

# 5 Charcoal and Carbonized Plant Remains

by J Miller and S Ramsay

## 5.1 Methodology

Identification of seeds and vegetative plant remains was undertaken with reference to *Zadenatlas der Nederlandsche Flora* (Beijerinck 1947). The internal anatomy of charcoal was identified with reference to *Anatomy of European Woods* (Schweingruber 1990). Vascular plant nomenclature follows *New Flora of the British Isles* (Stace 1997). Wherever it was not possible accurately to quantify elements within the samples, a scoring system of one to three plus marks was used denoting trace to abundant presence.

## 5.2 Discussion

The carbonized assemblage from Ferndale was sparse, containing only very small charcoal fragments (Table 1). Consequently, any conclusions drawn must necessarily be tentative. Cists 003 and 004 contained several charcoal types, including small trees and shrubs that would have been locally available, albeit not abundantly, in the Bronze Age. Small fragments of birch (*Betula*) and hazel (*Corylus*) charcoal within the cists suggests the

utilization of either local scrub woodland or driftwood resources as fuel, although it is impossible to determine whether this is residual from domestic material or ritual fires. Further evidence for potential fuel sources is indicated by heather family (Ericaceae) charcoal, burnt monocot type (grass/sedge) stems/rhizomes and occasional seeds of grassland indicators in cists 003 and 010. Together, these remains may be indicative of turf as fuel, or the construction of a fire (or pyre) over heathy grassland.

Occasional fragments of carbonized brown (Furoid) seaweed were also recovered from cists 003 and 010. Seaweed has been used as fertilizer and domestic fuel since antiquity (Dickson & Dickson 2000), especially in areas where other fuel resources are scarce. As cist 003 contained an inhumation, it would appear that either a cremation had also been in cist 003, or that contamination of the cist fills had occurred.

Food remains in the form of rare cereal grains – including six-row barley (*Hordeum vulgare sl*) and hazel (*Corylus avellana*) nutshell – were the only evidence for human diet. These may be residual from a ritual feast or food offering, or from accidental incorporation of background domestic occupation debris into the cist deposits.

**Table 1 Charcoal and carbonized plant remains**

	Location	Cist 10	Cist 4	Cist 4	Cist 3	Cist 3
	Context	006	009	009	016	018
	Sample	001	003	004	007	009
Matrix						
Total carb veg		5 ml	10 ml	5 ml	10 ml	<5 ml
Modern veg		++	+++	+++	++	++
<b>Charcoal</b>	<b>Common name</b>					
<i>Betula</i>	Birch	5 (0.05g)		4 (0.05g)	6 (0.1g)	–
<i>Corylus</i>	Hazel	4 (<0.05g)	5 (<0.05 g)	12 (0.2g)	2 (0.05g)	–
Ericaceae	Heather family	7 (<0.05g)	5 (0.05g)	4 (<0.05g)	3 (<0.05g)	1 (<0.05g)
Maloideae	Rowan type	–	–	–	1 (0.05g)	–
cf Maloideae	cf Rowan type	–	2 (0.2g)	–	–	–
Prunoideae	Cherry type	–	1 (<0.05g)	–	–	–
Bark indet	Indet bark	–	–	–	5 (0.1g)	–
<b>Carb macrofossils</b>						
Cereal indet	Indet cereal grain	–	–	2	–	–
<i>Corylus avellana</i>	Hazel nutshell	–	–	–	2 (0.1g)	–
Furoid seaweed	Seaweed	1 (<0.05 g)	–	–	1 (<0.05g)	–
<i>Hordeum vulgare sl</i>	Six-row barley grain	–	–	–	1	–
Monocot rhizomes	Grass/sedge rhizome	2 (<0.05 g)	–	–	7 (0.05g)	–
Monocot stems	Grass/sedge stem	–	–	–	2 (<0.05g)	–
<i>Plantago lanceolata</i>	Ribwort plantain seed	–	–	–	–	1
<i>Polygonum aviculare sl</i>	Knotgrass seed	–	–	–	–	1