

AH  
[93/1]

**Evaluation of biological remains from excavations  
in Champney Road, Beverley (site code BCR93)**

by

John Carrott, Keith Dobney, Allan Hall, Mike Issitt, Deborah Jaques,  
Harry Kenward, Steven Lancaster and Annie Milles

**Summary**

A series of samples of sediment and a small assemblage of hand-collected shells and bone from medieval deposits in Champney Road have been examined.

Of the samples of sediment, most proved to contain few identifiable invertebrate or plant remains but others gave quite rich assemblages, including some evidence for stable manure and perhaps also for wool-processing.

The small hand-collected bone assemblage available gave a limited amount of information; the few shells (mostly oyster) were of little bioarchaeological value.

Further excavation at this site should, however, be accompanied by more extensive sampling and in particular sieving for bones.

Authors' address:

Environmental Archaeology Unit  
University of York  
Heslington  
York YO1 5DD

Telephone: (0904) 433843-51  
Fax: (0904) 433850

Prepared for:

Humberside Archaeology Unit  
Estates and Property Management Department  
Humberside County Council  
County Hall  
Beverley  
N. Humberside HU17 9BA

November 30, 1993

# Evaluation of biological remains from excavations in Champney Road, Beverley (site code BCR93)

## Methods

Samples of sediment from 14 contexts of 12th-late or post-medieval date were submitted for an evaluation of their bioarchaeological potential. Of these, 15 individual samples representing these contexts were selected for sediment description in the laboratory (using a standard *pro forma*) and 12 samples taken forward to analysis.

For these, 1 kg (in one case 2 kg) 'test' subsamples were processed following methods outlined by Kenward *et al.* (1980; 1986) and 'squashes' for parasite eggs made following methods of Dainton (1992).

## Results

The sediment descriptions and results of analyses undertaken are recorded here in order of archaeological phase and then of context. Excavator's context information appears in brackets for each context.

### *Phase 1 Prehistoric/natural*

**Context 88** [rootholes]

#### **Sample 88**

Mid orange-brown, soft (working slightly plastic), moderately stony, clay sand with traces of stones (including flint) 2-60 mm. The sample was intended for pollen analysis but was thought unsuitable.

**Context 90** [rootholes]

#### **Sample 90**

Mid orange-grey-brown, crumbly (working slightly plastic), slightly stony clay sand with traces of chalk and flint 2-20 mm. The sample was intended for pollen analysis but was thought unsuitable.

### *Phase 2 C12th, perhaps before c. 1188*

**Context 49** [floor silt]

#### **Sample 49**

Mid grey-brown, soft (working sticky), very slightly sandy clay silt with traces of stones

(including chalk) 2-60 mm and of charcoal and mammal bone.

Test: The residue was of white quartz sand with a little gravel to 25 mm, including chalk and flint. There was a trace of brick/tile/pot to 25 mm and charcoal to 5 mm. The flot gave a trace of *Juncus* seeds, a Characeae (stonewort) oogonium, and a modern birch fruit. No invertebrate remains were observed.

Parasites: No eggs recorded.

Context 51 [floor silt = 49]

### Sample 51

Lithology as sample 49 but no bone or charcoal observed and stones present as flints in 2-20 mm range only. No further analysis.

Context 40 [primary fill of pit 30]

### Sample 40

Dark brown, layered (working crumbly) fine to coarse herbaceous detritus with traces of stones (including flint) 2-20 mm and flecks of brick/tile.

Test: There were abundant quite well preserved plant remains in the rather large flot and residue, and plant detritus made up the bulk of the latter (with only a trace of sand and fine gravel). There was some strongly decayed wood in the coarser fractions, and moderate amounts of 'straw' fragments in both residue and flot. Amongst the identifiable plant macrofossils, rush (*Juncus*, some of them probably *J. gerardi*) was abundant, with moderate numbers of stinking mayweed (*Anthemis cotula*), prickly sow-thistle (*Sonchus asper*), spike-rush (*Eleocharis palustris*) and silverweed (*Potentilla anserina*). There was a wide range of weeds of waste ground and cultivated soils, but a conspicuous component of plants which probably originated in grassland habitats - sea arrow-grass (*Triglochin maritima*), hawkbit (*Leontodon* sp.), field scabious (*Knautia arvensis*) and cat's ear (*Hypochoeris* sp.). It seems most likely that the bulk of the vegetable matter consisted of straw with some hay-derived material, perhaps from herbivore dung. Two taxa present which are likely to represent human activity are hazel nut and hemp (*Cannabis sativa*).

