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**Evaluation of biological remains from excavations at East Halton Skitter,  
North Lincolnshire (Humber link pipeline project site S26,  
site code: EHS00)**

by

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**Summary**

*Sediment samples, hand-collected shell, hand-collected bone, and 'spot' samples, from excavations of deposits of primarily Romano-British date at East Halton Skitter, North Lincolnshire, were submitted for an evaluation of their bioarchaeological potential.*

*The samples produced very limited archaeobotanical material, but the potential to provide useful quantities of remains was indicated by the large concentration of identifiable cereal remains in one pit fill.*

*Four of the samples gave modest-sized, but interpretatively useful, assemblages of land and freshwater snails.*

*The very few hand-collected shell remains were of little interpretative value other than to indicate the probable consumption of oysters by humans at the site.*

*A small assemblage of vertebrate remains was recovered from this site. Preservation varied from trench to trench, but was, on the whole, quite reasonable. Most assemblages were fairly fragmented, with some dog gnawing and, in some cases, extensive fresh breakage. Horse remains were quite numerous and included a horse burial from Trench 1. Unfortunately, no dating evidence was recovered from this trench. The current assemblage is too small to provide useful zooarchaeological and archaeological information but does, however, show the potential for the preservation of bone in some areas of the site.*

*No further work is recommended on the material considered in this report.*

**KEYWORDS:** EAST HALTON SKITTER; NORTH LINCOLNSHIRE; HUMBER LINK PIPELINE PROJECT (SITE S26); EVALUATION; ROMANO-BRITISH; PLANT REMAINS; CHARRED PLANT REMAINS; PEAT; CEREALS; INVERTEBRATES; SHELLFISH; OYSTER; FRESHWATER SNAILS; LAND SNAILS; VERTEBRATE REMAINS; HORSE BURIAL

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## Evaluation of biological remains from excavations at East Halton Skitter, North Lincolnshire (Humber link pipeline project site S26, site code: EHS00)

### Introduction

Archaeological trial trenching (nineteen trenches) was carried out by Northern Archaeological Associates (on behalf of BP Amoco Chemicals Ltd) at East Halton Skitter, North Lincolnshire (NGR: TA 142 224), in March and April 2000.

Thirty-seven sediment samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992) from separate contexts, four SPOT samples (*sensu* Dobney *et al.* 1992), one box of hand-collected vertebrate remains (of approximately 25 litres) and approximately one quarter of a box of hand-collected shell, were recovered from the deposits. Preliminary evidence from the pottery suggested that most of the deposits were of Romano-British date, although for some trenches no diagnostic artefacts were recovered. Three main concentrations of occupation were located, two (Trenches 10, 11 and 14) possibly dating from mid 1<sup>st</sup> to late 2<sup>nd</sup> century, whilst pottery from the third (Trench 5) probably dates from the 3<sup>rd</sup> to the late 4<sup>th</sup> century.

All of the samples and hand-collected material was submitted to the EAU for evaluation of its bioarchaeological potential.

### Methods

#### *Sediment samples*

The sediment samples were inspected in the laboratory. The lithologies of thirteen of the samples (selected by the excavator) 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 and washovers were also examined for invertebrate remains, and the residues were

examined for other biological and artefactual remains.

Table 1 shows a list of the submitted samples and notes on their treatment.

#### *Hand-collected shell*

Approximately one quarter of a box of hand-collected shell (representing remains from 19 contexts, from 8 trenches) was submitted. Only very brief notes were made on this material.

#### *Hand-collected vertebrate remains*

All the hand-collected vertebrate remains were recorded. Subjective records were made of the state of preservation, colour of the fragments, and the appearance of broken surfaces ('angularity'). Additionally, for the larger assemblages, semi-quantitative information was recorded concerning fragment size, dog gnawing, burning, butchery and fresh breaks.

Where possible, fragments were identified to species or species group, using the reference collection at the Environmental Archaeology Unit, University of York. Fragments not identifiable to species were described as the 'unidentified' fraction. Within this fraction fragments were grouped into a number of categories: large mammal (assumed to be cattle, horse or large cervid), medium-sized mammal (assumed to be caprovid, pig or small cervid), medium-sized mammal 2 (assumed to be dog, cat or hare), bird and totally unidentifiable.

Numbers of □A□ bones, i.e. mandibles (for age-at-death analysis) and measurable fragments (Dobney *et al.* forthcoming) were counted. Horse withers heights were

estimated using calculations devised by Kiesewalter (in von den Driesch and Boessneck 1974), following measurements outlined by von den Driesch (1976). Withers height is expressed in hands (hh), where 1 hand = 4 inches = 101.6 mm.

