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**Evaluation of biological remains from excavations at the St John's  
Coach Park, Clarence Street, York (site code: 2000.589)**

by

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**Summary**

*A series of sediment samples and half a box of hand-collected bone, from deposits of medieval date, revealed by excavations at a site at the St John's Coach Park, Clarence Street, York, were submitted for an evaluation of their bioarchaeological potential.*

*One of the sediment samples yielded a rather unusual assemblage of invertebrates (and some plant) suggesting a grazed soil surface. Further investigation of this material is recommended.*

*Deposits possibly of 14<sup>th</sup> and 15<sup>th</sup> century date provided much of the vertebrate material. The usual range of domestic species—cattle, caprovids, pig and horse—was identified. Additionally, single fragments of goose and ling were present. The size of the assemblage is too small, the dating rather uncertain, and the number of fragments providing biometrical information is insufficient, for further, detailed, analysis to be undertaken. No further work is recommended on this assemblage.*

**KEYWORDS:** ST JOHN'S COACH PARK; CLARENCE STREET; YORK; EVALUATION; MEDIEVAL;  
PLANT REMAINS; PLANT REMAINS; INVERTEBRATE REMAINS; VERTEBRATE REMAINS

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## Evaluation of biological remains from excavations at the St John's Coach Park, Clarence Street, York (site code: 2000.589)

### Introduction

An archaeological evaluation excavation was carried out by York Archaeological Trust at the St John's Coach Park, Clarence Street, York.

A series of sediment samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992) and half a box (approximately 10 litres) of hand-collected bone, were recovered from the deposits. The deposits were of medieval (possibly 14<sup>th</sup> and 15<sup>th</sup> century) date.

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

### Methods

#### *Sediment samples*

The sediment samples were inspected in the laboratory. Two of the samples were selected for evaluation 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 flots, washovers and residues were examined for plant remains. The flots and washovers were also examined for invertebrate remains, and the residues were examined for other biological and artefactual remains.

Preservational condition of the invertebrate remains was recorded using the scheme of Kenward and Large (1998). In summary, preservation is recorded as chemical erosion (E) and fragmentation (F), in each case on a scale from 0.5 (superb) to 5.5 (extremely decayed or fragmented).

One of the selected samples was also examined for the eggs of parasitic intestinal nematodes using the 'squash' technique of Dainton (1992).

#### *Hand-collected vertebrate remains*

All of the bone was recorded, with the exception of material from Contexts 2000, 5000 and 6000. It was suggested by the excavator that these deposits were clearance or machine excavated layers and consequently the material from them did not warrant recording. Records were made for the rest of the assemblage concerning preservation, colour, angularity (i.e. the nature of the broken surfaces) and fragmentation, whilst quantities and identifications were also noted.

### Results

#### *Sediment samples*

The results are presented in context number order. Archaeological information, provided by the excavator, is presented in square brackets.

**Context 2002** [Medieval (possibly 15<sup>th</sup> century) build-up deposit containing many stake holes with *in situ* decayed stakes]

Sample 1 (3 kg sieved to 300 microns with paraffin flotation and washover, and microfossil 'squash')

Moist, very dark brown, firm to brittle (working crumbly), humic silt (to silty amorphous organic sediment) with patches of reddish ?burnt soil or ash and vivianite (appearing in drying lumps). Stones (20 to 60 mm) were also present in the sample.

This subsample yielded a small washover and flots (mostly the former) of about 80 cm<sup>3</sup> consisting of cinders and coal with a little fine plant detritus (mostly rootlets), and with and some uncharred grass

fruits and chaff. There were a few, mostly rather poorly preserved seeds, mainly of buttercup (*Ranunculus* Section *Ranunculus*).

The flot contained modest numbers of invertebrate remains, including earthworm egg capsules, soil nematode (*Heterodera* sp.) cysts, and beetles. Smaller numbers were present in the washover. Preservation was generally rather poor (E2.0-4.0, mode 3.5, distinct; F 1.5-4.5, mode 3.0, weak).

Among the beetles, species associated with foul decaying matter, often in grazed turf, were predominant. Very foul matter, probably dung, was suggested by *Platystethus arenarius* (Fourcroy) and single individuals of three kinds of *Aphodius* dung beetles. A range of other taxa might have lived with these, notably *Megasternum obscurum* (Marsham) (several individuals), *Anotylus tetracarinatus* Block, *Tachinus signatus* Gravenhorst and *T. laticollis* Gravenhorst, (at least two individuals of each), two *Cercyon* species, *Megarthus* sp. and two *Philonthus* species. Some of these, and other elements of the fauna (e.g. *Anotylus rugosus* (Fabricius)) may have lived in plant litter on the soil surface. There were specimens of two large weevils typical of soil bearing short vegetation: *Barynotus* sp. (at least three individuals) and *Tropiphorus* sp., and some ground beetles which would be at home in similar conditions. A third weevil, *Leiosomus* sp. (two), would fit into this pattern.

Fauna of human occupation was poorly represented, only a single *Typhaea stercorea* (Linnaeus) being identified. This may have arrived in dung or hay, unless it originated in flight.

