

Palaeoecology Research Services

Evaluation of biological remains from further excavations at Low Farm, Cottingham, East Riding of Yorkshire (site code: LFC2002)

by

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PRS 2003/20

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Summary

Three sediment samples (from 2 contexts) and a single small box of hand-collected bone were recovered, from deposits of late Iron Age to Romano-British date, by further excavations at Low Farm, Cottingham, East Riding of Yorkshire, between the 17th and 28th of June and the 22nd of July and the 2nd of August 2002.

Plant remains were limited to small amounts of charred material (mainly charcoal) in both samples and a very few other charred remains (including some peat) in the sample from Context 55129. Insect remains were present as very decayed scraps in the sample from this context, too.

Deposits from this site produced an assemblage of rather broadly dated hand-collected bone, which was too small and poorly preserved to be of any interpretative value.

The investigation of these deposits has shown some limited potential for the survival of plant and insect macrofossils. Any future excavation at the site should allow for the collection and assessment of further samples of well-stratified archaeological deposits for plant and insect remains. No further analyses of the vertebrate remains are warranted although, should a tighter dating framework be achieved, it may be worth making an archive record of the remains from Context 55129.

The current material should be retained for the present against the eventuality of additional remains being recovered from further excavation.

KEYWORDS: LOW FARM; COTTINGHAM; EAST RIDING OF YORKSHIRE; FURTHER EVALUATION; LATE IRON AGE TO ROMANO-BRITISH; PLANT REMAINS; CHARRED PLANT REMAINS; INVERTEBRATE REMAINS; VERTEBRATE REMAINS

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14 March 2003

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Introduction

An archaeological evaluation excavation was carried out by Humber Field Archaeology at Low Farm, Cottingham, East Riding of Yorkshire (NGR TA 0560 3600), between the 17th and 28th of June and the 22nd of July and the 2nd of August 2002. The site comprised several adjoining fields on low-lying land east of Cottingham (between the villages of Cottingham and Dunsmoor). Approximately 40 trenches were excavated in advance of the proposed construction of a number of glasshouses.

Three sediment samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992), representing two contexts, and a single box of hand-collected bone, were recovered from deposits of late Iron Age to Romano-British date revealed by this phase of the excavation. All of the material was submitted to PRS for an evaluation of its bioarchaeological potential.

Methods

Sediment samples

The sediment samples were inspected in the laboratory and their lithologies recorded, using a standard *pro forma*, prior to processing, following the procedures of Kenward *et al.* (1980; 1986), for recovery of plant and invertebrate macrofossils.

The washovers and residues resulting from processing were examined for plant and invertebrate macrofossils. The residues were examined for larger plant macrofossils and other biological and artefactual remains.

Hand-collected vertebrate remains

For the hand-collected vertebrate remains records were made concerning the state of preservation, colour of the fragments, and the appearance of broken surfaces ('angularity'). Other information, such as fragment size, dog gnawing, burning, butchery and fresh breaks, was noted, where applicable.

Fragments were identified to species or species group using the PRS modern comparative reference collection. The bones, which could not be identified to species, were described as the 'unidentified' fraction. Within this fraction fragments were grouped into a number of categories: large mammal (assumed to be cattle, horse or large cervid), medium-sized mammal (assumed to be caprovid, pig or small cervid) and totally unidentifiable.

Results

Sediment samples

The results are presented in context number order. Archaeological information, provided by the excavator, is given in square brackets. A brief summary of the processing method and an estimate of the remaining volume of unprocessed sediment follows (in round brackets) after the sample numbers.

Context 5548 [primary pit fill from central pit within enclosure – late Iron Age-Romano-British]
Sample 1/T (3 kg sieved to 300 microns with washover; approximately 8 litres of sediment remains together with all (1 tub) of Sample 2 from the same context)

Moist, light to mid grey-brown to mid grey-brown, crumbly and slightly sticky to unconsolidated (working more or less plastic), slightly silty clay, with some stones (2 to 20 mm) and modern rootlets present.

The washover consisted of a few cm³ of modern roots and some iron-concreted sediment (pan), a few well-preserved modern seeds, and a few tiny (<2 mm) fragments of iron-encrusted charcoal.

The small residue (dry weight 0.51 kg) was mostly further lumps of iron-concreted sediment (pan, to 25 mm), with some sand and stones (to 40 mm).

Context 55129 [primary fill of enclosure/boundary ditch containing burnt material – late Iron Age-Romano-British]

Sample 3/T (1.8 kg sieved to 300 microns with washover; no unprocessed sediment remains)

Moist, light grey-brown to light to mid grey, crumbly and slightly sticky (working soft then plastic), slightly silty clay. Small stones (2 to 6 mm), charcoal, burnt bone and modern rootlets were present.

The washover was about 20 cm³ of modern roots, small (<5 mm) charcoal fragments, and some fragments of what appeared to be charred peat (also to 5 mm). Traces of charred root/rhizome and small twig and twig bark material was also perhaps from burning of brushwood or peat. The small amounts of burnt bone (all <5 mm) seem likely to be part of a component of ash, too. There were traces of charred oat (*Avena*) chaff and a single charred goosegrass (*Galium aparine* L.) fruit, together with traces of uncharred elder (*Sambucus nigra* L.) seeds.

