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## Portmahomack on Tarbat Ness: Changing Ideologies in North-East Scotland, Sixth to Sixteenth Century AD

by Martin Carver, Justin Garner-Lahire and Cecily Spall

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## Chapter 4

# Foundations (Periods 0–1, to c AD 680)

### Introduction

‘Foundations’ in the sense employed in the title of this chapter refers to the activities defined under and around St Colman’s Church before the Portmahomack monastery became a going concern in the seventh to eighth century. It gathers together all the pre-seventh century evidence recovered in the area excavated and what was known about the prehistoric presence on the peninsula at the time the project was completed (in 2012; see Chapter 1, p 13). The verdict will be that the peninsula was active in the Bronze Age and Iron Age, especially as a burial place, but at Portmahomack a cemetery and settlement are first established in the fifth to seventh century. The materiality of the cemetery and the settlement is secular, and neither overtly Christian nor specifically monastic. However, the cemetery location and the approach to metal manufacture suggest that Periods 1 and 2 were connected: the Period 1 occupants were intellectually, technically and chronologically implicated in what was to come.

Reference will be made to the topography of the Portmahomack site in the following terms (see Illus 4.1): the ‘hilltop’ refers to the raised beach on which the church of St Colman now stands (Sector 4); the ‘crest’ is the shoulder of land that stretches westward, where the Tarbatness Road now runs; on its north side are the ‘dunes’ (Sector 3), sandy hummocks dropping down to the beach; to its south is the ‘marshy ground’ where the stream ran and the pool was later formed (Sector 2); further south is the flat land that was long cultivated (Sector 1).

Period 0 (before the sixth century) is represented by stray finds of the Neolithic and Bronze Age and a burial at Balnabruach. Assigned by radiocarbon dating to Period 1 (sixth/seventh century) is a *cemetery* of long-cist graves consisting of three burials excavated at the north end of Sector 2 and sixteen burials excavated on the hilltop within St Colman’s Church. Additional evidence suggests these to have been part of a larger barrow cemetery strung along the crest. The *settlement* consists of a circular building (S11) with an industrial hearth and water-management scheme, situated in Sector 2 and a ditch containing burnt grain in Sector 4 (F129). Either contemporary with this settlement or belonging to an earlier one in Sector 1 is a large expanse of parallel scratch-plough marks, without plough pebbles, served by a penannular structure (S12).

A general chronology for the site was developed in Chapter 3 (Table 3.1). Table 4.1 gives a summary of the dated features and finds relating to Periods 0 and 1.

### Period 0 to the sixth century AD

#### *The land*

The natural subsoil is at its highest recorded point at 17.4m AOD under St Colman’s Church (OLA 6.3/3.1.1), whence it slopes westward to 15.4m at the north end of Sector 2, then falls south to 11.50m in the valley bottom, and rises again to 15.10–15.52m over the flat cultivated area to the south in Sector 1. On the hilltop, the natural deposition sequence was (from the bottom): white sand subsoil, weathered subsoil surface, buried soil and turf line, and podsolized buried soil. Analogues of these layers were also identified in the south-west churchyard, with the surface of the subsoil at c 16.6m (OLA 6.3/3.1.1).

In Sector 2 (north end) the subsoil was overlain directly by a shallow sequence of deposits consisting of small irregular hollows presumed to be natural in origin, overlain by alternating deposits of sand and turf lines. Further down the slope the subsoil had become a more robust mixed gravelly sand, overlain by episodes of consolidation represented by three turf lines or buried soils interleaved with accumulating sand deposits (Illus 4.2; Digest 7.5). As they approach the valley floor, these deposits were increasingly overlain by a ‘proto-marsh’ deposit, consisting of clean sand with a component of organic material, topped by laminated convoluted buff sand and black silt deposits that represented the margins of the stream-eroded area (OLA 6.2/3.1.1).

The earliest peat in the valley floor (C2310) was radiocarbon dated 720–380 cal BC and shows little trace of human occupation, although there may have been grazing mammals nearby, perhaps deer: it was dominated by plants of marsh and fen, primarily the hypnoid mosses *Drepanocladus*, *Cratoneuron commutatum* and *Scorpidium scorpioides*. Other plant taxa persistently present or recorded in significant numbers were lesser spearwort (*Ranunculus flammula*), toad rush (*Juncus bufonius*) and spike-rush (*Eleocharis palustris*). The presence of waterside insects, such as *Chaetarthria seminulum* was consistent with deposition in a shallow wet feature with enough standing water to provide habitats for caddis flies and water beetles such as *Coelostoma orbiculare*. There were also indications of organisms living in terrestrial habitats nearby. In this latter category, beetles such as *Aphodius* (but also several other taxa) pointed to the presence of herbivore dung in the vicinity (Hall and Kenward in Digest 7.4).

On the far south side of the stream, in Sector 1, the surface of the subsoil (at between 15.10 and 15.52m AOD) was covered

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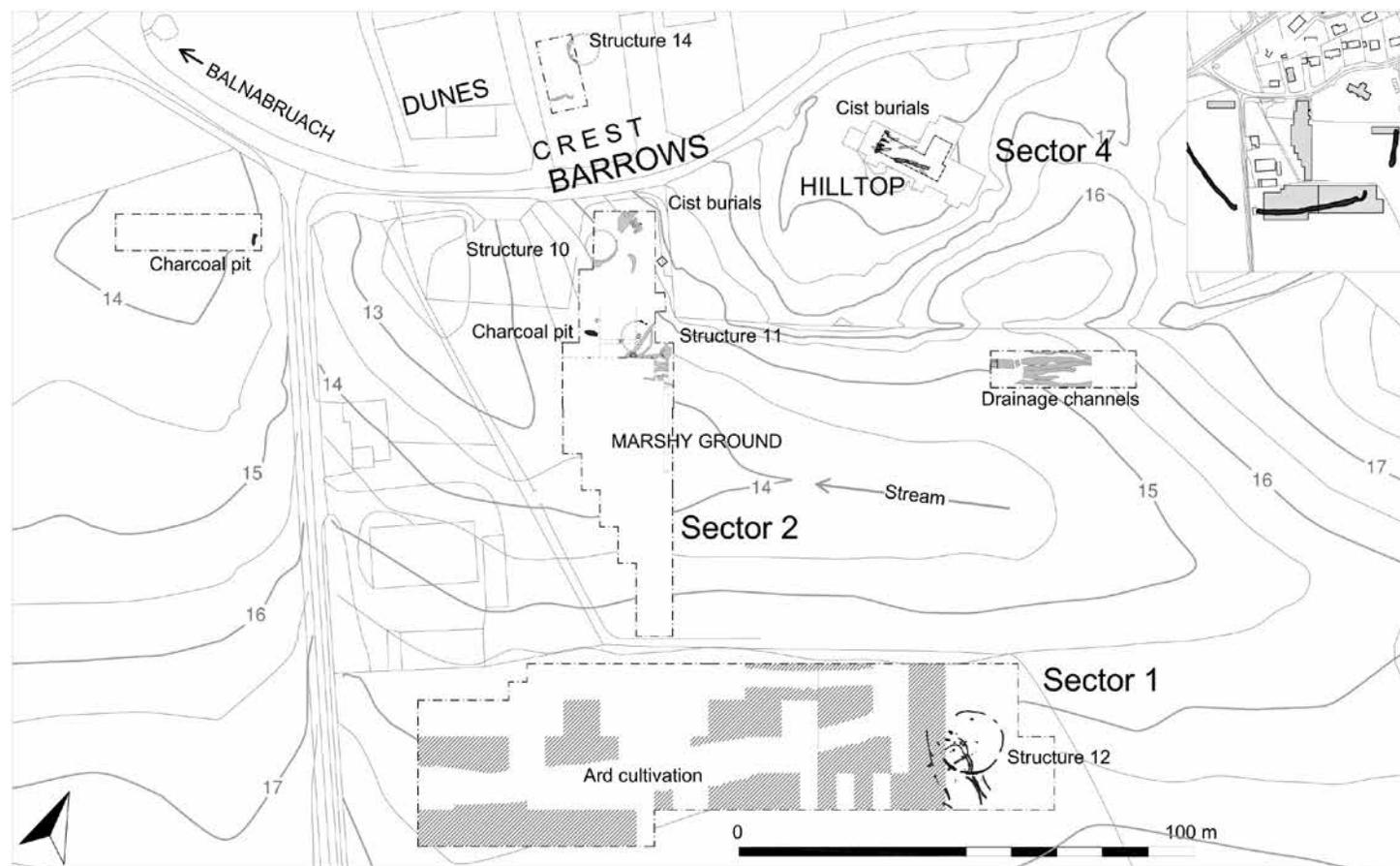


Illustration 4.1

Topographical map of the site, showing sectors and features and structures of Period 0/1

with a podzol that survived up to 100mm thick in places. This could be identified with the podzol seen in Sector 4, and similarly was without traces of human activity. The Sector 1 podzol had however been ploughed (see below).

### **Neolithic and Bronze Age artefacts**

The presence of occupation during the Neolithic-Bronze Age is suggested by a small assemblage of lithic material – scrapers, a knife and arrowheads – a carved stone ball and a number of trough querns. The lithic assemblage, all residual in strata of early medieval or later date, includes artefacts of flint, quartz and chert. A range of tools was identified, including two Mesolithic-Neolithic blades, three scrapers of the late Neolithic to Bronze Age, four Neolithic leaf-shaped arrowheads and a late Neolithic-Bronze Age tanged arrowhead (see Digest 6.1). A waste assemblage indicative of the manufacture and curation of tools was also present, including four cores and nearly fifty flakes, debitage and chips. In addition, a number of flints were recovered during clearance of the crypt of the church: a knife, four flakes and a piece of debitage. The assemblage of prehistoric implements is small but sufficient to indicate hunting and processing of hides, with a likely focus for activity provided

by the natural freshwater stream/marsh area. Distinct from this prehistoric group, a small group of debitage from Period 2 occupation layers is thought to relate to fire lighting in the historic period (Rowe in OLA 7.1.3.1).

A carved stone ball was recovered residually from the rubble infill of the seventeenth-century steps to the crypt. The ball has been identified as a six-knob type with nose-shaped interspace dating to the Early Bronze Age (Marshall Type 4c; Marshall 1977; 1983). A very wide range of functions, most of them symbolic, has been proposed for these objects, and their distribution may imply regional affiliations (Edmonds 1992). However, the portable, durable and appealing nature of the balls implies high mobility and survival; finds in primary contexts are rare. It may not be entirely coincidental that the distribution of these collectable items maps onto Pictish territories (Illus 4.3).

### **Querns**

Four fragments of trough querns were recovered from Sector 2 in Period 2 (1), Period 4 (2) and Period 5 (1), in each case reused as building stone (Digest 6.1). A fifth (noted by Close-Brooks, 1984b, 288) was removed from the churchyard wall and is now on display in the church, while a fragment of saddle quern was found in the

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ploughsoil of the west field by metal-detectorist Michael Gallon in 2005. Stone selected for the trough querns tended to be geologically old – granite, gabbro, metamorphic gneiss and syenite – present on the peninsula as glacial erratics. That the most complete example was recovered from a wall of nineteenth-century date is testament to their indestructible character. Close-Brooks' survey of early querns in Scotland listed six trough querns, five of which were recovered from contexts of reuse in stone-built structures, including a Beaker cist in Angus and chambered cairns on the Black Isle (1984b, 282–9). These examples endorse a date of origin for trough querns in the Neolithic-Bronze Age period, while also demonstrating their potential for re-employment as building material, if not for grinding grain, over the course of millennia.

### *Middle Iron Age*

Three articulated burials were encountered during a watching brief by Highland Council during the replacement of mains water in Balnabruach, which is located a few hundred metres south-west down the coast from Portmahomack. The remains of a total of seven individuals were later identified osteologically among the bone assemblage, one of which (Burial A) was in a short cist and radiocarbon dated to 410–230 BC. This burial of Middle Iron Age date is part of a burial ground that was to spread along the coast and endure until Period 1 at Portmahomack (see pp 99–102 below).

Two isolated charcoal-burning pits were located near the stream edge (Illus 4.1). That in Sector 2 (F573) was an elongated sub-rectangular pit (Illus 4.4), with a primary fill of a thick deposit of roundwood charcoal lining its base and sides. A date of AD 130–380 was obtained from a piece of birch charcoal with about forty years' growth (from which the ten outer growth rings were selected for dating) and a layer of windblown sand marked its final disuse. The feature is identified as the remains of a charcoal-making kiln, perhaps for the production of fuel for ironworking. Within Int 10 a number of anomalies were defined that may represent similar activity: post-holes and charcoal-lined pits. One of these (F15) consisted of an elongated sub-rectangular cut into subsoil, lined with a distinct deposit of pure charcoal.

These pits are comparable in form and content to some found on the line of the M4 in Ireland, as at Hardwood 2, which have given radiocarbon dates from the Late Bronze Age to the eleventh century AD. These are also interpreted as pits for making charcoal perhaps as precursors to episodes of ironworking (Illus 4.4; Carlin 2008, 88–91; Kenny 2010). The earliest known Scottish iron-smelting furnace lies across the

Moray Firth at Forres, is radiocarbon dated to 198 BC–AD 49 and 370 BC–AD 17 (Coleman & Photos Jones 2008, 15) and joins emerging evidence for the nature and organisation of Iron Age smithing practice in the north-eastern Highlands (Cressey et al 2011, 22–4; McDonnell 1998, 150–62). Much of the material from F573 comprised bark with tarry deposits on outside surfaces, consistent with the idea that this was deliberately made charcoal, since tars would tend to be concentrated in the enclosed environment of a charcoal clamp. It raises the possibility that pitch was also being produced, as a primary product or a by-product of the charcoal, which in turn implies an application to boat building (Hall in OLA 7.4.1/C3536).



*Illustration 4.2*

Section through the deposits in the valley relating to Period 1 (prior to the monastic development). Turf lines and buried soils are interleaved with windblown sand

Taken together these dispersed contacts suggest hunting expeditions in the Neolithic, some burial in the Bronze Age and Middle Iron Age, with charcoal burning in or before the fourth century AD. All the evidence comes from the raised beach at the north end of the site, the area nearest to the sea.

### **Period 1 mid-sixth to later seventh century**

Period 1 is defined on the hilltop by a group of cist burials and a ditch with a deposit of burnt grain. On the crest, the period is marked by three cist burials within a bank-and-ditch enclosure. Downslope near the stream was a round building (S11) with

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**Table 4.1**  
**Chronological for Periods 0–1**  
 (extracted from Chapter 3, Table 3.1)

Defined Period	Sector 1 [South Field]	Sector 2 [Glebe Field]	Sector 4 [Church]	The Tarbat Peninsula
PERIOD 0 Before AD 550				
Bronze Age		Flint arrowheads	Carved stone ball	<i>Short cists at Balintore, North Sutor and Balnabruach</i>
Iron Age <b>third/fifth century</b>	<i>Ring ditch S12</i> <i>Ard cultivation</i> (or Period 1)	Earliest marsh C2310 [S-13264] <b>770–400 BC</b> Earliest marsh C2310 [S-14990] <b>720–380 BC</b>  <i>Charcoal Pit F573</i> [S-33422] <b>170–380</b>		<i>Long cists at Balintore, Nigg and Balnabruach</i>  <i>Forts at Easter Rarichie, Tarrel, Lower Seafield and Castelhaven</i>  <i>Burials at Balnabruach</i> Balnabruach A [S-13257] <b>410–230 BC</b> Balnabruach B [S-13261] <b>240–420</b> Balnabruach C [S-13282] <b>260–530</b>
PERIOD 1 Late Iron Age <b>fifth/seventh century</b> AD 400–680		<i>Start: 525–650</i>  <i>Cemetery</i> Cist Burial 186 [S-13256] <b>420–610</b> Cist Burial 187 [S-33416] <b>540–650</b> S14 barrow (Sector 3) S10 barrow  <i>Settlement</i> S11 workshop Hearth F535 in S11 [S-33420] <b>640–770</b>  Well F527 [S-33421] <b>610–680</b>  Marsh Stake in marsh F436 [S-13277] <b>640–770</b> D1. Latest marsh C2296 [S-14989] <b>600–760</b>  <i>Flat-headed pins (fifth/ sixth century)</i> <i>Copper-alloy disc (sixth/ seventh century)</i> <i>Plough pebbles</i>  <i>End 635–730</i>	<i>Start: 420–600</i>  <i>Cemetery</i> Cist Burial 162 [O-13483; S-13255] (mean) <b>430–575</b> Cist Burial 172 [O-9699; S-37079] (mean) <b>570–650</b> A1. Plain burial 170 [S-33413] <b>580–660</b> A2/B1. Plain burial 169 [S-33412] <b>610–680</b> Plain burial 163 [O-13484] <b>640–690</b> Cist (?) Burial 146 [S-37078] <b>660–780</b>  <i>Settlement</i>  Ditch F129, with grain [S-13263] <b>540–660</b>  <i>End: 645–725</i>	<i>Burials on the ridge above the Firth</i>

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evidence for metalworking, and a number of pits, wells and cisterns serving a general theme of water management. Burials and organic matter relating to these features were radiocarbon dated between 550 and 700 (Table 4.1).

### The cemetery

#### *Burials on the hilltop (Sector 4)*

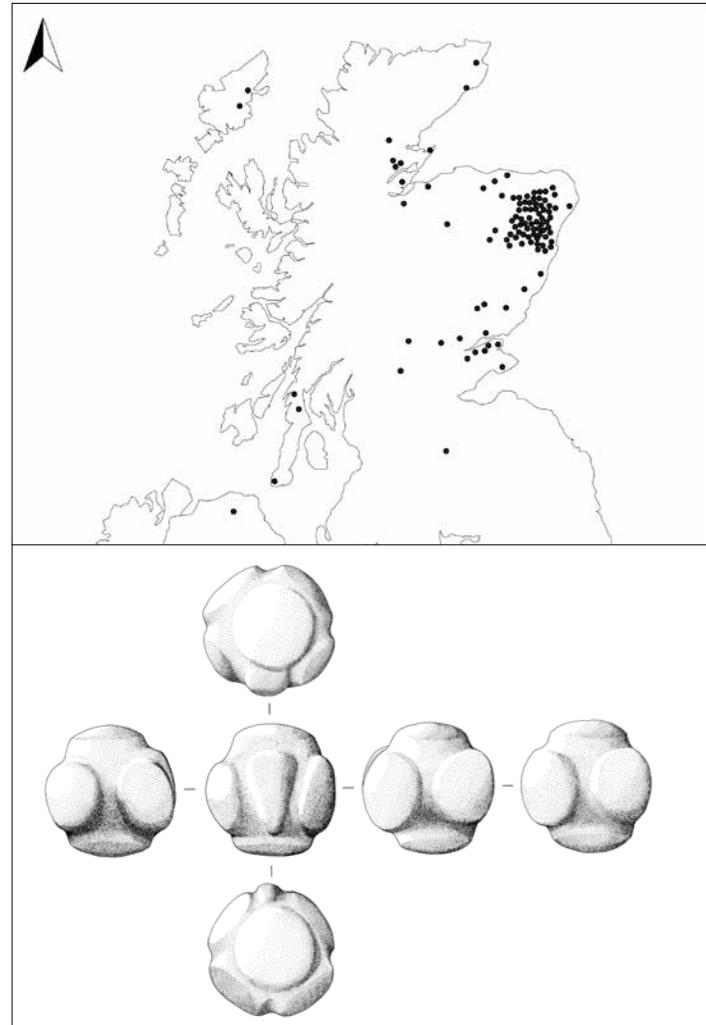
Period 1 burials excavated within the confines of the later church (Sector 4) were usually cut through a podsolized buried soil above the sand subsoil (OLA 6.3/3.1.1; App. C; here Illus 4.5). The burial rite, exclusive to this period, was extended supine inhumation (one prone burial was an exception), within a long cist of stone slabs. Old Red Sandstone slabs generally lined all four sides of the grave, but not the base. Some had a slab lid that rarely survived intact, but did survive occasionally in a collapsed and fragmentary state.

