An evaluation of biological remains from excavations at Flemingate, Beverley (site code: FG95)

by

Keith Dobney, Allan Hall, Deborah Jaques, Harry Kenward, Frances Large and Tom Shaw.

Summary

The single sediment sample investigated for plant and invertebrate macrofossils gave modest numbers of remains, possibly including an element from stable manure, demonstrating the potential for preservation by anoxic waterlogging at the site.

A small assemblage of animal bones, representing the medieval and post-medieval periods, was recovered. Although, in itself, it was of little interpretative value, several tightly dated groups (i.e. 12th-13th and 15th centuries) suggest that further excavation might produce important material of regional and national significance.

Keywords: Flemingate; Beverley; medieval; post-medieval; plant remains; insect remains: bone

Authors' address: Prepared for:

Environmental Archaeology Unit University of York Heslington York YO1 5DD MAP Archaeological Consultancy Ltd.
39 Greengate
Malton
North Yorkshire YO17 0EL

Telephone: (01904) 433843-51

Fax: (01904) 433850 30th August 1995

An evaluation of biological remains from excavations at Flemingate, Beverley (site code: FG95)

Introduction and methods

A single sediment sample, two residues from bulk sieving and a box (45 x 33 x 25 cm) of animal bones, recovered from excavations at Flemingate, Beverley, were submitted for evaluation of their bioarchaeological potential. The material was dated to the medieval and postmedieval periods.

The sediment sample ('GBA' sensu Dobney et al. 1992) (117301, Context 1173) was inspected in the laboratory and a description of its lithology was recorded using a standard pro forma. A subsample of 1 kg was taken for extraction of macrofossil remains, following procedures of Kenward et al. (1980; 1986).

The flot and residue resulting from processing were examined for plant and invertebrate macrofossils and bone.

The residues from two samples (from Contexts 1087 and 2008) processed on site were sorted for biological remains and other artefacts.

All vertebrate remains from the forty-nine bone-bearing contexts were viewed. Subsequently, assemblages from nine of these contexts (those containing twenty or more fragments) were recorded in more detail, whilst notes were made on a further ten groups.

In total, 313 bone fragments were recorded, of which 114 were identified to species.

Results

The sediment samples

The results of the investigations of the sediment samples are presented in context number order, with information provided by the excavator in square brackets.

Context 1087 [pit fill; 12th -13th centuries]

Sample 108701

The residue was composed mainly of stones, with some charcoal, including twigs.

Context 1173 [base fill of a sub-circular feature - may be a soakaway; ? 11th -12th centuries]

Sample 1173

Waterlogged, dark grey, plastic, soft and slightly sticky, sandy silty clay. Mediumsized stones (20-60 mm) and fragments of bark and wood were present.

The flot contained some plant detritus, some *Heterodera* (soil nematode) cysts and a few weed seeds. Other invertebrates were represented by a small beetle assemblage that hinted at a synanthropic decomposer group, possibly with a stable manure component. The outdoor forms could have accumulated as a result of a concentrating mechanism, such as a soakaway, but they could equally have arrived with cut vegetation. Preservation was variable, indicating multiple origins of the fauna.

The residue was about 50-60% by volume organic material, including some lumps of undisaggregated compressed herbaceous detritus (?stable manure). There was also a little wood and charcoal. The herbaceous detritus included some fragments which may have been grass or straw together with a small assemblage of moderately well preserved fruits and seeds indicative of a wide range of habitats (grassland, disturbed ground, wetland and woodland), but with no one group predominating. Flax (Linum usitatissimum L.) was present in the form of rare seeds and capsule fragments. The remainder of the residue consisted of sand and gravel.

This material appears to be of mixed origin

and is probably therefore a backfill or the result of gradual accumulation during abandonment.

Context 2008 [primary fill of pit; post-medieval]

Sample 200801

The residue was composed mainly of cinders and brick/tile, with traces of burnt and unburnt coal and mortar/plaster. Some bone and marine shell fragments were also recorded.

Hand-collected animal bone

12th -13th centuries

(Contexts 1083, 1088 and 1091)

Preservation was fair, the nature of the broken surfaces and colour both being scored as variable. Dog-gnawing was evident on a small number of bones.

