Assessment of biological remains from a watching brief on land to the rear of Chapel Farm, 9 Runner End, Holme-upon-Spalding-Moor, East Riding of Yorkshire (site code: HRE02)

by

Allan Hall, Harry Kenward and John Carrott

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Summary

Six sediment samples recovered from a watching brief on land to the rear of Chapel Farm, 9 Runner End, Holme-upon-Spalding-Moor, East Riding of Yorkshire, were submitted for an assessment of their bioarchaeological potential. Initial examination of recovered pottery suggested a 14th-15th century date for the deposits.

The insects from these features have no potential for further work towards ecological reconstruction, and the plant remains are of rather limited value. In view of their remarkable preservation, however, it would be of considerable academic interest to determine the date of the articulated insect remains from Context 053. The small assemblage of land snails recovered from Sample 3 (Context 036) was rather unusual being composed principally of two, possibly non-local, taxa.

Dating of the articulated insect remains from Context 053 would be of considerable interest in studies of in-ground decay but no further work is recommended for the purpose of site interpretation.

KEYWORDS: LAND TO THE REAR OF CHAPEL FARM, 9 RUNNER END; HOLME-UPON-SPALDING-MOOR; EAST RIDING OF YORKSHIRE; WATCHING BRIEF; MEDIEVAL; 14TH-15TH CENTURY; PLANT REMAINS; INVERTEBRATE REMAINS; LAND SNAILS

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Introduction

An archaeological watching brief was carried out by Ed Dennison Archaeological Services on land to the rear of Chapel Farm, 9 Runner End, Holme-upon-Spalding-Moor, East Riding of Yorkshire (NGR SE 8056 3831) during March and April 2002.

Six sediment samples (‘GBA’/‘BS’ sensu Dobney et al. 1992) were recovered from the deposits and submitted to PRS for an assessment of their bioarchaeological potential.

Initial examination of recovered pottery (Humberware) gave a date of 14th-15th century for the deposits.

Methods

The sediment samples were inspected in the laboratory and three were selected for assessment. 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 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. Archaeological information, provided by the excavator, is given in square brackets. A brief summary of the processing method and a note regarding remaining unprocessed sediment follows (in round brackets) after the sample number.

Context 012 [lower fill of ditch 010]
Sample 1/T (3 kg sieved to 300 microns with paraffin flotation; approximately 5 litres of sediment remain)
Moist, dark grey-brown to very dark grey, brittle (working sticky), very humic, sandy silt with patches of light grey-brown sand.

There was a tiny residue of a few cm$^3$ of granular organic debris and some sand. The former were small (<5 mm in maximum dimension) brittle clasts of what appeared to be uncharred peat (which might be natural reworked material in this context), and there were some ?modern rootlets and modest numbers of sclerotia (resting bodies) of the soil-dwelling fungus Cenococcum geophilum. The tiny flot consisted mostly of further rootlets and Cenococcum sclerotia, with traces of decayed plant and insect tissue. A single articulated weevil, the nettle feeder Cidnorhinus quadrimaculatus (Linnaeus), appeared to be modern. The deposit does not appear to be likely to contribute much to the interpretation or reconstruction of the site.

Context 036 [upper fill of barrel/timber lined pit]
Sample 3/T (3 kg sieved to 300 microns with paraffin flotation; approximately 20 litres of sediment remain)
Moist, pinkish brown, crumbly to unconsolidated, silty sand with lumps of ‘tufa-like’ material containing embedded organic matter.

The small residue of about 200 cm$^3$ consisted of about half by volume of very decayed wood fragments (to 30 mm), some of which bore whitish calcareous detritus on their surface. The remainder had the appearance of tufa (calcium carbonate precipitated in a somewhat spongy manner through the action of lime-charged water as in a spring or seepage point on chalk or limestone), in clasts to 10 mm, with a little sand and gravel. From the evidence of a layer of lime (Context 055) around the opening of the feature, however, this material may represent recrystallised lime if not material deliberately discarded into the feature (or, indeed, both!).

There were moderate numbers of rather decayed seeds, amongst which the following were present in modest amounts: greater celandine (Chelidonium majus L.), hemlock (Conium maculatum L.), blackberry/bramble
(Rubus fruticosus agg.) and (in greater abundance), stinging nettle (Urtica dioica L.). These remains are typical of deposits formed in the vicinity of occupation, greater celandine being particularly frequently encountered near standing buildings.

The large flot contained fine fragments of decayed wood, a small assemblage of snails, and a few insect remains; all of the latter were of terrestrial species (but there was no clear ecological implication), and quite strongly decayed with appreciable loss of colour. The concentration of fossils is too low for further investigation using a larger subsample to be practicable. The small snail assemblage was dominated by two taxa C. lubrica (Müller)/C. lubricella (Porro) and Vallonia costata (Müller)/V. excentrica Sterki with a few fragments of other unidentified land snails.

**Context 053** [concreted lower fill of barrel/timber lined pit]
Sample 5/T (3 kg sieved to 300 microns with washover; approximately 30 litres of sediment remain)
Moist, lumps of concreted lime/mortar with embedded organic material including leaves and ?rootlets.

There was a large residue of about 500 cm³ of coarse chalk gravel (to 90 mm) and lumps of ‘tufa-like’ material, perhaps recrystallised lime (to 40 mm). The small washover comprised pale strawy/yellow herbaceous detritus, of which the largest fragments were from tree leaves (probably including oak, Quercus), though with a few pinnule (frond) fragments of bracken (Pteridium aquilinum (L.) Kuhn). Seeds were sparse and mostly rather unusually preserved: there was, for example, a goosegrass (Galium aparine L.) fruit consisting of the white, spongy endosperm and only a trace of the pericarp in the region of the pedicel. Others were pale and rather thin-walled. By contrast, a single seed of dwarf spurge (Euphorbia exigua L.) was extremely well preserved. The seeds were, like the spurge, essentially weeds of waste ground and cultivated land.

There were a few insects, both adult and larvae, which were completely decolourised but still articulated. These remains closely resembled modern material when treated with alkali. The only specimens that could be identified were two Aphodius and a cethorhynchine weevil. At first sight, it was assumed that they were undoubtedly of very recent origin; however, their stratigraphic position makes this less certain. It would be most remarkable if ancient material had survived in this state, and of considerable interest in studies of in-ground decay. One possibility to be investigated is that the lime was being used to mix mortar to which herbivore dung and perhaps other material (leaf litter, bracken?) had been added.

**Discussion and statement of potential**

The insects from these features have no potential for further work towards ecological reconstruction, and the plant remains are of rather limited value.

In view of their remarkable preservation, however, it would be of considerable interest to determine the date of the articulated insect remains from Context 053, although this could probably only be done through sacrificing all the material for AMS assay. Dating the leaf material might be more practicable, providing it can be assumed the biological remains are contemporaneous.

The small assemblage of land snails recovered from Sample 3 (Context 036) was rather unusual being composed principally of two taxa. In particular, the Vallonia species are typical of dry, open, calcareous places, perhaps suggesting that these remains were accidentally imported to the site (possibly with the lime seen in the spread around the barrel-lined feature (Context 055) and as the ‘tufa-like’ inclusions in the deposits from within the feature) rather than local.

**Recommendations**

As noted above, dating of the articulated insect remains from Context 053 would be of considerable academic interest in studies of in-ground decay. However, no further work for the purpose of site interpretation is recommended for the current material, and it is considered that the palaeoenvironmental requirements of the watching brief have been achieved.

**Retention and disposal**
All of the current material 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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References