## Results

The results are presented in context number order (where applicable) by trench. Sample numbers were allocated in the laboratory, for internal record keeping purposes, and are derived from the Context and tub numbers of the samples (e.g. Context 402, tub 1 gives Sample 40201).

For those samples yielding identifiable snail remains semi-quantitative summary information is provided in Table 2.

A total of 483 bone fragments was recovered from nine of the excavated trenches. Most of the deposits from which bone was recovered were ditch fills. Pottery provided a Romano-British date for deposits from some of the trenches.

Archaeological information, provided by the excavator, is presented in square brackets.

**Trench 1** [This trench measured 50m by 2m and was located to evaluate the nature of a circular cropmark feature and another linear feature to the north. One modern ditch slot (108) was identified, reflecting a feature identified by the geophysical survey, together with a curving north-west to south-east aligned ditch (112) (the primary fill of which contained a horse skeleton) of uncertain function or date. This second ditch had not been identified by the geophysical survey]

### *Hand-collected shell*

Four fragments of oyster (*Ostrea edulis* L.) shell were recovered from Context 100.

### *Hand-collected vertebrate remains*

Two deposits from this trench produced bones. Preservation was rather variable, and the remains included battered and eroded fragments. Not surprisingly, material from Context 100 (topsoil), was extremely fragmented, whilst that from Context 113 was slightly more complete. However, fragmentation had occurred both in antiquity, and more recently, during excavation. Horse remains from Context 113, representing most of the bones of the front legs of one individual, made up the bulk of this assemblage. Although no dating evidence was available from this trench, the preservation of these bones suggested that the horse was not buried recently. A metacarpal provided an estimated withers height for the animal of 1339 mm or 13.1 hh. This individual, therefore, was a pony, i.e. less than 14.2 hands, which is the modern cut off point between horses and ponies. The rest of the horse was not recovered as it appeared that there was a complete, articulated skeleton only part of which extended into the excavated section. Only three of the fragments were measurable.

**Trench 4** [This trench measured 30m by 2m and was located to evaluate the south-western side of a possible enclosure ditch and an east to west oriented linear trend. Two large ditches, approximately, 3m wide and 0.9m deep, were identified in the northern end of the trench representing the enclosure ditches identified by the geophysical survey. Ditch 404, oriented south-west to north-east, contained three fills and truncated ditch 401, which was oriented north-west to south-east with two fills]

### *Sediment samples*

**Context 402** [Primary fill of ditch 401]  
Sample 40201/BS (10 kg)

Moist, slightly orange-brown to light to mid grey-brown, brittle to crumbly (working soft and slightly plastic), slightly sandy clay silt with some very small stones (2-6 mm) and modern rootlets present.

There was a small residue of about 700 cm<sup>3</sup> of clean sand and gravel (including flint) with some concreted sediment (perhaps iron pan?), to 5 mm; the small washover of a few cm<sup>3</sup> was mostly modern roots with a trace of fine (<5 mm) charcoal.

### *Hand-collected vertebrate remains*

A total of 25 fragments were recovered from three deposits (one was described as top soil). Preservation was reasonably good, although the material was fairly fragmented and battered in appearance. Large mammal vertebrae and radius fragments formed the

bulk of the assemblage, with two pig maxilla fragments also present. No measurable fragments were noted from this assemblage.

**Trench 5** [This trench measured 50m by 2m and was located to evaluate an area containing five potential ditch-type anomalies relating to a medium-sized enclosure with possible internal divisions. Eight east to west ditches and one ditch oriented north-east to south-west were identified, of which four of the east to west ditches had not been identified by the geophysical survey. Six of the ditches (545, 506, 514, 520, 530 and 532) contained a large amount of Romano-British pottery and animal bone within their fills suggesting settlement activity, and appeared to relate to the enclosure ditches located by the geophysics. None of the ditches showed clear evidence of re-cuts, and contained only a single distinguishable fill. The terminus of a narrow linear slot (512) and a partially exposed feature (509) were also recorded, the fills of which both contained sherds of Romano-British pottery]

### *Sediment samples*

**Context 521** [Fill of ditch 520]  
Sample 52102/BS (13 kg)

Moist, mid grey-brown, crumbly and slightly sticky (working soft), sandy clay silt. Medium-sized stones (20-60 mm), charcoal and modern rootlets were present in the sample.

