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**Evaluation of biological remains from excavations at West End, Kilham,
East Riding of Yorkshire (site code KINCM1998.87)**

by

Allan Hall, Deborah Jaques, Frances Large and Darren Worthy

Summary

Excavations at West End, Kilham, East Riding of Yorkshire, produced three sediment samples and a small assemblage of hand-collected bone from deposits of probable medieval date. This material has been evaluated for its bioarchaeological potential.

A small quantity of charred plant remains was recovered from two of the samples. The scarcity of the remains and the broad and uncertain dating framework render this material of little interpretative value. No further work is warranted. Ancient invertebrate remains were almost completely absent.

It is clear that the deposits showsome potential for producing well-preserved vertebrate remains, but, in view of the very small assemblage recovered from the five trenches that were excavated, it seems unlikely that further excavation would recover a substantial assemblage of bone. The current material does not warrant any further analysis.

KEYWORDS: WEST END; KILHAM; EAST RIDING OF YORKSHIRE; EVALUATION; MEDIEVAL; BONE; FISH BONE; CHARRED PLANT REMAINS; CHARCOAL

Authors' address:

Palaeoecology Research Services
Environmental Archaeology Unit
Department of Biology
University of York
PO Box 373
York YO10 5YW

Prepared for:

York Archaeological Trust
Cromwell House
13 Ogleforth
York YO1 7FG

Telephone: (01904) 433846/434475/434487
Fax: (01904) 433850

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Introduction

An archaeological excavation was carried out by York Archaeological Trust at West End, Kilham, East Riding of Yorkshire (NGR TA 05586430) in January 1999. Five trenches were excavated, with the purpose of examining a series of earthworks believed to be building platforms and enclosure boundaries of medieval date.

Three sediment samples ('GBA' *sensu* Dobney *et al.* 1992) and half a box of bone (approximately 10 litres) were recovered and submitted to the EAU for evaluation of their bioarchaeological potential.

Methods

Sediment samples

The three sediment samples were inspected in the laboratory and on the basis of this inspection two were chosen for further work. A description of the lithology of these samples was recorded using a standard *pro forma*. A 3 kg sub-sample from Sample 2 (Context 5010) was processed for extraction of macrofossil remains, following procedures of Kenward *et al.* (1980; 1986), whilst Sample 1 (Context 3003) was bulk sieved to 500 µm for recovery of bones and other artefacts.

The flots and residues resulting from processing were examined for plant and invertebrate remains.

Vertebrate remains

All of the bone was recorded, with the exception of material from Context 4000, which was described as unstratified. Brief notes were made concerning preservation, colour, angularity (i.e. the nature of the broken surfaces) and fragmentation, whilst quantities and identifications were also recorded.

Results

Sediment samples

The results of the investigations are presented in context number order. Archaeological information and/or archaeological questions to be addressed (provided by the excavator) are given in square brackets.

Context 3003 [basal fill of pit - can sample provide information on pit function?]

Sample 1 (1.5 kg processed)

Moist, mid grey-brown, crumbly (working soft and sticky when wet), slightly sandy, slightly clay, silt. Very small, small and medium-sized stones (2-60 mm), mainly chalk, were present, together with mammal and fish bone. Modern rootlets were noted.

The residue consisted mainly of chalk (to 45 mm) and gravel. A small quantity of charred plant remains were recovered, which included bread/club wheat (*Triticum* cf. *aestivo-compactum*), ?barley (*Hordeum* sp(p).), field bean (*Vicia faba* L.), and ?pea (cf. *Pisum* sp(p).). Preservation of these

remains was rather variable; some being very poorly preserved.

Additionally, 75 bone fragments were noted, most of which were burnt fish bone. Much of the material was too fragmented to be identified, but those which were represented included ling (*Molva molva* (L.)), haddock (*Melanogrammus aeglefinus* (L.)), eel (*Anguilla anguilla* (L.)) and herring (*Clupea harengus* L.).

The burnt plant and vertebrate remains from this sample, combined with the ashy nature of the deposit, suggest the pit was being used for dumping waste from a hearth or fire.

Context 4021 [fill of possible quarry pit]
Sample 3

This sample was quickly examined in the laboratory but no further action was taken.

