A Later Prehistoric house and Early Medieval buildings in Northern Scotland

Excavations at Loch Shurrery and Lambsdale Leans, Caithness, 1955

with a note on Lower Dounreay

by Alistair MacLaren

with contributions by Ewan Campbell, Gordon Cook, Richard Hingley, Janet Hooper, L H Wells

and illustrations by Jim Rideout

Scottish Archaeological Internet Report 5, 2003 www.sair.org.uk Published by the Society of Antiquaries of Scotland, www.socantscot.org with Historic Scotland and the Council for British Archaeology

Editor Colin Wallace

Produced by Archetype Information Technology Ltd, www.archetype-it.com

ISBN: 0 903903 74 1 ISSN: 1473-3803

Contents

List of illustrations
List of tables
1 Summary
2 Introduction by Alistair MacLaren
3 Loch Shurrery by Alistair MacLaren
4 Pottery from the Loch Shurrery hut circle by Ewan Campbell
5 Radiocarbon dating of the Loch Shurrery hut circle by Gordon Cook
6 Discussion and interpretation of the Loch Shurrery hut circle by Richard Hingley 15
7 Lambsdale Leans by Alistair MacLaren
8 Pottery from Lambsdale Leans by Ewan Campbell
9 Human remains from Lambsdale Leans by L H Wells
10 Discussion and interpretation of Lambsdale Leans by Janet Hooper 2 4
11 Appendix: salvage recording at Lower Dounreay, Caithness 1956 by the Ministry of Works 26
12 Acknowledgements
13 References

List of illustrations

1	Loch Shurrery hut circle and Lambsdale Leans mound: location maps
2	Loch Shurrery hut circle and Lambsdale Leans mound: section and plan conventions
3	Loch Shurrery hut circle: general view from the east
4	Loch Shurrery hut circle: contour survey and trench plan
	(vertical interval of original survey: 1ft)
5	Loch Shurrery hut circle: main plan
6	Loch Shurrery hut circle: sections and elevations (inset: a sketch of the central 'post-hole') 7
7	Loch Shurrery hut circle: cutting across the wall
8	Loch Shurrery hut circle: the entrance
9	Loch Shurrery hut circle: interior looking north-east
10	Loch Shurrery hut circle: interior, north-eastern quadrant
11	Loch Shurrery hut circle: the hearth
12	Lambsdale Leans mound: general view from the east
13	Lambsdale Leans mound: contour survey and trench plan
	(vertical interval of original survey: 1ft)
14	Lambsdale Leans mound: plan of the unfinished excavations
15	Lambsdale Leans mound: sections
16	Lambsdale Leans mound: section-face of Cutting A
17	Lambsdale Leans mound: the 'lower' stone structure
18	Lambsdale Leans mound: human remains. The skeleton (Lambsdale I) is on the right
	and the skull (Lambsdale II) on the left
19	Lambsdale Leans mound: the medieval pottery

List of tables

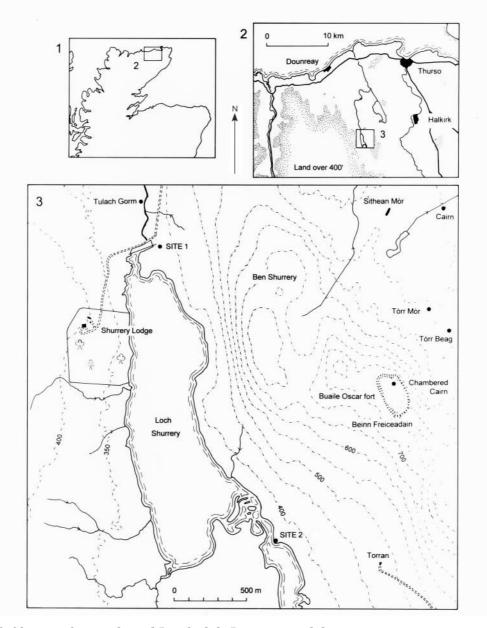
1 Radiocarbon dates from the Loch Shurrery hut circle	1	Radiocarbon dates from the Loch Shurrery hut circle	. 12
---	---	---	------

1 Summary

Two rescue excavations at the northern edge of a rather sparsely occupied part of the interior of Caithness are reported here, lying near to one of the largest clusters of archaeological sites in the modern county. In the event, the monuments were not threatened, and survive.

Because of the limited nature of the excavation at **Loch Shurrery** (NGR ND 043568), the main value of the evidence about the hut circle relates to its structure and dating. The excavated remains represented a medium-sized oval house with a west-facing entrance. It had an off-centre hearth of rectangular

construction. It was rather different in structure to the majority of the small group of such sites which have been excavated in the northern part of the Scottish mainland, as it did not appear to have an internal ring of post holes. In addition, its western entrance is not matched at the other sites, where entrance orientations are to the south, east or south-east. The wall of the Loch Shurrery house was fairly thick and the excavation suggested that it was complex, while the entrance passageway was quite long. The existence of door checks is also an unusual feature and may relate to the entrance structures of



Illus 1 Loch Shurrery hut circle and Lambsdale Leans mound: location maps

brochs and other substantial roundhouses. Two samples of charcoal from the hearth inside the hut circle were submitted for radiocarbon dating: the determinations produce calibrated ranges (at 2-sigma) of 346 – 4 cal BC and 341 cal BC – 1 cal AD. It is likely that most of the excavated, undecorated pottery is also Iron Age, part of a broad tradition of very coarsely tempered pottery. Notwithstanding evidence of extended occupation, the whole period of construction and occupation may have occurred within the Iron Age.

The mound of **Lambsdale Leans** (NGR ND 051548) lies in Reay parish, situated on low-lying ground at the head of Loch Shurrery and close to where its main tributary (the Torran Water) enters the loch from the south. The main characteristics of the this partially-excavated site are the presence of what appeared to be two extended inhumations and the remnants of possible structures associated with several layers of burnt material. Lambsdale Leans

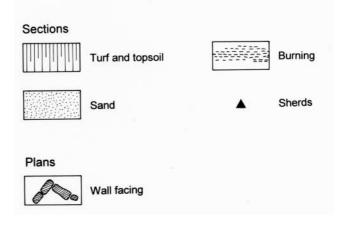
itself was a natural mound, of elongated shape and composed largely of sand, into which were set the burials and structural remains. The burials (one certainly female, the other probably so) were not in cists. The structural remains, while not fully excavated, accord well with the general tenor of the available evidence of later first millennium AD buildings in the north of Scotland. Both structures at Lambsdale Leans had floors comprising roughly laid paving, edged with upright slabs, and with an outer kerb of stones. The earliest-dated pottery sherds, unstratified, are from a single grasstempered handmade vessel whose form cannot be determined. Overall, on one interpretation the Lambsdale Leans evidence favours a context within the Early Medieval period in Caithness. The pottery however, being mostly C12-C13 oxidised wheel-thrown vessels, can be seen to support the suggestion that occupation on the site may have begun in the Medieval period.

The work outlined in this report was done by the author (at that time a final year student in the Department of Archaeology, University of Edinburgh) over a period of six weeks between 1 October and 12 November 1955, at the invitation of the then Ministry of Works (henceforward MoW). The locations of the two sites excavated are shown on Illus 1.

The two sites were apparently threatened by a dam built to provide a water supply for the Dounreay nuclear establishment, then under construction. In the event, the monuments were not threatened, and have survived: they are monument nos. FOR 360 and 339 in Mercer's survey volume (Mercer 1985) and Lambsdale Leans has been scheduled as AMH 459. The Project Archive will be deposited in due course with the NMRS in Edinburgh, to rejoin the drawings already lodged there. The location of the finds will be determined by Historic Scotland's Finds Disposal Panel. The Lambsdale Leans skeletons are among the material the National Museums of Scotland inherited from Edinburgh University's Anatomy Department in 1992 (*pers inf* Alison Sheridan).

