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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.

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**An evaluation of the bioarchaeological potential of deposits from
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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), *Vallonia* sp. (8), *Cochlicopa lubrica* (1) and *Vertigo pygmaea* (5), *Punctum pygmaeum* (2), *Nesovitrea hammonis* (2), *Aegopinella nitidula* (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), *Bathymophalus contortus* (3), *Valvata cristata* (5), *Armiger crista* (2), *Anisus vortex* (1), *Lymnaea 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/tile 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 flots 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 quadrimaculatus*) 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

- Evans, J. G. (1972). *Land Snails in Archaeology*. London: Seminar Press.
- Kenward, H.K., Hall, A.R. and Jones, A.K.G. (1980). A tested set of techniques for the extraction of plant and animal macrofossils from waterlogged archaeological deposits. *Science and Archaeology* 22, 3-15.