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**Evaluation of biological remains from excavations at
Sammy's Point, Hull (site code: SPH97)**

by

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Summary

Sediment samples from probable seventeenth to nineteenth century deposits at Sammy's Point, Hull were submitted for an evaluation of their bioarchaeological potential.

With the exception of the ?water closet fills (Contexts 111 and 219), preservation of plant and invertebrate remains at this site was very limited. These latter fills are of great value, however, in providing evidence for food consumption and waste disposal at a very late date and at a period when deposits of this kind are scarcely if ever recovered. The intestinal parasite eggs seen in the 'squash' were not sufficiently intact to be measured consequently not identifiable to species. Further investigation of them is unlikely to yield significant information.

The bone assemblage from the evaluation is too small to warrant further work. However, the quality of preservation suggests that should further excavation (on a larger scale) be undertaken, a moderate-sized assemblage of well preserved animal bone of late post-medieval and early modern date might be recovered.

The hand-collected shell is of no interpretative value. It seems unlikely that further excavation would reveal sufficient good-quality material to warrant further work unless localised concentrations of shellfish formed by dumping of food waste be encountered.

It is possible that further excavation would recover well-preserved organic material and any destruction of these deposits should certainly be accompanied by an adequate sampling programme, with appropriate provision for post-excavation analysis.

Keywords: SAMMY'S POINT; HULL; EVALUATION; PLANT REMAINS; SEEDS; INVERTEBRATES; INSECTS; MOLLUSCS; SHELLFISH; VERTEBRATE REMAINS

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Introduction

Excavations were carried out by Humber Archaeology Partnership at Sammy's Point, Hull during early 1997. Seven General Biological Analysis samples ('GBAs' *sensu* Dobney *et al.* 1992) and one box of bone were submitted for an evaluation of their biological potential. The material probably dates to the seventeenth and nineteenth centuries.

Methods

The material was initially inspected in the laboratory and described using a *pro forma*. Two samples were processed for extraction of macrofossil remains, following procedures of Kenward *et al.* (1980; 1986), the excess material being bulk-sieved. The remaining five samples were bulk-sieved to 500 µm, the two samples from Context 48 being combined. The flots, washovers, and residues resulting from processing were examined for their content of plant and invertebrate macrofossils. Notes were made of the quantity of fossils and of the principal taxa represented.

A single box (39 x 16 x 15 cm) of hand-collected animal bone was submitted for evaluation. All of the vertebrate remains were scanned and briefly commented upon.

A small amount of hand-collected shell was submitted for evaluation. All of the material was scanned and identified where possible.

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

Results and discussion

Sediment samples

The results are presented by phase in context number order. Context information provided by the excavator, and archaeological questions to be addressed, are enclosed in brackets.

Phase 2/3 (17th century)

Context 76, Sample 6/BS

[Layer immediately below construction/demolition spread of ?c. 1680 and certainly later than 1543. Is this occupation debris? If so, *in situ* or redeposited?]

4.75 kg processed

Just moist, dark brown, unconsolidated, sandy clay silt, with brittle lumps of light grey/brown clay (working plastic). Stones in the size range 2-20 mm, rotted mortar, brick/tile, coal and cinder were present.

The subsample examined produced a washover of only about 200 cc, most of which was 'char' (probably bituminous material exuded from burning coal) and coal to 20 mm in maximum dimension. Identifiable plant remains were mainly stinging nettle (*Urtica dioica* L.) seeds; there were traces of seeds from edible fruits—fig (*Ficus carica* L.) and raspberry (*Rubus idaeus* L.). A single ?duckweed (*Lemna*) frond was recorded; its presence is difficult to explain unless perhaps it arrived in water brought to the site. There was also a small assemblage of land snails comprising twenty *Pupilla muscorum* (L.), seven of which were juveniles, and one other unidentified snail. *P. muscorum* is typical of areas of broken ground/rubble.

The very large residue (3 sievefuls of material) was

predominantly coal with much cinder and mortar with a little brick/tile.

Phase 3 (probably late 17th century)

Context 48, Samples 5 and 7/BS

[material from around a 16th-century gun. Probably c. 1680 and certainly later than 1543. Can deposits be related to disposal of the gun? Any waterlogged preservation?]

26 kg processed

Moist, mid brown, crumbly and sticky (working soft to slightly plastic) clay silt. Stones in the size range 2-60 mm, coal, cinder, mortar, and brick/tile were common. Fragments of clay pipe were also noted.

There was no washover from this subsample.

The modest residue was mostly stone (to 150 mm), gravel, mortar and sand with some brick/tile, coal, pot (including a clay pipe bowl), cinder and a few fragments of unidentified animal bone and shellfish, and a few other unidentified shell fragments. A single ?modern *Helix aspersa* Müller was also noted. There was no preservation of more delicate remains by anoxic waterlogging.

