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Evaluation of biological remains from Figham Common, Beverley (site code FCB98)

by

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Summary

Eight sediment samples (from six contexts) and a single small box of both hand-collected bone and shell, of mid to late medieval date, were submitted for an evaluation of their bioarchaeological potential.

The plant and invertebrate macrofossils recovered were of some limited interpretative value generally indicating deposition in still, or slow flowing, water. There were only traces of food remains, synanthropic beetle taxa and charcoal to suggest human influence.

A small, moderately well-preserved vertebrate assemblage was recovered. The small size precluded any interpretation of the vertebrate remains but the reasonable preservation suggests that further work would produce a useful comparative assemblage.

KEYWORDS: FIGHAM COMMON; BEVERLEY; EVALUATION; PLANT REMAINS; INVERTEBRATE REMAINS; SHELLFISH; SNAILS; BEETLES; VERTEBRATE REMAINS

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Introduction

An archaeological excavation was carried out by Humber Archaeological Partnership at Figham Common, Beverley, in April 1998. Eight sediment samples ('GBA' sensu Dobney et al. 1992) and a single box (11 litres) containing both shell and bone were recovered from deposits of mid to late medieval date. This material was submitted to the EAU for evaluation of its bioarchaeological potential.

Methods

Sediment samples

All the sediment samples were inspected in the laboratory and on the basis of this inspection and information supplied by the excavator, five of them were chosen for further work. A description of the lithology of these samples was recorded using a standard *pro forma* and subsamples of 1 or 2 kg were taken for extraction of macrofossil remains, following procedures of Kenward *et al.* (1980; 1986).

Plant macrofossils were examined from the residues, washovers and flots resulting from processing, and the flots were examined for invertebrate remains.

Table 1 shows a list of samples and notes on their treatment.

Hand-collected shell

Six small bags of hand-collected shell (from six contexts) were submitted. Brief notes were made on the preservational condition of the shell and the remains identified to species where possible.

Vertebrate remains

The vertebrate remains were examined and a basic archive produced. A record was made of preservation, quantities (numbers and weights) and identifications where appropriate. Measurements were taken, where applicable, according to von den Driesch (1976).

Fragments not identifiable to species were grouped into categories: large mammal (assumed to be cattle, horse or large cervid), medium-sized mammal 1 (assumed to be caprovid, pig or small cervid), medium-sized mammal 2 (assumed to be dog, cat, hare or similar sized animal).

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 20 [13th century ditch fill - Is there any evidence for slow/flowing water? Any evidence of human contamination?]

Sample 7 (2 kg GBA - washover)

Moist, light to mid grey-brown, with orange mottles (to 5 mm), crumbly and slightly sticky (working soft and slightly plastic), clay silt. Very small to medium-sized (2 to 60 mm) stones, fragments of pot and ?bird bone were present.

The washover from this sample was very small (<1% of the sample by volume) and contained a limited number of disturbed ground weed species. Other plant macrofossils included very degraded wood fragments (to 5 mm), fine rootlets, small grass (Gramineae) seeds, charcoal (to 5 mm), and occasional bud scales. Wetland species were represented by infrequent sedge (*Carex* sp(p).) nutlets and a single stonewort (*Chara* sp(p).) oospore. Most *Chara* species are indicative of alkaline aquatic habitats; however, the very small size of the assemblage makes further interpretation difficult. A few fragments of unidentified snail shell were also noted.

The very small residue was mostly sand, small lumps of undisaggregated sediment (to 2 mm) and very small to medium-sized stones (2 to 30 mm) with a few unidentified bone fragments and freshwater planorbid snails.

There was no evidence for human contamination.

Context 24 [late 12th to early 13th century blue grey silts - Is there any evidence for stagnant/fresh water? Is this a natural deposit? Any evidence of human contamination?]

Sample 1 (2 kg GBA - washover)

Moist, light to mid grey-brown (with an orange tinge from rotted organic material), sticky (working plastic), very slightly silty clay. Small (6 to 20 mm) stones, modern rootlets and fragments of freshwater molluscs were present.

Stonewort oospores and duckweed (*Lemna* sp(p).) seeds were very frequent in the small washover (<1% of the original sample). Other wetland plant taxa present included rushes and water crowfoot (*Ranunculus* Subgenus *Batrachium*). The washover also contained occasional fish scales, fragments of

operculate and planorbid freshwater snail shell, traces of insect cuticle, quartz sand, charcoal to (10 mm), and angular oolitic limestone pebbles (to 20 mm).

