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Appendix*

**Assessment of biological remains from excavations at Mill House Farm,  
Kexby, near York (site code: 1997.61)**

by

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**Summary**

*Six samples of sediment from deposits revealed by excavations at Mill House Farm, Kexby, near York, were submitted for an assessment of their bioarchaeological remains. Plant remains consisted mostly of charcoal and root fragments, with a few seeds and fruits preserved in Context 1132. A few, very poorly preserved, invertebrates were also present in Context 1132. Further work on this material is not recommended.*

**Keywords:** MILL HOUSE FARM; KEXBY; YORK; ROMAN; ASSESSMENT; PLANT REMAINS; INVERTEBRATES; CHARCOAL

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## **Assessment of biological remains from excavations at Mill House Farm, Kexby, near York (site code: 1997.61)**

### **Introduction**

Excavations were carried out by On Site Archaeology at Mill House Farm, Kexby during 1997. Six General Biological Analysis samples ('GBAs' *sensu* Dobney *et al.* 1992) were submitted for an assessment of their bioarchaeological potential.

### **Methods**

The samples were initially inspected in the laboratory and described using a *pro forma*. Three samples were selected for processing. A 2 kg subsample was taken from each sample for extraction of macrofossil remains, following procedures of Kenward *et al.* (1980; 1986). A 'squash' (after Dainton 1992) was prepared from a further sample to check for the presence of nematode eggs. The sediment remaining after being processed was retained as voucher samples.

'Flots' and residues resulting from processing were examined for their content of plant and invertebrate macrofossils, and animal bone. Notes were made on the quantity of fossils and principal taxa.

### **Results and discussion**

The results are presented in context number order.

#### **Context 1100, Sample 5**

*Varicoloured (from light grey/brown to light brown to mid orange/brown) sand*

*with a stone in the size range 20-60 mm.*

No further analysis undertaken; probably no potential for bioarchaeological analysis on the basis of visual inspection.

#### **Context 1106, Sample 6/T**

*Just moist, mid-dark grey, crumbly (working plastic when wet), slightly clay sand. Millimetre-scale orange mottles were present, and the whole sediment had a yellowish cast caused by the abundant sand grains. Lumps of charcoal (to 25 mm) were common, as were very small fragments of burnt mammal bone.*

The small washover consisted of plant debris, probably mainly very decayed root and root bark fragments, to 5 mm in maximum dimension, with some fine charcoal (< 2 mm) and a very little very decayed wood to 10 mm. A few sclerotia (resting bodies) of the soil-dwelling fungus *Cenococcum* were noted and there were one or two tiny (< 1 mm) 'ash beads' (whitish bead-like structures probably formed during burning of organic matter). No invertebrates were present. The small residue was of quartz sand with some charcoal to 25 mm and burnt bone to 10 mm.

#### **Context 1132, Sample 7/T**

*Moist, light grey/brown to dark brown to black, crumbly (working slightly plastic locally), humic silt. Also present was some herbaceous detritus and some slightly silty sand. Some ?rotted wood was present. It is possible that some of the organic matter consisted of roots intruded at a later stage of the formation of the deposit.*

A tiny flot was produced and consisted of plant debris and a small assemblage of rather poorly preserved invertebrates. There was evidence of aquatic deposition from several *Daphnia ephippia* and *Helophorus* sp. A larva of a click beetle, probably *Athous hirtus* (Herbst) may have burrowed into the deposit post-depositionally, or have been ancient. There was a weak hint of an artificial accumulation of decaying matter from a *Gyrophynus* (?*fracticornis*), and of dung (somewhere) from *Aphodius* sp.

The small residue consisted of approximately equal volumes of quartz sand and organic matter, the latter mainly very decayed wood (to a maximum size of 30 mm, mostly rather smaller). Amongst the wood fragments were a few with rather sharp oblique edges which may have been wood chips produced by woodworking. There were modest numbers of rather poorly preserved fruits and seeds, the more abundant being stinging nettle (*Urtica dioica* L.) and spike-rush (*Eleocharis palustris sensu lato*). The small assemblage gave no clear indications either of local environment or of material which may have been discarded in the cut, though there were some hints that disturbed wet grassland was present in the vicinity. The presence of at least two *Sphagnum* leaves is difficult to account for unless there were areas of mire nearby or that peat or the moss itself was brought to the site for some purpose.

### Context 1140, Sample 8

*Just moist, dark brown with light brown patches, crumbly, slightly silty sand with iron-rich concretions (?pan) to 10 mm.*

The squash was mostly inorganic, with a trace of organic detritus, a few fungal hyphae and a single ?spore. Also present were some silica fragments which might

possibly have derived from an organic source such as (very poorly preserved) phytoliths.

### Context 1146, Sample 10

*Moist, light yellowish brown to mid-dark grey/brown, crumbly (working slightly plastic locally), slightly silty sand with charcoal (to 30 mm) present.*

No further analysis undertaken; probably no potential for bioarchaeological analysis on the basis of visual inspection.

### Context 1164, Sample 9/T

*Just moist, dark greyish brown (locally light grey/brown), crumbly sand with a lump of fused and slightly concreted charcoal/ash.*

The small washover produced only some plant debris and fine (<2 mm) charcoal. The former were, as in the subsample from Sample 6, root and root bark fragments. The small residue consisted of quartz sand with moderate amounts of charcoal to 15 mm, and with some small (<5 mm) concretions consisting of sand grains apparently held together with a dark brown 'varnish'. Some of the charcoal fragments bore patches of sand grains similarly 'varnished'. It was not clear from casual inspection whether the matrix was of mineral salts or some kind of amorphous organic material; this would require further analysis to elucidate.

## Recommendations

Further work on the bioarchaeological material from these contexts is not considered to be a high priority, although some further useful information might conceivably be obtained from Context 1132 by processing a much larger subsample. In

particular, there appears to be rather limited potential for ecological or land-use reconstruction.

## Retention and disposal

The sediment remaining from the selected samples need not be retained unless further analysis of the material from Contexts 1132 and 1164 is required.

## Archive

All extracted fossils and the residues are currently stored in the Environmental Archaeology Unit, University of York, along with paper and electronic records pertaining to the work described here.

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## References

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## Appendix

1997.61 Mill House Farm, Kexby. List of invertebrate taxa recorded.

Context: 1132 Sample: 7/T ReM: RS

Weight: 2.00 E: 0.00 F: 0.00

Helophorus sp.	2	oa-w
Olophrum sp.	1	oa
Gyrophypnus sp.	1	rt
Aleocharinae sp.	1	u
Aphodius sp.	1	ob-rf
Enicmus sp.	1	rt-sf
Coleoptera sp.	1	u
*Daphnia sp. (ephippium)	6	oa-w
*Athous ?hirtus (larva)	2	oa-p
*Coleoptera sp. (larva)	1	u
*Acarina sp.	1	u

s - semiquantitative record. Codes 'oa-w', etc., refer to ecological categories.