

Technical report

Analysis of plant remains from Ballinglanna North 6, Co. Cork (E3972)

By Penny Johnston

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Appendix 5 Plant remains

Analysis of the plant remains from Ballinglanna North 6, Co. Cork (E3972)

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Introduction

This short report details the results of plant remains analysis from Ballinglanna North 6, Co. Cork (E3972). The site comprised two areas of archaeological activity: at Area 1 a burnt mound/fulacht fiadh was found and at Area 2 a hearth and an associated area of activity was found.

Methodology

The samples were collected on site as bulk soil and were processed using machine-assisted floatation (following guidelines in Pearsall 2000). The floating material (or 'flot') from each sample was collected in a stack of geological sieves (the smallest mesh size was 250µm). When all the carbonised material was collected the flot was then air-dried in paper-lined drying trays prior to storage in airtight plastic bags. The samples were scanned under low-powered magnification (x 10 to x 40) using a binocular microscope. Nomenclature and taxonomic order follows Stace (1997).

Results

The results of preliminary scanning are presented in Table 1. A total of 7 samples were scanned. Seeds were recovered from just two samples, both from the same deposit: C.9 (S.5 and S.6).

The area of activity at Area 2 included the hearth, a metalled surface and an area, a screen or windbreak formed by four stake-holes and a post-hole and three pits.

Sample	Context	Charcoal	Seeds	% scanned
2	2	High	Absent	100
5	9	Medium	Low	100
6	9	Low	Low	100
14	38	Absent	Absent	100
15	4	Absent	Absent	100
19	46	Absent	Absent	100
21	54	Low	Absent	100

Table 1: Scanned samples from Ballinglanna North 6, Co. Cork (E3972)

Where plant material was found, it was only retrieved in small quantities. The identified material (presented in Table 2) included hazelnut shell fragments, barley grains and a small amount of weed seeds.

Context	9	9
Sample	5	6
Oat grains (<i>Avena</i> L. species)	5	
Barley grains (<i>Hordeum vulgare</i> L.)		1
Barley rachis internodes (6-row)	1	
Oat/Barley grains (<i>Avena/Hordeum</i>)	2	
Indeterminate cereal grains	2	
Indeterminate grass seeds (Poaceae)	2	

Table 2: Plant material in samples from Ballinglanna North 6, Co. Cork (E3972)

The only samples that contained plant remains were from the charcoal-rich fill of the hearth (C.9) in Area 2. The remains included cereal grains and chaff. The chaff suggests that, as these were found in a hearth, the cereal remains may represent the by-products of crop processing. Straw, chaff, weeds and occasional cereal grains were the usual by-products of crop processing, and these were sometimes used in domestic hearths as tinder or kindling. Grains are more likely than chaff to survive in this context as they are denser and do not burn away to ash as quickly as chaff does (Boardman and Jones 1990, 9 – 10).

The only cereals found were barley and oat, recovered in very small amounts. The presence of oats suggests a medieval (or later) date. Cultivated oats (*Avena sativa*) were probably introduced in Ireland in the early medieval period (see Monk 1986), although wild oat may have been important in prehistory (McClatchie 2007, 65). Unfortunately, it is impossible to distinguish between wild and cultivated varieties of oat in samples where floret bases are not present (these were not found at Ballinglanna North 6). It is therefore possible that the oats from this sample were from wild, uncultivated plants. However, the combination of oats and barley in the samples is typical of the early medieval period and oats and barley were the most common cereal grains found in a study of plant remains from medieval Munster sites (Monk et. al. 1998,

68). While the general impression from the Ballinglanna North 6 samples is that this deposit dates to the medieval period it could also date to a later period.

Penny Johnston

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References

Boardman, S. and Jones, G. 1990 Experiments on the effects of charring on cereal plant components, *Journal of Archaeological Science* 17, 1 – 11.

McClatchie, M. 2007 The plant remains. In Doody, M. Excavations at Curracghatoor, Co. Tipperary. Cork, UCC Department of Archaeology Archaeological Monograph.

Monk, M. Tierney, J. and Hannon, M. 1998 Archaeobotanical studies and early medieval Munster, in Monk M. and Sheehan J. (eds.) *Early Medieval Munster Archaeology, History and Society*. Cork, Cork University Press.

Monk, M. 1986 Evidence from Macroscopic Plant Remains for Crop Husbandry in Prehistoric and Early Historic Ireland: a review, *Journal of Irish Archaeology* 3, 31 – 6.

Stace, C.A. 1997 *New Flora in the British Isles*. (2nd edition) Cambridge, Cambridge University Press.