

COTTAM A

AN EVALUATION OF THE VERTEBRATE ANIMAL REMAINS

ARCHIVE REPORT

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(edited by J D Richards 2009)

INTRODUCTION

The entire assemblage, from deposits ranging from Iron Age to Anglo-Saxon in date, was submitted for an evaluation of its osteo-archaeological potential. This consisted of 3470 animal bone or animal bone fragments, including some 1611 which were, at the outset, considered to be too fragmentary or small to be identifiable. The general preservation of the bone was good and generally easy to handle. Some bones were complete and it was possible to take measurements to assess stature. The aim of this evaluation was to identify the bone and tooth elements, species, age, sex, and pathology of each specimen in the assemblage, where possible.

METHODS

Before examination the matrices were cleaned off the material in all cases, and the entire assemblage was washed and mechanically dried. The assemblage was analysed in the Human Palaeoecology Laboratory at the King's Manor, Department of Archaeology, University of York. Microscopes and magnifying glasses were used to identify gnaw marks, butchery cuts etc..

RESULTS AND DISCUSSION

Each context was examined as a separate entity, and contexts containing animal bone have then been grouped with others from the same period. The small mammal bones which were identified in the bulk sieve washovers have not been included as they were not available for study. However, such was the quality of the hand collection of the bones on site that several small mammals are quite well represented but are, as yet, unidentified to species.

Wherever possible, bone fragments which have been found to fit others have been reconstructed to aid better identification. There was a fair amount of erosion and most of the post mortem damage was caused by the machine used in the mechanical excavation of contexts **5078** and **5098**, or occasionally by trowel damage.

The majority of the assemblage appears to represent domestic food waste. There is evidence of numerous butchery cuts and chewing and gnawing (possibly by rodents). Context **5078** was found to have part of what appeared to be a broken knife blade embedded in the distal end of a *Bos* humerus. This was subsequently x-rayed and verified. Several of the distal ends of bones appear to have been smashed, this may have been for marrow extraction but there is no substantial evidence for this. There were a few examples of traumatic injury and stress related arthropathies; one may show evidence of ossified haematoma. Several horse and sheep teeth displayed an abnormal tartar build up. A few wild animals such as badger and fox may be intrusive but deer is also present.

Context **5060** is of particular interest as there are remains of an immature *Bos*, or calf, most of which relates to the front half of the animal. Context **5009** contained the partial remains of a human newborn infant.

Period I

I.1: Natural / animal features

5011, natural ditch fill, contained 4 bones, *Ovis*, large mammal.

5062, natural ditch fill, contained 8 bones, *Caf*, *Bos*, *Equus*, unidentified.

I.2: Possible Late Iron Age features

5013, natural fill, contained 8 bones, *Bos*, *Ovis*, *Sus*, large, medium and small mammal.

5021, ditch fill, contained 2 bones, both unidentifiable.

Period II: Romano- British farmstead

II.1: Quarry hole

5078, pit fill, section removed by machine; contained 364 bones, *Eq/Bos*, *Vulpes*, *Equus*, *Bos*, *Sus*, *Ovis*, *Ovicaprid*, *Cervus*, *Caf*, *Gag/bird*, large, medium and small mammal, unidentified.

This context contained an average mix of species for an occupation site although deer might be considered unusual, as were the remains of fox. There were several large bones from this context and a *Bos* distal left humerus was found to have part of a broken off knife blade in it (sf114), confirmed by X-ray.

5098, pit fill, primary fill of machine-cut trench, contained 94 bones, *Caf*, *Bos*, *Ovis*, *Eq/Bos*, *Meles*, *Sus*, large mammal. This context contained the largest and best preserved bones from the assemblage.

5105, ditch fill, contained 5 bones, *Bos*, *Ovis*.

II.2: E-W enclosure ditches

5010, ditch fill, contained 11 bones, *Bos*, *Ovis*, large and small mammal, unidentified.

5053, ditch fill, contained 2 bones, both unidentifiable.

5071, pit fill, contained 2 bones, *Sus*, unidentifiable.

5009, fill, contained 41 bones, *Equus, Bos, Ovis, Sus, Eq / Bos, Caf*, large and medium mammal. Parts of the skeleton of a human infant were also identified, including part of at least one humerus, radius and ulna, parts of both scapulae, numerous rib fragments, some with articular ends, both clavicles, two metacarpals, and four phalanges. Parts of the skull were also recovered, broken into numerous fragments. These are very thin but three pieces show evidence of pathology in the form of pitting and thickening of the bone, suggesting some form of pathological stress reaction, possibly caused during birth. There are two petrous parts and one ear bone, parts of the sphenoid, fragments of frontal orbit, and part of the left and right mandible including the mandibular ramii. Numerous pieces of neural arches plus at least six vertebral centra were also recovered. There are two milk teeth, possibly three incisors and one milk molar; the crowns are in early stages of development. The degree of crown development suggests a neonate to one or two weeks old. There is no trace of any of the lower limbs, either with **5009**, or from the contexts above and below. It is possible that the burial was inserted into the late Romano-British context from the later Anglo-Saxon occupation.

