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**Assessment of biological remains from the medieval moat  
at Hall Garth, Beverley (site code BHG80)**

by

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**Summary**

*Residues and washovers from a series of bulk-sieved samples of deposits associated with the medieval moat at Hall Garth, Beverley have been examined for their content of biological remains. They include some rich assemblages of freshwater and land molluscs and it is considered that they will, together with the more restricted plant macrofossil remains, prove valuable in understanding the local and environment and something of the course of deposition into the moat in the medieval and post-medieval periods. A small amount of hand-collected mollusc shell is also thought worthy of more detailed recording.*

*The small but well-preserved assemblage of vertebrate remains includes some interesting groups, particularly the rather large numbers of horse bones, whilst a group of sheep metapodials probably originating in waste from hide preparation offers very useful material for comparison with assemblages from other sites in the region.*

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## Assessment of biological remains from the medieval moat at Hall Garth, Beverley (site code BHG80)

### Introduction

This report offers recommendations for further bioarchaeological work on two series of biological remains from medieval moat fills at Hall Garth, Beverley: plant and invertebrate assemblages from samples from 14 contexts, and hand-collected bone from some 20 contexts.

The sediment samples had been bulk-sieved to 1 mm (with 500 µm washovers) by Martin Foreman and Barrie McKenna in the early 1980s, following procedures outlined by Kenward *et al.* (1980). For the most part, single subsamples from each context had been processed, but in some cases, there were multiple subsamples. A series of unprocessed sediment samples from the same deposits was, unfortunately, not available for assessment.

The bone consisted of a moderate-sized assemblage of hand-collected material occupying 8 standard boxes and 2 larger ones. Most of the bones were recovered from post-medieval deposits, the contexts richest in bone being 6, 11, 12, 13, 14, 15, 25 and 27 (of which five were described by the excavator as moat fills).

### Methods

The processed sediment samples had been stored dry as separate residues and 'washovers'. Both fractions from at least one subsample from each context were examined and notes made about their content of biological remains. A selection of samples representing the main archaeological phases was then examined more closely for molluscs.

As a general observation, it may be said that the samples had not all been washed very thoroughly and that lumps of undisaggregated silt were sometimes present in considerable quantities. This

may, however, be advantageous in providing samples for examination of parasite ova.

### Results

Notes on the sieved residues and washovers are presented in the appendix, together with comments on the plant macrofossils and mollusc assemblages.

The plant remains were notable for having few aquatic taxa but good evidence for disturbance and, in particular, for the presence of elder (*Sambucus nigra*) in the vicinity; the presence of abundant seeds in some layers and of twig fragments (also recorded from the samples of wood from this site, cf. Hall 1994) suggests this plant was growing very close to the moat at some periods. There was remarkably little evidence for plants likely to have originated via domestic waste disposal.

The samples provided some fairly rich and interesting assemblages of land, freshwater and marine molluscs. Recorded more carefully, these are likely to provide good evidence for local environmental conditions and the use of molluscs as marine and freshwater food resources.

Some insect remains were also observed, especially in the washovers; these will have been subjected to particular bias through the sieving technique used and are clearly not ideal material for more than a small amount of further work.

On the whole preservation of the bone was found to be very good, with numerous complete and measurable fragments. Colour varied from dark brown to ginger (bones with the latter colour coming from the moat deposits).

A range of species was represented and included domestic cattle, sheep/goat, pig, horse, dog, and cat; in addition, a few bird

elements were identified. Wild mammals were represented only by the remains of fallow deer (found in contexts 6, 9, 25, 33 and 43). These include one metacarpal, four metatarsals, several phalanges, a scapula, a tibia and a cast antler.

All common domesticates were from relatively large, improved, individuals. This was most obvious from the numerous canid remains, which ranged from small terrier size to large wolfhound size.

Horse remains were found in relatively high numbers; particularly interesting were three complete and at least two fragmented skulls and their associated mandibles. A few additional long-bone fragments were identified.

Sheep skulls were present and had been chopped sagittally, to remove the brain. All had had their horncores chopped through at the base. The group from context 11 included a large number (approximately 100-150) of sheep metapodials (interestingly, no phalanges were evident), which almost certainly represent the waste from hide preparation. Similar deposits of late medieval and post-medieval date have been described from other excavations in the region, for example, in Selby (Carrott *et al.* 1993), and at two sites in York: Lawrence Street (Dobney 1993) and Walmgate (O'Connor 1984).