The tiny residue was mostly sand and small stones (2 to 15 mm)with a few unidentified bone fragments and some fragments of freshwater snail shell (both planorbid and operculate taxa).

This sample represents an alkaline still-water habitat containing little evidence of human contamination.

Context 26 [13th century ditch fill - Is there any evidence for stagnant/fresh water? Is this a natural deposit? Any evidence of human contamination?] Sample 5 (2 kg GBA - washover)

Moist, mid grey-brown, crumbly to slightly sticky (working soft to plastic), clay silt, with very small (2 to 6 mm) and medium-sized (20 to 60 mm) stones, rotted wood and fragments of freshwater molluscs.

The small washover (2% of the original sample) contained a similar assemblage of aquatic plant species compared with the washover from context 24. In addition, the sample contained several weed types indicative of damp ditches, wayside and grassland habitats. The only food remains recovered were rare fig (Ficus carica L.) seeds. There were abundant Daphnia ephippia and Cristatella mucedo Cuvier again indicating aquatic deposition. A few fragments of freshwater operculate snail shell were noted. Terrestrial invertebrate forms were also present including three beetle taxa which may have originated from occupation areas: Lyctus linearis (Goeze) (powder-post beetle); Anobium punctatum (Degeer) (woodworm beetle) and ?Tipnus unicolor (Piller and Mitterpacher) (a spider beetle particularly associated with old, rather damp, buildings).

The very small residue was mostly sand and small to medium-sized stones (2 to 60 mm) with some unidentified bone fragments, a few fragments of freshwater operculate snail shell, and a single unidentified ?land snail.

The macrofossils from this sample suggest that the ditch contained still alkaline water. In contrast to the samples from Contexts 20, 24 and 44 the ditch appears to have been overgrown, being surrounded by tall- growing wayside weed species and several taxa that are found in damp ditches such as wild celery (*Apium graveolens* L.). With the exception of

the occasional fig seeds and the synanthropic beetle remains there was little evidence to suggest human influence, as such, these seem unlikely to represent *in situ* dumping but may have been carried by flowing water (perhaps flood waters) from nearby dump or occupation areas.

Context 36 [Peat deposits - Is there any evidence for human occupation? Marshland?]
Sample 3 (1 kg GBA - paraffin flotation)

Moist, very dark brown (oxidised black in places), crumbly and layered, slightly sandy, herbaceous detritus peat, with patches of silty clay inclusions. Rootlets (ancient) and common reed (*Phragmites australis* (Cav.) Trin. ex Steudel, to 20 mm) were common.

The large flot was mostly of plant detritus with modest numbers of beetles all of which were of taxa associated with natural or semi-natural habitats with a strong aquatic/waterside influence.

Common reed (*P. australis*) and clasts of highly humified organic matter were both abundant in the large washover (60% of the original sample). The sample contained a number of other species typical of fen or reedswamp including horsetail (*Equisetum* sp(p).), sedges, water crowfoot, water mint (*Mentha aquatica* L.), *Scorpidium scorpioides* (Hedw.) Limpr., bog bean (*Menyanthes trifoliata* L.), wild celery, and greater spearwort (*Ranunculus lingua* L.). A limited number of open, disturbed ground weed seeds were also present.

The residue was of essentially the same composition as the washover.

The sample was clearly from a relatively rich fen or reedswamp. The recovered remains gave no evidence of human influence.

Context 44 [late 12th to early 13th century ditch fill - Is there any evidence for slow/flowing water?] Sample 8 (2 kg GBA - washover)

Moist, light to mid grey to light to mid orangebrown, brittle to slightly sticky (working soft), clay silt with very small and small (2 to 20 mm) stones, charcoal and fragments of freshwater molluscs. The light to mid orange-brown colour could be the result of rotted organic material. The washover (<1% of the original sample) contained an assemblage of plant remains very similar to that described for the washover from Context 20, Sample 7. The very limited range of macrofossils recovered included rare pieces of charcoal (to 2 mm), degraded rootlets, very small bone fragments, degraded wood (to 10 mm), rush (Juncus sp(p).) seeds and rare stonewort oospores. Many snail shell fragment were noted together with two unidentified freshwater snail shells and two Cochlicopa lubrica (Müller) land snails.

