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FAUNAL REMAINS PROJECT
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ANIMAL BONES FROM TRIAL EXCAVATIONS AT POTTERNE, WILTSHIRE,
BY THE WESSEX ARCHAEOLOGICAL COMMITTEE, 1983, WITH
RECOMMENDATIONS FOR BONE RETRIEVAL IN PROPOSED FUTURE
EXCAVATIONS

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The comments below are based on a swift appraisal of c.400 bones from an 8m x 1m trench and examination of material that had been washed through 600 μ and 177 μ sieves. The stratigraphy involved was as below:

Layer 2		recent ploughsoil containing Late Bronze Age/ Iron Age material (not sampled)
Layer 3	}	L.B.A. midden
4		
5		
6		
7		
Layer 8		hearth at midden /occupation interface
Layer 9	}	occupation deposits.
10		

The bones discussed here have been retained but the data have not been computer coded.

General Condition of the Animal Bones

About 8% of the bones were measurable and all were very well-preserved and hard. Most had a slightly translucent, 'ivoried' appearance typical of some well-preserved collections probably as a result of swift burial and exclusion from air but in this case the preservation may be due to a slight mineralisation of all the bones and a white concretion on some of them could be tufa. Bone from the lower layers may be more encrusted than that from the midden although this was only a small sample from which to assess such differences.

The mineralised nature of these bones gave them a clear smooth surface and made the distinction of immature bones (which usually look porous in archaeological material) more difficult.

At least 12% of the bones showed canid gnawing and, because of the lack of subsequent erosion of the surface, this was readily visible. The amount of canid gnawing has no doubt reduced enormously the number of measurable bones as it tends to begin

in the joint area where most measurements are taken.

L.B.A. Midden Material

The fragments retrieved from excavation of these layers in the trial were as in Table 1. Examination of the sieved sample results suggested that retrieval by trowelling had been very efficient with no recognizable bones appearing on the sieves that had not been retrieved by eye. As this is only one aspect of sieving, however, more will be said about this in the recommendations. With such a small sample it is not possible to make comparisons between the layers which have any meaning but it is the impression of the excavator (C. Gingell) that Layer 7 may have built up more quickly than the others with at least one whole skull and two partial skulls of cattle preserved in it in this trench. The identifiable bones seen from this layer were mostly cattle but the sample only contained c.50 bones. The lack of horse is noteworthy.

There were two burnt fragments, one in Layer 3 and one in Layer 5.

Hearth (Layer 8)

The very small sample of bones from this layer consisted of nine identified to cattle or cattle-size, ten to pig and eleven to sheep. There were another 35 fragments of sheep-sized species. Of these approximately 75 fragments, 10 were burnt.

Occupation Deposits

Again, only a very small sample was examined. Some bones were very well preserved with considerable mineralisation. There were 22 cattle fragments, six of pig and 18 of sheep. In addition there were another 15 fragments of sheep-sized species. As in the other layers whereas there was definite evidence of sheep no definite goat bones were identified.

Recommendations

The animal bones from any excavations at Potterne would be valuable on two counts. For archaeozoological studies in Wessex they represent an important early sample quite unlike those studied

TABLE 1 Bones from the L.B.A. midden

	<u>cattle</u>	<u>sheep</u>	<u>pig</u>	<u>total</u>
skull	8	7	5	20
hyoid		1	.	1
jaw	3	12	4	19
rib	9	6		15
vertebrae	3	10	7	20
scapula	3	10	1	14
humerus	4	4	1	9
radius/ulna	4	7	4	15
pelvis	2	2	2	6
femur	1	2	1	4
tibia		9		9
fibula			3	3
carpal/tarsal	6	2	1	9
metapodial	5	23	1	29
phalanx		2	7	9
loose teeth	12	9	5	26
other	62	42	4	108
sheep-sized		40		40
total	122	148	46	356

notes In addition to the above :

1 antler roe deer, Capreolus capreolus

1 radius fragment possibly red deer, Cervus elaphus

1 dog mandible

in recent years. They are better preserved than animal bones from this period normally are and this would allow a more representative record of butchery and canid gnawing to be made. Secondly, they would help to elucidate the succession of activities which went on at this settlement (Maltby n.d.)

The bones would also provide an important corpus of measurements for the three major domestic species, something not yet available for Wiltshire. Because of the very good preservation the mandibular remains, especially those of sheep, would provide tooth eruption and wear data which could be compared immediately with the large corpus of data of this type from Hampshire settlements in an attempt to recognize differences in age structure and tooth wear sequence (Grant 1982).

It is recommended that in any future excavations animal bones are retrieved by careful trowelling from all layers. The bones are slightly flexible when under excavation and damp and are only likely to become friable if dried out excessively. They are much stronger than animal bones from most other LBA/IA excavations in Wessex and should not normally need more than the usual careful treatment and packing (Coy 1978) although, because of their particular interest, it is recommended that all sheep jaws with teeth are enclosed in a bag within the main bag. It is also recommended that bulk soil samples of c. 5 litres are taken at intervals in all excavated layers. Apart from the importance of this site for botanical information (not the province of this paper) the information that these bulk samples will provide includes a check on the quality of retrieval, and monitoring for remains of small mammals, birds, and fish.

It is recommended that the analysis of these bones should include the recording of data on gnawing and butchery and that the bones should be measured and tooth wear data recorded wherever possible. It would also be of interest to record more carefully than usual the incidence of immature individuals as it is likely that preservation of their bones may be better than usual on settlements of this period.

References

- Coy J P (1978) First aid for animal bones Rescue
- Grant A (1982) The use of tooth wear as a guide to the age of domestic ungulates In (Wilson B, Grigson C, & Payne S. eds) Ageing and sexing animal bones from archaeological sites British Archaeological Reports, British Series, 109
- Maltby J M (n d) In (Barker G W W & Gamble C S) Beyond Domestication Academic Press, forthcoming