The last group of samples was of hand-collected mollusc shell. Amongst these were some large freshwater mussels and oysters and many land snails, including the common garden snail, *Helix aspersa*. No doubt much of this material represents food remains.

#### **Discussion: statement of potential and recommendations for further work**

Although the samples available are not optimal for investigation of plant and invertebrate remains, there are some useful mollusc assemblages and further work on them is a high priority. The richer

assemblages (contexts 13, 14, 15 and 23) should be recorded in detail, with a briefer record of the species in the other contexts in this sequence. The hand-collected shell provides evidence for the larger taxa and should also be recorded further.

A somewhat more detailed record than that produced so far should be made for the plant remains to amplify the information concerning local environment and vegetation which the molluscs will offer.

A small amount of effort should be expended in checking the insect remains observed in the washovers; selected samples should be sorted very rapidly for these and identifications made only so far as is consistent with obtaining useful information quickly about local environmental conditions.

The small hand-collected bone assemblage is of interest because of its largely post-medieval date, its good preservation, its origins in what was perhaps a high status household, the presence of numerous measurable bones, and its range of species.

The presence of possible tanners' waste gives an indication of local industrial activities. The material from the other contexts does not have the appearance of the commercial or kitchen refuse usually encountered at medieval and post-medieval sites.

Tenuous links with the documented adjacent deer park are indicated from the number of cervid (fallow deer) remains.

It is recommended that a detailed record be made of bone from all well-dated contexts, particularly concentrating on biometrical analyses of caprovid metapodials, complete horse skulls and canid remains. Special attention should be paid to noting and recording incidence of pathological conditions of sheep metatarsals (as mentioned above, such pathology has already been recorded from assemblages of similar date in the region).

### **Estimates for further work**

These are presented in Table 1.

### **Retention/disposal**

All the material should be retained for the present.

### **Archive**

All paper and electronic archives pertaining to the work described here are currently stored at the EAU, York, along with the residues, washovers, hand-collected shell, and bone.

### **Acknowledgements**

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### **References**

Carrott, J., Dobney, K., Hall, A., Jaques, D., Kenward, H., Large, F. and Milles, A. (1993). *An evaluation of biological remains from excavations on land to the rear of Gowthorpe, Finkle Street and Micklegate in Selby town centre (site code Selby 1993)*. Prepared for MAP Archaeological Consultancy Ltd.

Dobney, K. (1993). *The animal bones from Lawrence Street (YAT code 1993.9)*. Report prepared for York Archaeological Trust.

Hall, A. (1994). Identifications of a group of wooden pegs and some other timbers from excavations at Hall Garth, Beverley (site code BHG80). *Reports from the Environmental Archaeology Unit, York 94/4*.

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.

O'Connor, T. P. (1984). Selected groups of bones from Skeldergate and Walmgate. *The Archaeology of York 15* (1), 1-60, plates. I-II. London: Council for British Archaeology.

Table 1. Estimates for work required on biological material from Hall Garth, Beverley.

<b>Task</b>	<b>Resource</b>	<b>Estimated time required (days)</b>	<b>[Cost]</b>
<i>(i) Plant remains</i> Record plant macrofossils from selected residues and washovers; prepare report	RF	2	
<i>(ii) Insect remains</i> Sorting of selected washovers Recording and preparation of report	Technician RF	1 0.5	
<i>(iii) Molluscs</i> Make detailed record of molluscs from selected BS residues and washovers and survey hand-collected molluscs; prepare report	Technician RF	2 3	
<i>(iv) Vertebrate remains</i> Record bones Preparation of report	Technician RF RF	3 1 2	

## Appendix

The material from bulk-sieved samples is considered in stratigraphic sequence, from the lowest deposits upwards.

### *Phase 1* [early features pre-dating digging of moat]

Context 44 [ditch fill; dark grey silt]

The washover was small and consisted of woody and herbaceous detritus with a few snails. The latter were not well preserved, but included some terrestrial taxa. Plant remains included aquatic and waterside taxa but also elderberry (*Sambucus nigra*) and linseed (*Linum usitatissimum*) indicating that this fill was probably receiving material from an area of human activity. The residue consisted mainly of undisaggregated sediment with some wood fragments and a few snails.

Context 36 [black clay/silt filling cut to S of ditch; archaeologically low priority unless different from 44]

The small washover was of woody and herbaceous detritus with several weed taxa of no particular indicator value; the residue was mostly undisaggregated sediment and wood with a few stones; it was, apparently, rather different from 44.

