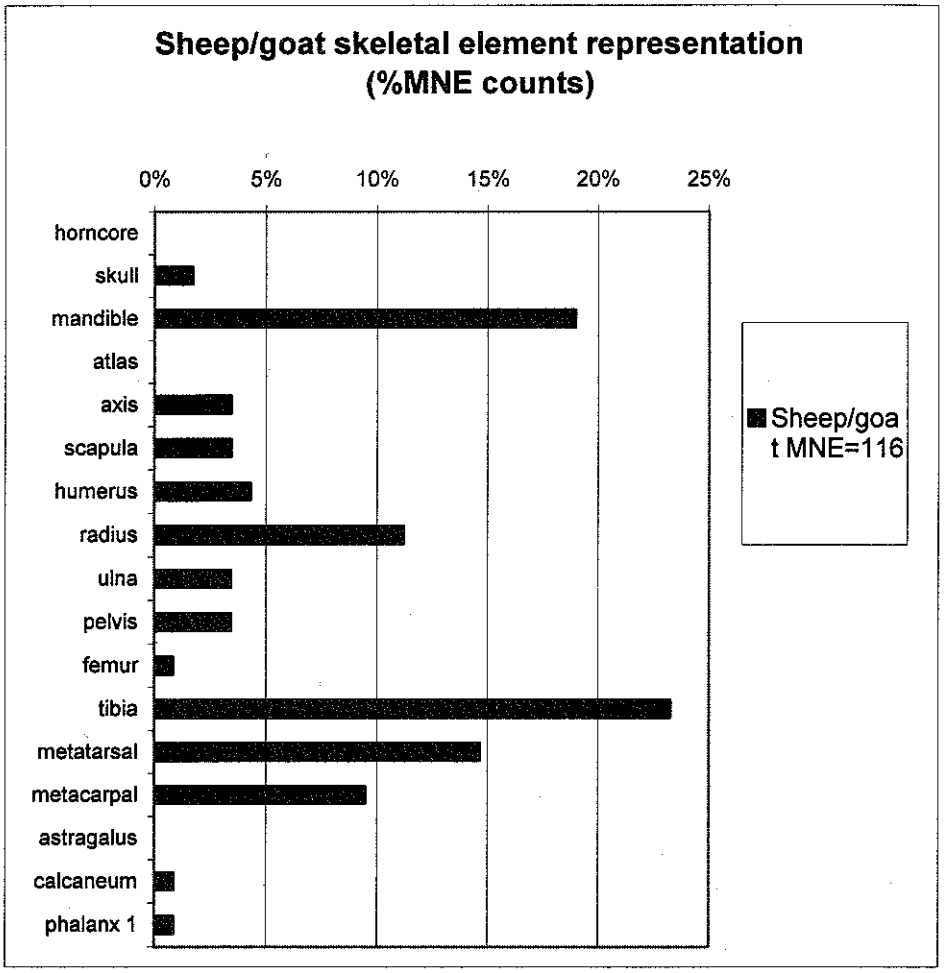

Fig. 16: Sheep/goat mandible wear stages