The strategy of the excavations was determined in discussion between the author and Mr P R Ritchie of MoW. Messrs Tawse, the firm building the dam, undertook to provide two workmen to help at Lambsdale Leans, for a limited period while work was being carried on a road diversion at the upstream end of Loch Shurrery. The intention was to spend six weeks, allocating a fortnight or so to each site, thus leaving time for survey and drawing at the beginning and end; indeed, to all of those above must go any credit for what the excavations may have achieved, while the shortcomings are mine alone. The imperial measurements quoted in the original report have been converted here to metric ones; where it was clear that an approximate or 'rounded' measurement was intended, the metric conversion has been expressed only to the nearest 0.1 m.

The first stage of the project was to make a contour survey of the mound at Lambsdale and a plan of the visible remains of the hut circle at Loch Shurrery, and to lay out grids of pegs for excavation.



Illus 2 Loch Shurrery hut circle and Lambsdale Leans mound: section and plan conventions

3 Loch Shurrery ('site 1' on Illus 1) by Alistair MacLaren

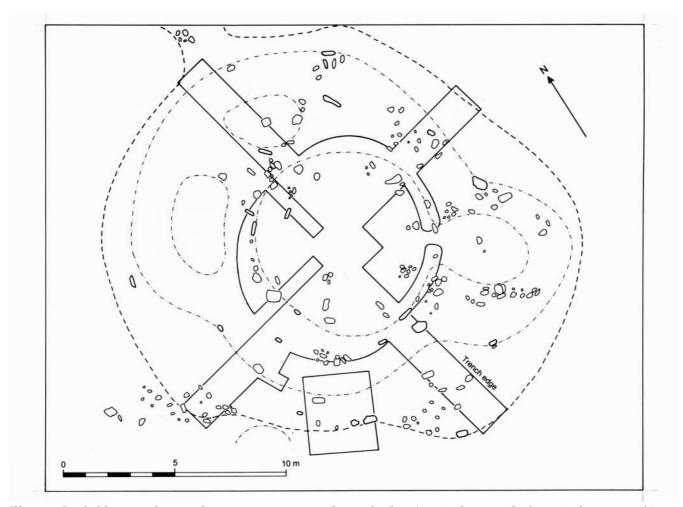
3.1 Introduction

Before excavation, the hut circle at Loch Shurrery appeared as a low, grass-grown collection of stones spread over an irregular area measuring about 80ft (24.4 m) from north-west to south-east by about 60ft (18.3 m) transversely, and some 3ft (0.9 m) in greatest height. It was situated within a few yards of the inner face of the dam at the northern end of the loch (NGR ND 043568). The central area was hollowed, and some of the stones that could be seen protruding through the turf suggested the inner face of a wall surrounding a circular area about 30ft (9.1 m) in diameter. The position of an entrance was not visible.

The apparent centre-point of the central area was taken as the principal survey-point, and from it a contour survey and plan of the visible remains was made before excavation began. The excavation was based on four radial cuttings, each 5ft (1.5 m)wide, which met at the centre-point to provide a section and cross-section (Illus 3, 4, 5 and 6). The south-western quadrant of the central area was cleared first, followed by the north-eastern



Illus 3 Loch Shurrery hut circle: general view from the east



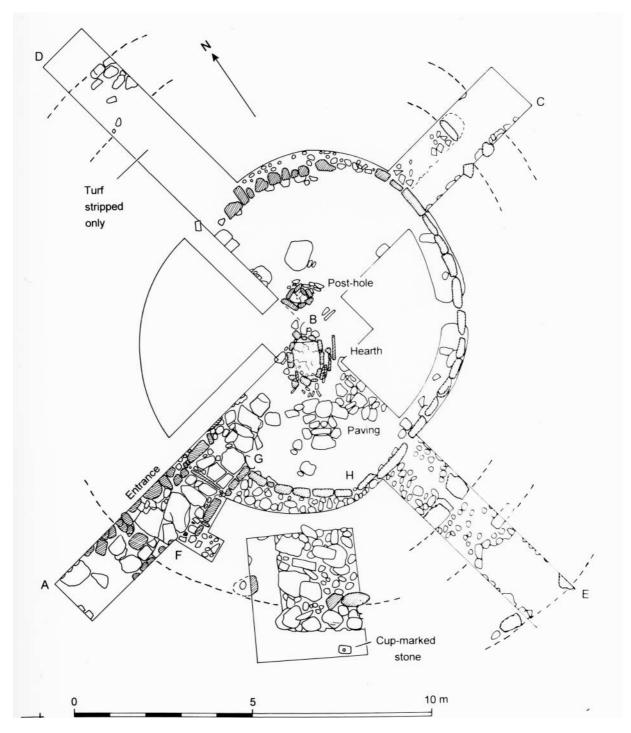
Illus 4 Loch Shurrery hut circle: contour survey and trench plan (vertical interval of original survey: 1ft)

quadrant; and, finally, a square was taken out at the centre, and a narrow curving trench was made in order to expose the inner face of the wall round its south-east arc. The turf was stripped from the north-western quadrant, but no further clearing was done, and most of the south-eastern quadrant was left undisturbed.

3.2 The wall (**Illus 5, 6 and 7**)

The four cuttings made through the wall (three radial cuttings and the square cutting on the south-west) showed that it was constructed of a mixture of random rubble (average size 9in by 12in (0.23 m by 0.30 m)) and soil, which rested on a thin foundation of flat slabs and rough cobbling. This core material was retained by an inner and outer face, and had a thickness of about 8ft (2.4 m) over all. Some 4ft (1.2 m) outside the outer face, there was slight evidence of what may have been a second outer face; this could indicate that, for stability, the wall had been built with an internal strengthening revetment, or could suggest a rebuild (Illus 7). The suggested inner and outer faces are indicated with dashed lines on Illus 5 and 6.

The inner face of the wall was revealed for three-quarters of the circuit and, round the north-eastern and south-eastern arcs, was found to consist of a series of substantial blocks founded on a thin base of flagstones and having the gaps between them filled with earth and small stones (cf. Illus 9 and 10). There was no trace of a second course of large facing-stones and no suggestion that the face was carried any higher in the form of coursed flagstones. The south-western arc of the inner face was different (Illus 6: section H–G): from the inner south corner of the entrance towards the south-east, the face was built entirely of flagstones laid horizontally and surviving to a maximum height of 1ft 6in (0.46 m) in five shallow bonded courses, individual flagstones measuring up to 1ft 8in (0.5 m) in length and between 3in (0.08 m) and 6in (0.15 m) in thickness. The amount of core material that survived in this sector suggested that the face of the wall was originally at least 3ft (0.9 m) high. The reason for change in construction used on the the south-western arc may have been associated with the entrance, where bonded coursing had also been incorporated (Illus 6: section G–F); and this could suggest that the entrance and adjacent sections of the wall were the first parts of the circle to be built.



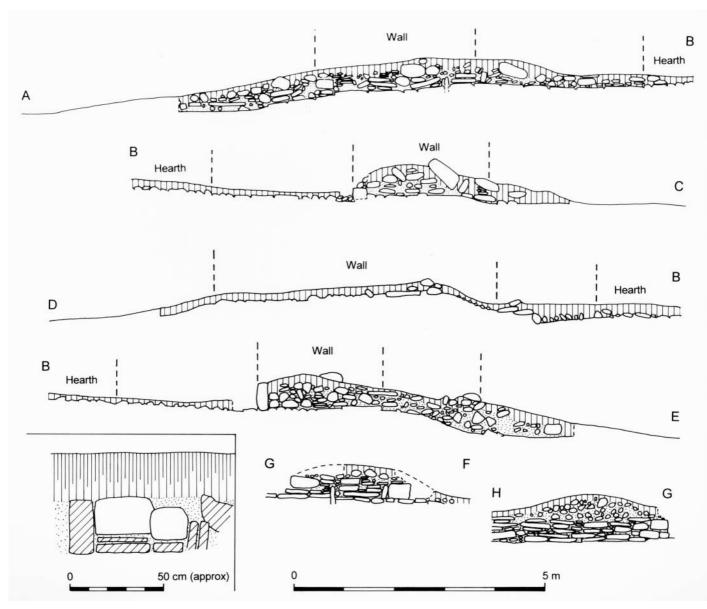
Illus 5 Loch Shurrery hut circle: main plan

3.3 The entrance (Illus 5 and 8)

The entrance, facing west-south-west, had an average width of 4ft (1.2 m). Except for two shallow courses of flagstone forming the base of the inner corner, and one large slab immediately to the west, practically all of the northern lining-wall of the passage had been robbed or dislodged. The southern side of the passage, however, remained fairly intact to a height of 1ft 6in (0.46 m) (Illus 6: section G–F). Its wall was based on a solid flagged foundation, and its inner corner was formed by a single large block

(1ft 7in (0.48 m) by 1ft 9in (0.53 m) by 8in (0.2 m)), which rested on the lowest course of the flagstone. To the west of it, the wall was carried outwards as a stretch of up to four shallow courses, and at the outer corner there was another substantial block (1ft 4in (0.41 m) long and 11in (0.28 m) high).

