Assessment of biological remains from excavations at St John’s 2 Opencast, Normanton, West Yorkshire (site code: MAP 01-08-02)

PRS 2004/12
Assessment of biological remains from excavations at St John’s 2 Opencast, Normanton, West Yorkshire (site code: MAP 01-08-02)

by

Allan Hall, John Carrott and Kathryn Johnson

Summary

Washovers and dried residues from 34 bulk samples, recovered from deposits, of Neolithic, early Bronze Age, Romano-British and medieval dates, encountered at St John’s 2 Opencast, Normanton, West Yorkshire, were submitted to PRS for an assessment of their bioarchaeological potential.

Ancient biological remains recovered from the samples were restricted to charcoal and charred cereal grains, and a very few associated weed seeds. These remains were too few to be of any great interpretative value; though in some cases they would provide sufficient material for radiocarbon dating to be attempted.

No further work is recommended on the current material.

KEYWORDS: ST JOHN’S 2 OPENCAST; NORMANTON; WEST YORKSHIRE; ASSESSMENT; NEOLITHIC; EARLY BRONZE AGE; ROMANO-BRITISH; MEDIEVAL; PLANT REMAINS; CHARRED PLANT REMAINS; CHARRED GRAIN

Contact address for authors:
Palaeoecology Research Services
Unit 8
Dabble Duck Industrial Estate
Shildon
County Durham DL4 2RA

Prepared for:
MAP Archaeological Consultancy Ltd
Showfield Lane
Malton
North Yorkshire YO17 6BT

14 April 2004
Assessment of biological remains from excavations at St John’s 2 Opencast, Normanton, West Yorkshire (site code: MAP 01-08-02)

Introduction

An archaeological excavation was carried out by MAP Archaeological Consultancy Ltd at St Johns 2 Opencast, Normanton, West Yorkshire (NGR SE 370 223), between July and October 2002.

The excavation comprised two trenches (Areas A and B) which revealed a complex of archaeological features. The features excavated included Neolithic and early Bronze Age ditches, pits and postholes, Romano-British enclosures, ditches and field systems and medieval ridge and furrow and narrow ditches. Through radiocarbon dating, the Neolithic activity (in Area A) has been dated to between 3050 years BC and 2910 years BC.

Washovers (‘flots’) and dried residues from 34 pre-processed bulk samples (‘GBA’/‘BS’ sensu Dobney et al. 1992), of 82 collected, were submitted to Palaeoecology Research Services Limited (PRS), County Durham, for an assessment of their bioarchaeological potential.

Methods

Large samples were processed by MAP Archaeological Consultancy Ltd and only the dried residues and washovers (where obtained) were submitted for assessment. Original sample weights and approximate volumes for the washovers were supplied by the excavator.

All of the washovers were inspected and quickly recorded. Five, where larger concentrations of remains were present, were selected for more detailed investigation. These were scanned after sieving into three fractions for ease of examination. Plant remains and any other components were recorded on a four-point semi-quantitative scale of abundance directly to a PC using Paradox software.

The residues were examined for larger plant macrofossils and other biological and artefactual remains.

Results

The results for the five samples examined in most detail are presented in context number order. For the remaining samples, which yielded few or no remains in the washerow, summary notes are presented in Table 1.

Each of the residues consisted largely of stones, with, in most cases, traces of charcoal (amounting to no more than 1 g).

Context 1232 [silt; munsell: 10YR4/4]
Sample 56/BS (weight of sample: 20 kg; approximate volume/weight of washerow: 20 ml/25 g)

The washerow consisted largely of rather eroded or very distorted charred cereal grains (although a few were rather better preserved); they included wheat (Triticum) and barley (Hordeum), the with some of the former perhaps being referable to emmer (T. dicoccum Schrank) and some to spelt (T. spelta L.) and perhaps even some specimens of bread/club wheat (T. ‘aestivocompactum’). There was also a little charcoal (to 10 mm in maximum dimension) and a very few charred weed seeds. A single barley rachis internode was also noted; it was somewhat eroded and could not be identified further.

Context 1233 [clay silt; munsell: 10YR3/2]
Sample 57 (weight of sample: 10 kg; approximate volume/weight of washerow: 15 ml/20 g)

The washerow comprised eroded charred cereal grains and a little charcoal, all the material being heavily silt-encrusted; barley and wheat (again probably including both emmer and spelt) were both present. There were traces of weed seeds and a little charcoal (to 10 mm).

Context 1266 [clay silt; munsell: 10YR4/3]
No sample number (weight of sample: unknown; approximate volume/weight of washover: <5 ml/5 g)

This sample yielded a few ml of very eroded and blistered charred grains with strong silt encrustation: they comprised barley and wheat (probably both emmer and spelt being present), with a very few weed seeds.

**Context 2103** [sandy silt; munsell: 10YR3/4]
Sample 72 (weight of sample: 11 kg; approximate volume/weight of washover: 35 ml/45 g)

There was a small washover of somewhat silt-encrusted charcoal (to 10 mm), including fragments of ash (*Fraxinus*) and some diffuse-porous material that was perhaps hazel (*Corylus*).

