An evaluation of the bioarchaeological potential of deposits from excavations at Castlethorpe 1, Scawby Brook, Brigg, S. Humberside, 1992

Annie Milles, Michael Dainton, Allan Hall and Harry Kenward

Summary

Two samples from the YEB cable excavation were examined for plant and animal remains. The remains of molluscs, plants and insects are indicative of damp, disturbed vegetation associated with a body of water. It is suggested that there is potential for further work on the molluscs.

Authors’ address:

Environmental Archaeology Unit
University of York
Heslington
York
YO1 5DD

0904 433843-51 15 June 1992
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Two samples taken during the YEB cable excavation at Scawby Brook, Brigg,
were selected by the site director for an evaluation of their potential as sources
of information about past environment and activity through analysis of plant and
animal remains.

In the laboratory, the samples were examined and their lithology described
using a standard *pro-forma*. A 1 kg subsample from each was processed
following methods outlined by Evans (1972), and a further 1 kg subsample from
sample 49 was processed following methods outlined by Kenward *et al.*
(1980), in which disaggregation and sieving to 300 microns were followed by a
‘washover’, where lighter organic material was decanted from the
disaggregated sediment.

The flots and residues from both methods were examined for molluscan, insect
and plant remains.

**Context 5, sample 5:** mid grey-brown, moist, stiff clay with some ped
structure and which contained both land and freshwater molluscs. The
landsnail species included *Trichia hispida* (2 individuals), *Valonia* sp. (8),
*Cochlicopa lubrica* (1) and *Vertigo pygmaea* (5), *Punctum pygmaeum* (2),
*Nesovitrea hammonis* (2), *Aegopinella nilidula* (1), *Carychium minimum* (9) and
*Vertigo cf. angustior* (1), which are typical of damp or wet grassland. It is likely
that this group represents vegetation growing beside water. The freshwater
molluscs tend to suggest relatively slow-flowing, vegetated water, and include
*Bithynia tentaculata* (81), *Planorbis planorbis* (35), *Bathympalus contortus*
stagnalis* (7), *Lymnaea peregra* (25), *Lymnaea truncatula* (1), *Succineidae*
spp. (4) and *Pisidium* spp. valves (12). Characeae oospores and ostracod
shells were also present - these, too, indicate an aquatic environment.

**Context 49, sample 49:** mid to dark somewhat orange-brown (with some
small bright orange patches), dry to moist, crumbly, humic clay with a few root
fragments, stones (2-20 mm), twig and wood fragments and fragments of
molluscan shell.

The residue left after sieving consisted mainly of small pellets of
undisaggregated clay with a little brick/filile to 10 mm, and a trace of glassy slag
to 15 mm. On ignition in a Bunsen flame, there was a small amount of
combustion of organic matter, leaving unburnt clay which had a bright red
colour on cooling. A sample of this clay was heated with dilute hydrochloric acid
and the dark brown extract tested for iron with potassium ferrocyanide and
potassium ferricyanide solutions. It was evident that there was much iron
present, and this probably accounted for much of the brown and orange hue of the raw sediment, which was thus probably rather low in humic matter.

The landsnails present in the residue and flot included Cochlicopa lubrica (1), Vallonia sp. (1), Vitrea sp. (2), Vitrina pellucida (3) and Trichia hispida (4), which are typical of a damp grassland. With them was a small assemblage of plant macrofossils, mainly oospores of Characeae, with a very small number of seeds or fruits of elderberry (Sambucus nigra), stinging nettle (Urtica dioica), orache (Atriplex sp.), celery-leaved crowfoot (Ranunculus sceleratus), mint (Mentha sp.) and woundwort (Stachys sp.). Insofar as they can be interpreted, they suggest the presence of some disturbed vegetation in the vicinity of a body of water.

Insect remains were rare and poorly preserved. Three adult beetles were recorded, of which two (Helophorus sp. and Hydraena sp.) were aquatics, and the third (Cidnorhinus quadrinaculatus) a nettle feeder. Other non-molluscan invertebrate remains gave no further ecological information. It seems unlikely that further investigation of insect remains from this layer would amplify an interpretation based on molluscs and plant macrofossils.

Implications

This assessment indicates that there is some potential for further bioarchaeological analysis of these deposits, at least where mollusc remains are preserved, to amplify what is known about the landscape in the vicinity of the site.

References
