

(92/14]

An evaluation of biological remains from  
excavations at 2 St Maurice's Road, York  
(YAT/Yorkshire Museum site code 1992.12)

by

Michael Dainton, Keith Dobney, and Allan Hall

Summary

Two samples of sediment, two 'spot' samples, and a small amount of bone were submitted for assessment of their potential for bioarchaeological interpretation. The samples proved to be barren of plant or invertebrate remains. The bone assemblage was rather small and poorly preserved, but evidence of probable bone working was noteworthy.

Authors' address:

Environmental Archaeology Unit  
University of York  
Heslington  
York YO1 5DD

Telephone: (0904) 433843-51

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Four samples from excavations at 2 St Maurice's Road were submitted for examination. Two were 'general biological analysis' samples from the fills of a Roman ditch, the third a sample of mortar and the fourth a coprolite. They are considered here in context number order.

**Context 1022**

Sample 4: a roughly cylindrical coprolite, measuring approximately 45 mm (maximum length) by 30 mm (maximum diameter) and consisting of granular, yellow-brown to orange-brown mineral material, evidently rich in (unidentifiable) fragments of bone. A small amount of freshly excavated material was disaggregated in dilute hydrochloric acid and the solution examined under the transmission microscope; no evidence for intestinal parasite eggs was noted. It is most likely that this was produced by a large dog.

**Context 1023**

Sample 3: mid brownish-grey, moist, stiff clay with abundant mortar. No appropriate further action could be undertaken with this material and it was returned to the excavator.

**Context 2014 [fill of Roman ditch]**

Sample 1: slightly calcareous dark grey-brown, moist, plastic to sticky sandy silty clay with orange flecks of mineralised material in small voids, with traces of oyster shell and mortar at mm scale. A 1 kg subsample was treated following methods of Kenward *et al.* (1980) and Kenward *et al.* (1986) involving disaggregation, sieving and paraffin flotation to extract insect remains.

The flot for this was devoid of invertebrate or plant remains, other than a few fragments of charcoal of sand-grain size. There was a little charcoal, mostly less than 10 mm, in the residue, along with traces of bone less than 5 mm, some more or less tubular concretions (perhaps casts of the walls of worm burrows or root channels), coal, and brick/tile in a matrix of sand and stones to 60 mm.

**Context 2017 [fill of Roman ditch]**

Sample 2: light/mid grey-brown, moist, plastic to sticky, somewhat heterogeneous, (?slightly sandy) clay (with a rather gritty texture perhaps resulting from mineralisation rather than the presence of sand grains), with traces of charcoal and tiny flecks of shellfish, and some light/mid orange-brown clay.

A 1 kg subsample was treated as for sample 1. The flot contained a few scraps of charcoal

and a single petal of a flower of a leguminous flower, of no interpretative significance. The residue contained a small amount of minute charcoal fragments to 10 mm, traces of brick/tile to 20 mm and a fowl bone (see below), with sand and stones to 20 mm, but most of the residue comprised amorphous slightly calcareous concreted material which appeared to consist of sand and clay with cavities or vesicles with a smooth wall of red-brown colour; these were perhaps only concreted 'soil' forming round worm burrows or root channels and presumably formed in a living soil rather than a sediment forming under water. If this ditch fill formed as a waterlain deposit (for which there is no biological evidence), it may have incorporated these concretions from reworked soil in the catchment.

### The animal bone assemblage

A small assemblage of animal bones was recovered from the site, amounting to no more than two standard-sized (30 cm-cubed) boxes. Most of the assemblage (from 17 contexts) originated in Roman deposits (several contexts possibly dated to the late 3rd century) with the remainder representing poorly dated material of post-Roman to modern date. All material represented hand-collected fragments with very limited numbers coming from GBA samples. Of a total of 258 fragments, 126 (49%) were identified to species.

Preservation of the whole assemblage ranged from poor to fair with the two largest bone bearing contexts (2001 and 2002) containing the least well preserved material. These contexts, described as cobbled yard or road surfaces, also contained numerous small rounded pebbles some of which were impacted into the fragile 'spongy' bone present at the epiphyses. A single bone fragment, from context 2008, showed evidence of iron staining.

Cattle were the most commonly represented domestic animal (100 fragments), in terms of total fragment number, followed by horse (14 fragments) with caprovid and pig remains present in negligible amounts (4 fragments each). A complete domestic fowl (*Gallus f. domesticus*) tarso-metatarsus was recovered from GBA sample number 002 whilst two goose (*Anser anser*) humeri fragments were presented in the hand-collected assemblage. However, with such small numbers of bones and the lack of systematic quantitative recovery procedures, the range of species and estimation of their relative frequencies is fraught with problems.

A single foetal humerus fragment, from context 3004 was identified as human. In addition, two oyster shells (*Ostrea edulis*) were recovered from Roman deposits.

From the total assemblage, 35 fragments for which useful measurements could be taken were recovered, the bulk (24) from cattle. Only 1 cattle mandible with intact teeth was present, whilst 56 fragments provided some evidence of age at death.

A small proportion of bones showed evidence of normal butchery practices; of these, a single horse humerus displayed knife cuts on the proximal end. Four metapodials showed evidence of possible working in the form of rough shaping of the distal ends. These may well represent the manufacture of bone skates. In addition, a number of cattle bones (10) exhibited numerous small 'gouge-like' depressions throughout the shaft region, which appeared to have resulted from blows from a small cleaver. Almost all were metapodials and all came from contexts 2001 and 2002 (cobbled surface).

## Implications

There appears to be no future in the analysis of these deposits for plant and invertebrate remains, though the possibility of contexts with better preservation elsewhere in the area cannot be discounted on the basis of an examination of such a small amount of material.

The animal bone assemblage from 92.12 is too small for any firm conclusions to be drawn. The majority of material came from general Roman deposits and a potentially modest bone assemblages may well be recovered from this period. However the poor preservation, especially from the richer contexts, limited range of species, and the small numbers bones providing age at death information, renders the assemblage of low priority. The small number of caprovid remains and the more numerous horse are worthy of note, although the bones of larger animals - at least from the large cobbled surface contexts 2001 and 2002 - may well have been more suitable for packing in deliberately dumped deposits, whilst those of sheep and goat are more readily fragmented and may be under-represented.

Evidence of possible bone working in the area, although almost certainly from redeposited material, is worthy of note and may provide important additional information from a larger assemblage.

Since few large Roman assemblages have been recorded from York any material of this date is potentially important.

## References

Kenward H. K., Hall A. R. and Jones A. K. G. (1980). A tested set of techniques for the extraction of plant and animal macrofossils from waterlogged archaeological deposits. *Science and Archaeology* 22, 3-15.

Kenward H. K., Engleman C., Robertson A. and Large F. (1986). Rapid scanning of urban archaeological deposits for insect remains, *Circaea* 3, 163-72.

Please note: Information concerning the archaeological context and dating of the deposits and biota considered in this report have been provided by York Archaeological Trust; the Environmental Archaeology Unit takes no responsibility for changes in archaeological interpretation or re-phrasing which may have occurred since this report was compiled.