The side-walls were checked at a point some 3ft 6in (1.07 m) from their inner ends, leaving a 7in (0.18 m) projection on each side for the door to bear against. Just inside the check, a single thin slab (3ft (0.91 m) long and up to 3in (0.08 m) thick) was firmly set on edge transversely across the passage to form a sill



Illus 6 Loch Shurrery hut circle: sections and elevations (inset: a sketch of the central 'post-hole')

rising 7in (0.18 m) above the floor (Illus 8). The floor was paved with large heavy slabs, the interstices filled with small cobbling. This paving extended into the interior of the hut for a distance of 5ft (1.5 m). One sherd of pottery was found resting on the paving of the passage 2ft (0.6 m) outside the sill-stone, but was unfortunately not identifiable as to form or date (see Section 4, No. 1).

3.4 The internal area (Illus 5, 9 and 10)

The interior as excavated, which measured 28ft (8.5 m) by about 26ft (7.9 m) across, is considered to have been disturbed, but sufficient flagstones remained in position to support the interpretation that the floor was originally composed of paving bedded on a 3in (0.08 m) layer of rough cobbling set into the natural clay subsoil. [*Ed.*: the assumption

being that what survived in the entrance and the south-western quadrant was originally representative of the whole interior]. Situated just off centre there was a sub-rectangular hearth consisting of a paved area measuring 3ft 4in (1.02 m) by 2ft 2in (0.66 m), which was defined by a kerb of thin slabs set on edge; the hearth floor was covered by a layer of burnt material mixed with small stones (Illus 11). Two samples of the charcoal were submitted for radiocarbon dating in 1997 (see Section 5). Both fragments were of Alder (identifications by Dr Mike Cressey). The determinations produce calibrated ranges (at 2-sigma) of 346 - 4 cal BC and 341 cal BC – cal AD 1.

Situated 2ft 6in (0.76 m) north-north-east of the hearth there was a post-socket, consisting of a polygonal hole sunk some 9in (0.2 m) into the ground, paved with a double layer of flat stones (up to 2in (30–50 mm) thick) and lined with sizeable stones (up to 1ft 8in (0.5 m) by 9in (0.23 m) by 10in (0.25 m): see



Illus 7 Loch Shurrery hut circle: cutting across the wall

Illus 6 inset). One of the lining-stones had originally been a saddle quern (Section 3.5, no. 5). Some burnt material and a few small packing-stones were recovered from it.

3.5 Small finds

1. Sherd from paving of entrance passage (Section 4, pottery no. 1)

2. Two sherds from surface of wall foundation in the South cutting immediately outside the outer face (Section 4, pottery nos. 2 & 3)

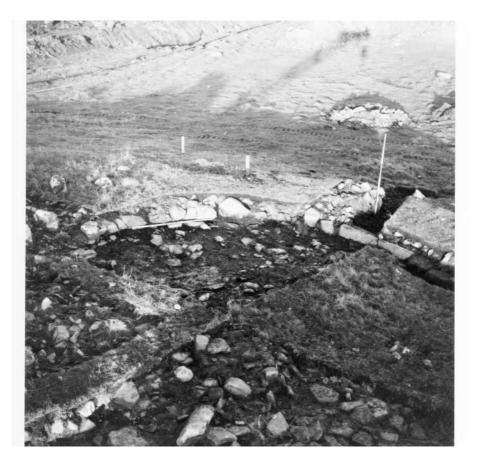
- **3**. Wood fragments from hearth (see Section 5)
- **4**. Burnt stone from wall core north of entrance (Section 4, 'pottery' no. 4)
- 5. Saddle quern from the post-socket near the hearth

6. Stone bearing a single cup-mark from wall tumble outside wall in South-West cutting

[*Ed.*: Items 5 and 6 were no longer extant in 1996 when post-excavation work restarted, so little more can be said about them. The excavator was of the opinion that the position of the small cup-marked stone (Illus 5) among the external wall-tumble suggests that it had served as core material and was of no other significance to the builders of the hut circle than just a handy bit of rubble to fill the space between the inner and outer faces. The saddle quern had definitely been re-used. It may support a date earlier than the later first millennium BC for some of the activity on the site, if the dating evidence for the quern transition (Caulfield 1980) is accepted, but see Armit 1992, 192 and Section 6.2]



Illus 8 Loch Shurrery hut circle: the entrance



Illus 9 Loch Shurrery hut circle: interior looking north-east



 ${\it Illus \ 10} \quad {\it Loch \ Shurrery \ hut \ circle: \ interior, \ north-eastern \ quadrant}$



Illus 11 Loch Shurrery hut circle: the hearth

4 **Pottery from the Loch Shurrery hut circle** by Ewan Campbell

Three sherds of pottery were recovered from this site, but none retained diagnostic features. All are handmade and fired at a low temperature. Pottery of this nature has been made in western Scotland from the Iron Age until recent times, and it is difficult to date sherds which are undecorated and do not show the vessel form. However, an Iron Age date is the likeliest for these sherds. Nos. 2 & 3 are very coarsely tempered with large rock fragments derived from the bedrock of Old Red Sandstone. Comparable coarse fabrics were found at Crosskirk broch in the early broch-period deposits (Fairhurst 1984, 110-12), though there the inclusions were not quite as coarse. A tradition of very coarsely-tempered pottery is found in various parts of Scotland, and is sometimes referred to as Dunagoil Ware or VCP (Very Coarse Pottery). In southern and western areas these are found in early/middle Iron Age contexts (Campbell 2002, 141). A date in the later first millennium BC would fit with the evidence from Crosskirk and the radiocarbon dates from the Loch Shurrery hearth. Sherd no. 1 is even less identifiable. Its soft fabric suggests that it is pre-medieval, but it is impossible to be more specific.

1. Body sherd. Handmade, burnt fabric, inner face missing. Fabric soft, grey to brown. Few inclusions, of decayed material, unidentified. Layer 1, paving of entrance passage (Section 3.5, small find 1).

2.& 3. Bodysherds from large vessel. Handmade, fabric very coarsely gritty, siltstone rock fragments up to 15 mm. Colour brown to black. T 10 mm. Layer 2, surface of wall foundation, south cutting (Section 3.5, small find 2).

4. Labelled 'burnt clay', but is in fact burnt siltstone. Layer 4, core of wall (Section 3.5, small find 4).

[report written 1997, revised 2002]

5 Radiocarbon dating of the Loch Shurrery hut circle by Gordon S Cook

Table 1 Radiocarbon dates								
Lab code*	Sample material	Lab Age BP	δ C13	Calibrated dates				
				1 sigma	2 sigma			
AA-24947	Sample 1: Alder 3.1g (Alder)	2095±45	-28.1‰	cal BC 187–91 (cal BP 2136–2040)	cal BC 346–4 (cal BP 2295–1953)			
AA-24948	Sample 4: Alder 3.3g (Alder)	2090 ± 45	-28.0‰	cal BC 183–77 (cal BP 2132–2026)	cal BC 341–cal AD1 (cal BP 2290–1949)			

The calibrated age ranges are determined from the University of Washington Quaternary Isotope Laboratory, Radiocarbon Dating Program, 1987. The 20 year atmospheric calibration curve is used throughout and the calendar year ranges, obtained from the intercepts (Method A), are expressed at both the 1- and 2-*sigma* levels of confidence.

