Evaluation of biological remains from excavations at the former D. C. Cook site, Lawrence Street, York (site code: YORYM 2001.9444)

by

Allan Hall, Deborah Jaques and John Carrott

Summary

Five sediment samples and a single box of hand-collected animal bone from deposits revealed by excavations at the D. C. Cook site, Lawrence Street, York, were submitted for an evaluation of their bioarchaeological potential.

The few ancient plant remains recovered from the two sediment samples examined were of little interpretative value. Although mostly well preserved, the vertebrate assemblage was too small and, on the whole, too poorly dated to provide useful information.

No further work is recommended on the current material. Further excavation at this site seems unlikely to yield valuable material.

KEYWORDS: D. C. COOK SITE; LAWRENCE STREET; YORK; EVALUATION; ROMAN; MEDIEVAL; POST-MEDIEVAL; PLANT REMAINS; CHARRED PLANT REMAINS; VERTEBRATE REMAINS

Authors' address: Prepared for:

Palaeoecology Research Services Environmental Archaeology Unit Department of Biology P. O. Box 373 University of York York YO10 5YW

York Archaeological Trust

Cromwell House

11 Ogleforth

York YO1 2JG

Telephone: (01904) 433846/434475/434487

Fax: (01904) 433856 23 July 2001

Evaluation of biological remains from excavations at the former D. C. Cook site, Lawrence Street, York (site code: YORYM 2001.9444)

Introduction

An archaeological evaluation excavation was carried out by York Archaeological Trust at the former D. C. Cook site, Lawrence Street, York (NGR: SE 6157 5126), during May 2001. Ten trenches were excavated, revealing ditches, pits and postholes of Roman to post-medieval and early modern date.

Five sediment samples ('GBA'/'BS' sensu Dobney et al. 1992) from separate contexts were recovered from the deposits. A single box of animal bone (approximately 20 litres) was also collected.

All of the samples and the bone were submitted to the EAU for an evaluation of their bioarchaeological potential.

Methods

The sediment samples were inspected in the laboratory and two were selected for assessment. The lithologies of the selected samples were 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 washovers and residues from the processed subsamples were examined for plant remains. The washovers were also scanned for invertebrate remains, and the residues for other biological and artefactual remains.

Table 1 shows a list of the submitted samples and notes on their treatment.

For the hand-collected vertebrate remains that were recorded, subjective records were made of the state of preservation, colour of the fragments, and the appearance of broken surfaces ('angularity'). Additionally, for the larger assemblages, notes were made concerning fragment size, dog gnawing, burning, butchery and fresh breaks.

Where possible, fragments were identified to species or species group, using the reference collection at the Environmental Archaeology Unit, University of York. Fragments not identifiable to species were described as the 'unidentified' fraction.

Results

The results are presented in context number order. Archaeological information, provided by the excavator, is presented in square brackets. N.B. This information arrived subsequent to the selection of the samples.

Sediment samples

Context 5006 [backfill of possible ditch/construction trench; pottery dating from 11-16th C was recovered] Sample 1/T (5 kg sieved to 300 microns, with washover)

Moist, dark olive brown, soft and crumbly (working sticky and almost plastic when wet), slightly clay sand, with small stones (6-20 mm) and rotted limestone fragments present. Pieces of brick/tile were common.

There was large residue of about 800 cm³ of sand, gravel and brick/tile (the last to about 55 mm in maximum dimension) with a little clinker (also to 55 mm), bone (to 80 mm) and coal (10 mm). The tiny washover of a few cm³ in volume consisted of roots (probably ancient) and charcoal (to 10 mm) with cinders and a few plant remains. These comprised some very decayed uncharred greater celandine (*Chelidonium majus* L.) seeds (mostly in a fragmentary state), a single charred ?wheat (*Triticum*)

grain and a single charred shore-weed (*Littorella uniflora* (L.) Ascherson) seed. The celandine seeds are typical of deposits forming around buildings in an urban setting, but the shore-weed seed is rather unexpected. As its vernacular name suggests, this plant grows in shallow water at the margins of lakes and ponds, flowering only when exposed. Its significance as an isolated charred specimen in the current context is difficult to assess.

