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**Evaluation of biological remains from further  
samples from excavations at Bishop Wilton,  
N. Humberside (site code VBW93)**

by

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**Summary**

Four samples of sediment from a late medieval kiln were examined for biological remains. Two of the subsamples were quite rich in charcoal, mostly from roundwood, presumably fuel. Two (including one of those with charcoal) contained modest numbers of rather poorly preserved charred cereal grains and one of these also yielded remains of several small vertebrates. There were also a few snails from three samples. The fourth subsample was barren apart from traces of charcoal.

If the grain is not waste from fuel, it is perhaps most likely to be from a bread oven. A few barley grains showing signs of germination might be connected with brewing, but the evidence is very slight. The vertebrates are as likely to have originated in pellets from raptors as from animals living on the site.

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## Evaluation of biological remains from further samples from excavations at Bishop Wilton, N. Humberside (site code VBW93)

This report deals with analyses of four samples additional to the single sample (from context 102) from this site, reported by Carrott *et al.* (1993). All were from deposits associated with a late medieval (C15/16th) kiln. An initial inspection suggested that at least three of them contained considerable amounts of charcoal, and after making a description of the sediment in the laboratory, using a standard *pro forma*, subsamples of 1 kg from all four were taken for processing, following methods of Kenward *et al.* (1980), using the dried residue to examine charcoal and other charred plant remains. All the flots from paraffin flotation were barren of insect remains.

The results were as follows (in context number order):

### Context 7, sample 241 [flue residue dump, outside building 1]

Dark grey, crumbly (working plastic), very gritty silty clay with flint and chalk abundant in 2-6 mm range and present at 6-20 mm. Probably rich in very fine charcoal or soot.

The modest-sized residue was mostly of angular and rounded chalk, with a little flint to 15 mm and a trace of brick/tile. There was some sand and a few modern root fragments. Most obvious in the finer fractions were rather large numbers (estimated as approximately 100) of rather poorly preserved charred ?bread/club wheat (*Triticum ?aestivo-compactum*; most were very puffed and usually not whole) together with a slightly smaller number of grain fragments, most of which were probably also of this species. There were also two ?oat (*Avena* sp.) grains, a single barley (*Hordeum* sp.) grain, and a possible cotyledon fragment of bean or pea. There was a trace of charred mammal bone (unidentifiable) and a few poorly preserved snails (*Vallonia* sp., *Trichia* sp. and a probably intrusive *Cecilioides acicula*) indicative of grassland habitats.

### Context 219, sample 218 [layer above bowl and flue]

Mid grey-brown, crumbly (working plastic), very gritty clay with abundant chalk 2-6 mm and small amounts 6-60 mm; also some charcoal.

The modest-sized residue of angular and rounded chalk to 25 mm, with a little flint to 20 mm, also contained some sand and a trace of charcoal to 15 mm. The single 'large' fragment was identified as hazel (*Corylus avellana*). There was a trace of unidentifiable mammal bone.

### Context 220, sample 222 [upper fill of flue]

Dark grey-brown, crumbly (working plastic), very gritty silty clay with abundant chalk 2-6 mm and traces 6-60 mm, and large fragments of charred roundwood. Some reddish burnt

soil or ash and burnt chalk. A modern (live) beetle (identified as *Trechus quadristriatus* Schrank) and some rootlets were also present.

The modest-sized residue was of angular and rounded chalk to 25 mm, with a fair quantity of charcoal to about 40 mm in maximum dimension. This seemed mostly to have come from roundwood to about 30 mm diameter and a group of ten pieces (the largest ones) were identified thus: hazel (4+?1), ash (*Fraxinus excelsior*, 1), willow/poplar (*Salix/Populus*, 3) and indet. 1. There was a single amphibian (probably frog, *Rana temporaria*) bone and a few well preserved snails (*Pupilla muscorum*, *Vallonia* sp. and the probably intrusive *Cecilioides acicula*) indicating grassland vegetation. The flot from this subsample contained a single modern beetle larva.

#### Context 238, sample 240 [lower fill of oven bowl]

Lithology as for sample 222 (apart from the absence of a live beetle!).

The modest-sized residue was of angular and rounded chalk and angular flint to 30 mm. There was some sand, a trace of coal, and moderate amounts of charcoal to 30 mm. The latter was probably all from roundwood up to about 40 mm diameter. A group of 10 pieces (the largest) were identified as follows: hazel (1), ash (1), ?willow/poplar (2) and ?birch (?*Betula*, 5). In addition, there were two complete hulled barley grains (both showing evidence of having begun to germinate), a further seven *Hordeum* sp. grains, ten ?bread/club wheat, eight ?wheat and about 25 grain fragments which could not be identified more closely. The whole grains were mostly not very well preserved. Other charred plant remains were traces of grass (Gramineae), dock (*Rumex*), bedstraw (*Galium* sp.) and ?pea/bean cotyledon, and there were two uncharred 'seeds': one each of elderberry (*Sambucus nigra*) and buttercup (*Ranunculus* Section *Ranunculus*). These latter may be later contaminants brought down to the deposits by worm action.

There was also a modest assemblage of vertebrate remains: various bones (for the mammals, also teeth) of amphibian (probably frog), common shrew (*Sorex araneus*), field vole (*Microtus agrestis*), a mouse (*Apodemus* cf. *sylvestris*), and a smallish immature bird. In addition there was a fragment of tooth enamel, perhaps of pig, and some unidentified small mammal bones. It is probable that these remains are contemporaneous with the formation of the deposit but they are as likely to have been deposited in pellets from raptors (in which case there must have been a perch above the site of deposition) as to have originated in animals living nearby.

Other components of the residue included fragments of bird eggshell and slug 'granules', and there were poorly preserved several snails (*Vallonia* sp., *Oxychilus* sp. and *Trichia* sp. (together with a probably intrusive *Cecilioides acicula*) which indicate grassland vegetation.

#### General comments

The grains present in some of these deposits may indicate the use of the kilns for baking, though it is possible that they are from incompletely burnt straw or other threshing waste

used as fuel. The two barley grains which had evidently begun to germinate might point to brewing, though such evidence is slim, to say the least.

If the small vertebrate bones from sample 240 are, as seems likely, contemporaneous with the formation of the deposit, and if they are remains from pellets regurgitated by raptors (owls, small birds of prey), it is probable that some kind of structure existed above the kiln at this time, providing a perch for the birds. The presence of bird eggshell in the same deposit is perhaps rather curious given the general lack of occupation debris, unless it also originated in birds nesting—rather than simply perching—on some kind of structure above..

### References

Carrott, J., Dobney, K., Hall, A., Jaques, D., Kenward, H. and Milles, A. (1993). An evaluation of biological remains from excavations at Bishop Wilton, N. Humberside (site code VBW93). Report to Humberside Archaeology Unit, 26.8.93.

Kenward, H. K., Hall, A. R. and Jones, A. K. G. (1980). A tested set of techniques for the extraction of plant and animal microfossils from waterlogged archaeological deposits. *Science and Archaeology* 22, 3-15.