

Reports from the Environmental Archaeology Unit, York 97/46, 4 pp.

**An evaluation of biological remains from excavations at
Naburn Sewage Treatment Works, York (site code: 1997.81)**

by

John Carrott, Paul Hughes and Frances Large

Summary

Ten samples of sediment from deposits of ?Romano-British to post medieval date excavated at Naburn Sewage Treatment Works, York were submitted for an evaluation of their potential for bioarchaeological analysis.

The traces of ancient plant and invertebrate remains recovered from the samples were of very limited interpretative value.

Keywords: NABURN SEWAGE TREATMENT WORKS; YORK; EVALUATION; CHARRED PLANT REMAINS; INVERTEBRATE REMAINS

Authors' address:

Palaeoecology Research Services
Environmental Archaeology Unit
University of York
Heslington
York YO1 5DD

Telephone: (01904) 434485/433843/434487/434486
Answerphone: 433846
Fax: 433850

Prepared for:

On-Site Archaeology
25A Milton Street
York YO1 3EP

27 October 1997

An evaluation of biological remains from excavations at Naburn Sewage Treatment Works, York (site code: 1997.81)

Introduction

Excavations at Naburn Sewage Treatment Works, York (NGR SE 601 463), undertaken in 1997 by On-Site Archaeology revealed deposits of Romano-British to post-medieval. Ten samples of sediment from these deposits have been examined to evaluate their bioarchaeological potential.

Methods

Ten samples of sediment ('GBAs' *sensu* Dobney *et al.* 1992) were submitted. The samples were inspected in the laboratory and the lithologies of three samples selected for further investigation were recorded using a standard *pro forma*. Subsamples of 3 kg were taken from two of the samples, and 2 kg from the third, for extraction of macrofossil remains, following procedures of Kenward *et al.* (1980; 1986).

Plant macrofossils were examined from both the residues and the washovers resulting from processing, and the washovers were examined for invertebrate remains. None of the samples were deemed suitable for examination for the eggs of parasitic nematodes.

Artefacts were removed from the residues to be returned to the excavator.

Results

The results of the investigations are

presented in context number order with information provided by the excavator in brackets.

Context 905 [Post medieval flood deposit]
Sample 3/T (3 kg washover)

Just moist, mid brown to mid to dark grey (mm- to cm-scale mottling), crumbly (working soft and slightly sticky when wet), slightly clay sandy silt with some light brown patches of sand. Medium-sized stones (20 to 60 mm), cinder, twigs and modern rootlets were present in the sample.

The large washover was mostly modern rootlets with some other modern woody plant remains, lumps of cinder (to 25 mm), earthworm egg capsules and a small assemblage of invertebrate remains. Charred, poorly preserved seeds (of common weed taxa) were also recorded.

The small residue was mostly sand and small stones with a little coal (to 5 mm).

Context 909 [Post medieval flood deposit]
Sample 6/T (3 kg washover)

Moist, mid brown to mid grey (mm-scale mottling), unconsolidated to crumbly (working soft and slightly sticky when wet), slightly clay sandy silt with fragments of brick/tile and charcoal present.

The large washover was mostly charcoal (to 7 mm), some cinder (to 10 mm) and a little coal (to 7 mm) and sand. A few tiny fragments of slag, some earthworm egg

capsules, two fragments of beetle (one larval) and a very few rootlet fragments were also present.

The small residue was mostly sand and small stones with a little coal (to 10 mm).

Context 7002 [?Romano-British primary fill of linear ditch. The fill contained burnt stones which may have been pot-boilers]
Sample 2/T (2 kg washover)

Just moist, light to mid grey to light to mid brown with buff patches, stiff to slightly plastic (working plastic), very slightly sandy clay with ?charcoal and modern rootlets and seedlings present.

The moderate-sized washover was mostly rootlets (probably modern), fine charcoal (to 4 mm) and sand. Two modern earthworm egg capsules were also noted.

The small residue consisted of sand and small stones.

Discussion and statement of potential

Sample 3 (Context 905) yielded small assemblages of plant and invertebrate remains. The invertebrate assemblage was too small to be of interpretative value. The plant assemblage contained both charred and uncharred components. The uncharred remains are most likely modern as, in the absence of waterlogging, it is unlikely that they would have survived for any length of time. The condition of the charred component suggests exposure to a fairly high temperature fire (perhaps coal or coke in view of the presence of ?cinder).

The extremely limited number of plant and invertebrate taxa recovered from the

samples provide very little opportunity to draw any additional inferences about the contexts.

Further examination of the charcoal may yield a little information if there are relevant archaeological questions to be addressed and providing it is dated

Recommendations

No further work need be undertaken on the present material. If deposits with organic preservation by anoxic waterlogging or higher concentrations of charred plant material are exposed by further excavation every effort should be made to sample and investigate them.

Retention and disposal

Any remaining sediment samples may be discarded unless they are to be sieved for artefact recovery.

Archive

All extracted fossils from the test subsamples, and the residues and flots, are 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 Nick Pearson (On-Site Archaeology) for making this material available.

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** (for 1985), 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.