The moderate-sized residue was of clean sand and gravel with some concreted sediment (?pan) to 5 mm; there was a very small washover of modern roots and fine coal. Plant remains were confined to a single mineralised seed of *Brassica* sp. or *Sinapis arvensis* (brassica or charlock) and one tentatively identified wheat (*Triticum*) grain. A single fragment of land snail (*Trichia* sp.) shell was also noted.

**Context 533** [Fill of ditch 532]  
Sample 53303/BS (10 kg)

Just moist, light to mid grey-brown, crumbly (working soft and slightly plastic), sandy clay silt (to silty clay) with some stones (2-6 mm) and modern rootlets present.

The moderate-sized residue of sand contained some large (to 120 mm) lumps of stone (perhaps a basalt or similar igneous rock) making up about 30-40% of the volume. There was also a little pot. The very small washover consisted of modern roots and fine (<5 mm) charcoal with a single charred stinking mayweed (*Anthemis cotula* L.) achene and one tentatively

identified charred spelt wheat (*Triticum spelta* L.) grain.

**Context 541** [Fill of plough furrow 540]  
Sample 54101/SPT

This spot find was a fragment of very decayed wood to 50 mm, with some fine rootlets running through it. Although it was only possible to examine the material by means of a radial longitudinal section (it was very soft and readily fell apart) it had the appearance of root wood and cannot be identified further. It may not be of great antiquity if it is from a tree formerly growing in the vicinity.

**Context 546** [Fill of ditch 545]  
Sample 54601/BS (13 kg)

Waterlogged, mid brown, slightly sticky, slightly sandy clay silt with some ?charcoal, stones (2-6 mm) and modern rootlets present.

The small to moderate-sized residue of about 2 litres consisted of sand and (mainly chalk) gravel; there was a small washover comprising modern roots, fine (<5 mm) charcoal and a few land snails (mostly *Vallonia* sp(p)., with a single fragment of *Trichia* sp.). Two rather battered bone fragments were also recovered from the residue.

### *Hand-collected shell*

Three contexts (500, 533 and 546) yielded a few fragments of oyster shell, and Context 539 gave a single, ?modern *Cepaea/Arianta* sp. land snail.

### *Hand-collected vertebrate remains*

Six deposits from this trench yielded in total 69 fragments of bone, of which 63 were recovered from Contexts 521, 533 and 546 (all ditch fills). Overall, the vertebrate remains were moderately well preserved, although some fragments were slightly battered. Bone from Context 533 was more variably preserved than fragments from other contexts in this trench. Fresh breakage was also more extensive. Cattle and large mammal fragments were the most numerous, but some caprovid remains were also present. Freshly broken fragments from Context 521 represented a single caprovid mandible.

**Trench 6** [This trench measured 40m by 2m and was located to evaluate the nature of a major south-west to north-east ditch-type feature. This was

identified as a large natural channel filled with glacio-fluvial deposits. Two other probable natural channels were recorded within bands of natural till deposits oriented east to west along the length of the trench. No archaeological features were identified within this trench]

### *Hand-collected shell*

Context 616 gave four small fragments of ?oyster shell.

**Trench 8** [This trench measured approximately 20m by 2m and was located primarily to evaluate the nature of a ditch-type feature oriented east to west. One ditch (805), oriented east to west on alignment with the geophysical trend, was identified within this trench. Several sherds of pottery and fragments of animal bone were recovered from the ditch. No other archaeological finds or features were identified within this trench. The trench comprised bands of natural gravel and clay till deposits oriented east to west]

### *Hand-collected vertebrate remains*

Only a single context (806) from this trench produced bone. The assemblage consisted of a single very poorly preserved cow metatarsal and eleven small eroded fragments, some of which had been broken from the metatarsal during excavation and/or post-excavation.

**Trench 10** [This trench measured approximately 30m by 2m and was located to examine a probable double-ditched trackway (also evaluated in trenches 12 and 14). The two ditches of the trackway were excavated within this trench. The western ditch (1006) had been re-cut (ditch 1002) on a slightly different alignment. Both cuts were considerably deeper than the eastern ditch 1009 (re-cut 1014). A reasonable quantity of Romano-British pottery and animal bone was recovered from all of the ditch cuts. No associated trackway surfaces or other archaeological finds or features were identified within this trench]

### *Sediment samples*

**Context 1005** [Tertiary fill of ditch 1002]  
Sample 100502/BS (10 kg)

Just moist, mid grey-brown (mottled more grey/more brown on mm- and cm-scales), stiff to brittle (working just soft), slightly sandy clay silt with modern rootlets and stones (6-60 mm) present.

