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**Evaluation of biological remains from excavations at Trinity Lane,
Beverley, East Riding of Yorkshire (site code: TRB2001)**

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Summary

Seven sediment samples and one box of animal bone from deposits excavated at Trinity Lane, Beverley, were submitted for an evaluation of their potential for bioarchaeological analysis.

Plant macrofossils, both charred and uncharred were identified from the five sediment samples that were processed. These remains were of variable preservation and none were of much interpretative value. No invertebrate remains were recovered from the samples.

The hand-collected shell assemblage was too small to be of any great interpretative value beyond indicating the importation of oysters to the site. However, some of the oyster valves were sufficiently well preserved to be measurable and the possibility of recovering a larger, and more interpretatively useful, assemblage should be considered in the event of further excavation.

A small assemblage of vertebrate remains was recovered from deposits medieval and post-medieval date. Preservation of the remains was generally quite good. A range of species was identified with cattle, caprovids and pigs forming the largest component of the assemblage. Skeletal element representation suggested a mixture of refuse was represented from a number of different sources. The samples produced small quantities of fish bones, which included the remains of eel, herring and gadid. No further work is warranted on the current assemblage. However, this assemblage shows the potential of these deposits for the preservation of bone.

KEYWORDS: TRINITY LANE; BEVERLEY; EAST RIDING OF YORKSHIRE; EVALUATION; MEDIEVAL; POST-MEDIEVAL; EARLY MODERN; 13TH TO 19TH CENTURY; PLANT REMAINS; CHARRED PLANT REMAINS; SHELLFISH; OYSTER (*OSTREA EDULIS*); VERTEBRATE REMAINS; FISH BONES

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Introduction

An archaeological evaluation excavation was carried out by Humber Field Archaeology at Trinity Lane, Beverley, East Riding of Yorkshire, in November and December 2001.

Seven sediment samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992) and a single box (approximately 16 litres) of hand-collected bone and shell were recovered from the deposits. Preliminary evidence gave medieval, post-medieval and early modern dates for the deposits (pre-13th century to late 19th century).

All of the material was submitted to the EAU for an evaluation of its bioarchaeological potential.

Methods

The sediment samples were inspected in the laboratory. Five of the samples were selected for investigation and their lithologies were recorded, using a standard *pro forma*, prior to processing, following the procedures of Kenward *et al.* (1980; 1986), for recovery of plant and invertebrate macrofossils.

The washovers and residues resulting from processing were examined for plant and invertebrate macrofossils and the residues were sorted for bone, and other biological and artefactual remains.

Brief notes were made on the preservational condition of the hand-collected shell and the remains identified to species where possible. For oyster (*Ostrea edulis* L.) shell additional notes were made regarding: numbers of left and right valves; evidence of having been opened using a knife or similar

implement; measurability of the valves; damage from other marine biota (polychaet worms and dog whelks); encrustation by barnacles. Preservation was recorded subjectively on two four-point scales for erosion and fragmentation as: 0–none; 1–slight; 2–moderate; 3–severe.

For the hand-collected vertebrate remains that were recorded, data were entered directly into a series of tables using a purpose-built input system and *Paradox* software. Subjective records were made of the state of preservation, colour of the fragments, and the appearance of broken surfaces ('angularity'). Brief notes were made concerning fragment size, dog gnawing, burning, butchery and fresh breaks where applicable.

Where possible, fragments were identified to species or species group using the PRS modern comparative reference collection. Fragments not identifiable to species were described as the 'unidentified' fraction.

Results

Sediment samples

The results are presented in context number order. Archaeological information, provided by the excavator, is given in square brackets. Table 2 shows the number of bones recovered from each sample.

No invertebrate remains were recovered from the samples.

Context 1011 ['open ground'; provisional date 14th-16th century]

Sample 7/BS (7 kg sieved to 300 microns with washover)

Moist, mid to dark grey-brown, brittle to crumbly (working soft), slightly sandy clay silt. Stones (6 to 60 mm, including oolitic limestone), brick/tile to 100 mm), charred remains, and large mammal bone, were present in the sample.

There was a moderate-sized residue of about 1400 cm³ of clean quartz sand with some large bone (to 140 mm in maximum dimension), but mainly brick/tile (to 90 mm) and grit, with some chalk (to 50 mm), cinders (to 10 mm) and sand. The washover of about 40 cm³ consisted of 'char' (undense charred material probably from the burning of coal), and charcoal with a few uncharred elder (*Sambucus nigra* L.) seeds, and single charred barley (*Hordeum*), oats (*Avena*) and ?bread/club wheat (cf. *Triticum aestivo-compactum*) grains.

An assemblage of vertebrate remains, amounting to 92 fragments was recovered from this sample. Many of the bones were <30 mm in dimension and were unidentifiable to species. Fish remains were identified and included herring (*Clupea harengus* L.), eel (*Anguilla anguilla* (L.)) and gadid vertebrae. The latter appeared crushed and may show damage consistent with having been eaten and subsequently digested. Cow, caprovid and dog remains were also present. The washover contained a passerine tibiotarsus fragment.

