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The Archaeology of Finlaggan, Islay

David Caldwell

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The Archaeology of Finlaggan, Islay: Excavations at the Centre of the Lordship of the Isles, 1989–1998

CATALOGUE

by David Caldwell

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Note

Contents of the Finlaggan Archaeological Project site archive

The Finlaggan Archive contains a fuller presentation of the data contained within this Catalogue, including additional details of the finds and descriptions of the excavations. The archive is lodged in the Historic Environment Scotland Archives (collection number 551/2513).

The archive consists of six main elements:

(A) Finds and Samples. The soil samples at the time of writing (June 2023) have now all been jettisoned.

(B) Key Data: Guides and Lists, including:

- Information on the site grid
- Statistics on areas of trenches
- List of archaeological contexts
- Harris matrices for all the trenches
- List of Finlaggan plans
- List of record photos
- List of finds with contexts, coordinates and levels
- Finds illustrations
- List of soil samples.

(C) The Primary Site Record

This is the original documentation on fieldwork and excavations, mostly generated on-site during the campaigns in Islay from 1989 to 1998. It includes:

- Diary
- Trench notebooks
- Context sheets
- Finds and samples record sheets
- Plans of trenches, sections, record drawings of upstanding walls, etc
- Slides and photographs
- Survey notes and levels
- Environmental data.

For trenches 1 to 13 (1990–92), most recording was done in the trench notebooks, with information on finds and samples being logged in separate finds notebooks. For trenches 8, 12, 14–25 (1993–97), context sheets, finds record sheets and sample record sheets were used. Record photography of the excavations was done using 35mm single-lens reflex cameras loaded with colour slide film and black and white film for producing prints.

(D) Post-Excavation and Contextual Data, including:

- Interim reports
- Correspondence
- Specialists reports and data on finds, environmental material, etc
- Report on bathymetric survey in Loch Finlaggan
- Radiographs of finds, mostly ironwork
- Data on C14 and archaeomagnetic dating
- Geological data
- Survey material on sites and monuments in the Finlaggan Survey Area.

(E) The Final Report: a complete paper copy of the report for publication, as completed by D Caldwell in June 2023.

(F) Digitised Data, including much of the material listed in sections B, D and E, other relevant reports and illustrations.

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PART I

The artefacts

Over 4,300 artefacts were logged in the course of the Finlaggan excavations. The actual number recovered is considerably greater than that, since in many cases entries in the site database are for groups rather than individual items. These artefacts come from over 1,300 archaeological contexts on Eilean Mór, Eilean na Comhairle and the mound at Cnoc Seannda (site no. 46). No artefacts were recovered from the excavations at the settlement (no. 38) at Rudh' a' Chròcuin or another at Portanellan (no. 44). A select catalogue, ordered by small find (SF) numbers, is provided in Chapter C7. These numbers consist of a trench or sector number followed by a unique three-digit number.

In Chapter C1 the artefacts identified as prehistoric are grouped together and analysed. In Chapters C2 to C6 the medieval and later finds are dealt with by material, starting with stone and progressing to ceramics, metal and items of organic material. Those that are specifically identified or discussed and illustrated have also been assigned a category number, as follows:

X prehistoric
R stone
P ceramic
N coins
C copper alloy
S silver
L lead alloy
F iron
B bone, ivory, horn
H leather
W wood

It is worth drawing attention here to some important artefact groupings. First, there are significant collections associated with the occupation and demise of medieval and post-medieval structures, especially:

- Trs 3 and 18, the gatehouse
- Tr 19, structure 19.2, a house
- Tr 7, structure V.1, a house
- Tr 6, structure 6.1, possibly a wooden watchtower
- Tr 8, structure H, a house
- Tr 12, structure 12.2, a house
- Tr 12, structure 12.3, a house.

Second, other significant groups of finds were recovered from medieval midden deposits:

- Tr 6, 6022
- Tr 25, Context 25008, associated with the erection and occupation of the castle on Eilean na Comhairle.

The contexts of many of the artefacts, however, are less helpful for a full understanding of what was happening at Finlaggan. Many come from topsoil and other recent deposits in trenches 19, 7 and 12 as a result of post-medieval agricultural activity on Eilean Mór churning up material from lower levels. An explanation for gravel spreads containing artefacts below the topsoil in several of the trenches is sorting by earthworms.

Several of the finds listed as 30*** and 31*** were recovered from the shoreline or shallow water surrounding Eilean Mór and Eilean na Comhairle, having been washed out from occupation and midden deposits by wind and wave. An indication of their find spots is provided here in terms of sectors 1–5 around Eilean Mór and sectors C1–C2 around Eilean na Comhairle (Illus C1.1).

With few exceptions, soil conditions were not conducive to the good preservation of a broad range of materials. Stone, pottery and metalwork make up much of the inventory of excavated material, the ironwork often very badly corroded. Bone, both animal and human, and shells have survived reasonably well, but only in trench 25 were quantities of wood and leather recovered, primarily from waterlogged midden deposits. Conditions, however, were not such that any textiles survived, here or elsewhere.

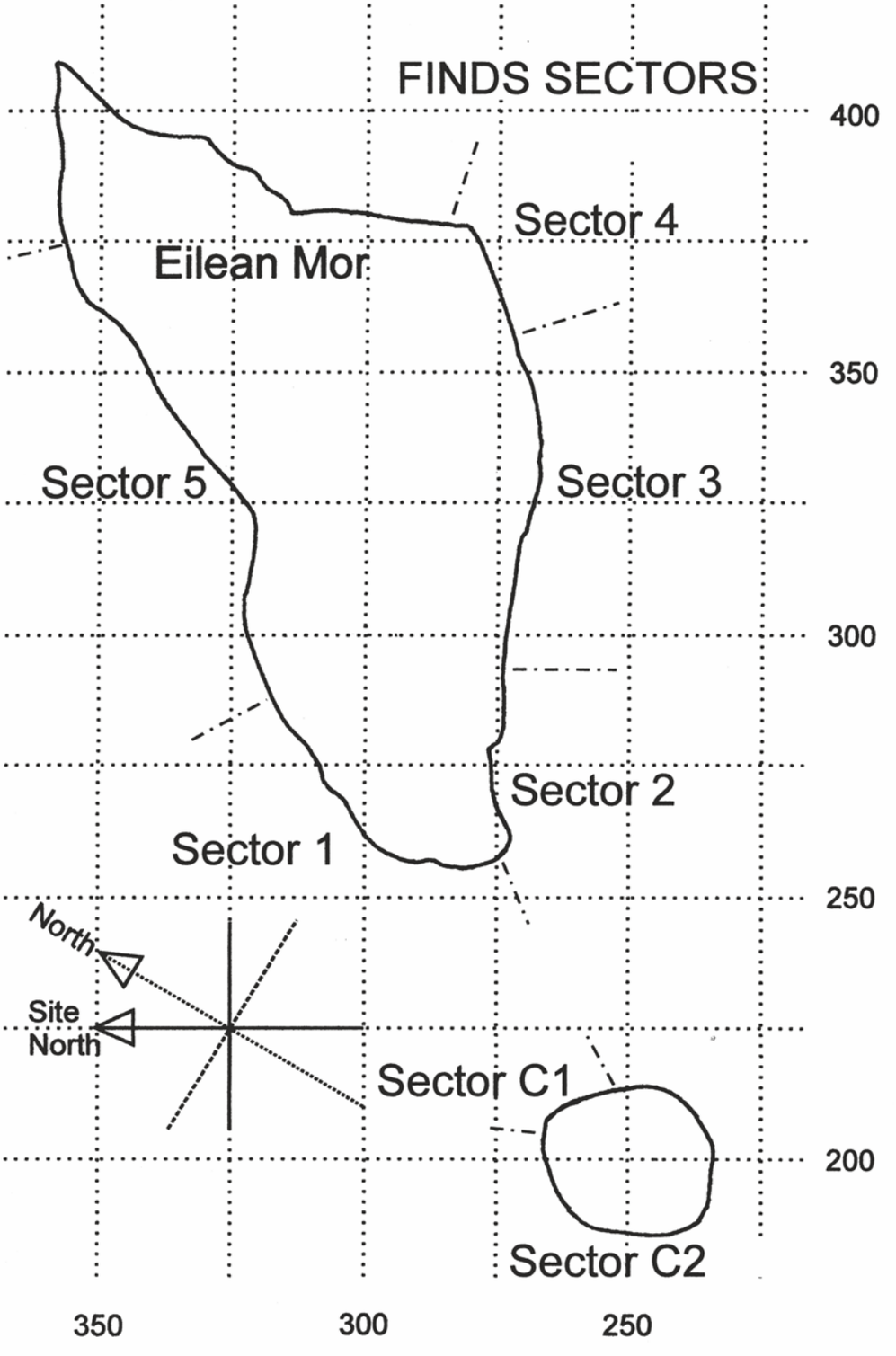


Illustration C1.1
Plan of finds sectors around Eilean Mór and Eilean na Comhairle

CHAPTER C1

Prehistoric finds

The majority of artefacts identified as prehistoric are from contexts of medieval or later date, or are unstratified. Exceptions to this are artefacts from trenches 21 and 22 on the mound at Cnoc Seannda (site no. 46) which can be associated with a kerb cairn and underground chamber. A probable hearth in trench 19 contained substantial sherds of food vessel type pottery of Bronze Age date and is therefore thought to be of that date. Less clear is the date of a pit [19134] in trench 19 which contained four flints in its fill [19120]. So many struck lithics have been recovered from medieval and later deposits elsewhere at Finlaggan that no dating significance can be attached to this material. It is regrettable that samples of beach sand and gravel deposits underlying the remains of the gatehouse in trench 18 were lost prior to processing. It was noted that they contained small flakes of worked flint, thought to represent Mesolithic activity.

Some of the struck lithics, particularly concentrations in topsoil and lazy beds in trench 19, may be there as a result of the truncation of prehistoric deposits through post-medieval agricultural activity. Others from trench 2 [2010] and the medieval midden [25008] adjacent to Eilean na Comhairle may have come directly from shoreline beaches. There are also significant quantities that can be associated with buildings, especially their collapse or destruction, that appear to have had clay-bonded stone elements in their walling:

- House V, trench 7, Contexts 7007, 7017, 7027
- House J, trench 1, Context 1007
- House H, trench 8, Contexts 8011, 8016, 8040, 8043
- House F and/or F.1, trench 9, Contexts 9003, 9004
- House K.1 (and possibly K), trench 2, Contexts 2015, 2033, 2035, 2039, 2042

The explanation for this is that gravel containing the flints, probably dug up from the shores of the loch, was mixed with clay to make the mortar.