A modest group of invertebrate remains was recovered, including several puparia and an interpretable group of beetles. The latter included a component which may have originated in stable manure which included some hay. There were hints of a contribution from waterside habitats. The plant and insect evidence is thus very much in accord.

A record of a sheep ked puparium (*Melophagus ovinus*) is noteworthy; such records from other sites generally appear to indicate wool cleaning.

Parasites: No eggs recorded.

Context 77 [fill of pit 30, above 40]

### Sample 772

Dark grey-brown to mid orange-buff, brittle to crumbly, slightly stony, sandy silt with more peaty, ashy or clayey parts, and traces of stones (including flint) 2-20 mm and of pot.

Test: From the modest-sized residue, a rather large washover yielded quite large numbers of strongly decayed hazel nutshell fragments, earthworm egg capsules, fruits of prickly sow-thistle (*Sonchus asper*), nipplewort (*Lapsana communis*), dead-nettle (*Lamium* Section *Lamiopsis*) and annual nettle (*Urtica urens*) and seeds of *Veronica beccabunga*-type. Other taxa, present in small amounts were mostly weeds of waste places and cultivated soils

The flot contained a small number of insects and other invertebrates, the former being typical urban taxa, primarily derived from decaying matter.

Parasites: two tentatively identified *Trichuris* eggs.

Context 39 [fill of pit 30, above 77]

### Sample 393

Dark orange-ish grey-brown, crumbly, slightly sandy clay silt with traces of stones 2-6 mm (including flint) and flecks of brick/tile; moderate amounts of charcoal present.

Test

The small washover from the residue was rich in 'seeds' of celery-leaved crowfoot (*Ranunculus sceleratus*) with moderate numbers of stinging nettle (*Urtica dioica*) and rush (*Juncus* spp.). The remainder of the plant macrofossil assemblage, together with that in the flot, consisted of plants of waste ground or aquatic/waterside/fen habitats and there were a few charred ?bread/club wheat (*Triticum ?aestivo-compactum*) grains and a little charred hazel nutshell. The rest of the residue consisted of white quartz sand with a little gravel to 15 mm, mammal bone to 25 mm and charcoal to 5 mm. There were appreciable numbers of beetle and other insects, but the remains were fragmentary and poorly preserved. They represented a small, typical urban decomposer group of limited interpretative potential. A badly decayed fragment of a probable *Melophagus ovinus* (sheep ked) puparium was recorded.

Parasites: No eggs recorded.

Context 73 [fill of pit 30, above 39]

### Sample 73

Mid/dark grey-brown, crumbly (working plastic), very slightly sandy silty clay with traces of stones (including chalk) 2-60 mm, flecks of brick/tile and charcoal and mammal bone.

Test: The small residue consisted largely of quartz sand, with a little gravel and stones to 40 mm, including chalk and flint. There were traces of fish bone and some small iron-rich concretions (to 15 mm) which were calcareous and which yielded modest numbers of diatoms and a few phytoliths on disaggregation of a small fragment in dilute hydrochloric acid. The flot gave moderate numbers of stinging nettle and goosefoot (*Chenopodium* Section *Pseudoblitum*) seeds—both suggesting areas of nutrient rich soils—together with three taxa probably representing damp or wet habitat, though the assemblage was too small to be of much interpretative value. There were a few rotted fragments of insect cuticle amongst which three beetle and one bug taxa could be recognised.

Parasites: No eggs recorded.

**Context 72** [fill of pit 30, above 73]

### **Sample 72**

Mid grey-brown, crumbly, ?slightly humic, very slightly sandy clay silt with traces of stones (including flint, ?some of it burnt) 2-60 mm, and traces of brick/tile, charcoal and mammal bone.