This sample yielded a small residue of about 400 cm<sup>3</sup> of clean sand with some gravel and pot. The washover was mostly modern roots with a little coal and fine (<5 mm) charcoal. There were a few charred root/rhizome fragments which might have been ancient, and a single small charred legume cotyledon, perhaps from a vetch (*Vicia* sp.).

### *Hand-collected shell*

Two contexts (1005 and 1010) gave a few fragments of oyster shell (including one right and three left valves, one of the latter showing evidence of having been opened with a knife or similar implement). Context 1005, together with Context 1008, also contained ?modern land snails; mostly *Cepaea/Arianta* sp. with a few ?*Trichia* sp. (from Context 1005).

### *Hand-collected vertebrate remains*

In total 22 fragments of bone, from seven ditch fills, were recovered from this trench. Most fragments were well preserved, with sharp, distinct edges. Pig mandibles or fragments of mandibles were identified from Contexts 1003 and 1004, all representing juvenile individuals. A red deer (*Cervus elaphus* L.) pelvis from Context 1004, appeared to have had a hole deliberately made in the centre of the acetabulum (the socket within which the femur head articulates), the purpose of which was not clear. Antler fragments, probably also from red deer, were noted from Context 1015. Four mandibles with teeth *in situ* were recorded from this trench.

**Trench 11** [This trench measured approximately 40m by 2m and was located to examine a series of linear anomalies that formed a group of irregular enclosures and several pit-type anomalies. Both sets of features possibly represented occupation activity bordering the trackway. The eastern ditch (1127) of the trackway was identified at the western limit of the trench. Ditch 1106 may also relate to the trackway. Four ditches oriented north to south (1108, 1110, 1102 and 1123) and a slot running north-west to south-east (1125) were also recorded. A reasonable quantity of pottery and animal bone was recovered from these features suggesting occupation activity in the area]

### *Sediment samples*

**Context 1128** [Fill of ditch 1127]  
Sample 112801/BS (14 kg)

Wet, light to mid orange-brown, sticky and crumbly (working soft and sticky), slightly sandy clay silt.

Land snails and modern rootlets were present in the sample.

The small residue of about 1100 cm<sup>3</sup> consisted of clean sand with a few concreted sediment clasts (perhaps 'pan') and gravel; the very small washover comprised a few cm<sup>3</sup> of modern roots, an elaterid beetle elytron (probably modern) and some snails.

The snail assemblage was mostly of terrestrial taxa associated with either dry calcareous places and/or short-turfed grassland (*Vallonia ?costata*, *V. ?excentrica*, *Pupilla muscorum*) or damp grasslands (*Carychium minimum*, *C. tridentatum*, *Vitrea ?crystallina*, *Cochlicopa ?lubrica*). A single ?pond snail (*Lymnaea* sp.) and a few fragments of the burrowing land snail *Cecilioides acicula* were also noted.

### *Hand-collected shell*

Two contexts from this trench gave hand-collected shell. Context 1101 yielded a single *Cepaea/Arianta* sp. land snail and Context 1128 gave thirty-six *Cepaea/Arianta* sp. individuals together with one right and one left oyster valve.

### *Hand-collected vertebrate remains*

Fifty-eight fragments of bone were recovered from six contexts (of which five were ditch fills). Preservation of the material varied between the different ditches. Bones from Context 1109 were root-etched and battered in appearance, with preservation described as 'fair' to 'poor', whilst fragments from Context 1128 were poorly preserved and rather mottled in colour. Contexts 1109 and 1119 produced most of the assemblage (35 fragments). The prevalent taxon from these deposits was horse, the main right foreleg (humerus, radius, and ulna) and hindleg (femur and tibia) elements, probably from a single individual, being identified from Context 1119. Additionally a horse patella and metapodial fragment were recovered from Context 1109. Large mammal rib and vertebra fragments, which were almost certainly horse, were recorded from the same deposit. Four measurable fragments were noted.

**Trench 12** [This trench measured approximately 30m by 2m and was located to examine a probable double-ditched trackway (also evaluated in Trenches 10 and 14). The two ditches of the trackway were excavated within this trench. Neither ditch showed clear evidence of a re-cut. Very few finds were recovered from either ditch. No other archaeological finds or features were identified within this trench]

### *Hand-collected shell*

Context 1210 gave a few ?modern *Cepaea/Arianta* sp. and ?*Trichia* sp. land snails.

### *Hand-collected vertebrate remains*

A single context (1210) from this trench produced two unidentified bone fragments.

