

Palaeoecology Research Services

**Evaluation of biological remains from excavations at  
Beckside North, Beverley, East Riding of Yorkshire  
(site code: BEC2001)**

by

Deborah Jaques, Allan Hall, Harry Kenward and John  
Carrott

*PRS* 2002/06

*Palaeoecology Research Services  
Unit 8, Dabble Duck Industrial Estate  
Sildon, County Durham DL4 2RA*

## **Evaluation of biological remains from excavations at Beckside North, Beverley, East Riding of Yorkshire (site code: BEC2001)**

by

Deborah Jaques, Allan Hall, Harry Kenward and John Carrott

### **Summary**

*Nine sediment samples (from 21 collected), a small quantity of hand-collected shell, and two boxes of hand-collected bone, recovered from excavations of deposits of early medieval to modern date at Beckside North, Beverley, East Riding of Yorkshire, were submitted to PRS for an evaluation of their bioarchaeological potential.*

*There was a variable content of plant and invertebrate remains in these deposits, with assemblages varying from those with abundant remains preserved by anoxic 'waterlogging' to those with small amounts of charred plant material alone. All had some evidence for peat, however, and this was an abundant component of some samples (forming the bulk of Sample 4, Context 1090). It seems to have served as fuel in some cases, at least.*

*The hand-collected shell assemblage was too small to be of any great interpretative value beyond indicating the importation of oysters and other marine shellfish to the site during the medieval and post-medieval periods.*

*Vertebrate material was recovered from deposits of early medieval to modern date. Cattle, caprovid, pig and horse remains formed the largest component of the identified fragments, whilst several chicken, geese and duck bones were also present. Preservation of the bones was good, but the material was spread rather thinly through the deposits, with few contexts producing more than 5 fragments. The small size of the assemblage renders it of little interpretative value; however, it included evidence of both butchery and domestic refuse.*

*It is probably worth making a full analysis of plant and invertebrate remains from Contexts 1000, 1090 and 1199 and perhaps also plant remains from 1257 and 1261. Information concerning local activity and living conditions would be obtained, as well as records in space and time from these narrowly-dated contexts, although it would be important to distinguish remains of local and contemporaneous origin from older fossils imported in peat. No further work on the shell remains is recommended. Little further work on the current vertebrate assemblage is warranted, but if tighter dating for the later Phases became available an archive, including biometrical data, should be made for the purposes of comparanda and synthesis. The good preservation of the bones suggests that additional excavation in this area is likely to produce a moderately large assemblage of vertebrate remains.*

**KEYWORDS:** BECKSIDE NORTH; BEVERLEY; EAST RIDING OF YORKSHIRE; EVALUATION; EARLY MEDIEVAL TO MODERN; PLANT REMAINS; CHARRED PLANT REMAINS; 'PEAT'; INVERTEBRATE REMAINS; SHELLFISH; OYSTER (*OSTREA EDULIS* L.); VERTEBRATE REMAINS

Contact address for authors:

Palaeoecology Research Services  
Unit 8  
Dabble Duck Industrial Estate  
Shildon  
County Durham DL4 2RA

Prepared for:

Humber Field Archaeology  
The Old School  
Northumberland Avenue  
Hull HU2 0LN

25 March 2002

## Evaluation of biological remains from excavations at Becksid North, Beverley, East Riding of Yorkshire (site code: BEC2001)

### Introduction

An archaeological evaluation excavation was carried out by Humber Field Archaeology at Becksid North, Beverley, East Riding of Yorkshire (NGR TA 0451 3936), during October and November 2001.

Twenty-one sediment samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992), a very small quantity of hand-collected shell, and two boxes of hand-collected bone, were recovered from the deposits. Nine of the samples and all of the hand-collected material were submitted to PRS for an evaluation of their bioarchaeological potential.

Provisional dating has assigned the deposits to four phases: Phase 1 – early medieval (very late 12<sup>th</sup>-very early 13<sup>th</sup> century); Phase 2 – late medieval; Phase 3 – post-medieval; Phase 4 – 19<sup>th</sup>-20<sup>th</sup> century.

