

Palaeoecology Research Services

**Evaluation of biological remains from excavations at  
'Rowdales', nr South Cave, East Riding of Yorkshire  
(site code: RSC2002)**

by

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**Summary**

*Two sediment samples and a small quantity of hand-collected bone, recovered from excavations of deposits associated with a weapon cache of Iron Age date at 'Rowdales', nr South Cave, East Riding of Yorkshire, were submitted to PRS for an evaluation of their bioarchaeological potential.*

*Ancient plant remains were, unfortunately, extremely sparse in the two samples, though there is a hint that material originating in the burning of turves or peat may have been present. Such remains are being regularly noted from deposits of Iron Age date (inter alia) in this general area. No ancient invertebrate remains were recovered.*

*The few vertebrate remains recovered were of little interpretative value but appeared to represent food and butchery waste rather than material deliberately deposited with the weapon cache.*

*No further work is recommended on the biological remains from these deposits. The current material should be retained for the present.*

**KEYWORDS:** 'ROWDALES'; NR SOUTH CAVE; EAST RIDING OF YORKSHIRE; EVALUATION; IRON AGE; CHARRED PLANT REMAINS; VERTEBRATE REMAINS

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## Evaluation of biological remains from excavations at 'Rowdales', nr South Cave, East Riding of Yorkshire (site code: RSC2002)

### Introduction

The excavation and recording of a late Iron Age weapons cache at 'Rowdales', nr South Cave, East Riding of Yorkshire (NGR SE 92773 30506), was carried out by Humber Field Archaeology and York Archaeological Trust between the 10<sup>th</sup> and the 13<sup>th</sup> of September 2002.

The cache was discovered by metal detectorists in a pit cut into a pre-existing ditch. Cropmark and archaeological evidence suggest widespread agricultural settlement in the area during the Iron Age and Romano-British period, and the site lies relatively close to both the pre-Flavian trading site at Redcliff, North Ferriby, and Brough (*Petuarial/Parisiorum*), the territorial capital of the Parisi.

Two sediment samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992 – one of which was a 'voucher' of raw sediment from a sample bulk-sieved on site) and a small quantity of hand-collected bone, were submitted to PRS for an evaluation of their bioarchaeological potential.

### Methods

#### *Sediment samples*

The sediment samples were inspected in the laboratory. Both were selected for evaluation 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. Recovered artefacts were returned to the excavator.

#### *Hand-collected vertebrate remains*

Records were made of the hand-collected vertebrate remains 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 completely unidentified.

### 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. No ancient invertebrate remains were recovered from the samples.

**Context 1003** [backfill of pit containing weapons hoard]

Sample 1/T (2 kg sieved to 300 microns with washover; approximately 1 litre of unprocessed sediment remains)

Just moist, light to mid yellow-brown, unconsolidated, fine sand, with no obvious inclusions.

The very small washover consisted of a very little charcoal (to 5 mm) and some modern root fragments, cereal chaff and weed seeds; the cysts of soil-dwelling nematodes, probably *Heterodera* sp., were presumably also modern. Perhaps the only fossil material—all charred—comprised two ?yellow-rattle (cf. *Rhinanthus* sp.) seeds, one small (<5 mm) ?heather (*Calluna vulgaris* (L.) Hull) root/twig fragment, and one unidentifiable root/rhizome fragment (to 3 mm).

The small residue (dry weight 0.39 kg) was mostly sand with some stones (to 10 mm). A very small quantity extremely poorly preserved vertebrate material (7 g) was recovered. Many fragments had no surfaces and all fragments were less than 10 mm in any dimension. Most of the fragments recovered could not be identified. The few that were identifiable included a murine (mouse) maxilla and several small mammal elements, a water vole tooth, a few amphibian vertebrae and shaft fragment and the dentary of a small fish. Additionally, approximately ten rather battered caprovid tooth enamel fragments were identified.

**Context 1005** [fill of ditch into which pit containing 1003 had been dug]

Sample 2/BS (30 kg sieved to 1 mm with 300 micron washover; a further 35 kg sieved to 1 mm for artefact recovery; approximately 3 litres of unprocessed sediment remains)

Just moist, light to mid orange-brown, unconsolidated, sand, with some ?stones (20 to 60 + mm) and modern rootlets present.

The minute washover consisted of a few cm<sup>3</sup> of (non-oak) charcoal (to 10 mm) and modern roots, cereal chaff, and weed seeds. Modern material of both *Heterodera* cysts and earthworm egg capsules was present; the traces of coal and cinder noted may also be of recent origin. The only fossils likely to be ancient were a single charred pod fragment of wild radish (*Raphanus raphanistrum* L.) and a trace of charred ?heather root/twig.