A cluster of six burials including five long cists was defined in the south-west corner of the excavated area in the church comprising (in stratigraphic order) Burial 162 under 146; 172 under 146 and 131; 131 (without cist) under 179 under 181 (Illus 4.6). Burial 162 has the earliest carbon date (AD 430–575) and the lowest height at 16.6m AOD. Burial 146 has the latest carbon date (AD 660–780). Burial 181 was a small cist containing no bones and was possibly the burial of a child. It was the latest in this local sequence, and the highest to survive at 17.6m AOD. The cluster thus comprised three female burials, one male burial, a further adult and a possible child, and their close proximity implies a family group. Given a height difference of one metre between the highest and lowest members of the cluster, and a time duration of at least a century, the cluster would appear to have focused on a mound that was revisited by additional interments, or was created by them. Burial 182, also with a cist, was an outlier to the immediate east. Other plain burials follow this orientation towards the putative mound (Burials 166, 185, 186) (Illus 4.7). The same alignment is shared by Burial 149, in which some stones of a slab lining survived. Burial 149 cut a timber-lined ditch, containing grain (F129), which is dated to the sixth/seventh century and so was contemporary with at least some of the graves (see below). No barrow ditch was defined in the narrow and highly congested south-west corner, where access was also impeded by the standing church walls. But the disposition of the Period 2 burials implies a mound that was still visible in the eighth century, and may have facilitated the continuity of burial on the hilltop (Chapter 5.2, p 108). Burials assigned to Period 1 are summarised in Tables 4.2 and 4.3 (see Digest 4 for data on all burials).

#### *Burials on the crest (Sector 2)*

Three burials were excavated (more accessibly) on the crest in the north-eastern corner of Sector 2 (Table 4.3; Illus 4.8: Burials 186, 187, 188; OLA 6.2/3.2.1; App C). Burial 186 (F515) contained a broken and collapsed lid, recovered as three slabs of Old Red Sandstone, beneath which lay an articulated skeleton, extended, supine, and orientated SSW–NNE (Illus 4.8a, b). The head lay facing to the south, the arms had been positioned to the sides and the legs were crossed at the feet. The protection of the cist had

resulted in excellent preservation and the skull including cheek bones, rib cage and pelvic girdle remained extant, the right hand lay palm down and the left lay palm up, slightly cupped with the thumb across the palm. The relaxed positioning of the body suggests that it was not confined by a shroud or winding cloth when interred. The sides of the cist were also defined at this level and were made of eight upright slabs, three to each side and one each at the head and feet; the slab that had previously formed the head end of the cist had slipped and rolled to the south.



*Illustration 4.3*  
Carved stone ball 20/366 (below) and distribution of the type  
(after Marshall 1977, 1983)

Osteological analysis of the individual identified a male aged forty-six years or older (Digest 4).

Burial 187 (F516) lay 0.10m to the north of Burial 186 and was first seen as a sub-rectangular cut visible against the stained and variable subsoil as a bright yellow sand backfill, although its edges could only be followed intermittently. It was a deep

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**Table 4.2**  
**Period 1 burials in Sector 4**  
(extracted from *Digest* 4.1)

No.	Type	Occupant	Stratification	Location [height AOD]	Analyses	Date
46	Cist represented by side slab at lower right leg, oriented W-E	Adult, probable male, extended/ slightly flexed, supine. Height 1.72m/5' 8"	heavily cut away by later graves	lay at east end of area of intervention Sacrum – 16.8 Tibia – 16.9		
131	Simple; extended, supine, unfurnished, oriented broadly W-E	Female, 46–59 years	cut by cist Burial 179 and truncated by unknown agent, disappeared beyond western and southern limits of intervention	Grave cut 16.9–17.2		
146	Possible cist represented by side slab at right lower leg and part lid fragment over left leg; extended, supine, oriented WSW-ENE	Female, 26–35 years, represented by legs only. Height 1.6m/5' 3"	Cut cist Burial 172, later truncated to west by bell casting pit 20/F4	Tibia – 17.02		AD 660–780
149	Cist represented by side slabs down to upper leg; extended, supine, oriented WSW-ENE	Male with blade wound, 60 years+	cut into Period 1 ditch 20/F129 = 17/F100, cut by Period 2 head-box Burial 125	Skull – 16.9 Sacrum – 16.7	Fractured R. ribs, Poss Neoplasm (R.Orbit), OA, DJD, SN, Dental, Maxillary Sinusitis	
162	Cist represented by side slabs down to lower leg and partial lid over upper torso; extended, supine, oriented WSW-ENE	Adult male. Height 1.68m/5' 6"	disappeared beyond western limit of intervention, cut cist Burial 146	Tibia – 16.6		AD 430–575
163	Simple; extended, supine, probably shrouded, oriented W-E	Male, 36–45 years. Height 1.74m/5' 9"	collapsed into underlying Period 1 cist Burial 162 when lid gave way	Sacrum – 16.8 Tibia – 16.7	Local	AD 640–690
166	With sandstone cist side slab, oriented SW-NE	Adult, probable female represented by right arm and part right torso. Height 1.54m/5' 1"	truncated by Period 2 Burial 155	Grave cut – 16.6–16.9m		
169	Simple; extended, supine, oriented W-E	Male, 26–35 years. Height 1.76m/5' 9"	post-dated Burial 170, in dense north-west zone, disappeared beyond western limit of intervention	Sacrum – 16.9 Tibia – 16.9		AD 610–680
170	Simple; extended, supine, oriented W-E,	Male, 26–35 years	early, deep burial in dense north-western zone	Skull – 16.9 Sacrum – 16.7 Tibia – 16.7	Calculus, Fracture (L.clavicle), SN, Neoplasm?	AD 580–660
172	Full long cist of side slabs with possible collapsed lid fragment, extended, supine, oriented SW-NE	Female, 46–59 years. Height 1.6m/5' 3"	post-dated by Burial 131 and cist Burial 146, later disturbed by Period 5 20/F4 = F147 bell pit and partially redeposited therein	Skull – 16.9 Sacrum – 16.7 Tibia – 16.8	<b>Migrant from the west</b> OA: L5-Sacral r.facet, L.knee, poss granuloma	AD 570–650

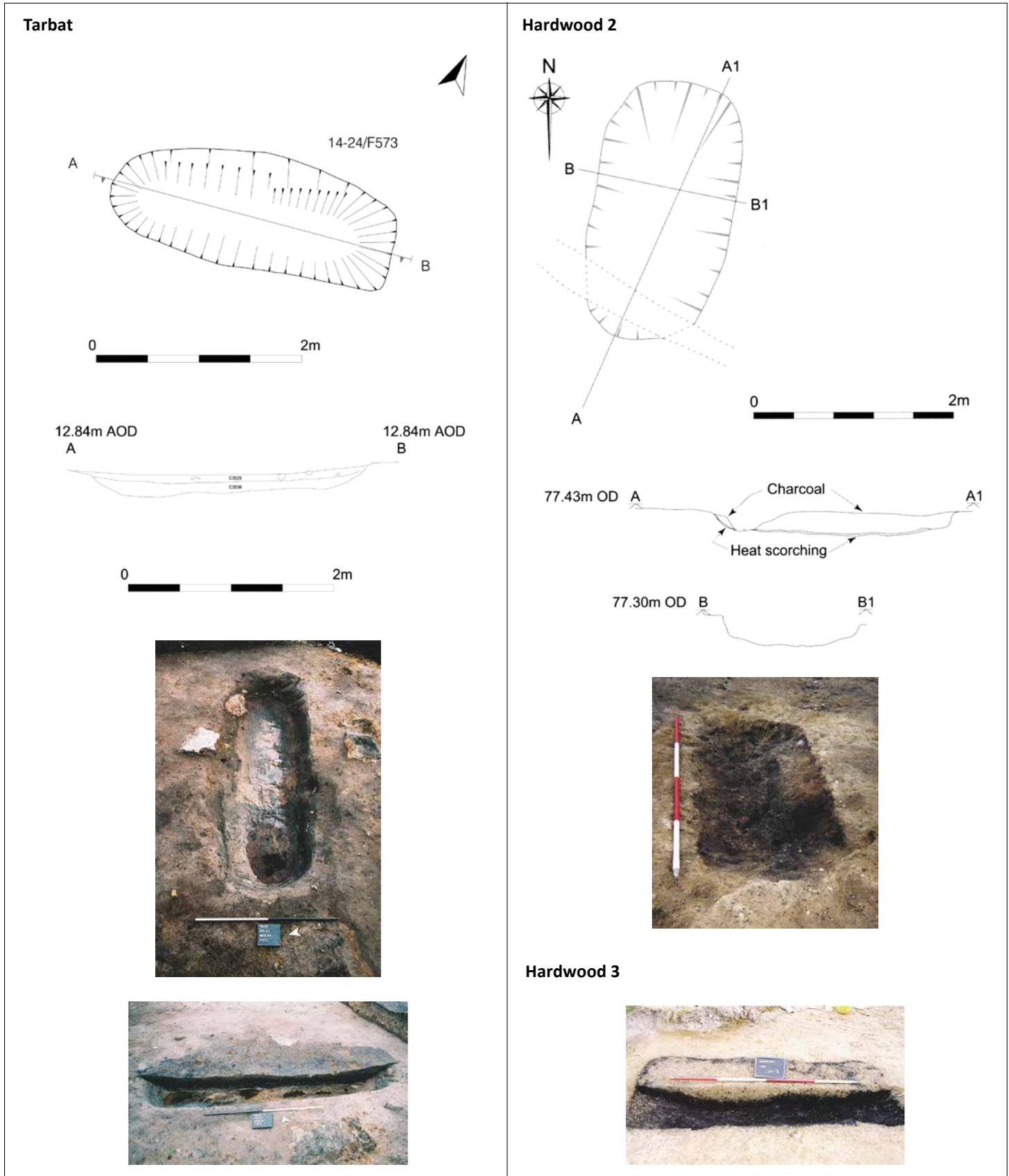
**Table 4.2**  
**Period 1 burials in Sector 4 (cont.)**

No.	Type	Occupant	Stratification	Location [height AOD]	Analyses	Date
179	cist represented by two side slabs down to knees, extended, prone, oriented W-E	Adult	cut Burial 131, later truncated by unknown agent and overlain by cist Burial 181, disappeared beyond western and southern limit of intervention, left <i>in situ</i>	Top cist sides – 17.21 Grave base – 16.91		
180	long cist of side slab and part lid, extended, supine, oriented W-E	Adult	disturbed while semi-articulated possibly by cist collapsing, recorded during underpinning of church, remains <i>in situ</i>	Grave cut 17.0–17.4		
181	Stone slabs packed with cobbles of possible small cist, oriented N-S	?child burial	disappeared beyond western limit of intervention, cut Burial 131 and truncated cist Burial 179	Grave cut 17.3–17.6		
182/3	Cist of side and end slabs (assigned Burial 182), oriented broadly SW-NE	no skeleton preserved although body stain recorded within cist backfill (assigned Burial 183)		Grave base 16.8–17.0		
184	Cist of part side slab, likely oriented SW-NE	Not known	heavily truncated by later graves, disappeared beyond northern limit of intervention	Slab 16.8–17.0		
185	Cist of part side slab		cist surviving repeated truncation by later graves	Slab 16.8–17.2		

**Table 4.3**  
**Period 1 Burials in Sector 2**

No.	Type	Occupant	Analyses	Date
186	Cist; lid broken into three; extended, supine, orientated SW-NE	Male aged 26–35 years. Height 1.7m/5' 7"	<b>Not local</b> <b>Terrestrial diet</b> Spondylolisis(L5), L.Os acromiale, Entheses	420–610
187	Cist with lid and sides packed with beach cobbles; supine extended oriented SW-NE	Male 36–45. Height 1.8m/5' 10"	<b>Not local</b> <b>Terrestrial diet</b> Spina bifida occulta, L&R 5th MT fracture, Periostritis (R.Ulna)	540–650
188	Supine inhumation oriented SW-NE	very poorly preserved remains of an adult, probable male	SJD(?): C2	

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*Illustration 4.4*

(Left) Charcoal kiln and section (Sector 2; F573); with a comparison (right) from Harwood 2, Ireland (Carlin 2008, Illus 5.1a and Illus 5.8c, courtesy of Archaeological Consultancy Services Ltd and Neil Carlin)

## FOUNDATIONS (PERIODS 0-1, TO *c* AD 680)

straight-sided grave preserved to a depth of *c* 0.9m (Illus 4.8b). Fallen into the grave was a cist lid made of three large unworked seaworn slabs of red sandstone that had split along bedding planes, fragmented and dipped into the underlying cavity. Their removal revealed the cavity to have filled only slightly with percolating sand and the skeleton lay relatively undisturbed within an inner cist of split sandstone slabs, packed behind with rounded flat beach cobbles; the cist lid appeared to have relied only on the inner stones for support. Excavation of the skeleton revealed a supine extended adult inhumation oriented SSW–NNE. Covering the skull, torso and lower abdomen was a fungal mould which had resulted in poor bone preservation in those areas; elsewhere bone preservation was good. The skeleton lay tightly within the carefully built cist and in places appeared constrained by its narrow width, particularly around the shoulder area. The legs were crossed at the feet and flush with the grave end, which had apparently never been furnished with a stone. Osteological analysis identified a male aged twenty-six to forty-five years.

Burial 188 (F517) lay 0.20m to the south of Burial 186 (Illus 4.9). The grave was identified as a sub-rectangular cut, visible as a bright yellow sand backfill against a more variable dull yellow subsoil. Excavation of the grave backfill revealed a large sub-rectangular grave with near-vertical sides and the very poorly preserved remains of an adult supine inhumation oriented SSW–NNE. The skeleton had been reduced to brown sand stains in most areas, although the shape of limbs and the form of individual bones were sometimes betrayed by an iron-pan crust. Only parts of the skull, the cervical vertebrae, the distal femora, patellae and proximal tibiae were preserved and recoverable; osteological analysis identified an adult of undetermined sex. The burial position could nonetheless be discerned and appeared to have consisted of the arms crossing slightly at the abdomen, legs straight with the feet together and the head leaning slightly to the south.

Burial 186 and Burial 187 (males) were radiocarbon dated as AD 430 to 610 and AD 540 to 650 respectively (95%) (see Table 2). It is likely that all three individuals had been interred by the early to mid-seventh century.

### *Ditch and bank*

A short surviving length of ditch *c* 2.60m wide and oriented NNE–SSW, was defined on the north-west side of this group of three burials (Illus 4.9; F545). An excavated section revealed that, following initial excavation, the ditch had been left open for a period, marked by the accumulation of windblown sand, with tumbling and collapsing sides. Following erosion, the ditch was backfilled from the east though not comprehensively, and apparently with the original upcast which appeared to have been used for the make-up of an adjacent bank. The feature persisted as a consolidated turf-lined earthwork of a shallow ditch and bank. This horizon was overlain by a thin layer of clean redeposited bright yellowish-brown sand subsoil, which, significantly, merged with the redeposited subsoil backfill of Burial 187 and indeed, was indistinguishable from it. It would appear that this grave was excavated while the ditch lay open.

The shared stratigraphic horizon of ditch and grave and the tightly spaced burial group suggest a deliberate association. Although little was seen of the ditch, later heavily truncated, its width implies a quantity of quarried sand and its location a structure appropriate to the graves – perhaps a round or square barrow, with which they were covered or to which they were later added.

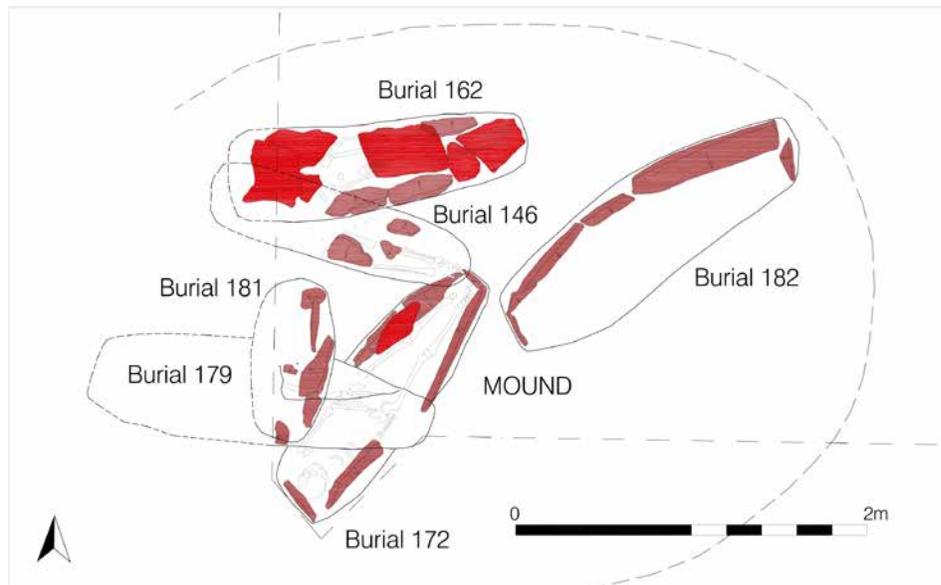


*Illustration 4.5*

Cist Burial 172, excavated in the south-west corner of the nave

On top of the cut for Burial 188 there survived the remains of a small earth mound covered with a series of flat sandstone slabs with a possible small post-hole at the eastern end (Illus 4.10). These are interpreted as constituting a deliberate grave marking, and add to the evidence that a mound was associated with these graves. The implication of the relative heights is that the monument had been visible during the subsequent layout and construction of the

## PORTMAHOMACK ON TARBAT NESS



*Illustration 4.6*

The cist burial cluster at the south-west end of the excavated area ('South Cluster'). Burial 162 and Burial 172 are the earliest, followed by 146, 179 and the child 181

adjacent Period 2 tank (S4) and road (S13). Thus it may be that both this group and the 'cluster', suggested as being beneath a mound in Sector 4 (above), represent similar memorial structures. If so, it would be possible to envisage an origin for the Period 1 cemetery as a series of cist graves under barrows (for the type see Ashmore 1980; Close-Brooks 1984a; Wedderburn & Grime 1984; Alexander 2005).

