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Evaluation of biological remains from excavations at Norman Court, Grape Lane, York (site code: 1995.5)

by

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Summary

The potential for further analysis of biological remains from sediment samples from deposits excavated at Norman Court, Grape Lane, York is considered. All of the deposits gave small amounts of biological remains, but insufficient to allow definite interpretation.

The remaining sediment samples should be sieved to recover small bones. No other work on the material described here is recommended.

Keywords: Norman Court; Grape Lane; York; invertebrate remains; plant remains; mammal bone; fish bone

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Introduction and methods

Five samples (GBAs *sensu* Dobney *et al*. 1992) from excavations by MAP Archaeological Consultancy Ltd. at Norman Court, Grape Lane, York, were submitted for an evaluation of their potential for bioarchaeological analysis.

The samples were inspected in the laboratory and their lithology recorded using a standard *pro forma*. Subsamples of 1 kg were taken for extraction of macrofossil remains following procedures of Kenward *et al*. (1980; 1986). For Sample (Context 15) the remaining sediment was sieved to 1 mm, primarily for the recovery of small bone; the residue from this is referred to as BSXS in the text below.

Plant macrofossils were examined from the residues, 'flots' and washovers resulting from processing, while only the flots and washovers were examined for invertebrate remains.

Parasite eggs were investigated by means of 'squashes' following the method of Dainton (1992). Other microfossils were noted where present.

Results

The results of the investigations are presented in phase then context number order, with archaeological information provided by the excavator in brackets.

No parasite eggs were seen in the 'squashes'— these are not discussed further.

Phase I - 11th Century accumulation/dump

Context 39 [Accumulation or dump. *Reason for sampling: To assess the environmental potential, and determine the method of formation of the deposit - deposit may be affected by piling*]

Sample 5: Moist, dark grey, sticky (working plastic), silty clay. Medium-sized and large stones (20 to 60+ mm), mortar/plaster, brick/tile, charcoal and fragments of bone were present in the sample.
The small washover was mostly charcoal (to 10 mm) with some sand and a little cinder. A few elder seeds (*Sambucus nigra* L.) and some fragments of ?fish bone were also present.

The small residue was mostly sand, gravel and stones (to 15 mm) with some bone, slag, one fragment of brick/tile (to 10 mm) and a trace of shellfish. The bone component of the residue consisted of twenty-three fragments of which twenty-one were unidentified (eighteen cow-sized and three fish). The remaining two fragments were a pig lateral metapodial and phalange, both from juvenile individuals.

The process of formation of the deposit is unclear. The mixed components perhaps indicate dumping, but the condition of the bones suggests slower formation or re-deposition.

Phase II - 11/12th Century cuts

Context 37 [Fill of small linear slot - possibly cutting Anglo-Scandinavian deposits. *Reason for sampling: ?Origin of fill/function of slot*]

Sample 4: Moist, mid to dark, grey-brown, crumbly (working slightly plastic), slightly sandy clay silt. Very small, small and medium-sized stones (2 to 60 mm), mortar/plaster, charcoal and bone fragments were present.

The small washover was mostly charcoal (mostly less than 5 mm with some fragments to 10 mm) with some cinder and a little sand. A few elder seeds (*S. nigra*), plant debris, a few fish vertebrae and a few other fragments of bone were also present.

The small residue was mostly sand and stones (to 15 mm) with a few fragments of twig/root, brick/tile (to 7 mm) and some bones. The latter included a pig distal radius, a cow-sized shaft fragment and eight fish

bones (a cyprinid caudal vertebra and seven unidentified fragments).

The biological remains give no clear indication of the function of this feature - all of the material may have been re-deposited.

Phase VII - 13/14th Century pit

Context 15 [Fill of small pit. *Reason for sampling: Any indications as to the function of the pit and/or nature of the fill?*]

Sample 2: Moist, mid to dark grey-brown, crumbly (working plastic), slightly sandy clay silt with clasts of yellow/buff clay. Medium-sized and large stones (20 to 60 mm), brick/tile, pot, charcoal and marine molluscs were present and bone was common.

The small washover was mostly charcoal (to 10 mm) with some cinder and a little sand. A few fragments of elder seed (*S. nigra*), an earthworm egg capsule, a bird phalange (turdid - thrush family) and a few other fragments of bone were also noted.