### Methods

The submitted sediment samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992) were inspected in the laboratory and their lithologies were 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 flots, 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.

Insect preservation was recorded using the scale of Kenward and Large (1998).

Brief notes were made on the preservational condition of the hand-collected shell and the remains identified to species where possible. For oyster (*Ostrea edulis* L.) shell additional notes were made regarding: numbers of left and right valves; evidence of having been opened using a knife or similar implement; measurability of the valves; damage from other marine biota (polychaet worms and dog whelks); encrustation by barnacles. Preservation was recorded subjectively on two four-point scales for erosion and fragmentation as: 0 – none; 1 – slight; 2 – moderate; 3 – severe.

For the hand-collected vertebrate remains that were recorded, data were entered directly into a series of tables using a purpose-built input system and *Paradox* software. Subjective records were made of the state of preservation, colour of the fragments, and the appearance of broken surfaces ('angularity'). Brief notes were made concerning fragment size, dog gnawing, burning, butchery and fresh breaks where applicable.

Where possible, fragments were identified to species or species group using the PRS modern comparative reference collection. Fragments not identifiable to species were described as the 'unidentified' fraction.

### Results

#### *Sediment samples*

The results are presented in context number order by phase. 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.

EARLY MEDIEVAL (PHASE 1: VERY LATE 12<sup>TH</sup>-VERY EARLY 13<sup>TH</sup> CENTURY)

*Phase 1a: Ground-raising deposits and open area accumulation*

**Context 1199** [dump containing wooden watermill gear]

Sample 13/T (1 kg sieved to 300 microns with paraffin flotation; remaining sediment 5 litres)

Moist, light to mid grey-brown to dark grey (with some patches of mid orange-brown), brittle to crumbly (working soft), slightly sandy clay silt. Stones (2 to 20 mm, including flint) and pot sherds were present and wood fragments (some with flecks of white mold) were common in the sample.

The large residue of about 300 cm<sup>3</sup> was a little under half by volume sand, grit, and potsherds, the rest being woody detritus including worked wood fragments (to 45 mm) and wood chips (to 10 mm, including oak, *Quercus*), with some yellowish root-rich detritus peat (and dark brown 'fen' peat of the kind seen in Sample 4, Context 1090). Also noted were fragments of hazel (*Corylus*) nutshell and moderate numbers of seeds, mostly rather worn and/or 'silted'. Identifiable remains were representative of peat and various kinds of litter (hay, straw) and there were traces of charred saw-sedge leaf fragments and perhaps heather (*Calluna vulgaris*) basal twig/root material which may represent roofing or fuel.

The flot was fairly small, mostly plant debris, but with quite large numbers of fragments of insects, especially immature stages. Preservation varied but was generally rather good (E 1.5-3.5, mode 2.0 distinct; F 1.5-4.0, mode 2.5 weak). There was a clear occupation-site fauna (e.g. *Lyctocoris campestris* (Fabricius), *Cercyon atricapillus* (Marsham), *Mycetaea hirta* (Marsham), *Xylodromus concinnus* (Marsham), *Monotoma* sp. and *Ptinus ?fur* (Linnaeus)) and a range of other species likely to have lived with these. Aquatic insects were not noted, and even *Daphnia* was apparently absent. In addition to the synanthropes there was a natural-habitats component, probably originating in fen and including a donaciine 'reed beetle' and the ground beetle *Odocantha melanura* (Linnaeus). There were some other taxa which would have been equally at home in a fen with these, or at the damp margins of a ditch. Further probable damp-environment species were a distinctive carabid beetle and a weevil, both of which require further investigation.

This material probably deserves detailed recording, though with the reservation that the fen component probably originated in peat and therefore may pre-date deposition considerably.

*Phase 1b: Plot division*

**Context 1000** [primary fill of possible property boundary ditch 1245]

Sample 12/T (1 kg sieved to 300 microns with paraffin flotation; remaining sediment >8 litres)

Moist to wet, very dark brown to black, layered, fibrous and slightly compressed, fine and coarse herbaceous detritus with a little sand and patches of light to dark grey slightly clay silt. Fragments of ?mortar/plaster and wood were present and 'straw' was common in the sample.