Some support for this suggestion is offered by a vertical aerial photograph taken in 1945, which shows a group of circular features in the land north of the Tarbatness Road (Illus 4.11). These vary in diameter from less than 3m to over 8m, and are set in rows across the line of the crest. Lines of later paths cross the area, one directly emanating from the wicket gate to St Colman's Church. These features are unlikely to have remained above ground, or they would have been recorded, and were probably then showing as parchmarks. The date was 31 August and the average temperature was the hottest for the war years (Marsh 2011; Perry M 2006, 7). By 1994, this area of land had been completely built over, apart from the narrow strip that became Int 15 (Sector 3). To our knowledge, no identification has been suggested for these features and there is no information implying that stone slabs or skeletons were encountered during building along the Tarbatness Road (McCullagh & Wood 2010). The features resemble ring ditches of different sizes and recall barrow cemeteries of the Bronze Age or later. As such they link discoveries made both to north and south of them (at Balnabruach and Chapel Hill, see below, p 100).

### ***Other structures in the burial zone***

Within Int 15 (Sector 3) on the beach side of the crest, two curvilinear gulleys were identified and excavated (OLA 6.2/3.2.2;

Illus 4.12). The more southerly (F5), heavily truncated, had been cut directly into the powdery sand subsoil and varied along its length in width and depth, with two sterile pebbly-sand backfills that yielded a little animal bone and a fragment of iron. The other (F34, S14) was better defined and consisted of a segment of curvilinear ditch running broadly north to south with curves at either end, trending towards a possible circular form. The ditch was backfilled with sterile sand; a group of stones within the backfill positioned at the southern end were recorded as possible post-packing. S14 was an indication of a circular ditched enclosure about 7m in diameter. It lay close to the possible barrows shown on Illus 4.11, and may itself have signalled the remains of a barrow ditch.

Lying still further south, curvilinear ditch F559, designated as S10, was defined following the removal of a buried soil associated with Period 2 occupation (Illus 4.12). It was oriented broadly NE-SW, opening onto a wide flat base on the down slope to the south (OLA 6.2/3.2.2). With a stepped profile and initially filled with windblown sand, S10 may have functioned as a drain or eaves-drip of a small roundhouse *c* 7m in diameter. However its location close to the burial zone and its dimensions again raise the possibility that this was a ditch that had been dug to create a small mound and left open. The central area, where a hearth or burial would have been situated, was obscured by the outflow from S4. The proposal that these trace structures belonged to burial mounds has the spatial logic of separating the barrow cemetery on the crest from the more sheltered valley by the stream, the site of the circular feature S11, which had a central hearth and was more certainly a building (below). These traces encourage the view that there was a prehistoric cemetery along the shore ridge overlooking the Portmahomack bay, to which sixth/seventh-century cist graves under mounds were

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Illustration 4.7  
Cist burials in Sector 4, showing the cluster/mound at the west end, and the location of ditch F129

## PORTMAHOMACK ON TARBAT NESS



Illustration 4.8

Cist burials in Sector 2: (a) Burial 186, adult male in cist grave; (b) Burial 186, showing the cist; (c) Burial 187, adult male in cist grave

added, these in turn guiding the subsequent interments of the eighth century.

### *Evidence for diet from carbon/nitrogen isotopes (Curtis-Summers OLA 7.2.2.1)*

Three Period 1 burials were examined for their diet using isotope signatures of carbon and nitrogen (Burials 166, 169 and 172). The isotope values of these individuals suggest that they were consuming a similar range of foods to the monks who succeeded them in Period 2; that is a terrestrial, high protein diet. One adult male (Burial 169) had slightly lower  $\delta^{15}\text{N}$  values than that of the later Period 2 group, although not of sufficient magnitude to suggest a difference in trophic level.

Table 4.4

### **Evidence for childhood provenance from Oxygen and Strontium isotopes (Period 0 and 1) (Walther OLA 7.2.2.2)**

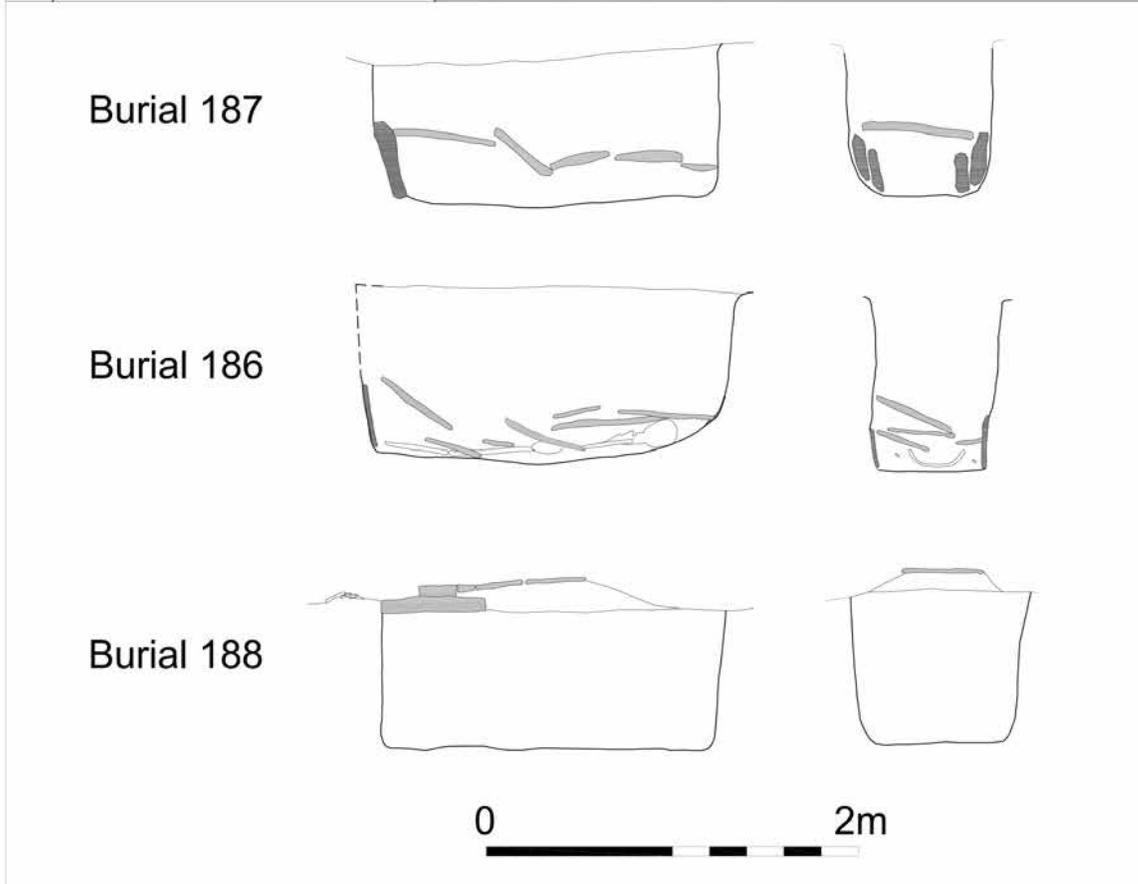
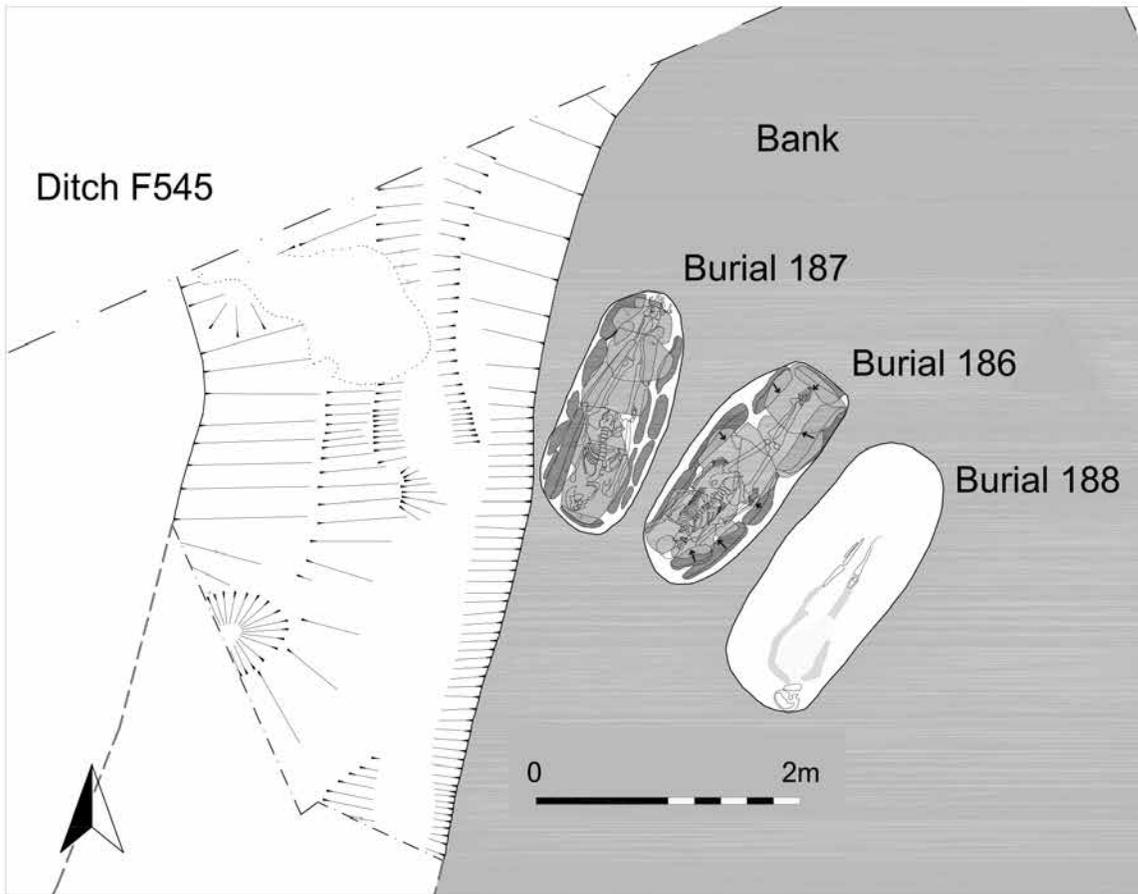
Period 1	Source	Provenance
0	Balnabruach A	East Britain (local)
	Balnabruach C	East Britain (local)
1	Burial 170	Local
	Burial 172	Western Britain
	Burial 186	Britain?
	Burial 187	East Britain

Six burials were examined for their provenance, using oxygen and strontium isotope signatures. While the two Middle Iron Age individuals (and Burial 170) were of local extraction, three of the four occupants of graves belonging to the sixth/seventh century were more exotic. Burial 172 came from west or central Britain and Burial 186 and 187 were probably from Britain but not of local origin (Digest 4.4).

There was much variety in this small sample of the sixth/seventh-century population at Portmahomack. It included men (nine), women (four) and one child; age indications ranged from the empty grave of a child to a sixty-year-old somewhat battered warrior with a blade injury (Burial 149). There was a man of unusual height (Burial 187 at 1.8m) and a woman of 1.54m (Burial 166). The four persons examined had a terrestrial high protein diet. Out of another four, tested for childhood origin, only one was raised locally, although all had grown up in Britain.

### **Status and religious affiliation**

At Whithorn, Peter Hill decided that his lintel graves (cist burials) were lower status than his log coffins, on the grounds that the former are easier to assemble (1997, 70). At Portmahomack the cist graves provide an obvious contrast to simple graves (where the use of timber is not suspected), and the association with



*Illustration 4.9*

Plan of burials in Sector 2, showing ditch (F545) and location of bank above, profiles and sections of burials below



Illustration 4.10  
Relict mound above Burial 188

burial mounds endorses the assessment that, relatively speaking, these are special investments.

A Christian affiliation with cist burial has been argued on the doctrinal grounds that the body is to be resurrected on the last day and should be protected in the meantime – thus the need for robust slabs (Smith 1996, 28; Ó Carragáin, T 2010b, 219). Others see the practice of inhuming the dead in cists under low mounds and cairns as a north British tradition with its roots in the Roman period (Loveluck in Daniels 2007, 187; Maldonado 2011, 95–8). The dates of the Portmahomack cist burials would seem to detach them from being the necessary consequence of a known Christian mission.

In general, the prominent situation of the burials at Portmahomack in Period 1, the use of mounds and the high protein diet suggests that those commemorated may be assessed as high status. As for religious alignment, it has been argued elsewhere that burial rites do not neatly align with ‘Paganism’ and ‘Christianity,’ but neither do they mean nothing (Carver 2001; 2010). Allowing that the burial parties have agency, burial rite reports ideological allegiance, but the ideology itself may be local or ephemeral or presently unknown. Changes in burial rite imply changes in thinking, which in this case occurred in the early first millennium when the cist-grave cemetery was established and again in about 700, with the change to head-support burial argued as characteristic of the Period 2 monastery (Chapter 5.2).

### The settlement

#### Environment

Signs that the marshy ground south of the burial ground in Sector 2 was subject to a human exploitation were evident from surviving peat in the valley (C2296), which made its

latest appearance between radiocarbon dates AD 600–760 and most probably before 700 (p 68). This peaty stratum appears to provide a snapshot of the valley bottom as it was drying out. There were plants typical of disturbed places and weeds of cultivation, such as annual nettle (*Urtica urens*), docks (*Rumex*), fat hen (*Chenopodium album*), chickweed (*Stellaria media*), corn spurrey (*Spergula arvensis*) and wild radish (*Raphanus raphanistrum*). The presence of heather, especially as charred fragments, together with scattered charred grains and chaff fragments from barley (*Hordeum*) point to human activity. There were indications in the beetle fauna for the presence of artificial habitats (via *Falagria* or *Cordalia* sp. and *Gyrophypnus ?angustatus*). At least four kinds of fly puparium were present in this assemblage, too, perhaps adding to the evidence for detritus from human occupation. It should be noted, however, that the only strongly synanthropic insect was the spider beetle *Tipnus unicolor*, a species generally associated (in modern contexts) with damp old buildings. Although some of the wetland plant taxa from the earlier phase persist, and there are occasional records of waterside beetles, the moss flora is very depleted in the upper part of the peat and the taxa present are not the fen/marsh plants of the earlier period (see p 73 above). The insect fauna is increasingly dominated by terrestrial taxa, especially grazing land mammals (Hall & Kenward Digest 7.4, C2296).

#### Structures

The micromorphology sequence obtained from beneath the later road (S13) sets the scene for the development of the Period 1 settlement (Illus 4.13). The area was a sand dune overlaid by windblown sand and ash with no evidence for the in situ growth of vegetation. The ash was derived from either a grass-rich turf, or more likely a thin peat that had developed upon a silt/sand-rich substrate. The relative scarcity of ash rich in biogenic silica may also be a function of the carrying capacity of the wind, ie it was too strong to deposit the finer ash. The presence of very small fragments of bone, possible coprolite and a rounded clast of burnt clay suggests that the source of the ashy components of the deposits may have been a midden heap onto which domestic and industrial waste was being dumped (Ellis in Digest 7.5).

Evidence for occupation to the south was grouped as S11 and consisted of a slight terrace bounded by a curvilinear ditch (F547) enclosing a hearth (F535) and a slag pit (F560), both these signalling industrial use (Illus 4.13). During the life of the hearth, a complex of freshwater collection features was constructed, represented by a downslope ditch (F534), gulleys (F526 and F572), a stone-lined cistern (F530), wicker-lined well (F527) (see Period 1 in stratigraphy for Sector 2 in Ilus 3.13). Within this group, F526, F527 and the F435 feature group clearly predated the construction of the Period 2 eastern boundary wall F149.

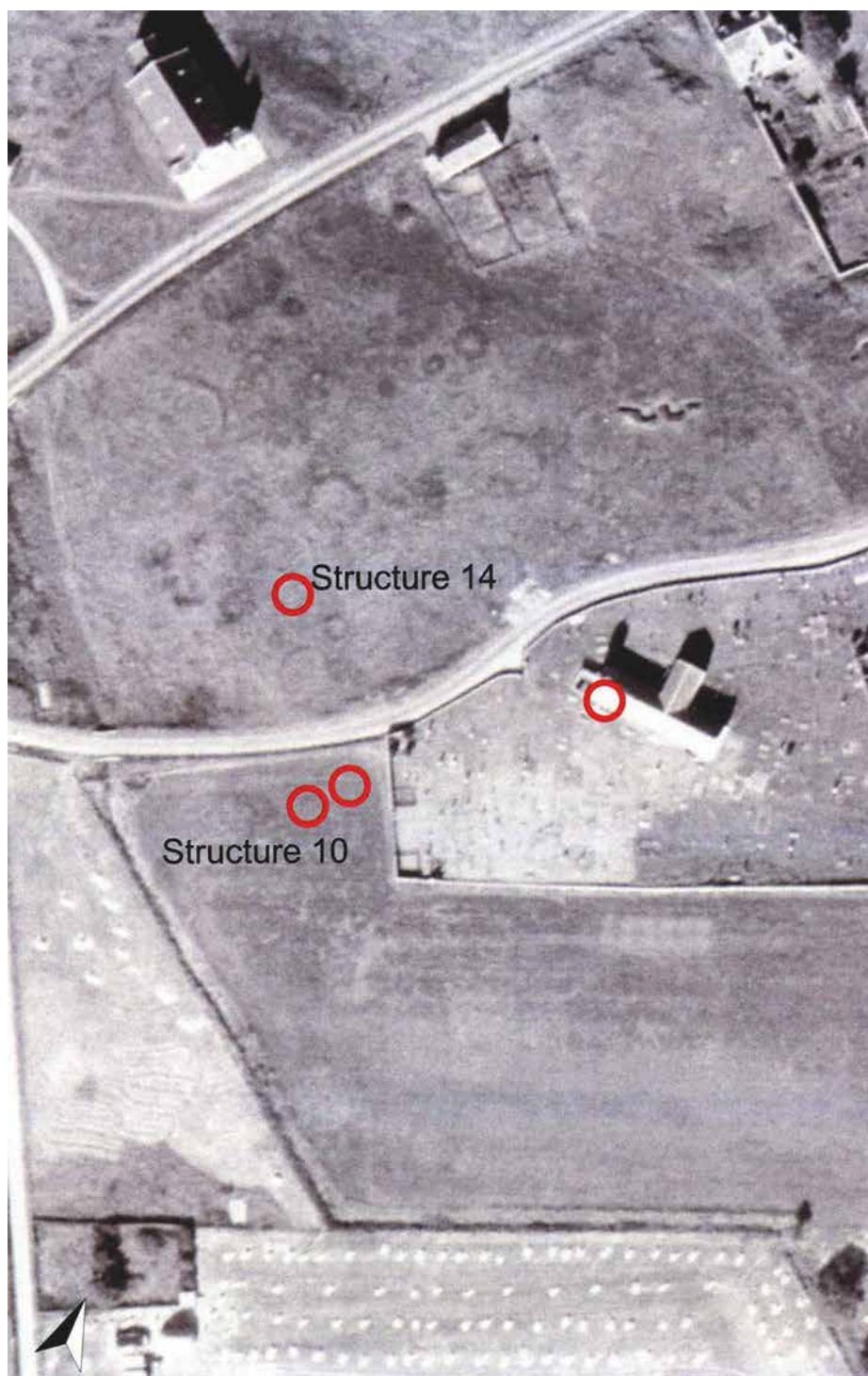
The size of S11 was inferred from the curving gully, the edge of a terraced platform and a cluster of stones (F578) each of which was roughly equidistant from a central hearth (F535) ringed by stake-holes (Illus 4.14). The implied diameter of the building is 7m. No ring of posts or stakes was recorded, implying that the wall of this small building or shelter was constructed entirely in turf.