**Trench 14** [This trench measured approximately 30m by 2m and was located to examine the northern edge of the main polygonal enclosure together with the adjacent trackway to the north. Both ditches of the trackway (1404 and 1414) were identified. The more southerly ditch (1404) showed evidence of having been re-cut (1442). The ditch defining the northern side of the main sub-rectangular enclosure of the settlement was also identified. This ditch (1434) measured 1.25m deep and 2.4m wide. There was evidence of three possible re-cuts (cuts 1431, 1440 and 1402 chronologically). A large quantity of Romano-British pottery and animal bone was recovered from the fills of these ditches indicative of settlement related activity. A further ditch [1447] aligned north to south along the trench was partially exposed. This ditch was cut by trackway ditch (1414) and had not been identified by the geophysical survey. A sand filled channel, a single discrete posthole and a rabbit burrow were also identified. The features were truncated by plough furrows (1410, 1406 and 1425) and field drains]

### *Sediment samples*

**Context 1405** [Secondary fill of ditch 1404]  
Sample 140501/SPT

This was a spot find sample of snail shells which were rather fragmented. The few identifiable remains were of *Cepaea/Arianta* sp.

**Context 1418** [Tertiary fill of ditch 1402]  
Sample 141801/T (3 kg)

Just moist, mid grey-brown (lighter in places), brittle to crumbly (working just soft), slightly sandy clay silt. Stones (chalk and flint, 2-60 mm) were present in the sample.

A small residue of about 150 cm<sup>3</sup> of sand and gravel was obtained. The small washover consisted of a few cm<sup>3</sup> of sand with a trace of fine (<2 mm) charcoal and modern roots with some snails (a few *Vallonia* ?*excentrica*, two fragments of *Trichia* sp. And a few other unidentified fragments); there were traces of poorly preserved cereal grains and two spelt glume bases.

**Context 1427** [Secondary fill of ditch 1414]  
Sample 142701/SPT

This was a spot find sample of snail shells which were, again, rather fragmented. The numerous identifiable remains were mostly of *Cepaea/Arianta* sp. with a few ?*Trichia* sp.

**Context 1430** [Primary fill of ditch 1434]  
Sample 143002/BS (10 kg)

Just moist, light to mid grey to light to mid grey-brown, crumbly and slightly sticky (working soft and slightly plastic), slightly sandy clay silt (to silty clay). Land snails, ?charcoal, and stones (20-60 mm) were present in the sample.

The small residue of about 800 cm<sup>3</sup> consisted of clean sand with some gravel, shell fragments and a caprovid upper molar. The small washover of a few cm<sup>3</sup> was mostly snails with some modern plant material (including an uncharred bread wheat rachis fragment), but there were some charred and uncharred remains which seem likely to be ancient. The former included traces of grass (Gramineae) caryopses, wild radish (*Raphanus raphanistrum*) pod fragments and persicaria (*Polygonum persicaria* L.) and sea club-rush/bulrush (*Scirpus maritimus* L./*S. lacustris* L.) nutlets, as well as wheat grains. Uncharred remains included a moderate number of rush (*Juncus* cf. *inflexus/effusus/conglomeratus*) seeds and a fragment of a hemp agrimony (*Eupatorium cannabinum* L.) fruit. The assemblage is too small for confident interpretation, but the uncharred material seems likely to indicate conditions in and around the ditch with the charred material arriving with ash from a nearby settlement.

The snail assemblage was similar to that recovered from Context 1128, though less diverse (dry conditions were again indicated by *Vallonia* spp. and *P. muscorum*, and damp grassland by both *Carychium* species). The remains of at least six individuals of the dwarf pond snail (*Lymnaea truncatula*, a species of well-aerated, shallow waters but to some extent amphibious and able to resist drought) were also recovered.

**Context 1433** [Primary fill of ditch 1402]  
Sample 143303/BS (11 kg)

Moist, mid grey-brown, crumbly and slightly sticky (working soft), slightly sandy clay silt with some stones (2-6 mm) and land snails present.

The small residue of about 900 cm<sup>3</sup> consisted of clean sand with some concreted sediment (?pan) to 5 mm, gravel and snails. The small washover of was of snails and fine (<5 mm) charcoal with modern roots and modern bread wheat rachis and glume fragments. However, there were also traces of charred spelt wheat chaff and perhaps also grains of this plant, as well as traces of charred sea club-rush/bulrush and chickweed (*Stellaria media* (L.) Vill.), and uncharred seeds of rush (*Juncus* cf. *inflexus/effusus/conglomeratus*) as in the assemblage from Context 1430.

The snail assemblage was, again, very similar to that from Context 1128 (and Context 1430), including the same terrestrial forms indicative of both dry calcareous places/short-turfed grassland and damp grassland conditions. There were no freshwater snails, however.

