

**Evaluation of biological remains from excavations at
Carberry Hall Farm (site code: TSEP 908)**

by

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Summary

A series of sediment samples and a very small quantity of hand-collected bone from deposits revealed by excavations at Carberry Hall Farm were submitted for an evaluation of their bioarchaeological potential.

Three of the four examined samples gave biological remains of limited value. The fourth (Sample 17, Context 1045) produced very much more useful assemblages of plants and invertebrates. It is suggested that the invertebrate remains from an additional 5 kg subsample of this deposit should be added to those from the material already processed and recorded in detail to aid the reconstruction of the local landscape, and perhaps in recovering records of climate indicators. The data should be combined with those for the plant remains in reconstructing vegetation.

No further work is recommended on the other sediment samples unless they are to be sieved for artefact recovery and/or for remains that may allow radiocarbon dating of the deposits to be undertaken. The existing information from the plant remains should be used in site interpretation, however.

The very small quantity of hand-collected bone was extremely poorly preserved and of no interpretative value. This material may be discarded.

KEYWORDS: CARBERRY HALL FARM; EVALUATION; LATE IRON AGE; ROMANO-BRITISH; PLANT REMAINS; CHARRED PLANT REMAINS; INVERTEBRATES; VERTEBRATE REMAINS

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12 December 2000

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Introduction

An archaeological evaluation excavation was carried out by Humber Field Archaeology at Carberry Hall Farm (NGR: XX), between 31 January and 18 February 2000, as part of a series of interventions along the line of the British Petroleum Teeside to Humber pipeline.

A series of sediment samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992), and a very small quantity of hand-collected bone, were recovered from the deposits. Preliminary dating evidence (from recovered pottery) gave a broad 'late Iron Age' (primarily from features associated with a roundhouse) to Romano-British date for the deposits.

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

Methods

Sediment samples

The sediment samples were inspected in the laboratory. Four of the samples were selected for investigation 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 flots, washovers and residues were examined for plant remains. The flots and washovers were also examined for invertebrate remains, and the residues were examined for other biological and artefactual remains. Preservation of insect remains was estimated using the scales of Kenward and Large (1998).

Table 1 shows a list of the submitted samples and notes on their treatment.

Vertebrate remains

The few vertebrate remains submitted were examined and brief notes were made on their preservational condition.

Results

Sediment samples

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

Context 1005 [Fill of latest Iron Age roundhouse gully]
Sample 7/T (2 kg sieved to 300 microns with washover)

Just moist, mid to dark grey-brown, unconsolidated, slightly clay sand with traces of fine charcoal.

The moderate-sized to large residue of about 250 cm³ of sand and ?iron pan contained some iron-stained charcoal (to 15 mm); more fine charcoal was noted in the small washover, along with some very decayed ?modern weed seeds.

Context 1045 [Organic fill at base of Iron Age ditch 1019]
Sample 17/T (2 kg sieved to 300 microns with paraffin flotation)

Moist, mid to dark grey brown, crumbly (working soft and slightly sticky), slightly clay sandy silt with patches of light orange-brown sand. Traces of charcoal were present in the sample.

There was a moderate-sized residue of about 175 cm³, of which roughly half by volume was plant material, the rest sand. Both the residue and the flot contained very large numbers of very well preserved elder, stinging nettle and water-crowfoot seeds or

fruits, together with a modest range of other taxa. Taken together, the plant remains point to deposition in a pond or ditch close to scrub, with alder present as well as elder, and perhaps a hedgebank nearby. The presence of charred heather basal twig/root fragments and charred rhizome suggest some burnt material like turves might have been deposited, too. There was also a little charcoal (to 10 mm).