**Industrial activity**

Within S11, the hearth (F535) consisted of a sub-rectangular cut into subsoil against which was set a sandstone slab and cobble kerb (Illus 4.15). Three sides of the hearth each consisted internally of a single upright stone achieving the required depth. The northern side, however, was different and consisted of three courses with an integral void at hearth-base level, while externally the construction cut had a more gentle gradient. This void within the stone make-up appeared to have been deliberate and would have allowed air into the hearth at a low level, possibly aided by bellows; a sole upright sandstone slab to the immediate north of the feature may have provided bellows support. Adjacent to the void, the initial hearth fill consisted of a pale yellow, oxidised ash deposit, which appeared to have been created in intense heat. Surrounding the hearth was a series of stake-holes, which were identified externally on all sides of the feature, although represented only by a single example on the north side. Thus it is possible that the hearth was fitted with a stake-and-turf cover, incorporating an air supply from the north, which would have enabled the creation of high temperatures as well as funnelling smoke.

Adjacent to the hearth was a slag pit (F560), also contained within S11 (Illus 4.16). Measuring 1.30×0.60m and containing a single concreted slag-rich fill, the pit was contemporary with the early use of the hearth and also associated with ironworking. The hearth and the pit between them produced just over 2.3kg of undiagnostic iron-smithing slag, together with dense slag that indicates that secondary smithing was probably being undertaken. Other slags recovered from Period 1 backfills and layers included four smithing hearth bottoms (Spall & Mortimer in Digest 6.9).

The use of the hearth endured: a new lining overlay the earlier kerb make-up and thus presented a three-sided hearth, open to the south. Notably, evidence for the hearth having been cleared out from the south was manifest as a mixed clayey-silt ash and charcoal deposit that had the appearance of representing a general mixture of cleaner homogenous ash fills. The fuel used by the hearth contained heather roots and peat turves with traces of barley grains and charred hazel nutshell (Hall in Digest 7.4). This implies lower temperature activities such as secondary smithing. A charred

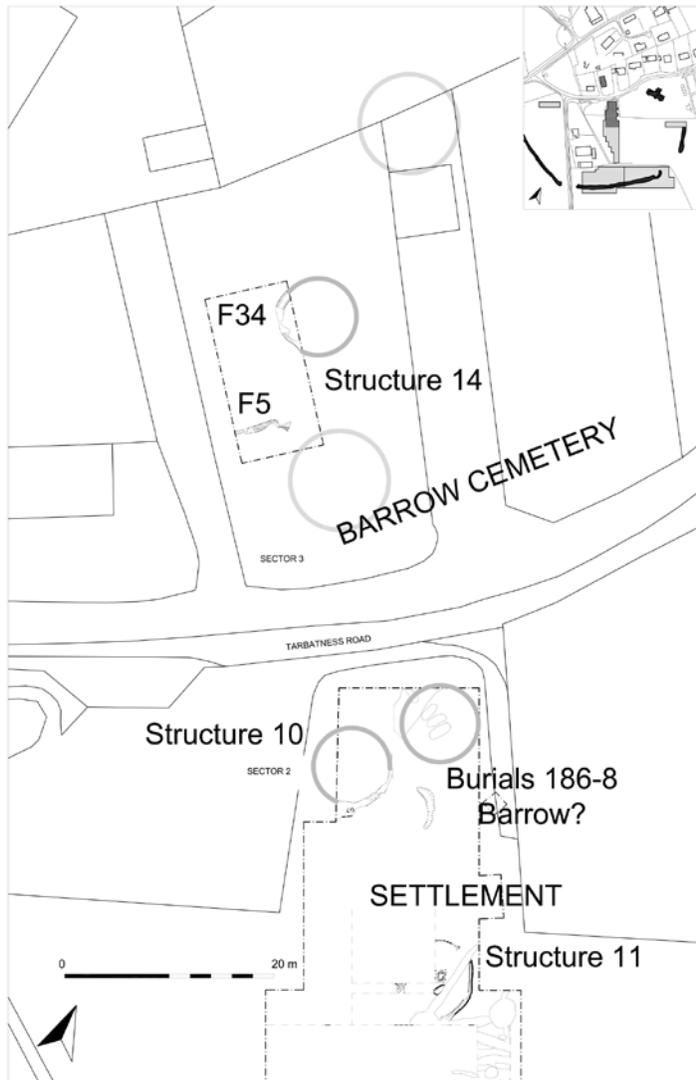


*Illustration 4.11*

Possible round barrows seen north of St Colman's Church, Portmahomack in 1945  
(RCAHMS 106G/UK751 flown 31 Aug 1945)

hazelnut shell was submitted for radiocarbon dating and returned as AD cal 640 to 770 (see p 42). Although this is a broad date range, the stratigraphy indicated that the use of the hearth was contemporary with, or pre-dated, the use of the wicker-lined well

## PORTMAHOMACK ON TARBAT NESS



*Illustration 4.12*

The locations of possible barrows in Sector 3 and at the north end of Sector 2, including S10 and 14

(F527), which was measured at AD cal 610–680, allowing both in the seventh century (below).

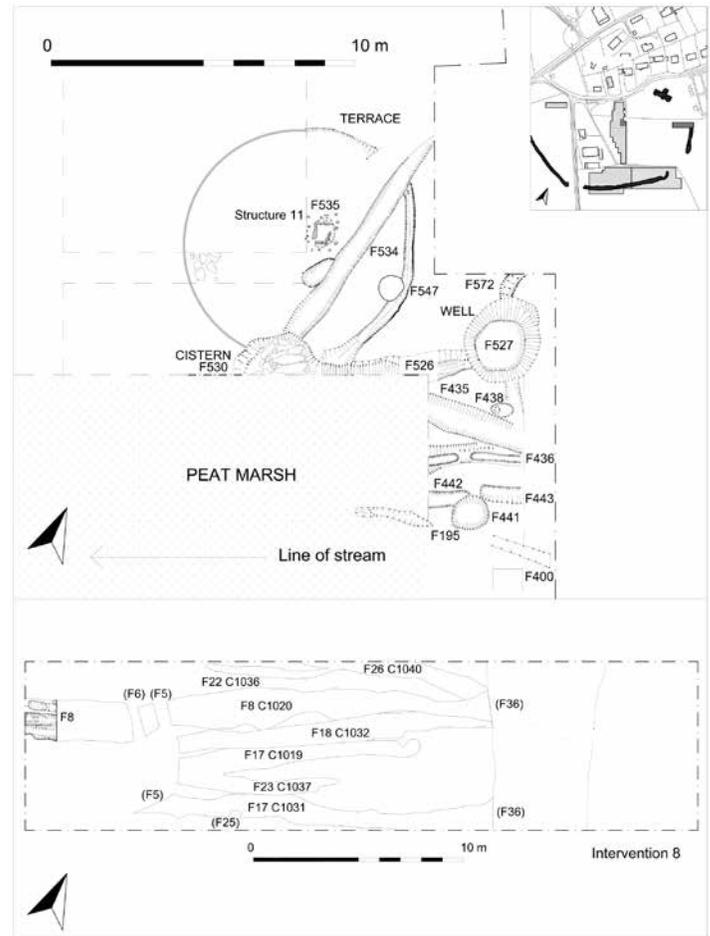
Concurrent with the use of the hearth, a number of deposits were allowed to build up within the small terrace cut into the natural slope defining the north side of the working complex, partially levelling it. Nearby, a buried soil appeared to have functioned as the working surface for the early occupation of S11. It contained a number of slag fragments and small iron objects including a possible knife blade, nail or pin fragments and a whetstone.

### **Water management**

During the life of hearth F535, a series of measures were put in place dedicated to the collection or management of fresh water.

The gully of S11 (F547) had an erosion pattern suggesting that it had intercepted and emptied water towards the marsh; after an initial episode of silting it was comprehensively backfilled. A gully F534 then cut across gully F547 and ran past the hearth in a south-westerly direction. Ditch and hearth were in use together until their upper fills intermingled, as the section across them shows (Illus 4.17). Ditch F534 was destined to collect water as well as evacuate it, since it fed a stone-lined cistern F530 (Illus 4.18). The basal fill of the ditch F534 was dark and greasy, suggesting a wooden lining as noted in the contemporary ditch on the hilltop (F129, below) and pre-echoing a technique that would be applied to the roadside ditches of the Period 2 monastery in the same place (p 48).

Further east was a wicker-lined well (F527) (Illus 4.13, 4.19). The preserved wickerwork lining protected an area c 1.0m in diameter and survived to c 0.50m high where the feature penetrated deep into the water table, bottoming on a horizon of running sand. The construction cut, wider than the wicker lining,



*Illustration 4.13*

The settlement zone near the stream. S11 and well F527 stand north of the marshy stream bed. The edge of the marsh was managed with fences (and possible gateways), and canalisation of water. This begins upstream to the east in Int 8 (below)

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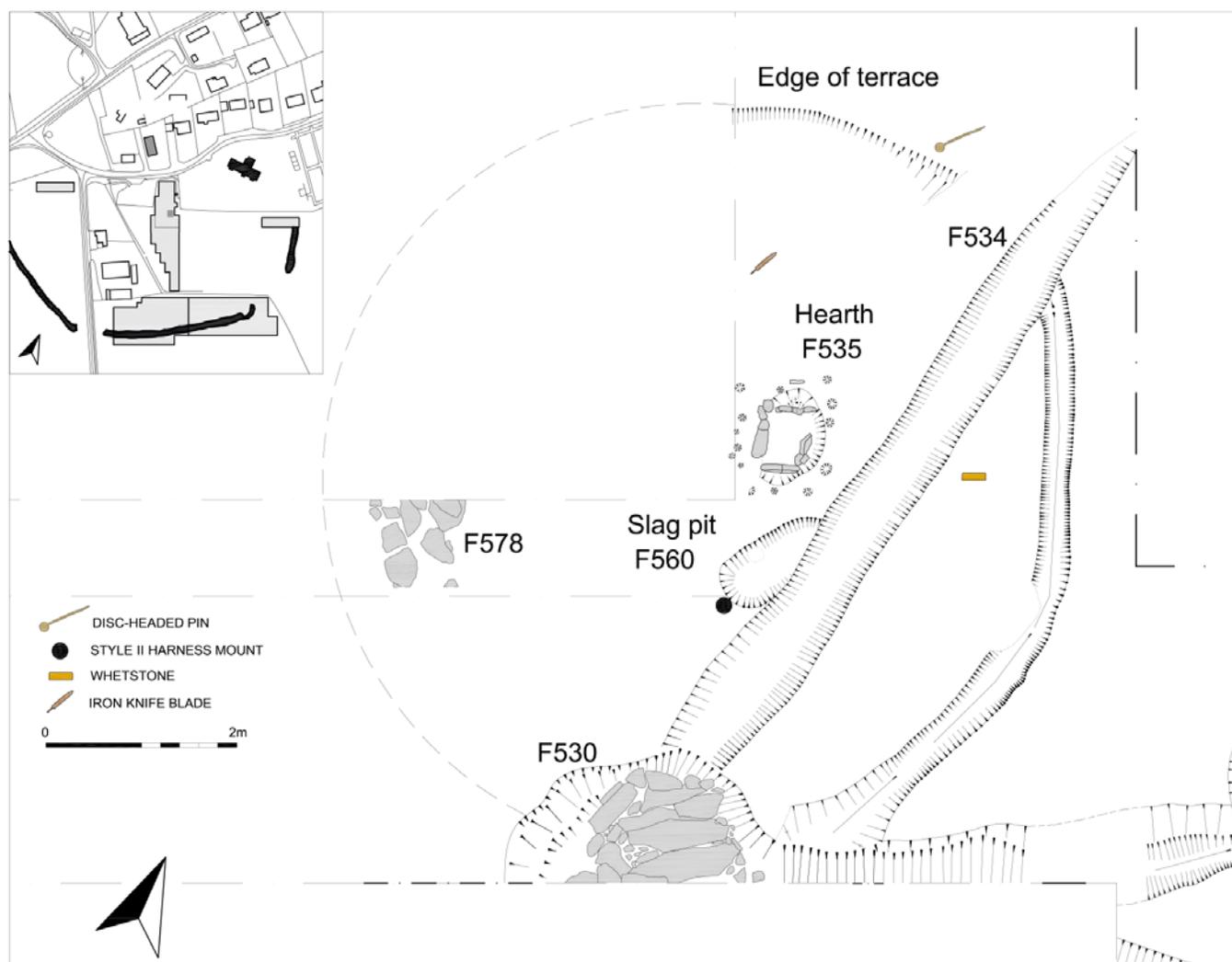


Illustration 4.14

S11, with hearth F535 and slag pit F560, showing findspots of associated finds. Cistern F530 and feeder F534 are later additions. The cistern is also connected to well F527 via culvert F526

had been backfilled with redeposited sand. During the excavation, the feature filled quickly with water and its sides became unstable, collapsing partially on the east side. A sample of the wicker lining was nevertheless recovered and a rod identified as willow of about fourteen years' growth was selected for radiocarbon dating which returned a date of AD 610–680. The well had three feeders or overflows one of which (F526) connected to the cistern (F530) (Illus 4.13). Thus well, cistern, downslope gully (F534) and hearth belonged at one point to an integrated design in which the industrial activity around the hearth was linked to a wider system geared to the collection and storage of freshwater.

A number of gulleys, a small pit and a post-hole located in the valley floor were associated with this design (F435; F436; F438; F439; F441–F443; Illus 4.13). These features were excavated directly into Period 0 strata at the peaty fringe of the valley floor and may represent attempts to canalise water or

erect fences protecting the settlement area from the marsh. A wicker hurdle indicated by willow stakes had been erected along the line of silted up channels, returning a radiocarbon date of AD 630–780 (F436). The hurdle, together with two comparable and parallel features further south, had gaps aligned with each other as though providing a passage from industrial area into marsh. Outside the excavated area to the east, these features were echoed and continued in the evaluation trench Int 8 in the form of a series of parallel gulleys. The respective AOD heights from Int 8 in the east to the Int 24 group show a fall from c 14m (at Int 8) to 12.6m AOD (at Int 24).

### *The ditch on the hilltop (Sector 4)*

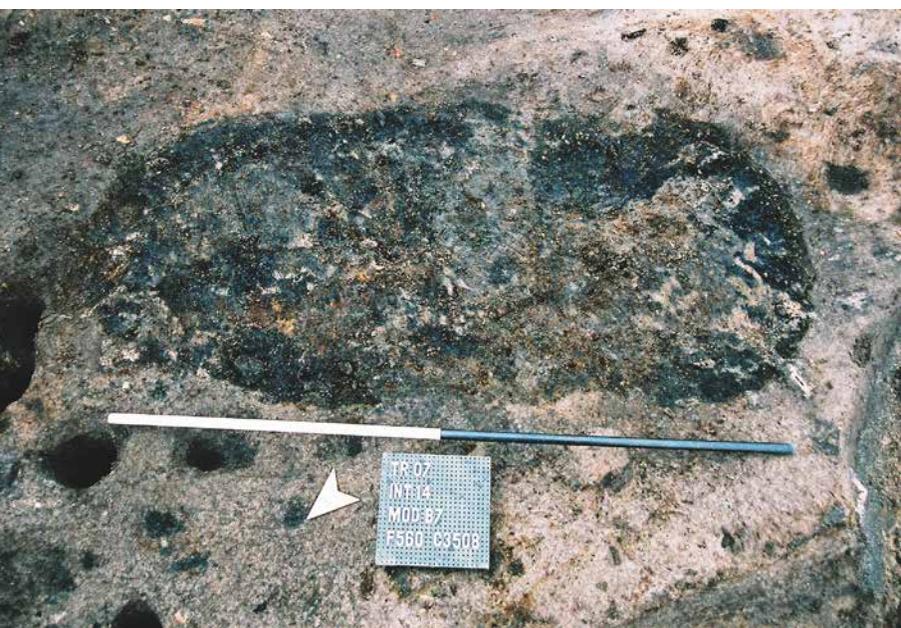
A single non-burial feature was defined in the area of the burial ground at the top of the hill: a ditch 0.75m wide and running

## PORTMAHOMACK ON TARBAT NESS



*Illustration 4.15*  
Hearth F535 at Phase 1, inside S11. The void designed to introduce a draught shows in the centre of the north side (on the left)

broadly W–E (Illus 4.20; 4.21; F129; for location see Illus 4.7). It was traced for 8m and proved to consist of a narrow, steep-sided, linear cut deep in sand subsoil. The base of the ditch was recorded at between 16.0–16.15m AOD with a surviving maximum depth of c 0.55m. The fill system of the feature began with an initial



*Illustration 4.16*  
Slag pit, F560

slumping of sand edges, followed swiftly by the insertion of a lining, part wooden and part sandstone slabs. When sampled and processed by flotation, the lower fills were found to contain a quantity of burnt rye, wheat and barley. A carbonised barley grain was radiocarbon dated to AD 540–660. This deposition was followed by an episode of collapsing edges of sterile sand, followed by another deposit of dark organic material, which also produced charred cereals identified as wheat, barley and rye (p D142). Subsequent fills consisting of redeposited sand and gravel subsoil appeared to derive from the excavation of graves nearby (OLA 6.3/3.1.2). The grain was charred, implying redeposition after a fire or an accident during processing. The heights of the ditch base vary by only 0.15m along an 8.0m excavated length, discouraging its interpretation as a drain. As well as a wood lining, it may have had a wooden lid, so raising the possibility that grain was stored, steeped or allowed to germinate in a contained space. However the mixture of rye, barley and wheat and the presence of grains and rachis (ear stalk) fragments, as well as material derived from turf, suggest that it may be burnt debris from a straw-and-turf roof (Allan Hall in Digest 7.4). The implication is that a Period 1 structure stood east of the first cist graves, and the ditch was backfilled during clearing up or renewal. It does not need to have been a building as such; Scottish traditional constructions include the ‘fale dike’, a turf wall with a turf or thatched coping that ran alongside a field boundary or ditch (Walker & McGregor 1996, 22). Structures made largely of turf are suggested as plausible components of the Portmahomack repertoire (see Chapter 5.9, p 228).