There was a large residue of about 475 cm<sup>3</sup> of which a few cm<sup>3</sup> was sand and grit, the rest woody and herbaceous detritus including abundant 'fen' peat (rather compressed and well humified). Six fragments of well-preserved bone were also recovered – those which could be identified represented the remains of herring (*Clupea harengus* L.) and eel (*Anguilla anguilla* L.). Preservation of the wood (in fragments up to 40 mm in maximum dimensions) was mostly good: fragments were either very pale (and firm) or black- (sulphide-) stained (and firm). The uncharred seeds and fruits with these were often extremely well preserved, too. Although some of the identifiable remains probably originated in the peat, the bulk were representatives of a variety of kinds of litter (probably mainly hay and straw) and there were some hints of saltmarsh (especially in the form of sea arrowgrass, *Triglochin maritima* L.). These might all have arrived in herbivore dung and/or stable cleanings.

Amongst these debris there were modest numbers of seeds of flax (*Linum usitatissimum* L.) and a trace of hemp (*Cannabis sativa* L.), as well as rare fragments of the pod of gold-of-pleasure, *Camelina sativa* (L.) Crantz, which was formerly grown as an oil-seed crop but may have been a weed amongst flax. Leaf fragments of sweet gale or bog myrtle, *Myrica gale* L. were also noted. Assuming it did not arrive with the peat (which was rather too well humified and fine-grained to have carried such large macrofossils), this may have been imported for a variety of purposes.

The smallish flot consisted of plant debris and abundant arthropod remains. Chemical preservation was generally good (E 1.5-3.0, mode 2.0 distinct), though some remains were rather fragmented (F 2.0-4.0, mode 2.5 weak). It appeared likely that this fragmentation was recent, either a result of damage during excavation (e.g. compression by heavy machinery) or during processing. The insects gave no indication of aquatic deposition (and there was only a single species associated exclusively with marginal habitats, a reed beetle, *Plateumaris*, quite possibly imported with peat).

There was a substantial fauna of beetles typically found together in and around buildings, and in accumulations of foul waste; perhaps too many to be background fauna and therefore perhaps representing decaying matter *in situ* or remains brought with dumps. Notable in this component, and most probably representing dumped waste from wool cleaning, were remains of the sheep ked (*Melophagus ovinus* (Linnaeus)). There were some unfamiliar beetle and bug remains requiring closer identification.

Altogether, this sample yielded a large, diverse and well-preserved assemblage of plant and invertebrate remains and a few fish bones. The deposit deserves further analysis, using a subsample of at least 3 kg for the insects, though processing of all of the remaining sediment may be desirable in order to also recover additional fish remains.

#### **Context 1090** [fill of pit]

Sample 4/T (1 kg sieved to 300 microns with paraffin flotation; remaining sediment 7 litres)

Moist, mid brownish grey to black, fibrous and somewhat brittle to crumbly, slightly clay slightly silty amorphous organic sediment and fine herbaceous detritus (appears to be well-humified peat) with stones (2 to 6 mm) and ?very rotted mortar/plaster present.

This subsample yielded a large residue of about 400 cm<sup>3</sup> of granular root-rich 'fen peat' (in clasts up to 15 mm), with a little wood, charcoal and bark; the peat was abundant, forming the bulk of all three of the smaller fractions (0.3 mm, 1 mm, 2 mm) examined. The wood and bark may even be from within peat. Identifiable seeds might also largely have come from the peat: the more abundant were bogbean (*Menyanthes trifoliata* L.), sedge (*Carex* sp(p)), and spike-rush (*Eleocharis palustris sensu lato*) and these were also seen in the small flot. With them, however, were traces of flax capsule fragments and moderate numbers of seeds of weld or dyer's rocket (*Reseda luteola* L.) and a few other terrestrial taxa which certainly would not have arrived with peat and must have become incorporated into the pit as another fill component. They suggest textile working (including dyeing) as a possible source, although more work would be required with a large sample to pursue this matter further.

