

Amesbury Co-op: Animal Bone Assessment (60031).

S. Knight, 27th October 2005.

Methodology

The potential of the assemblage to provide information about husbandry patterns, population structures and consumption practices was ascertained from the number of bones that could give information on the age and sex of animals, butchery, burning and breakage patterns. The number of bones that could provide metrical information was also counted.

Conjoining fragments that were demonstrably from the same bone were counted as one bone in order to minimise distortion, and therefore specimen counts (NISP) given here may differ from the absolute raw fragment counts in the finds table. There may also be some discrepancies when bone is fragile may fragment further after initial quantification. No fragments were recorded as 'medium mammal' or 'large mammal'; these were instead consigned to the unidentified category. No attempt was made to identify ribs or vertebrae (except the atlas and axis) to species, although large numbers of these bones were noted where they occurred.

The extent of mechanical or chemical attrition to the bone surface was recorded, with 1 indicating very poor condition, 2 poor, 3 fair, 4 good and 5 excellent. The numbers of gnawed bone were also noted. Marks from chopping, sawing, knife cuts and fractures made when the bone was fresh were recorded as butchery marks.

Results

The bones originated mainly from features of Saxo-Norman date, some of which contained earlier Romano-British pottery, and with few from later periods (table AB1). The largest quantities of bone originated from pits 511 and 518, and ditch 523, from more than one fill in each of these features. For the purpose of this report, dates have been established using ceramic association, and where this was not possible, from the list of features, and as such are subject to alteration. Post-medieval and modern bones have been combined.

	Gnawed	Loose teeth	Unidentified	Butchery	Burnt	Measure	Age	Total (NISP)
Saxo-Norman	6	8	64	14	3	6	15	936
Medieval	9	0	59	18	0	5	23	22
Post-medieval	8	0	72	20	0	0	28	25
Undated	0	33	67	44	11	0	0	9
Total	6	8	64	14	3	6	15	992

Table AB1: Taphonomic characteristics of the assemblage; proportions of bones as a percentage of NISP rather than raw counts.

95% of the 992 bones were in good condition, with 49 in excellent condition (mainly from the Post-medieval period) and only 4 in poor condition (from a single Post-medieval cut and one fill in a Saxo-Norman pit). Correspondingly, the proportion of teeth lost from the jaw by erosion or fragmentation was low in the Post-Medieval assemblage, although the proportion of unidentified bone was high in this period, perhaps partially due to scavenger activity destroying the bone, and butchery

fragmenting the bones into less easily identifiable pieces (also reflected in the absence of any Post-medieval bones complete enough to be measured).

Gnawing was present throughout and will have affected the assemblage to an extent, although at a relatively low level. Loose teeth are particularly well-represented in the undated contexts, and this portion of the assemblage also contains no measureable or ageable bone, perhaps a result of fragmentation from reworking or the methods of butchery or deposition. The Saxo-Norman assemblage contained a relatively high proportion of loose teeth, but these were often in the same context as the jaw from which they had been lost, and fragmentation probably occurred post-depositionally.

Approximately a third of bones could be identified, and the species proportions varied by phase, from a Saxo-Norman predominance of sheep/goat (sheep but no goats positively identified) to a majority of cattle in the later periods of occupation (table AB2). The proportion of pigs is relatively high, especially in the Saxo-Norman period, and this is also the period where a variety of other species are represented, probably due to the larger size of the assemblage. Fish, however, were only observed in the Medieval assemblage, and one cat jaw was recovered from a Post-medieval pit that contained early Medieval ceramic.

	Horse	Cattle	Sheep/Goat	Pig	Dog	Deer	Cat	Bird	Fish	Total identified (NISP)
Saxo-Norman	2	16	53	24	2	1	0	3	0	336
Medieval	0	44	11	22	0	0	0	0	22	9
Post-medieval	0	43	29	14	0	0	14	0	0	7
Undated	0	33	33	33	0	0	0	0	0	3
Total	2	17	51	24	2	1	0	3	1	355

Table AB2: Species percentages (as proportion of identified bones)

The number of ageable bones is relatively high, partially due to the large number of sheep/goat mandibles, and includes foetal individuals. Several bones could be sexed, 55 measured, and ten with pathological modifications can facilitate interpretation of animal treatment and health.

Butchery marks were seen on a large number of bones, mainly consisting of helical fractures from marrow extraction, chops to portion the carcass and a few cuts from filleting and disarticulation. Some ribs showed splintering consistent with snapping of fresh bone during consumption. A small but significant number of bones had been burnt, and the position and extent of scorching on some could be used to indicate cooking activity. An odd texture and appearance, similar to that documented as 'ivoried' but more translucent, almost marbled, was observed on 51 bones from Saxo-Norman pits and ditches. This effect has been noted on many sites and linked to cooking, although other interpretations have been suggested, and it is interesting that it is so prevalent on the Saxo-Norman bones here.

Several deposits contained a large proportion of bones from the head and feet which may be butchery waste, and several deposits of articulated lower limbs indicate direct, rapid deposition (perhaps also primary butchery waste) into some features.

Three worked fragments were recovered from two Saxo-Norman ditch segments; object 36 is a polished piece with rounded flattened ends, one roe deer-sized radius

had been worked into a wedge shape and a piece of long bone had been fashioned into a rod.

Recommendations

As part of the only significant material evidence from Saxon Amesbury, this assemblage is important, particularly as the bone originates from securely dated deposits and is in good condition, with some interesting deposits that could directly reflect activity.

The potential for understanding animal husbandry in this area is moderate, and interpretation of how and which animals were raised and selected for meat consumption can be made, as well as better understanding of the exploitation of non-food and wild animals. The means by which domestic animals were butchered and deposited can be ascertained to an extent. The large number of sheep/goat mandibles can be used to interpret seasonality and flock structure, and the contextual position and associations of the ivoryed/marbled bone should be further investigated to try to determine the reason for this effect.

Further work should focus on the Saxon assemblage (with comments on how it differs to the later Medieval bones) and a full record should be made of the species, elements and characteristics of each fragment, to include butchery, measurements, *etc.* Analysis should then be carried out to elucidate taphonomic processes, carcass manipulation and methods of animal husbandry. The results should then be compared to other similarly dated sites and feature types to determine the nature of occupation and infer aspects of the status and function of this site.

Four bones should be photographed for reference and comparative purposes, and possible inclusion in the publication.

Time estimate

Contextual analysis and grouping of bones to be investigated: 0.5 days

Identification and data input: 5 days

Analysis: 3 days

Write up and comparative work including library reference: 3 days

External specialist (bird, fish and small mammals): 0.5 days

Photography of 4 fragments: 1 hour?

Total: 12 days & 1 hour (EW)?

Illustrations

Strange burning on cattle long bone

Broken healed burnt sheep ulna in 414

Oddly shaped ?deer radius wedge in 414

Pathological articulated cattle lower limb in 515