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**Assessment of biological remains from excavations at The Outgang,
Driffield (site code: OGD96)**

by

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Summary

The potential for further analysis of biological remains from thirteen sediment samples, one box of bone and a small amount of mollusc shell from deposits excavated at the Outgang, Driffield, is considered.

The sediment sample from unphased Context 68 contained modest numbers of plant and invertebrate microfossils and has a limited potential for environmental reconstruction, but the remaining sediment samples are of no value.

The animal bones recovered from this excavation formed too small an assemblage for useful interpretation. The production of a basic archive report is recommended, to include biometrical data for the post-medieval dog skeleton.

The available shell assemblage is too small to be of substantial value.

Keywords: THE OUTGANG; DRIFFIELD; ASSESSMENT; MEDIEVAL; PLANT REMAINS; CHARRED PLANT REMAINS; INSECTS; VERTEBRATE REMAINS; MOLLUSCS

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Introduction

Excavations were carried out by Humber Archaeology Partnership at a medieval rural site at The Outgang, Driffield, during 1996. Thirteen General Biological Analysis samples ('GBAs' *sensu* Dobney *et al.* 1992), one box (39 x 30 x 12 cm) of hand-collected bone, and a very small amount of hand-collected shell (from eight contexts) were submitted for an assessment of their biological potential.

Methods

The material was initially inspected in the laboratory. A 1 kg subsample was taken from one of the GBAs for extraction of macrofossil remains, following procedures of Kenward *et al.* (1980; 1986). Seven of the remaining samples were treated as bulk-sieving (BS *sensu* Dobney *op. cit.*) samples.

The washovers and residues resulting from processing were examined for their content of plant and invertebrate macrofossils, and animal bone. Notes were made of the quantity of fossils and principal taxa.

All bone (with the exception of the unstratified material and fragments from topsoil deposits) was examined and records made of preservation, quantities and identifications where appropriate.

The hand-collected shell was identified to species where possible.

Results and discussion

The results are presented in phase, then sample number, order. Context information provided by the excavator is given in square brackets.

Sediment samples

No phase number

Sample 3/T, Context 68

[fill in natural hollow]

1 kg processed

Moist, light brownish-grey, plastic, stiff (working plastic and slightly sticky) clay with black streaks of ?monocotyledon stems (very rotted). Approximately fifty percent of the sample was composed of rounded stones of flint and chalk to 20 mm.

The tiny flot contained a trace of herbaceous detritus amongst which there were a very few moderately or well preserved fruits and seeds of taxa likely to have grown in wet grassland or on a damp track, though the assemblage was too small for confident interpretation. Although a few invertebrates were present, including mites, adult Diptera, earthworm capsules and some beetles associated with water (such as *Dryops* sp. and *Limnebius* sp.) and herbaceous vegetation (e.g. *Halticinae* sp.), this assemblage is of limited interpretative value. A 10 kg sample might yield sufficient insects for interpretative purposes, if crucial archaeological questions need to be addressed; otherwise, further work is not recommended.

The residue consisted almost entirely of sand and chalk gravel with some stones to

30 mm in maximum dimension, and with only a small quantity of fine, unidentifiable plant debris.

Phase 1 - 12th Century

Sample 1/BS, Context 20

[fill of gully]

8 kg processed

Moist, light-mid brown, brittle (working plastic and sticky) sandy clay with abundant chalk stones (2-20 mm) and some flint. Patches of white efflorescence were also noted.

Several unidentified land snail fragments and one piece of pottery were present in the (mostly stony and sandy) residue.

Phase 1/2 - 12th/13th Century

Sample 5/BS, Context 26

[fill of ditch]

6 kg processed

Dry, light to mid brown (slightly darker when moist), unconsolidated (working plastic and slightly sticky when wet) sandy clay. Chalk and flint stones (2-20 mm) were mostly rounded and comprised 70-80% of the sample.

The residue consisted mostly of chalk gravel and sand with a few rootlets. Land snails were represented by two ?*Discus* sp. and two *Cecilioides acicula* (Müller); the latter is a burrowing species and almost certainly intrusive to the deposit.

Phase 2 - 13th Century

Sample 8/BS, Context 6

[fill of gully]

9.5 kg processed

Dry, light to mid brown, unconsolidated to brittle (working plastic to slightly sticky when wet), slightly sandy clay silt. Chalk and flint (mostly rounded), of 2-20 mm size, comprised

approximately 70% of the sample. Modern rootlets were present.

In addition to chalk gravel the residue contained only a few modern roots, one *Vallonia* sp. and several unidentified land snail fragments.

Sample 10/BS, Context 53

[hard standing]

8 kg processed

Dry to moist, light/mid brown, crumbly (working plastic and slightly sticky when wet), slightly sandy, clay silt with abundant 2-20 mm sized stones, mostly rounded, of chalk and flint. A few modern rootlets were also present.

The residue consisted entirely of chalk gravel.

Sample 11/BS, Context 74

[fill of ditch]

8 kg processed

Dry, light/mid brown, crumbly (working plastic and sticky when wet), sandy, silty clay. Approximately 80% of the sample was composed of chalk and flint stones which were mostly rounded and 2-20 mm in size. Land snails were present.