The very small residues (dry weight 3.75 kg from a total of 65 kg) were mostly of ?iron concreted sediment (possibly including some artefactual remains), sand/gravel and stones. A little bone was recovered from the sample, amounting to less than 1 g in weight. Most fragments were tiny (less than 10 mm) and unidentifiable. Several fragments of tooth enamel were present, together with a small mammal tibia fragment

and a juvenile bird tarsometatarsus. A single large pottery sherd was also recovered.

### *Hand-collected vertebrate remains*

Vertebrate remains recovered from the deposits associated with the sword hoard were mostly very poorly preserved and fragile. The surface of some fragments was completely absent or eroded almost beyond recognition. Much fresh breakage was observed, but this was a consequence of the fragility of the bone.

The remains of cattle and caprovids were identified, the latter mostly represented by teeth or mandible fragments. This is likely to be a consequence of taphonomic factors, whereby tooth enamel generally survives better in unfavourable conditions [for the preservation of bone]. Some of the bones from Context 1003 which were given small find numbers were identified as fragments of a cattle pelvis and a sacrum. These may represent the same animal and could have been deposited in articulation. Most of the material recovered appears to be refuse associated with butchery processes and food consumption and is likely to represent waste that was deposited in the ditch prior to the deposition of the weapon cache. Several small mammal and amphibian bones were noted in the assemblage retrieved from Sample 1 (bulk-sieved sample). Their presence is indicative of the ditch acting as a pit fall trap.

A record of the remains recovered from each context can be found in the Appendix.

## **Discussion and statement of potential**

Ancient plant remains were, unfortunately, extremely sparse in the two samples, though there is a hint that material originating in the burning of turves or peat may have been present. Such remains are being regularly noted from deposits of Iron Age date (*inter alia*) in this general area (SE Vale of York to south-western Wold margins, cf. Hall *et al.* 2000; Hall 2003).

The few vertebrate remains recovered were of little interpretative value (beyond that given above), but appeared to represent food and butchery waste rather than material deliberately deposited with the weapon cache.

## Recommendations

No further work is recommended on the biological remains from these deposits.

## Retention and disposal

The current material should be retained for the present.

## 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

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## Appendix

### *Hand-collected vertebrate remains*

Key: Sh/g = sheep/goat; Unid = unidentified.

#### **Context 1000**

*Preservation:* fair to poor

*Angularity:* bone has very eroded surfaces

*Colour:* light brown

*Cow:* 1 M1/M2 – heavily worn

*Sh/g:* 1 mandible (M1, M2); 1 mandible (M1); 1 M2

*Unid:* 13 unidentified fragments – very eroded surfaces

*Weight:* 30g

*General comments:* much of the assemblage quite poorly preserved. Identification hindered by poor condition of bone and lack of surfaces remaining.

#### **Context 1001**

*Preservation:* fair

*Angularity:* battered

*Cow:* 1 upper molar fragment

*Unid:* 1 rib fragment

*Weight:* 13g

#### **Context 1002**

*Preservation:* poor

*Angularity:* bone has very eroded surfaces

*Colour:* variable

*Unid:* 1 medium-sized mammal tooth enamel fragment; 1 medium-sized mammal ?shaft fragment (ginger in colour), metal concretion attached to bone.

*Weight:* 1g

#### **Context 1003**

*Preservation:* poor

*Angularity:* bone has very eroded surfaces and damaged by fresh breakage

*Colour:* light brown

*Small find no. 32:* Large mammal fragment, part of cow sacrum – attaches to small find no. 36. Surface of bone largely absent.

*Small find no. 33:* Cow pelvis, right side, represents an adult individual. May be related to cow sacrum (small find nos. 32 and 36), e.g. same animal.

*Small find no. 36:* Cow sacrum (not complete)

*Small find no. 43:* Sh/g mandible (M3) – may be associated with teeth from Context 1000

*Small find no. 103:* Large mammal sized fragment, element not identifiable

*Total weight:* 170g

*General comments:* much of the assemblage quite poorly preserved. Identification hindered by poor condition of bone and lack of surfaces remaining.

**Context 1005**

*Preservation:* very poor

*Angularity:* bone has very eroded surfaces

*Colour:* light brown

*Unid:* 5 large sized mammal shaft fragments; 1 medium-sized mammal rib fragment; 1 medium-sized mammal shaft fragment.

*Weight:* 68g

*General comments:* much fresh breakage damage because of the fragility of the recovered bone.