There is a fine copper alloy zoomorphic brooch (X29) from the loch and also one bone object (X30) from the chamber in the mound at Cnoc Seannda. A wooden artefact (X31) was recovered from the crannog structure in trench 25.

The struck lithics (Illus C1.2, Tables C1.1–6)

Karen Hardy

The lithic assemblage from the excavated trenches at Finlaggan consists of a total of 1,391 pieces of worked stone. These were found in the trenches (21 and 22) on the mound at Cnoc Seannda (site no. 46) and all the trenches on Eilean Mór (excluding two of the smallest, trenches 3 and 15) and Eilean na Comhairle. The finds from trench 25 are dealt with in a separate section at the end of this report. The distribution of lithics was uneven, with some trenches producing large amounts, particularly trench 21 where over 50% of the flints were located, while others only produced a very few (Table C1.1).

The assemblage

A breakdown of the assemblage into four major groups – cores, flakes, blades and tools – shows that the majority of the assemblage consists of unretouched flakes, some of which had use damage along their edges. Cores are all small single-platformed flake and blade cores. The majority of flakes are non-cortical and inner (Table C1.2).

Trench no.	No. of pieces
1	5
2	43
4	11
5	3
6	6
7	42
8	74
9	17
10	4
11	35
12	61
14	21
16	13
17	9
18	110
19	143
21	716
22	47
23	17
24	5
Other	9

Table C1.1
Distribution of struck lithic artefacts

Technology	Amount
Cores	56
Flakes	1225
Blades	74
Retouched	36

Table C1.2
The struck lithic assemblage, major technological groups

Raw material

Artefacts are made from locally occurring beach pebbles (Table C1.3). Most of these range in colour from cream to deep yellow to grey and are covered by a rough cortex. Burnt artefacts total 127, that is, 9% of the whole assemblage. Throughout the Western Isles pebbles occur in varying degrees of abundance on beaches. It is thought that they may come from the flint beds off the northern coast of Ireland (Wickham-Jones & Collins 1980). The raw material was separated into different categories on the basis of colour, translucence and texture. This was carried out by eye, without microscopic or chemical analyses being undertaken. Based upon these three criteria, a number of different categories of flint were identified, but with no flint source to use as a comparison, it is difficult to assess their relevance. Marshall (2000) examined the abundance and location of pebble deposits around the coast of Islay and found greater

Colour	Amount
Cream/yellow	918
Light grey translucent	57
Chalky flecked	98
Burnt	127
Orange/red	182
White/cream translucent	8

Table C1.3
The struck lithic assemblage, raw materials

concentrations on the west-coast beaches than on the east coast. He correlates the more intense presence of Mesolithic sites on the west coast of the island with proximity to a good raw material supply. The position of Finlaggan, lying inland yet closer to the east coast, suggests that if pebble collection was carried out on the abundant yet distant west coast, then caching of raw material would probably have occurred, something for which at present there is no evidence.

Size

A total of 902 artefacts (64.8%) were unbroken. The sizes of unbroken artefacts were grouped according to their overall length. As can be seen from Table C1.4, two thirds of the flaked artefacts are between 16 and 30mm in length. This corresponds well with collected data on pebble sizes from the beaches on Islay and nearby islands (Marshall 2000).

Size	Amount
Small (< 15mm)	86
Medium (16–30mm)	676
Large (31–50mm)	140
Extra large (> 50mm)	3

Table C1.4
The struck lithic assemblage, size of unbroken artefacts

Technology

The majority of this assemblage is the product of a typically Mesolithic small blade and flake technology produced from small single-platformed cores with microliths present. There is evidence for the use of both soft and hard hammers.

There is also a small amount of evidence for scalar or bipolar core working, in particular one bipolar core and a small number of flakes and blades which retain evidence of bipolar working. Characteristic evidence for bipolar working includes flat ventral surfaces without bulbs or percussion ripples, and evidence of flake detachment and splintering from both ends of the core (Broadbent 1979). At Kinloch, on Rhum, bipolar cores were used during the Mesolithic and continued to be present in the Neolithic sample from this site (Wickham-Jones 1990).

The composition of the assemblage and relative proportions of different types of artefacts point to a technologically wide-ranging assemblage, consisting of cores, a large amount of decortical flakes, a lot of inner flakes and a number of core rejuvenation pieces. The contents and relative amounts of these categories suggest that primary decortication is evident by the numbers of cortical flakes (18.6%) although the absence of unmodified pebbles is notable in this context (Table C1.5).

Technological type	Amount	Percentage
Decortical flakes	260	18.6
Inner flakes	941	68
Core rejuvenation flakes	21	1.5
Cores	56	4
Blades	75	5.4
Retouched	36	2.6
Pebbles	2	0.1

Table C1.5
The struck lithic assemblage, technological types

Use

The vast majority of artefacts were unretouched. However, a number have clear evidence of use damage along one or more edges. In addition there were a number of retouched pieces. Most of these have indeterminate areas of retouch, but there were a few identifiable types such as scrapers and piercers. Most of these are culturally non-diagnostic, but a small number of retouched artefacts were present, in particular microliths and microburins, which are characteristic of the Mesolithic period, and two arrowheads (Table C1.6).

Most of the microliths are incomplete, but they are examples of standard Mesolithic edge-blunted sub-triangular and rod-like forms. There are two leaf-shaped arrowheads of Neolithic date, SF 8407 and SF 19074 (not illustrated). There is also a large, complete, barbed and tanged arrowhead (X12) dating to the Bronze Age.

Blades

Of the 74 blades, representing 5.3% of the assemblage, almost 75% are of the creamy-yellow flint. This shows a preference for making blades using this raw material. Most of the blades appear to be unused, but 20% (15 blades) have evidence of heavy use damage and also 20% (15 blades) have areas of retouch along one edge, while slightly over half of all blades are unbroken (40 blades).

Rolling

We found 170 artefacts to be well rounded around their edges, which suggests water-rolling or post-depositional movement. Distribution is interesting in that far more rolled artefacts occur in some trenches (2, 11, 14, 16 and 23) and fewer in trenches 19 and 21.

Distribution

The assemblage was examined to determine whether there was any differential distribution. Trenches 18 and 19 had fewer pieces of raw material 1 (37% and 44% respectively) and more of raw material 5 (43% and 24% respectively). Trench 19 had many more burnt artefacts (16.1%), while trench 8 had more artefacts of raw material 2 (18.9%).

Number	Use type	Amount	Percentage
1	Unretouched, unused	1048	75.3
2	Unretouched, used	178	12.8
3	Microliths	10	0.7
4	Microburins	4	0.3
5	Scrapers	11	0.8
6	Points	9	0.6
7	Arrowheads	2	0.1
8	Miscellaneous retouched	109	7.9
9	Burnt, unidentifiable	20	1.4

Table C1.6
The struck lithic assemblage, use types

No variation was found in the distribution of technological types. Retouched pieces were less common in trench 21 and more common in trenches 8, 12 and 19.

Quartz

A number of large quartz pieces were found in trenches 1 and 21. Several of these had clear negatives of removals from more than one edge. While this is noted, the absence of any actual tools or small artefacts in quartz limits their interpretation. They were, however, clumped in two locations, suggesting the use, at least occasionally, of quartz as a raw material.

Discussion

The majority of this assemblage consists of non-diagnostic flakes. Within an assemblage it is only the small number of cores and characteristic retouched tool types which can give an indication of cultural affiliation. Microlithic tools, and their associated waste flakes and microburins, point definitively to the Mesolithic. Other tool types are less temporally specific, although three artefacts have been identified as Neolithic. These and the Bronze Age arrowhead point to some cultural mixing within the assemblage. A small number of artefacts (11) have evidence of reworking, that is, retouching on top of older patinated surfaces. This shows that these artefacts were used at more than one time and could indicate some later, possibly even post-prehistoric use of these flints.

A total of 145 (10%) of the artefacts were retouched in some way. This is a much higher percentage than would normally be expected from a Mesolithic assemblage. For example, at the Mesolithic site of Rhum only 1.16% of artefacts were retouched (Wickham-Jones 1990). Most of the retouched tools from Finlaggan are pieces with small areas of indeterminate retouch. Only 36 artefacts (2.6%) can be described as recognisable tools. Of these there are 14 artefacts, all microliths and microburins, which are characteristic of the Mesolithic. As the assemblage from Finlaggan does not come from an undisturbed Mesolithic horizon, it is not possible to examine any meaning which may lie in its relative proportions. The assemblage dates to a period which is earlier than the rest of the site, and its relevance to the main excavation is therefore limited within that context. It is, however, important in its own right, as the amount of artefacts, particularly in trench 21, and their technological nature, especially the amount of cores and unworked debris, suggest more than simply a scatter of artefacts lost or discarded in passing.

The Mesolithic in the Western Isles is relatively well known, with many sites occurring in coastal areas on the mainland and islands (eg Mercer 1975, 1981; Mellars 1987; Wickham-Jones 1990; Bonsall et al 1994; Bonsall 1997). A number of Mesolithic sites have already been identified on Islay (Mithen 2000), and all of these lie in the north-western part of the island. Finlaggan lies at the edge of an inland loch away from the coast, and well away from what have been identified as the main concentrations of raw material on the west coast of the island.

The lithic assemblage is relatively small when compared to assemblages from other locations on the island – for example at Bolsay Farm around 300,000 pieces were excavated, while Gleann Mór produced around 12,000 pieces (Mithen 2000) – but it is difficult to interpret within the site distribution pattern of Mesolithic sites on Islay, as most of the artefacts come from within redeposited contexts. The assemblage is large enough, however, to suggest Mesolithic activity of some sort in the vicinity of Loch Finlaggan.

What is most interesting about the presence of this assemblage, on the edge of an inland loch at the eastern side of the island, well away from the coast and other known Mesolithic concentrations on Islay, is that it suggests that, as at Bolsay Farm, inland resources were exploited. Investigation into the Mesolithic of the Southern Hebrides has tended to concentrate on the availability and abundance of coastal resources. The presence of a Mesolithic occupation at Finlaggan can help to redress the balance and contribute to a wider interpretation of the Mesolithic occupation of the region.

Conclusion

The struck lithic assemblage from the excavated trenches at Finlaggan is mostly non-diagnostic, but there are a number of indicators to suggest some of it is Mesolithic. This interpretation is based on the presence of microliths and the numerous small single-platformed blade cores. The raw material was obtained from beaches around the island and there is evidence of all stages of lithic working, from primary cortex removal to tool making. A small number of artefacts point to some Neolithic and Bronze Age presence in the assemblage.