There were rather few invertebrate remains in the small flot. Preservation varied (E 2.0-4.0, mode 3.0 weak; F 1.5-4.0, no clear mode but a distinct trend towards stronger decay). The presence of at least three statoblasts of the bryozoon *Lophopus cristallinus* (Pallas) indicated the introduction of water from a fairly clean source, or of waterlain sediment. Beetles were rare and appeared to have more than one source (occupation and - perhaps - peat). A 5 kg subsample

might produce a useful number of remains if there is a pressing archaeological question attached to this deposit (the presence of what appear to be introduced aquatics perhaps suggesting one such question); otherwise it would be hard to justify further investigation.

#### **Context 1257** [occupation accumulation?]

Sample 16/T (1 kg sieved to 300 microns with paraffin flotation and washover; remaining sediment < 1 litre)

Moist, varicoloured (buff to black through shades of grey-brown and orange-brown in places), mixture of two components, the lighter coloured sediment being a brittle to stiff (working soft and somewhat plastic), clay silt/silty clay, and the darker a layered (working slightly sticky) silty clay ash with some charred organic material.

There was a moderate-sized residue of about 150 cm<sup>3</sup> which produced about 25 cm<sup>3</sup> of heavy washover consisting mainly of ?baked soil with some peat (which might mostly come from burning); in addition, a 'light' washover of about 30 cm<sup>3</sup> was also examined, along with a tiny flot which contained a few rather eroded seeds (of which many were a probable salt-marsh rush, *Juncus ?gerardi* Loisel. The light washover yielded modest numbers of seeds, perhaps largely deriving from peat, notably saw-sedge (*Cladium mariscus* (L.) Pohl), bogbean and spike-rush, since all were rather eroded, and often very poorly preserved. However, amongst the charred material were stem and leaf fragments of *Cladium* which seem much more likely to have arrived as dried litter for fuel or roofing. There were only traces of well-decayed invertebrate remains in the small flot.

#### *Phase 1c: Redefining of southern plot and associated hearths/ovens*

#### **Context 1252** [thin occupation surface over hearth 1254]

Sample 15/T (1 kg sieved to 300 microns with washover; remaining sediment < 1 litre)

Moist, varicoloured (mostly mid grey-brown to black but with patches of buff and orange-brown), layered and brittle to crumbly (working soft and slightly plastic), ?ashy clay silt with a few fragments of ?brick/tile present.

The large residue consisted of about 175 cm<sup>3</sup> of ?daub (with one large fragment to 50 mm), charcoal, and some sand. Amongst these there were some 'platy' fragments of silty material with a fine-grained organic context which looked rather like faecal concretions; they were highly calcareous and found to contain some

diatoms and perhaps also phytoliths, but no worm eggs were seen so they are perhaps just daub-like material. The small washover of about 20 cm<sup>3</sup> comprised charcoal with a little unburnt peat; there was no flot.

**Context 1254** [burnt clay hearth]

Sample 14/T (1 kg sieved to 300 microns with washover and 'SPOT'; remaining sediment > 5 litres)

Just moist, mid orange to buff, stiff to brittle (working plastic) clay with some charcoal present with a dark grey to black component (examined as a 'SPOT' sample).

The moderate-sized residue of about 100 cm<sup>3</sup> consisted of red baked soil/clay and sand; the very small washover of a cm<sup>3</sup> or two was of burnt peat, charcoal, charred bark and more burnt soil, all in very small (<2 mm) fragments. There was a single elder (*Sambucus nigra* L.) seed. No flot was taken. A lump of unprocessed sediment was also examined: it was red and black ashy material with distinct small-scale banding and ashy feel, consistent with an ash accumulation in a hearth.

