

Plant Remains from Newcastle Quayside

excavator: Colm O'Brien

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Introduction

During October and November 1983 some trial excavations were carried out within the Queen Street car park at Newcastle quayside to examine the surviving stratigraphy and to see whether the conditions favoured the survival of organic materials. A sample for botanical analysis was collected from the earliest man-made deposit above the river bank silts (059). This deposit consisted of debris, dumped onto the river bank, presumably to reclaim the ground and provide a stable platform (O'Brien 1983). It was sealed by a hard-packed layer of clay. The deposit was described by the excavator as: "dark, and foul smelling, ... rich in organic matter, probably refuse from elsewhere in the town, as suggested by finds of leather off-cuts and a small piece of textile." (O'Brien 1983). The deposit is dated to the 12th or 13th century. The sample was collected to test the survival of the botanical remains. The sample (c. 0.5 kg) was left to soak in water and some detergent for a few days, and was subsequently washed through a stack of sieves (2.0 mm, 1.0 mm and 0.5 mm). The results are given in Table 1 and are discussed below.

Results

In total 117 seeds or fragments of seeds were found in the sample. While the preservation of seeds was reasonable, a number of them were too badly preserved to allow identification.

Two potential foodplants were present: hazel (Corylus avellana) and bramble (Rubus fruticosus). Both are normally found in woods or hedgerows, but the fruits of both species (hazelnut and blackberry) are common, collected fruits and will almost certainly have been brought into town from outside.

Most of the other species in the sample could have grown locally in the town. Stinging nettle (Urtica dioica), knotgrass (Polygonum aviculare), red shank (Polygonum persicaria), pale persicaria (Polygonum lapathifolium), black bindweed (Polygonum convolvulus), chickweed (Stellaria media), and goosefoot (Chenopodium sp.) are common weeds by roadsides and on waste places, like for example back yards. Corn cockle (Agrostemma githago) and wild raddish (Raphanus raphanistrum) are arable weeds. In fact, most of the species mentioned above, can also occur in arable fields. However, the total absence of cereal grain or chaff waste suggests that the plants, or their seeds, were not brought in with a cereal crop, but were growing locally.

Conclusions

The range of seeds found in the sample indicates that the earliest man-made deposit on the site was sufficiently anaerobic to preserve botanical remains. The anaerobic condition, favouring the preservation of the plant remains, and indeed leather and textile, might well have been brought about by the layer of clay that sealed the deposit.

Durham, 3 February 1984

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References

- O'Brien, C. (1983) Newcastle Quayside Archaeological Report Phase 2, Interim Report. Archaeological Unit for North East England.

Table 1. Number of seeds and fruits in deposit 059 from Queen Street, Newcastle Quayside, 1983.

<i>Corylus avellana</i> L. (hazelnut), fragments nut shell	9
<i>Rubus fruticosus</i> agg. (bramble)	4
<i>Polygonum aviculare</i> agg. (knotgrass)	1
<i>Polygonum convolvulus</i> L. (black bindweed)	4
<i>Polygonum lapathifolium</i> L. (pale persicaria)	2
<i>Polygonum persicaria</i> L. (red shank)	8
<i>Polygonum lap.</i> / <i>pers.</i> , fragments	26
<i>Polygonum</i> sp.	1
Polygonaceae indet.	1
<i>Rumex acetosella</i> agg. (sheep's sorrel)	1
<i>Stellaria media</i> (L.) Vill. (chickweed)	3
<i>Agrostemma githago</i> L. (corn cockle), fragments	5
<i>Raphanus raphanistrum</i> L. (wild raddish), fragments	12
<i>Urtica dioica</i> L. (stinging nettle)	1
Chenopodiaceae indet.	5
<i>Chenopodium</i> sp. (goosefoot)	6
<i>Atriplex</i> sp.	3
<i>Carex</i> sp. (sedge)	2
<i>Potentilla</i> sp.	2
<i>Brassica</i> sp.	1
Caryophyllaceae indet.	2
Compositae indet.	2
indet. (badly preserved)	16
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Total	117