

Bakewell Road, Matlock Waterlogged Palaeoenvironmental Assessment

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Introduction

During the watching-brief excavation of Trench 13, a large waterlogged deposit of silty clay was uncovered which was viewed as likely being a body of water of indeterminate age. Organic material was visible within this fill and so samples were taken in order to recover palaeobotanical remains which could permit the development of palaeoenvironmental interpretations.

No waterlogged remains were recovered which could be confidently identified and interpreted as being ancient in origin.

Methods

20L of waterlogged bulk sample extracted from the waterlogged silty clay were processed using the method described by Kenward *et al.* (1980) where a gentle disaggregation of material is achieved by wash-over followed by sieving into 5mm, 1mm, and 500µm size fractions. 100% of palaeobotanical remains recovered from all size fractions were scanned using a low-power binocular microscope (x40).

Plant macrofossil identification utilised plates and guides from Martin and Barkley (2000) and Cappers *et al.* (2006), supplemented by examples of known species in the Archaeological Research Services Ltd library archive. Plant macrofossil nomenclature follows Stace (1997).

Paleoenvironmental Remains

Size Fraction	5mm	1mm	500µm
Notes	Large quantities of rootlets	Large quantities of rootlets	Large quantities of rootlets
Plant Macrofossils			
<u>Seeds</u>			
Asteraceae sp.		4	
Black alder (<i>Alnus glutinosa</i>)		9	
Goosefoot (<i>Chenopodium album</i>)	3	20-30	
Hawthorn (<i>Crataegus monogyna</i>) leaves	4	1	
Cleaver (<i>Galium aparine</i>)	2	13	

Table 1. Palaeobotanical macrofossil remains

The recovered remains were composed primarily of small rootlets of an indeterminate age and species. It was not possible to identify whether these were of ancient age, or whether they are more recent intrusions through later floral growth.

Plant remains were recovered from the waterlogged samples; however these are all of the same species of plants as are currently present on the site. Black alder trees were observed

growing on the hillside nearby, hawthorn bushes were visible around the margins of the site, and goosefoot and cleaver plants were growing within the topsoil at the present day. It is viewed that the recovered botanical remains represent recent contamination of palaeoenvironmental bulk samples and not a true representation of ancient plant communities.

References

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