

**Environmental evidence from excavations at the  
Ideal Laundry site, Trinity Lane, York  
(YAT/Yorkshire Museum sitecode: 1991.5)**

by

**D. M. Alldritt, J. B. Carrott, A. R. Hall,  
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**Summary**

A series of samples from excavations the Ideal Laundry site gave only very limited evidence of animal and plant remains. A spot find of small mammal and bird bone was complemented by evidence from another context where remains of small mammals were abundant. These may have originated in owl pellets or via a pit-fall. Three samples gave evidence of concretions, certainly faecal in one instance, with some possible evidence for the presence of hay debris. Two of the sample yielding concretions also contained numbers of seeds of a ~~salt~~ marsh rush, *Juncus gerardi*, which might have arrived at the site in several ways. Two further sample were effectively barren of biological remains and offer no interpretative information regarding the nature of the archaeological build-up.

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**Introduction**

This report discusses the results of analyses of invertebrate animal and plant remains and non-human bones from deposits excavated from the Ideal Laundry site.

**Methods**

Subsamples of raw sediment were examined in the laboratory primarily for plant and invertebrate animal remains. A 'rapid assessment' was carried out on six of the samples, from which 'test' subsamples (Kenward *et al.* 1986), of 1 kg were taken and processed by paraffin flotation (Kenward *et al.* 1980) to extract insect remains. Plant remains were recorded from the flots from paraffin flotation and from the residues or washovers from the residues. Additionally, the remainder of one of the above sample was washed to 1 mm to recover numerous small bones apparent during description of the sediment, and a seventh sample was processed as a 'spot' sample.

**The samples and results of the analyses**

The analyses carried out on each sample, and the remains recovered, are described below, together with a laboratory description of the sediment. A brief archaeological description and/or interpretation of the context is given in brackets where available. The samples are presented in context number order.

**Context 1019**

Sample 1: Mid to dark grey-brown, dry to moist, soft crumbly, humic, sandy, clay, silt. Large and small bone fragments, mortar and pieces of limestone (greater than 10 mm) were present in the sample.

A 1 kg 'test' subsample (/T) was processed by paraffin flotation to extract insect remains. The minute flot contained only a few tiny charcoal fragments and a modest number of rush seeds, identified as *Juncus gerardi* Loisel., a species characteristic of the upper parts of salt-marsh communities. It has been recorded frequently from sites of Roman and medieval date in York and may have been brought to the city in cut vegetation (hay) or within the digestive tracts of livestock pastured on salt-marsh, whose dung became incorporated in urban build-up. Though not one of the tallest species of rush in Britain, it might also have been used for flooring or rush-lights.

A washover (to 300 µm) was performed on the residue to separate the organic fraction, which was examined wet. It consisted mostly of sand and charcoal (to 14 mm) with traces of mammal bone, glass, fish bone, brick/tile and angular oolitic limestone (to 30 mm). There were also a few fragments of concreted material bearing traces of straw-like plant fragments though no parasite ova could be detected in a smear prepared by disaggregating a little of this material in dilute hydrochloric acid. It is not certain, therefore, that these concretions originated in human faeces. They may have formed within the dung of large herbivores.

### Context 1020

Sample 2: Mid to dark grey-brown, just moist, soft, crumbly, humic, clay, silt. Small bone fragments (less than 20 mm), large pieces of limestone (greater than 10 mm) and gingery, calcareous, perhaps faecal, concretions were present in the sample (a smear prepared from a small amount of concretions disaggregated in dilute hydrochloric acid gave only a single *Trichuris ovum*).

A 1 kg 'test' subsample (/T) was processed by paraffin flotation to extract insect remains. The tiny flot contained many *Juncus gerardi* seeds (see sample 1, above), a few unidentifiable scraps of insect cuticle and a few tiny scraps of charcoal.

A washover (to 300 µm) was performed on the modest-sized residue and gave small amounts of charcoal (to 10 mm) with a single fragment of coal (to 20 mm), frequent *Juncus* seeds, traces of elderberry (*Sambucus nigra*) seeds and seed fragments, a few fragments of concretion less than 10 mm maximum dimension, a bone of a small mammal and some ?recrystallised lime. The residue, which was mostly sand, gave a fragment of concretion to 20 mm, traces of brick/tile and oolitic and Magnesian limestone fragments to 40 mm.

### Context 1025

Sample 3: Very small, mid to dark yellow-brown, moist, crumbly, plastic in places when handled, humic, clay, silt. Pale, orange-brown, calcareous concretions and one completely oxidised iron object which was removed to be returned to the excavator were present in the sample. A small amount of one fragment of concretion was disaggregated in dilute hydrochloric acid and found to contain many well-preserved pollen grains, principally *Centaurea nigra*-type, which includes two taxa likely to have grown in meadows and other grassy places and to have been a constituent of, for example, hay (the involucre bracts of *C. nigra* are occasionally recorded from samples from medieval York that are rich in grassland/hay meadow plants). Grass phytoliths were also present.

