

Palaeoecology Research Services

**Evaluation of biological remains from excavations at  
Scott Lane, Wetherby (site code: SLW03)**

by

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**Summary**

*An archaeological evaluation excavation was carried out by Northern Archaeological Associates at Scott Lane, Wetherby, West Yorkshire during February and March 2003. Seven sediment samples and two boxes of hand-collected bone, recovered from deposits of probable 12<sup>th</sup> century date, were submitted to PRS for an evaluation of their bioarchaeological potential.*

*Ancient plant remains were scarce, with the samples yielding no more than a small quantity of charred remains, including some rather poorly preserved cereal grains. Land snails were recovered from the samples, but were mainly identified as *Cecilioides acicula* (Müller), a burrowing species almost certainly intrusive to the deposits.*

*A diverse range of species was represented within the vertebrate assemblage, including the remains of the usual domestic mammals —cattle, caprovids and pigs —together with roe and red deer. Horse bones were quite numerous, and included remains which were almost certainly deposited in articulation. Birds were less well represented, but those bones identified were mostly of chicken (including juvenile individuals) and goose, with two bones identified as woodcock. Several fish bones, including gadid, were present within the material, whilst herring and eel vertebrae were recovered from one of the samples. The occurrence of the remains of hunted animals hints at high status occupation, whilst the relatively high frequencies of pig remains may also be an indication of an affluent lifestyle.*

*No further analysis of the current material is warranted, but in the event of additional interventions, every effort should be made to secure samples from well-stratified and primary deposits to check for the preservation of (at least) charred plant remains and for the recovery of small bones. It is also highly likely that further excavation would produce a moderate assemblage of well-preserved animal bone which would be of use for archaeological and zoological interpretation.*

**KEYWORDS:** SCOTT LANE; WETHERBY; EVALUATION; 12<sup>TH</sup> CENTURY; CHARRED PLANT REMAINS; CHARRED GRAIN; LAND SNAILS; MARINE MOLLUSCS; VERTEBRATE REMAINS; FISH BONE

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## Evaluation of biological remains from excavations at Scott Lane, Wetherby, West Yorkshire (site code: SLW03)

### Introduction

An archaeological evaluation excavation was carried out by Northern Archaeological Associates at Scott Lane, Wetherby (SE 4025 4815), in late February and early March 2003, prior to the development of the site for housing. Ceramic evidence suggested that most deposits were 12<sup>th</sup> century in date.

Seven sediment samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992) and 2 boxes of hand-collected bone were submitted to PRS for an evaluation of their bioarchaeological potential.

### Methods

#### *Sediment samples*

The sediment samples were inspected in the laboratory and their lithologies recorded, using a standard *pro forma*. Subsamples of 2 kg from six of the seven samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992), and of 16 kg from the seventh, were processed following the methods of Kenward *et al.* (1980;1986) for the recovery of plant and invertebrate macrofossils.

The washovers resulting from processing were examined for plant and invertebrate macrofossils. The residues were examined for larger plant macrofossils and other biological and artefactual remains.

#### *Vertebrate remains*

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'). 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. The bones which could not be identified to species were described as the 'unidentified' fraction.

### Results

#### *Sediment samples*

In each case the sediment matrix was composed mostly of rather stony (stones 2 to 60 mm usually being common) slightly clay silt. Modern rootlets were noted in all of the samples and some contained obvious artefactual material, such as fragments of brick/tile, and small amounts of charred material (mostly charcoal) were also noted.

Plant remains were very scarce in the seven washovers examined. Other than roots and woody roots, clearly of modern origin, there were small amounts of charred material, mainly wood charcoal, but with a few charred cereal grains in some samples. These were poorly preserved, being variously puffed or eroded. The results of the evaluation for plant remains are presented by context in Table 1.

Land snails were present in some of the washovers; these were mostly *Cecilioides acicula* (Müller), a burrowing species almost certainly intrusive to the deposits. Other land snails were represented in small numbers, rather too few to be of any great interpretative value. A summary of the snails recovered is presented as Table 2. No insect remains were recovered from the samples. Some vertebrate remains were recovered from the residue of the subsample from Context 54 (see below).

#### *Hand-collected shell*

Single fragments of marine shell were recovered from each of two contexts. Context 50 (unstratified) gave a hinge fragment of a ?Venus shell (cf. *Veneridae* sp. indet.), and Context 57 (apparently laid rubble raft) a very well preserved cockle (*Cerastoderma edule* L.) valve.