Context 105, Sample 1/T

[interpreted as occupation (but outdoors, so perhaps redeposited) on the berm of the citadel rampart. Probably c. 1680 and certainly later than 1543. Is this occupation debris? Any waterlogged preservation?]

2 kg processed

Moist, mid brown, crumbly and sticky (working soft to slightly plastic) clay silt. Stones in the size range 2-60 mm, coal, cinders, mortar, and brick/tile were present.

The very small washover consisted mostly of 'char' and coal <2 mm, with traces of rootlets and very decayed wood (to 10 mm), a few scraps of plant debris, (including traces of rush and hemlock seeds of no particular interpretative value and a few *Sphagnum* (bog moss) leaves, perhaps from peat). There were also many earthworm egg capsules, and a single fragment of a weevil elytron. There was thus a limited amount of preservation by anoxic waterlogging, although the material was of limited interpretative value.

The small residue was characterised by rounded chalk pebbles, with some brick, coal, mortar, and cinder.

Sample 1/BSXS

8 kg processed

There was no washover from this subsample.

The large residue was of cinder, mortar and brick/tile (mostly fragments of only a few mm) with some stones (to 90 mm), coal, pot (one fragment) and a few fragments of unidentified animal bone.

Phase 4 (mid 18th/mid 19th century)

Context 111, Sample 2/BS

[upper fill of sunken rectangular brick structure - ?earth closet. Mid-late 19th century. Is this an earth closet? If not, any other ideas - eg. stove pit?]

10.5 kg processed

Moist, mid/dark brown-black, crumbly (working soft and slightly plastic), sandy clay silt. Stones in the size range 2-20 mm, brick/tile, and coal were present. Cinders were common. Patches of very rotted mortar were also noted.

The small washover from this subsample consisted of cinders, together with abundant fig and raspberry seeds and traces of grape, elderberry, strawberry and blackberry. There was a single eroded seed fragment which may have been tomato (*Lycopersicon esculentum* Miller). These food remains strongly indicate that this was a faecal deposit, and thus that the structure was an earth closet.

The large residue was mostly cinder, coal, small stones (2 to 6 mm), gravel and sand with a little brick/tile (mostly fragments of only a few mm in greatest dimension), glass, pot (one fragment), a nail and a single fragment of bird bone.

Context 219, Sample 3/T

[below Context 111; dating and remarks same as this context]

2 kg processed

Moist, mid brown to mid grey/brown, crumbly (working soft and slightly sticky), slightly sandy

clay silt. Rotted mortar and cinders were common, and seeds and very small stones (2-6 mm) were present.

A small flot was produced but contained many seeds (the same suite of small fruit seeds as detailed in the text for the BSXS subsample - see below) and many fly puparia. Puparia of the subfamily Limosininae, the lesser dung flies, formed the largest group, with several individuals of *Thoracochaeta zosteræ* (Haliday) and *Scatopse* sp. There were also several mineralised muscid puparia. The only other invertebrates present were fragments of a few beetles and several insect larval head capsules. The presence of relatively large numbers of sphaerocerid fly puparia and only a few individuals of beetles suggests that this (certainly foul) material was sealed rather soon after deposition.

The large residue from the /T subsample was mostly cinders with some coal. The 2-4 mm fraction contained with many grape pips and pip fragments, whilst the 1-2 mm fraction was rich in raspberry and fig, with some strawberry; there was quite a lot of mineralised material.

Three poorly preserved (very pale) *Trichuris* eggs were seen in the 'squash' together with some pollen grains/spores and a few fungal hyphae. The presence of the eggs indicates a faecal component within the deposit; subjectively, their poor preservational condition may indicate that the low number observed is because of decay rather than rarity at the time of deposition.

Sample 3/BSXS

4 kg processed

The washover (of about 250 cm³) consisted almost entirely of raspberry, fig and grape (*Vitis vinifera* L.) seeds, with traces of elderberry (*Sambucus nigra* L.), blackberry (*Rubus fruticosus* agg.), ?bilberry (*Vaccinium* sp.) and one non-fruit seed: coriander (*Coriandrum sativum* L.). The seeds were all rather eroded and sometimes brittle, with some evidence for the beginnings of mineral replacement.

The modest-sized residue was mostly cinder and coal with some mortar, ?burnt shellfish, small stones (2 to 6 mm), pot (including fragments of clay pipe stem), two bones (a sheep/goat tibia and a small rodent mandible) and many seeds (representing the same taxa as noted from the

washover but evincing a greater degree of mineralisation—some being completely mineralised).

The evidence from this context clearly confirms the faecal nature of the pit fills. The mixture of material preserved by anoxic waterlogging and partly mineralised remains is notable.

Context 220, Sample 4/BS

[basal fill, below Context 219. Date and remarks as for Context 111]

8 kg processed

Moist, dark brown-black, crumbly (working soft and slightly plastic), sandy clay silt. Stones in the size range 2-20 mm and brick/tile were present. Cinders and coal were common. Patches of very rotted mortar were also noted.

