

Palaeoecology Research Services

**Evaluation of biological remains from a sample
recovered during a watching brief at Far Ings, Barton,
North Lincolnshire (site code: FIB2001)**

by

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Summary

A single sediment sample recovered during a watching brief at Far Ings, Barton, North Lincolnshire was submitted for an evaluation of its content of biological remains.

The sample examined was found to contain plant remains indicating a mixture of wetland habitats (fen, waterside, standing water), though the bulk of the plant material preserved in the deposit comprised fine roots, perhaps from trees. Willows were represented by twig and wood fragments. There was a small insect assemblage with many fragmented specimens. Formation of the deposit in water is indicated, presumably with later colonisation by tree roots from above.

No further work is recommended on the current material unless there is a specific archaeological question to be addressed.

KEYWORDS: FAR INGS; BARTON; NORTH LINCOLNSHIRE; EVALUATION; PLANT REMAINS; CHARRED PLANT REMAINS; INVERTEBRATE REMAINS

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Introduction

An archaeological watching brief was carried out by Humber Field Archaeology at Far Ings, Barton, North Lincolnshire (centred on NGR TA 0112 2286), over a period of several months during the winter of 2001/2002.

The monitoring work involved watching machine stripping of topsoil and subsoil, during the creation of a series of wildlife lagoons and reedbeds. There was very little indication of archaeological features surviving, apart from a stone and timber structure in the upper alluvium, which was probably the remains of a post-medieval jetty.

The sequence of deposits was consistent across the entire area. The uppermost deposit under the topsoil was a band of fine blue-grey alluvial silt, with recent land drains cut through. Beneath this was a thin band (approximately 0.2 metres thick) of eroded organic material, which seemed to form the remains of a truncated land surface pre-dating the post-medieval period, about 0.84 metres below the current surface. It was interpreted as possible marsh, which had presumably survived rising river levels, perhaps because the river was embanked and the land warped (some of the upper alluvium showed banding, although this was not universal). No dateable artefacts were recovered from this layer.

A single large sediment sample ('GBA'/'BS' *sensu* Dobney *et al.* 1992) was recovered from the organic layer and approximately half of this was submitted to PRS for an evaluation of its content of biological remains.

Methods

The sediment sample was inspected in the laboratory and its lithology was 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 and residue resulting from processing were examined for plant and invertebrate macrofossils.

Insect preservation was recorded using the scale of Kenward and Large (1998).

Results

Context 3 [organic layer – ?possible truncated land (marsh) surface]

Sample 2/T (1 kg sieved to 300 microns with paraffin flotation; remaining sediment >20 litres)

Moist, mid to dark grey-brown, fibrous and brittle, slightly sandy slightly clay silt with patches of amorphous organic sediment, fine and coarse herbaceous detritus, mid brown sticky silty clay, and light grey clay. Wood and twig fragments and ?ancient rootlets were also present.

There was a large residue of about 500 cm³ of woody and herbaceous detritus, much of it 4 mm or less in size. The bulk proved to consist of rootlets, some still in tangled knots and clumps, but mostly free fragments. These are presumably ancient and probably from a tree or shrub (although quite fine, they are rather more robust than fossil roots of herbaceous plants). Some sheets of herbaceous material may have been largely from rhizomes rather than culms. There were a few rather poorly preserved seeds from plants which indicated a variety of habitats: aquatic, waterside and fen, e.g. fool's water-cress (*Apium nodiflorum* (L.) Lag.), hemp agrimony (*Eupatorium cannabinum* L.), water-cress (*Nasturtium officinale* R. Br. in Aiton), water-crowfoot (*Ranunculus* Subgenus *Batrachium*) and true bulrush (*Scirpus lacustris sensu lato*), as well as terrestrial: buttercup (*Ranunculus* Section *Ranunculus*), blackberry (*Rubus fruticosus* agg.), elder (*Sambucus*

nigra L.) and stinging nettle (*Urtica dioica* L.). It seems most likely that such an abundance of roots represents penetration of an essentially aquatic sediment (with a terrestrial component from nearby land) after it formed, from trees either growing on a land surface no longer represented in the stratigraphic sequence or growing on the deposit examined but at some distance from the point of sampling. Evidence for possible human activity was present in the form of traces of charcoal (up to 5 mm in maximum dimension), though this may, of course, have been of natural origin.

The rather small flot contained small numbers of invertebrate remains. Chemical preservation was variable, though generally about average for archaeological material from deposits with anoxic waterlogging (E 2.0-4.0, mode 3.0 distinct). By contrast, the degree of fragmentation, though again variable, was often extreme (F 2.0-5.0, mode 4.0 distinct). Many remains were so fragmented that it would be impractical to attempt to name them. The damage appeared recent, as edges showed clean breaks, suggesting they occurred within in the ground immediately prior to excavation (perhaps as a result of the passage of heavy machinery), or during sampling, storage or processing.

Rather more than 20 beetle taxa were noted, and also a small number of invertebrates belonging to other groups. As concluded from the plant remains, the deposit seems to have formed in water, for there were four kinds of aquatic beetle and remains of at least one caddis larva case. Among these, only *Ochthebius minimus* (Fabricius) was represented by more than one individual: there were at least two. There were various insects which may have lived at the edge of water, among plants or litter. Terrestrial species included what appeared to be fragments of the chafer *Hoplia philanthus* (Fuessly), and positively identified remains of a second chafer, *Phyllopertha horticola* (Linnaeus). These would have most probably originated in rough grassland, such as poor grazing. A click beetle, Elateridae sp., seems likely to have had a similar origin. No dung beetles were noted, however, but this may simply be a result of the small number of remains present.

Discussion and statement of potential

It is possible that processing a larger (say 5 kg) subsample of this deposit would produce an insect assemblage which would provide useful information about the surroundings (and which would also increase the range, and therefore the interpretative value, of the plant remains), but the degree of fragmentation

would make identification very time consuming, and many remains would not be identifiable at all; there would need to be a pressing archaeological question to be addressed for the effort to be justifiable.

Should dating of this deposit be required there is certainly a sufficient organic content for a radiocarbon date of the sediment to be attempted.

Recommendations

No further work is recommended on the current material unless there is a specific archaeological question to be addressed.

Retention and disposal

The remaining sediment should be retained for the present.

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.

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