There is a catalogue of the struck lithics in the Finlaggan database. The following pieces are illustrated (Illus C1.2) and included in the select catalogue of finds. They are all complete, non-cortical, unrolled pieces.

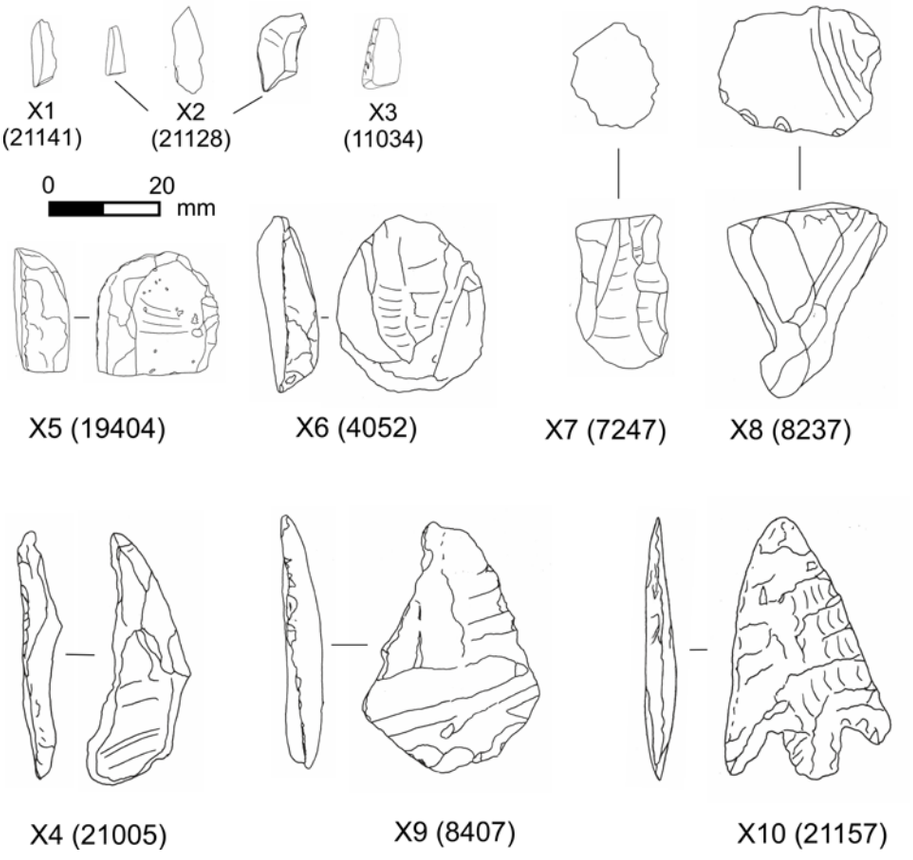


Illustration C1.2
Prehistoric finds: lithics

X1 MICROLITH, CREAM-YELLOW FLINT
12.47 by 3.70 by 1.99mm
Mesolithic (cat struck lithics 343)
SF 21141; [21016] top fill of chamber

X2 MICROLITH, CREAM-YELLOW FLINT
8.08 by 3.08 by 1.52mm
Mesolithic (cat struct lithics 498)
SF 21128; [21013] topsoil

X2 MICROLITH, CREAM-YELLOW FLINT
15.70 by 4.95 by 1.43mm
Mesolithic (cat struct lithics 499)
SF 21128; [21013] topsoil

X2 MICROLITH, CREAM-YELLOW FLINT
14.00 by 6.10 by 2.36mm
Mesolithic (cat struct lithics 500)
SF 21128; [21013] topsoil

X3 MICROLITH, CREAM-YELLOW FLINT
12.68 by 6.46 by 2.02mm
Mesolithic (cat struct lithics 1239)
SF 11034; [11015] debris from destruction of great hall

X4 POINT/PIERCER, CREAM-YELLOW FLINT
44.05 by 13.63 by 6.92mm
Mesolithic (cat struct lithics 812)
SF 21005; [21001] topsoil

X5 SCRAPER, CHALKY FLECKED FLINT
22.16 by 22.54 by 8.05mm
Mesolithic (cat struct lithics 1030)
SF 19404; [19066] surface of natural

X6 SCRAPER, CREAM/YELLOW FLINT
31.57 by 23.96 by 7.90mm
Mesolithic (cat struct lithics 1074)
SF 4052; [4020] sandy gravel shore

X7 CORE, SINGLE PLATFORMED, CREAM/YELLOW FLINT
27.78 by 16.17 by 16.30mm
Mesolithic (cat struct lithics 1301)
SF 7247; [7027] floor of building V.1

X8 CORE, SINGLE PLATFORMED, DEEP ORANGE/RED FLINT
34.94 by 26.01 by 20.54mm
Mesolithic (cat struct lithics 1319)
SF 8237; [8043] post-medieval path

X9 ARROWHEAD, LEAF SHAPED, CREAM-YELLOW FLINT
44.66 by 30.27 by 7.86mm
Neolithic (catalogue of struck lithics 1204)
SF 8407; [8069] tumble from wall of building H.1

X10 ARROWHEAD, FLINT
47.01 by 28.83 by 5.21mm
Barbed and tanged arrowhead of light grey flint
Chalcolithic or Bronze Age
SF 21157; [21016] bottom of the clayey silt deposit in the chamber cut in the summit of the mound at Cnoc Seannda. See also *Finlaggan*, Illus 7.10.

Struck lithics from trench 25

Karen Hardy

The following material was excavated after the report on the material above was completed.

A total of 1,084 pieces from trench 25 were examined, of which 745 had been knapped. Of the remaining 339 most were of unknown but non-knappable stone, most likely included in the assemblage erroneously.

Of the 745 worked pieces, most of them (665) are on yellowish/orangey flint material. A small number of pieces (71) are of quartz and a few (33) are burnt. There are 185 heavily rolled pieces, showing substantial post-depositional movement.

A small number of artefacts have areas of indeterminate retouch around the edge. There are six cores, all of which are small platform cores. The cores are all made on the orangey flint-like material. Two of the cores are very small exhausted nubs. The remaining four are all of very similar size, with lengths ranging from 23 to 32mm. There are 18 blades present in the assemblage, all broken and all small.

One artefact stands out from the rest as clearly culturally diagnostic. This is a microlith-type obliquely blunted point. It has been backed on the proximal right-hand side, the retouch having removed the bulb of percussion. This artefact is complete and in good condition. It dates to the Mesolithic period and so can positively be identified as being somewhere between 8,500 and 6,000 years old. The microlith is made on the yellowish/orangey flint, which is the most common in the assemblage. Its size of 21 by 8 by 3mm puts it into the category of large microliths, something which is quite common for obliquely blunted points.

The assemblage is suggestive of the Mesolithic. Not only the one culturally diagnostic artefact, the obliquely blunted point, dates it to this time, but also the platform cores are similar to those from other Mesolithic assemblages, as are the small blades.

Prehistoric coarse stone artefacts (Illus C1.3)

Only four coarse stone artefacts have been identified as prehistoric. One is a Neolithic axehead (X11), described below by the late Alan Saville. The other three are a hammer stone and two rubbers, only one of which is from a prehistoric context. The two rubbers are formed from rock imported to Islay.

Polished stone axehead

Alan Saville (submitted July 2010)

A complete Neolithic stone axehead (X11) was recovered in 1994 from Context 23046 on Eilean na Comhairle, a stony soil, possibly of prehistoric date. It is a well-preserved example, intact and with virtually no modern damage, though there are adhering black deposits (of iron pan or related nature) which obscure parts of the surface. The axehead is polished all over, though with several patches where the original shaping has left scars too deep to be affected by the grinding and polishing processes. The cutting edge when viewed end-on is curved, almost hollow-ground on one face, and the longitudinal profile of the axehead is slightly asymmetric; however, these traits are not sufficiently marked for the implement to be called an adze-blade. The dimensions are length 121mm, maximum breadth 61mm and maximum thickness 39mm, and it weighs 426g. The cross section is ovoid, with rounded edges lacking any faceting. The cutting edge is slightly lopsided, but more or less straight and with curved rather than angular corners. The lateral edges are convex, tapering to the butt, where the base is squared off. Overall the axehead could be described as having a 'stubby' form, and is unusual in having its greatest thickness so far back from the blade.

The colour of the axehead is pale brown (near Munsell 10YR 6/3) with dark grey-green flecking, and the stone is a meta-quartzite – identification by Simon Howard, National Museums Scotland (NMS) – which cannot be given any specific geological provenance and was presumably initially collected as an erratic cobble.

At least ten previous finds of polished stone axeheads have been made on Islay, and at least three of these are of petrological Group IX (Antrim porcellanite) and can be regarded as imports from the north of Ireland (Clough & Cummins 1988: 236). None of the examples seen by the writer are of quite the same type as the Finlaggan axehead, the most similar in form being an axehead from Lùb Glas near Kildalton House, said to be a 'granitic' stone, which, although slightly larger, is also 'stubby' and tapers to a pointed, squared-off butt (NMS reg no. X.AF 913; Canmore ID 38014/NR44NW35). Neolithic axeheads are frequently isolated finds without contemporary context, and this occurrence at Finlaggan should most probably be interpreted as fortuitously in the same place as the subsequent historic activity. Nevertheless, two other possibilities which should not totally be ruled out are that either there was a Neolithic site in the vicinity, or that the axehead was collected elsewhere and brought to Finlaggan as a curio by one of its inhabitants in historic times.