Vertebrate remains recovered from this sample were few in number and largely unidentified. Both large and medium-sized mammal fragments were represented, additionally several fish bones were noted.

Context 5011 [fill of posthole; pottery of 10/11th C date was recovered]

Sample 3 (5 kg sieved to 300 microns, with washover)

Moist, mid to dark grey-brown, crumbly and soft (unconsolidated and working somewhat sticky when wet), slightly silty sand, with medium-sized stones present.

The moderate-sized residue of about 550 cm³ comprised sand and gravel, with a little bone (to 55 mm) and traces of charcoal and brick/tile (both to 10 mm). The very small washover of about 20 cm³ was of charcoal, roots (probably ancient), charred amorphous material (perhaps peat, to 10 mm), charred herbaceous stems (perhaps from grass or rush) and some tiny charred ?heather (*Calluna vulgaris* (L.) Hull) root/basal twig fragments. Other remains included some probably cereals (oats, *Avena*, and perhaps also wheat) and a small range of weed seeds (mostly charred). Some of this material perhaps suggests the presence of burnt peat or turves, but all the remains were extremely sparse.

This sample produced a small assemblage of bone, mainly large mammal rib and shaft fragments. A single eel (*Anguilla anguilla* (L.)) vertebra was also identified.

Hand-collected vertebrate remains

A single box of vertebrate remains was recovered from these excavations, representing nine of the ten excavated areas. Most of the assemblage was recovered from Trenches 3, 5 and 9, although the deposits which produced the bones from Trench 3 were mostly 19th Century in date or very broadly dated. Additionally, the bulk of the material from Trenches 1, 2 and 4 was recovered from machine clearance layers and was, therefore, unstratified. The remaining bones from Trenches 5 to 9 were mainly of medieval date, although again some of the deposits

had rather broad pottery spot dates, spanning approximately 400 years in some cases, which greatly limits the usefulness of the assemblages. All of the vertebrate remains were rapidly scanned and those with tighter dating were recorded in more detail.

Preservation overall was mostly quite good, with few fragments that were battered or eroded in appearance. Material from Trenches 7 and 9 were particularly well preserved, with less well preserved material from Trench 3, whilst bones from Trench 5 were more varied in their appearance. Fragmentation was not great and dog gnawing and fresh breakage were minimal.

The recorded remains included the main domesticates - cattle, caprovids and pigs - with dog being the only other domestic species identified. Unidentified bones mainly represented large mammals, but several bird shaft bones were also noted. Very few measurable bones were recorded and only a single mandible (cow) of use for providing age-at-death data was present.

Discussion and statement of potential

These samples produced extremely low concentrations of plant remains, mainly preserved by charring. They offer rather little interpretative information and processing of large subsamples seems unlikely to provide useful assemblages.

Although reasonably well preserved, the vertebrate remains from this site were too broadly dated and insufficiently numerous for detailed analysis. They do demonstrate, however, the potential for the survival of these remains within certain deposits.

Recommendations

It is recommended that no further work is carried out either on these samples or those from the evaluation which were not examined bioarchaeologically.

The animal bones do not warrant further examination.

Further excavation at this site seems unlikely to yield valuable material, though the possibility of moderate or high concentrations of charred remains and the recovery of a small vertebrate assemblage should be allowed for.

Retention and disposal

The current material may be discarded.

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.

Acknowledgements

The authors are grateful to Dave Evans and Dave Brinklow of York Archaeological Trust for providing the material and the archaeological information, and to English Heritage for allowing AH to contribute to this report.

References

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.

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

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

Table 1. List of sediment samples from excavations at the former D. C. Cook site, Lawrence Street, York, with notes on their treatment.

Context	Sample	Notes
3041	8	Inspected in tub
5006	1	5 kg sieved to 300 microns with washover
5011	3	5 kg sieved to 300 microns with washover
8009	6	Inspected in tub
9008	9	Inspected in tub