The crops represented in the ditch were rye, barley and free-threshing hexaploid wheat. The presence of wheat is significant because its occurrence at this date is rare in Scotland. At the Anglian monastic site of Hoddom, Dumfries and Galloway, wheat was thought to have been imported (Lowe 2006, 195); here however, the presence of rachis argues for on-site cleaning. Oats, a staple at Hoddom, were not certainly identified at Portmahomack. The fill also included burnt turf, charcoal and fuelash slag (Digest 7.4; F129). The ditch on the hill signals the existence of a grain-processing station beside the barrow cemetery and associated with the settlement. The ditch itself may have been used to hold water, or to canalise it towards the industrial area down the slope. The traces of barley grains in four samples from the hearth of S11 (F535) and from an adjacent dump of spent fuel might represent material from straw, or accidental burning of grain intended for food, in the hearth. Charred hazel nutshell was present in three samples in this group. The barley and the timber-lined ditches provide some connection between the industrial area and the grain processing on the hilltop.

### Assemblage from the settlement

#### *Status objects*

An iron dress pin with a disc head was found beside the northern terrace edge of S11 (Illus 4.14); a further example was recovered from Period 1 strata and three others including a copper-alloy example with crescentic head and octagonal shank, were recovered residually, but almost certainly emanated from Period 1 (Illus 4.22;

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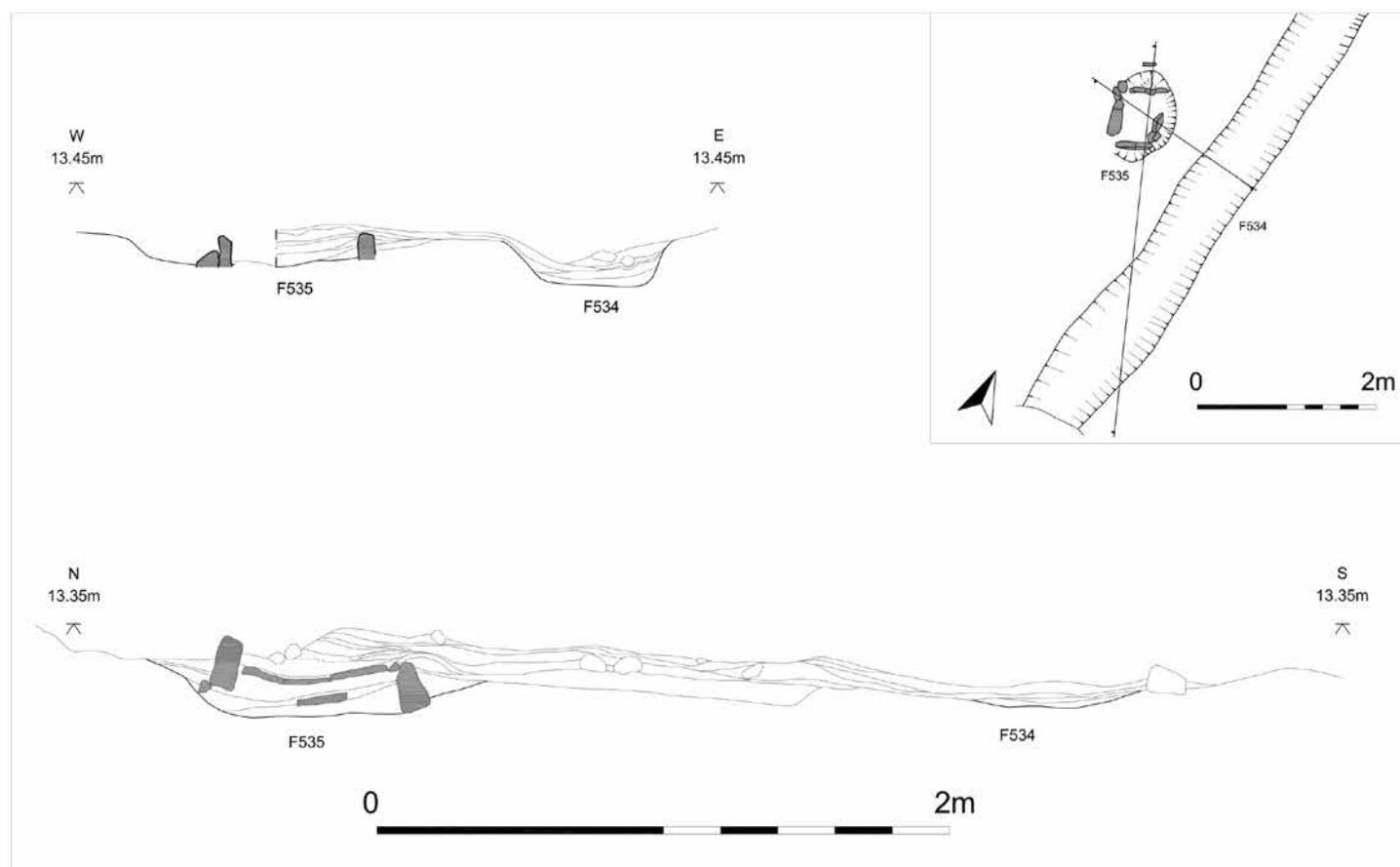


Illustration 4.17  
Sections through hearth F535 and gully F534

see Digest 6.1 'Dress pins'). A trample layer near pit F560 yielded a circular gilded copper-alloy disc bearing intricate Style II triple-strand interlace (14/4548) identified as a sixth/seventh-century harness mount (Illus 4.23). These two object types provide useful indications of the status and date of the occupants of the Period 1 settlement.

Iron and copper-alloy pins with disc heads are found all over Britain, varying from plain examples dating to the fifth/seventh century to the grand silver-gilt decorated oval disc head from Brandon of the late eighth (Webster 2012, 139). The more collectable examples tend to be of silver or copper alloy, those of iron being corroded or discriminated against by detectorists. The type derives from Roman exemplars, initially made for the hair but from the fourth century more appropriate to dress (Laing & Longley 2006, 145). A bronze pin from the fort at Newstead dated AD 80–180 offers a close parallel to Portmahomack (Curle 1911, pl. xcii no 15). Their successors flourished in fifth/sixth-century Scotland as 'hand pins' also presumably intended to fasten clothing rather than hair (Alcock 2003, 311–12). Of the thirty-six pin moulds found at the Mote of Mark, two are for pins headed with a flat disc (Laing & Longley 2006, 143). Copper-alloy flat disc pins are found in Anglo-Saxon cemeteries in seventh-century graves ('Kingston disc-heads,' Ross 1992), for example

in graves 132 and 158 at Buckland Dover (Evison 1987, 175, 325, 333; dated 650–675 and 675–700 respectively). Copper-alloy disc-headed pins similar to those from Portmahomack have also been found at the seventh-century settlement at Chalton, Hants (Champion 1977, 369). Examples in iron are less common: there is a reasonably close parallel from grave 369 at Morningthorpe Norfolk (Green et al 1987, 330; Ross Type XXII; 1992; Fig 5.19b). It was 120mm long and occurred with an annular brooch and a Roman penannular brooch in a female grave, presumably dug in the fifth or sixth century (Green et al 1987, 143). More closely related to Portmahomack are the iron 'stick pins' recorded in Whithorn's Period 1 (*c* 500 to *c* 730 AD), one with a flat crescentic head (Hill 1997, 418, Fig 10.97, 41.14).

The Portmahomack terminal disc presents a packed interlace of triple strand serpentine bodies. It finds a parallel in a find from 1929 at Dunadd, which Thomas (1990, 19) identified with the face of a Frankish disc brooch. The sixth/seventh-century Irish Sea exchange regime with France, proposed by Thomas, reaches at least as far as Craig Phadrig, near Inverness, so a Frankish import on Tarbat Ness would not be out of the question. Lane & Campbell (2000, 246) compared the Dunadd disc with Sutton Hoo and proposed it as a piece of Anglo-Saxon aristocratic horse gear. At Mote of Mark, moulds were found that also cited the patterns of

## PORTMAHOMACK ON TARBAT NESS



Illustration 4.18

Cistern F539 (right) fed by gully F534, draining water down the slope. The gully to the left belongs to the Period 2 roadside ditch

the Sutton Hoo bridle (Laing & Longley 2006, 71, 148–9). The disc from Dunadd (30mm dia), the Mote of Mark moulds (30mm dia) and Portmahomack disc (25mm dia) do indeed recall the bridle disc at Sutton Hoo, in size, form and style (Illus 4.23). The best



Illustration 4.19  
Wicker lining of well, F527

Sutton Hoo exemplar is the upper terminal (35mm dia) on the cheek piece of the bit of the bridle of the Mound 17 horse. The face of this disc also carries interlaced triple-band serpentine animals, thought to represent the best of Style II ornament in East Anglia. The Sutton Hoo bridle was manufactured in the later sixth century and deposited around 600–620 AD (Evans 2005, 227, 230, 234; Carver 2005a, 490).

The lower terminal of the Sutton Hoo bridle bit is a decorated axe-shaped ‘pendant’. Endorsement that the Scottish discs are likely to come from bridles, and that these may also be made in Scotland, is given by the moulds at Mote of Mark, which include an example of the diagnostic axe-shaped terminal as well as two roundels (Laing & Longley 2006, 71, 148–9). The nature of the Anglo-Saxon and north British interaction implied by these objects is unlikely to be a simple import/export relationship involving the objects as commodities. Intrusive ‘Germanic’ styles have been seen among the moulds found at Dunadd: bird-headed brooch terminals and three-piece buckles, a *pressblech* mount and a gold-and-garnet stud. ‘Celtic’ objects are represented by panelled terminals and a hanging-bowl escutcheon. The occurrence of the two classes of object suggests ‘a physical context where Celtic artisans were engaged in both copying and transforming the decorative style of imported Germanic metalwork’ (Campbell & Lane 1993, 57). The Hillquarter saddle mount from Ireland gives further evidence for a shared equestrian ‘language’ (Kelly 2001). Bridle parts have now been recognised widely in sixth/seventh century Britain, implying interaction at least at aristocratic level (Dickinson et al 2006).

It is reasonable to look for Roman, Anglo-Saxon and Irish connections in the metalwork of the fifth/seventh century in Scotland, and to attribute them to cultural survival, trade or reworking by itinerant smiths. In this context, it would be worth also drawing attention to the British as inheritors of Iron Age and Roman practice and as potential players in both manufacture and elite expression (Alcock 2003, 124; see also Chapter 5.3, *passim* for references in stone carving). However, like the sculpture that was to follow at Portmahomack, these Period 1 objects are not ethnically diagnostic. It may be that art and craft enjoyed a more fluent network than ethnicity, in the manner of a higher language, shared especially among those of similar rank. Although not gender specific, the Portmahomack bridle mount and iron pins fit well with a sixth/seventh century insular equestrian class of which both sexes were members. In this, the Portmahomack settlement evidence aligns with the rank and sex of its contemporary and adjacent cist burials.

### Plough pebbles

Plough pebbles were found in Sector 2, although always residually. These small pebbles are inserted into the couler of a wooden plough to protect it from erosion by the soil, and they are recognisable by being flattened on one side. At Whithorn they were recovered from fifth- to ninth-century contexts and associated with plough marks of the mid-ninth century (Hill 1997, 80, 464–6). All the examples at Portmahomack were found in Period 2 contexts in an area coincident with the north edge of the marsh (the foundation raft of the Period 2 S9 yard

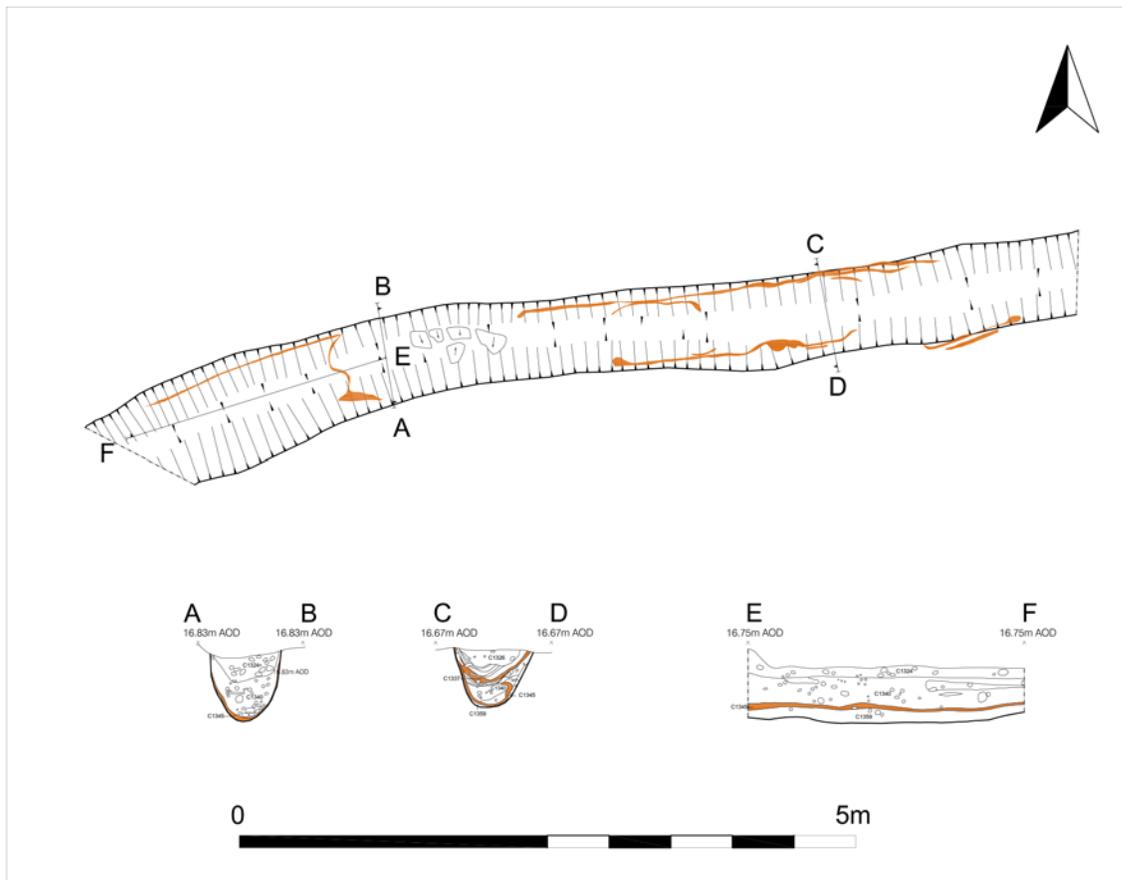


Illustration 4.20  
Wood-lined F129, plan and sections

wall within the Period 2 boundary wall and in early Period 2 deposits on the east side of Sector 2). Here the array of residual pebbles is compelling (Illus 4.24). As built, the east boundary wall was flanked by a wicker hurdle found charred in situ and associated with a collapse deposit of possible turf and burnt hurdle. This deposit, and deposits associated with the Period 2 burnt destruction, yielded twenty-two plough pebbles, many of which were sooted and heat blackened. The distribution of pebbles close-by the later pool hugs the wall markedly with two examples tumbling into Period 3 metalworking dumps over the wall.

The distribution could imply that the northern slope of Sector 2 was ploughed using plough pebbles, but the excavated area produced no plough marks or environmental evidence for cereals, and was occupied by graves and an industrial area from the seventh century at latest. It is argued in Chapter 5.5 that the buildings and infrastructure of the monastery (Period 2) employed walls compounded of stone cobbles and turf. The close association between the plough pebbles and the boundary walls suggests another explanation, namely that they arrived in turves cut from an area that had been previously cultivated using pebble-studded plough soles (see below). As such, the pebbles predate Period 2 and belong to a Period 1 episode of cultivation.

### Cultivation and settlement in Sector 1

There was widespread evidence for cultivation in Sector 1, where parallel scratch-plough marks and a podzol layer were extensively mapped (OLA 6.1/3.1.1; Illus 4.25; and see Illus 3.3 and Illus 5.9.6 for other sightings). The scratch-plough marks (ard marks) were generally visible as thin, grey-sand-filled interruptions in the yellow-sand subsoil, orientated broadly N-S and wavering slightly in their course, sometimes cross ploughed E-W (see Illus 3.5). The multiplicity of marks made it hard to determine any regularity but the lines were narrow, sinuous and rarely more than 15cm apart. A grey podzol covered the subsoil over much of the sector, but its relationship with the ard marks was equivocal. While the ard marks were generally seen to cut through the podzol and into the subsoil, in places the podzol also masked the ard marks, especially at the western end of the sector, where it was found to measure up to 0.10m in places. Thus the podzol might have been pre-existing and owed to a previous episode of cultivation, or it may have formed as a result of the (over) cultivation that produced the parallel ard marks. Features which may represent boundaries or drainage ditches were glimpsed in areas of thinner podzol, namely three extremely truncated gulleys, one possibly set with posts, filled with grey sterile sand (OLA 6.1/3.1.1; and see Illus



*Illustration 4.21*  
West-facing section through the fill of wood-lined gully F129

4.25). Plough marks were absent from the modules of the eastern 20m of Sector 1. Later ploughing was heavier in this area and will have affected both the survival of the ard marks and of the features assigned to S12.

#### **Structure 12**

The podzolic soil and the ard marks appeared to respect an area to the east, occupied by a penannular gully with a number of associated if irregular features (S12) (Illus 4.26; OLA 6.1/3.1.2). S12 was defined by a curvilinear gully (F31) marking out a circular form enclosing an area c 14.0m in diameter. The arcs of gully incorporated five breaks: two apparently deliberate, one at the north-eastern arc and a more substantial gap at the north-western side corresponding with the position of six post-holes. Three further breaches were due to truncation by later features: one at the southern side coincides with the position of a medieval plough furrow and two on the east side clearly result from the foundation trench of S5 (p 280). Investigation of the two termini of S12 revealed straight, steep profiles suggesting genuine butt-ends rather than gradual truncation, implying a wide western entrance, more appropriate to a shed or store or an unroofed pen. The fills of the termini consisted of grey or brown sterile sandy silts reminiscent of the ard marks and podzol, often containing stones but without clear evidence for posts. Within the perimeter and mostly on its western side were twelve probable post-holes, with no obvious spatial pattern. Three contained packing stones, and these together with two more lie on a circle appropriate to a ring of support posts, about 8.5m in diameter.