The large residue was mostly cinder and ash with a little coal, rotted mortar, a nail and a fragment of glass. In view of the evidence for this feature having been a water closet (from Contexts 111 and 219) it seems likely that the cinder and ash were added to 'freshen' the water closet and accelerate the decomposition of organic waste. This may also explain the poor preservational condition of the less resilient organic remains.

Hand-collected shell (Table 2)

A small assemblage of shell, mostly oyster (*Ostrea edulis* L.), was recovered from twelve contexts (one unstratified). Preservation of the material was generally poor—most of the remains being both broken and eroded

Hand-collected bone

Deposits from Trenches 1 and 2 produced a small assemblage of bone, amounting to 49 identifiable (437 g) and 89 unidentifiable (720 g) fragments. Table 1 shows the species present in the assemblage, together with the total number of fragments and the number of measurable bones. Eleven of the 19 bone-bearing contexts were dated to Phases 2 and 3 (17th and late 17th century) and provided over half of the material recovered. The remaining contexts were later in date, either Phase 4 (18 to 19th century), of which three were confined to a single brick feature (Contexts 111,

219 and 220 from the putative water closet), or Phases 5 and 6 (19 to 20th century).

Much of the material was well preserved, the colour being fawn or brown. Context 219 contained fragments that were battered in appearance, whilst many of the fragments from Context 105 had very rounded edges. Extensive root damage was recorded on many fragments from Contexts 30, 103 and 105. Evidence of fresh breakage and dog gnawing was present, along with rodent gnawing (identified on a single pig calcaneum).

Butchery was noted throughout and included split cattle long-bone shafts, and vertebrae, from both large and medium-sized mammals, that had been chopped longitudinally. These vertebrae reflect the practise of splitting carcasses into sides, a technique uncommon before the medieval period.

Remains of the major domesticates—cattle, caprovid and pig—were all represented, as was chicken. The cattle remains included juvenile individuals, a typical component of post-medieval assemblages, showing a preference for veal during this period.

Little of interest was noted from the deposits within the brick feature. However, most of the chicken remains came from this feature, including 5 tarsometatarsi, a phalanx and a skull. All were from juvenile individuals and two of the tarsometatarsi had been chopped mid shaft, suggesting waste from preparing carcasses for the table was present in addition to the faecal material indicated by plant and insect macrofossils.

Ten cat bones were recovered from Context 10, all of which probably represent a single individual. A fragment of turkey bone confirms the late date of the assemblage as turkeys were only introduced into this country in the sixteenth century. However, even after this date, turkey remains are only rarely recovered.

Statement of potential and recommendations

With the exception of the ?water closet fills (Contexts 111 and 219), preservation of plant and invertebrate remains at this site was very limited. These fills are of value, however, in confirming the identification of the feature and providing

evidence for diet and waste disposal at a late period when deposits of this kind are scarcely if ever recovered.

The intestinal parasite eggs seen in the 'squash' were not sufficiently intact to be measured and, therefore, would not be identifiable to species. Hence, further investigation is unlikely to yield any additional information, although the identification of the faeces as human is very probable on other evidence.

The bone assemblage so far recovered is too small to warrant further work. Its preservation suggests, however, that should excavation on a larger scale be undertaken a useful assemblage of well preserved bone of late post-medieval and early modern date might be recovered.

The hand-collected shell is of no interpretative value and it seems unlikely that further excavation would produce useful material except, perhaps, as localised concentrations of shellfish formed by the dumping of food waste.

It is possible that further excavation might recover deposits with well-preserved organic material, and if they are to be damaged by development such deposits should certainly be sampled carefully and appropriate provision made for a post-excavation analysis programme.

Retention and disposal

All of the material should be 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. Hand-collected vertebrate remains from Sammy's Point, Hull.

Taxon		No. fragments	No. measurable	Weight (g)
<i>Oryctolagus cuniculus</i> (L.)	rabbit	1	-	
<i>Canis</i> f. domestic	dog	1	1	
<i>Felis</i> f. domestic	cat	11	5	
<i>Bos</i> f. domestic	cattle	13	-	
<i>Sus</i> f. domestic	pig	1	-	
Caprovid	sheep/goat	13	1	
<i>Gallus</i> f. domestic	chicken	7	-	
? <i>Gallus</i> f. domestic	?chicken	1	-	
<i>Meleagris gallopavo</i> L.	turkey	1	-	
Sub-total		49	7	437
Unidentified		87	-	720
Total		136	7	1157

Table 2. Hand-collected molluscs and eggshell from Sammy's Point, Hull.

Taxon	Context											
	30	44	45	46	64	68	77	103	105	143	220	u/s
<i>Ostrea edulis</i> L. (oyster)		1			1		1		1	1		1
<i>Mytilus</i> sp. (mussel)				1								
<i>Cerastoderma edule</i> (L.) (cockle)												1
Unid. marine	1		1			1		1				
<i>Helix aspersa</i> Müller									1			
eggshell											many frags	