[report written 1997]

6 Discussion and interpretation of the Loch Shurrery hut circle by Richard Hingley

6.1 Introduction

At least 2000 earthwork hut circles survive in Caithness and Sutherland which, together with the visible remains of their field systems, represent an important record of human settlement in the period between around 3900 and perhaps 1500 years ago. Mercer (Mercer 1985, 59–95) discusses the range of hut circles in Caithness and Sutherland while the Lairg report (McCullagh and Tipping 1998, 4) considers the range of dates that these sites may cover. These hut circles are the surviving traces of the stone foundations of round stone, timber and turf houses (Armit 1997, 27-30). They occur singly and in groups of up to 20 examples. The internal diameter and substantial nature of many of these hut circles actually suggests that the term 'house circle' is more appropriate (Hingley 1998, 25), but 'hut circle' is well established in the literature. The Loch Shurrery hut circle represents one of a small group of such sites which have been excavated in the northern part of the Scottish mainland.

This discussion will consider the Loch Shurrery hut circle through a comparison with similar sites excavated in Sutherland in recent decades, at Kilphedir (Fairhurst and Taylor 1974), Lairg (McCullagh and Tipping 1998), Rhiconich (Cullen 1993; Donnelly in prep.) and Armadale (Strachan 1996). These few excavated examples represent some of the variety evident in the sites recorded through field survey. With so few excavated examples, however, it is not possible to draw any clear conclusions about the class as a whole.

The Loch Shurrery hut circle appears to have been an isolated example and there is no evidence of contemporary cultivation in the vicinity (O.S. surveyors 1981, cited in NMRS NDO5NW3). A dense concentration of sites immediately to the north of the hut circle and to either side of the Forss Water includes a number of brochs and other structures which may be broadly comparable in date to the excavated site. Because of the limited nature of the excavation at Loch Shurrery, the main value of the evidence about the hut circle relates to its structure and dating, although the material culture of its occupants will also be discussed.

6.2 Dating

Of the excavated stone-built hut circles in Sutherland, many appear to date to the second millennium BC; for instance a range of houses at Lairg and the single house at Rhiconich. The dates from the excavated houses at Kilphedir may indicate occupation in the early to mid first millennium BC, with reoccupation of at least one house late in the first millennium BC or early in the first millennium AD. Three of the houses at Lairg were constructed in the first millennium BC or early in the first millennium AD (houses 3, 7 and 8). This dating evidence may suggest a spread of dates for the construction of roundhouses from as early as c1900 BC to the early first millennium AD; this may be broadly comparable to the dating of roundhouses for much of Scotland, although it is usually assumed that the majority of examples in Sutherland and elsewhere are second millennium BC in date.

Two radiocarbon dates were obtained from the two samples of Alder from the central hearth of the Loch Shurrery house (Section 5) and these were virtually identical, suggesting at the 2-sigma level that the house was in use in the fourth to first centuries BC. These dates should indicate the time at which burning occurred in the centre of the house. They do not necessarily date the construction or initial usage of the roundhouse, which may have been rather earlier. The pottery from the Loch Shurrery roundhouse (see Section 4) and certain aspects of its construction (see below) might support the idea of an Iron Age phase of occupation. Although it would appear likely that the roundhouse at Loch Shurrery was used in the later first millennium BC and the saddle quern and pottery suggests that this use may have been domestic, the evidence does not serve to demonstrate conclusively that the house was built at this time as the radiocarbon dates were obtained from a context relating to the occupation rather than the construction of the house.

This dating problem appears more serious because of the evidence from Rhiconich, where the central hearth of the second millennium BC roundhouse appears to have been reused in the middle first century AD, perhaps to cremate a human body (Donnelly in prep.). Other roundhouses were reused at a date sometime after their abandonment; for instance Kilphedir house V (Fairhurst and Taylor 1971, 92). Elsewhere in Scotland additional evidence exists for reuse of roundhouses at a date somewhat later than their initial construction (see Carn Dubh, Perthshire: Rideout 1995, 158–59).

At Carn Dubh and Rhiconich the reuse of roundhouses does not appear to have been domestic in nature, but there is no apparent reason why an old house should not have been rebuilt at a much later time. The only way to study the complex potential history of the use and reuse of stone walled hut circles, brochs and other substantial later prehistoric houses which are excavated in future is to obtain multiple dates for the construction and use of these complex monuments.

To summarise, it is likely from the limited evidence that in some cases the stone foundations of earlier roundhouses were reoccupied, rebuilt or used for a later activity. With regard to the idea of the possible Iron Age phases of activity at Loch Shurrery representing reuse, traces of a possible rebuild in the outer wall may indicate that the house saw more than a brief period of occupation. Whether this extended phase of occupation occurred in more than one distinct period is unclear from the excavated evidence and the whole period of construction and occupation may have occurred within the Iron Age.

6.3 The structure of the hut circle

The Loch Shurrery hut circle represented a medium-sized oval house with a west-facing entrance (Illus 5). It had an off-centre hearth of rectangular construction. There was also a post hole just to the north-east of the hearth which may have held a roof support or some item of internal furniture. The entrance passageway was well-paved and contained a door-check (Illus 8), while at least part of the interior was also paved. The (probable) disturbance of the interior area made it difficult to ascertain whether the remainder of the interior had been paved, most of the paving on the plan being to the west of the interior of the building.

Too few hut circles have been excavated in Northern Scotland to attempt to place them into any meaningful types (McCullagh and Tipping 1998, 4), although Armit follows Fairhurst and Taylor in suggesting that during the latter part of the first millennium BC hut circles seem to have become rather more complex in design, having thicker walls and lengthened entrance passageways. He has also suggested that their overall numbers appear to be reduced so that they occur as isolated farmsteads rather than in groups (Armit 1997, 30).

It has been suggested above that the Loch Shurrery hut circle may have been an Iron Age roundhouse. It was similar in size to examples at Rhiconich and Armadale and broadly comparable to examples at Kilphedir. It is also similar in size to the smaller examples at Lairg. It was rather different in structure to the majority of these houses, however, as it did not appear to have an internal ring of post holes. In addition, its western entrance is not matched at the other sites, where entrance orientations are to the south, east or south-east. The isolation of the Loch Shurrery hut circle appears to fit with the interpretation outlined by Armit for first millennium AD hut circles (see above). In addition, the wall of the house was fairly thick and the excavation suggested that it was complex (Illus 7), while the entrance passage way was quite long (Illus 5). When the site was visited by the O.S. surveyors in 1981, they noted that around the north-western arc the width of tumble was about 6.0m, suggesting an unusually massive construction in this quarter, or possibly further subsidiary structures as yet unexcavated (NMRS NDO5NW3). The existence of door checks is also an unusual feature in the excavated examples of Sutherland hut circles and may relate to the entrance structures of brochs and other substantial roundhouses, which usually appear to date to the late first millennium BC or early first millennium AD.

6.4 Material culture

The site produced a limited quantity of very undiagnostic pottery (Section 4) and a saddle quern (Section 3.5). These types of finds are typical of later prehistoric settlements in Scotland. Unlike the Rhiconich site, Lairg and other hut circle sites, no lithics were found; perhaps if the Iron Age dating is preferred for the Loch Shurrery hut circle it may be supposed that by the later first millennium BC lithics had ceased to be common items of the domestic tool-kit. The single stone with a 'cup mark' from outside the wall of the hut circle to the south of the entrance (marked on Illus 5) was of uncertain significance, as it did not survive when this discussion came to be written.

[report written 1998, revised 2003]

7 Lambsdale Leans ('site 2' on Illus 1) by Alistair MacLaren

7.1 Introduction

Before excavation, the Lambsdale Leans site (NGR ND 051548) appeared as a grass-grown mound, about 7ft (2.1 m) high and an irregular oval on plan, measuring about 75ft (22.9 m) in length by a maximum of 55ft (16.8 m) transversely (Illus 12 and 13). Towards the eastern and western ends of the mound, the tops of several, potentially large, stones were visible protruding through the surface which was uneven and pitted with rabbit-holes. Probing suggested that the upper levels, at least, of the mound consisted largely of sand, and at the western end, where a strip of turf had been removed, sand could be seen with a $2\frac{1}{2}$ -inch-deep (0.06 m) layer of burnt material running through it.

