

Reports from the Environmental Archaeology Unit, York

Evaluation of biological remains from excavations at Bishop Wilton, East Riding of Yorkshire (site code KINCM 2000.108)

by

Deborah Jaques, Allan Hall and John Carrott

Report 2001/18

Palaeoecology Research Services Environmental Archaeology Unit Department of Biology, P. O. Box 373, University of York, York YO10 5YW

Evaluation of biological remains from excavations at Bishop Wilton, East Riding of Yorkshire (site code: KINCM 2000.108)

by

Deborah Jaques, Allan Hall and John Carrott

Summary

Two sediment sample and two boxes of hand-collected bone (each box approximately 10 litres) from deposits revealed by excavations at Bishop Wilton, East Riding of Yorkshire, were submitted for an evaluation of their bioarchaeological potential.

Both sediment samples gave small assemblages of charred plant remains (mostly cereal grains). The remains from Context 3113 (Sample 2) were sufficiently well preserved to warrant some further study if the deposit can be reliably dated.

Preservation of the bones was, on the whole, quite good, although some variability was noted within the assemblage from Contexts 3010, 3028 and 3051. Much of the assemblage was composed of the usual domestic species, horses, cattle, caprovids and pigs. Skinning marks on a horse first phalanx and the preponderance of horse lower limb elements suggests some leather or hide working may have been undertaken in the vicinity. The small size of the assemblage and the limited number of fragments of use for providing biometrical and age-at-death information restricts further analysis.

KEYWORDS: BISHOP WILTON; EAST RIDING OF YORKSHIRE; EVALUATION; MEDIEVAL; EARLY POST-MEDIEVAL; CHARRED CEREAL GRAIN; VERTEBRATE REMAINS

Authors' address: Prepared

for:

University of York York YO10 5YW

Palaeoecology Research Services
Ltd
Environmental Archaeology Unit
Department of Biology
P. O. Box 373
NorthYorkshire YO17
TEL

MAP Archaeological Consultancy
39 Greengate
Malton
NorthYorkshire YO17

Telephone: (01904) 433846/434475/434487

Fax: (01904) 433850 19 March 2001

Evaluation of biological remains from excavations at Bishop Wilton, East Riding of Yorkshire (site code: KINCM 2000.108)

Introduction

An archaeological evaluation excavation was carried out by MAP Archaeological Consultancy Ltd at a site at Bishop Wilton, East Riding of Yorkshire.

Two sediment samples ('GBA'/'BS' sensu Dobney et al. 1992), and two boxes (each box approximately 10 litres) of hand-collected bone, were recovered from the deposits. Information from the pottery specialist suggested that most of the deposits were of medieval to early post-medieval date.

All of the material was submitted to the EAU for an evaluation of its bioarchaeological potential.

Methods

Sediment samples

The sediment samples were inspected in the laboratory and their lithology was 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 were examined for plant remains. The washovers were also examined for invertebrate remains, and the residues were examined for other biological and artefactual remains.

Hand-collected vertebrate remains

For each context (or sample) subjective records were made of the state of preservation, colour of the fragments, and the appearance of broken surfaces ('angularity'). Additionally, where more

than ten fragments were present, semiquantitative information was recorded concerning fragment size, dog gnawing, burning, butchery and fresh breakage. Where possible, fragments were identified to species or species group, using the reference collection at the EAU. Fragments not identifiable to species were grouped into a single 'unidentified' category.

Results

Sediment samples

Archaeological information, provided by the excavator, is presented in square brackets.

Context 3057 [14th/15th century. No other context information available]

Sample 1/T (2 kg sieved to 300 microns with washover)

Moist, mottled mid to dark grey and mid greybrown, soft and slightly sticky (working soft), ashy clay silt with some stones (6 to 60 mm, including flint) and modern rootlets present.

The washover consisted of about 40 cm³ of charred plant material and modern roots, the former a few tens of mostly very poorly preserved cereal grains. They were well enough preserved, however, for bread/club wheat (*Triticum 'aestivo-compactum'*) to be discerned as the main taxon present, along with a few barley (*Hordeum*) grains and at least one field bean (*Vicia faba var. minor*) cotyledon. There were a few snails, almost all the intrusive exotic species *Cecilioides acicula* (Müller), and one modern beetle fragment.

The moderate-sized residue consisted mainly of chalk and flint gravel, with a few scraps of bone, a small mammal incisor and a little charred material.

Context 3113 [No dating or context information available]

Sample 2/T (2 kg sieved to 300 microns with washover)

Just moist, mid to dark grey-brown (locally lighter), crumbly (working more or less plastic), slightly sandy ashy clay with some stones (6 to 20 mm, mostly chalk) present.

The washover of about 50 cm³ consisted largely of mostly quite well preserved charred cereal grains and at least one pea (*Pisum*) cotyledon. There were also a few small charred weed seeds, but no chaff, although some detached charred cereal coleoptiles (emerging shoots) were noted. Most of the grains were bread/club wheat but there were a few barley grains and some oats (*Avena*).