### *Vertebrate remains*

A small assemblage of hand-collected bone, amounting to 2 boxes (each box approximately 20 litres), was recovered from excavations at Scott Lane, Wetherby. A total of 607 fragments were recorded excluding the material from contexts described as unstratified or topsoil or general cleaning. Trench 7 produced the bulk of the remains (477 fragments), with most of the rest (97 fragments) from Trench 8. Overall, twenty-one fragments were measurable and four mandibles with teeth *in situ* were recovered.

Preservation of the bones was mostly very good, although the material from a few deposits, particularly that from Trench 8, looked quite varied and was probably composed of material from a number of different sources. However, given that much of the vertebrate assemblage from Trench 7 derived from levelling deposits, the material was in surprisingly good condition, with minimal evidence of dog gnawing or extensive fragmentation. This suggests that, although some of the remains may have originally been dumped elsewhere, they were quickly incorporated into the deposits from which they were subsequently recovered. Only the bones from Context 37 were poorly preserved and the condition of some of these bones may be damage caused by heat.

Evidence of butchery was observed throughout, including pig cranium fragments which had been split longitudinally. Presumably this was for access to the brain.

A diverse range of species (Table 3) was represented, including the remains of the usual domestic mammals —cattle, caprovids and pigs— together with roe deer (*Capreolus capreolus* (L.)) and red deer (*Cervus elaphus* L.) from Contexts 3, 54, and 55. Horse bones were quite numerous, and included part of the hind limbs of a single individual which were almost certainly deposited in articulation (Context 54). A scan of the bones from Context 50 (described as topsoil/unstratified) revealed more horse remains (? the same

individual as that from Context 54), with incisors suggesting an age of approximately 7 years. A horse femur representing a foetal individual was identified from Context 55. This element and a neonatal pig tibia from Context 57 suggest that both pigs and horses may have been bred at the site.

Birds were less well represented, but those bones identified were mostly chicken (including juvenile individuals) and goose (*Anser* sp.), with two bones identified as woodcock (*Scolopax rusticola* L.) from Contexts 54 and 71. Several fish bones, including cod (*Gadus morhua* L.) and other gadid remains, were present within the material recovered from Contexts 54 and 55.

The sample from Context 54 produced many tiny (most less than 20 mm in any dimension) fragments of bone, which included herring (*Clupea harengus* L.) and eel (*Anguilla anguilla* (L.)) vertebrae, several gadid finray, and neural spine fragments and a few fish scales. A small bird was also represented, together with goose. Acid etching was apparent on several caprovid bones suggesting that these fragments had been eaten and originated from faecal material. On the basis of the size of the bones, these remains could represent dog faeces.

The numerous unidentified fragments mostly represented large and medium-sized mammal shaft and rib fragments. Much of this fraction was probably kitchen and table refuse, although some also represented primary and secondary carcass processing waste.

## **Discussion and statement of potential**

Ancient plant remains were scarce from these deposits, with most of the samples yielding no more than small amounts of charred material of little interpretative value. The prospects for recovery of useful assemblages of plant remains from further deposits at the site appear limited.

The hand-collected shell fragments were clearly too few to be of any great interpretative value but do indicate that shell remains may have been preserved at the site

and could be recovered in greater concentrations by further excavation.

This site also shows some potential for the preservation of vertebrate remains. Both domestic refuse and butchery waste are indicated, with the presence of cervid, hare and bird remains suggesting that wild resources formed a minor component of the diet. Roe and red deer are animals which would have been hunted and, as such, hint at high status occupation; hunting being a pursuit of the nobility. A high frequency of pig remains, as seen here, is also often used as an indicator of an affluent lifestyle, representing the conspicuous consumption of meat (Ervynck 1992). Well-preserved fish remains were recovered from the sample, and show potential for the recovery of a useful fish assemblage, which could provide additional information regarding diet and also local supply networks.

## Recommendations

No further work on the sediment samples is justified, though every effort should be made to secure samples from well-stratified and primary deposits to check for the preservation of (at least) charred remains in the event of further interventions.

The current vertebrate assemblage is a little small for further analysis, with few fragments available for providing biometrical and age-at-death data. However, further excavation would almost certainly produce a moderate assemblage of material which would be of use for archaeological and zoological interpretation, however.

## 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

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Table 1. Plant remains from samples from excavations at Scott Lane, Wetherby, West Yorkshire (SLW03).