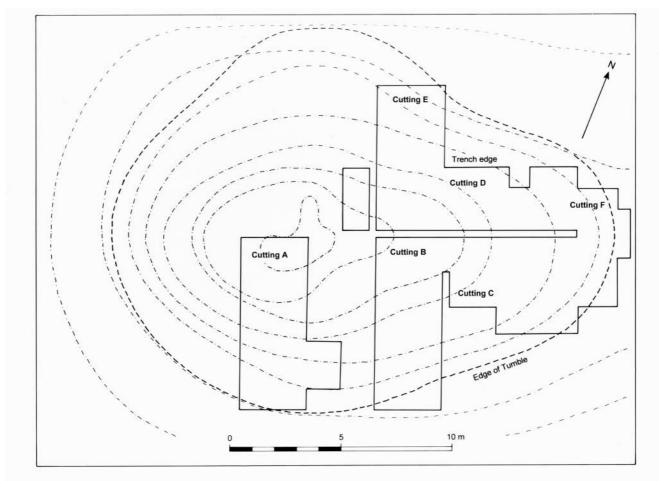
The contour survey – and the pattern of the excavation cuttings (Illus 13) – was based on a line roughly marking the long axis of the mound, which was aligned on a magnetic bearing of 80° (69.5° True in 1955). In the three weeks which were spent on this site, in spite of the loss of seven days to severe rain, and interruption by showers on three other days, enough stripping was done, mainly in the eastern half of the mound (some 1400 square feet [130 square metres approx.]), to reveal that it was largely composed of a mixture of sand and earth, in which there was evidence of stone structures associated with layers of burning, which suggested two occupation floors. The partial skeletal remains of two adult females were recovered, together with a few sherds of pottery.

7.2 The excavations (Illus 13, 14 and 15)

The pattern of excavation trenches was laid out in order to provide a longitudinal section of the mound



Illus 12 Lambsdale Leans mound: general view from the east



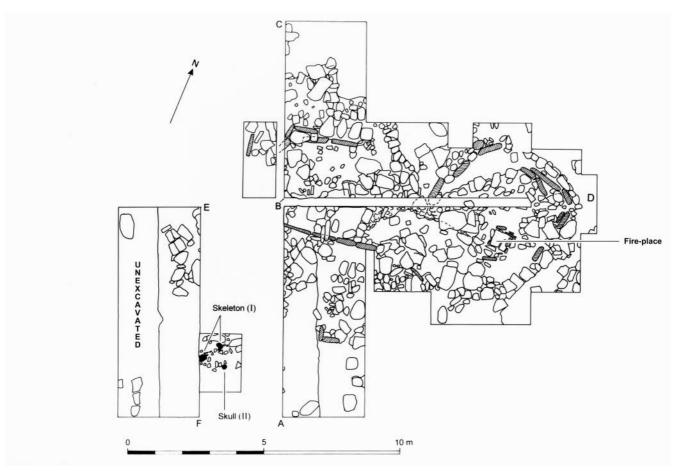
Illus 13 Lambsdale Leans mound: contour survey and trench plan (vertical interval of original survey: 1ft)

and, running towards it from each side, a series of cross-sections. They were examined in alphabetical order (see Illus 13), and their layout was developed in order to expose stone structures as they became visible within the body of the mound.

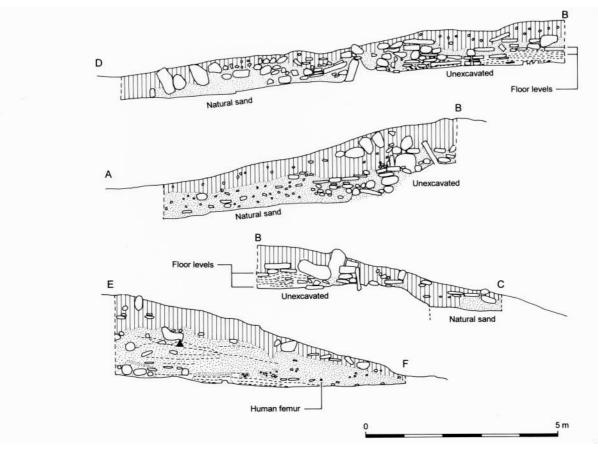
The first cutting (A) was put into the southern side of the mound at its broadest and highest point. The drawing of its east face (Illus 15: section E-F; see also Illus 16) shows that it consisted largely of sand and earth incorporating some stones, most of them apparently set at random, and all of them situated towards the inner (north) end of the cutting. The sandy mixture had, running through it, several lines of burnt material, the heaviest at lower levels, and about 7ft (2.1 m) in from the southern end of the cutting, and low down, human bones were exposed. The cutting was later extended to uncover the upper parts of two femora with part of the pelvis articulated (Illus 18), and the lower end of the vertebrae, and parts of a skull (all lying supine), with nearby, and at a slightly higher level, the remains of another skull. The skeleton [Ed.: oriented NE-SW] had several flat stones ranged round it, but there was no trace of a coffin or cist, and no attendant grave-goods. The skeletal remains were examined by Dr L H Wells, at that time on the staff of the Anatomy Department, University of Edinburgh, and his report appears below (Section 9).

The second cutting (B) was of the same dimensions (20ft by 10ft (6.1 m by 3.1 m)) as those of cutting A and running parallel to it 10ft (3.1 m) to the east (Illus 15: section A–B). The outer (southern) l0ft (3.1 m) of this cutting was found to consist mainly of sand and soil, but the inner 15ft (4.5 m) contained a lot of stones, including flat slabs disposed in such a way as to suggest, if not establish, the presence of a floor or occupation-level running into the very heart of the mound, its outer limit about 2ft 6in (0.75 m) below the surface; and there were indications of a lower occupation-level, founded on the undisturbed natural sand beneath.

At this stage, that is three days into the excavation (with one whole day lost to torrential rain), I decided against removing any more of the northern two-thirds of cutting B in favour of extending eastwards to follow the features already exposed, and on the fourth day cuttings C and D were deturfed. This showed the upper occupation-level of cutting B to extend to the east, and also exposed what appeared to be the foundations of a sub-circular structure, not definitely associated, which in turn was extending farther to the east. Two days later, additional cuttings were made on the north (cutting E) and on the east (cutting F). In cutting F, the eastern arc of the sub-circular structure was completed and, in cutting E, what appeared to be



Illus 14 Lambsdale Leans mound: plan of the unfinished excavations



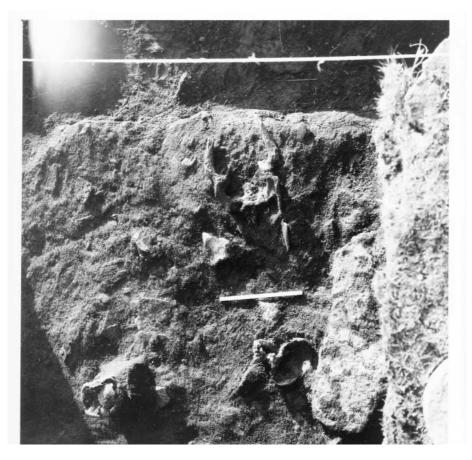
Illus 15 Lambsdale Leans mound: sections



Illus 16 Lambsdale Leans mound: section-face of Cutting A



Illus 17 Lambsdale Leans mound: the 'lower' stone structure



Illus 18 Lambsdale Leans mound: human remains. The skeleton (Lambsdale I) is on the right and the skull (Lambsdale II) on the left

part of the northern side and north-western angle of the rectangular structure first uncovered in cutting B was exposed.

It was at this point that the weather broke, and between 11 and 25 October seven full days were lost to persistent heavy rain, while three others were showery, leaving only four days uninterrupted. Progress was so severely delayed that it became clear that there would not be time to do further excavation, and I decided to do what more I could to clean up what I had already done, and leave the lower levels undisturbed.

