

Palaeoecology Research Services

**Evaluation of hand-collected vertebrate
remains and shell from excavations at Hyde
Laundry, Winchester, Hampshire
(site code: HLW11)**

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Evaluation of hand-collected vertebrate remains and shell from excavations at Hyde Laundry, Winchester, Hampshire (site code: HLW11)

by

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Summary

A small assemblage of hand-collected animal bone and a little marine shell recovered from deposits encountered during excavations at Hyde Laundry, Winchester, Hampshire, was submitted for an evaluation of its bioarchaeological potential. The evaluation comprised the excavation of two trenches revealing archaeological features which included a watercourse and deposits relating to ground consolidation. Roman pottery was recovered from some of the contexts but much of this was eroded and may be residual.

The shell recovered consisted of just two oyster valves which almost certainly derive from human food waste but which were too few to be of any further interpretative value.

The majority of the vertebrate remains were recovered from silty peats which had accumulated within the watercourse. Bones from this feature were, on the whole, well preserved but some elements showed signs of cracking and flaking indicating inconsistent preservation within the channel and potential loss of material. Identified elements were exclusively of the main domestic mammals, with no remains of wild animals. Fragmentation was low and four of the bones were measurable but this was too few to provide data for any meaningful biometric analysis. A horse mandible with a complete permanent dentition provided a guide as to age-at-death for this animal.

No further study of the current material is warranted. The excellent condition of most of the vertebrate remains recovered from the watercourse suggests that any future excavations in the vicinity should allow for the possibility of encountering larger and more interpretatively valuable concentrations of bone, however.

KEYWORDS: HYDE LAUNDRY; WINCHESTER; HAMPSHIRE; EVALUATION; ROMAN; MARINE SHELL; VERTEBRATE REMAINS

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Introduction

An archaeological evaluation excavation was undertaken by Border Archaeology at the former Hyde Laundry premises, Winchester, Hampshire (NGR SU 48250 29895) during early June 2011. The works were undertaken in advance of a mixed commercial and residential development of the site.

The site is located within an area of high archaeological sensitivity, on the eastern fringes of the extra-mural Roman suburb of *Venta Belgarum*. Evaluation trenching carried out in 1986 at the Gordon Road timber yard immediately to the north of the site revealed alluvial peats with well preserved archaeological remains, corroborating documentary evidence that this area was open water meadows during the medieval and post-medieval periods.

The evaluation at Hyde Laundry comprised the excavation of two trenches; Trench 1 outside the building and Trench 2 within it. These revealed evidence of archaeological features including a channel (provisionally identified as a watercourse depicted on 17th century maps) and deposits relating to occupation and ground consolidation. Dating evidence from the features included Roman pottery but much of this was eroded and may be residual.

A small quantity of hand-collected bone and a little marine shell was submitted to Palaeoecology Research Services Limited (PRS), Kingston upon Hull for an evaluation of its bioarchaeological potential.

Methods

Hand-collected shell

Marine shell identifications were made principally by reference to Hayward and Ryland (1995). The weights (in grammes), numbers of fragments and maximum dimensions of shell of different taxa from each context were recorded (where determinable) and the minimum numbers of individuals (or individual valves for bivalve taxa) represented calculated where possible.

For oyster (*Ostrea edulis* L.) shell additional notes were made (where possible) regarding: numbers of left and right valves; evidence of having being opened using a knife or similar implement; measurability of the valves; damage from other marine biota (e.g. polychaete worms and dog whelks); encrustation by barnacles. Preservation was recorded using two, subjective, four-point scales for erosion and fragmentation—scale points were: 0 – none apparent; 1 – slight; 2 – moderate; 3 – high.

Nomenclature for marine shell follows Hayward and Ryland (1995).

Hand-collected vertebrate remains

All of the submitted material was examined and identified as closely as possible within the constraints of the evaluation. Subjective records were made of 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 and published works (Schmid 1972). The bones

that could not be identified to species were described as the 'unidentified' fraction. Within this fraction fragments were grouped into three categories: large mammal (assumed to be cattle, horse or large cervid), medium-sized mammal (assumed to be caprine, pig or small cervid) and completely unidentified.

Results

Hand-collected shell

The hand-collected shell recovered consisted of just two oyster valves (total weight 18.4 g) from Context 212, a possible raised cambered surface and the earliest evidence for occupation at the site.

Preservation of the remains was poor, with considerable surface erosion and fragmentation, but 'side' could be determined for both of the oyster valves, with one left and one right valve recorded (the latter more a large fragment); the two did not appear to form a pair. Neither of the valves would be able to provide biometrical data beyond a simple maximum linear dimension. Evidence of the oysters having been opened using a knife or similar implement (as shown by characteristic damage to the shell margins) was noted on the left valve and perhaps also on the right (this possible evidence having been rendered inconclusive through deterioration of the shell in the ground and fresh breakage presumably caused during recovery). There was no evidence of damage or encrustation of the oyster valves by other marine biota.

Details of the recorded shell remains are summarised in Table 1.