Context and sample information	Processing notes	Comments on the plant remains recovered
<b>Context 17</b> (?lime-burning debris) Sample 1701/T	2 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain	The largish washover of about 120 cm <sup>3</sup> consisted of modern roots (including wiry, woody ones) and a little modern uncharred wood (tending to float), but was essentially wood charcoal, mostly ?willow/poplar ( <i>Salix/Populus</i> ), including very eroded roundwood fragments to 15 mm in maximum dimension.
<b>Context 34</b> (buried soil over natural gravel) Sample 3401/T	2 kg sieved to 300 microns with washover; approximately 1 litre of unprocessed sediment remains but includes large stones	The washover comprised a few cm <sup>3</sup> of rather silted (?mostly non-oak) charcoal (to 10 mm), a trace of coal (5 mm), modern roots, and some snails.
<b>Context 37</b> (fill of shallow pit cut into natural gravel) Sample 3701/T	2 kg sieved to 300 microns with washover; approximately 2 litres of unprocessed sediment remain, but includes large stones	There was about 20 cm <sup>3</sup> of modern roots and some charcoal (to 10 mm, apparently all oak, <i>Quercus</i> ), and some snails in the small washover.
<b>Context 41</b> (context information not available at time of writing) Sample 4101/T	2 kg sieved to 300 microns with washover; approximately 2 litres of unprocessed sediment remain	The small washover consisted of a few cm <sup>3</sup> of snails, some charcoal (? all non-oak, and including some twig fragments, to 10 mm), and one fragment of charred hazel ( <i>Corylus avellana</i> L.) nutshell.
<b>Context 54</b> (levelling deposit) Sample 5401/T	16 kg sieved to 300 microns with washover; approximately 10 litres of unprocessed sediment remain	The very small washover of about 70 cm <sup>3</sup> was mainly of snails and charcoal (to 10 mm, including oak), with some bone (including fish), cinder-like material (to 5 mm), and a few very poorly preserved cereal grains (those which could be identified more closely being barley, <i>Hordeum</i> and 'bread/club' wheat ( <i>Triticum aestivo-compactum</i> )); there was a single ? <i>Vicia</i> seed (<2 mm in diameter), and one fragment of charred hazel nutshell. There was also a trace of charred ?oat ( <i>Avena</i> sp.) awn ('beard') amongst the finest material.
<b>Context 56</b> (context information not available at time of writing) Sample 5601/T	2 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain	The small washover of about 20 cm <sup>3</sup> comprised modern roots, charcoal (to 5 mm), snails, and a few very poorly-preserved charred cereal (bread/club wheat) grains.
<b>Context 68</b> (context information not available at time of writing) Sample 6801/T	2 kg sieved to 300 microns with washover; approximately 4 litres of unprocessed sediment remain	There was a very small washover of about 15 cm <sup>3</sup> of modern roots and a little charcoal (to 5 mm) and snails; a single bread/club wheat grain was noted, along with traces of ?cinders and coal (both to 5 mm) and some uncharred bark which appeared to be modern.

Table 2. Land snails recovered from sediment samples from Scott Lane, Wetherby, West Yorkshire. Key: CN = context number; S = NAA sample designation; W = weight of processed sediment (kilos);

*U* = quantity of unidentified snails; *f* = few (up to 3 individuals); *s* = some (4 to 20); *m* = many (21 to 50); *v* = very many (more than 50); figures give minimum numbers of individuals.

CN	S	W	<i>Cochlicopa</i> sp.	<i>Vertigo</i> <i>pygmaea</i> (Draparnaud)	<i>Pupilla</i> <i>muscorum</i> (L.)	<i>Vallonia</i> <i>excentrica</i> Sterki	<i>Discus</i> <i>rotundatus</i> (Müller)	<i>Cecilioides</i> <i>acicula</i> (Müller)	<i>Trichia</i> <i>?hispidata</i> (L.)	U
017	AA	2								f
034	AA	2				2		f	2	
037	AA	2				2		s	2	
041	AA	2		2				s		2
054	AA	16	1	3		8	1	v	1	6
056	AA	2		1		1		m		
068	AB	2				1		s		s

Table 3. Hand-collected vertebrate remains from Scott Lane, Wetherby, West Yorkshire.

Species		Number of fragments
<i>Lepus</i> sp.	hare	1
<i>Equus</i> f. domestic	horse	23
<i>Sus</i> f. domestic	pig	26
<i>Cervus elaphus</i> L.	red deer	2
<i>Capreolus capreolus</i> (L.)	roe deer	1
<i>Bos</i> f. domestic	cow	34
Caprovid	sheep/goat	21
<i>Anser</i> sp.	goose	4
<i>Gallus</i> f. domestic	chicken	7
cf. <i>Gallus</i> f. domestic	?chicken	2
<i>Scolopax rusticola</i> L.	woodcock	2
Bird indet.		3
Gadidae	cod family	2
<i>Gadus morhua</i> L.	cod	1
Fish indet.		4
Unidentified		474
<b>Total</b>		<b>607</b>