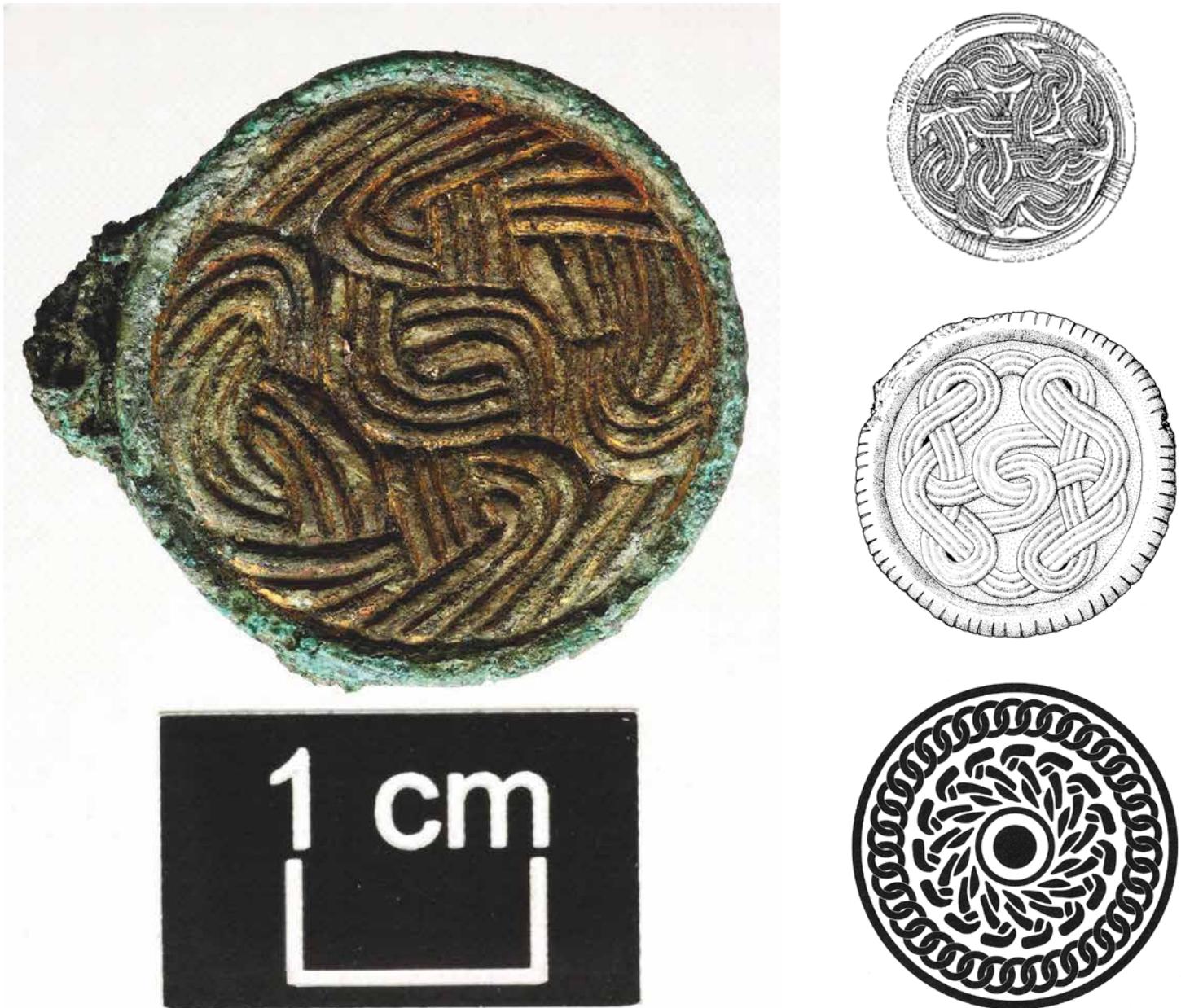
To the immediate south and west of S12 were several rectilinear and curvilinear features or parts of features, without diagnostic shape or backfill. Their characteristics were consistent with fences or other surface structures contemporary with S12. The location of F94, F83 and F79 would be appropriate to fence lines separating S12 from the cultivated area (see Illus 4.26).

#### **Contexts for cereal production in Period 1**

No datable artefacts, such as pottery, plough pebbles or ard points, or material suitable for radiocarbon dating, were recovered from the extensive excavation in Sector 1. S12 is unconvincing as a dwelling, having no hearth or regular post ring. Even if there were no upper floor, most roundhouses, even turf houses of any size, would be expected to have a ring of post-holes for roof support (Harding 2009, *passim*). S12 does not closely resemble the roundhouse of the Middle Iron Age brought to light by



*Illustration 4.22*  
Examples of iron dress pins. For dimensions see Digest 6.1

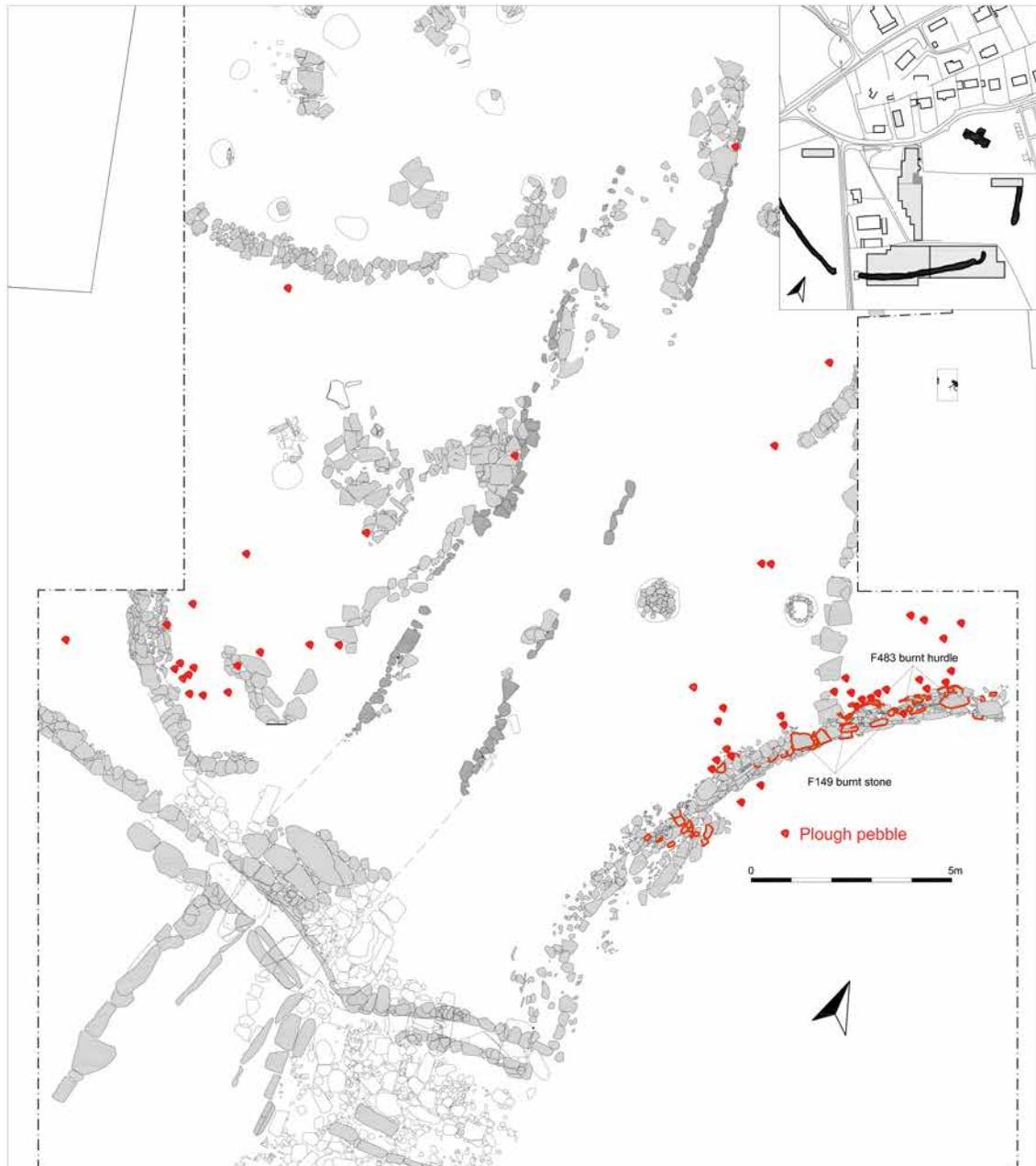


*Illustration 4.23*

Mercury-gilded, leaded bronze Style II harness mount (14/4548) with comparative objects from Sutton Hoo Mound 17, Dunadd and Mote of Mark (from mound) (Carver 2005, 490; Lane & Campbell 2006, 246; Laing & Longley 2006, 149)

Fraser Hunter across the Moray Firth at Birnie (2007), nor the roundhouses in southern Pictland, thought to continue in use well into the first millennium AD (Harding 2009, 186). The example in Sector 2 (S11) shows that a round building relying on turf would be a feasible structure of the sixth/seventh century at Portmahomack (see also Chapter 5.9). However in their surviving state, neither appear as robust structures. S12 might have served as a pen for stock, or a makeshift grain store where four-posters were clad by a turf barrier. Significant in this respect is its location on the edge of a cultivated area.

The marks left by cultivation are also chronologically equivocal. Ard marks have been recorded in association with a managed Bronze Age ploughsoil around Old Scatness Broch, Shetland, where micromorphological analysis detected the addition of domestic waste, primarily peat-fuel ash and animal bone, to the arable soil (Simpson et al 1998, 111; Plate 2; Guttman et al 2004). A Bronze Age economy was defined at Achany Glen in the second and first millennium BC, where the plough print was corded rig, narrow spade-dug cultivation ridges set 1 to 1.5m apart. Ard marks at Achany Glen were principally assigned to two



*Illustration 4.24*  
Examples of plough pebbles and their distribution (red symbols)

## FOUNDATIONS (PERIODS 0-1, TO c AD 680)

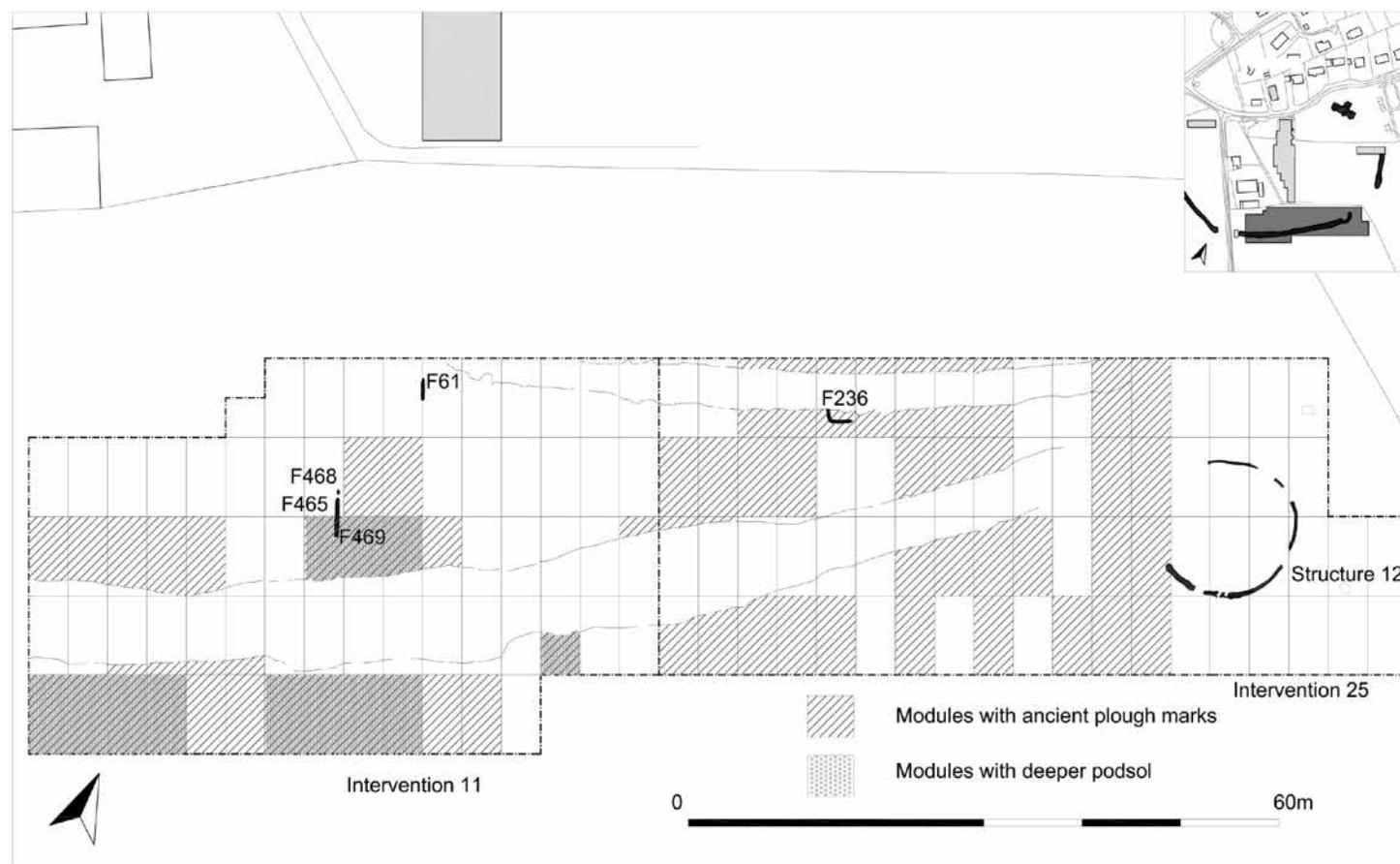


Illustration 4.25

Map of Sector 1, showing penannular structure S12 and areas with podzol, scratch-plough marks and truncated gulleys

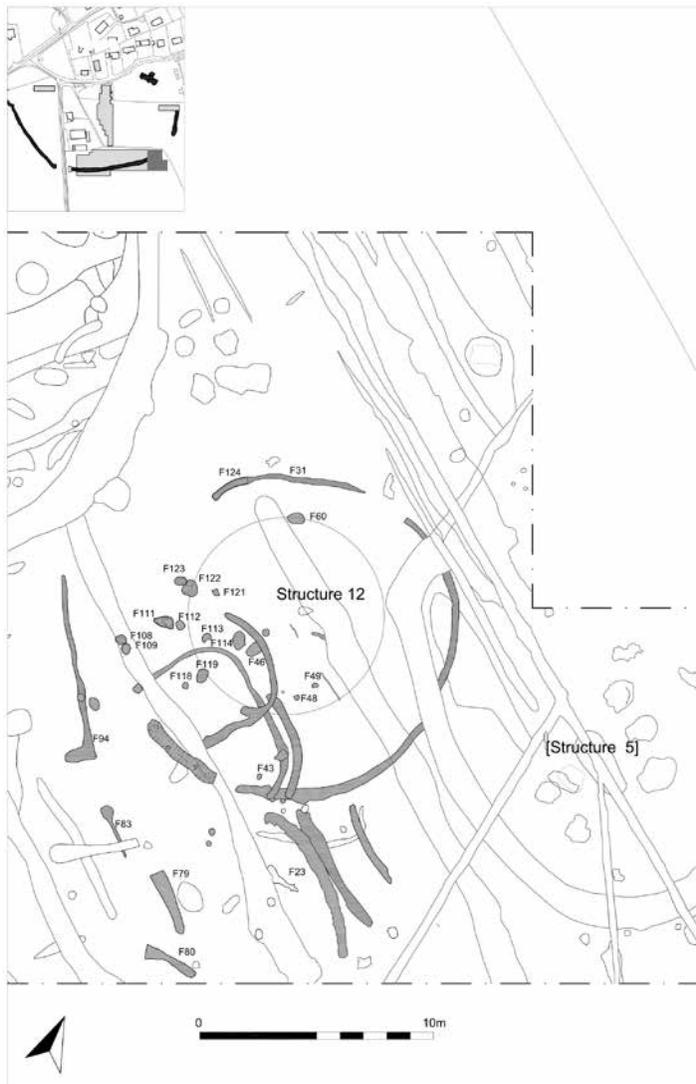
radiocarbon periods: third to second millennium BC and first millennium AD. The latter showed as well-preserved ridged fields with ridge spans between 0.8 to 1.5m overlying earlier buildings. Excavated examples indicated that an initial ploughing in two directions at right angles, which densely scored the subsoil, was followed by lighter ploughing in a single direction (NE-SW). The initial marks are read as a first cross-ploughing designed to break the land into manageable pieces (McCullagh & Tipping 1998, 158-9). Such a scheme would also provide an opportunity to cut, lift and stack turf for future use elsewhere, while the stripped land is then put under the plough.

In his survey of first millennium farming, Fowler emphasises that the ard and the heavy plough continued side by side in Britain from the Roman period to the Norman (2002, 184-6). The heavier wooden ploughs have a sole that bumps along the ground, a coulter to cut the sod and a mould board to turn it. Characteristic of these ploughs in the north are pebbles set into the base of the plough to reduce wear on the wooden sole. When found, discarded, the pebbles are worn down into a characteristic convex surface marked with parallel striations. Such 'plough pebbles' turn up in early historic and later contexts (they 'must in general be early medieval': Fenton 1999, 30). The Portmahomack plough pebbles from Sector 2 (above) are all of the gently rounded form and so

derive from a mould board or sole rather than having protected the axles of wheeled ploughs.

At Whithorn, sixty-one plough pebbles were securely associated with plough marks of the late fifth/early sixth century, and the discard of another 100+ was detected through the seventh century. They were missing from eighth-century strata, but showed up again as 50+ examples in a distribution coincident with plough marks of the mid-ninth century (Hill 1997, 80, 464-6). In this latter case, the plough marks are thin, parallel, sinuous and adjacent, as at Portmahomack. Hill attributes these plough marks, and the use of plough pebbles, to a mould-board plough (Hill 1997, 190-1). Presumably the same arguments apply to the fifth/sixth-century ploughing, which is described as 'sporadic and oriented north-east/south-west' (ibid, 80), although these plough marks are also represented as making a criss-cross pattern (ibid, 76; Fig 3.5). Hill identified the pebbled mould board and wheeled plough as part of a package of exotic technologies and ideas introduced to Whithorn in the late fifth century and proposes an association between plough pebbles and early *monasteria* in Scotland (Hill 1997, 28; Hill & Kucharski 1990). However, in spite of intensive and repeated trowelling (at Level D, p 24) no plough pebbles were retrieved from Sector 1, so the association of such a package with this extensive system of cultivation remains tenuous.