**Context 1436** [Primary fill of ditch 1440]  
Sample 143601/T (3 kg)

Just moist, light to mid grey-brown (mottled lighter and darker on mm and cm scales), stiff to crumbly (working just soft), slightly sandy clay silt. Stones (flint and chalk, 2-20 and 60+ mm), charcoal, white flecks, and modern rootlets were present.

There was a small residue of about 175 cm<sup>3</sup> of sand and gravel and a very small washover of sand, with modern roots, a few fairly well preserved bone fragments, and some snails. The uncharred chickweed seed recorded is likely to be of recent origin.

The snail assemblage was, in essence, the same as that from Context 1436 and indicative of the same environmental conditions.

**Context 1444** [Fill of ditch 1443]  
Sample 144401/T (3 kg)

Just moist, light to mid grey-brown (mottled more grey and more brown on mm and cm scales), stiff to crumbly (working just soft), slightly sandy clay silt with some stones (2-6 mm) and modern rootlets present.

The small residue of about 175 cm<sup>3</sup> comprised sand and gravel; there was a small washover of modern roots and fine (<3 mm) charcoal.

### *Hand-collected shell*

Six contexts in this trench yielded hand-collected shell remains (1403, 1418, 1420, 1421, 1422, and 1427). Two of the contexts (1403 and 1427) gave single oyster valve fragments. The other four contexts contained remains of *Cepaea/Arianta* sp. and Context 1420 also gave a few *Helix* sp.

### *Hand-collected vertebrate remains*

A small assemblage, amounting to 115 fragments, was recovered from ten ditch fills. Preservation, overall, was reasonable, but was more variable within the assemblages from Contexts 1405 and 1427. In the case of 1427, most fragments were not identifiable to species. Large mammal shaft fragments were noted and some of these were quite eroded. The species present included cattle, horse, caprovid and pig. Measurements from a horse metatarsal from Context 1430 provided an estimated withers height of 11.2 hh (1177 mm), representing a small pony that would have been similar in size to a Shetland.

Fragments of the same dog pelvis were recovered from Contexts 1403 and 1418, whilst a sacrum fragment from a small dog was present in Context 1419. Antler fragments (possibly of red deer) were identified from Context 1415.

In total only five fragments were measurable; two mandibles were also noted.

**Trench 15** [This trench measured approximately 40m by 2m and was located to examine a pit-type anomaly and a series of weak east to west aligned linear trends that appeared to represent the remnants of field systems. One pit, which was lined with a layer of charcoal, and a small slot oriented south-west to north-east were encountered. Neither feature had been identified by the geophysical survey. No finds were recovered from within the pit (1503). The slot (1507) contained a concentration of animal bone and shell with a few sherds of pottery. No other archaeological finds or features were identified within this trench.]

### *Sediment samples*

**Context 1505** [Primary fill of pit 1503]  
Sample 150501/T (3 kg)

A coarse mixture of light brown and light grey clays with darker areas of mid grey to black (darkened by abundant ?rotted charcoal) and a little sand. Stones (2-20 mm; flint and chalk) and modern rootlets were present.

There was a small residue of about 220 cm<sup>3</sup> of which large proportion (about 100 cm<sup>3</sup>) formed a washover consisting very largely of rather poorly preserved charred grain. To judge from the few well preserved glume bases present, this material was spelt wheat. One or two of the grains showed signs of having begun to geminate. There were no weed seeds. The rest of the material was sand and gravel.

**Context 1508** [Fill of gully 1507]  
Sample 150801/T (3 kg)

Just moist, light to mid orange-grey-brown to light grey (in places), stiff to crumbly (working just soft), slightly sandy, clay silt (to silty clay), with stones (chalk; 2-20 mm), charcoal and modern rootlets present.

The small residue of almost 200 cm<sup>3</sup> was of sand, concreted sediment (?pan) to 5 mm, and gravel; the small flot was of modern roots and fine (<5 mm) charcoal.

### *Hand-collected shell*

One context (1508) from this trench gave two fragments of oyster shell.

### *Hand-collected vertebrate remains*

Thirty-two fragments were recovered from a single deposit (1508) in this trench. Cattle remains predominated and included a collection of loose mandibular teeth. Preservation was rather poor, with most fragments appearing battered.

