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**Assessment of biological remains from excavations at  
St Sepulchre Street, Scarborough (site code: SP96)**

by

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**Summary**

*Two sediment samples from medieval deposits associated with a former watercourse (the Damyet) at St Sepulchre Street, Scarborough were submitted for an assessment of their bioarchaeological remains. The sample from Trench One produced assemblages of very limited interpretative value but the sample from Trench Four yielded remains not inconsistent with the dumping of mixed organic materials. It is recommended that further material from Sample 412 is examined and the results published with the site report.*

**Keywords:** ST SEPULCHRE STREET; SCARBOROUGH; DAMYET; ASSESSMENT; MEDIEVAL;  
PLANT REMAINS; INVERTEBRATES; INSECTS

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## **Assessment of biological remains from excavations at St Sepulchre Street, Scarborough (site code: SP96)**

### **Introduction**

Excavations were carried out by Scarborough Archaeological and Historical Society at St. Sepulchre Street, Scarborough (GR 048886) during 1996. Two General Biological Analysis samples ('GBAs' *sensu* Dobney *et al.* 1992) from medieval deposits associated with a former watercourse (the Damyet) were submitted for an assessment of their biological potential.

### **Methods**

The material was initially inspected in the laboratory and described using a *pro forma*. Subsamples of two kilograms were processed from each sample for extraction of macrofossil remains, following procedures of Kenward *et al.* (1980; 1986). The flots and residues resulting from processing were examined for their content of plant and invertebrate macrofossils. Notes were made of the quantity of fossils and principal taxa.

### **Results and discussion**

Sample information provided by the excavator is enclosed in square brackets.

#### **Trench 1 Sample 114/T**

[grey silt deposit interpreted as part of the natural silting of the Damyet watercourse]

*Wet, mid orange-ish brown, slightly brittle (working soft), sandy silt with millimetre-*

*scale patches of orange and yellow sediment. Small stones (2-6 mm), coal, and fish bone were also present.*

The moderate-sized flot consisted mainly of fine herbaceous detritus with a few seeds of weeds typical of urban occupation sites. The small residue (<200 cm<sup>3</sup>) was mostly sand and gravel, with about 10-15% by volume very decayed organic material (the remainder being sand with a little gravel, marine shell and fish bone). There was a low concentration of 'seeds' and preservation was somewhat variable. The residue contributed a few more weed taxa and some traces of food in the form of a single charred sprouting barley (*Hordeum*) grain, and single fig (*Ficus carica*) and raspberry (*Rubus idaeus*) seeds and a small fragment of hazel (*Corylus*) nutshell. A single lump of peat to 25 mm recalled material seen in greater quantity in Sample 412 (*q.v.*). Overall, the plant remains (and the food animals) give an impression of a gradual accumulation of material in the vicinity of occupation, but not a dump of refuse as such.

The flot also produced many earthworm egg capsules, several fly puparia, a few mites, and a very small, rather poorly preserved, beetle assemblage. Most species were typical of occupation deposits, but the assemblage was too small to make a more detailed interpretation.

#### **Trench 4 Sample 412/T**

[Black organic layer interpreted as part of a sequence of rubbish deposits thrown into the Damyet watercourse]

*Moist, mid to dark grey/brown, crumbly and stiff (working soft and slightly plastic),*

clay silt with large patches of light grey clay and occasional smaller lumps of orange/brown clay. Some areas of the sediment were more varicoloured, ranging from mid brown to buff. Evidence of oxidation was noted. Stones were present in the size range 2-6 mm and 20-60 mm. Wood fragments were also present.

The moderate-sized flot consisted mainly of fine plant detritus. The rather large residue of about 700 cm<sup>3</sup> was at least two-thirds by volume organic matter, the rest sand with a little gravel. The coarser organic fraction consisted of about equal proportions of very decayed wood (there were perhaps one or two very eroded wood chips) and undisaggregated material which looked very much like a highly humified peat (in lumps up to about 10 mm). There were also some tiny twig fragments which may have been very decayed heather (*Calluna vulgaris*), and a single leaf of bell heather (*Erica cinerea*) perhaps also points to the presence of a heathland component—the peat may have been mor humus from heathland or moorland turves, for example—whilst the *Sphagnum imbricatum* leaves clearly indicate the presence of raised-bog peat. The concentration of seeds was low; most were from plants likely to have been growing as weeds in the area, although the bugle (*Ajuga cf. reptans*), of which there were at least two nutlets, is a plant of moist grassland, especially in woods, and is somewhat difficult to explain. There were at most traces of some possible foodplants: hazel, an uncharred half-caryopsis of oat and cereal grain and chaff (perhaps from straw rather than food).