Test: There was a modest-sized residue of quartz sand and gravel (to 30 mm, including chalk, flint and sandstone) with a moderate amount of fragmentary fish bone. The washover from this was small but, together with a small flot, contained moderate numbers of teasel (*Dipsacus sylvestris/sativus*) fruits, with stinging nettle and celery-leaved crowfoot and a small range of other plant taxa essentially of waste ground and aquatic habitats. There were a few cereal grains including ?oat (*Avena*), ?bread/club wheat (*Triticum aestivo-compactum*) and barley (*Hordeum*). Preservation of invertebrates, which included a small group of beetles and some earthworm egg capsules, was variable. Too few remains were recovered for interpretation.

Parasites: No eggs recorded.

### ***Phase 3 early C13th***

**Context 63** [plugging of pit]

### **Sample 631**

Mid orange- to ginger-brown, soft, slightly calcareous, slightly sandy silt or ash with traces of ?brick/tile and mammal bone.

Test: The residue from this subsample was large and consisted of very undense light/mid orange-brown amorphous vesicular material in clasts up to 10 mm. It was slightly

calcareous but did not appear to have an organic component. It may have been burnt soil, but further investigation would be necessary to elucidate this. The only identifiable remains in the small flot were moderate numbers of stonewort (Characeae) oogonia, which are likely to have come from lake marl or in water brought from a pond in which the plant was growing, and traces of poorly preserved arthropod cuticle.

Parasites: No eggs recorded.

Context 70 [pit fill or plugging]

Sample 70

Mid ginger-brown (with yellow and orange speckling), crumbly, soft, sticky silt or ash with flecks of brick/tile, charcoal and wood.

Test: A 2 kg subsample was processed. The residue consisted of pale brown, highly calcareous concretions with moderate amounts of fragmentary fish bone and a little sand, and a few chalk and other stones to 15 mm, a trace of burnt bone, brick/tile and eggshell. The concretions were apparently quite rich in organic material but no cereal 'bran' or parasitic worm eggs were noted in a small sample disaggregated in dilute hydrochloric acid. The flot from this sample, unusually, included moderate numbers of charred and partly charred teasel (*Dipsacus sylvestris/sativus*) fruits and a few poorly preserved charred cereal grains, together with a single earthworm egg capsule and traces of insect cuticle, only *Anobium punctatum* (the woodworm) being identifiable.

Parasites: No eggs recorded.

*Phases 4-5 (early-late C13th) not sampled*

*Phase 6 C15th/16th* [fills of three pits for comparison]

Context 9 [pit fill]

Sample 9

Mid/dark grey-brown, crumbly (working plastic), slightly sandy clay silt with traces of brick/tile, charcoal, mammal bone and eggshell and ?burnt coal.

Test: The residue was largely of cinder with a little coal, burnt shale and charcoal, with brick/tile, oyster shell. There were modest numbers of rush (*Juncus*) seeds in the flot, together with single charred seeds of elderberry (*Sambucus nigra*) and linseed (*Linum usitatissimum*); only traces of putative insect cuticle were present.

Parasites: No eggs recorded.

**Context 37** [pit fill]

**Sample 371** [upper fill]

Mid grey-brown, crumbly, soft, slightly stony, slightly sandy clay silt (?ashy), with traces of stones (including flint) 2-6 mm, brown/black concretion/slag, brick/tile flecks, ?coal and charcoal.

Test: There was a rather large residue of sand and gravel to 15 mm with moderate amounts of cinders, a trace of charcoal and coal, a trace of brick/tile and a little bone (some of it burnt). The small flot contained only a little charred material, perhaps from burnt coal.

Parasites: No eggs recorded.

**Context 54** [pit fill]

**Sample 5431** [upper fill]

Dark grey-brown, crumbly (working plastic), slightly clay silt with traces of stones 6-20 mm, and of brick/tile, charcoal and mammal bone.

Test: The large residue consisted almost entirely of cinders with a little coal, brick/tile (to 20 mm), burnt and unburnt mammal bone (to 15 mm), mussel shell (to 20 mm) and a trace of sand and gravel. There was only a little charred material, perhaps derived from coal in the flot, together with a few scraps of what may have been insect cuticle.

Parasites: No eggs recorded.

**Sample 5432** [lower fill]

Dark brown, layered, compressed (working crumbly), slightly sandy, slightly silty herbaceous detritus and amorphous organic material with some pale buff sand and silt lenses and traces of stones 2-6 mm, and of charcoal.