*Phase 1e: postholes and possible construction slot*

**Context 1261** [occupation accumulation?]

Sample 21/T (1 kg sieved to 300 microns with paraffin flotation and washover; remaining sediment 1 litre)

Moist, varicoloured (mostly light brown and light grey to mid grey-brown with dark grey, buff, orange, and black), brittle and crumbly to soft and layered in places (working soft and plastic), silty clay to clay silt with stones (6 to 20 mm), ?charcoal, and ?organic patches, present.

The moderate-sized residue of about 150 cm<sup>3</sup> yielded a heavy washover of about 25 cm<sup>3</sup> of granular fen peat (as in Sample 4, Context 1090, *q.v.*), and there was also a light washover of about 50 cm<sup>3</sup>, mostly detritus <1mm. The plant remains were a subset of the 'litter' groups seen in better preserved material from same site (e.g. Sample 12, Context 1000), but the seeds were very variable in their state of preservation: corncockle (*Agrostemma githago* L.) seeds were flat and strongly eroded, whilst some *Menyanthes* and *Atriplex* were well or very well preserved. The tiny flot added modest numbers of a rush which may have been the salt-marsh species, *Juncus gerardi*. The trace flot contained a few well-decayed beetle fragments and a single fragment of snail (Succineidae sp. indet.), offering no prospect for useful further investigation.

**PHASE 2: LATE MEDIEVAL/POST-MEDIEVAL (14<sup>TH</sup>-EARLY 17<sup>TH</sup> CENTURY)**

*Phase 2a: Further ground-raising dumps, and hearth/oven with millstone base*

**Context 1170** [burnt clay, probable demolition of a clay oven]

Sample 8/T (1 kg sieved to 300 microns with washover; remaining sediment 8 litres)

A moist, mix of half crumbly (working sticky), orange, slightly sandy ash and clay, and brittle (working soft), grey-brown ashy clay silt.

This subsample yielded a moderate-sized residue of about 150 cm<sup>3</sup> of pinkish-orange burnt soil with traces of gravel, sand and bone; there was a very small washover of a few cm<sup>3</sup> of roughly equal parts of burnt soil (which might actually come from peat), charcoal and ?burnt peat, all <5 mm. There was no flot.

*Phase 2b: Stone foundations and tile-on-edge hearth/oven*

**Context 1189** [possible external accumulation associated with chalk foundation 1196]

Sample 6/T (2 kg sieved to 300 microns with paraffin flotation and washover; remaining sediment > 5 litres)

Moist, light to mid brown, stiff (working soft and plastic), slightly sandy slightly silty clay. Stones (2 to 6 mm), ?very rotted mortar/plaster, brick/tile and charcoal were present in the sample.

This subsample gave a moderate-sized residue of about 200 cm<sup>3</sup> of sand and gravel and a tiny washover of 1-2 cm<sup>3</sup> of plant detritus; the small flot contained several duckweed (*Lemna* sp.) fronds (there were more in washover), together with a few charred seeds, some charcoal and coal and a few very small (<5 mm) peat fragments. The remains were of limited interpretative value, the duckweed fronds presumably arriving with water either through flooding or the use of water from a pond or ditch for some purpose (uncharred *Lemna* fronds are rather frequently encountered in small numbers in certain occupation deposits with otherwise very limited preservation of uncharred material and as such are rather unexpected).

The washover was small and contained only traces of invertebrate remains. Notable, however, was what appeared to be remains of the spider beetle *Tipnus unicolor* (Piller and Mitterpacher), a species very typical of late and post-medieval deposits.

### *Hand-collected shell*

Very small quantities of hand-collected shell were recovered from 13 contexts (of which one was undated/unphased). The remains amounted to only single, or a few, rather variably preserved oyster (*Ostrea edulis* L.) valves per context with occasional cockle (*Cerastoderma edule* (L.)) valves also present. A summary of the recovered remains is presented as Table 1.

### *Hand-collected vertebrate remains*

In total, 251 fragments of bone from 44 contexts, representing all four phases, were recovered from this site. Bones from Phases 1-3 deposits were recorded, whilst those from Phase 4 (19<sup>th</sup>-20<sup>th</sup> century) were only quickly scanned. Table 2 shows a summary of the number of fragments and contexts by phase and Table 3 shows the numbers of fragments by phase and by species, excluding Phase 4 material.

