Evaluation of biological remains from excavations associated with the Transco West Hull pipeline (site code: OSA01EV05)

by

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Summary

A series of sediment samples from deposits, revealed by excavations along the Transco West Hull pipeline, were submitted for an evaluation of their bioarchaeological potential. Dating evidence was very sparse but gave some indication of possible late prehistoric and medieval activity.

Four samples were selected for investigation. The two ‘peaty’ samples (from Contexts 2000 and 5001) were very similar and probably represent the same deposit. They appear to be peat reworked naturally by flowing water into a fluviatile sand and probably do not warrant further examination. The other two samples were effectively barren of identifiable ancient remains.

These deposits do not appear likely to yield useful palaeoenvironmental information from their content of plant and invertebrate remains, though the presence of (presumably reworked) organics in Contexts 2000 and 5001 (both from Field 49) may be of significance in the overall post-glacial history of the area if placed in a proper stratigraphic context.

KEYWORDS: TRANSCO WEST HULL PIPELINE; KINGSTON UPON HULL; FIELD 49; FIELD 51; EVALUATION; LATE PREHISTORIC; MEDIEVAL; PLANT REMAINS; CHARRED PLANT REMAINS; ‘PEAT’; INVERTEBRATE REMAINS

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Introduction

Archaeological evaluation excavations were carried out by On Site Archaeology along the line of the Transco West Hull pipeline in September 2001.

A series of sediment samples (‘GBA’/‘BS’ sensu Dobney et al. 1992) were recovered from the deposits. Preliminary dating evidence was very sparse but gave some indication of possible late prehistoric and medieval activity.

All of the material was submitted to PRS for an evaluation of its bioarchaeological potential.

Methods

The sediment samples were inspected in the laboratory and four selected for investigation. 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 washovers and residues resulting from processing were examined for plant and invertebrate macrofossils and the residues were sorted for bone, and other biological and artefactual remains.

Results

The results are presented in context number order by field number. Archaeological information, provided by the excavator, is given in square brackets.

Field 49

Context 2000 [peat deposit of unknown date]

Sample 2/T (2 kg sieved to 300 microns with washover)

Just moist, dark brown, unconsolidated (working slightly sticky when wet), slightly silty slightly clay sand, with a little rotted charcoal present.

There was a very small washover of a few cm$^3$ of organic detritus, mainly very decayed caddis larva cases with moderate numbers of duckweed (Lemna) seeds, together indicative of clean standing or gently flowing water. There was also some undisaggregated peaty sediment and traces of decayed wood and some charcoal (both to 5 mm in maximum dimension). The moderate-sized to large residue of about 450 cm$^3$ consisted of roughly equal volumes of clean quartz sand (with traces of flint gravel to 5 mm) and clasts of peaty sediment which seem most likely to have been redeposited into the sand. Why such large numbers of rotted caddis cases should have accumulated is unclear. A possible mechanism is sorting in a moderately fast water flow: if so, eroding peat might well be deposited together with the caddis cases.

Context 5001 [undated peaty accumulation]

Sample 5/T (2 kg sieved to 300 microns with washover)

Just moist, mid to dark brown to black, crumbly to unconsolidated, slightly clay silty sand. Stones (2 to 6 mm), light flecks, and modern rootlets were present in the sample.

The small washover of about 10-15 cm$^3$ comprised peaty debris, mainly in the <1mm fraction: there were some modern root fragments and seeds, a trace of decayed wood and charcoal (to 5 mm), and decayed caddis larva cases. The moderate-sized to large residue of about 325 cm$^3$ consisted of roughly equal volumes of clean quartz sand and clasts of peaty sediment which seem most likely to have been redeposited into the sand; there were traces of chalk (to 10 mm) and flint gravel (to 5 mm).
Context 5006 [pit fill – undated but below peat horizon]

Sample 7/T (2 kg sieved to 300 microns with washover)

Moist, light to mid yellow-brown to mid grey-brown, crumbly (working soft), slightly silty clay sand, with patches of pale grey-brown sand.

The very small washover of a few cm$^3$ in volume consisted of modern roots and a few weed seeds, with a little wood and charcoal (to 5 mm); the small to moderate-sized residue was of clean quartz sand and flint gravel (to 20 mm).

Field 51

Context 2003 [undated post-hole fill]

Sample 1/T (3 kg sieved to 300 microns with washover)

Just moist, light to mid orange-brown, unconsolidated, very slightly clay sand, with some modern contaminant roots present.

There was a tiny washover of a few cm$^3$ of modern roots with traces of insect cuticle and fine (<2 mm) charcoal; the moderate-sized residue of about 500 cm$^3$ was of clean quartz sand and gravel (to 35 mm, including flint to 25 mm).

Discussion and statement of potential

The two ‘peaty’ samples were very similar and probably represent the same deposit. They appear to be peat reworked naturally by flowing water into a fluviatile sand and probably do not warrant further examination. The other two samples were effectively barren of identifiable ancient remains.

Recommendations

These deposits do not appear likely to yield useful palaeoenvironmental information from their content of plant and invertebrate remains, though the presence of (presumably reworked) organics in Contexts 2000 and 5001 (both from Field 49) may be of significance in the overall post-glacial history of the area if placed in a proper stratigraphic context.

Retention and disposal

Any remaining sediment from Contexts 2000 and 5001 should be retained for the present. The remainder of the current samples may be discarded.

Archive

All of the recovered 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.

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References