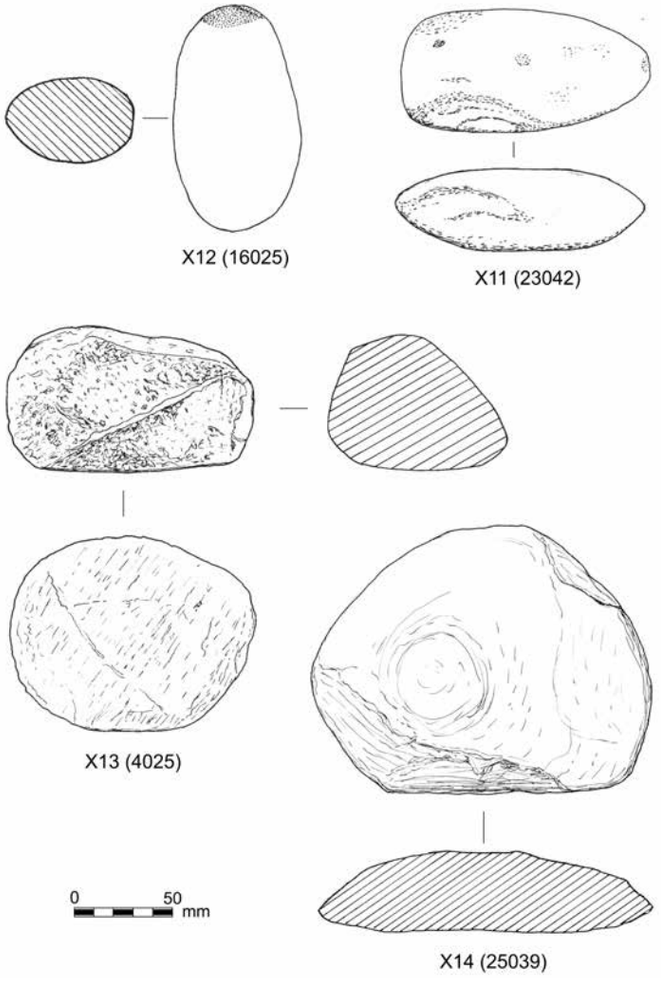


Illustration C1.3
Prehistoric finds: coarse stone artefacts

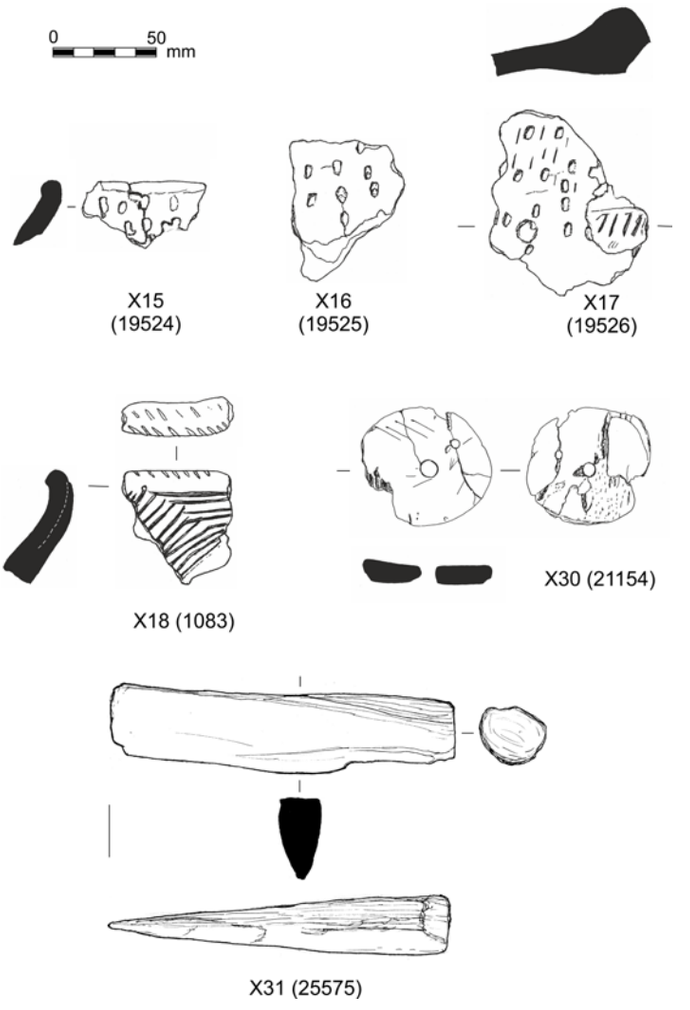


Illustration C1.4
Prehistoric finds: ceramic, bone and wood

Catalogue of prehistoric coarse stone artefacts (Illus C1.3)

X11 POLISHED STONE AXEHEAD
Meta-quartzite, with 'stubby' form, 121 by 61 by 39mm
Wt: 426g
Neolithic
SF 23042; [23046] secondary occupation within dun, or later tumble

X12 HAMMER STONE
An unshaped cobble, 115mm long, battered at one end as a result of use as a hammer
Not certainly of prehistoric date
SF 16025; [16008] 19th-century metalled surface in courtyard

X13 RUBBER, STONE
Crinan grit? Flat underside polished smooth.
70 by 95 by 85mm
Prehistoric?
SF 4025; [4012] topsoil

X14 RUBBER, STONE
Rounded stone of very fine conglomerate full of weathered quartz (Crinan grit?). There is a shallow cup on the top surface; one side is broken off. 177 by 139 by 45mm
SF 25039; [25023] organic-rich deposit, lower crannog structure.

Prehistoric ceramics

There is a large assemblage of handmade pottery from the excavations, the subject of a report by Jo Dawson in Chapter C3. It is clear that this is mostly of medieval or later date, but it was assumed to be likely that there would be a number of prehistoric sherds included among it. A few such, identifiable by their context and especially fabric, are listed in the catalogue below. They include sherds of Bronze Age food vessel type (X15–X17) and a decorated rim sherd (X18), possibly of Early Bronze Age date. It was found in the clay soil within an early medieval grave [1049] excavated in trench 1 in the burial ground. The best parallels for it are among the large assemblage of Early Bronze Age pottery excavated in a midden at Kilellan Farm, Ardnave, in the Rhinns of Islay (Cowie 2005: 49–78). Its stabbed decoration, however, is different to the style of the Kilellan assemblage. It is probable that there are several more prehistoric sherds in the handmade assemblage, but without a more detailed knowledge of fabric types and the application of scientific dating techniques these will have to await identification through further research.

Catalogue of prehistoric ceramics (Illus C1.4)

X15 RIM SHERD, FOOD VESSEL TYPE
Well-smoothed ware, the exterior strong brown; tempered with sub-angular stones up to 8mm across; decorated on the exterior with sub-oval impressions made with a fibrous stalk. Rim diameter about 164mm; Wt: 16.88g

Bronze Age
SF 19524; [19026] silty clay with charcoal in str 19.6
See also sherds SF 19525–26

X16 BODY SHERD, FOOD VESSEL TYPE
Ware and decoration as SF 19524; fire blackened on exterior. Wt: 42.31g; Th: 10mm
Bronze Age
SF 19525; [19026] silty clay with charcoal in str 19.6
Probably the same vessel as SF 19524 and 19526

X17 BODY SHERD, FOOD VESSEL TYPE
Ware and decoration as SF 19525; fire blackened on exterior. It is also decorated with diagonal incisions, including on an applied lug. Wt: 102.65g
Bronze Age
SF 19526; [19026] silty clay with charcoal in str 19.6
Probably the same vessel as SF 19524 and 19526

X18 RIM SHERD
The everted rim, about 250mm in diameter, is bevelled both internally and externally and decorated with short diagonal slashes. The vessel exterior has grouped horizontal and diagonal impressed lines, probably arranged overall in panels. The fabric is light yellowish-brown and well smoothed, and contains sparse, large inclusions, one 9 by 15 by 7mm. Wt: 44.44g
Possibly Early Bronze Age
SF 1083; [1049] clay soil within an early medieval grave [1049] excavated in trench 1 in the burial ground

X19 BODY SHERD
Well-smoothed ware, the exterior yellowish-brown; very gritty with stone inclusions up to 3mm across. 40 by 25mm; Th: 11mm; Wt: 11.15g
SF 19527; [19026] silty clay with charcoal in str 19.6
Not illustrated

X20 BODY SHERDS (9)
Yellowish-red ware with rough-feeling surfaces and reduced core; tempered with angular stones up to 6mm across. Th: 10mm; total Wt: 37.79g
SF 8361; [8061] fill of 8129, foundation trench of wall of str H
Not illustrated

X21 BODY SHERD
Gritty ware, the exterior brownish-yellow; the stone inclusions include fragments of quartz up to 7mm across. 46 by 24mm; Th: 12mm; Wt: 15.86g
SF 19261; [19006] lazy bed
Not illustrated

X22 BODY SHERDS (2)
Well-smoothed ware, the exterior yellowish-brown; very gritty with stone inclusions up to 10mm across. Th: up to 14mm; total Wt: 10.77g
SF 19340; [19003] subsoil under the lazy beds
Not illustrated

X23 BODY SHERDS (3)
Well-smoothed ware, the exterior light yellowish-brown; gritty with stone inclusions up to 10mm across. One sherd has the edge of a possible lug, another a fire-blackened exterior. Th: up to 15mm; total Wt: 75.32g
SF 19369; [19026] silty clay with charcoal in str 19.6
Not illustrated

X24 BODY SHERD
Well-smoothed ware, the exterior yellowish-brown; very gritty with stone inclusions. 20 by 27mm; Wt: 9.03g
SF 19387; [19031] fill of pit 19030, str 19.4
Not illustrated

X25 BODY SHERD
Well-smoothed ware, the exterior yellowish-brown; very gritty with stone inclusions up to 3mm across. 37 by 33mm; Th: 9mm; Wt: 14.78g
SF 19393; [19026] silty clay with charcoal in str 19.6
Not illustrated