Context 1062 [gully fill; provisional date 13th century]

Sample 6/BS (7 kg sieved to 300 microns with washover)

Moist, light to mid grey-brown, crumbly and slightly sticky (working soft), sandy clay silt. Stones (2 to 60 mm), brick/tile (to 160 mm), charred remains, and large mammal bone, were present in the sample.

The moderate-sized residue of about 1100 cm³ consisted largely of clean quartz sand with chunks of brick/tile (to 60 mm), chalk (to 50 mm), cinders (to 60 mm) and grit, with bone (to 140 mm), some coal (to 15 mm), and an iron object. The washover comprised about 30 cm³ of 'char' and charcoal with (?modern) root bark and some seeds and seed fragments, mainly elder, but also including some weed and other occupation habitat plants. There were also a few very eroded charred bread/club

wheat grains.

Vertebrate remains from this sample totalled 125 mostly small (<30 mm) fragments. Forty of these were fish bones, but only 10 were identifiable and included the remains of herring (*Clupea harengus* L.), haddock (*Melanogrammus aeglefinus* (L.)) and Gadidae. Mammal and bird remains were also represented, but only a caprovid radius and a ?chicken phalanx could be identified.

Context 1071 [fill of post hole 1070; Provisional date 13th century]

Sample 1/T (1 kg sieved to 300 microns with washover)

Wet, mid grey-brown, soft and sticky, gritty, clay sandy silt with some ?mortar/plaster, charred remains, and stones (6 to 60+ mm) present.

The moderate-sized to large residue of about 300 cm³ was of cinder (to 30 mm) and brick/tile (to 20 mm), with grit, sand and some bone (to 35 mm). The small washover of about 30 cm³ consisted of 'char' and cinder, with a few uncharred seeds of elder and of other taxa of no particular interpretative significance. There were also traces of charred bread/club wheat grains.

Few bones could be identified from the fifty-two fragments recovered from this sample. Several fish elements were identified as herring, ?cod (cf. *Gadus morhua* L.) and ?haddock (cf. *Melanogrammus aeglefinus* (L.)), whilst the mammal remains included a small rat-sized vertebra.

Context 1082 [waterlogged deposit; provisional date 13th century]

Sample 2/T (3 kg sieved to 300 microns with washover)

Moist, mid grey-brown, crumbly and slightly sticky (working soft), sandy clay silt (to silty clay). Small stones (2 to 6 mm), brick/tile (to 90 mm) and ?charred remains, were present in the sample.

This subsample yielded a moderate-sized residue of about 550 cm³, mainly clean quartz sand with some large bone and one cobble (both to 120 mm), the

rest comprising angular brick/tile (to 30 mm) and some flint gravel. The washover of a few cm³ was of 'char' and charcoal, with uncharred elder seeds, and some very decayed plant detritus including traces of poorly preserved weed seeds.

Bones from this sample were rather fragile and of battered appearance. Fifty-nine fragments were recovered, of which 14 could be identified. Most of the identified remains were fish, including herring, eel, ?flatfish (cf. Pleuronectidae) and a ray (*Raja* sp.) dermal denticle. One caproid scapula was also noted.

Context 1084 [slot fill; provisional date 13th century]

Sample 4/T (1 kg sieved to 300 microns with washover)

Moist, mid brown to mid to dark grey-brown to dark grey, crumbly to sticky (working soft and sticky), slightly sandy clay silt with some small stones (6 to 20 mm) and charred remains present.

The small to moderate-sized residue of about 150 cm³ was mainly coal (to 75 mm), and grit with a little cinder, brick/tile, and sand. The small washover from this was of 'char', cinder, and charcoal with rather large numbers of very decayed seeds, which mainly seemed to be opium poppy, *Papaver somniferum* L..

A small assemblage of bone, amounting to 25 fragments was recovered from this sample. Most were small, with rather rounded edges and of variable colour. Nine fish bones were present and those showed better preservation than the mammal fragments. No bones were identified to species.

Hand-collected shell

A very small quantity of hand-collected shell (representing material from six contexts, one of which was unstratified) was submitted. Each of the contexts gave a very small quantity of rather variably preserved oyster shell (the most by weight and best preserved remains were from the unstratified Context 1000). Context 1056 also gave remains of two individuals of the land snail (*Helix* sp.).

Some of the oyster valves showed characteristic marks indicative of having been opened using a knife or similar implement.

Summary information for the hand-collected shell is presented as Table 1.

Hand-collected vertebrate remains

A single box (approximately 16 litres) of hand-collected vertebrate remains from thirteen contexts was recovered from excavations at Trinity Lane, Beverley. Provisional information dated the deposits containing bone from the 13th century through to the late 19th century. Table 3 shows the number of fragments from each period represented and the number of contexts assigned to each period.

Preservation of the material from all periods was good, with the exception of bones from Context 1056—these were rather battered in appearance and a few fragments had rounded edges. Material from this deposit was also quite heavily dog gnawed. Some variation of colour was noted within Contexts 1035, 1040 1056 and 1057, but mostly fragments were brown. Butchery was more evident on bones from the later deposits than from the earlier ones. In particular, cattle shaft fragments were heavily chopped.