Context 5010 [basal fill of pit - can sample provide information on pit function?]
Sample 2 (3 kg processed)

Moist, mid brown, with orange-ish flecks and stained throughout by charcoal, crumbly (working plastic), silty clay. Very small stones (2-6 mm) and tiny fragments of brick/tile were present, whilst charcoal was recorded as abundant.

The flot was extremely small and consisted mainly of modern rootlets, a little sand and some charcoal (to 14 mm). A single beetle fragment and a fly wing were noted (both believed to be modern), along with a few earthworm egg capsules. Two land snails were also present; one was identified as *Cecilioides acicula* (Müller), a burrowing species and probably modern.

The residue was composed almost entirely of charcoal (to 21 mm), with some sand and a few small (to 40 mm) stones. The charcoal included some fragments of oak (*Quercus*).

Too few remains were recovered for any interpretation to be made regarding the function of the pit.

Vertebrate remains

From information supplied by the excavator, it appeared that most of the material was probably medieval in date. No information could be found for Context 1023, the only deposit producing bone from Trench 1. In total, vertebrate remains from eighteen contexts were recorded (including material from 1023), representing all five trenches, and amounting to 58 identified and 41 unidentified fragments. Only two of the fragments were measurable and two were mandibles with teeth *in situ*.

Preservation overall was mainly good, most fragments having sharp edges and only a few fragments (from Contexts 1023, 4017 and 5007) being recorded as battered in appearance. Material from Context 1023 was also quite fragmented, with more than 50% of the bones being less than 5 cm in their greatest dimension. Additionally, bones from Contexts 3002, 3005 and 3009 showed a high degree of fragmentation, but much of the breakage was fresh and the bones affected were fish, which can be more brittle and prone to damage. Little evidence for dog gnawing was apparent.

Most of the small assemblage consisted of fish bones recovered from Trench 3 (Table 1). These fragments represented large individuals (as one might expect from hand-collected material), and included the remains of ling (*Molva molva* (L.)), cod (*Gadus morhua* L.), haddock (*Melanogrammus*

aeglefinus (L.)) and unidentified Gadidae. Both vertebrae and skull fragments were present; some showing chop marks. Remains of the more typical domestic mammals such as caprovids, cattle and pigs were also present in small numbers (Table 1).

Two pig bones, a radius and an ulna (representing the same individual), recovered from Context 1023 are worthy of note. They exhibit characteristics associated with a condition known as achondroplasia, which results in shortened limbs and jaws. This condition is believed to be congenital (Brothwell 1972).

Discussion and recommendations

Sediment samples

Plant and invertebrate remains recovered from the samples were scarce and showed no potential for further analysis. The broad and uncertain dating of the deposits also renders the material of little value.

Vertebrate remains

It is clear that the deposits show some potential for producing well-preserved vertebrate remains. However, in view of the very small assemblage recovered from the five trenches that were excavated, it seems unlikely that further excavation would recover a large assemblage of bone. The current material does not warrant any further analysis.

Storage requirements

The flots and residues should be retained for the present. Any remaining sediment and the bone may be disposed of.

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.

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References

- Brothwell, D. R. (1972). *Digging up bones*. London: British Museum (Natural History).
- Dobney, K., Hall, A. R., Kenward, H. K. and Milles, A. (1992). A working classification of sample types for environmental archaeology. *Circaea, the Journal of the Association for Environmental Archaeology* **9** (for 1991), 24-6.
- Kenward, H. K., Engleman, C., Robertson, A., and Large, F. (1986). Rapid scanning of urban archaeological deposits for insect remains. *Circaea* **3** (for 1985), 163-72.
- 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.

Table 1. Hand-collected vertebrate remains from West End, Kilham, East Riding of Yorkshire. Key: No. frags = total number of fragments; No. meas = number of measurable fragments; No. mand = number of mandibles with teeth in situ.

Species		No. meas	No. mand	No. frags
<i>Sus f. domestic</i>	pig	-	-	3
<i>Bos f. domestic</i>	cattle	1	-	7
Caprovid	sheep/goat	1	2	8
<i>Gadus morhua</i> L.	cod	-	-	1
<i>Molva molva</i> (L.)	ling	-	-	12
<i>Melanogrammus aeglefinus</i> (L.)	haddock	-	-	1
<i>Sub-total</i>		2	2	32
Unidentified fish		-	-	26
Unidentifiable		-	-	41
<i>Sub-total</i>		-	-	67
Total		2	2	99