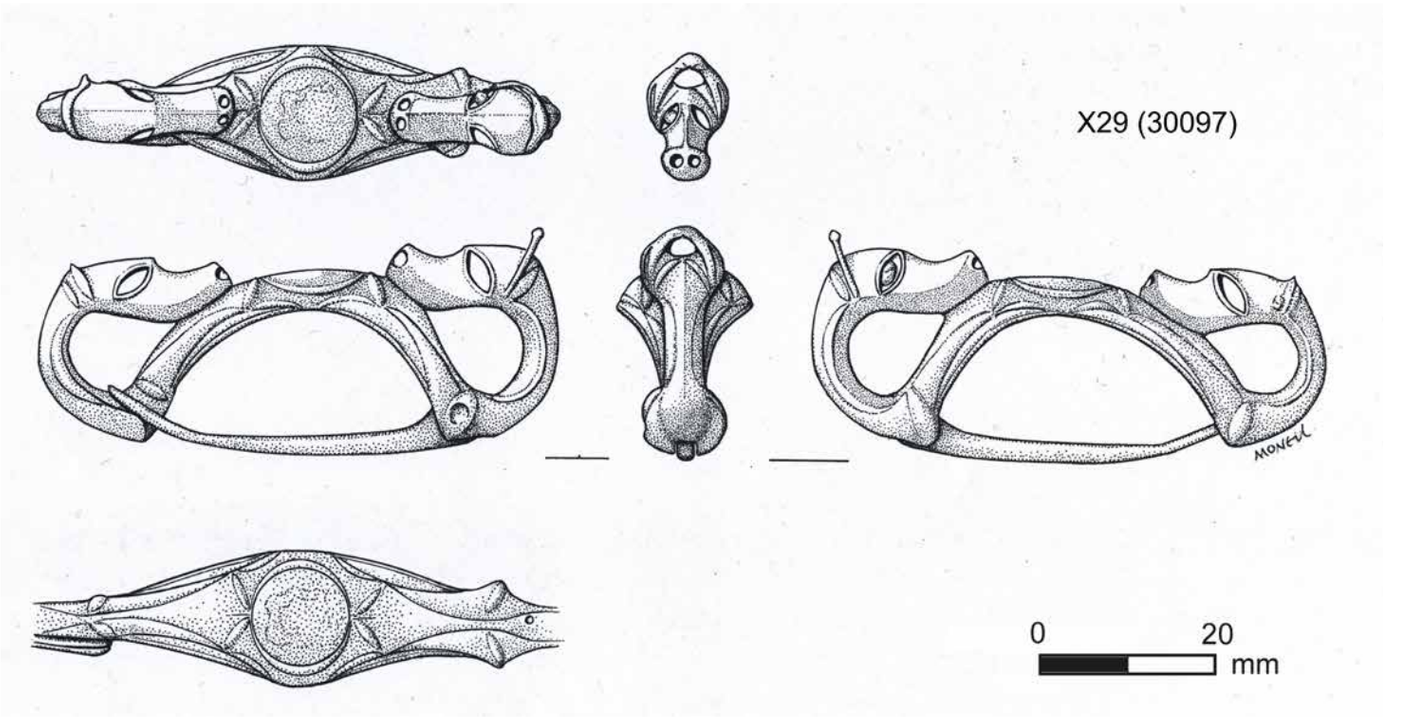


Illustration C1.5
Prehistoric find: zoomorphic bronze brooch; illustration by Marion O'Neil

X26 SHERDS, INCLUDING A RIM (4)
Brownware with smooth outer surface and rough interior; well tempered with stones including angular pieces of quartz up to 3mm across. The rim is simple and rounded. Th: up to 12mm; total Wt: 35.57g
SF 19394; [19027] stones in str 19.6
Not illustrated

X27 BODY SHERD
Well-smoothed ware, the exterior light yellowish-brown, the interior fire-blackened; very gritty with stone inclusions up to 9mm across. 38 by 40mm; Th: 16mm; Wt: 21.92g
SF 19397; [19070] fill of [19065], str 19.3 post-hole
Not illustrated

X28 BODY SHERDS (5)
Well-smoothed ware, the exterior yellowish-brown; very gritty with stone inclusions up to 10mm across. Th: up to 12mm; total Wt: 25.16g
SF 19401; [19047] a stony area in natural
Not illustrated.

Other prehistoric artefacts

Iron Age zoomorphic bronze brooch (Illus C1.5)
FRASER HUNTER

A fine bronze Iron Age brooch (X29) was recovered in 1994, in sector 1, a few metres off the shore of Eilean Mór in a few centimetres of sediment in shallow water. It is a delicately cast double animal-headed bow brooch with a hinged pin, decorated with symmetrical combinations of slender trumpets. The bow has a focal circular device. The two animal heads are slender with hollowed lentoid eyes, ears and horns, and long necks. The head over the hinge is larger than the other, the horns of which are now missing. Surface X-ray fluorescence (XRF) analysis by Dr K Eremin in the NMS Research Laboratory showed that both brooch and pin were of bronze, with trace lead and zinc.

This brooch is an assured and well-designed miniature masterpiece of insular Celtic art, for which a date from the later first century BC to the first century AD can be suggested. For a fuller description and consideration of its wider cultural and artistic context, see Hunter (2009).

X29 DOUBLE ANIMAL-HEADED BOW BROOCH, COPPER ALLOY
L: 58.5mm; W: 15.5mm; Ht: 24mm. Pin L: 42mm; Diam: 2.5mm. Disc Diam: 6mm.
Insular, Iron Age, later first century BC to the first century AD
SF 30097; sector 1

Prehistoric bone whirligig (C1.4; Finlaggan, Illus 7.9)

A pierced bone disc (X30) with a diameter of 63mm was found in the bottom of the chamber on the summit of the mound at Cnoc Seannda. It is possibly of Iron Age date and can be compared with a cetacean bone object from an Iron Age wheelhouse complex at Foshigary in North Uist, similarly with two piercings, but also ogham-like decoration and interlace patterns (NMS reg no. GNA 11). It has been identified as a lid (Hallén 1995: illus 11), but a more likely explanation for both pieces is that they were whirligigs – toys – made to whirl round by being threaded with twine through their holes.

X30 WHIRLIGIG, BONE
Circular bone disc pierced centrally and with a smaller hole off-centre. Diam: 63mm; maximum Th: 12.03mm
Iron Age?
SF 21154; [21016] clayey silt deposit in the bottom of the chamber cut in the summit of the mound at Cnoc Seannda

Prehistoric wooden tool (Illus C1.4)

X31 A BROKEN BLADE AND STUB OF SHAFT
L: 166mm
SF 25575; [25019] crannog structure.

CHAPTER C2

Stone: sculpture, architectural carvings, domestic artefacts

Medieval West Highland sculpture

Churches and burial grounds in the West Highlands and Islands are home to a remarkably large and distinctive local corpus of medieval sculpture, mostly grave-slabs and commemorative crosses. Twelve items of this work were listed by RCAHMS (1984: 279–80) and more pieces have been recovered as a result of these excavations. The opportunity has been taken to present here a new, expanded catalogue of all the relevant material. More information is provided in Chapter 9 of *Finlaggan* on the circumstances surrounding the recovery of these monuments around and in the chapel on Eilean Mór.

The majority of West Highland medieval sculpture is carved from chlorite schist which outcrops in several locations in Argyll, including Islay. It is believed to have been quarried at Doide on Loch Sween in Knapdale in medieval times. There is as yet no conclusive evidence that it was quarried in Islay in the medieval period, but there is a small quarry near Port Ellen (NGR NR 3690 4562) where it was extracted in more recent times. The carvings were intensively studied in a major work by Steer and Bannerman (1977) and their conclusions have fed into the accounts of the sculpture contained in the RCAHMS *Inventory of Argyll* (7 vols, 1971–92). This author (Caldwell et al 2010; Caldwell 2018: 67–81), however, while applauding the quality of Steer and Bannerman's work, has challenged some of their conclusions, especially that none of the carving was earlier than the later 14th century, and their hypothesis that there was a school of carvers based in Iona which produced many of the monuments there and shipped much of their work to other places, including Finlaggan. The presence of the largest and best collection of sculpture on Iona is not necessarily because that is where the carvers were based, but because Iona was a very desirable place for the great and good to be buried. Just as their bodies were shipped there after death, so were slabs and crosses to commemorate them. None of the stone used for medieval monuments in Iona can be sourced in that island.

One of the Finlaggan slabs, R6 (Illus C2.1, C2.12), may be a typological precursor of a group of slabs christened by Steer and Bannerman as Iona class II stones, since many of them are to be found there. Apart, however, from Iona they are concentrated on the Argyll mainland in Lorn, Knapdale and around Loch Awe, which is more probably where they were carved. The most telling comparisons for the designs of these are in Scandinavian art. Finlaggan slab R6 has intertwined plant-scrolls forming a series of large circles occupying the full surface of the slab, rather like some of the so-called *liljestenar* (slabs with tree-of-life ornamentation) in Västergötland in Sweden (Rhodin et al 2000), dated to the 11th and 12th centuries. Included is a pine-cone motif, reminiscent of those that decorate the throne of a late 12th-century Scandinavian ivory king from the hoard of chessmen and other pieces buried on the Isle of Lewis (Caldwell et al 2009: king no. 79). Another slab of similar date

Illustration C2.1
Grave-slab: R6; photo of fibreglass cast by Raymond Lafferty

Illustration C2.2
Grave-slab: R7, from plaster cast by Graham (1895)

Illustration C2.3
Grave-slab: R1

Illustration C2.4
Grave-slab: R14

Illustration C2.5
Grave-slab: R2

in the cathedral at Trondheim in Norway has a pattern of intertwined plant-scrolls, including pine cones, forming a series of large circles, confined between broad chamfered edges (Ekroll 2001: 26, no. 4).

R6 has a pair of shears represented at the bottom. It has sometimes been thought that they symbolise women, but they obviously also occur on many slabs carved for men. They might be interpreted as a symbol of status, an indication of a man who would indulge in personal grooming rather than dirtying his hands in digging the ground. West Highland grave-slabs elsewhere include combs and mirrors along with shears in their design.

R7 (Illus C2.2, C2.12) has a foliate design which may also be of 13th-century date. In this case there is a central stem, or perhaps the shaft of a cross. Much of the original design has been deliberately removed to ready the slab for reuse. At one end it has an anvil carved at a later date, perhaps to commemorate one of the hereditary smiths of the lords of the Isles, traditionally said to have been MacEacherns (Caldwell 2002: 85–86).

Slabs R1 and R14 (Illus C2.3, C2.4, C2.12, C2.13) with long shafted foliate crosses flanked by swords and plant-scroll are good examples of a type with a distribution mostly in Iona and Islay. Steer and Bannerman labelled such slabs as Iona School class I, but they may have originated in Islay in the 14th century. The swords on these and other slabs are taken to be a symbol that they belonged to males of noble birth. They are probably not representations of actual swords, and in any case they often have features of much earlier date than the supposed date of the monuments on which they are carved. On slabs R2, R4 and R5 swords supersede or replace crosses as the main design element (Illus C2.5–C2.7, C2.12). The presence of three swords on slab R5 may represent the number of individuals buried under the slab – brothers, or father and son(s). Three swords are to be found on another slab at the old parish church, Cill Choluim Chille, Lochaline in Morvern (RCAHMS 1980: 131, no. 267), and two on a slab at Saddell Abbey in Kintyre (RCAHMS 1971: 144, no. 10). The Finlaggan slab also has two orbs and crosses, one over the left-hand sword and the other over the right-hand one. The largest sword, placed centrally, is over a rectangular block – the stone used in inauguration ceremonies for lords of the Isles? It is possible that all this symbolism relates to the regal pretensions of the leaders of Clan Donald.

