

To: D. Brinklow, YAT

From: Harry Kenward, Director, Environmental Archaeology Unit  
(with notes from Allan Hall and Terry O'Connor, Research Fellows)

Date: 4.1.90.

Dundas St. 89.22

We have made a visual inspection of all the samples from the NEEB boreholes and selected a representative group for processing. Generally, 3kg subsamples have been sieved to 300um and paraffin floated for insects. Plant remains have been checked from the flots (and from residues, where these were organic). You appear to have a remarkable intuition since two out of three of your 'late extra' samples were rich. We have also looked at another extra sample which proved fairly rich. The following is a summary of our notes and records on the processed samples. Sediment descriptions are on the lab. sheets and I won't send the data unless asked specially.

Borehole 1

103/T: A tiny flot, mostly plant fibres. Charcoal, mineral grains. Residue of stones, gravel and sand.

Borehole 2

201/T: A large flot, very rich in well-preserved insect remains. A mixture of terrestrial and aquatic species, the former in turn a mixture of species from urban and natural or semi-natural habitats. The aquatics appear to be species tolerant of still, rather nutrient-rich water. Grain pests present in small numbers, giving a Roman or post-Conquest date if my ideas about the extinction of grain pests in the 'dark ages' are correct. Probably water-lain, with urban forms from rubbish dumping, run-off or background fauna.

A rather small assemblage of molluscs, mostly freshwater, but consistent with a clean, slow-moving river with adjacent grassland. The single valve of cockle is presumably from occupation debris.

Flora very rich with much evidence for willow in the form of buds, fruits and twig fragments, though the latter were all small lengths and suggest deposition at some distance from the trees themselves. Deposition clearly aquatic, in still to slow-moving water, with both yellow and white water-lily present and a range of other aquatic taxa. Plenty of terrestrial plants, too, though - some are cereal weeds, others probably 'urban' weeds. Very few 'useful' plants other than flax, fig, wheat and perhaps pea (though all of these present in very small amounts). Some evidence of vegetation growing on drying mud at the edge of a body of water. Date probably post-Conquest on the basis of the flora.

1/90  
[90/9]

Rather a lot of fine brick/tile (mostly less than 4mm max. dimension) plus some glassy slag and a little coal, charcoal and fish and mammal bone and wood chips - so a fair amount of 'occupation' debris is getting into this body of water but dumping is probably some way from the actual site of deposition.

#### Borehole 3

301/T: Insect remains very like 201, although perhaps a little more fragmentary. Plant remains also very like 201 but somewhat less diverse. Willow buds, twigs and fruits again the most frequent fossils. Residue included some wood chips, burnt coal, ?cinders and some small (less than 2mm) brick/tile debris.

#### Borehole 4

403/T: A few mineral grains and single insect and seed fragments. Residue of stones, gravel and sand from this 3kg subsample was very small - i.e. most of the deposit was clay and silt.

#### Borehole 6

601/Washover: Mostly mineral grains, some ?glassy slag, this being clearly vesicular. Charcoal, bark and leaf fragments and a few seeds of rather uninformative nature. A few nondescript beetles.

#### Borehole 8

801/T: A tiny flot containing some poorly preserved insect scraps. Residue of stones, gravel and sand with a little coarse woody detritus but no identifiable plant macrofossils. A few fragments of markedly abraded bone suggesting transport from some distance. Some ?daub.

#### Borehole 9

903/T: Minute flot, charcoal and mineral grains. Residue of stones, gravel and sand only.

#### Borehole 10

1001/T: A moderately large flot, with abundant plant fragments and insect remains, the latter mostly of immatures. A variety of aquatic invertebrates. Perhaps like 201 and 301, although numbers of beetles and bugs smaller.

Plant remains a very depauperate version of 201 and 301, perhaps a higher proportion of 'urban' weeds.

Some freshwater mussel shell (*Unio pictorum*) fragments, and single specimens of *Bithynia leachii* and *Sphaerium corneum*. A small piece of folded lead.

1002/T: Minute flot, plant fragments and mineral grains. Four insect fragments of no interpretative value. Residue very small - sand and gravel with a little coal and shellfish fragments.

#### Borehole 11

1101/T: Moderately large flot, mostly rootlets and some large twig/root fragments. A charred grain (?oat) and some elderberry seeds. One insect fragment, suspiciously well preserved and possibly a contaminant. Modest residue of stones, sand and gravel, with traces of coal, bone (frog, and herring), shellfish, and charcoal.

#### Borehole 13

1302/T: Flot barren of insects, but with one 'buttercup' achene and minute charcoal fragments. Residue of stones, gravel and sand.

1303/SPT (4kg washed to 1mm): Residue of stones, gravel and sand with some modern contaminant leaf fragments, only.

1306/T: Minute flot, mostly mineral grains. A few tiny plant tissue fragments. No invertebrates. Very small residue of stones, gravel and sand from this 3kg subsample.

It appears that the layer represented by 201, 301 and 1001 deserves further investigation in the fullness of time; a report could be based on identification of the remains from these core segments, but they were, as cores usually are, clearly fairly mangled and cross-contaminated. I believe that much better information would be obtained from a long trench like the one we have discussed; in particular I would want to see the stratigraphy in section and examine carefully-located samples before I started forming any clear conclusions about what was going on. A trench would represent a very cheap way of getting a lot of information when faced with archaeological deposits on an almost geological scale. My first hypothesis for testing is that there was dumping into shallow water, but the lithology may not support this for the sample locations. We may be seeing deposition beyond dumping, with urban detritus, including the easily-transported biological remains, drifting out. A trench may also reveal that more than one phase of deposition associated with human activity is involved, or that there was deposition by exceptional phases of runoff, or that water levels changed greatly during the life of the King's Pond. One sample (403) gave a laminated appearance, suggestive of the deposition of mineral grains annually or in runoff episodes.

I hope that this will be helpful. Please let me know if you require further information.

We are still waiting for Russell to sort out labelling and 'entubbing' of the Garden Place material - progress on that site will start once the records are straight.

I will send you a separate bill.

Yours sincerely,

Harry Kenward.

File: Dundas St Admin, Site records.