The small residue from the washover was mostly sand, small stones (to 6 mm) and charcoal (to 5 mm) with some fragments of brick/tile (to 8 mm) and a few bones (discussed below).

The modest BSXS residue was mostly stones (limestone and sandstone to 85 mm), gravel, sand, brick/tile (to 70 mm) and mortar/plaster (to 50 mm). Bones, soil concretions (to 2 mm), pot, cinder, coal, charcoal (to 10 mm) and a few unidentified shell fragments (shellfish and snail) were also present. A total of sixty-seven fragments of bone were recovered from this context (sixteen from the GBA residue) of which thirteen were identifiable. Cattle (maxilla with teeth and a first phalange), caprine (a cuboid and a sesamoid), cat (astragalus), ?black rat (cf. *Rattus rattus* (L.) - molar), chicken (femur) were all represented. Fish remains included four caudal vertebrae (three cyprinid and a single clupeid). The remaining eight fragments of fish bone were unidentifiable. A scapula fragment with a fracture callus (from an unidentified wader) and a single antler fragment showing chop marks were also noted.

The bones suggest that this pit was used for the disposal of waste material from food preparation, but the limited number of remains are insufficient to allow a definite interpretation.

Context 19 [Uppermost surviving fill of pit. *Reason for sampling: Examination of pit fill. ?Domestic refuse*]

Sample 3: Moist, mid to dark grey-brown, crumbly to soft (working slightly plastic), slightly sandy silty clay. Very small and medium-sized stones (2 to 6 and 20 to 60 mm), mortar/plaster, brick/tile, ash, charcoal and bone were all present in the sample.

The small flot was mostly charcoal (to 5 mm) with some poorly preserved plant debris.

The small residue was mostly sand, gravel, charcoal (to 6 mm) and stones (to 15 mm) with some brick/tile (to 25 mm), small bones and slag (to 25 mm) and traces of shellfish (some burnt), coal (to 6 mm), cinder and plaster/mortar. The bones were a passerine carpometacarpus, a murine mandible with teeth, and eight unidentifiable fragments (four of these were fish).

There is no reason to believe that the remains represent food waste or other primary domestic refuse.

Phase IX - 15/16th Century slot

Context 6 [Fill of linear slot. *Reason for sampling: To assess environmental value - this feature is likely to be lost to forthcoming development*]

Sample 1: Moist, dark brown, soft, slightly sandy ashy silt. Bone was common in the sample and mortar/plaster, brick/tile, charcoal and marine molluscs were present.

The small flot was mostly charcoal and cinder (both to 5 mm) with some plant debris. A few poorly preserved invertebrate remains were noted - *Palorus ratzeburgi* (Wissmann), *Ptinus* sp., *Anobium punctatum* (Degeer) (all characteristic synanthropes), a fly puparium and an earthworm egg capsule.

The residue was mostly sand, gravel and cinder with charcoal (to 15 mm) and bone and traces of shellfish, slag, brick/tile (to 5 mm), glass (one piece) and metal (one piece). Mammal species were represented by seven unidentifiable cow- and sheep-sized fragments and one rabbit (*Oryctolagus cuniculus* (L.)) metacarpal. Fish remains included a clupeid caudal vertebra and a ?salmonid vertebra with a crushed appearance, characteristic of damage caused by

chewing. Three other fish bones were unidentifiable.

Clearly, the environmental value of the deposit is limited, although this is the only feature to show insect preservation.

Discussion

All of the deposits gave some biological remains but in insufficient quantities to allow definite interpretation.

Evidence from a series of contexts with insect preservation (as in Context 6) might as a whole permit useful deductions, and would certainly be of value in synthetic studies.

Statement of potential

The deposits evaluated offer only very limited potential for useful bioarchaeological analysis other than through examination of the charcoal, which may yield a small amount of information about wood used for fuel, although the fragments were generally very small and identification would be difficult.

There may be features with organic preservation by anoxic waterlogging; if any such deposits are exposed during development they should be sampled and investigated.

Recommendations

The remaining sediment samples should be sieved to recover small bones. No other work on this material is recommended. If deposits with organic preservation by anoxic waterlogging, higher concentrations of charred plant material, or substantial assemblages of bones, are exposed during development, however, every effort should be made to sample and investigate them.

Retention and disposal

The sediment samples should be retained for the present. The bone recovered by sieving should be stored together with the hand-collected material.

Archive

All extracted fossils from the test subsamples, and the residues 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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