Galleys or birlings are also taken to be an indication of high status or leadership, as on slabs R4 and R5 (Illus C2.6, C2.7). The galley on slab R11 (*Finlaggan*, Illus 9.18) is one of the best surviving representations of these ships and in this context may be considered to mark out its owner, Donald MacGillespie, as one of the gentlemen of Clann Iain Mhóir (Clan Donald South) who participated in the fighting in Ireland in the 16th century.

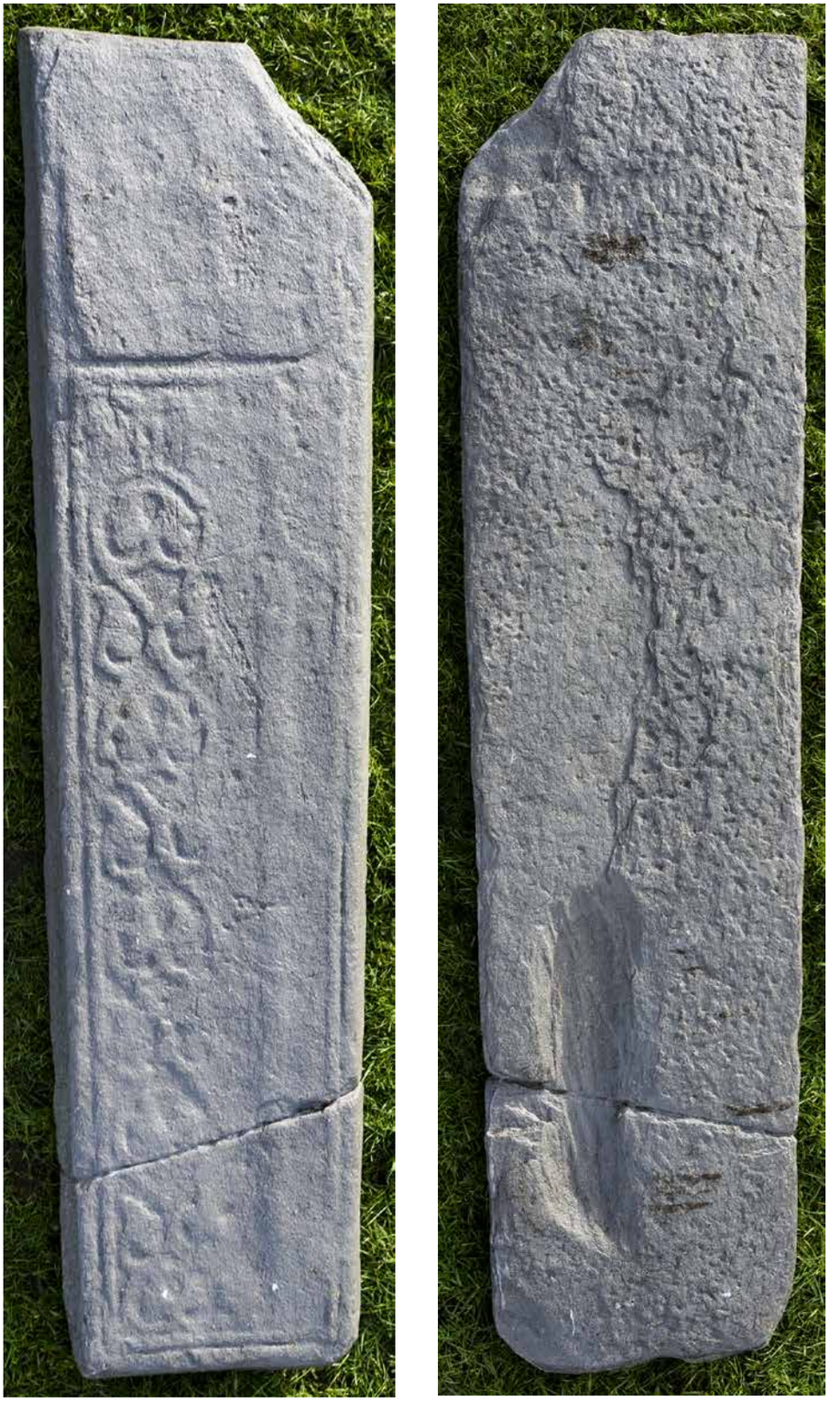


Illustration C2.6
Grave-slab: R4 (a) front and (b) back; photos of fibreglass casts by Raymond Lafferty

Illustration C2.7
Grave-slab: R5, from plaster cast by Graham (1895)

MacGillespie's galley is a representation, certainly not to scale. The effigy on the slab of Donald himself is a fine rendering of traditional West Highland arms and armour. Many medieval European military effigies show the hands in the process of unsheathing the sword. One hand pulls on the hilt, while the other holds the scabbard steady. Donald MacGillespie, however, is not unsheathing his sword but buckling on his sword-belt (Illus C2.8, C2.9), and this particular pose is only to be found on West Highland slabs and an effigy at Dungiven Priory, Co Londonderry (Steer and Bannerman 1977: pl 17E), the work of a West Highland carver.

This buckling on of the sword-belt was apparently not a representation of the rite of knighthood. There is little evidence for West Highland leaders seeking or valuing knighthood, but the significance of the symbolism on this and other West Highland grave-slabs may be that the warriors are buckling on their own swords, whereas in the ceremony of knighting this was done by the person who was conferring the knighthood. Are we seeing here some ritual of 'self-knighting', a sign that these men belonged to the exclusive local club of warriors? The Isles supported a force of standing warriors, known as caterans (from Gaelic *ceatharn*) in Lowland sources, all the way through the medieval period and the 16th century. Many West Highland grave-slabs and crosses may celebrate them and their way of life.

The identification of effigy R11 as Donald MacGillespie is only possible because it is one of the relatively few pieces of medieval West Highland sculpture with an inscription (Illus C2.9). It is possible that the missing shaft of the cross, R20 (C2.10; *Finlaggan*, Illus 9.7), would have had one recording who had set it up in the 14th or 15th century. A clue may be provided by the cross-crosslet incorporated in the design on one side. A cross-crosslet features in the heraldry of the MacDonalds of Dunyvaig and the Glens.

RCAHMS (1984: 12) suggested that the sword and galley on slab R12 (Illus C2.11, C2.12), represented by deeply incised lines, are probably secondary, the sword perhaps a recutting of the original design. Neither motif can be considered to be finished, nor together a complete scheme of decoration. The galley, however, is too large, and the sword too far to one side, to have

Illustration C2.8
Grave-slab: R11, detail of sword-belt being fastened

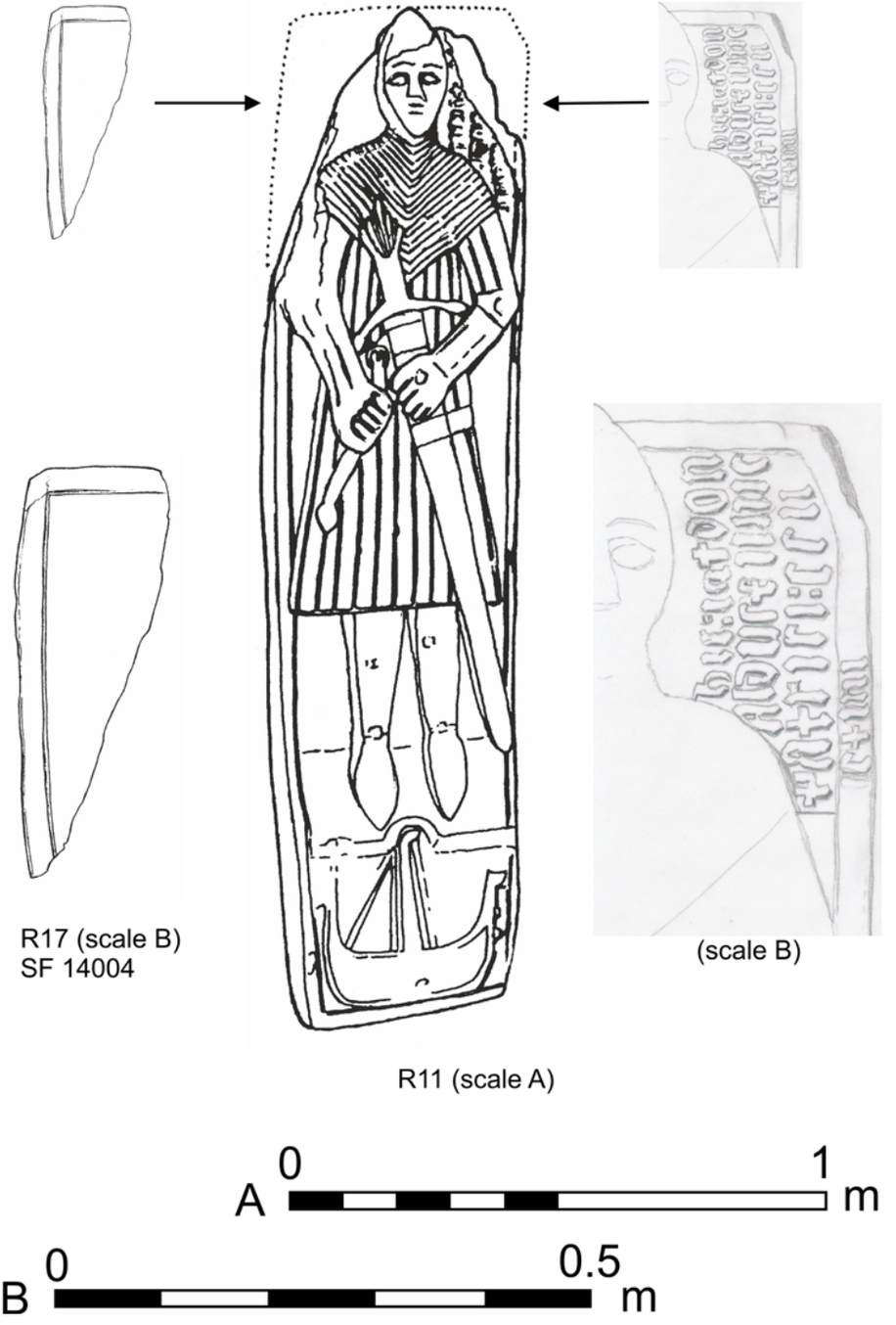


Illustration C2.9
Grave-slab: R11 with now missing inscription, after Graham (1895)

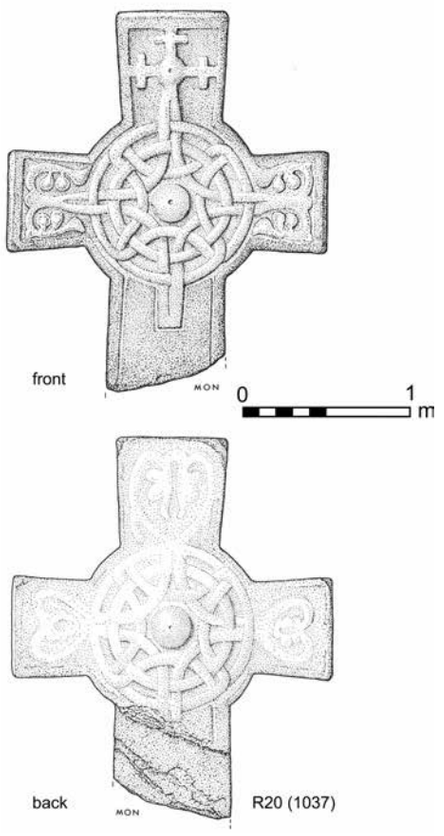


Illustration C2.10
Cross-head: R20 (SF 1037); illustration by Marion O'Neil

Illustration C2.11
Grave-slab: R12

allowed for the edge mouldings invariably present on medieval slabs. This may be a clue that this slab represents a late attempt, in the late 16th or early 17th century, to reproduce or perpetuate the carving of earlier times.