Preservation was, overall, described as good, with only the occasional fragment that was battered or eroded or had rounded edges. Colour of the fragments varied between deposits, from dark brown to brown to fawn, but, on the whole, little variation was seen within the material from individual deposits. The assemblage was not particularly fragmented, nor was there evidence for extensive dog gnawing. Vertebrate material from this site seems to have been fairly quickly incorporated into the deposits and does not appear to have been left exposed for a long period prior to burial.

Many fragments showed evidence of butchery, and this included cattle long bone shafts that had been chopped transversely and longitudinally. Several medium-sized mammal vertebrae (assumed to be caprovid) appeared to have been chopped longitudinally suggesting the splitting of carcasses into 'sides'.

Cattle, caprovid, pig and horse remains formed the bulk of the identified fragments. Most of the cattle fragments from Phase 1-3 deposits were elements associated with the head (i.e. mandibles and isolated teeth) or lower limb (calcanei, metapodials and phalanges), indicating the presence of primary butchery refuse. In contrast, caprovids were represented by a greater number of meat-bearing elements, more indicative of domestic or kitchen waste.

A few bird bones were present, and were identified as goose, duck and chicken. The duck humerus from Context 1098 was damaged by cat gnawing and there was also a series of knife marks across the top of the proximal articulation. Bird carcasses require minimum preparation prior to consumption and the bird remains

are likely to represent table waste. The diet of the medieval and post-medieval inhabitants of Beverley also seems to have been supplemented by wild resources. Single fragments identified as hare and ?gadid (cod family) were recovered from Contexts 1037 and 1088.

The horse remains are less likely to be the product of food preparation or represent the consumption of horse meat by people. No butchery or skinning marks were apparent. Two horse incisors from Contexts 1019 and 1052 represented individuals of between 5 and 7 years old.

These deposits produced 25 measurable fragments and a single mandible with teeth *in situ* of use in providing biometrical and age-at-death data.

## **Discussion and statement of potential**

There was a variable content of plant and invertebrate remains in these deposits, with assemblages varying from those with abundant remains preserved by anoxic 'waterlogging' to those with small amounts of charred plant material alone. All had some evidence for peat, however, and this was an abundant component of some samples (forming the bulk of Sample 4, Context 1090). It seems to have served as fuel in some cases, at least.

The hand-collected shell assemblage was too small to be of any great interpretative value beyond indicating the importation of oysters and other marine shellfish to the site during the medieval and post-medieval periods.

Vertebrate remains from these excavations were well preserved, however, they were spread rather thinly throughout the deposits and few contexts produced more than five fragments. It does not appear that this area was being used for large scale dumping of waste, rather that small accumulations of rubbish or debris were being incorporated into the deposits in an effort to raise or stabilise the ground surface. The good preservation of the bones suggests that they were buried whilst still relatively fresh as there is little evidence of redeposition.

## Recommendations

It is probably worth making a full analysis of plant and invertebrate remains from Contexts 1000, 1090 and 1199 and perhaps also plant remains from 1257 and 1261. Information concerning local activity and living conditions would be obtained, as well as records in space and time from these narrowly-dated contexts, although it would be important to distinguish remains of local and contemporaneous origin from older fossils imported in peat.

Only a few of the oyster valves were sufficiently well preserved to be measurable but the possibility of recovering a larger, and more interpretatively useful, assemblage should be considered in the event of further excavation.

Little further work on the current vertebrate assemblage is warranted, but if tighter dating for the later Phases became available an archive, including biometrical data, should be made for the purposes of comparanda and synthesis.

This assemblage has shown that the survival of bone in these deposits is good and further intervention in this area is likely to produce a moderate assemblage of well preserved vertebrate remains.

## Retention and disposal

All of 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

The authors are grateful to Ken Steedman, Trevor Brigham and Sophie Tibbles of Humber Field Archaeology for providing the material and the archaeological information.