Of a total of 103 fragments, thirty-six were identifiable. The material consisted mainly of cattle, caprine and pig remains, with a few chicken, goose (*Anser* sp.) and cat fragments also present. The cat bone had a 'greasy' appearance suggesting that it might be intrusive. Fish remains were represented by two skull fragments (from Context 1083) identified as gadidae (cod family).

Although butchery was not in evidence on a large scale, it was noted that cow-sized vertebrae had been chopped longitudinally, indicative of the splitting of carcases.

Three mandibles with teeth and thirteen measurable bones were recorded.

Medieval

(11th-14th centuries - Contexts 1096, 1154, and 1165)

Deposits of this broader timescale produced a small assemblage of thirty-three identifiable and eighty-one unidentifiable fragments.

Preservation was recorded as fair to good,

with colour being dark brown in the case of Context 1165 perhaps indicating waterlogged deposits.

Cattle, caprine and pig remains were most numerous, with domestic fowl and goose remains represented by three fragments. Context 1096 yielded a small number of additional species including horse, hare (*Lepus* sp.) and pigeon (Columbidae). The fish bones recovered were all unidentifiable fragments.

Totals of 11 measurable bone and two mandibles with teeth were present in the medieval material.

Late medieval to early post-medieval (Contexts 1110 and 3009)

Preservation and colour were similar to the earlier (12th -13th century) material.

Again, bones of common domesticates were present, the assemblage being dominated by caprine remains (15 of the 31 identified fragments), with chicken, goose and hare also present. A single distal cattle metacarpal fragment exhibited splayed medial and lateral condyles.

There were only five mandibles with teeth (all caprine) and seven measurable bones.

Post-medieval

(Context 2008)

Preservation was recorded as fair and the colour of the bones as fawn. Some dog gnawing was also evident.

Most of the identifiable fragments represented the remains of cattle, pig and chicken. All seven of the cattle and pig remains present were from juvenile individuals. Single elements of goose and hare were identified, along with three large gadidae fragments.

Discussion and statement of potential

Although some limited conclusions can be drawn from the both the plant macrofossils and the invertebrate assemblage from Sample 117301 (Context 1173), a larger subsample of between 5 and 10 kilos would be necessary to retrieve assemblages of interpretative value.

However, and more importantly, this sample indicates that bioarchaeological remains are well preserved in deposits from certain context types at this site, and show modest potential for further useful investigations of site environment and human activity.

As it stands the hand-collected bone assemblage is of little interpretative value because of its small size. Although most of the material represents a broad chronological framework, a well preserved and apparently tightly dated fraction is also present. Consequently, it is highly likely that moderately large, well preserved bone assemblages of 12th-13th and 15th century date would be recovered should further excavation be undertaken.

Well dated assemblages from the medieval period are uncommon from the region, although several are published from Beverley itself (Scott 1991, 1992). These would provide important comparanda should a larger assemblage be recovered from Flemingate.

In addition, early post-medieval assemblages are nationally rare and have, therefore, been identified by English Heritage as a high priority for future research (English Heritage 1991, 37)

Recommendations

The plant and insect macrofossils from Context 1173 should be investigated through a larger subsample.

It is possible that further excavation would recover tightly dated and well preserved material and any destruction of these deposits (particularly Context 1173) should be accompanied by an adequate sampling strategy, with appropriate provision for a post-excavation programme.

Retention and disposal

All material should be retained for the present.

Archive

All extracted fossils from the test subsamples, and the residues, flots and bones, 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 MAP for providing the samples and archaeological information and to English Heritage for allowing Keith Dobney, Allan Hall and Harry Kenward to work on this material.

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.

English Heritage (1991). *Exploring our past*. London: HBMC.

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.

Scott, S. (1992). *The animal bones*, pp. 216-33 in Armstrong, P., Tomlinson, D. G. and Evans, D. H., Excavations at Lurk Lane, Beverley, 1979-82. *Sheffield Excavation Reports* 1. Sheffield.

Scott, S. (1991). *The animal bones*, pp. 236-51 in Evans, D. H. and Tomlinson, D. G., Excavations at 33-35 Eastgate, Beverley, 1983-6. *Sheffield Excavation Reports* **3**. Sheffield.