This sample was taken as a 'context' sample but treated in the laboratory as a 'spot' sample. The whole sample (weight 240 g) was carefully washed to 300 µm and the resulting residue was examined wet. It consisted almost exclusively of granular whitish to light to dark brown concretions up to 25 mm, with some impressions of grass-like plant stem or leaf. There were also a few tiny scraps of bone and charcoal. On disaggregation of a small amount of concretion in dilute hydrochloric acid, traces of *Ascaris* and *Trichuris* ova were revealed, together with some fragments of plant tissue that may have been very decayed wheat/rye 'bran', and some grass epidermis and phytoliths. Some other structures, which may be other 'worm' eggs, were also recorded but not identified.

### Context 1054

Sample 4: Mid to dark grey-brown, dry to moist, soft, crumbly, slightly sandy, silt. Large bone fragments (greater than 20 mm), brick/tile, medium-sized stones and a faced fragment of mortar were present in the sample.

A 1 kg 'test' subsample (/T) was processed by paraffin flotation to extract insect remains. The tiny flot contained only a few scraps of charcoal.

The modest residue was examined wet and was mostly sand and gravel with some limestone (to 30 mm), a little brick/tile (to 30 mm), burnt mammal bone and small ?mammal bone and a trace of fine charcoal. Some pot, which was also present in the residue, was removed to be returned to the excavator.

**Context 1065** [A spot sample of fish bones was taken from this context]

Sample 7: The sample consisted of a collection of small bones including a leg bone of a large-sized hen (*Gallus gallus*) and one from a small passerine bird. There were also remains of at least five mice (probably *Apodemus sylvaticus*, the wood \*), of a single black rat (*Rattus*) and of a frog or toad.

**Context 1066**

Sample 5: Light grey, dry to moist, soft, crumbly, silty, mixed fine and coarse sand. Patches of, more or less, pure grey sand and reddish burnt soil (?ashy), medium-sized stones and a large fragment of brick/tile were present in the sample.

A 1 kg 'test' subsample (/T) was processed by paraffin flotation to extract insect remains. Only a few tiny scraps of charcoal, and single specimens of fat-hen (*Chenopodium album* L.) and sedge (*Carex* sp.) were present in the tiny flot.

The large residue consisted mostly of sand and gravel with brick/tile fragments to 40 mm, much ?recrystallised lime, a rectangular fragment of chalk (to 50 mm) and traces of charcoal and a flint fragment to 10 mm.

**Context 1067** [Fish bones present in the context]

Sample 6: Mid brown, dry to moist, crumbly and brittle, sandy, clay, silt with 1 cm scale, mid grey-brown mottling (?produced by gleying). Small mammal bones, medium-sized stones, mortar and ?rotted mortar were present in the sample which appeared to be local till ('boulder-clay') with very little alteration.

A 1 kg 'test' subsample (/T) was processed by paraffin flotation to extract insect remains. A fairly large number of small bones was removed from the sample during processing. The minute flot contained only a few tiny scraps of charcoal and plant detritus.

The modest residue was mostly sand and gravel with stones to 30 mm, brick/tile to 15 mm and a trace of tiny charcoal fragments. There was a marked orange-brown coloration, perhaps resulting from a ?iron object. The small bones proved to be as follows: field vole, *Microtus agrestis* (at least two individuals); common shrew, *Sorex araneus* (at least two), and frog/toad (at least one).

The remaining 7 kg of sample were hand-washed to 1 mm (during this process some bone was removed) and the resulting residue allowed to air-dry. The residue contained very large amounts of bone from small mammals with a wide variety of skeletal elements represented. Most of the residue was gravel with stones (including angular Magnesian limestone fragments to 50 mm, and rounded pebbles to 100 mm), some brick/tile fragments and modest amounts of mortar/plaster.

The bones were as follows: water vole, *Arvicola* \* (at least two individuals), common shrew (at least seven), vole, probably *Microtus agrestis* (at least four), mouse, probably *Apodemus sylvaticus* (at least five), frog/toad (at least four) and some fragments of larger mammals, some burnt.

The bones from samples 6 and 7 represent a rather unusual concentration of remains within the context of urban archaeological deposits from York. Two origins appear likely: in owl pellets, or as specimens falling into a pit-fall of some kind.

### Implications

Apart from the quantities of bone in samples from contexts 1065 and 1067, there were few biological remains from these deposits. However, the traces of faecal and perhaps other concretions in sample 1, 2 and 3 are worthy of further analysis both for parasite ova and, in the case of sample 3, for pollen. Such analyses could not be undertaken within the budget for the present evaluation exercise. Certainly future excavation

at this site should take account of the fact that useful biological evidence may not be obvious from the nature of the deposits and a low-cost survey of a range of contexts should be undertaken, with funding provision for detailed investigation of a selection.

#### References

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