7.3 The 'lower' stone structure

In the easternmost cutting (F) an arc of stones was found to be resting on the natural yellow sand (Illus 17; see also Illus 15: section D–B). It consisted mainly of flat slabs laid horizontally in two courses to form an outer kerb. Inside this kerb were set large flat slabs placed vertically and all sloping outwards. This setting was traced in cutting D, but in cutting C it merged with a jumble of stones, which there was not time to explore (Illus 14, area of cuttings C, D and F). The area defined by this?outer wall was covered by the remains of a rough paving incorporating several flagstones laid flat. The remains of a fire-place (see Illus 14) consisted of a rectangular hearth-stone accompanied by slabs set on edge and protruding some 3in (0.08 m) above the level of the hearth itself. All these stones were cracked and showed signs of having been subjected to heat.

7.4 The 'upper' stone structure

[*Ed*.: NB that no stratified sequence could be established relating the two sets of structures in Cuttings B-F to each other or to the burials in Cutting A: 'lower' and 'upper' appear to be working references to the way in which the structures were encountered during the excavations, though see section B-D on Illus 15]

What remained of this structure formed an irregular rectangular pattern and consisted of a series of large uprights with rounded stones ranged outside them (Illus 14, area of cuttings B and E). The area inside was a rough floor, composed of flagstones laid flat, and overlain by a dense accumulation of burnt material in alternate yellow and black bands.

7.5 Small finds, bag numbers

1. Four sherds from cutting A, top burnt layer (see the solid triangle in section EF, Illus 15, for position) (Section 8, pottery nos. 1–4)

2. Sample of burnt material from cutting B (no longer extant)

3. Sherds, unstratified, from cutting B (Section 8, pottery nos. 7–12, 14 & 15)

Sherds of pottery and one of glass, unstratified, from cutting C (Section 8, pottery no. 13)
 Sherds, unstratified, from cutting E (Section 8, pottery Section 8)

nos. 5–6)

Almost all the pottery is unstratified, and therefore can only give a possible indication of the overall date range of occupation of the site. None of the sherds look prehistoric, and most appear to be medieval. The earliest sherds are from a single grass-tempered handmade vessel whose form cannot be determined (nos. 7-10). This type of fabric is often found in Norse-period assemblages in the Caithness region (Gaimster 1986), though in other areas such as the Western Isles grass-tempering is not chronologically significant, being found in Iron Age and later fabrics (Lane 1990). Most of the remainder of the sherds fall into a generally later tradition of medieval oxidised wheel-thrown vessels. There are a number of different fabrics though they share similarities. Two rims are present (nos. 1 and 5), but neither are easy to date very precisely as there is so little comparable material in this area (McCarthy & Brooks 1988, illus 113). They appear to be from small globular pots, which by comparison with the few northern or western assemblages are probably of l2th-l3th centuries AD date (ibid, illus. 114, no. 530; Armit et al in prep.). The fabrics are not particularly well-fired, and are probably of local production. There are no examples of identifiable 13th-14th century types such as East Coast White Gritty or Red Sandy wares which were widely distributed. There is a scarcity of identifiable post-medieval wares which one would expect if occupation had continued into the 17th century or later, though no. 6 may be of this date. The glass from Cutting C is the only other object which might be late in date, but is also unstratified. [*Ed.*: Robin Murdoch kindly comments that it is part of the kick-up from a wine bottle, of small diameter and hand-finished, late 18th—early 19th century. He notes that the opaque grey-blue colour is the result of a flaw in the manufacturing process.] Two other pottery sherds (nos. 13 & 14) are from handmade vessels but have no distinctive features. They could belong to the Late Iron Age or Norse periods.

The pottery suggests a mainly medieval date for the occupation, with a possible beginning in the Norse period and lasting till the 12–13th centuries, with only casual occupation at later dates.

In the list below, RD = Rim Diameter, T = thickness, * indicates material illustrated

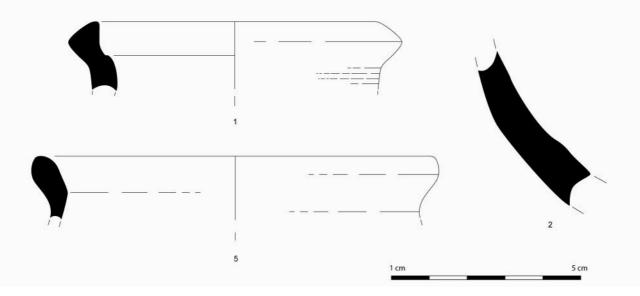
1.* Rim sherd from small globular vessel with everted rim. Wheel thrown or wheel turned. Fabric soft, orange-brown, scattered sub-angular quartz grits > 1 mm. Rim with deeply incised lid-seat. Carbon deposits on exterior. RD 90mm. Layer 1, cutting A, top burnt layer (Section 7.5, finds bag 1).

2–4.* Three bodysherds from near base, same vessel as 1. Indications of flat or sagging base. T 7–11 mm. Same context as no 1.

 5^* Rim, everted. Wheel thrown, medium hard, orange fabric, sparsely gritted with mixed subangular quartz and other minerals. RD 110 mm. Layer 5, cutting E, unstratified (Section 7.5, finds bag 5).

6 Bodysherd. Wheel thrown, rilling on interior, exterior wiped. Fabric orange, medium hard, ungritted. Layer 5, cutting E, unstratified (Section 7.5, finds bag 5).

7–10. Four bodysherds of thin-walled vessel, handmade. Fabric medium hard, buff to grey, no grits but sparse



Illus 19 Lambsdale Leans mound: the medieval pottery

coarse organic temper. T 4–7 mm. Layer 3, cutting B, unstratified (Section 7.5, finds bag 3).

11–12. Two joining bodysherds of large wheel thrown vessel. Fabric medium hard, similar to no 1, above. T 8–11 mm. Layer 3, cutting B, unstratified (Section 7.5, finds bag 3).

13. Bodysherd, handmade coil-formed vessel. Fabric grey to buff, medium hard, few grits. Layer 4, cutting C, unstratified (Section 7.5, finds bag 4).

14. Possible basal sherd, very abraded, in similar fabric to no. 13. Layer 3, cutting B, unstratified (Section 7.5, finds bag 3).

15. Small bodysherd, similar fabric to no. 11. Layer 3, cutting B, unstratified (Section 7.5, finds bag 3).

[report written 1997, revised 2002]

9 Human remains from Lambsdale Leans *by L H Wells*

The remains are those of two individuals: one (Lambsdale I) represented by the left half of the skull and mandible with fragments of vertebral column, pelvis and limbs and the other (Lambsdale II) by the hinder half of the skull with no other associated parts (Section 7.2; Illus 18).

Lambsdale I is clearly shown by the remains of the pelvis to be female. The vault sutures are almost completely obliterated, externally as well as internally, indicating a middle-aged or even elderly individual. This agrees with the evidence of extensive arthritic change in the vertebral, pelvic and hip joints. Despite this the teeth, although considerably worn, were nearly all still in position. The remains are too heavily corroded for any measurements to be made on either the limb-bones or the skull. They have belonged to a small-boned woman; the clearly defined muscle markings on the limb-bones show that she had led an active life. The remaining portion of the skull is somewhat warped, but it was evidently of medium size and moderately dolicho-cranial.

Lambsdale II represents a younger, but still fully adult individual, and from its slender build was probably also female. The fragment appears to have formed part of a skull shorter and wider than that of Lambsdale I.

[report written 1956]

10.1 Introduction

The partially excavated mound of Lambsdale Leans lies in Reav parish, situated on low-lying ground towards the head of Loch Shurrery and close to where its main tributary, the Torran Water, enters the loch. Loch Shurrery lies at the northern edge of this now rather sparsely occupied part of the interior of Caithness. In spite of this, on the slopes of Beinn Freiceadain and Ben Dorrery, just to the east, is one of the largest surviving clusters of archaeological sites in Caithness, a concentration which continues northwards along the Forss Water to the sea. Within this group are sites of both ritual and secular significance and of varying dates, including chambered tombs, standing stones, hut circles and the enigmatic fort of Buaile Oscar on the top of Beinn Freicaidain itself. While this provides no immediate clue as to the place of Lambsdale Leans in the history of the locality, it suggests that this area has always been of some importance.