Hand-collected vertebrate remains

Vertebrate remains were recovered from six deposits resulting in a small assemblage of 19 fragments. The majority of these were from the (?naturally accumulated) silty 'peat' fill of the water channel (Context 211=216(=217)). The colour of the bones from this organic deposit was a uniform dark brown and fragmentation was low with several complete elements present. Condition, however, was variable; some remains were excellently preserved whereas a few were in poor condition with severe flaking and recent breaks. This suggests that moisture levels within the deposit were inconsistent and may indicate a fluctuating water table. A caprine metacarpal and a fragment of cattle pelvis from Context 216 had crenulated edges which can indicate gnawing by

carnivores but distinctive tooth scoring was not apparent and this damage may therefore be unrelated to scavenging. The remaining bone consisted of occasional fragments derived on the whole from deposits interpreted as introduced material.

Remains of dog, horse, cattle and caprines (sheep/goat) were among the identified material, with no bones from either birds or wild mammals present. Only a few elements were wholly unidentified or categorised only by size, which reflects the low fragmentation of the assemblage. A cattle humerus from Context 216 had been chopped through the distal articulation and across the shaft, but this was the only firm evidence of butchery. No pathologies or scorch marks were apparent on the material.

Four of the bones were measurable for the purposes of biometrical data analysis, all from Contexts 211 and 216. These included a dog humerus and ulna, possibly from the same animal, and a horse femur. A horse mandible from Context 211 was preserved intact with the incisors and a full set of permanent cheek teeth from the right side *in situ*. The presence of the complete permanent dentition, in wear, indicates an animal at least three and a half to four years old (Hillson 1986; Silver 1969). In addition, the smooth occlusal surface of the incisors would extend this to nine years old or more using traditional methods of age determination. However, ageing horses by attrition of the incisors has been shown to be unreliable when applied to modern horses of known age and can therefore only be used to provide a rough estimate (Muylle *et al.* 1996; Richardson *et al.* 1995). The vestigial, un-erupted, canines indicated that the animal was probably female.

Details of the recorded vertebrate remains are presented by context in Table 2.

Discussion and statement of potential

The trace of oyster shell recovered almost certainly derives from human food waste but was too little to be of any further interpretative value.

The site produced a very small but generally well preserved assemblage of vertebrate remains; the majority being recovered from the silty peat fill of a watercourse which also produced Roman pottery. The dark brown colour of the bones and low fragmentation was evidence of the excellent preservation conditions within this feature, although the

deterioration of some of the material may indicate fluctuating water levels in some places and that unexcavated remains are therefore vulnerable to decay.

None of the bones showed conclusive evidence of carnivore gnawing, suggesting rapid incorporation into the deposit with limited access for scavenging animals.

Identified elements were exclusively of the main domestic mammals, including dog, horse, cattle and caprine, with no remains of birds or wild mammals. Fragmentation was low and four of the bones were measurable; too few to provide data for any meaningful biometric analysis, however. One horse mandible with a complete permanent dentition provided a guide as to age-at-death for this animal.

Recommendations

No further study of the biological remains recovered from this site is recommended in isolation.

Some specific additional study of the bone may be of value if included as part of an analysis of the vertebrate assemblage from proposed further excavations at the site; the excellent condition of most of the vertebrate remains from the watercourse suggests that larger and more interpretatively valuable concentrations of bone may well be recovered.

Retention and disposal

All of the remains should be retained as part of the physical archive for the site.

Archive

All material is currently stored by Palaeoecology Research Services (Unit 4, National Industrial Estate, Bontoft Avenue, Kingston upon Hull), pending return to the excavator, along with paper and electronic records pertaining to the work described here.

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Table 1. Hyde Laundry, Winchester, Hampshire: Hand-collected shell. Key: 'CN' = context number; 'l' = number of left (or lower) valves; 'r' = number of right (or upper) valves; 'i' = number of valves of indeterminate side; 'e' = erosion score for valves; 'f' = fragmentation score for valves; 'meas' = estimated number of valves intact enough to be measured; 'kn' = number of valves showing damage characteristic of the oyster having been opened using a knife or similar implement; 'fr' = number of valves showing fresh breakage; 'biota' = number of valves with evidence of damage or encrustation from/by other marine biota (e.g. polychaete worms, dog whelks, barnacles); 'wt' = total weight of shell (in grammes). Erosion and fragmentation scores were recorded, subjectively, as: 0 – none apparent; 1 – slight; 2 – moderate; 3 – high.

CN	Context type	Oyster valves									Notes	wt
		l	r	i	e	f	meas	kn	fr	biota		
212	Possible raised cambered surface – earliest evidence for occupation	1	1	0	3	3	0	1/?2	1	0	Oyster valves to 60 mm – not a pair; some mm-flakes of shell	18.4

Table 2. Hyde Laundry, Winchester, Hampshire: Hand-collected vertebrate remains by context.

Species		Context						Total
		103	208	209	211	212	216	
<i>Canis</i> f. domestic	dog	-	-	-	-	-	2	2
<i>Equus</i> f. domestic	horse	1	-	-	3	-	1	5
<i>Bos</i> f. domestic	cattle	-	-	-	-	-	2	2
Caprine	sheep/goat	-	-	-	1	1	1	3
Large mammal		-	1	-	-	1	1	3
Medium-sized mammal		-	-	-	-		2	2
Unidentified mammal		-	-	1	-	-	1	2
Total		1	1	1	4	2	10	19