Technical report: charred plant remains from excavations at Site 1F Caltragh, nr Sligo, County Sligo, Republic of Ireland (site code: 03E0543)

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by

Allan Hall and John Carrott

Summary

Charred plant remains recovered from a deposit encountered during excavations at Site 1F Caltragh, along the route of the Sligo Inner Relief Road, Sligo, County Sligo, Republic of Ireland, were submitted for analysis. The site consisted of three spreads of fulacht material (two resulting from the levelling of the third, which must have been substantial). One of the spreads overlay a rectangular trough, with post holes at each corner (indicating a former timber lining) and a dense scatter of stake holes in the vicinity. No direct dating evidence was recovered from the deposits.

The charred plant remains were restricted to a single rather large quantity of wood charcoal, presumably from fuel. The sample contained sufficient material for radiocarbon dating to be attempted via AMS, but neither this nor dating using the standard radiometric technique was recommended. After discussion with the excavator, material for dating was sorted from the sample and returned for submission (taking care to avoid the inclusion of modern root fragments). This material was not ideal (being of wood of indeterminate age) for dating but an approximate date for the deposit was considered crucial and the potential error acceptable.

KEYWORDS: SLIGO INNER RELIEF ROAD; CALTRAGH; SLIGO; COUNTY SLIGO; REPUBLIC OF IRELAND; TECHNICAL REPORT; UNDATED; PLANT REMAINS; CHARRED PLANT REMAINS

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Introduction

An archaeological excavation was undertaken, during June and July 2003, by Archaeological Consultancy Services Ltd (ACS) at a site located at Caltragh (Site 1F), nr Sligo, County Sligo, Republic of Ireland (grid reference: 168780, 334550). The works were undertaken as part of a series of interventions along the route of the Sligo Inner Relief Road.

The site consisted of three spreads of fulacht material (two resulting from the levelling of the third, which must have been substantial). One of the spreads overlay a rectangular trough, with post holes at each corner (indicating a former timber lining) and a dense scatter of stake holes in the vicinity. No direct dating evidence was recovered from the deposits.

A quantity of charred plant remains (exclusively of charcoal) recovered from the processing of a single bulk sediment sample, was submitted to Palaeoecology Research Services Limited (PRS), County Durham, UK, for analysis.

Methods

The sediment sample was processed by ACS prior to delivery to PRS, and the recovered charred plant remains were submitted for analysis. The excavator’s standard processing technique was employed. The soil sample was placed onto 1 mm nylon mesh in a sieving tank. The light organic fraction was washed over through a 2 mm sieve into a 500 micron sieve to collect the flot. The sample was put through this system twice to ensure that as much material as possible was recovered.

A single sample of charcoal recovered from the deposits, was submitted for identification and for consideration as the basis for dating by radiocarbon assay or accelerator mass spectrometry (AMS).

Results

The single rather large sample of charcoal included material of hazel, oak and willow/poplar/aspen. Details are presented in Table 1. Summary information regarding the suitability of the remains for radiocarbon dating is given in Table 2 (some material, though not ideal, was subsequently submitted for dating, see Table 3).

Discussion

Ancient plant remains were restricted to a rather large quantity of wood charcoal, presumably from fuel, but of no further interpretative value.

The sample contained sufficient material for radiocarbon dating to be attempted via AMS, but neither this nor dating using the standard radiometric technique was recommended. After discussion with the excavator, material (~10 g of larger fragments of hazel charcoal) for dating was sorted from the sample (see Table 3) and returned for submission (taking care to avoid the inclusion of modern root fragments). This material was not ideal (being of wood of indeterminate age) for dating but an approximate date for the deposit was considered crucial and the potential error acceptable.

Retention and disposal
Other than those required for radiocarbon dating, all of the recovered remains should be retained as part of the physical archive for the site.

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 Ed Danaher and Rachel Sloane of ACS for providing the material and the archaeological information.
Table 1. Charred plant remains from deposits at Site 1F Caltragh, nr Sligo, County Sligo, Republic of Ireland.

Key to abbreviations:

charcoal—+/++ = little/moderate amount (reflected in weight in notes column, but cannot be related to size of sample from which charcoal was originally extracted); number = size (in millimetres) of largest fragments; A = alder (Alnus); C = hazel (Corylus); F = ash (Fraxinus); I = holly (Ilex); P = apple/hawthorn/rowan (Pomoideae); Pr = blackthorn/cherry/plum (Prunus); Q = oak (Quercus); S/P = willow/poplar/aspen (Salix/Populus); U = unidentified charcoal, not one of these other taxa.

<table>
<thead>
<tr>
<th>Context</th>
<th>Sample</th>
<th>Charcoal</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>219</td>
<td>1</td>
<td>+ 10 C, Q, S/P</td>
<td>about 190 g (before drying) of charcoal and some modern roots</td>
</tr>
</tbody>
</table>

Table 2. Notes on the suitability of charred plant remains (other than where predominantly of charcoal) from deposits at Site 1F Caltragh, nr Sligo, County Sligo, Republic of Ireland, for radiocarbon dating. Key: Radio = standard radiometric technique; AMS = accelerator mass spectrometry. Possibilities for dating are indicated thus + = possible, but not ideal given size of sample.

<table>
<thead>
<tr>
<th>Context</th>
<th>Sample</th>
<th>Sample notes</th>
<th>Approximate weight of dateable material</th>
<th>Dateable by?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Radio</td>
</tr>
<tr>
<td>219</td>
<td>1</td>
<td>charcoal and some modern roots: oak, hazel and willow/poplar/aspen</td>
<td>190 g</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 3. Material selected and returned to the excavator for submission for radiocarbon dating.

<table>
<thead>
<tr>
<th>Context</th>
<th>Sample</th>
<th>Material selected for submission</th>
<th>Approximate dry weight</th>
<th>Dating method</th>
</tr>
</thead>
<tbody>
<tr>
<td>219</td>
<td>1</td>
<td>Hazel charcoal</td>
<td>10 g</td>
<td>Standard radiometric</td>
</tr>
</tbody>
</table>