5032, ditch fill, contained 4 bones, *Bos, Ovis, Gag*/bird.

5058, fill, contained 14 bones, *Ovis, Bos, Equus*, large mammal.

5072, fill, contained 3 bones, *Sus*, unidentified,

5072b, fill, contained 2 bones, *Equus*.

5085, fill, contained 11 bones, *Bos, Equus*, large mammal, and unidentified.

Contexts **5076** and **5112**, trench, ditch fill, contained 11 bones, *Bos, Ovis, Sus, Equus*.

5101, ditch fill, contained 4 bones, *Eq / Bos, Equus*, small mammal.

5104, ditch fill, contained 24 bones, *Bos, Ovis, Sus, Ovicaprid, Equus*, large and medium mammal.

5093, ditch cut, contained 1 bone, *Caf*.

II.3: N-S trackway

5026, ditch fill, contained 14 bones, *Bos, Ovis, Equus, Sus*, large, medium and small mammal, unidentified.

5004, ditch fill, contained 22 bones, *Ovis, Bos, Sus, Equus*, large, medium and small mammal, unidentified.

II.4: Occupation surface

5031, occupation layer, contained 394 bones, mostly *Ovis*, with *Bos*, *Eq / Bos*, *Equus*, *Ovicaprid*, *Sus*, *Gag / bird*, medium, and small mammal, unidentified. **5031**. This context contained an average mix of what is considered to be food refuse. There are butchery cuts and chewing and gnawing marks on many of the bones.

5060, pit fill, contained 75 bones, almost exclusively immature *Bos / calf*. The remains consisted almost entirely of what was identified as skeletal parts of the hind end of an immature animal, from the mid back and including the tail. There appears to be no obvious reason why only the hind portion survived; there was no trace of any forelimbs.

5077, occupation layer, contained 54 bones, *Equus*, *Bos*, *Ovis*, *Eq / Bos*, *Caf*, small mammal, unidentified.

5079, fill, contained 106 bones, *Bos*, *Sus*, *Equus*, large, medium and small mammal, unidentified.

5110, fill, contained 1 bone, *Ovis*.

II.5: External structure

5006, fill, and structural fabric, contained 2 bones, both *Ovis*.

5008, layer, contained 44 bones, *Bos*, *Ovis*, *Equus*, *Sus*, large and small mammal, unidentified.

II.6: Miscellaneous features

5049, pit fill, contained 3 bones, *Ovis*, *Eq / Bos*, unidentified.

Period III: Anglo-Saxon occupation

III.1: Backfilling of quarry hole

5001, possible midden material, contained 1 bone, *Bos*, *Equus*, *Ovis*, small mammal, unidentified.

5054, pit fill, contained 60 bones, *Ovicaprid*, *Ovis*, *Bos*, *Caf*, *Equus*, Large mammal, unidentified.

5068, pit fill, contained 115 bones, *Ovicaprid*, *Eq / Bos*, *Sus*, *Ovis*, *Bos*, *Caf*, *Gag / bird*, small, medium, large mammal, unidentified. The type of domesticated species here does not appear to differ from the other periods of site occupation.

III.2: Backfilling of boundary ditches

5043, ditch fill, contained 230 bones, *Eq/ Bos, Caf, Bos, Sus, Ovis, Gag/ bird, Equus, Cervus, Ovicaprid*, large mammal, unidentified. There were more examples of *Ovicaprid* from this area than the rest of the site, although this may be due to the way in which this context was identified, and *Ovicaprid* is a less specific term than *Ovis*.

III.3: Structural features

5080, pit fill, contained 28 bones, *Bos, Ovis*, small mammal, unidentified.

Period IV

IV.2 General ploughsoil

5000, overlay whole of excavated area, contained 211 bones, *Ovis, Sus, Meles, Equus, Eq/ Bos, Gag/ bird*, large, medium, small mammals, unidentified. This context contained the usual mix of domesticated animals with the addition of badger which was presumably intrusive.

5038 contained 1 bone of *Ovis*.

5066 contained 1 bone: small mammal.

Terms used

<i>Ovis</i>	Sheep
<i>Sus</i>	Pig
<i>Bos</i>	Cattle
<i>Ovicaprid</i>	Sheep/ goat
<i>Equus</i>	Horse
<i>Eq /Bos</i>	Horse/Cattle?
<i>Meles</i>	Badger
<i>Gag/bird</i>	Chicken/ bird
<i>Vulpes</i>	Fox
<i>Cervus</i>	Deer

Acknowledgements

The following people are acknowledged for their help with the Cottam assemblage.

Frances Booth, Susannah Jemmeson, Tracy Merrifield, Vicky Pogrel, Clair Prance, Claire Ross and Alexis Willett. Thanks too to Professor Don Brothwell who verified the majority of our identifications!