The lightest fraction of the washover included moderate numbers of scraps of insect cuticle, mainly beetles; they could not be identified with certainty.

The very small residue (dry weight 0.12 kg) was mostly sand, with numerous small fragments (to 8 mm but mostly less than 3 mm) of burnt bone and some stones (to 14 mm).

Hand-collected vertebrate remains

The small vertebrate assemblage, recovered from 15 deposits within Trench 55, amounted to 79 fragments. Most of the contexts which produced bone were the fills of ditches and all were broadly dated to the Late Iron Age/Romano-British period.

Preservation of the bones was quite varied, with fragments from nine of the deposits being described as of poor or very poor preservation, whilst material from six was recorded as 'fair'. Many of the more poorly preserved fragments had very eroded surfaces (particularly from Contexts 5548, 5589, 55100 and 55128), and were rather fragile and brittle. Several teeth, which are elements which typically survive even

the poorest preservational conditions, had enamel that was completely degraded (Contexts 5598 and 55134). Fragmentation was quite extensive and largely the result of fresh breakage. Some burnt bones were recorded throughout the assemblage, with most fragments from Context 55129 (see Sample 3) being burnt.

Of the 79 fragments, only 14 could be identified to species; these included the remains of cattle, horse, and caprovid (Table 2). A single bird humerus shaft was also recovered which could possibly be duck, however, distinctive morphological features were absent. Few fragments were recorded which could provide biometrical or age-at-death data.

Discussion and statement of potential

Plant remains were limited to small amounts of charred material (mainly charcoal) in both samples and a very few other charred remains (including some peat) in the sample from Context 55129. Insect remains were present as very decayed scraps in the sample from this context, too. These very sparse plant and insect remains were of little interpretative value and indicate that no further work can be justified on the material in hand.

Deposits from this site produced an assemblage of rather broadly dated hand-collected bone, which was too small and poorly preserved to be of any interpretative value. A high degree of fragmentation was noted throughout, for which recent damage to the bones (i.e. during excavation) was partly to blame. However, it was also evident that the rather brittle nature of the bones contributed to the fragmentary condition of the material. The burnt part skeleton of a sheep recovered from Sample 3 (Context 55129) may be the remains of an animal deposited specifically within the enclosure ditch for some ritual purpose. Skeletons of animals are frequently recorded from sites of Iron Age/Romano-British date and are often, on the basis of their location and association with other artefacts, considered to represent deposits of ritual significance. The inclusion in Context 55129 of cattle and large-size mammal remains may

suggest that the material is merely domestic refuse disposed of in a convenient ditch.

Recommendations

The investigation of these deposits (and those reported previously, Hall *et al.* 2002) has shown some limited potential for the survival of plant and insect macrofossils but no further work is recommended for the current material. Any future excavation at the site should allow for the collection and assessment of further samples of well-stratified archaeological deposits for plant and insect remains.

No further analyses of the vertebrate remains are warranted although, should a tighter dating framework be achieved, it may be worth making an archive record of the remains from Context 55129. Two interventions at the site have produced only very small amounts of bone suggesting that this area has little potential for the recovery of well preserved and useful vertebrate assemblages.

Retention and disposal

The current material should be retained for the present against the eventuality of additional remains being recovered from further excavation.

Archive

All material is currently stored by Palaeoecology Research Services (Unit 8, Dabble Duck Industrial Estate, Shildon, County Durham), along with paper and electronic records pertaining to the work described here.

Acknowledgements

The authors are grateful to Trevor Brigham and John Tibbles of Humber Field Archaeology for providing the material and the archaeological information. Allan Hall and Harry Kenward wish to thank English Heritage for permission to undertake this evaluation.

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Table 1. List of contexts which produced bone from Low Farm, Cottingham (further work), with the number of fragments recovered and their weight. Key: No. frags = total number of fragments recovered from Trench 55.

Context Number	Context Description	No. frags	Weight (g)
5519	Ditch Fill	8	72
5548	Primary Ditch Fill	2	8
5581		1	34
5582	Primary Ditch Fill	20	212
5586	Primary Ditch Fill	12	200
5588	Primary Ditch Fill	5	244
5589	Upper Fill of Ditch	5	12
5596	Pit Fill	1	4
5598	Slot Fill	1	10
55100	Pit Fill	1	4
55128	Secondary Fill of Enclosure Ditch	1	10
55129	Primary Fill of Enclosure Ditch	8	132
55134	Slot Fill	6	6
55137	Primary Ditch Fill	6	8
55139	Secondary Fill of Ditch	2	88

Table 2. Hand-collected vertebrate remains from Low Farm, Cottingham. Key: No. frags = total number of fragments recovered from Trench 55.

Species	No. frags
<i>Equus</i> f. domestic horse	1
<i>Bos</i> f. domestic cow	10
Caprovid sheep/goat	3
Large mammal	28
Medium-sized mammal	9
Unidentified bird	1
Unidentified	27
Total	79