Test: About 85% by volume of the residue consisted of wood and herbaceous detritus, and plant detritus made up much of the modest-sized flot. Conspicuous in the organic fraction were abundant oak (*Quercus*) buds and bud-scales, and there were also scales or buds of *Populus* (aspen/polar) and *Alnus* (alder) and some leaf abscission pads, all likely to have come from brushwood or from trees in the vicinity. Some of the small wood fragments may have been chips from woodworking. The remainder of the assemblage of plant macrofossils included a modest range of weeds of waste and cultivated ground, notably stinking mayweed (*Anthemis cotula*) and stinging nettle (*Urtica dioica*), with a few taxa of moist places or aquatic habitats, and a few suggesting grassland. The rest of the residue was quartz sand and gravel with a little brick/tile, cinder and coal. Plants of clear economic value were confined to coriander (*Coriandrum sativum*) and hazel (*Corylus avellana*).

A modest group of insect remains was present, largely consisting of taxa which may have originated in foul, mouldering material such as stable manure.

Parasites: No eggs recorded.

### Shell

There was a little hand-collected shell from several contexts; almost all was oyster, but there were a few fragments of mussel. Such small assemblages are not worth further analysis and the quantities recovered do not indicate that further sampling is warranted unless high concentrations of well-stratified material are encountered.

### Bone

Two standard-sized boxes of animal bone were recovered from this excavation by hand-collection. The material came from a total of 26 contexts which were from phases 3-6. Most of the material (from 21 contexts) was from phases 3, 4 and 5 (early to late 13th century). Bone from the remaining five contexts came from phase 6 (15th/16th century).

From the entire assemblage, a total of 370 fragments (4343g) were recovered (197 from the earlier group and 173 from the later). Of these, only 122 fragments were identifiable to species (55 from 13th century and 67 from phase 6).

Preservation overall was good to fair although the bone from some contexts was noted as being poorly preserved. A number were also rather battered. Colour varied, ranging from dark brown, brown, and fawn to ginger, and fresh breakage was observed in material most contexts, as was dog gnawing and butchery which were fairly extensive throughout. Most of the butchery recorded was from cow size fragments but butchery was also apparent on sheep/goat and pig fragments. Interestingly, a large femur (identified as dog) from context 39 (13th century) exhibited a number of large chop marks on the shaft region.

The range of domestic animals represented, from both 13th and 15/16th century contexts, included cow (31 fragments) sheep/goat (51 fragments) and pig (15 fragments). Also recovered were several canid fragments (one possibly fox), a cat tibia and a number of fish bones identified as large gadid. Bird remains were present in small numbers and consisted entirely of goose and domestic fowl.

Also of interest were nine sheep horncores, of varying sizes, all from 15/16th century layers (contexts 9 and 37), most of which had been chopped from the skull. Four exhibited characteristic lesions known as 'thumb prints' the aetiology of which is little understood.

From the entire assemblage only 30 measurable fragments were available, the largest proportion from sheep/goat (19), the remainder from cow (5), pig (3), bird (2) and canid (1). There were only 6 mandibles with teeth and a single isolated tooth of use for providing ageing information.



## Implications

There were some groups of insects and plant remains from these samples which deserve further investigation, both in order to improve understanding of the present site and to provide records of characteristic assemblages in space and time. However, most deposits gave very poor preservation of the more delicate organic remains and in this respect at least have very little potential.

Of particular interest from a bioarchaeological and historical point of view were records of plants and insects indicative of stable manure, including hay and straw, and hints from ectoparasites of sheep and from teasel fruits for wool-processing.

The small size of the bone assemblage and limited numbers of measurable bones and mandibles with teeth, renders the zooarchaeological value of the assemblage of limited value. However, should further opportunities for excavation arise, it would be likely that a moderate-sized animal bone assemblage of medieval date, which is relatively well preserved, will be recovered. This will provide important data from an area of the town from which we have little information, for comparison with information from other published sites in Beverley.

## Retention and disposal

Most of the GBA samples are not worthy of long-term retention, but those few giving good or modest preservation by 'anoxic waterlogging' (and in one case charring) should be stored since they have considerable potential for future synthetic projects. These were samples from contexts 39, 40, 54 (lower levels), 70, 72, and 77. The bone and shell are not worth retaining.

## References

- Dainton, M. (1992). A quick, semi-quantitative method for recording nematode gut parasite eggs from archaeological deposits. *Circaea* 9, 58-63
- 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.