A quite rich assemblage of insects, together with abundant Cladocera and a few mites, was recovered. Preservation was variable (E 2.5-5.0, mode 3.5, weak; F 2.0-5.0, mode 3.0, weak), but almost all of the remains would be identifiable given time. There were a few aquatics (a variety of beetles and the numerous *Daphnia ephippia*) and waterside taxa, but terrestrial forms were well represented. There were various species associated with plants, predominantly from open terrain (such as rough grazing), but perhaps also a few from scrub or woodland. There appeared to be at least two species of chafer, indicative of shortish vegetation. Dung beetles were rather common, *Aphodius prodromus* (Brahm) being fairly numerous and *A. contaminatus* (Herbst) represented by more than one individual (there were also *Onthophagus* and *Geotrupes* species. These insects all seem to have been locally derived by flight or inwash rather than imported in dumped material. Various other taxa may have come from dung, too. Invertebrate remains from a larger subsample, together with those seen here, would provide a useful reconstruction of local environment and land use.

Context 2002 [Upper fill (burnt) of small Iron Age pit 2003]
Sample 19/T (3 kg sieved to 300 microns with washover)

Just moist, varicoloured (light grey to light brown to mid orange-brown to dark brown) on a mm-scale, stiff to crumbly (working plastic), slightly sandy silty clay (to clay silt). Charcoal was present in the sample.

There was a very large residue of about 800 cm³ of clean quartz sand and a little iron pan, and a single clast (to 40 mm) of sandstone; the washover of about 40 cm³ comprised charcoal (to 15 mm, apparently mostly oak, *Quercus*) with some charred heather root/twig fragments and other material perhaps from burnt turves. All the charred material was very much coated with silt and encrusted with iron salts.

Context 2023 [Fill of latest Iron Age roundhouse gully]
Sample 22/T (5 kg sieved to 300 microns with washover)

Moist, mid reddish grey-brown, unconsolidated, fine sand with inclusions of stiff, mottled (blue-grey/dark brown) clay.

The very large residue of about 900 cm³ consisted of clean quartz sand with some flints (to 30 mm) and a little iron pan. The small washover of about 20 cm³ included more iron pan and some charcoal, and there were again some charred heather root/twig fragments and very small lumps of burnt and unburnt peat (perhaps from turves) and some uncharred (presumably modern) material.

Hand-collected vertebrate remains

Eight bone fragments were recovered from a single context from this site. Preservation of the remains from Context 1035 was extremely poor and it was impossible to identify from which species or elements the fragments were derived. All the fragments were reddish-brown in colour.

Discussion and statement of potential

Three of the samples gave biological remains of limited value, although giving indications of materials being exploited (notably turf or peat). The fourth (Sample 17, Context 1045) produced very much more useful assemblages of plants and invertebrates.

Detailed examination and identification of the insect remains from Context 1045 would be time-consuming, but rewarding in terms of reconstructing the local landscape, and perhaps in recovering records of climate indicators. The data should be combined with those for the plant remains in reconstructing vegetation.

The vertebrate remains are of no interpretative value.

Recommendations

It is suggested that the invertebrate remains from an additional 5 kg subsample of Sample 17 (Context 1045) should be added to those from the material already processed and recorded in detail.

No further work is recommended on the other sediment samples unless they are to be sieved for artefact recovery and/or for remains that may allow radiocarbon dating of the deposits to be undertaken. The existing information from the plant remains should be used in site interpretation, however.

No further work is recommended on the vertebrate remains.

Retention and disposal

All remaining sediment from Context 1045 should be retained for the present. Sediment samples from other contexts may be discarded unless they are to be sieved for artefact recovery and/or to recover material for radiocarbon dating of the deposits.

The small quantity of hand-collected bone 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.

Acknowledgements

The authors are grateful to Ken Steedman of Humber Field Archaeology for providing the material and the archaeological information,

and to English Heritage for allowing AH and HK to contribute to this report.

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Table 1. List of examined sediment samples from excavations at Carberry Hall Farm, with notes on their treatment.

| Context | Sample | Notes |
|---------|--------|--|
| 1005 | 7 | 2 kg sieved to 300 microns with washover |
| 1045 | 17 | 2 kg sieved to 300 microns with paraffin flotation |
| 2002 | 19 | 3 kg sieved to 300 microns with washover |
| 2023 | 22 | 5 kg sieved to 300 microns with washover |