

Palaeoecology Research Services

**Evaluation of biological remains from excavations at
Bedford Hotel, 108-110 Bootham, York
(site code: YORYM 2003.250)**

by

Allan Hall, Deborah Jaques and John Carrott

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*Palaeoecology Research Services
Unit 8, Dabble Duck Industrial Estate
Shildon, County Durham DL4 2RA*

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Summary

An archaeological evaluation excavation was carried out by York Archaeological Trust at Bedford Hotel 108-110 Bootham, York, during March 2003. A single sediment sample and a small amount of hand-collected bone, recovered from deposits of Roman and medieval date, were submitted to PRS for an evaluation of their bioarchaeological potential.

The sample gave only charred plant remains and a small quantity of unidentified mammal bone. The small washover was almost entirely of charcoal, and of this almost all root/basal twig fragments of heather; with it, were leafless charred twig fragments of heather, and at least one leafy shoot tip. These remains, and the few other identifiable specimens present, point clearly to the burning of peat or turves, perhaps most likely turves from an area of heathland.

Although preservation of the vertebrate remains was good, the presence of an isolated human shaft fragment (Context 1021), and other artefactual evidence, suggests that most of the deposits contained some redeposited or residual material. Additionally, the assemblage was too small for detailed analysis but initial observations suggest that much of the material from the deposits of Roman date (Contexts 1021 and 2013) was a mix of butchery and domestic refuse. Very little bone was recovered from the later, medieval, deposits. The remains demonstrate the potential for the survival of bone within these deposits and the butchery techniques observed suggest that much of it may be of Roman origin.

No further work is required on the sample or the hand-collected vertebrate remains, but any development at this site should take account of the potential of deposits to furnish biological remains with a significant archaeological information content and appropriate sampling and bioarchaeological investigation should be undertaken.

KEYWORDS: BEDFORD HOTEL; 108-110 BOOTHAM, YORK; EVALUATION; ROMAN; MEDIEVAL; CHARRED PLANT REMAINS; VERTEBRATE REMAINS; BURNT TURVES

Contact address for authors:

Palaeoecology Research Services
Unit 8
Dabble Duck Industrial Estate
Shildon
County Durham DL4 2RA

Prepared for:

York Archaeological Trust
Cromwell House
13 Ogleforth
York YO1 7FG

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Evaluation of biological remains from excavations at Bedford Hotel, 108-110 Bootham, York (site code: YORYM 2003.250)

Introduction

An archaeological evaluation excavation was carried out by York Archaeological Trust at Bedford Hotel, 108-110 Bootham, York (NGR SE 5975 5254), during March 2003.

A single sediment sample ('GBA' *sensu* Dobney *et al.* 1992) and a small amount of hand-collected bone were submitted to PRS for an evaluation of their bioarchaeological potential.

Methods

Sediment sample

The sediment sample was inspected in the laboratory and its lithology recorded, using a standard *pro forma*, prior to processing, following the procedures of Kenward *et al.* (1980; 1986), for the recovery of plant and invertebrate macrofossils.

The washover resulting from processing was examined for plant and invertebrate macrofossils. The residue was examined for larger plant macrofossils and other biological and artefactual remains.

Hand-collected vertebrate remains

For the hand-collected vertebrate remains records were made concerning the state of preservation, colour of the fragments, and the appearance of broken surfaces ('angularity'). Other information, such as fragment size, dog gnawing, burning, butchery and fresh breaks, was noted, where applicable.

Fragments were identified to species or species group using the PRS modern comparative reference collection. The bones,

which could not be identified to species, were described as the 'unidentified' fraction. Within this fraction fragments were grouped into a number of categories: large mammal (assumed to be cattle, horse or large cervid), medium-sized mammal (assumed to be caprovid, pig or small cervid) and totally unidentifiable.

Results

Sediment sample

Archaeological information, provided by the excavator, is given in square brackets. A brief summary of the processing method and an estimate of the remaining volume of unprocessed sediment follows (in round brackets) after the sample number. No invertebrate remains were recovered from the sample.

Context 2013 [upper fill of a large cut feature, perhaps a ditch, of Roman date]

Sample 1/T (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain)

Moist, mid to dark grey-brown, crumbly to unconsolidated (working soft and slightly plastic), slightly sandy clay silt, with some charcoal and bone fragments present.

There was a moderately large residue of about 200 cm³ of sand and gravel (to 35 mm) including some ceramic building material (to 5 mm). There were also some glassy slag-like fragments (to 15 mm) which may have come from burning plant material. The small washover of about 80 cm³ was almost entirely of charcoal, and of this almost all root/basal twig fragments (to 20 mm) of heather (*Calluna vulgaris* (L.) Hull); with it, were leafless charred twig fragments of heather, and at least one leafy shoot tip. These remains, and the few other identifiable specimens present point clearly to the burning of peat or turves, perhaps most likely turves from an area of heathland.

This sample also produced 26 small fragments of bone (6 g) which were all unidentified, but represented the

remains of large and medium-sized mammals. One fragment was burnt.

Hand-collected vertebrate remains

Eight deposits, representing both Trenches 1 and 2, produced a total of 61 fragments of hand-collected bone. Contexts 1000 and 2000 were described by the excavator as unstratified and the material (11 fragments) recovered from these contexts has been excluded from this report. The remaining 50 fragments were recovered from deposits of Roman and medieval date, with Context 2013 (upper most fill of Roman roadside ?ditch) producing the bulk of the assemblage.