Hand-collected vertebrate remains totalled 133 fragments, with most being recovered from deposits of 13th century and mid to late 19th century date. Typically, the major domestic species (cattle, caprovids and pig) were well represented in the assemblage regardless of period. Several horse fragments were identified and a number of bird bones, including goose (*Anser* sp.), duck (*Anas* sp.), and fowl were present. Additionally, Context 1040 (mid to late 19th century) produced a possible fallow deer (*Dama dama* (L.)) humerus shaft.

The range of skeletal elements for these species suggested the presence of a mixture of primary butchery waste and domestic refuse. Slight variations of colour and preservation also indicated different sources for some components of the assemblage.

In total, 18 measurable fragments and 6 mandibles with teeth *in situ*, of use for providing biometrical

and age-at-death data, were recorded.

Discussion and statement of potential

All the samples yielded small or very small amounts of charred and/or uncharred plant material but none was of much interpretative value. It is not thought worthwhile to make further analysis of the material to hand.

The hand-collected shell assemblage was too small to be of any great interpretative value beyond indicating the importation of oysters to the site. Also, most of the remains were from deposits of mid to late 19th century date. However, some of the oyster valves were sufficiently well preserved to be measurable and the possibility of recovering a larger, and more interpretatively useful, assemblage should be considered in the event of further excavation.

A small assemblage of animal bones was recovered from this site. Much of the material was quite late in date, but well preserved bone, including fish, was recorded from the medieval deposits. The variable preservation and colour of the material from Context 1056 and the extensive dog gnawing on bones from this deposit does suggest that some of the material was left exposed prior to its disposal. Also, some of the bones from this deposit may have been reworked or be residual.

Few reasonably-sized fish bone assemblages of medieval date have been recovered which limits our understanding of the use and exploitation of this resource in urban centres. It is quite likely that a systematic programme of sampling of deposits in the vicinity of this site would produce a significant assemblage of fish remains.

Recommendations

Other deposits from this site, which may be revealed by further excavation, should be sampled and examined for bone, in particular fish bone. Plant remains were rather sparse, and no invertebrate remains were present, in the examined samples and further sampling specifically for these should only be undertaken where the deposits appear more likely to contain useful assemblages of fossils than those

seen so far.

No further work on the current hand-collected material is warranted. However, these remains do show the potential of the deposits in this area for preserving bone and shell and this should be borne in mind if further excavation is being considered.

Retention and disposal

The samples need not be retained.

Archive

All of the recovered material is currently stored by Palaeoecology Research Services (Unit 8, Dabble Duck Industrial Estate, Shildon, County Durham), along with paper and electronic records pertaining to the work described here.

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Table 1. Summary information for the hand-collected shell from excavations at Trinity Lane, Beverley. '?' before numbers indicates possible numbers (e.g. '3(?4) = definitely 3, possibly 4).

Key: 'left' = number of left (or lower) valves; 'right' = number of right (or upper) valves; 'ind' = number of valves of indeterminate side; 'meas' = estimated number of valves intact enough to be measured; 'wt' = weight of oyster shell in grams; 'e' = average erosion score for valves; 'f' = average fragmentation score for valves; 'knife' = number of valves showing damage characteristic of the oyster having been opened using a knife or similar implement; 'worm' = number of valves showing damage by polychaet worms; 'barn' = number of valves with barnacles; 'dog' = number of valves showing damage from dog whelk boring; 'fresh' = number of valves showing fresh breakage.

Date	Context	Oyster valves											Helix sp.	
		left	right	ind	meas	wt	e	f	knife	worm	barn	dog		fresh
u/s	1000	1	2	1	2	351	2	1	2	0	0	0	?1	0
L 19 th C	1030	1	0	0	1	6	1	2	?1	0	0	0	0	0
L 19 th C	1037	0	1	0	0	6	3	2	?1	0	0	0	0	0
?M-L19 th C	1041	1	0	0	0	7	1	3	0	0	0	0	1	0
13 th C	1056	1	2	0	0	49	2	3	1(?2)	0	0	0	?1	2
M-L19 th C	1057	1	0	1	0	10	3	2	0	0	0	0	0	0

Table 2. Vertebrate remains recovered from the samples, from excavations at Trinity Lane, Beverley.

Date	Context	Sample	No. of fragments
13 th C	1062	6/BS	124
13 th C	1071	1/T	52
13 th C	1082	2/T	59
13 th C	1084	4/T	25

Table 3. Hand-collected vertebrate remains from excavations at Trinity Lane, Beverley.

Date period	No. of fragments	No. of mandibles	No. of measurable fragments	No. of contexts
13 th C	50	3	5	3
14-16 th C	3	0	0	1
L 16 th /E 17 th C	9	1	0	1
?18 th C	9	0	1	1
?M-L 19 th C	8	0	2	1
M-L 19 th C	44	2	7	4
L 19 th C	10	0	3	2
Total	133	6	18	13