The main characteristics of the Lambsdale Leans site – the presence of what appear to be two extended inhumations and the remnants of possible structures associated with several layers of burnt material (Illus 14 and 15) – provide the initial starting points in the search for a context for the site. A number of sherds of medieval pottery, coming from the upper layers, provide the only clue to dating these rather diverse strands of evidence (Section 8).

10.2 Lambsdale Leans as a burial site

The change from cremation to extended inhumation burial seems to have occurred during the later prehistoric period, although a variety of burial practices did persist well into the first millennium A.D. (Ashmore 1981, 350ff; Close Brooks 1984, 89). Long cist burial, generally without grave goods, appears to have been the norm in the Early Medieval period throughout much of Scotland (Close Brooks 1984, 94), though again this does disguise a variety of form and association. In many cases, such cists - while still incorporating slab-like stones - were often very roughly constructed. This was true at Reay, on the coast north of Lambsdale Leans, where one of the (?10th-century) burials lay on a paved surface and was surrounded by large stones which, although they covered the burial, could not be described as a cist (Edwards 1927, 203). This recalls Lambsdale Leans; here, again, the excavator believed that, although the burials were not in cists, that there was some form of arrangement of flat stone slabs around one of the bodies (Section 7.2).

Lambsdale Leans is a natural mound, of elongated shape and composed largely of sand, into which are set the burial and structural remains. Many of the known long cist burials in the north of Scotland also occur in natural mounds. These, as at Reay, and at Keiss (Laing 1870, 38–41) and in the Birkle Hills, near Murkle (Tress Barry 1895), are often sand dunes. In other cases, for example Loch Watenan Dairy Park, Dunrobin, an artificially and constructed cairn covered the cist (Gourlay 1984; Ashmore 1981, 350; Close Brooks 1984, 99-102). Not all mounds utilised in this way were of natural origin; a significant number of long cists have been recovered from broch mounds, such as Crosskirk and Green Tullochs, both in Reay parish (Fairhurst 1984, 101-3; Anderson 1873, 185).

Although many of the accounts of the finds of burials in Caithness and Sutherland are old and confused, a surprising number include references to possibly associated structures. Even if these are not contemporary with the burials, it is perhaps significant that such relationships do occur. At Lambsdale Leans, areas of stone paving and walling form two, small structures, one sub-circular in shape and the other, less complete example, seemingly rectangular in plan. At Lower Dounreay, the structural remains are described as huts (Cruden 1956; see Appendix, Section 11). Although their shape is not recorded, these had clay floors and hearths and may have been contemporary with, or later than, the group of burials with which they were found. In the top of the most northerly mound of the Birkle Hills and overlying the cist burials, a rectangular, slab-built structure contained a re-used Pictish symbol stone (Laing 1870, 49; Tress Barry 1895, 273). At Crosskirk, the seated burial is associated with the main period of occupation of the broch, while the two other cists appear to post-date this main phase of use (Fairhurst 1984, 101-3). These, along with more well-known complexes at Buckquoy and Saevar Howe in Orkney (Ritchie 1977; Hedges 1983), suggests that the transformation of settlement sites into burial places, and apparently vice versa, was a feature of the later first millennium A.D. in Caithness as elsewhere.

[*Ed.*: However, it is only an assumption that the burials are stratigraphically earlier than the structures. It is noticeable that the orientation of the Lambsdale Leans burials – north-east to south-west-is the same as that of the later, aberrant burials in the sequence at John O'Groats (Driscoll 1993, 35) which are radiocarbon-dated to 1520-1656 cal AD (at 1-*sigma*). It is also only an assumption

that the mound, into which the burials were incorporated or inserted, is a natural one and not a burnt mound].

10.3 The structures at Lambsdale Leans

The structural remains themselves, whilst neither was fully excavated, accord well with the general tenor of the available evidence from the north of Scotland. Both structures at Lambsdale Leans had floors comprising roughly laid paving, edged with upright slabs, and with an outer kerb of stones. The form and construction of these structures, particularly this use of uprights, finds parallels amongst the known cellular and rectilinear buildings at Buckquoy and Pool, Sanday on Orkney and the Udal and Cnip in Lewis (Ritchie 1977; Hunter 1990; Crawford n.d., 12; Armit 1996, 164-6). Further, the structures at Lambsdale Leans appear to be of comparable dimensions to the buildings at these sites - the circular structure is around 3.5 m in diameter, while the rectangular structure is of similar width (although not complete enough to determine length). Their scale certainly ensures that these structures are more in keeping with the later first millennium AD buildings in Orkney and Lewis than the hut circles, broch settlements, and wags of the Iron Age in Caithness.

[*Ed*.: It is worth mentioning here the Late Norse site at Huna in Canisbay parish, described as 'a low irregular [sand] mound . . . made up of a series of structural phases. Sherds of grass tempered pottery were found in association with walls protruding at the upper level' (Batey 1984, 24 & 58; plate 6A & B)].

10.4 Final comments

While much of this evidence is tantalisingly imprecise, on the arguments presented above Lambsdale Leans correlates well with other known sites in the far north of Scotland. Although the known distribution of burials in this area is primarily coastal, the cairn at Watenan provides a parallel as it is also situated by an inland loch. Lambsdale Leans, therefore, appears to find a place within the context of Early Medieval activity in Caithness. The pottery however suggests that occupation on the site, or perhaps more likely nearby, may have continued into the medieval period.

It must be stressed that the evidence is so fragmentary, due to the conditions under which the excavations had to be carried out and the fact that the work was abandoned, that it is difficult to be certain about any aspect of the Lambsdale Leans site.

[Ed.: An alternative interpretation, prompted by the stratified 12th–13th century pottery (Section 8, nos 1-4) in the mound and another structural parallel (the medieval building at Eilean Olabhat: Armit 1996, fig 11.1), might offer an even later date-range than Early Medieval. In this respect, it would be useful to obtain radiocarbon dates for the Lambsdale Leans burials, whose orientation is of some interest, for at present it could be argued that they had been cut from a higher level than was recognised at the time (cf Illus 15: section E–F). The relationship between Cutting A (burials) and Cuttings B-F (structures) seems to have become a casualty of the premature end to the 1955 excavations; the site of course still remains, though it is a Scheduled Ancient Monument].

[report written 1999, revised by the Editor 2002]

11 Appendix: salvage recording at Lower Dounreay, Caithness 1956 by the Ministry of Works

[Ed.: The account of the work at Lower Dounreay Farm (now part of UKAEA Dounreay) has been mentioned in Section 10.2. Like Lambsdale Leans, the site is not well known, however (e.g. it is absent from the survey of Viking and Late Norse graves, Batey 1983) and so it is reproduced here – by permission of the Council for Scottish Archaeology – as an appendix, largely unaltered from its 1956 form.]

In the course of excavating a deep trench near Lower Dounreay Farm (NGR NC984 669) with a mechanical digger, human and animal remains were discovered. The Ministry of Works was informed, and in the course of other duties in the district an Inspector of Ancient Monuments carried out a limited exploration of the site.

At least seven skeletons were found; as the first discoveries were dispersed by the digger, it is not possible to determine the number exactly. Excavations on the 29th–30th October exposed four skeletons buried in pits dug in the sand. The interments were 8 to 9 feet (2.4–2.7 m) below present ground level: at least half of this accumulation is later than the interments.

Three of the skeletons were extended, one crouched lying on its right side with arms folded. The left arm of one of the extended skeletons was dismembered at the shoulder. No objects were found in association with the interments. The ganger in charge of the original digging said that the first skeletons found were buried in covered cists, made of local flagstones, but the cists could not be accurately observed before they were broken up. As no cists were found in the course of the MoW excavations we have little definite knowledge of them. Upright flagstones, which may have belonged to other cists, were visible in the western side of the trench, but it was not possible to explore these.