Slabs R9 and R10 (Illus C2.12) may also be unfinished. Slabs like these, plain but for their edge mouldings, can be found elsewhere in West Highland graveyards. It is possible that they were dressed thus in a workshop at or near the quarry where the rock was won, and shipped to Finlaggan with the intention that they be finished off there.

Catalogue of sculpture

Note that the numbering used by RCAHMS (1984: 279–80) in respect of nos 1–12 has been retained (but here prefixed with the letter 'R'). R17 is almost certainly a piece of R11. It is not certain how many slabs are represented by R13, R15 and R16.

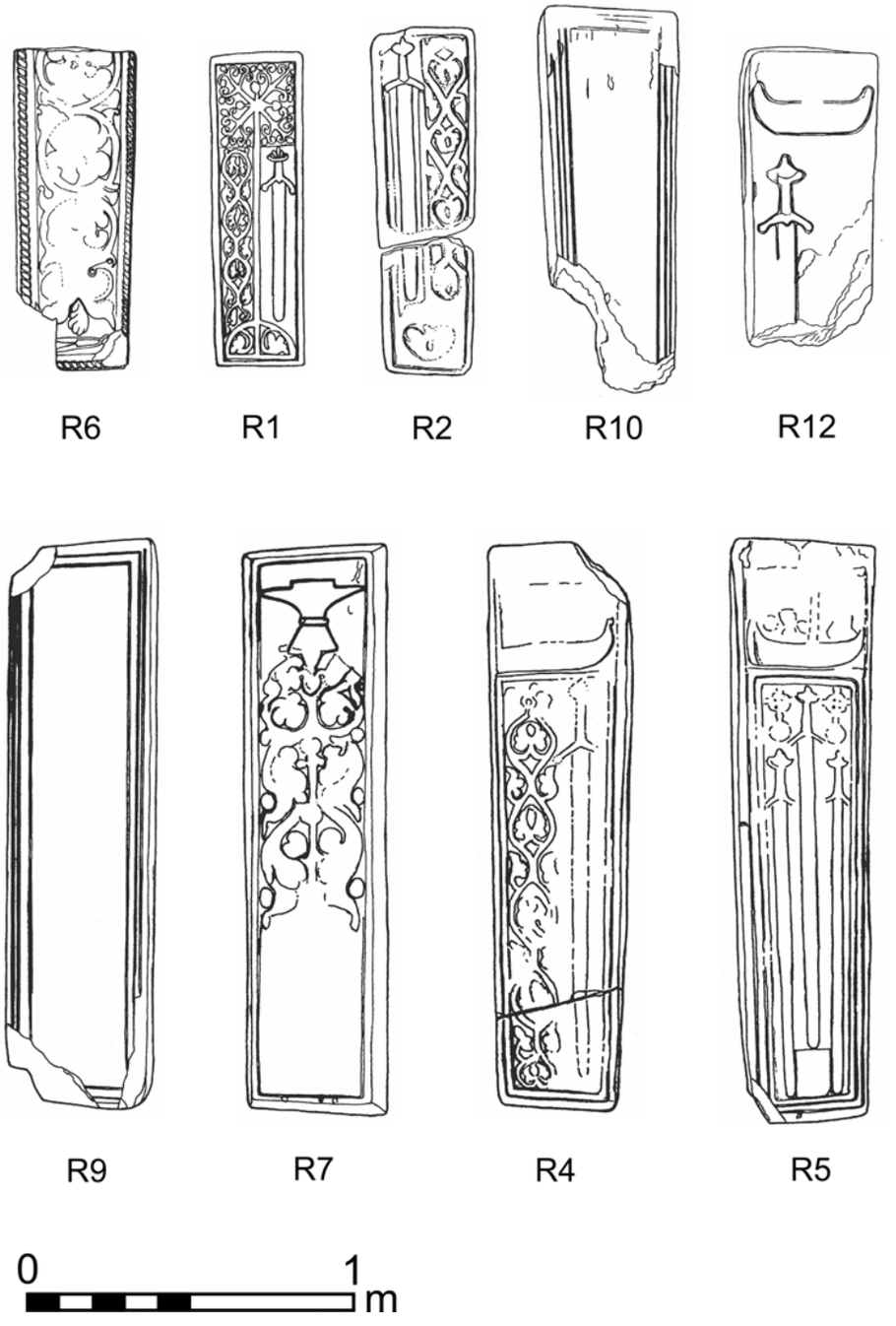


Illustration C2.12
Grave-slabs

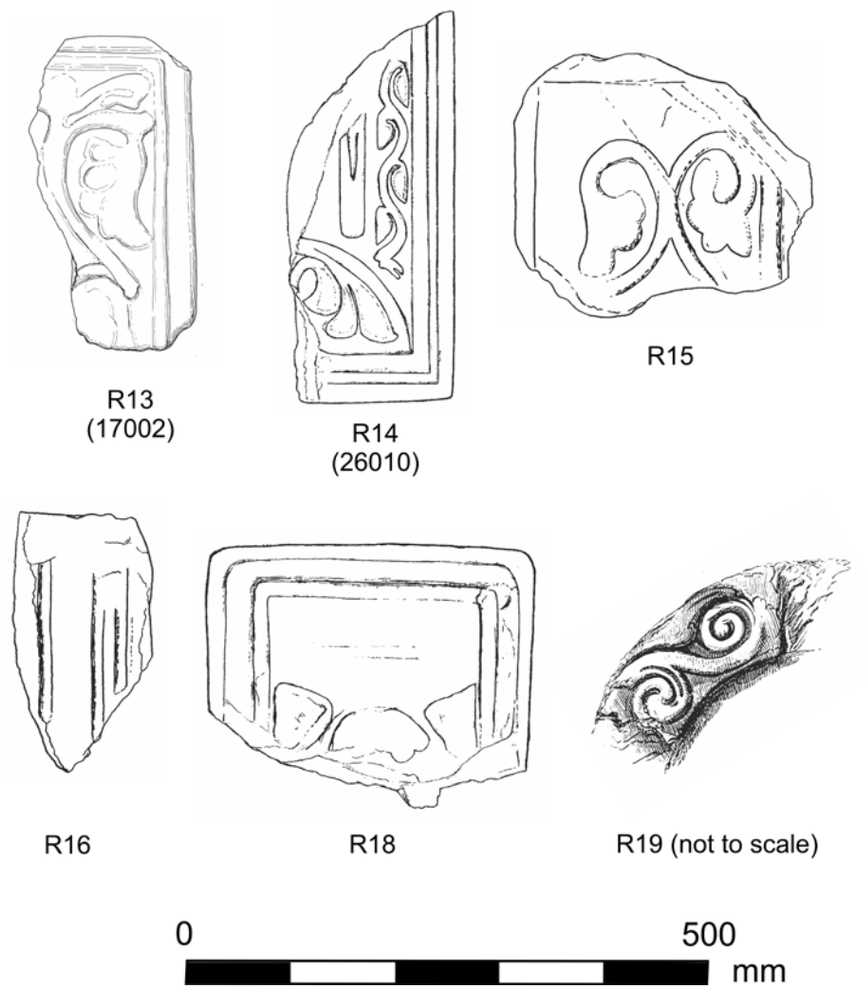


Illustration C2.13
Grave-slabs and fragment of a font

R1 CHILD'S (?) SLAB OF CHLORITE SCHIST (ILLUS C2.3, C2.12)
Rectangular in shape with a single plain edge moulding. It has a cross with floriate head and floriate semicircular base, flanked by plant-scroll, featuring opposed half-palmettes, and a sword. The sword has a lobated pommel and drooping quillons. The slab is complete and in good condition. It measures 0.98 by 0.32m. Graham 1895: pl III, no. 8. It was one of three noteworthy slabs observed in 1882, prior to the clearance of the chapel in 1894 (MacLagan 1883: 38; 1898: 38). (RCAHMS, Iona School work.) Islay? 14th century.

R2 CHILD'S (?) SLAB OF CHLORITE SCHIST (ILLUS C2.5, C2.12)
Tapering slab with a sword and plant-scroll contained within a roll moulding. The sword has a lobated pommel and drooping quillons, and is flanked by additional roll mouldings. The plant-scroll appears to terminate in opposed animal heads at the top. The bottom of the slab was left unfinished, a roughly smoothed zone with a secondary design of two large trilobe leaves. The boundary between finished and unfinished traces an uneven diagonal line under the tip of the sword and the bottom of the plant-scroll. The slab is complete, but broken in two and fairly worn. It measures 1.07 by 0.33m. It was removed from Eilean Mór by persons unknown on the night of 10–11 June 1990 and returned in July 2006. Graham 1895: pl III, no. 7. (RCAHMS: Iona School.) Islay? 14th–15th century.

R3 CHILD'S SLAB (?)
Two fragments of this slab were mentioned by Graham (1895: 30, no. 9). These cannot now be identified, although R14 below may be one of them.

