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Evaluation of biological remains from Landress Lane, Beverley (site code: LAB96)

by

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Summary

Twenty-one sediment samples from deposits dating to the 12th to 15th centuries from Landress Lane,Beverley, were submitted for evaluation of their potential for bioarchaeological analysis.

The biological remains were of little interpretative value. However, those samples containing animal bones should be processed to recover them and the resulting assemblages incorporated with the hand-collected material from the site. Processing of additional material from Sample 7 (Context 81) may yield an interpretable assemblage of invertebrate remains.

Keywords: LANDRESS LANE; BEVERLEY; EVALUATION; 12TH TO 15TH CENTURY; CHARRED PLANT REMAINS; INVERTEBRATE REMAINS; VERTEBRATE REMAINS; INDUSTRIAL WASTE

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Introduction

Excavations were carried out by Humber Archaeology Partnership at Landress Lane, Beverley during 1996. Twenty-one General Biological Analysis samples ('GBAs' *sensu* Dobney *et al*. 1992) were recovered from deposits dating to the 12th to 15th century.

Methods

All of the samples were inspected in the laboratory. Subsamples of 1 kg were taken from four of the samples for extraction of macrofossil remains, following procedures of Kenward *et al.* (1980; 1986). A 3 kg subsample from Sample 21 was sieved to 300:m and 1 kg subsamples from each of the samples processed from Trench B were sieved to 1 mm to determine if there was any evidence for industrial activity. Eleven of the samples were examined for the eggs of parasitic nematodes using the 'squash' technique of Dainton (1992). Where the deposits were obviously heterogeneous multiple 'squashes' were performed (minimum of 3) taken from different areas within the sample.

The flots, washovers and residues resulting from processing were examined for their content of plant and invertebrate macrofossils. Notes were made concerning the quantity of fossils, principal taxa, and main ecological groups.

Results

The results are presented in context number order by trench, with information and archaeological questions to be addressed (provided by the excavator) enclosed in square brackets.

Notes on samples examined but not recorded further are given in Table 1.

Trench A

Context 33 Sample 20 [15th C. *Is this a backfilled cess pit? Is there any evidence of industrial waste/activity?*]

Moist, dark brown, unconsolidated to sticky, sandy clay silt with light brown sandy silty clay flecks, limestone and chalk, brick/tile, coal and cider present and flecks of charcoal common.

The large washover was mostly charcoal (to 10 mm) and cinder with a little plant detritus, an earthworm egg capsule and a single carbonised grain.

The residue was mostly cinder with some sand. Stones, coal and very rotted mortar/plaster were also present.

The microfossil 'squash' was mostly inorganic with a little organic detritus. No parasitic nematode eggs were seen.

The cinder may suggest industrial waste, though it may equally be of domestic origin. The presence of food waste in Sample 21 (same Context) would favour the latter. The absence of parasitic nematode eggs implies that this feature was not a cess pit.

Context 33 Sample 21 [as Sample 20]

Moist, dark brown-grey, crumbly, sandy clay silt with some burnt clay. Mortar/plaster, brick/tile, cinder, bird bone and mussel shell were present and fish bone was common in the sample.

The modest residue (from 3 kg) was mostly cinder and coal with sand, stones, iron pan, charcoal (to 12 mm) and bone. The latter included large numbers of bones: of fish (gadid and pleuronectid), birds and large mammals (including a chopped vertebra).

The microfossil 'squash' was mostly inorganic with a little organic detritus. No parasitic nematode eggs were seen.

See Sample 20 (same Context) above.

Context 81 Sample 7 [12th/early 13th C. primary occupation layer over natural.]

The sediment was layered and very heterogeneous on a centimetre scale. Identifiable components were: pale to mid grey-brown, slightly sandy silty clay (more than a of sample), dark brown, amorphous, humic material, pale brown-grey, sandy silty clay (more clay than first component) and humus-like plant matter. Other inclusions present were very small and medium-sized stones (2 to 6 and 20 to 60 mm respectively) and streaks of charcoal. The overall appearance was of a trampled surface with embedded litter.

The small flot was mostly plant detritus with many *Heterodera* sp. (soil nematode) cysts, some earthworm egg capsules and a small group of other invertebrates—dominated by decomposer beetle taxa. The invertebrates were too few to be of detailed interpretative value—processing a larger subsample (5 kg) may yield a useful assemblage.

The small residue was mostly sand with some small stones and gravel and very fine charcoal and bird bone (including a chicken ulna).

The microfossil 'squash' was approximately half inorganic and half organic detritus with some phytoliths. No parasitic nematode eggs were seen.

Context 83 Sample 10 [12th/early 13th C. pit fill. *Is it a rubbish/cess pit. Deliberately filled or filled by weathering?*]

Moist, light to mid grey-brown to orange-brown (?iron salt deposition at sediment interfaces), crumbly (working plastic), clay sand with very small and small stones (2 to 20 mm) and charcoal present.

The small washover was composed of *Heterodera* sp. (soil nematode) cysts (many), several elder seeds (*Sambucus nigra* L.), charcoal and some other charred plant fragments, some sand and two beetle fragments.