The opening of the trench also revealed in cross-section the floors of two huts, one containing a clay hearth. As no objects were recovered from these it is not possible to date them absolutely; they may be contemporary with or later than the interments.

At present it can only be suggested that the interments are pre-Christian [Ed.: presumably on the grounds of orientation, though this is not stated]. It is very likely that there are more outside the limits of the 1956 trench: the discovery of three skeletons lying within a 6 ft (1.8 m) square points either to good luck or to a considerable cemetery.

[Ed.: The NMRS notes that 'several coffins' were found in the vicinity while part of the stackyard of Lower Dounreay Farm was being levelled in about 1865 and that another burial was recorded in 1966 (NMRS NC96NE3). A Class 3 decorated slab has been found at the foot of the cliffs at Dounreay and is now in the National Museum (National Museums of Scotland X.IB 303) (NMRS NC96NE31). It bears a key pattern in low relief on one face and could be part of a cross-shaft like that found at Reay parish church (National Museums of Scotland: X.IB 267)]. Alistair MacLaren: All the site drawing was done, under difficult weather conditions and severe pressure of time, by Mr William Boal of the Architects Department of the Ministry of Works. Both he and Mr Ritchie could not have been more friendly and co-operative in giving me all the help and advice they could. It is also a pleasure to acknowledge the much kindly assistance given by Mr Jollans, resident engineer, and his assistant, Mr Charlton, and by Mr Mitchell, the chief foreman. Much of the equipment for the excavation was provided from MoW stores, and the University of Edinburgh generously lent a tent and a Dumpy level, tripod and staff, while Messrs Tawse kindly supplied a barrow, spades, shovels and picks.

SAIR: Publication acknowledgments must be made to Jim Rideout, and to Gordon Barclay of

Historic Scotland who initiated the post-excavation work in 1996, as well as to the contributors of the pottery reports, radiocarbon dating and site discussion sections; in addition, the charcoal from Loch Shurrery was identified by Dr Mike Cressey (CFA Archaeology Ltd.). The SAIR editor is grateful to Roderick McCullagh and Graham Key of Historic Scotland, to Sarah Winlow of the NMRS, to Thomas Small of Headland Archaeology for his digitisation work (through the good offices of Mike Middleton), to the referees for their helpful comments on the text, to Robin Murdoch for his comments on the glass, to Alison Sheridan (NMS Archaeology) and Simon Gilmour (RCAHMS), and to Mr David Lynn, CSA Director, for permission to re-publish the original account of the little-known work at Lower Dounreay.

13 References

- Anderson, J 1873 'Notice of the excavation of the brochs of Yarhouse, Brounaben,
 Bowermadden, Old Stirkake, and Dunbeath in Caithness; with remarks on the period of the brochs, and an appendix, containing a collected list of the brochs of Scotland, and early notices of many of them, with a map showing sites of brochs', Archaeologia Scotica 5 (1873–90), 129–98.
- Armit, I 1992 'The Atlantic Scottish Iron Age: five levels of chronology', Proc Soc Antiq Scot 121 (1991), 181–214.
- Armit, I 1996 The Archaeology of Skye and the Western Isles. Edinburgh.
- Armit, I 1997 Celtic Scotland. London.
- Armit, I, Campbell, E, & Dunwell, A in prep.
 'Excavations at Eilean Olabhat, North Uist', Proc Soc Antiq Scot.
- Ashmore, P J 1981 'Low cairns, long cists and symbol stones', *Proc Soc Antiq Scot* 110 (1978–80), 346–55.
- Batey, C E 1984 Caithness Coastal Survey 1980–82: Dunnet Head to Ousdale, Durham [= Dept. Archaeol. Univ. Durham. Occ. Pap. 3].
- Batey, C E 1993 'The Viking and Late Norse Graves of Caithness and Sutherland', in Batey, C E Jesch, J and Morris, C D eds., *The Viking Age in Caithness, Orkney and the North Atlantic*, Edinburgh, 148–72.
- Campbell, E 2002 'The Western Isles pottery sequence', in Ballin Smith, B and Banks, I eds., In the Shadow of the Brochs The Iron Age in Scotland, Stroud, 139–44.
- Caulfield, S 1980 'Quern replacement and the origins of the brochs', *Proc Soc Antiq Scot* 109 (1977–78), 129–39.
- Close-Brooks, J 1984 'Pictish and other burials', in Friell, J G P and Watson, WG eds., *Pictish studies: settlement, burial and art in Dark Age Northern Britain*, 87–114. Oxford [= British Archaeological Reports 125].
- Crawford, I A n.d. The West Highlands and Islands; a View of 50 Centuries. Cambridge.
- Cruden, S 1956 'Lower Dounreay, Caithness', Discovery and Excavation in Scotland, 1956, 35–36.
- Cullen, I 1993 'Rhiconich (Eddrachilles parish) Hut circle', *Discovery and Excavation in Scotland*, 1993, 54.
- Donnelly, M in prep. 'The excavation of a hut circle at Rhiconich, Sutherland, Highland District, 1993'.
- Driscoll, S T 1993 'Rescue Excavation of a Prehistoric Settlement and Viking

Age/Medieval Cemetery at John O'Groats 1989', *Glasgow Archaeol J* 16 (1989–90), 29–37.

- Edwards, A J H 1927 'Excavation of graves at Ackergill and of an earth-house at Freswick Links, Caithness, and a description of the discovery of a Viking grave at Reay, Caithness', *Proc Soc Antiq Scot* 61 (1926–7), 196–209.
- Fairhurst, H and Taylor, D B 1971 'A Hut-Circle Settlement at Kilphedir, Sutherland', *Proc Soc Antiq Scot* 103 (1970–71), 65–99.
- Fairhurst, H 1984 *Excavations at Crosskirk broch, Caithness*. Edinburgh [= Society of Antiquaries of Scotland Monograph Series 3].
- Gaimster, D 1986 'Dung-tempering? A Late Norse case study from Caithness', *Medieval Ceramics*, 10 (1986), 43–47.
- Gourlay, R 1984 'A Symbol Stone and Cairn at Watenan, Caithness', in Friell, J G P and Watson, W G eds., *Pictish studies: settlement*, *burial and art in Dark Age Northern Britain*, 131–33. Oxford [= British Archaeological Reports 125].
- Hedges, J W 1983 'Trial excavations on Pictish and Viking settlements at Saevar Howe, Birsay, Orkney', *Glasgow Archaeol J* 10, 73–124.
- Hingley, R 1998 Settlement and Sacrifice: the later prehistoric people of Scotland. Edinburgh.
- Hunter, J R 1990 'Pool, Sanday: a Case Study for the Late Iron Age and Viking Periods', in Armit, I (ed) *Beyond the brochs*, Edinburgh, 175–93.
- Laing, S 1870 'Donations to the Museum', Proc Soc Antiq Scot, 7 (1866–8), 37–56.
- Lane, A 1990 'Hebridean pottery: problems of definition, chronology, presence and absence', in Armit, I (ed) Beyond the brochs, Edinburgh, 108–30
- McCarthy, M R & Brooks, C M 1988 Medieval Pottery in Britain AD 900–1600, Leicester.
- McCullagh, R and Tipping, R 1998 *The Lairg Project 1988–1996: The Evolution of an Archaeological Landscape in Northern Scotland.* Edinburgh [= STAR Monograph 3].
- Mercer, R 1985 Archaeological Field Survey in Northern Scotland Volume III 1982–1983. Edinburgh [= University of Edinburgh Department of Archaeology Occasional Paper 4].
- Rideout, J S 1995 'Carn Dubh, Moulin, Perthshire: survey and excavation on an archaeological landscape 1987–90, *Proc Soc Antiq Scot*, 125 (1995), 139–96.

Ritchie, A 1977 'Excavation of Pictish and Viking-age farmsteads at Buckquoy, Orkney, *Proc Soc Antiq Scot* 108 (1976–7), 174–227. Strachan, R 1996 'Armadale (Farr Parish) Archaeological excavations', Discovery and Excavation in Scotland, 1996, 63–64. Tress Barry, F 1895 'Donations to the Museum', Proc Soc Antiq Scot, 29 (1894–5), 272–74.