**Context 2202** [clay; munsell: 10YR5/3]
Sample 79 (weight of sample: 10 kg; approximate volume/weight of washover: 20 ml/25 g)

This washover comprised charcoal (to 15 mm) and a few very distorted or eroded charred wheat grains. There were also traces of weed seeds.

**Discussion and statement of potential**

The remains recovered were restricted to small quantities of charcoal and charred cereal grains, and a very few associated weed seeds. Only a single chaff fragment was found from the entire corpus suggesting the grain represents a largely cleaned product, perhaps from a store, although the material was not very well preserved and chaff may have been present originally but consumed in the fires which led to the charring of the grain.

**Recommendations**

It is not thought to be profitable to undertake any further analyses of the assemblages considered here and, assuming they represent those deposits with the best survival of charred plant material, it is probably not worth examining any of the others.

**Retention and disposal**

Any remaining sediment samples may be discarded unless needed for the recovery of additional charred material for radiocarbon dating. Those charred remains already recovered 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 Paula Ware and Kelly Hunter of MAP Archaeological Consultancy Ltd for providing the material and the archaeological information.

**References**

Table 1. Summary notes for the less productive dried ‘flots’ (washovers) from St John’s 2 Opencast, Normanton, West Yorkshire.

<table>
<thead>
<tr>
<th>Context</th>
<th>Sample</th>
<th>Area</th>
<th>Sample weight /kg</th>
<th>Notes on washover</th>
</tr>
</thead>
<tbody>
<tr>
<td>1008</td>
<td>49</td>
<td>A</td>
<td>12</td>
<td>Tiny (of a few ml, ~5 g) washover of approximately half modern rootlets and half fine charcoal, with some larger charcoal fragments (to 8 mm)</td>
</tr>
<tr>
<td>1038</td>
<td>7</td>
<td>A</td>
<td>14</td>
<td>Tiny (~1 ml, &lt;1 g) washover of fine unidentified wood charcoal (to 5 mm), with a little modern plant detritus and invertebrate (centipede and beetle) remains and a single very poorly preserved ?wheat grain</td>
</tr>
<tr>
<td>1040</td>
<td>4</td>
<td>A</td>
<td>25</td>
<td>Tiny (of a few ml, ~3 g) washover mostly of sediment ‘dust’ and modern rootlets, with a little fine charcoal (some larger pieces to 6 mm but unidentified), a few modern invertebrate (centipede and beetle) fragments and a single poorly preserved charred ?wheat grain</td>
</tr>
<tr>
<td>1060</td>
<td>43</td>
<td>A</td>
<td>20</td>
<td>Tiny (of a few ml, ~3 g) washover mostly fine sediment ‘dust’ and modern rootlets and other plant detritus, with a trace of fine charcoal</td>
</tr>
<tr>
<td>1082</td>
<td>25</td>
<td>A</td>
<td>unknown</td>
<td>Tiny (of a few ml, ~3 g) washover of small fragments of unidentified charcoal (to 8 mm) and a little undisaggregated sediment (in lumps to 8 mm)</td>
</tr>
<tr>
<td>1092</td>
<td>10</td>
<td>A</td>
<td>10</td>
<td>Tiny (of a few ml, ~2 g) washover of fine charcoal (with some larger unidentified pieces to 12 mm) and modern rootlets. There were also a few very poorly preserved unidentified charred grains.</td>
</tr>
<tr>
<td>1155</td>
<td>-</td>
<td>A</td>
<td>10</td>
<td>Tiny (of a few ml, ~2 g) washover of sand grains and small stones (to 8 mm), with a trace of fine charcoal (to 3 mm)</td>
</tr>
<tr>
<td>1212</td>
<td>41</td>
<td>A</td>
<td>11</td>
<td>Tiny (~1 ml, ~1 g) washover of fine sediment ‘dust’, with a little unidentified charcoal (to 6 mm)</td>
</tr>
<tr>
<td>1237</td>
<td>55</td>
<td>A</td>
<td>10</td>
<td>Tiny (~1 ml, ~1 g) washover of fine charcoal (some larger pieces to 8 mm but unidentified), with some very poorly preserved charred grains (most of ?wheat), a few charred seeds and a little modern plant detritus</td>
</tr>
<tr>
<td>2035</td>
<td>70</td>
<td>B</td>
<td>11</td>
<td>Tiny (of a few ml, ~2 g) washover mostly of small fragments of unidentified charcoal (to 8 mm), with some modern rootlets and an occasional small stone (to 6 mm)</td>
</tr>
<tr>
<td>2046</td>
<td>62</td>
<td>B</td>
<td>11</td>
<td>Tiny (of a few ml, ~5 g) washover of modern rootlets and sediment ‘dust’, with a few small stones (to 4 mm) and a little unidentified charcoal (to 10 mm)</td>
</tr>
<tr>
<td>2107</td>
<td>74</td>
<td>B</td>
<td>3</td>
<td>Tiny (~1 ml, ~1 g) washover of fine charcoal (mostly 1-2 mm, with some larger unidentified pieces to 6 mm) and modern rootlets</td>
</tr>
</tbody>
</table>