The very small residue was mostly sand, small lumps of undisaggregated sediment (to 2 mm) and very small to medium-sized stones (2 to 60 mm) with a few unidentified bone fragments and small planorbid snails.

The ditch represented by this sample probably contained alkaline water; however, there is insufficient evidence to say whether the water was still or flowing. The rare pieces of charcoal were the only evidence for human contamination.

Hand-collected shell

The small amounts of marine shell and freshwater and terrestrial snails recovered showed rather different states of preservation. The marine shell was, in general, poorly preserved whereas the freshwater and terrestrial snail shells were fairly well-preserved.

Oyster valve fragments were recovered from five of the six represented conexts A single right oyster (Ostrea edulis L.) valve from Context 20 bore a 'V'shaped nick mark characteristic of having been opened with a knife or similar implement.

The freshwater snails from Context 20 included six *Planorbis corneus* (L.) and a single *Lymnaea ?glabra* (Müller), the former indicating hard, slow or standing weedy water and the latter, if confirmed as *L. glabra*, characteristic of small water bodies (e.g. ponds, ditches) subject to drying out. Two large planorbids were also recovered from Context 24 but these were not identified to species and so indicated only the presence of fresh water.

The terrestrial snails were all *Cochlicopa lubrica*, *Cepaea/Arianta* sp. or *Helix* sp.

Counts by taxon and context are presented in Table 2.

Vertebrate remains

Overall preservation was good with angularity (appearance of broken surfaces) described as variable, most fragments being spiky or slightly battered. Colour was variable, ranging from fawn to brown. Fragmentation was not great with more than 50% of fragments being 5 to 20 cm in dimension. Dog gnawing and butchery were evident on less than 10% of fragments. Fresh breakage was present on 10 to 20% of the assemblage.

Table 3 gives the number of fragments and weights by species, together with the number of unfused fragments and the number of loose teeth of use in age at death analysis. A total of 86 fragments (weighing 1214 g) were recovered, of which 31 (650 g) were identifiable to species or species group. Cattle (Bos f. domestic) fragments were the most numerous, followed by sheep/goat (caprovid) and pig (Sus f. domestic). Other species, including horse (Equus f. domestic) and chicken (Gallus f. domestic) were represented by single or few fragments.

The assemblage contained six measurable fragments (Table 4), a single loose tooth and two sub-adult fragments. The small numbers of fragments precluded any further analysis.

Discussion and statement of potential

Sediment samples

All of the ditch samples produced very small plant macrofossil assemblages and a few freshwater snails; however, the species that were identified mostly provided a clear interpretation of the depositional environment. All of the ditches appear to have contained alkaline water and most contained plant species indicative of still conditions. Preservation of plant remains was good and therefore the small macrofossil volumes were probably a result

of dilution by inorganic deposition. The peat sample contained a typical well-preserved, relatively rich assemblage of wet fen or reedswamp plant species. Two of the contexts (Context 26, Sample 5 and Context 38, Sample 3) gave modest numbers of insect remains, again, indicative of aquatic/waterside conditions. Rare fig seeds from Context 26, three synanthropic beetle taxa from Context 20 and occasional pieces of charcoal from several other contexts were the only evidence for human contamination.

Hand-collected shell

Only very small amounts of shell were submitted and, with the exception of the remains from Context 20, they were of little interpretative value.

The small amounts of oyster shell recovered are probably from human food waste.

The freshwater snails from Context 20 support the evidence from the plant remains (recovered from Sample 7) that the ditch contained alkaline (hard) water and further suggest that this was still or slow flowing.

The terrestrial snails were mostly catholic taxa and of no interpretative value.

Vertebrate remains

The small size of the vertebrate assemblage renders it of limited interpretative value. However, the good preservation suggests that if further excavation were to take place a moderate-sized assemblage of vertebrate remains would be recovered. A useful comparison could be made between material from this site and Jack Taylor Lane (Carrott *et al.* 1998) as the assemblages are of similar

date and are in the same area of the town, on opposite sides of the beck. Material from Lurk Lane and Eastgate, Beverley (Scott 1991, 1992) would also provide useful local comparanda.

Recommendations

No further work is required on the present sediment samples; however, if a second excavation phase is planned provisions should be made to study samples from any waterlogged deposits encountered in the area.

No further work is recommended on the recovered shell.