## PORTMAHOMACK ON TARBAT NESS



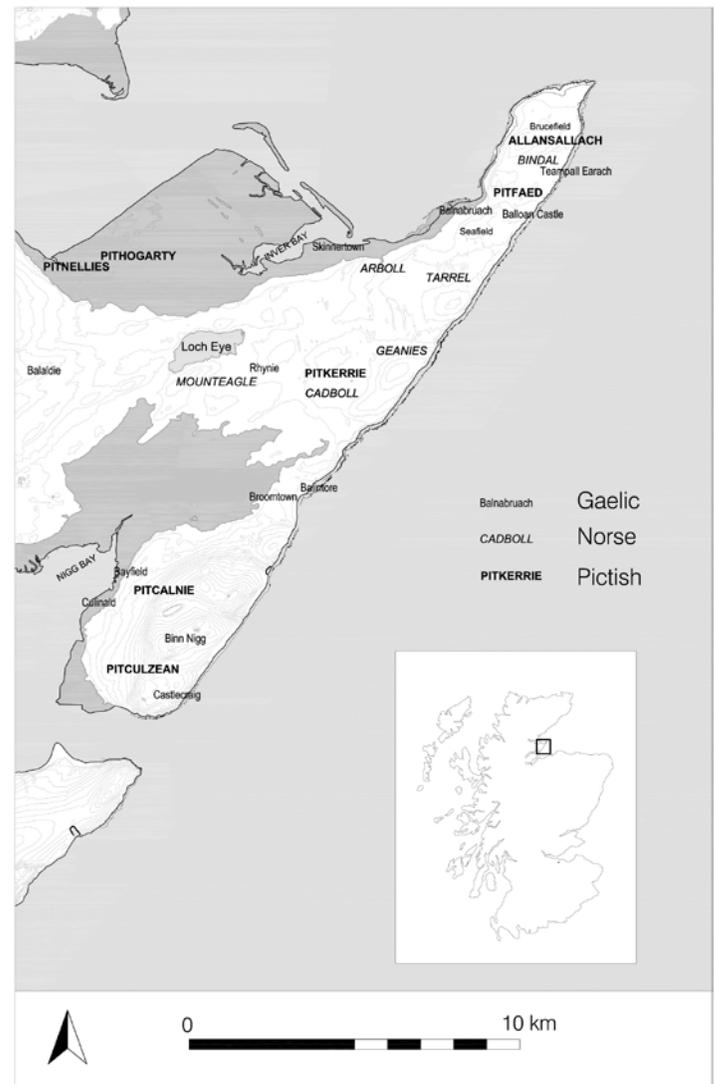
*Illustration 4.26*  
Plan of S12, and associated features

The Period 1 settlers had access to rye, barley and wheat (see above) but there is no direct evidence of how it was ground. Barley could be pulped by pounding it with a mallet in a ‘knocking stone’ (Fenton 1999, 102–3), but ‘saddle and trough querns ... were used to grind barley and wheat, at first, and then rye and above all oats *from the period of the Romans* when these two crops first appeared’ (ibid, 105–6; our italics). The rotary quern was added to the technology in the first millennium BC, although at Portmahomack the examples of rotary querns are all medieval (p 313).

There are reasonably strong connections of date and diet between the grain processing on the hill and the industrial area and indeed the cemetery. The fifty-three plough pebbles were residual as found in and around the Period 2 boundary walls. The plough marks in Sector 1 were presumably made by a wooden implement. It is not excluded that plough-pebble technology superseded an earlier system but it did not do so

there. Nevertheless, as it stands, the cultivation defined in Sector 1, the plough pebbles from Sector 2 and the grain deposit found in Sector 4 have little to relate to at present, apart from each other. They converge on the fifth/seventh century, a period of some 150 years in which it may have been possible to cultivate some land with a wooden ard, cultivate other parts with a pebble-studded mould board, grow rye, barley and wheat and process and consume it elsewhere in the vicinity.

The animals exploited in Period 1 were cattle, pig and ovicaprid, red deer, roe deer and chicken. The only sea creature present was the seal. The percentage profile of domestic animals was similar to Periods 2–3, with cattle in the majority, but the numbers of identifiable bones (303) and the number of species identified were very small compared with what was to follow in the same excavated area (Chapter 3, Table 3.7; Seetah in Digest 7.1). By contrast, it was noticeable that evidence for cereal cultivation



*Illustration 4.27*  
Selected place-names on the Tarbat peninsula

## FOUNDATIONS (PERIODS 0-1, TO *c* AD 680)

at Portmahomack was strong in the sixth/seventh century (Period 1). The eighth century (Period 2) appears to be largely dependent on cattle and other stock. The evidence for an eighth-century mill is inconclusive at best (p 193). In Period 3, structures and plant remains suggest a return of arable cultivation in Sector 1. An argument can therefore be assembled that the principal subsistence shifted from cereal cultivation at its inception (Period 1) to cattle and dairy products (Period 2) and back to cereals (Period 3) (pp 225, 276).

### The end of the Period 1 settlement

#### *The first enclosure ditch in Sector 1*

Within Sector 1, an early post-ploughing event was the excavation of a large ditch, measuring between *c* 3.0m to *c* 4.0m wide (S15; Illus 3.2). The ditch was located at the northern limit of the Sector, and was visible for a total length of *c* 25.0m from the north-west corner of Int 11 to the north-east corner of Int 25. This ditch (S15) clearly cut through the podzol and ard marks (Illus 3.3). In turn, the ditch was cut by features and structures assigned to Period 2, notably the well S8 and the bag-shaped building S3, and in its backfilled state was to receive material from the Period 2 metalworkers (Chapter 5.7). It is therefore an acceptable candidate for Period 1, and raises the possibility that the settlers by the marsh threw out a southern boundary at this point. However, the ditch S15 was superseded by another (S16) slightly further south but on the same alignment and similar in form, which was certainly part of the monastic infrastructure of Period 2 (p 186). For this reason it is argued that the ditch S15 more properly belongs to Period 2, where it represented a first exercise in marking out the monastic precinct (see Chapter 5.5).

#### *Disuse of Period 1 features*

The S11 hearth, adjacent wicker-lined well and a wattle fence line, together with the timber-lined ditch F129 on the hilltop have been argued to be in contemporary use and share date spans in the seventh century (at 95%, see Table 4.1). The ornamental bridle mount and the iron pin found in association with S11 also conform to a sixth/seventh century circulation. Perhaps the most helpful of the radiocarbon dates show that the well was constructed between 610 and 680, the hearth was last used after 640 and grain was left in the hillside ditch before 660. All the certain cist graves were interred before 690. An end to Period 1 activities in the second half of the seventh century seems to provide a good fit. The Bayesian calculation put the end of Period 1 between 635 and 730, and proposes a hiatus of up to eighty-five years before Period 2 begins; however, the same analysis offers a start date for Period 2 between 645 and 685 (at 50%) (Digest 3.1).

The stratigraphy would place the end of Period 1 and the beginning of Period 2 in fairly close proximity. The disuse of Period 1 features in Sector 2 was often marked by the deposition of a homogenous sterile grey sand. It was identified beneath the Period 2 road, S13, and encountered widely in Int 24 and in the evaluation trench Int 8. It was recorded as being *c* 0.25m at its deepest and became increasingly thin until it petered out midway

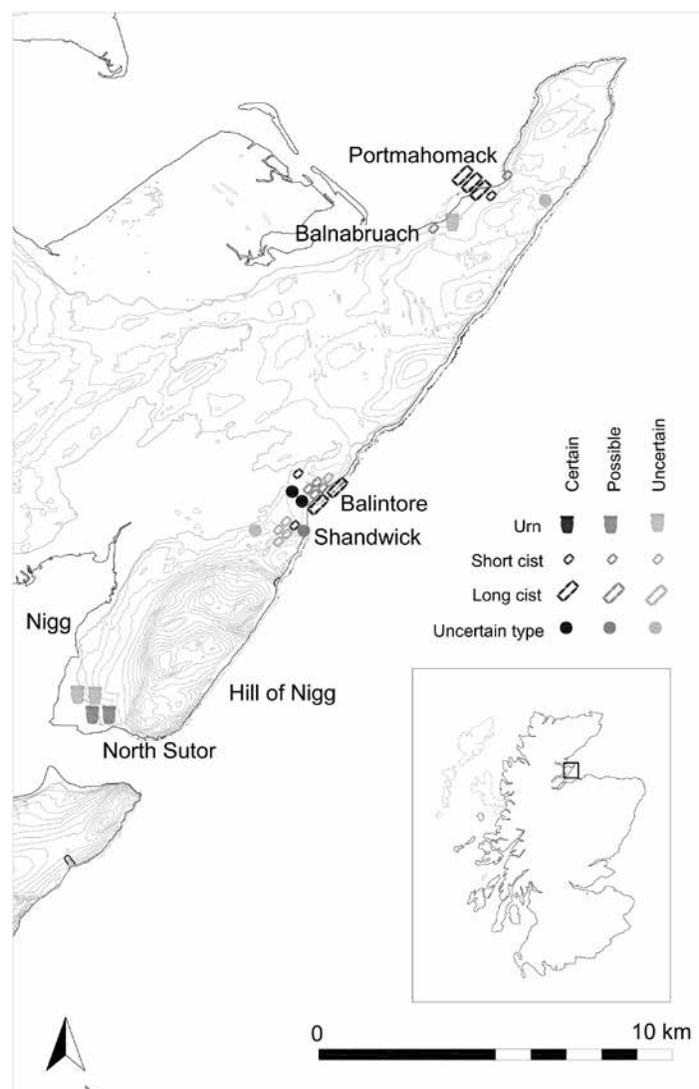


Illustration 4.28  
Map of prehistoric burials on the Tarbat peninsula

up Sector 2 (north). This wide-scale deposition was identified by micromorphology as windblown sand (Ellis in Digest 7.5). This might have been the result of a passing storm or of a turf-stripping operation that bared the subsoil surface. In either case it suggests only a brief hiatus between Period 1 and the major development that was to follow. Given that all the dated events of Period 2 in Sector 2 occur after 640–660, we have placed the transition between Period 1 and Period 2 as lying between 660 and 700, abbreviated as *c* 680.

The Period 1 occupation comprised a cemetery of cist graves, a settlement producing iron objects and an economy in which cereals played a prominent role. It dated from *c* 550 to *c* 680 and was replaced rapidly by a new infrastructure and regime but retained some practical continuities, leaving the nature of the transition uncertain. This will be discussed at the chapter's end. The task will be made easier by examining what we know of the context provided by the peninsula and the environs as a

whole. The features of the sixth/seventh century and earlier at Portmahomack are difficult to put into context at present owing to the low levels of fieldwork in the region – although this is about to change (see comment on p 334). Here we offer a review of the immediate landscape, restricted to information and observations collected during the life of the project (up to 2012).

**The Peninsula and the Firthlands in Prehistory**

The Tarbat peninsula is a ridge of land running from the Hill of Nigg (Binn Nig, 205m) in the south-west to Tarbat Ness in the north-east, via a chain of small eminences at Geanies (80m), Meikle Tarrel (65m), Seafield (37m) and Brucefield (55m) (Illus 4.27). This ridge is connected to the mainland by a neck of

*loch an dàilich*: loch of the meetings). However four ‘*Pit*’ names have been noted: Pitculzean in Nigg, Pitcalnie in Nigg, Pitkerrie in Fearn, and Pitmaduthy in Logie Easter (Fraser I 1986, 26–7, Fig 2.4). These should indicate properties that had once been in Pictish hands. Norse words name several ‘*eith*’ places referring to the isthmus (including Loch Eye) and the landing places of Cadboll and Shandwick. The name Tarbat (G. *tairbeart*: a crossing) implies a portage, and using the lie of the land it is easy to envisage a hypothetical route from Inver Bay to Nigg Bay via Loch Eye (Illus 5.10.1). This would enable travellers to take a short cut from the Cromarty to the Dornoch Firth, saving much time and danger, either by carrying the boat or by transferring boat to boat at each bay. There is some support for this configuration of the landscape, and for the portage route, from the medieval documentation (see Digest 8 and Chapter 5.10, p 246).

As a generalisation, activity of the first millennium AD and before congregates at the landing places of Portmahomack, Balintore/Shandwick and Nigg. The prehistoric sites identified with reasonable certainty comprise burials and forts.

***Burials on the peninsula (research by Nicola Toop, see OLA 8.7 for the full report)***

Human remains have been encountered casually in many locations on the peninsula and its environs, but the absence of artefacts or scientific dating makes attribution to a precise period problematic. Burial types are sometimes too readily assumed from casual encounters with fragments of pottery or slabs of stone, and indeed it is no simple matter if the observation in question was made while digging a drain with a mechanical excavator. With these caveats in mind, the map of sighted burials (Illus 4.28) distinguishes between *certain* (archaeologically recorded, certain identification); *possible* (archaeologically recorded but with insufficient remains to make a secure identification, or a description sufficient to allow an informed identification); and *uncertain* (ambiguous descriptions, or poorly located accounts).

Three main clusters of burial can be identified: the first on the west coast at Portmahomack/Balnabruach, a second on the east coast at the Seaboard Villages, in particular Balintore, and third on the south coast in the area of Nigg and the north Sutor. This distribution may owe something to building development in these areas, but it is probably not wholly unrepresentative, since extensive ploughing would have resulted in the discovery of more slabbed graves had they been there in any quantity.

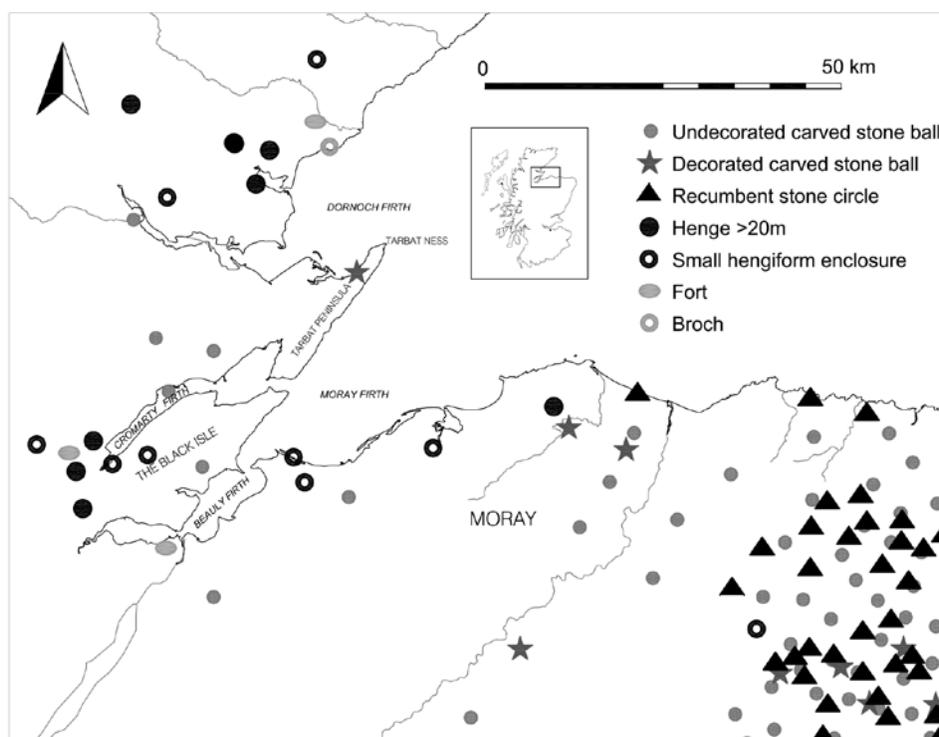


Illustration 4.29  
Map of prehistoric sites in the Firthlands

land between Inver Bay and Nigg Bay. Given the large areas of low-lying sandbanks that surround both bays, the stable isthmus is probably confined to land that lies today above the 10m contour, that is between Hill of Fearn and Newton, about 4.5km as the crow flies. Half of this isthmus is occupied by Loch Eye.

The peninsula was fortunate to be included in one of the earliest detailed place-name studies (Watson 1904, repr 1996; here Digest 8). The great majority of place-names identified by Watson were Gaelic in their earliest form, and thus likely to represent retrospective naming in the ninth century and later; examples are Rhynie (G. *ràthan*: little fort) and Dallachie (G.

## FOUNDATIONS (PERIODS 0-1, TO *c* AD 680)

### **Portmahomack/Balnabruach group**

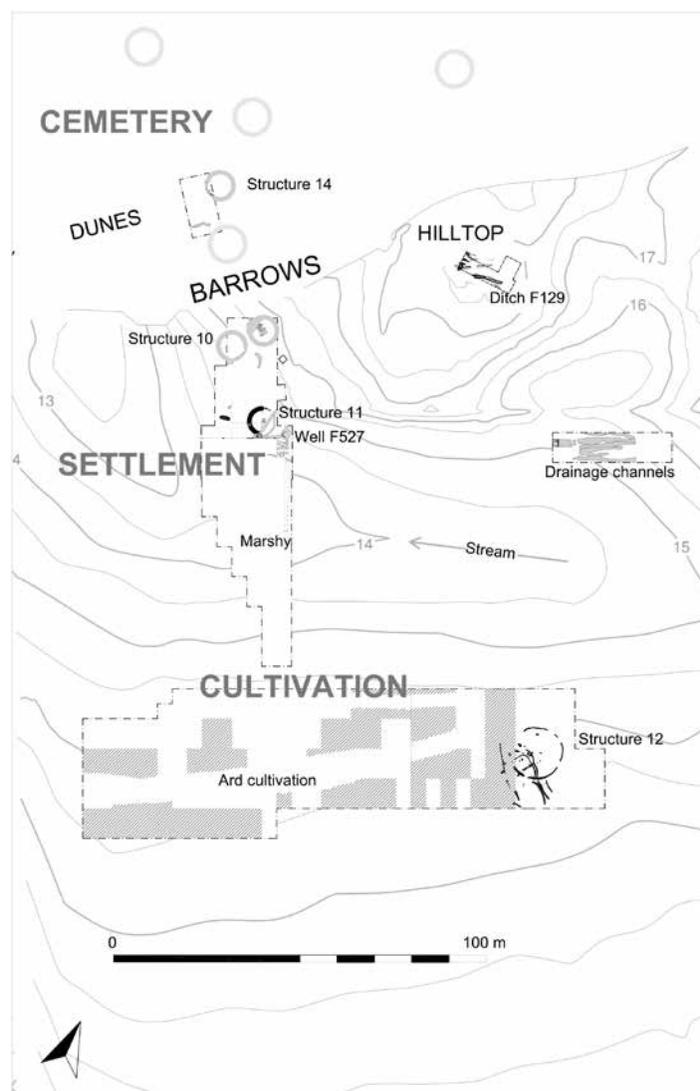
Balnabruach, 600m west of St Colman's Church, is the site of a concentration of burials in both long and short cists. In 1992, a watching brief on the course of a pipeline by GUARD identified a shell midden, a Bronze Age short stone cist containing a body, probably male aged seventeen to twenty-five (Burial A), and a long cist with an extended skeleton N-S with another E-W above it (Burials B and C). The records from this watching brief have been re-examined (with thanks to Dorothy Low, see OLA 8.5) and the skeletal materials were analysed by Daphne Lorimer (OLA 8.3) and radiocarbon dated within the Tarbat programme (Table 3.1; Digest 3.2). Burial A (NH 9100 8410), encountered in isolation, was represented by the disturbed human remains of a young adult male associated with slabs interpreted by the archaeological contractor as the remains of a short cist. Bones were radiocarbon dated to 410–230 cal BC, placing them in the Middle Iron Age. Approximately 150m to the west (at NH 9084 8408) three burials were excavated (B, C, D) later shown to comprise at least six individuals: a female oriented N-S (B), accompanied by bones of another female (Bi), and above these a young male oriented W-E (C). Associated with Burial C were the remains of a young adult female (D), a female aged thirty to thirty-four (Di) and a mature adult, possibly male (Dii) (see OLA 8.5). Burials B and C returned similar radiocarbon dates (Burial B: AD 240–420; Burial C: AD 260–530). The Balnabruach group of cist graves would appear to belong to a cemetery active in the late first millennium BC into the early first millennium AD, by which time cist burial had begun at Portmahomack.