Preservation of the vertebrate remains was, on the whole, good, with little evidence of erosion or surface damage. Some fresh breakage was noted, however. Evidence of butchery was observed on a number of bones. Two cattle scapulae from Context 1017 had been heavily chopped around the glenoid cavity and additionally, on the more complete example, it was noted that the spine, which runs down the blade of the scapula, had also been removed in part. This technique of butchery tends to be characteristic of the Roman period and has been observed on cattle scapulae from many sites of Roman date, including those from 4th century deposits at Wellington Row, York (Carrott *et al.* 1995), from 1st century deposits at Holmes grain warehouse, Lincoln (Dobney *et al.* 1996) and from Heybridge, Essex (Johnstone and Albarella 2002). The scapulae with trimmed glenoid cavities and chopped spinae from Lincoln were interpreted as possibly representing brined and cold smoked joints, the trimming allowing access for the salt into the muscle mass (Dobney *et al. ibid.* pp. 26-27).

Cattle remains were the most numerous of the identified fragments, with sheep/goat and pig also present. Single fragments of horse and dog were identified from Context 1021, whilst this deposit also produced a human tibia shaft fragment. Most of the 'unidentified' fraction consisted of large mammal shaft, rib and vertebra fragments, which probably represent cattle. Initial observations suggest that much of the material from the deposits of Roman date (Contexts 1021 and 2013) was a mix of butchery and domestic refuse. Very little bone was recovered from the later, medieval horticultural build-up deposits.

Three fragments were measurable and one mandible with teeth *in situ* was noted.

Discussion and statement of potential

The data from the charred plant remains add to the growing body of evidence for exploitation of heathland habitats in the Roman period in the southern and central Vale of York (Hall 2003), perhaps reflecting a landscape by this period largely devoid of trees and necessitating the use of peatland resources for fuel, as previously pointed to by the evidence of raised-bog peat in the fills of the Roman wells at Skeldergate (Hall *et al.* 1980) and The Bedern (Kenward *et al.* 1986). The material also represents a very rare example of the survival of biological remains in this part of York and, in particular, in the vicinity of a major Roman road to the city.

Although preservation of the vertebrate remains was good, the presence of an isolated human shaft fragment (Context 1021), and other artefactual evidence, suggests that most of the deposits contained some redeposited or residual material. Additionally, the assemblage was too small for detailed analysis, with few fragments available for the reconstruction of age-at-death profiles and the size and shape of the animals represented. However, the remains do demonstrate the potential for the survival of bone within these deposits and the butchery techniques observed suggest that much of it may be of Roman origin.

Recommendations

No further work is required on the sample or the hand-collected vertebrate remains, but any development at this site should take account of the potential of deposits to furnish biological remains with a significant archaeological information content and appropriate sampling and bioarchaeological investigation should be undertaken.

Retention and disposal

All of the current material should be retained for the present.

Archive

All material is currently stored by Palaeoecology Research Services (Unit 8, Dabble Duck Industrial Estate, Shildon, County Durham), along with paper and electronic records pertaining to the work described here.

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References

- Carrott, J., Dobney, K., Hall, A., Issitt, M., Jaques, D., Johnstone, C., Kenward, H., Large, F., McKenna, B. and Milles, A. (1995). Assessment of biological remains from excavations at Wellington Row, York (sitecode 1988-9.24). *Reports from the Environmental Archaeology Unit, York* **95/14**, 17 pp. + 43 pp. appendix.
- Dobney, K., Jaques, D. and Irving, B. (1996). Of butchers and breeds. Report on vertebrate remains from various sites in the City of Lincoln. *Lincoln Archaeological Studies* **5**, vi + 215 pp.
- Dobney, K., Hall, A. R., Kenward, H. K. and Milles, A. (1992). A working classification of sample types for environmental archaeology. *Circaea, the Journal of the Association for Environmental Archaeology* **9** (for 1991), 24-6.
- Hall, A. (2003). Recognition and characterisation of turves in archaeological occupation deposits by means of macrofossil plant remains. *Centre for Archaeology Report* **16/2003**.
- Hall, A. R., Kenward, H. K. and Williams, D. (1980). Environmental evidence from Roman deposits in Skeldergate. *The Archaeology of York* **14** (3), 101-56. London: Council for British Archaeology.
- 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., Hall, A. R. and Jones, A. K. G. (1986). Environmental evidence from a Roman well and Anglian pits in the legionary fortress. *The Archaeology of York* **14** (5), 241-88 + Fiche 2. London: Council for British Archaeology.
- Kenward, H. K., Engleman, C., Robertson, A. and Large, F. (1986). Rapid scanning of urban archaeological deposits for insect remains. *Circaea* **3**, 163-172.

Table 1. Hand-collected vertebrate remains (excluding unstratified material) from excavations at Bedford Hotel, 108-110 Bootham, York.

Species		Number of fragments
<i>Canis f. domestic</i>	dog	1
<i>Equus f. domestic</i>	horse	1
<i>Sus f. domestic</i>	pig	2
<i>Bos f. domestic</i>	cow	10
Caprovid	sheep/goat	2
<i>Homo sapiens</i>	human	1
Large mammal		28
Medium-sized mammal		4
Unidentified		1
Total		50