The small residue was mostly sand and gravel with some stones, mortar/plaster and fish bone.

The microfossil 'squash' was mostly inorganic with a little organic detritus and a few phytoliths. No parasitic nematode eggs were seen.

Again, the absence of parasitic nematode eggs and presence of food waste would indicate that this was a rubbish pit, not a cess pit. It was not possible to determine the method of formation of the deposit from this sample.

Context 87 Sample 18 [13th C. *Is the ash domestic/industrial? Dumped or* in situ*?*]

Moist, pale rusty brown to pale grey (mid to pale grey in places), ashy silt with mm-scale fragments of chalk common.

The tiny flot was mostly plant detritus and charcoal (to 5 mm) with many *Heterodera* sp. (soil nematode) cysts, two elder seeds (*S. nigra*), an earthworm egg capsule and one fragment of beetle cuticle.

The small residue was mostly concreted ash with small stones, charcoal (to 7 mm, including charred twigs) sand, slag, iron pan,
large mammal bone and fish bone.

The microfossil 'squash' was mostly inorganic with a little organic detritus and a few phytoliths. No parasitic nematode eggs were seen.

The presence of slag in the residue may indicate that the ash was formed as part of an industrial, rather than domestic, process. It was not possible to determine the method of formation of the deposit from this sample.

Trench B

Context 26 Sample 1 [14th C. pit fill. *Is the material domestic/industrial?*]

The residue was mostly cinder and stones with some brick/tile and oyster shell, mussel shell, slag, coal, charcoal and large mammal bone also present.

The microfossil 'squashes' were mostly inorganic with a little organic detritus and a few phytoliths. No parasitic nematode eggs were seen.

The presence of food waste suggests that this material was of domestic origin.

Context 62 Sample 12 [14th C. *Is the material domestic or industrial? Has the pit had a secondary use as a cess pit? Are any of the fills due to weathering?*]

The residue was mostly cinder and mortar with a little coal, brick/tile, copper related slag, very decayed ?wood, pot and bone.

The microfossil 'squashes' were mostly inorganic with a little organic detritus. No parasitic nematode eggs were seen.

The absence of parasitic nematode eggs indicates that this feature was not a cess pit. The origin of this material is indeterminate because of the lack of a dominant waste component (domestic or industrial). It was not possible to determine the method of formation of the deposit from this sample.

Context 64 Sample 15 [as Sample 12]

The residue was mostly cinder and stone with some mammal bone (blue colouration), coal, marine shell, brick/tile and charcoal.

The microfossil 'squashes' were mostly inorganic with a little organic detritus and a few phytoliths and diatoms. No parasitic nematode eggs were seen.

See Sample 12 (above).

Context 66 Sample 13 [as Sample 12]

Dark, grey-brown, unconsolidated, slightly clay, slightly silty, sand with chalk, cinder and flecks of copper corrosion present and

brick/tile common.

The residue was mostly brick/tile and cinder with a little slag and charcoal present.

The microfossil 'squashes' were mostly inorganic with a little organic detritus and a few fungal hyphae. No parasitic nematode eggs were seen.

Similar to Sample 12 (above), but the absence of food waste suggests that this material was industrial in origin.

Context 73 Sample 4 [14th C. pit fill. *Evidence to suggest function? Industrial?*]

The residue was mostly stone and unidentified land snail fragments with a little brick/tile and slag.

The microfossil 'squashes' were mostly inorganic with a little organic detritus and a few fungal hyphae. No parasitic nematode eggs were seen.

Although slag was present in the sample it seems unlikely that this deposit was formed primarily by dumping of industrial waste.

Context 79 Sample 16 [14th C. pit fill. *Evidence of industrial activity? Cess pit?*]

The residue was almost entirely stone with a little cinder and charcoal.

The microfossil 'squashes' were mostly inorganic with a little organic detritus. No parasitic nematode eggs were seen.
The residue components are inconclusive in regard to evidence for industrial activity. Again, the is no evidence for this feature's use as a cess pit.

Statement of potential

Apart from the content of vertebrate remains and artefacts, and the possibility of recovering a useful assemblage of invertebrate remains from Sample 7 (Context 81), these deposits are of no further interpretative value.

Recommendations

Where appropriate, the remaining sediments should be sieved to recover bone and artefacts. The recovered bone should be incorporated with the hand-collected assemblage.

A 5 kg subsample from Sample 7 (Context 81) should be processed to recover invertebrate remains.

Retention and disposal

Those samples, other than Sample 7, which are not required for bone and artefact recovery may be discarded.

Archive

All extracted fossils and flots are 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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Table 1. Notes on samples from Landress Lane, Beverley which were not evaluated in more detail.

Context	**Sample**	**Notes**
83	9	evidence of oxidation
87	17	lime with tiny clasts of chalk and some burnt earth
100	8	looks like alluvial sediment—predominantly sandy, locally indurated (?iron panning), root/invertebrate channels coated with iron oxide (also locally)
108	11	could be pitfill—not natural. Burnt organic matter, coal and large mammal bone present
118	19	should be processed to recover fish bone and other food remains