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Technical report: charred plant remains from excavations at Site 1D/E Caltragh, nr Sligo, County Sligo, Republic of Ireland (site code: 03E0542)

PRS 2004/90

# Technical report: charred plant remains from excavations at Site 1D/E Caltragh, nr Sligo, County Sligo, Republic of Ireland (site code: 03E0542)

by

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### **Summary**

Small quantities of charred plant remains recovered from deposits encountered during excavations at Site 1D/E Caltragh, along the route of the Sligo Inner Relief Road, Sligo, County Sligo, Republic of Ireland, were submitted for analysis. Site 1D comprised the remains of a fulacht fiadh, two cremation pits and associated stake holes and the remains of two dry stone walls. The fulacht is most likely of Bronze Age date, whilst the cremation pits and walls are probably Neolithic. Site 1E consisted of a single circular pit the principal fill of which was of large boulders, with occasional flecks of burnt bone. The date and archaeological significance of this feature are, as yet, uncertain.

Ancient plant remains were restricted to small quantities of wood charcoal, presumably from fuel, and in one instance four fragments of hazel nutshell most likely representing food waste. One of the samples contained sufficient suitable material for radiocarbon dating to be attempted via AMS, but none could be recommended for dating using the standard radiometric technique. After discussion with the excavator, material for dating was sorted from each of the samples and returned for submission—two of these were of material not ideal (and/or of rather low sample size) for dating but for which a date for the deposit was considered crucial.

**KEYWORDS**: SLIGO INNER RELIEF ROAD; CALTRAGH; SLIGO; COUNTY SLIGO; REPUBLIC OF IRELAND; TECHNICAL REPORT; PREHISTORIC; NEOLITHIC; BRONZE AGE; PLANT REMAINS; CHARRED PLANT REMAINS

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23 November 2004

# Technical report: charred plant remains from excavations at Site 1D/E Caltragh, nr Sligo, County Sligo, Republic of Ireland (site code: 03E0542)

Introduction

An archaeological excavation was undertaken during April and May 2003 by Archaeological Consultancy Services Ltd (ACS) at a site located at Caltragh (Site 1D/E), nr Sligo, County Sligo, Republic of Ireland (grid reference: 168880, 334330). The works were undertaken as part of a series of interventions along the route of the Sligo Inner Relief Road.

Site 1D comprised the remains of a *fulacht fiadh*, two cremation pits and associated stake holes and the remains of two dry stone walls. The *fulacht* is most likely of Bronze Age date, whilst the cremation pits and walls are probably Neolithic. Site 1E consisted of a single circular pit the principal fill of which was of large boulders, with occasional flecks of burnt bone. The date and archaeological significance of this feature are, as yet, uncertain.

Small quantities of charred plant remains (primarily charcoal) recovered from the processing of three bulk sediment samples, were submitted to Palaeoecology Research Services Limited (PRS), County Durham, UK, for analysis.

#### Methods

The sediment samples were processed by ACS prior to delivery to PRS and the small quantities of charred plant remains recovered were submitted for analysis. The excavator's standard processing technique was employed. The soil samples were 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 flots. Each of the soil samples was put

through this system twice to ensure that as much material as possible was recovered.

Three samples (from three separate contexts) of charcoal and other charred plant remains recovered from the deposits, were submitted for identification and for consideration as the basis for dating by radiocarbon assay or accelerator mass spectrometry (AMS).

### **Results**

Three samples were examined; one yielded a few fragments of hazel nutshell and some alder/hazel and ?hazel charcoal, whilst the other two contained charcoal of alder and ?alder, oak and willow/poplar/aspen, respectively. Details are presented in Table 1. Summary information regarding the suitability of the remains for radiocarbon dating is given in Table 2 (material from two samples for which the material was insufficient or not ideal was subsequently submitted for dating, see Table 3).

#### **Discussion**

Ancient plant remains were restricted to small quantities of wood charcoal, presumably from fuel, and in one instance (Context 137) four fragments of hazel nutshell most likely representing food waste, but the remains were too few to be of any further interpretative value.

One of the samples contained sufficient suitable material for radiocarbon dating to be attempted via AMS, but none could be recommended for dating using the standard radiometric technique. After discussion with the excavator, material for dating was sorted from each of the samples (from Contexts 135,

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137 and 143, see Table 3) and returned for submission (taking care to avoid the inclusion of modern root fragments). Two of these were of material not ideal (and/or of rather low sample size) for dating but for which a date for the deposit was considered crucial.

## **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.

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Table 1. Charred plant remains from deposits at Site 1D/E 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.

other remains—nutshell: N = hazel (*Corylus avellana* L.)

Context	Sample	Charcoal	Other remains	Notes
135	4	+ 20 A		about 28 g charcoal; some modern rootlets
137	2	+ 15 A/C,	4 fragments N	scraps of unidentifiable charred material
		?C	_	
143	5	+ 25 ?A, Q,		about 8 g of charcoal and some modern roots
		S/P		

Table 2. Notes on the suitability of charred plant remains (other than where predominantly of charcoal) from deposits at Site 1D/E 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; ++ = easily enough datable material; () indicates cases where dating would be on material which might return a misleadingly old date.

Context	Sample	Sample notes	Approximate weight of dateable material	Dateable by?	
				Radio	AMS
135	4	charcoal: rather mature alder and some modern roots; some small twig fragments might be suitable for dating	28 g	(+)	(++)
137	2	three bags: charred hazel nutshell (4 fragments), 'seeds' (scraps of charred material, probably not seed); and a larger bag of charcoal: alder/hazel and ?hazel 15 mm; a 100 mg twig fragment might be suitable for dating but an AMS date of the nutshell would be preferable	nutshell: 60-75 mg charcoal: 52 g	+	+++
143	5	charcoal and some modern roots: some oak, ?alder, willow/poplar/aspen	8 g	-	(+)

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

Context	Sample	Material selected for submission	Approximate dry weight	Dating method
135	4	Alder charcoal	7 g	Standard radiometric
137	2	Hazel nutshell	60-75 mg	AMS
143	5	Alder charcoal	5 g	Standard radiometric