Assessment of Environmental Evidence from 86563 Outseats Farm, Alfreton

Acknowledgements
The samples were processed by Liz Chambers and Mary Marshall and assessed by Inés López-Dóriga.

1 ENVIRONMENTAL EVIDENCE

1.1 Introduction

1.1.1 A total of four bulk samples were taken, three samples were taken from a pit with *in-situ* burning and the forth one was taken from a construction cut packing. Only the sample from the context of *in-situ* burning was processed and assessed for the presence of environmental evidence, since the remainder of the samples are considered of low potential for environmental purposes (one containing mixed material from two different contexts, another one being the natural and the forth one being the construction packing) and are recommended for discard.

1.2 Aims and Methods

1.1.2 The purpose of this assessment is to determine the potential of the environmental remains preserved at the site to address project aims and to provide archaeobotanical data valuable for wider research frameworks.

1.1.1 The nine-litre sample (50% of the context of *in-situ* burning) was processed by standard flotation methods on a Syraf-type flotation tank; the flot retained on a 0.25 mm mesh, residues fractionated into 5.6 mm and 1 mm fractions and dried. The coarse fraction (>5.6 mm) was sorted, weighed and discarded. A riffle box was used to split large flots into smaller flot subsamples when appropriate. The flots were scanned using a stereo incident light microscopy (Leica MS5 microscope) at magnifications of up to x40 for the identification of environmental remains. Different bioturbation indicators were considered, including the percentage of roots and the abundance of modern seeds. The preservation and nature of the charred plant and wood charcoal remains, as well as the presence of other environmental remains such as molluscs, animal bone and insects (in cases of anoxic conditions for their preservation), was recorded.

1.3 Results

1.1.2 The flot was large (Table XXX) and there were low numbers of roots but a moderate amount of modern seeds that may be indicative of some stratigraphic movement and the possibility of contamination. Charred material comprised exclusively mature wood charcoal. No other piece of environmental evidence was preserved in the sample.

Table 1: Assessment of the charred plant remains and charcoal

Feature	Context	Sample	Vol (l)	Flot (ml)	Subsample	Bioturbation proxies	Grain	Chaff	Cereal Notes	Charred Other	Charred Other Notes	Charcoal > 4/2mm	Charcoal
505	507	2	9	750	30%	1%, A	-	-	-	-	-	700	Mature

Key: Bioturbation proxies: Roots (%), Uncharred seeds (scale of abundance, A = >10)

1.4 Discussion and Further potential

1.1.3 The wood charcoal assemblage is consistent with an *in-situ* burning activity and has the potential to inform about fuel selection, however this potential is limited as the chronology of the deposit is uncertain and there is no recognisable association with any industrial or processing activity. The assemblage may be radiocarbon dated should this be required, subjected to species ID to rule out old wood effect. The un-processed samples are recommended for discard.