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**Evaluation of biological remains from excavations at Citadel Way,
Kingston upon Hull (site code: BMW2001)**

by

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Summary

Three sediment samples from deposits of medieval to post-medieval date, revealed by excavations at Citadel Way, Kingston upon Hull, were submitted for an evaluation of their bioarchaeological potential.

Two samples were selected for evaluation and each gave small assemblages of plant and invertebrate macrofossils. Further work on the invertebrate remains from Context 1032 is probably worthwhile in order to give better resolution to reconstruction of local conditions.

There is clearly potential for preservation by waterlogging in this area, and any subsequent excavation should be accompanied by sampling and bioarchaeological assessment of any well-stratified and -dated deposits thought likely to contain plant and invertebrate remains.

KEYWORDS: CITADEL WAY; KINGSTON UPON HULL; EVALUATION; MEDIEVAL; POST-MEDIEVAL; EARLY 15TH CENTURY (OR EARLIER) TO LATE 17TH CENTURY; PLANT REMAINS; CHARRED PLANT REMAINS; INVERTEBRATE REMAINS

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Introduction

An archaeological evaluation excavation was carried out by Humber Field Archaeology at Citadel Way, Kingston upon Hull (NGR TA 1051 2872), in late Spring 2001.

Three sediment samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992) were recovered from the deposits. Preliminary evidence gave medieval and post-medieval (early 15th century or earlier to late 17th century) dates for the deposits.

All of the material was submitted to the EAU for an evaluation of its bioarchaeological potential.

Methods

The 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 flot, washovers and residues were examined for plant remains. The flot and washover were also examined for invertebrate remains, and the residues were examined for other biological and artefactual remains.

Results

The results are presented in context number order. Archaeological information, provided by the excavator, is given in square brackets.

Context 1032 [?buried topsoil/original ground surface. Phase 2 – mid 15th –late 17th century]
Sample 1/T (2 kg sieved to 300 microns with paraffin flotation)

Just moist, mottled (5 mm-scale) mid brown and mid grey-brown, brittle to crumbly (working more or less soft), clay silt with some stones (2 to 20 mm) present.

The subsample examined yielded a very small residue of barely 100 cm³ of herbaceous detritus, an angular piece of oolitic limestone (to 65 mm in maximum dimension) and some gravel and brick/tile (to 10 mm). Despite the small size of the residue, there were rather large numbers of quite well preserved uncharred plant remains amongst the detritus, principally achenes of buttercups (*Ranunculus* Section *Ranunculus*) and caryopses of grasses (Gramineae) of several kinds, as well as fruits and perianth (flower) segments of docks (*Rumex* sp(p).), and further specimens of these taxa were present in the flot. Earthworm egg capsules were also rather frequent. Overall the plant remains noted are consistent with what might be expected to form through the burial of, for example, weedy pasture or grassy waste ground vegetation.

This was to an extent mirrored in the rather decayed and fragmented insect and other invertebrate remains from the flot. These included beetles which are likely to reflect waste ground vegetation and some taxa indicative of fairly foul decaying matter (e.g. moist compost). It seems likely that full examination of a large subsample for insect remains would provide a reasonably detailed picture of conditions around the point of deposition.

Context 1036 [ground raising dump? Phase 1 – early 15th century or earlier]
Sample 4/T (3 kg sieved to 300 microns with washover)

Moist, mid brown (mid grey-brown internally), soft to crumbly (working soft and more or less plastic), sandy clay silt with some stones (2 to 6 mm) and snails present.

The very small residue consisted of a few cm³ of sand and gravel, including some small (<5 mm) brick/tile fragments. The small washover of about 20 cm³ mainly comprised fine (<5 mm) coal. A tiny quantity of light material was removed from the washover; it contained a few scraps of poorly preserved seeds and insects, of little interpretative significance. Tests of Foraminifera were quite common, indicating an estuarine influence. There were also a few ostracods, identification of which might give a further guide to salinity.

Discussion and statement of potential

Given the nature of the deposits examined by means of these two samples, it is probably not worthwhile to carry out any further analysis for plant remains, either of the material in hand or of any samples from the evaluation excavation not yet seen. Further work on the invertebrates from Context 1032 is, on the other hand, probably worthwhile in order to give better resolution to reconstruction of local conditions.

There is clearly potential for preservation by waterlogging in this area, and any subsequent excavation should be accompanied by sampling and bioarchaeological assessment of any well-stratified and -dated deposits thought likely to contain plant and invertebrate remains.

Recommendations

Any subsequent excavation should be accompanied by sampling and bioarchaeological assessment of any well-stratified and -dated deposits thought likely to contain plant and invertebrate remains.

Retention and disposal

Any remaining sediment samples from the current evaluation may be discarded.

Archive

All material is currently stored in the Environmental Archaeology Unit, University of York, along with paper and electronic records pertaining to the work described here.

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