**Trench 19** [This trench measured approximately 40m by up to 4m and was located to examine a series of ferrous anomalies and a north-east to south-west linear response. No archaeological features or finds were identified within this trench. The natural consisted of 2m of alluvial clay over laminated tidal river muds which exceeded the trench depth of 3.6m. Three discrete small pieces of wood were encountered at approximately 1.6m depth within the clay]

### *Sediment samples*



**Context 1903**

Sample 190301/SPT

This sample comprised a mixture of black humic material and orange-grey-brown soft clay (the latter perhaps the matrix for clasts of the former). The organic material consisted of well-decayed *Sphagnum* peat, with some whole leaves and shoot fragments identified as *S. imbricatum*, the species commonly found forming raised bog peats in the late prehistoric period. The nearest outcrops of such peat today are in the Humberhead Levels, some tens of kilometres to the west of the site, but it is possible that there were areas of peat bog closer to East Halton Skitter in the past which were destroyed by cutting in late prehistoric or historic times.

**Discussion and statement of potential***Sediment samples*

These samples produced very limited archaeobotanical material, though the presence of a rather large concentration of identifiable cereal remains in one pit fill (with traces in some other contexts) indicates that at least some deposits at this site have the potential to provide useful remains. Thus, in the event of destruction of deposits through development, an attempt should be made to sample and investigate further. The only other Iron Age/Romano-British plant material from North Lincolnshire (as a region rather than an administrative unit) is that from Dragonby (van der Veen 1996), where the small amounts of charred material recovered were, where identifiable, spelt wheat (with some barley).

The larger snail assemblages recovered from the sediment samples (Contexts 1128, 1430, 1433 and 1436) were indicative of a fairly dry, open landscape of short-turfed grassland with little or no additional vegetative cover. Those taxa requiring damper/more shaded conditions probably exploited the altered conditions at the edges of the cut features. The pond snails recovered from Context 1430 showed that ditch 1434 must have held

freshwater (though not necessarily continuously as *Lymnaea truncatula* will resist periods of drought).

If other deposits not examined in this evaluation (or revealed by further excavation) contain similarly well preserved snail assemblages then these may provide additional interpretative information.

*Hand-collected shell*

The hand-collected land snails (and those seen in the two shell spot samples from contexts 1405 and 1427) were mostly of *Cepaea/Arianta* sp., with a few *Helix* sp, and *Trichia* sp. These are all catholic taxa of no value in ecological/landscape reconstruction.

The very small quantity of marine shell recovered was all fairly poorly preserved oyster. A few of the larger, better preserved, valve fragments (e.g. from Context 1128) showed damage consistent with having been opened using a knife or similar implement. These remains were almost certainly derived from human food waste but were too poorly preserved and too few to be of any additional interpretative value.

*Hand-collected vertebrate remains*

Only a small quantity of hand-collected material was recovered from the deposits, no large concentrations of material having been deposited into the excavated parts of the ditches. Preservation varied from trench to trench, but was, on the whole, quite reasonable. Bones in most assemblages were fairly fragmented, with some dog gnawing and, in some cases, extensive fresh breakage — a consequence of which is the small number of measurable fragments. Mandibles with teeth *in situ* and isolated mandibular teeth (of use for providing age-at-death information) were equally scarce.

It is clear that some of the material is domestic in nature.

Although no dating evidence was recovered from Trench 1, based on the preservation of the bones, the horse burial (Context 113) is almost certainly contemporary with the rest of the material from this site. This skeleton may represent a 'special' or 'ritual' deposit, but there is no conclusive evidence to support this.

## Recommendations

No further work is recommended on the remains recovered from the sediment samples considered in this evaluation. Closer identification and quantitative recording of the recovered land and freshwater snails would be possible and, perhaps, of academic interest, but would not add significantly to the site/feature interpretations included in this report.

No further work on the hand-collected shell is warranted.

The existing vertebrate assemblage is too small to provide useful zooarchaeological and archaeological information, and no further work is warranted on the material. However, the assemblage does show the potential for the preservation of bone in some areas of the site and it is likely that further excavation would produce a moderate-sized assemblage. Any additional vertebrate assemblage would only prove useful if a tight dating framework could be achieved.

Data obtained from a large vertebrate assemblage from a site such as that at East Halton Skitter could potentially provide an important insight into the cultural, social and economic development of a rural settlement throughout the Roman period.

Certainly, given the paucity of bioarchaeological evidence from any period in this area, any deposits with at least moderately large assemblages of plant or animal remains should be investigated.

## Retention and disposal

The recovered plant remains indicate that it is, perhaps, worth retaining any unprocessed sediment from Contexts 1430, 1433 and 1505. The peat sample from Context 1903, although not associated with any archaeological features, is certainly of interest (being so far from the nearest peat outcrops known today).

The sediment samples from Contexts 1430 and 1433 also warrant retention on the grounds of the recovered snail assemblages; as do the samples from Contexts 1128 and 1436.