If further excavation should take place a moderate-sized assemblage of reasonably well-preserved vertebrate remains is likely to be recovered.

The environmental development of the beck area should be written up with reference to the present work and the evidence from Jack Taylor Lane and North Beckside. Provision should be made for the full post-excavation analysis and publication of material recovered.

Retention and disposal

It is recommended that all the sediment samples, shell and vertebrate remains are kept for the present.

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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Table 1. A list of the sediment samples from Figham Common, Beverley.

Context	Sample	Described?	Processed?	Notes
20	6	N	N	No action taken
20	7	Y	Y	GBA, 2 kg processed
24	1	Y	Y	GBA, 2 kg processed
26	5	Y	Y	GBA, 2 kg processed
34	4	N	N	No action taken
36	2	N	N	No action taken
36	3	Y	Y	GBA, 1 kg processed
44	8	Y	Y	GBA, 2 kg processed

Table 2. Hand-collected shell from Figham Common, Beverley. Counts are minimum numbers of individuals.

Taxa/Context	7	8	10	20	24	26	Total
Ostrea edulis L.	1	1	1	1	-	3	7
Cerastoderma ?edule (L.)	-	1	-	-	-	-	1
Lymnaea ?glabra (Müller)	-	-	-	1	-	~	1
planorbids	-	-	-	6	2	~	8
Planorhis corneus (L.)	-	-	-	6	-	-	6
Cepaea/Arianta sp.	-	1	-	11	-	-	12
Helix sp.	-	3	-	1	-	1	5
Total	I	6	1	26	2	4	4()

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Table 3. The vertebrate remains from Figham Common, Beverley. The numbers of teeth includes only those of use for obtaining ageing or sexing information. Key: * Weight of all unidentifiable fragments

Taxa		No. unfused	No. teeth	Total no. fragments	Weight (g)
Horse	Equus f. domestic	-	-	2	96
Pig	Sus f. domestic	1	-	4	41
Cow	Bos f. domestic	-	1	15	424
Sheep/goat	Caprovid	I	-	9	87
Chicken	Gallus f. domestic	-	-	1	2
Suhtotal		2	1	31	650
Medium mam	ımal I	-	-	20	
Medium mam	amal 2	-	-	1	*564
Large mamma	al	-	-	34	
Subtotal		-	-	55	564
Total		2	1	86	1214

Table 4. Measurements for vertebrate remains from Figham Common, Beverley.

Date	Taxa	Element	Side	Measurements		
L12-E13th C	Horse	Metacarpal	I	Bd = 50.45	Dd = 37.95	
13th C	Pig	Humerus	1	BT = 30.45	HTC = 19.15	
13th C	Sheep/goat	Radius	I	Bp = 28.08	BFp = 25.37	
13th C	Sheep/goat	Radius	r	Bp = 29.14	BFp = 25.71	SD = 16.51
13th C	Sheep/goat	Metacarpal	1	Bp = 21.68	Dp = 15.29	
13th C	Chicken	Humerus	r	Bp = 18.20	Dip = 19.06	
	L12-E13th C 13th C 13th C 13th C 13th C	L12-E13th C Horse 13th C Pig 13th C Sheep/goat 13th C Sheep/goat 13th C Sheep/goat	L12-E13th C Horse Metacarpal 13th C Pig Humerus 13th C Sheep/goat Radius 13th C Sheep/goat Radius 13th C Sheep/goat Metacarpal	L12-E13th C Horse Metacarpal I 13th C Pig Humerus I 13th C Sheep/goat Radius I 13th C Sheep/goat Radius r 13th C Sheep/goat Metacarpal I	L12-E13th C Horse Metacarpal I $Bd = 50.45$ 13th C Pig Humerus l $BT = 30.45$ 13th C Sheep/goat Radius l $Bp = 28.08$ 13th C Sheep/goat Radius r $Bp = 29.14$ 13th C Sheep/goat Metacarpal l $Bp = 21.68$	L12-E13th C Horse Metacarpal I Bd = 50.45 Dd = 37.95 13th C Pig Humerus 1 BT = 30.45 HTC = 19.15 13th C Sheep/goat Radius 1 Bp = 28.08 BFp = 25.37 13th C Sheep/goat Radius r Bp = 29.14 BFp = 25.71 13th C Sheep/goat Metacarpal 1 Bp = 21.68 Dp = 15.29