Two ?*Discus* sp. land snails and a few fragments of bone were the only additional components in the stony residue.

Sample 12/BS, Context 7

[house platform]

10 kg processed

Dry, light/mid brown, brittle (working plastic, soft and slightly sticky when wet), silty clay sand. Nearly all of the abundant chalk and flint stones were slightly rounded.

Chalk gravel, sand, modern roots, one *Vallonia* sp., and a few unidentified land

snail fragments were present in the residue.

Phase 2/3 - 13th/14th Century

Sample 6/BS, Context 51

[fill of gully]

7.5 kg processed

Chalk gravel and sand formed the bulk of the residue with coal, charcoal and roots being present only in very small quantities. The residue also contained a small assemblage of land snails comprising four *Cochlicopa ?lubrica* (Müller), seven *Vallonia* sp., four ?*Hygromia* sp., a single *Pupilla muscorum* (L.) and many unidentified fragments. The assemblage is too small to be of much interpretative value.

Bone

The bone assemblage was extremely small. In total only 16 identifiable and 12 unidentifiable fragments were recovered from the medieval deposits (Phases 1-3), whilst the post-medieval deposits (broadly dated from 16/17th to 19/20th centuries) produced only 57 fragments (20 identifiable and 37 unidentifiable).

Preservation of the material from both assemblages was variable, with some bone appearing rounded and eroded, particularly those fragments from Contexts 12, 31 and 52. Colour ranged from dark brown to fawn. Few of the bones showed evidence of dog gnawing, fresh breakage or butchery.

The vertebrate remains from the medieval deposits consisted mainly of horse and caprine fragments, with a single cattle element present (Table 1). Also identified

was the humerus of a merlin (*Falco columbarius* L.).

The post-medieval assemblage was made up almost entirely of the part skeleton of a dog (Context 44). Most of the fragments represented the fore limbs and skull of a small robust individual. The skull shows marked shortening of the face and snout, resulting in excessive crowding of the maxillary teeth (some rotated by 90 degrees) and the mandibles exhibit lateral curvature.

Shell

The tiny hand-collected shell assemblage was recorded by context. None of the contexts yielded more than a few fossils and preservation of these was poor, with most of the shell being both broken and eroded. The results are presented in Table 2.

Statement of potential

The sediment sample from unphased Context 68 has a modest potential for environmental reconstruction from plant and invertebrate macrofossils, but the remaining material is of no value.

The vertebrate assemblage is of little interpretative value as it stands because of its very small size and the limited number of bones which can be used to obtain age-at-death and biometrical information. The available shell assemblage is of no interpretative value.

Recommendations

The sample from Context 68 should be examined in more detail if the layer can be

dated and there are relevant archaeological questions to be addressed. No further analysis of the bone assemblage is recommended. However, a basic archive should be produced, to include a list of bones present and biometrical data for the post-medieval dog skeleton. Half a day for a Research Assistant would be needed to complete this task.

If further excavations take place on this site then every effort should be made to investigate any revealed deposits including an intensive regime of sampling. The deposits certainly should not be damaged by development without proper excavation and sampling, and commensurate funding for post-excavation analysis should be made available.

Retention and disposal

With the exception of Context 68, the sediment remaining from these samples has no further bioarchaeological potential and does not need to be retained on these grounds. All washovers and residues should be retained in the longer term. The bone should be retained at least until completion of the archive.

Archive

All extracted fossils and flots are currently stored in the Environmental Archaeology Unit, University of York, along with paper and electronic records pertaining to the work described here.

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Table 1. Hand- collected bone from the Outgang, Driffield. Key: pm = post-medieval, m = medieval.

Taxon		No. fragments		No. measurable		No. isolated teeth		Weight (g)	
		pm	m	pm	m	pm	m	pm	m
<i>Canis f. domestic</i>	dog	17	-	4	-	-	-	176	-
<i>Equus f. domestic</i>	horse		7		1		-	-	86
<i>Bos f. domestic</i>	cattle	1	1	-	1	-	-	3	34
Caprinae	sheep/goat	-	7	-	1	-	3	-	50
<i>Gallus f. domestic</i>	chicken	2	-	-	-	-	-	8	-
<i>Falco columbarius L.</i>	merlin	-	1	-	-	-	-	-	1
Sub-total		20	16	4	3	-	3	187	171
Unidentified		37	12	-	-	-	-	179	27
Sub-total		37	12	-	-	-	-	179	27
Total		57	28	4	3	-	3	366	198

Table 2. The hand-collected shell assemblage from The Outgang, Driffield.

Context number	Number of individuals	Species
1	1	<i>Cepaea/Arianta</i> sp.
	1	<i>Ostrea edulis</i> L. (oyster) valve
8	1	<i>Cepaea/Arianta</i> sp.
	1	unidentified land snail
14	1	unidentified land snail
20	1	<i>Cepaea/Arianta</i> sp.
	1	? <i>Oxychilus</i> sp.
52	1	? <i>Oxychilus</i> sp.
74	2	unidentified land snails
77	4	<i>Helix</i> sp.
	1	<i>Cepaea/Arianta</i> sp.