## 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. and Large, F. (1998). Recording the preservational condition of archaeological insect fossils. *Environmental Archaeology* **2**, 49-60.
- 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.
- Kenward, H. K., Engleman, C., Robertson, A. and Large, F. (1986). Rapid scanning of urban archaeological deposits for insect remains. *Circaea* **3**, 163-172.

Table 1. Summary information for the hand-collected shell from excavations at Becksid North, Beverley, by context. A '?' before numbers indicates possible numbers (e.g. '3(?4) = definitely 3, possibly 4). **Key:** 'Con' = Context number;



*Date (Ph) = Date (Phase); 'left' = number of left (or lower) valves; Emed = early medieval; Lmed = late medieval; Pmed = post-medieval; 'right' = number of right (or upper) valves; 'ind' = number of valves of indeterminate side; 'meas' = estimated number of valves intact enough to be measured; 'e' = average erosion score for valves; 'f' = average fragmentation score for valves; 'knife' = number of valves showing damage characteristic of the oyster having been opened using a knife or similar implement; 'worm' = number of valves showing damage by polychaet worms; 'barn' = number of valves with barnacles; 'dog' = number of valves showing damage from dog whelk boring; 'fresh' = number of valves showing fresh breakage; 'cockle' = minimum number of cockle valves; 'wt' = total weight of shell in grams*

Con	Date (Ph)	Oyster valves											cockle	wt
		left	right	ind	meas	e	f	knife	worm	barn	dog	fresh		
1037	Lmed (2)	0	1	0	0	3	2	0	0	0	0	1	0	9
1038	Pmed (3)	0	1	0	0	3	1	0	0	0	0	0	0	7
1042	Unknown	0	0	0	-	-	-	-	-	-	-	-	1	2
1048	Lmed (2)	2	3	0	0	3	2	1	0	0	0	0	0	25
1088	Lmed (2)	0	2	0	0	2	3	?1	0	0	0	0	0	11
1098	Pmed (3)	2	1	0	3	1	1	?1	0	0	0	0	3	46
1111	Lmed (2)	0	1	0	0	1	2	1	0	0	0	0	0	8
1145	Emed (1)	1	0	0	0	1	3	1	0	0	0	0	0	11
1170	Emed (1)	1	0	0	1	1	1	1	0	0	0	0	0	17
1190	Lmed (2)	0	2	0	2	1	1	1	0	0	0	0	5	27
1207	Lmed (2)	0	0	0	-	-	-	-	-	-	-	-	1	2
1221	Lmed (2)	1	0	0	1	1	2	1	0	0	0	0	0	18
1223	Emed (1)	1	0	0	0	3	1	?1	0	0	0	?1	0	9

Table 2. *Hand-collected vertebrate remains by phase from excavations at Beckside North, Beverley. Key: Measurable = number of measurable fragments; Mandibles = number of mandibles with teeth in situ.*

Date (Phase)	No. of fragments	Measurable	Mandibles
Early Medieval (Phase 1)	20	5	0
Late Medieval (Phase 2)	147	16	1
Post-Medieval (Phase 3)	37	4	0
19th - 20th Century (Phase 4)	47	1	1
Total	251	26	2

Table 3. *Hand-collected vertebrate remains (excluding fragments from Phase 4) by species from excavations at Becksid North, Beverley.*

Species		Phase 1	Phase 2	Phase 3	Total
<i>Lepus</i> sp.	hare	-	1	-	1
<i>Equus</i> f. domestic	horse	-	5	1	6
<i>Sus</i> f. domestic	pig	-	7	-	7
<i>Bos</i> f. domestic	cattle	1	9	6	16
Caprovid	sheep/goat	4	16	1	21
<i>Anser</i> sp.	goose	2	-	1	3
<i>Anas</i> sp.	duck	-	-	1	1
<i>Gallus</i> f. domestic	chicken	-	2	-	2
fish		-	1	-	1
Unidentified		13	106	27	146
<b>Total</b>		<b>20</b>	<b>147</b>	<b>37</b>	<b>204</b>