

Palaeoecology Research Services

Evaluation of biological remains from further excavations at the site of the former Magistrates' Court, Brough, East Riding of Yorkshire (site code: BRO2002)

by

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PRS 2003/05

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Summary

Seven sediment samples recovered from further excavations of deposits of ?prehistoric to post-medieval date at the site of the former Magistrates' Court, Brough, East Riding of Yorkshire, were submitted to PRS for an evaluation of their bioarchaeological potential.

Plant remains preserved (apart from charcoal in Context 1023) by 'waterlogging' were present and well-preserved in most samples, but usually identifiable remains were sparse. Five of the samples yielded traces of insect remains, generally rather well preserved, though often fragmented. Ostracods were noted as present in Contexts 2022 and 3029; mites were moderately common in Contexts 2024 and 2031. Small numbers of snails were recovered from three of the samples (from Contexts 1023, 2022, and 3029).

The recovered remains were consistent with deposition in foreshore environments where the level of organic deposition is usually rather low but where remains are sealed in fine sediments and remain waterlogged. Only one sample (from Context 2022) indicated any human activity, with a small component of remains probably derived from occupation waste occurring amongst the natural aquatic and waterside flora and fauna.

It is clear that, whilst small amounts of generally well preserved biological remains are present in these deposits, it is not worth pursuing the material further. It is not recommended that the processed and unprocessed material be retained unless required for analyses not so far undertaken.

KEYWORDS: FORMER MAGISTRATES' COURT; BROUGH; EAST RIDING OF YORKSHIRE; EVALUATION; ?PREHISTORIC TO POST-MEDIEVAL; PLANT REMAINS; CHARRED PLANT REMAINS; INVERTEBRATE REMAINS

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27 January 2003

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Introduction

An archaeological evaluation excavation was carried out by Humber Field Archaeology at the site of the former Magistrates' Court, Brough, East Riding of Yorkshire (NGR SE 9365 2679), between the 9th and the 24th of September 2002.

The site lies in Brough Haven, a natural harbour on the west side of the historic centre of Brough (Roman fort and the town of *Petuaria*). Three further trenches were excavated at the site of earlier works undertaken in 2001. Trench 1 adjoined the 2001 trench in front of the former Court and encountered a very similar sequence of deposits – 2nd-3rd century Roman foreshore, and medieval and post-medieval alluvial silts and surfaces. Trench 2, which was further west immediately in front of the Court, also encountered presumed medieval/post-medieval alluvial sequences together with limestone blocks, possibly from the walls of *Petuaria*, which had been eroded by post-Roman marine transgression. Trench 3 was located behind the Court and encountered only alluvial deposits (all probably post-Roman and most likely medieval or post-medieval).

Seven sediment samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992) were recovered from the deposits and submitted to PRS for an evaluation of their bioarchaeological potential.

Methods

The submitted sediment samples were inspected in the laboratory and their lithologies 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 resulting from processing were examined for plant and invertebrate macrofossils. The residues were examined for larger plant macrofossils and other biological and artefactual remains.

Results

The results are presented in context number order by Trench. Archaeological information, provided by the excavator, is given in square brackets. A brief summary of the processing method and an estimate of the remaining volume of unprocessed sediment follows (in round brackets) after the sample numbers.

Trench 1 (adjoining the 2001 works in front of the former Court)

Context 1023 [organic alluvial deposit overlying medieval or post-medieval hard-standing]
Sample 7/T (1 kg sieved to 300 microns with washover; approximately
15 litres of unprocessed sediment remain)

Moist, mid grey-brown (to dark grey internally), stiff (working more or less plastic), silty clay (to clay silt). There were no obvious inclusions in the sample.

The washover consisted of a few cm³ of fine 'grassy' detritus, with traces of wood (to 10 mm in maximum dimension), charcoal (5 mm) and of snails (a few *Hydrobia ?ventrosa* (Montagu)); the minute residue was of gravel (to 10 mm).

Trench 2 (to the west of Trench 1 immediately in front of the former Court)

Context 2022 [possible Romano-British foreshore – hardstanding/demolition]
Sample 4/T (3 kg sieved to 300 microns with washover; approximately 2 litres of unprocessed sediment remain)

Moist, light to mid grey-brown to mid grey, crumbly to slightly sticky (working soft), stony (stones 2 to 60+ mm were present), slightly sandy clay silt.

The washover comprised about 60 cm³ of woody and herbaceous detritus with a modest-sized assemblage of well-preserved plant remains. For the most part these were aquatic taxa (especially the pondweed, *Groenlandia densa* (L.) Fourr.), waterside and marsh plants, but with a distinctive terrestrial component including some mosses likely to have grown on trees, and some other plants certainly indicative of the deposition of waste from human occupation – seed fragments of corncockle (*Agrostemma githago* L.), pod fragments of wild radish (*Raphanus raphanistrum* L.) and a single capsule fragment of flax, (*Linum usitatissimum* L.). There was also a very small assemblage of freshwater molluscs, including *Pisidium* bivalves, two fragments of an unidentified planorbid, and a fragment of a ?pond snail (?*Lymnaea* sp.).

The moderate-sized to large residue of about 500 cm³ consisted of gravel (to 100 mm) and sand.

Context 2023 [clean alluvium – possibly prehistoric/late Roman]

Sample 5/T (1 kg sieved to 300 microns with washover; approximately 4 litres of unprocessed sediment remain)

Moist, mid grey-brown to light grey-brown, stiff (working plastic), silty clay. Some white flecks and stones (2 to 20 mm) were present in the sample.