The small to moderate-sized residue of about 175 cm<sup>3</sup> was of sand with pieces of iron-cemented sediment (platy fragments of silty sediment with orange flecks in the interior) with a little coal, cinder, and brick/tile. A small assemblage of vertebrate remains was also recovered from this sample. Most of the 56 fragments (total weight 14.8 g), some of which were burnt, were less than 20 mm in maximum dimension and few could be identified to species. Those fragments that could be identified included remains of cow, herring (*Clupea harengus* L.) and amphibian.

The microfossil 'squash' was approximately half inorganic and half organic detritus. Three live soil nematodes and some fragments of plant silica were seen but no eggs of intestinal parasites.

Overall, the invertebrates suggest that this deposit was a buried soil which formed under grazing, or consisted of such soil which had been transported. The plant remains are not inconsistent with this, though of limited interpretative value in isolation.

The sample certainly did not give evidence for the 'night soil' suggested by the excavator to have been present. It is difficult to make further comment in the absence of more archaeological information.

**Context 6022** [Medieval (possibly 14<sup>th</sup> century) build-up deposit]

Sample 3 (3 kg sieved to 300 microns with washover)

Moist, dark grey, crumbly (working plastic), sandy clay silt. Stones (2 to 6 mm and 20 to 60 mm), brick/tile, fish bone and fragments of rotted oyster shell were present in the sample.

The small washover consisted of about 20 cm<sup>3</sup> of charcoal (to 10 mm) with a little coal. The large residue was about 400 cm<sup>3</sup> of sand and gravel with some brick/tile and traces of bone and pottery.

#### *Hand-collected vertebrate remains*

The small hand-collected vertebrate assemblage recovered from this site amounted to 99 fragments, representing seven contexts. A possible 14<sup>th</sup> century build-up deposit, Context 6022, produced almost half of the bones, whilst most of the remainder were recovered from similar build-up deposits possibly dating to the 15<sup>th</sup> century. Material from Context 5002 may have been from the same period but dating of this dump deposit was rather uncertain.

Much of the assemblage was well preserved, particularly the remains from Context 6022. Material from some contexts was slightly battered in appearance, but, on the whole, angularity (the nature of the broken surfaces) was recorded as 'spiky'. Bones from Context 5002 had a somewhat variable appearance, both in preservation and in colour. A couple of fragments had very rounded edges and a single human ulna fragment was identified. The inclusion of human remains and the variable nature of the bones within this deposit suggests that some of this material may be residual or reworked. Evidence for butchery included a number of caprovid vertebrae which had been split longitudinally. This practice, providing evidence for splitting carcasses into sides, is well known from the medieval period onwards.

Table 1 shows the range of species and the number of fragments recovered from this site by hand-collection. As can be seen from this table, a very restricted suite of species was identified which included the remains of the major domestic mammals, horse, cattle, caprovid and pig. Context 6022 produced a cattle metacarpal fragment which had been sawn across the shaft just below the articulation. This bone may represent evidence for

bone working in the vicinity, as often the diaphyses of metapodials were used for this sort of activity. A single goose coracoid (Context 6022) and a large ling (*Molva molva*) vertebra (Context 2003) were also recorded, along with a human ulna fragment (as noted earlier). Eight bones of use for providing biometrical data were recorded.

## Discussion and statement of potential

One of the two sediment samples examined yielded modest numbers of moderately well preserved plant and invertebrate remains which seemed to point to an origin in grassland. Whether *in situ* or transported, it was clear that the bulk of the organic content had decayed strongly before the deposit was sealed in antiquity.

The deposits from this site produced a small assemblage of vertebrate remains which suggested the presence of a mixture of rubbish, including both butchery and kitchen refuse. Possible bone working activities may also have been undertaken nearby, however, too few fragments were recovered for any distinct patterns of refuse disposal to be discernible. Overall, the vertebrate assemblage shows that some deposits from this site show potential for the recovery of well preserved bones and this should be borne in mind if additional excavations are undertaken in this area in the future. However, the size of the current assemblage is too small, the dating rather uncertain, and the number of fragments providing biometrical information is insufficient for further, detailed, analysis to be undertaken.

## Recommendations

Though there is probably little value in further examination of most of this material, but excavations which threaten the survival of this and related deposits with organic preservation should make allowance for some analysis to attempt to put the deposits into an archaeological context and to make a

proper record of the deposits and their contents. The plant and insect macrofossils from Context 2002 should be recorded, for they represent unusual assemblages—the insects, at least, from a larger subsample should clarify interpretation.

No further work is recommended on the vertebrate assemblage.

## Retention and disposal

All of the current material should be retained 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.

## Acknowledgements

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Table 1. Hand-collected vertebrate remains recovered from deposits at a site at St John's Coach Park, Clarence Street, York. **Key:** meas = number of measurable fragments.

Species		meas	Total
<i>Equus f. domestic</i>	horse	1	2
<i>Sus f. domestic</i>	pig		1
<i>Bos f. domestic</i>	cow	1	8
Caprovid	sheep/goat	6	12
<i>Anser sp.</i>	goose	-	1
<i>Homo sapiens</i>	human	-	1
<i>Molva molva (L.)</i>	ling	-	1
Unidentified		-	73
<b>Total</b>		<b>8</b>	<b>99</b>