To the south of Balnabruach, a 'cist' was found during land reclamation 160m west of Castle Corbet in 1865 (NH 900 832; RCAHMS Site 94). It contained a cremation and small 'urn'. To the north of Portmahomack, at Chapel Hill, burials were discovered before 1845 'deposited within rough flags of freestone'. Suggestions have been made that these would have been associated with a chapel alleged to have stood at the site (NH 916 845; NH98SW 6; NSA xiv 460; OPS 1851–5, ii, 434; Davidson 1946, 27). However, an earlier date for the burials might be suggested by the fuller description, 'several chests of freestone flags were dug up a few years ago ... each chest contained an entire skeleton ... and from the position of the bones it appeared that the bodies had been doubled' (NSA xvii inv, 461). The 'doubling' of bodies may refer to crouched burials, implying an Early Bronze Age date. The Portmahomack cist burials and mounds of the Late Iron Age (sixth/seventh century) thus represent the latest development of a long tradition of burial around the Portmahomack bay. The burials all occur in the coastal zone, between sea level and *c* 15m AOD.

### **Balintore group**

A second concentration of burials lies on the east coast, in the area now known as the Seaboard Villages (Robins in Carver 1998b). A number of the reported burials occurred in association with two landscape features: Bruchal Mhor, a sand hill also known in local folklore as 'Ghost's Hillock', and Slochd Geal, the 'White Pit', the location of which is not clear but which is positioned by locals

near Harbour View. Both landscape features were removed in the late 1930s to make way for housing. In 1935, two cists containing crouched burials were discovered on the north-east side of the mound Bruchal Mhor at NH 8619 7552 (reported by a local informant in 1972). Two years later, excavation of foundations on the south-west side of Bruchal Mhor also revealed an inhumation,



*Illustration 4.30*

Layout of elements of the sixth/seventh-century estate centre contacted at Portmahomack

reported to have been in a 'stone coffin' which possibly refers to a cist (NH 8617 7549). The levelling of the mound in 1937 to make way for housing was said to have revealed a number of human bones, including an inhumation 'surrounded by stone slabs' with 'flints or sharp stones found with it' (not securely located). During building in 1938–9, 'skulls and other bones were found' (Davidson 1946, 26). A report by a local informant stated that a team from

the University of Aberdeen excavated the site and revealed thirteen extended skeletons, but as yet no information has been forthcoming to substantiate this. A sinuous form is depicted on the Ordnance Survey editions of the 1890s and early 1900s, which may represent this mound.

At Bank Street, Balintore excavators of a well in 1932 encountered a small stone-lined grave with skull and bones 'all bunched up'; the description might suggest a short cist with crouched inhumation (NH 8639 7570). A short distance to the west, excavation of a sewer in c 1950 contacted a cist containing bones, again recorded as a short cist (NH 8626 7563). Inland from Bank Street, a short cist was identified in 1976, measuring 0.92m by 0.45m and containing the remains of two individuals – a primary adult inhumation and a secondary child. Six vertical slabs formed the cist, containing the earlier, primary adult burial; a layer of collapsed slabs may have formed an early lid, over which the remains of a child were interred, possibly covered by a secondary lid. Extended inhumations were also recorded archaeologically in 1982 to the east of Balintore (NH 8660 7580). Two extended burials, orientated SW–NE were identified during excavation of a sewer, covered with flat slabs. A third skull was also recovered. All three individuals were identified as female.

At Shandwick, a local informant described the find of a short cist containing a single crouched inhumation during excavation of a service trench in 1945 (NH 8558 7465). The burial was apparently left in situ, and the informant believed there to be a further four or five examples in the vicinity, represented by large horizontal slabs. The burial is likely to be that referred to in an account of 1961 which recorded a find in 1954 as a 'stone coffin' containing a 'skull and other human bones', at almost the same grid reference (NH 8555 7465) (RCAHMS 1979, no 111). The name of the Shandwick cross-slab, Clach a Charridh, has been translated as 'stone of the grave plots', and the historic Ordnance Survey marks a 'Burying ground' at the site (NH 8556 7473) (see Digest 8). At the site of the medieval chapel at Shandwick, a possible burial ground is represented by finds of human remains in an area now represented by the edge of a quarry (NH 8582 7453). Bones were discovered at the site during 1939–1945, when stone from the chapel was used to build the RNAS Airfield at Loans of Rarichie.

South of Shandwick, at Easter Rarichie Farm, a further cist burial was reported beneath a large sandstone slab measuring 1.5×1×0.3m, found during ploughing. No bone or associated artefacts were reported, but a hint of a burial ground is provided by a field listed by Watson as '*Ron a'chlaidh*', or graveyard field. Watson (1904, 57) states that 'the plough ... formerly used to strike the gravestones, but these are now removed', suggesting a more extensive burial ground (Digest 8). Further up the coast is Cnoc Dubh, Ballone where there was a reference to 'stone coffins' in 1904 (NH98SW 2; Canmore 16643); this might refer to later sarcophagi, or cists, but without further information this cannot be known (Watson 1904, 48).

### ***Nigg Group***

A third focus for burial on the peninsula is hinted at by records of possible cremation burials and cists at Nigg, although none

has been verified archaeologically. At Balnabruach, Nigg, a cist was reported to have been found under the west gable of a cottage in 1922 (NH 794 698); four other cists were apparently opened at the same time in the vicinity of a hollow known as Poll na Marie. In 1945, two 'clay vases' were recovered during excavation of a service trench in the bank surrounding the house (NH 7945 6987). Together, the evidence suggests a possible Bronze Age cemetery focused at Nigg. A 'rude undressed stone' is said to have stood in Nigg churchyard in 1835, suggesting a ritual focus for the burials (RCAHMS no. 120, NH 804 717). The new statistical account for 1845 reported the discovery of two crude burial urns, found c 1820–1823 in 'a bank of blown sand directly under the northern Sutor'. The sand, partially removed by storms, overlaid a deposit of animal bones. One urn was filled with ashes and half-burned bones, the other with bits of a black bituminous-looking stone resembling jet, which had been made into beads and 'little flat parallelograms perforated edgewise, with four holes apiece' (NSA 1845; Miller Sr 1835). Visiting in 1972, the OS placed the site at NH 800 691. This has echoes of a burial of the Beaker period.

### ***Forts***

Two forts are marked on the OS map on the north lower slope of the Hill of Nigg, at Easter Rarichie. The more westerly labelled 'dun' is at 841/737; the more easterly ('fort') is at 834/736. This latter is referred to as Easter Rarichie (Canmore 15300), and described as a multi-period, multivallate fort, with an inner enclosure on its summit that may be a dun. As seen in 1972 and 1981 it consisted of three ruinous walls and two outer ramparts, enclosing an area about 67×50m. The inner enclosure is defined by a wall 3.5m thick and 17.5m in diameter, interpreted variously as a hut circle or a dun. Hut circles were suggested 50m SE of the fort but not substantiated (Canmore 15301). Rarichie is later mentioned as a landholding of the early Earls of Ross, thus it is not excluded that the site was, or became, a twelfth to thirteenth-century castle (see Chapter 7, p 288).

Other possible enclosed sites include Tarrel dun at 904 803, where the bank measures up to 3.7m in thickness and encloses an area about 9.5×6.7m (Canmore 15642). The remains of what may have been a broch stand on a tongue of raised beach 650m SW of Lower Seafield (RCAHMS Site 184). At Castlehaven there is said to be a promontory fort with D-shaped enclosure, which gave its name to the harbour (RCAHMS Site 180). This exiguous evidence suggests a Late Iron Age presence on the peninsula, probably within the first millennium AD.

Tarbat Ness is a natural landmark for navigators, and would probably have been used by the Romans, who sailed round the island after Agricola's campaign and named the inhabitants of Easter Ross '*Decantae*'. Although recent researchers have claimed a Roman military presence in the Moray Firth region, in the form of camps (Jones et al 1993), substantiated Roman traces on the peninsula are rare. The Carn a'Bhodaich at NH 9469 8759 was the supposed site of a Roman beacon (NSA 1845, 14, 460, 15v). The third statistical account reported a Roman camp on the Black Moor about one mile from Tarbat Ness (TSA 1957). A fairly worn *antoninianus* of Tetricus II, AD 270–273/4 minted

at Trier was found near Tarbat Old Church (RCAHMS no NH98 SW00 43). The current archaeological indication is that Middle Iron Age settlement gave way to Late Iron Age/early Pictish in the fifth century without Roman intervention.

### **Overview**

The coast of the peninsula has thus attracted burial from the Early Bronze Age, through the Iron Age and into the Pictish period. The clustering of prehistoric burial at points where there is access from the sea, and where there are detachable slabs of rock, has a pragmatic rationale, as well as a long ideological ancestry from Brittany to Orkney (Cunliffe 2008, Ch 6; 2013, Ch 6; in Scotland, Driscoll 1988). The celebrated 'Queen of the Inch' with her ten-row necklace of Whitby jet was interred in the early second millennium BC on the island of Inchmarnock, later to become an equally celebrated eighth-century monastery (Lowe 2008, 62–5). The Bronze Age burials on Tarbat are likely to have coalesced into three cemeteries, each with a lengthy period of use. In the nineteenth century, a cemetery of short cists was encountered at Alness, a short boat trip from Nigg in the Cromarty Firth, during the construction of a railway line to the distillery at Dalmore cemetery. There were eighteen cists in two groups, featuring two burial rites: inhumation, succeeded by cremation. The inhumations were crouched, with a leaf-shaped blade, jet beads and a stone bracer among the grave goods; while from the cremations came pottery and a bronze blade (Jolly 1880). This provides an inkling of what might lie hidden at North Sutor and Balnabruach.

Retrospective indications of early centres and practices may also be discerned in the medieval period (see Chapter 7, p 336). Of all the Ross-shire parishes, those of the Tarbat peninsula, and Nigg in particular, claim the largest number of chapels and wells (Watson 1904 [1996], 54). While a recent view of 'holy wells' in Ireland had suggested they were a post-Reformation phenomenon, evidence from Struell shows that some were at least medieval and could be early Christian or earlier, potentially providing important foci for pre-Christian as well as Christian worship (references in McCormick F 2009; see Chapter 7, p 318).

### **Firthlands**

In spite of its central location, the Tarbat peninsula participates in the prehistoric landscape of the Moray Firth coastlands to a very modest degree (RCAHMS 1979; Illus 4.29). The regional sequence of prehistoric burial was normally inhumation until 1800 BC, cremation from 1800–1000 BC, no burials between 1000 BC–AD 200 (only scattered bone), and extended inhumation in cists from c AD 400 to AD 600 (Ashmore 2003; Maldonado 2011, 82ff). Historic Scotland's radiocarbon-dating programme has rewritten the story of burial rite in the first millennium, and disqualified the determinant chronological status of the cist itself: long cists are no longer necessarily Christian, nor short cists necessarily Bronze Age. The use of short cists is occasionally found in northern England and Eastern Scotland into the third to fourth century AD (Ashmore 2003, 39). The long cist appears between the first and fourth century, before the traditional dates

of Christianisation (Ashmore 2003, 40). However, there is a rapid rise in the use of long cists, cairns and mounds from around 400 AD (Maldonado 2011, 1, 98, 123, 127), and there is therefore still a case for noting an ideological change from the fifth century, conventionally labelled as the transition from Middle Iron Age to the Late Iron Age or Pictish period. The net change is from a lingering use of cremation and the short cist, scattered bones in settlements and bones buried in former settlements, to the more regular use of inhumation, long cists, cairns and mounds, round and square (Maldonado, *ibid*; see Winlow 2011 for a useful review of Pictish period burial rites on Tayside).

We argue above (p 87) for the presence of a Pictish barrow cemetery on the crest at Portmahomack. The location recalls that at Redcastle, where the cemetery 'developed linearly along the edge of the raised beach and was bounded on the landward side by the paleochannel' (Alexander 2005, 108). The cists in mounds, which in our case arrive in the fifth or sixth century, point to a new direction even while they make references to the practices of the past (Maldonado 2011, 82–9). Before the Late Iron Age, the emphasis on the peninsula would appear to be on coastal burial, with three main centres where mounds would have stood on the skyline, associated with landing places. Combined with the activities at Portmahomack, this indicates a surge in activity in the Late Iron Age. Here, one or more burial groups, perhaps under mounds, had been installed on the crest by the sixth century, using the high-investment burial rite of cists composed of large slabs topped with an earth mound. These are elite memorials, and celebrate both men and women, but are not specifically Christian. The latest of them is erected in the seventh century. At the least, the relatively sparse footprint of early prehistoric settlement encourages the view that Period 1 is a new beginning and the features encountered could all belong to it. The chapter ends by considering this hypothesis and its significance.

### **Interpretation of the Period 1 occupation at Portmahomack**

The defining characteristic of the Period 1 occupation is that it constitutes both a settlement and a cemetery that are in the same place and coeval between the fifth and the seventh century (see above, p 76). The cemetery on the crest overlooking the firth contained cist burials of men, women and children under mounds. The settlement by the marsh featured ironworking, iron dress pins and horse gear. The people had a diet high in protein and consumed wheat and barley. There were fields in the vicinity, one in the south (Sector 2), which may not have still been active and another using plough pebbles that is unlocated. On this reading the Period 1 occupation divides the occupied land into three: a barrow cemetery on the crest, an industrial zone by the stream and a grain-production site somewhere on the productive land to the south (Illus 4.30). The Period 1 community can also claim relatively high status in its burials (above, p 86), its mobility, its iron production, its access to resources and the hints of the presence of an insular equestrian class with a potentially wide range of contacts. The metalworkers are not likely to have operated without patronage. On the other hand, it is true that the identification of all seventh-

century sites in Britain tends to rely on the occurrence of high status finds (Crone 2000, 166).

One of the more celebrated rewards of the archaeological campaigns carried out by the Irish National Roads Authority was the first sighting of a new kind of occupation provisionally termed ‘cemetery-settlement’ or ‘settlement-cemetery’ (Kinsella 2010, 124; Ó Carragáin, T 2009; O’Sullivan & Nicholl 2010; O’Sullivan et al 2014, 306–12). These are settlements with a contemporary and adjacent communal burial ground. They exhibit a variety of enclosures and buildings. Prominent activities are the processing of crops (eg Raystown, Co Meath; Seaver 2006) and industrial activities, particularly ironworking (eg Lowpark, Co Mayo; Wallace & Anguilano 2010). Animal bone assemblages suggest funeral feasting in addition to more routine consumption. The burial ground is often enclosed and situated at the centre of the site as at Carrigatogher, Co Tipperary. Many of the sites appear to start with the burial ground in the fifth century (O’Sullivan et al 2014, 311), which in Ireland raises expectations that the cemetery-settlement emerges with St Patrick. However, Ó Carragáin notes that churches are largely absent from these sites and that their affiliations may be Christian or pagan or at least not determined, rather ‘engaging with the new religion on their own terms’ (2010b, 219). Cemetery-settlements seem not to turn into monasteries – the ecclesiastical sites are new foundations that run in parallel with them through the seventh and eighth century, neither having a monopoly in commemorating the dead. A significant interpretation, also owed to Ó Carragáin, is that the cemetery-settlement is essentially a family establishment, losing its primacy in the Viking Age to communal places of burial (2010b). It is not until the eighth century that ‘burial near the saints becomes an acceptable substitute for burial among the ancestors’ (O’Brien E 2009, 150).

Authors presenting the new work in Ireland emphasise the variety of settlement and burial options that have been revealed and warn us against devising too-rigid classifications to cope with them (O’Sullivan et al 2014, 312). Nevertheless, the Irish cemetery-settlement offers us a useful model for Period 1 at Portmahomack: a family estate with its own cemetery, productive farmland, ironworking, high-status metalwork and no obvious religious allegiance. What became of the occupants?

### *The Period 1 to Period 2 transition*

The transition between the family estate of Period 1 and the monastery of Period 2 shows both continuity and change. The people of Period 1 are already members of an ‘insular’ community. The cemetery maintains its location on the crest and hilltop, and the new burials of Period 2 defer to the existing mounds (p 106). But cist burial is replaced by head-support burial, and the family groups by a community of men only. The technique of timber-lined drains is still practised, but is now at the service of paved roads. The manufacture of secular objects for high-status men, women and children gives way to specialist Christian sculpture and books. Arable produce is replaced by an emphasis on cattle. The time frame of Period 1 is consistent with Columcille’s journey up the Great Glen in 565 AD, but there is no specific symbolic marker we might call on to indicate that his journey reached Portmahomack. The provenance of some of the individuals in the Period 1 burials is British, and there is only one from the west coast. The findspots of TR24 and 25, simple scratched crosses on unworked stones, while not precise, may possibly be located in Period 1 strata (OLA 6.3/3.2.1). Thus it is not excluded that the Period 1 activity at Portmahomack represents a pioneering early Christian collaboration of the sixth and seventh century, but its expression is far from that of the conventional Christian repertoire and very far from the monastic extravagance of Period 2. The interpretation lies open. This may be what a sixth/seventh-century Columban community looked like; or it may be an elite group that is about to be replaced, lose its initiative to a different power group, or themselves convert to an agenda we can more easily recognise as monastic.

As the story of this site unfolds, we will be drawing attention to a number of occasions on which the cultural material seems to reflect not a replacement or displacement of the occupants but a change in their mentality. Reduced to essentials, a high-status traditional burial ground and associated settlement with no clear ideological affiliation was exposed to new thinking in the later seventh century and replaced suddenly by an all-male college displaying extravagant Christian symbolism. This is certainly the result of intrusive new politics. But it may also be what happens when successful local leaders grant land to make a monastery.