A moderate-sized assemblage of fairly well-preserved beetles was also produced. Many of the species present were of the 'house fauna' type (see for example Kenward and Hall 1995): *Mycetaea hirta* (Marsham), *Xylodromus concinnus*

(Marsham), *Lathridius minutus* group, *Cryptophagus* sp., *Atomaria* sp., *Tipnus unicolor* (Piller & Mitterpacher), and *Anobium punctatum* (Degeer). Decomposers formed the other main component of the assemblage and these, together with sepsid and sphaerocerid fly puparia, certainly indicate the presence of decaying organic material. A newly emerged *Apion* sp., two *Sitona*, and a single grain weevil may point to the presence of stable manure (Kenward and Hall in press). Other invertebrates included ants, a scale insect, and a bug nymph.

The evidence from the insects and the plants appears to imply different origins so that some mixing of different types of material would seem to have occurred either before or after it was dumped. It is conceivable however, that peat may have been used as litter in a stable.

## Potential and Recommendations

The material from Trench One (sample 114) could provide a little more information were a large subsample to be processed, but this would not be a priority. The material from Trench Four (sample 412) is rather more promising, and a larger subsample would certainly give a range of useful information, in terms of identifying the materials contributing to the fills and for comparison and synthesis. More material should be examined if possible, and the results be published with the site report.

Further excavations at, or adjacent to, this site could recover further well-preserved material and any destruction of these deposits should certainly be accompanied by an adequate sampling strategy, with appropriate provision for a post-excavation programme.

## Retention and disposal

The unprocessed material, flots, and residues 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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## Appendix

Tables 1a and 1b. Lists of invertebrate taxa recorded from deposits at St Sepulchre Street, Scarborough. Taxonomic order and nomenclature for insects follow Kloet and Hincks (1964-77).

<b>1A: TRENCH 4, Sample 412/T</b>	
<b>Hemiptera</b>	Coccoidea sp.
	Hemiptera sp. (nymph)
<b>Diptera</b>	Sepsidae sp. (puparium)
	<i>Thoracochaeta zosteræ</i> (Haliday) (puparium)
	Sphaeroceridae spp. (puparium)
	Diptera spp. (puparium)
	Diptera spp. (adult)
<b>Hymenoptera</b>	Formicidae spp.
<b>Coleoptera</b>	
Carabidae	<i>Bembidion harpaloides</i> Serville
Hydrophilidae	<i>Cercyon</i> sp.
Ptiliidae	<i>Ptenidium</i> sp.
	Ptiliidae sp.
Staphylinidae	<i>Micropeplus fulvus</i> Erichson
	<i>Omalius caesum</i> or <i>italicum</i>
	<i>Xylodromus concinnus</i> (Marsham)
	<i>Platystethus nitens</i> (Sahlberg)
	<i>Anotylus complanatus</i> (Erichson)
	<i>Stenus</i> sp.
	<i>Xantholinus ?glabratus</i> (Gravenhorst)
	<i>Xantholinus linearis</i> or <i>longiventris</i>

	<i>Neobisnius</i> sp.
	Aleocharinae sp.
	Staphylinidae sp.
Scarabaeidae	<i>Aphodius</i> sp.
Anobiidae	<i>Anobium punctatum</i> (Degeer)
Ptinidae	<i>Tipnus unicolor</i> (Piller & Mitterpacher)
	<i>Ptinus fur</i> (Linnaeus)
Lyctidae	<i>Lyctus linearis</i> (Goeze)
Cryptophagidae	<i>Cryptophagus</i> sp.
	<i>Atomaria</i> sp.
Endomychidae	<i>Mycetaea hirta</i> (Marsham)
Lathridiidae	<i>Lathridius minutus</i> group (Linnaeus)
	<i>Corticaria</i> sp.
Chrysomelidae	Chrysomelidae sp.
Apionidae	<i>Apion</i> sp.
Curculionidae	<i>Sitona</i> sp.
	<i>Sitophilus granarius</i> (Linnaeus)
	Curculionidae sp.
	Coleoptera sp. (larvae)
<b>Arachnida</b>	Acarina spp.

<b>1B: TRENCH 1, Sample 114/T</b>	
<b>Nematoda</b>	<i>Heterodera</i> sp. (cyst)
<b>Oligochaeta</b>	Oligochaeta sp. (egg capsule)
<b>Crustacea</b>	<i>Daphnia</i> sp.
<b>Diptera</b>	Diptera spp. (puparium)

<b>Coleoptera</b>	Carabidae spp.
	<i>Helophorus</i> sp.
	<i>Megasternum obscurum</i> (Marsham)
	<i>Omalium</i> spp.
	<i>Anotylus ?nitidulus</i> (Gravenhorst)
	<i>Tachinus</i> sp.
	Aleocharinae sp.
	Staphylinidae sp.
	<i>Anobium punctatum</i> (Degeer)
	<i>Ptinus</i> sp.
	Curculionidae sp.
	Coleoptera sp. (larvae)
<b>Arachnida</b>	Acarina spp.