Any sediment samples not examined as part of this evaluation should be retained.

All of the hand-collected material should be retained for the present.

## Archive

All material is 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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*Table 1. List of sediment samples from excavations at East Halton Skitter, North Lincolnshire (Humber link pipeline project site S26), with notes on their treatment.*

Trench	Context	Notes
4	402	Sediment description, 10 kg hand-sieved to 300 microns with washover
4	403	No investigation of this sample was undertaken
4	405	No investigation of this sample was undertaken
4	415	No investigation of this sample was undertaken
4	416	No investigation of this sample was undertaken
5	515	No investigation of this sample was undertaken
5	521	Sediment description, 13 kg hand-sieved to 300 microns with washover
5	531	No investigation of this sample was undertaken
5	533	Sediment description, 10 kg hand-sieved to 300 microns with washover
5	541	Examined as 'SPOT' sample
5	543	No investigation of this sample was undertaken
5	546	Sediment description, 13 kg hand-sieved to 300 microns with washover
6	605	No investigation of this sample was undertaken
6	608	No investigation of this sample was undertaken
6	610	No investigation of this sample was undertaken
6	616	No investigation of this sample was undertaken
10	1005	Sediment description, 10 kg hand-sieved to 300 microns with washover
10	1007	No investigation of this sample was undertaken
10	1015	No investigation of this sample was undertaken
11	1107	No investigation of this sample was undertaken
11	1109	No investigation of this sample was undertaken
11	1119	No investigation of this sample was undertaken
11	1124	No investigation of this sample was undertaken
11	1126	No investigation of this sample was undertaken
11	1128	Sediment description, 14 kg hand-sieved to 300 microns with washover
12	1203	No investigation of this sample was undertaken
12	1206	No investigation of this sample was undertaken
12	1210	No investigation of this sample was undertaken
14	1405	Examined as 'SPOT' sample
14	1418	Sediment description, 3 kg hand-sieved to 300 microns with washover
14	1419	No investigation of this sample was undertaken
14	1422	No investigation of this sample was undertaken
14	1427	Examined as 'SPOT' sample
14	1430	Sediment description, 10 kg hand-sieved to 300 microns with washover
14	1433	Sediment description, 11 kg hand-sieved to 300 microns with washover
14	1436	Sediment description, 3 kg hand-sieved to 300 microns with washover
14	1444	Sediment description, 3 kg hand-sieved to 300 microns with washover
15	1504	No investigation of this sample was undertaken
15	1505	Sediment description, 3 kg hand-sieved to 300 microns with washover
15	1508	Sediment description, 3 kg hand-sieved to 300 microns with washover
19	1903	Examined as 'SPOT' sample

Table 2. List of mollusc taxa from sample washovers by context (for examined contexts containing identified mollusc remains) from excavations at East Halton Skitter, North Lincolnshire (Humber link pipeline project site S26), with semi-quantitative estimates of numbers of individuals. **Key:** f – less than 10; s – 11 to 25; m – more than 25 individuals; numbers indicate counts of minimum numbers of individuals.

Taxon	Context						
	521	546	1128	1418	1430	1433	1436
<i>Lymnaea truncatula</i> (Müller)	-	-	-	-	6	-	-
<i>Lymnaea ?truncatula</i> (Müller)	-	-	1	-	-	-	-
<i>Carychium minimum</i> (Müller)	-	-	m	-	s	s	s
<i>Carychium tridentatum</i> (Risso)	-	-	m	-	s	s	-
<i>Cochlicopa lubrica</i> (Müller)	-	-	-	-	-	1	1
<i>Cochlicopa ?lubrica</i> (Müller)	-	-	1	-	-	-	-
<i>Vertigo ?pygmaea</i> (Draparnaud)	-	-	s	-	-	-	-
<i>Pupilla muscorum</i> (Linnaeus)	-	-	f	-	2	-	1
<i>Vallonia ?costata</i> (Müller)	-	-	s	-	m	s	-
<i>Vallonia ?excentrica</i> Sterki	-	-	m	f	m	s	f
<i>Vallonia</i> sp.	-	f	-	-	-	-	-
<i>Vitrea crystallina</i> (Müller)	-	-	f	-	-	1	-
? <i>Oxychilus</i> sp.	-	-	-	-	s	f	1
<i>Cecilioides acicula</i> (Müller)	-	-	f	-	-	-	-
<i>Trichia</i> sp.	1	1	s	2	-	f	1
<i>Cepaea/Arianta</i> sp.	-	-	-	-	f	-	-