

ENVIRONMENTAL REMAINS
FROM NETHERHILLS QUARRY,
FRAMPTON ON SEVERN,
GLOUCESTERSHIRE: AN
ASSESSMENT

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Project P3143
Report

Contents

1.	Summary	1
2.	Introduction and archaeological background	1
2.1	Project parameters	1
2.2	Aims	1
3.	Methods	1
3.1	Fieldwork and sampling policy.....	1
3.2	Processing and analysis	1
4.	Results	2
4.1	Charred plant remains.....	2
5.	Discussion	2
6.	Significance	3
7.	Recommendations	3
8.	The archive	3
9.	Acknowledgements	3
10.	Bibliography	3

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1. Summary

Analysis of environmental samples from an excavation at Netherhills Quarry was undertaken on behalf of Allen Environmental Archaeology prior to redevelopment. Samples from eight deposits of Early Neolithic, Beaker, Bronze Age and unknown date were selected for analysis. Of the eight samples assessed only one from the primary fill of an Early Neolithic pit (context 1015) contained charred plant remains in large quantities, the other seven samples produced none or very little. The results are presented in tables 1-3.

2. Introduction and archaeological background

An assessment of environmental remains from Netherhills Quarry, Frampton on Severn, Gloucestershire, (English Heritage Project Number 5171, GSMR 28716) was undertaken on behalf of Allen Environmental Archaeology. Geology and soils, site summary, previous excavations can be accessed from the *Gloucestershire County Council Project design for post-excavation assessment of Excavations at Netherhills Quarry, Frampton on Severn, Gloucestershire* (Mullin 2007).

2.1 Project parameters

The environmental project conforms to relevant sections of the *Standard and guidance for archaeological excavation* (IFA 1999) and *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage 2002).

2.2 Aims

The aims of the assessment were to determine the state of preservation, type, and quantity of environmental remains recovered, from the samples and information provided. This information will be used to assess the importance of the environmental remains.

3. Methods

3.1 Fieldwork and sampling policy

Samples were taken by the excavator from deposits considered to be of high potential for the recovery of environmental remains. A total of eight samples were taken from the site and are listed in Table 1.

3.2 Processing and analysis

The samples were processed by flotation using a Siraf tank. All of the Neolithic and Beaker samples were processed (contexts 1015, 1014 and 1016), up to thirty litres of the Bronze Age samples (contexts 1025, 1022 & 1027) and ten to twenty litres of the unphased samples. The remaining portions of the samples were wet sieved over a 2mm and 4mm meshes in order to

retrieve any artefacts and ecofacts. The flots were collected on a 300µm sieve and the residue retained on a 1mm mesh. This allows for the recovery of items such as small animal bones, molluscs and seeds.

The residues were fully sorted by eye and the abundance of each category of environmental remains estimated. A magnet was also used to test for the presence of hammer scale. The flots were scanned using a low power MEIJI stereo light microscope and plant remains identified using modern reference collections maintained by the Service, and a seed identification manual (Beijerinck 1947). Nomenclature for the plant remains follows the *New Flora of the British Isles*, 2nd edition (Stace 2001).

4. Results

4.1 Charred plant remains

Of the eight samples assessed for charred plant remains only one (context 1015) showed to have charred plant remains in any large quantities. In the majority of cases the flots were of a small volume ranging from 1-10 millilitres, with context 1015 producing a flot of over 200 ml. Apart from 1015 where no modern contamination was detected, the dominant component of the samples was modern roots. In five of the contexts covering the Neolithic, Beaker and Bronze Age occasional burnt bone was recorded, most likely of large mammal (contexts 1015, 1014, 1016, 1025 and 1022). The results can be seen in Tables 2 and 3.

As mentioned above the richest context was that from the primary fill of the Early Neolithic pit 1001 [1015]. This contained a large number of charred hazel nutshell fragments (*Corylus avellana*) along with a number of fragments of both crab apple (*Malus* sp.) and sloe (*Prunus spinosa*), no cereal remains were identified from this pit. Crab apple fragments were also found in the secondary fill of the pit (context 1014).

The only cereal remain was that of a hulled barley grain (*Hordeum vulgare*) from the primary fill of the Bronze Age pit 1008 (context 1022), a cereal culm node was identified from the secondary fill (context 1027) of the same pit. The only other seed found was that of a wood-rush nutlet from context 1050, the fill of unphased pit 1049.

The largest amount of charcoal was found in context 1015, some of these fragments were of identifiable size, none of which were of round wood .

5. Discussion

The lack of cereal grains and the dominance of charred hazel nutshell fragments in the primary fill of the Early Neolithic pit 1001 (context 1015) suggests that cereal cultivation did not take place on this site or within the local area. The presence of burnt animal bone suggests that the pit may have been used as a refuse pit. The presence of sloe stone fragments and crab apple fragments along with the hazelnut shell fragments suggests the gathering of wild food. Raw crab apples tend to be unpalatable and need to be processed in some way before eating, hazelnuts also become more palatable after roasting and roasting in a domestic hearth is one way of to achieve this. The presence of charcoal in the pit may possibly suggest the dumping of domestic hearth material.

The presence of a single charred hulled barley grain in the primary fill of pit 1008 (context 1022) and the culm node in the secondary fill (context 1027) does not really indicate local agriculture and could be residual.

6. **Significance**

The only sample of any significance is that from context 1015, the primary fill of the early Neolithic pit 1001. The presence of charred hazel nutshell, apple and sloe indicates the exploitation of the local environment. The full analysis of the charcoal may emphasise the exploitation of the local environment by indicating which habitats were exploited for fuel. The lack of cereal remains suggests that wild foods played a prominent part of the diet for the local population.

7. **Recommendations**

The following recommendations are made with regard to further work on the samples considered as part of this report

- Full analysis of the charred plant remains from context 1015. (1.5 days)
- Identification of the charcoal from context 1015. This will allow the determination of the habitats which were exploited in the Early Neolithic (1.5 days)
- Writing of full report (1.5 days)
- Total cost for 4.5 days = £1,129.13

8. **The archive**

The archive consists of:

1 box of sorted flots and residues and 8 AS17 Sample recording sheets

9. **Acknowledgements**

The Service would like to thank the following for their assistance in the conclusion of this project: Allen Environmental Archaeology, Andy Mann for processing the samples and sorting the residues, and Liz Pearson for editing this report.

10. **Bibliography**

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