The washover of a few cm³ of 'grassy' plant detritus included a trace of coal (perhaps from drift in the region); the small residue consisted of a few tens of cm³ of sand and gravel (to 15 mm)

Context 2024 [organic alluvial deposit below Context 2023 – possibly prehistoric/Roman]

Sample 6/T (1 kg sieved to 300 microns with washover; approximately 3 litres of unprocessed sediment remain)

Moist, mid to dark grey-brown with areas of black (?very rotted organic material), stiff (working plastic), slightly silty clay, with a little amorphous organic material and/or very fine organic detritus.

The washover from this subsample comprised about 50 cm³ of 'grassy' plant detritus with rather small numbers of well preserved seeds, the bulk of which were celery-leaved crowfoot, *Ranunculus sceleratus* L., with traces of the salt-marsh plant sea arrow-grass (*Triglochin maritima* L.) and some Cyperaceae. There was a very small residue of a few cm³ of sand and gravel (to 50 mm).

Trench 3 (behind the former Court)

Context 3029 [organic alluvial deposit of unknown date, though probably later medieval or post-medieval – sample from upper part of 2 m thick deposit]

Sample 1/T (1 kg sieved to 300 microns with washover; approximately 4 litres of unprocessed sediment remain)

Moist, mid grey-brown (to dark grey internally), stiff (working more or less plastic), slightly sandy silty clay.

There was a very small washover of a few cm³ of plant debris with snails (a few *Hydrobia ?ventrosa*) and ostracods; only traces of identifiable plant remains were recorded, of no particular interpretative value. There was no residue from this subsample.

Context 3029 [organic alluvial deposit of unknown date, though probably later medieval or post-medieval – sample from lower part of 2 m thick deposit]

Sample 2/T (1 kg sieved to 300 microns with washover; approximately 4 litres of unprocessed sediment remain)

Moist, mid grey-brown (to dark grey internally), stiff (working plastic), very slightly sandy silty clay, with some stones (2 to 6 mm) present.

The washover consisted of a few cm³ of fine 'grassy' detritus, the tiny residue of sand and gravel (to 20 mm). The few identifiable plant remains were of little interpretative value.

Context 3031 ['earliest deposit' in Trench 3, most likely post-Roman, possibly medieval]

Sample 3/T (1 kg sieved to 300 microns with washover; approximately 4 litres of unprocessed sediment remain)

Moist, mid grey-brown, stiff and slightly sticky (working soft), clay silt, with some fine herbaceous detritus.

This subsample yielded no residue. The rather large washover of about 120 cm³ was of plant detritus, mainly coarse and fine herbaceous debris. Deposition in a salt-marsh environment is indicated by the well-preserved (although sparse) remains of sea aster (*Aster tripolium* L.), sea arrow-grass and tentatively identified sea rush (*Juncus maritimus* Lam.). Some unidentified but very characteristic comb-like structures may have been fragments of flowering spikes of sea lavender (*Limonium*), consistent with this interpretation. The few other identifiable remains pointed to some input from terrestrial habitats.

Discussion and statement of potential

Plant remains preserved (apart from charcoal in Context 1023) by 'waterlogging' were present and well-preserved in most samples, but usually identifiable remains were sparse. This is consistent with deposition in foreshore environments where the level of organic deposition is usually rather low but where remains are sealed in fine sediments and remain waterlogged. Only one sample (from Context 2022) indicated any human activity, with a small component of remains probably derived from occupation waste occurring amongst the natural aquatic and waterside flora.

Five of the samples yielded traces of insect remains, generally rather well preserved, though often fragmented. Freshwater, waterside and terrestrial species were noted; no halophile taxa could be positively identified. There were a few dung beetles, but not enough to provide any indication of land use. The concentration of insect remains is too low to justify further analysis.

Ostracods were noted as present in Contexts 2022 and 3029; mites were moderately common in Contexts 2024 and 2031. Both groups might repay further analysis in pursuit of palaeoecological information if reliable dating of the deposits could be determined.

Small numbers of snails were recovered from three of the samples (from Contexts 1023, 2022, and 3029). Those from Context 2022 were of freshwater taxa consistent with the 'natural' component of the plant assemblage. The few snails from Contexts 1023 and 3029 were tentatively identified as *Hydrobia ventrosa*, a species usually found in brackish lagoons not directly connected to the sea, and perhaps constitute further indicators of the marine influence shown by the salt-marsh plants (Contexts 2024 and 3031).

Recommendations

It is clear that, whilst small amounts of generally well preserved biological remains are present in these deposits, it is not worth pursuing the material further; further deposits of this kind seem unlikely to furnish much useful archaeological information unless stratigraphically related to features (such as natural or artificial cuts), although on the basis of the evidence of plant remains from Context 2022 further analyses may indicate contexts where debris from human activity found its way into the ground.

Retention and disposal

It is not recommended that the processed and unprocessed material be retained unless required for analyses not so far undertaken.

Archive

All material is currently stored by Palaeoecology Research Services (Unit 8, Dabble Duck Industrial Estate, Shildon, County Durham), along with paper and electronic records pertaining to the work described here.

Acknowledgements

The authors are grateful to Trevor Brigham of Humber Field Archaeology for providing the material and the archaeological information.

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