The moderate-sized residue comprised chalk gravel with angular flint with some sand and a small number of charred grain fragments.

Hand-collected vertebrate remains

Two boxes of vertebrate remains were recovered from 39 contexts. Vertebrate remains from 29 of these were recorded. Pottery spot dates indicated that most of the bones (344 fragments) were from deposits of 14th to 16th Century date, with the remainder being slightly earlier in date (12th to 14th Century). Material from ten deposits of modern or unknown date has been excluded from this report.

Much of the material was reasonably well-preserved and brown or fawn in colour. Variability of preservation, angularity and colour was observed within material from a few of the later 15/16th century deposits (Contexts 3010, 3028 and 3051). Material from these contexts included fragments that were eroded and battered in appearance. A higher degree of fragmentation was also noted for bones from these deposits, some of which was the result of fresh breakage damage which had occurred during excavation and post-excavation processes. Dog gnawing was present throughout the assemblage. Evidence for butchery was limited but a number of the cattle fragments had been quite heavily chopped. A single horse first phalanx had a series of knife marks across the bone towards the distal articulation. These are likely to represent skinning marks. Within the assemblage recovered from Context 3038 was part of a human clavicle bone. The latter and the rather variable preservation of the material from certain deposits suggest the presence of some redeposited or residual material.

A typical range of domestic species were identified from this assemblage. As can be seen from Table 1, caprovid remains were the most commonly occurring species, with cattle and horse bones also present in some numbers. Fragments of horse were largely restricted to lower limb elements

(metapodials, phalanges, tarsals and carpals). Skinning marks noted on a horse phalanx from Context 3072 and the predominance of certain leg elements may indicate waste associated with leather/hide working.

Remains of dog were recovered from a number of deposits, representing both large and small individuals. Bird remains included a possible duck ulna (Context 3005) and a Columbidae (pigeon family) ulna from Context 3092. Metapodial fragments identified as fallow deer (*Dama dama* (L.)) were recovered from Context 3005.

A part skeleton of a chicken was recorded from Context 3046 (not dated and therefore excluded from Table 1). Medullary bone noted within one femur shaft indicate that this was a female bird of laying age.

Overall, only 7 measurable fragments and 1 mandible with teeth *in situ*, of use for providing biometrical and age-at-death data, were noted.

Discussion and statement of potential

Assemblages of charred cereals are relatively rare on rural medieval occupation sites in the region and as such consideration should be given to examination of any other deposits of a similar kind to these with a view to obtaining more information about plant crops and food at this site.

Although vertebrate material from this site is reasonably well-preserved and, on the whole, tightly dated, the size of the assemblage is too small and the number of fragments providing biometrical and age-at-death information is insufficient for further analysis to be undertaken.

Recommendations

In view of the scarcity of charred grain assemblages from rural medieval sites, it is probably worth making a proper record of the material, at least from Context 3113, by means of careful processing of a somewhat

larger sample (a further 3 kg might suffice). However, this should not be undertaken if the dating of this deposit is uncertain.

No further work on the current vertebrate material is warranted.

Retention and disposal

All the material, processed and unprocessed, should be retained for the moment as should the vertebrate assemblage.

Archive

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

Acknowledgements

The authors grateful MAP are to Consultancy Archaeological Ltd for providing material and the the archaeological information, and to English Heritage for allowing AH to contribute to this report.

References

Dobney, K., Hall, A. R., Kenward, H. K. and Milles, A. (1992). A working classification of sample types for environmental archaeology. *Circaea, the Journal of the Association for Environmental Archaeology* **9** (for 1991), 24-6.

Kenward, H. K., Hall, A. R. and Jones, A. K. G. (1980). A tested set of techniques for

the extraction of plant and animal macrofossils from waterlogged archaeological deposits. *Science and Archaeology* **22**, 3-15.

Kenward, H. K., Engleman, C., Robertson, A., & Large, F. (1986). Rapid scanning of urban archaeological deposits for insect remains. *Circaea* **3**, 163–172.

Table 1. Hand-collected vertebrate remains from excavations at Bishop Wilton, East Riding of Yorkshire. **Key**: No. meas = number of measurable fragments; No. mand = number of mandibles with teeth in situ; No. frags = total number of fragments

Species		No. meas	No. mand	No. frags
Canid	dog family	-	-	1
Canis f. domestic	dog	3	-	9
Equus f. domestic	horse	2	-	20
Sus f. domestic	pig	-	-	9
Dama dama (L.)	fallow deer	-	-	3
Bos f. domestic	cow	-	-	28
Caprovid	sheep/goat	2	1	56
cf. Anas sp.	?duck	-	-	1
Columbidae	pigeon	-	-	1
Homo sapiens	human	-	-	1
Unidentified		-	-	248
Total		7	1	377