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**Evaluation of biological remains from excavations at
Flat Lane, Barmby Moor (site code: TSEP 254)**

by

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Summary

A series of sediment samples and small quantities of hand-collected bone and shell from deposits revealed by excavations at Flat Lane, Barmby Moor, were submitted for an evaluation of their bioarchaeological potential.

The hand-collected shell and the biological remains (a few snail shells and shell fragments) recovered from the sample were of no interpretative value. The battered nature of the bone fragments suggests that some reworking of deposits is likely—the inclusion of human remains supports this hypothesis.

No further analysis of these deposits is recommended but should material from Trench 2 deposits prove to be tightly dated, then a basic archive of the vertebrate remains, including measurements and tooth wear records, should be made.

KEYWORDS: FLAT LANE, BARMBY MOOR; EVALUATION; BRONZE AGE TO ROMANO-BRITISH; LAND SNAILS; VERTEBRATE REMAINS

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Introduction

An archaeological evaluation excavation was carried out by Humber Field Archaeology at Flat Lane, Barmby Moor (NGR: XX), between 4 November and 17 November 1999.

A series of sediment samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992), a small quantity of hand-collected bone, and a very small amount of hand-collected shell (from three contexts), were recovered from the deposits revealed by three trial trenches. Pottery recovered from the deposits was mostly of Romano-British date (predominantly 2nd century) with some earlier (Iron Age and Roman) and later (late medieval/post-medieval) sherds. A Bronze Age thumbnail scraper was also recovered from Trench 2.

All of the material was submitted to the EAU for an evaluation of its bioarchaeological potential.

Methods

Sediment samples

The sediment samples were inspected in the laboratory. One of the samples was selected for investigation and its lithology was recorded, using a standard *pro forma*, prior to processing, following the procedures of Kenward *et al.* (1980; 1986), for recovery of plant and invertebrate macrofossils. The washover and residue were examined for plant remains. The washover was also examined for invertebrate remains, and the residue was examined for other biological and artefactual remains.

Hand-collected shell

Brief notes were made on the preservational condition of the shell and the remains identified to species where possible.

Vertebrate remains

Data for the vertebrate remains were recorded electronically directly into a series of tables using a purpose-built input system and *Paradox* software. For each context (or sample) subjective records were made of the state of preservation, colour of the fragments, and the appearance of broken surfaces ('angularity'). Additionally, where more than ten fragments were present, semi-quantitative information was recorded concerning fragment size, dog gnawing, burning, butchery and fresh breakage.

Where possible, fragments were identified to species or species group, using the reference collection at the EAU. Fragments not identifiable to species ('B' bones *sensu* Dobney *et al.* forthcoming) were grouped into categories: large mammal (assumed to be cattle, horse or large cervid), medium-sized mammal 1 (assumed to be caprovid, pig or small cervid), small mammal (rats, mice, voles etc), unidentified fish, unidentified bird, and completely unidentifiable.

Results

Sediment samples

The results are presented in context number order. Archaeological information, provided by the excavator, is presented in square brackets.

Context 2014 [Fill of large ditch. Romano-British (2nd century)]

Sample 2/T (2 kg sieved to 300 microns with washover)

Moist, light grey-brown, unconsolidated, silty sand with small (2 to 20 mm) fragments of flint and chalk common.

The very large residue of about 500 cm³ was of chalk and flint gravel (to 25-30 mm) with sand; the tiny washover contained a single *Cepaea* sp. shell and fragments of some other snails including a few *Trichia* sp., a *Vallonia* sp., and many small unidentified shell fragments. No plant or insect remains were recovered.

Hand-collected shell

Three small bags of hand-collected snail shells (from three contexts; 2014, 2020 and 5004) were recovered. Most of the shells were of fairly well preserved (possibly modern) *Cepaea* sp. but Context 5004 also gave a few *Trichia* sp. and fragments of other unidentified snails.

Hand-collected vertebrate remains

Deposits from Trench 2 (Contexts 2008, 2014, 2018, 2020 and 2030) produced 209 fragments, of which eleven were measurable and three were mandibles with teeth *in situ*. On the whole, vertebrate remains from this site were moderately well preserved, although most fragments were battered in appearance. Material from Context 2014, which produced the bulk (174 fragments) of the assemblage, contained a small number of acid etched fragments. Bones from this deposit were extensively damaged during excavation, resulting in a high degree of fragmentation and occasionally preventing identification to species and inclusion within the total number of measurable fragments.

Remains of horse were most numerous, closely followed by those of cattle, with caprovids and pigs represented by a total of only four fragments. A range of elements was present for both horse and cattle, but isolated teeth formed a large proportion of these. Insufficient fragments were recovered for meaningful interpretation of the deposits. The emphasis on isolated teeth may be the result of taphonomic bias, whereby enamel survives better than bone in poor preservational conditions. Shallow chop marks were noted on one of the horse pelvis fragments and it was possible that some of the other horse bones (mandible and tibia) had been chopped. However, conclusive evidence of butchery proved elusive because of the extensive damage caused by dog gnawing and the erosion of the bone surfaces. Most of the heavily worn horse incisors almost certainly represented a single individual and suggested an age of 10+ years.

Additionally, two dog bones and two human long bone shaft fragments (femur and tibia) were identified from Context 2014.

Table 1 presents a summary of the vertebrate remains.

Discussion and statement of potential

The hand-collected shell and the biological remains (a few snail shells and shell fragments) recovered from the sample were of no interpretative value.

The battered nature of the bone fragments suggests that some reworking of deposits is likely. The inclusion of human remains supports this hypothesis.

Recommendations

No further analysis of these deposits is recommended but should material from Trench 2 deposits prove to be tightly dated, then a basic archive of the vertebrate remains, including measurements and tooth wear records, should be made.

Retention and disposal

The vertebrate assemblage should be retained for the present but any remaining sediment samples may be discarded (unless they are to be sieved for possible small bone and artefact recovery).

Archive

All material is currently stored in the Environmental Archaeology Unit, University of York, along with paper and electronic records pertaining to the work described here.

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Table 1. Summary of hand-collected vertebrate remains from excavations at Flat Lane, Barmby Moor.

Sitecode	Context	No. of fragments	Notes
TSEP254	2008	15	Small assemblage including horse scapula (measurable); cow scapula and metatarsal; large-sized mammal shaft fragment; medium-sized mammal shaft fragment plus few unidentified bits.
TSEP254	2014	174	Quite fragmented but mostly recent damage during excavation rather than in antiquity. Horse (22 fragments) and cow (19) represented, only few caprovid fragments (2) and 2 dog bones. Pig – broken canine only.
TSEP254	2018	2	Horse humerus - dog gnawed; caprovid metacarpal shaft.
TSEP254	2020	16	2 cow fragments - mandible with ?M2 erupting; unidentified mainly large-sized mammal vertebrae.
TSEP254	2030	2	Horse tibia and a very heavily fragmented cow scapula (fresh breakage).