### *Phase 2* [excavation of moat and construction of bridge; samples represent primary fills]

Context 18 [pale clay, earliest moat silt, pre-dating setting of bridge sill-beams]

Nine subsamples had been processed. The washovers and residues appeared essentially similar, the former being small and consisting mainly of herbaceous detritus with a little wood; the identifiable plant remains included some weeds and elderberry seeds. The residues had a somewhat variable content of stone, including chalk, and a little wood. There were traces of brick/tile in at least one residue.

Context 21 [dark silt, more richly organic, accumulating within box-frame of bridge]

The small washover was of woody and herbaceous detritus with a few 'seeds' perhaps indicative of wet habitats; there were a very few land snails. Wood and stones made up the residue, in which there was also a trace of brick/tile.

Context 19 [grey clay silt with organics]

The small washover contained a few freshwater snails but was mostly woody and herbaceous detritus. There were a few insect fragments, and plant remains indicative of aquatic-marginal habitats and perhaps also neglected waste ground. The residue included some chalk to 30 mm and a trace of brick/tile.

### *Phase 3* [continued filling of moat and bridge foundation structure]

Contexts 9 and 43 [possibly equivalent layers of organic material within box-frame of bridge abutment; ??C14th]

The washovers from the three subsamples from context 9 contained woody and herbaceous detritus with freshwater snails, beetles and plant remains which included leaf fragments (probably from trees or shrubs), a rose prickle, and perhaps some straw. There were stones and traces of brick/tile in the residues, together with a few snails.

Two subsamples from context 43 were available. The small washovers were rich in freshwater molluscs and amongst the woody and herbaceous detritus were abundant elderberry seeds and a few taxa typical of aquatic habitats and perhaps also some weeds. The residues contained further snails and traces of brick/tile.

It appears that these two contexts are not so similar as postulated by the excavator and may need further work to make the distinctions clearer.

Context 24 [clay within box-frame of bridge abutment; ??C14th]

The small washover was of woody and herbaceous detritus with traces of freshwater snails and at least two plant taxa suggestive of neglected waste ground. The residue was of wood and sand/gravel.

Context 23 [waterlogged silts forming within abutment; ??C14th]

Woody and herbaceous detritus formed the bulk of the small washover, but there were some snails, including *Helix aspersa*, some other land taxa and freshwater forms (amongst them *Pisidium* spp.). The residue was of wood, stones, brick/tile and twigs, with further snails.

Context 27 [dark silts in moat]

The small washover included many and diverse freshwater snails and some terrestrial forms, with caddis larva cases, some beetle fragments, and plants indicative of waterside habitats and perhaps also disturbed soils. The residue was of sand/gravel but included traces of brick/tile and wood, and some more snails.

Phase 4 [moat silts forming after re-lining of moat with clay; late to post-medieval]

Context 15 ["reedy" silt; ?C15th]

Two subsamples had been processed; the small washovers consisted mostly of freshwater snails with a few bivalves and some land snails. There was some herbaceous detritus with elderberry seeds (one of the residues also contained what was probably an elder twig, and it may be relevant to note here that elder twig material was observed amongst the smaller timbers from this excavation, reported by Hall (1994)). The residues included undisaggregated sediment with wood fragments and many more snail shell fragments.

Context 14 ["silty" silt; ?C16th]

The small washover contained many snails, both land and freshwater taxa. Plant remains included aquatic-marginal types and perhaps also taxa of neglected waste ground. There were also caddis larva cases and ostracods. The residue was of sand/gravel and undisaggregated sediment with traces of brick/tile and some more snails.

Context 13 ["peaty" silt; ?C16th]

The very small washover was rich in snails, mainly freshwater forms with some terrestrial taxa. There were also many elderberry seeds, some weeds and a few beetle fragments. The residue was of gravel with some chalk to 50 mm, traces of brick/tile and more snails.

Context 5 is described as overlying 'main brown peat' but cannot be located more closely; it is thus of low priority.

Context 5

The very small washover was about 70% charcoal (to 10 mm maximum dimension) and 30% woody and herbaceous detritus; the latter included a range of probable weeds, amongst them caper spurge (*Euphorbia lathyris*), a plant with rather few archaeological records.

The residue was rich in undisaggregated sediment and there were many root moulds, and traces of oyster shell and bone.