R4 SLAB OF CHLORITE SCHIST WITH GALLEY, SWORD AND PLANT-SCROLL (ILLUS C2.6, C2.12)
Tapered in shape with a double roll-moulding round its edge. The galley is contained in a panel at the top, facing right. The main slab has a plant-scroll on the left, featuring inter-twining half-palmettes, and a sword on the right. The sword has a long blade and short drooping quillons. The slab is quite worn, lacking its top-right corner, and the bottom portion is detached. It measures 1.72 by 0.46m. It has attracted attention because of a crudely formed hollow on the back which some have identified as the footprint used in the inauguration ceremonies of the lords of the Isles. This is apparently Graham's no. 10 (Graham 1895: 30). According to Gruamach (1967: 74) it was discovered in the loch water off the north side of Eilean Mór about 1894 or 1895, but it was next to the chapel in 1882 when a rubbing of it was made by Miss MacLagan (1883: 38; 1898: 38). That rubbing, now in the British library (MS Add 34798/45), apparently indicates that the stone was then in one piece. (RCAHMS: Iona School.) Islay? 14th–15th century.

R5 SLAB CHLORITE SCHIST WITH GALLEY, TWO CROSSES AND THREE SWORDS (ILLUS C2.7, C2.12)
Tapered in shape with a single roll-moulding around its edge. The galley is contained in a separate panel at the top, facing right with figures in it. The main part of the slab is contained in a further two roll-mouldings. The three swords are laid out side by side, except that the central one is raised on a rectangular block. All have long blades, short drooping quillons and lobated pommels. Above the right- and left-hand sword are orbs surmounted by ring-headed crosses. The slab is badly worn and lacking its bottom-left corner. It measures 1.77 by 0.48m. Graham 1895: pl II, no. 4. (RCAHMS: 14th–15th century.)

R6 SLAB OF CHLORITE SCHIST WITH PLANT-SCROLL AND SHEARS (ILLUS C2.1, C2.12)
Tapered in shape with bevelled edges with two mouldings, the outer one a cable, the inner plain. It has a large, bold plant-scroll forming medallions containing leaves. It terminates at the bottom in a pine cone. Beneath that there is a pair of shears. It is very worn, missing its upper portion and bottom-left corner. Its maximum length is now 0.99m. This is apparently Graham's no. 12. It was to the east of the chapel, near the shore. (RCAHMS: 14th–15th century.) 13th century.

R7 SLAB OF CHLORITE SCHIST WITH FOLIAGE AND AN ANVIL (ILLUS C2.2, C2.12)
This has bevelled edges with double roll-mouldings. The foliage has a central stem from

which leaves branch out on both sides. The slab is very worn, especially the bottom third, but it looks probable that the plant-scroll continued all the way to the bottom. At the top is an anvil, double-beaked, with a narrow waist and pointed tang. As pointed out by the Royal Commission (RCAHMS 1984: 280), the carving of the anvil is deeper and crisper than the rest, and it appears to overlie the upper part of the plant-scroll. This suggests that it is secondary work, possibly replacing a floriated cross. The slab measures 1.73 by 0.46m. Graham 1895: pl III, no. 5. (RCAHMS: 14th – early 16th century.) 13th century, altered in 14th or 15th century.

R8 slab with double roll-moulding round its edge

Described by RCAHMS (1984: 280) as tapered and very worn, only the upper part of the slab surviving, with a maximum length of 0.24m. A photograph in a report of 1938 showed traces of foliaceous ornament and a label, possibly for an inscription. This slab is not listed by Graham and it has proved impossible to trace any copies of the 1938 report cited by the Commission – 'Report on sculptured stones, Islay, by HM Office of Works'. It may tentatively be identified as R18 below. (RCAHMS: 14th – early 16th century.)

R9 slab of chlorite schist with triple roll-moulding around its edge (illus C2.12)

This has no other decoration. It is 1.74m long and 0.47m wide. It has lost its upper-right and bottom-right corners. Probably Graham 1895: no. 11. (RCAHMS: 14th – early 16th century.)

R10 slab of chlorite schist similar to R9 (illus C2.12)

Missing its bottom end. It is 1.18 by 0.44m. (RCAHMS: 14th – early 16th century.)

R11 slab of chlorite schist with effigy of a warrior and a galley (C2.8, C2.9; *Finlaggan*, illus 9.18)

This has a single plain moulding round its edge. The warrior is wearing armour consisting of a knee-length quilted aketon, a mail collar and a basinet. Crudely carved in the collar are relatively recent initials, 'CJK' and 'WM'. The man's sleeves are strapped at the elbows, with the upper strap on his left arm still retaining evidence for foliage scroll decoration. Straps are also buckled around his ankles, indicating he is wearing spurs. The pose is full frontal, with his feet resting on a sloping plinth. He is carved in the act of buckling on his sword. His left hand grasps the scabbard, while his right pulls the end of his sword-belt through the buckle. The sword is long, with a wide blade and relatively short hilt with space for only one hand. It has a lobated pommel and long drooping quillons with spatulate ends. On a panel beneath the man's feet is a galley, facing left, with high prow and stern and rudder. It has a mast and rigging but no sail. To the right of the head is an inscription, side-on, in black letter, now partly missing. Graham (1895: pl II, no. 3) shows it complete, which allows it to be read as:

hic:iatdon
aldusfilius
patrici:celi
stini

That is, *hic iacet donaldus filius patrici celistini* ('Here lies Donald son of Patrick (son of) Celestine'), identifiable as Donald MacGillespie, crown tenant of Finlaggan in 1541 (Steer & Bannerman 1977: 123). The slab is described by Graham (1895: 29) as lying under the north wall of the chapel, but as noted in *Finlaggan* Chapter 9 there is reason to think that it may have covered burial 14008 inside the chapel. It measures 1.87 by 0.48m. See also R17. (RCAHMS: *c* 1500–60.)

R12 slab of chlorite schist with unfinished (?) design (illus C2.11, C2.12)

This has the incised outline of the hull of a galley across the top, and a sword below, placed to the left of centre. The sword has drooping quillons and the outline of the pommel is similar to others shown as lobated. Its maximum length is 0.91m and it is 0.42m wide. Graham 1895: pl III, no. 6. Islay? Late 16th or early 17th century.

R13 grave-slab, two fragments. chlorite schist with planar fabric (illus C2.13)

These are badly worn and lacking full thickness, both probably from the one slab with foliage scroll decoration and edge double roll-moulding. One piece is either from the top-right or bottom-left corner of the slab. The smaller piece is not illustrated. SF 17002 from Context 17002; 305 by 157 by 34mm, and 156 by 217 by 20mm. 14th or 15th century.

R14 child's (?) slab, fragment. chlorite schist (illus C2.13)

Only the bottom-right corner survives, showing part of the foliated semicircular base of a central cross, with the blade of a sword above, flanked by a single strand of plant-scroll terminating at the bottom in a dragon's head. The edge of the slab has a triple roll-moulding. The middle roll is keeled, and narrower than the others. The carving is very fine, showing little sign of weathering. It measures 378 by 154mm and is 43mm thick. This is possibly a fragment of the finely carved child's slab, 'lately smashed into small pieces', seen in the early 20th century by Grant (1935: 404). Islay? 14th century.
SF 26010, from the debris outside the east wall of the chapel.

R15 slab, two fragments, probably from the same slab. chlorite schist (illus C2.13)

The larger piece is a corner with part of a plant-scroll design. Both pieces are very worn. The smaller one is not illustrated. They measure 255 by 283mm and 215 by 150mm. 14th or 15th century.
Found in clearance work at the chapel in 2001. They were recovered adjacent to each other in debris outside the east wall of the chapel.

R16 slab fragment of chlorite schist with planar fabric (illus C2.13)

Decorated with part of an unsheathed sword blade with wide fuller (?), and a roll moulding. It measures 250 by 130mm. 14th or 15th century.
Found in clearance work at the chapel in 2001.

R17 slab, corner of, lacking its full thickness. chlorite schist (illus C2.9)

This is undecorated but for a groove defining the margin. 430 by 150mm.
It appears to be the upper-left corner of slab R11.
SF 14004; [14002/part of 14010].

R18 slab, fragment of, chlorite schist with pyrite (illus C2.13)

This is the badly worn top or bottom part of a slab with triple roll-moulding and foliage decoration. The space between the foliage and roll mouldings might be interpreted as a label for an inscription, in which case this piece would be a candidate to be identified as R8 above. It might also be the part of a grave-slab said to have been found in the ruins of the chapel by a local farmer, Ara Fletcher. In conversation in 1994 he described it as having a crown on it. It is 314mm wide by 244mm in surviving length. 14th or 15th century.
Found in clearance work at the chapel in 2001.

R19 fragment of rim of a font or holy water stoup (?) (illus C2.13)

This is represented in a woodcut published by Campbell (1862, 400). It is said to have been discovered under the ruins at the east end of the chapel about 1830. Its size and rock type are unknown. The flat surface of the rim is carved with foliage scroll. 14th or 15th century.

R20 CROSS-HEAD OF CHLORITE SCHIST (C2.10; *Finlaggan*, ILLUS 9.7)

The disc head of a commemorative cross of chlorite schist.

It is carved on both sides with interlace designs contained within a roll moulding, tracing the outline of the cross with its short arms. The main face, which evidently faced (true) ESE, is in pristine condition. It has a central boss, plain but for a central hollow made by the compasses used to lay out the design. It is set within a ring interlaced with a band which develops into half-palmettes in the arms and a cross-crosslet in the head. The other side shows considerable wear from exposure to the prevailing wind and rain, enough to suggest that it stood in place for a considerable period of time. It measures 0.48m across its arms and 0.572m in maximum surviving height. Islay? 14th or 15th century.

SF 1037 recovered in the burial ground on Eilean Mór adjacent to its plinth [1005].

Architectural carvings and imported stone

NIGEL A RUCKLEY

In 2005 the author of this section, along with D H Caldwell, published an overview of domestic architecture in the Lordship of the Isles. There they noted the limited sources of freestone in the West Highlands and Islands but drew attention to evidence of how it could be transported over relatively long distances in the medieval period, from quarry to building project. It was used sparingly in many churches and castles for window and door dressings, quoins and other architectural details. There is no freestone available in Islay, but sandstone was used in some of the main buildings on Eilean Mór and Eilean na Comhairle. Very little of this stonework remains in situ in the ruins, and some of the pieces which are still incorporated in walling appear to have been recycled from earlier structures. It has not yet been possible to source any of the freestone at Finlaggan to specific quarries.

Red sandstones

The 'red' sandstone at Finlaggan varies in colour, but much of it is dusky red (10R 3/2–3/4) or light reddish-brown (2.5YR 4/2–3/4). On the basis of visual examination, this material is similar to the red Permian sandstones that outcrop on the western seaboard of Kintyre, for instance at Red Cove, Beachmenach Farm (NGR NR 690 432), and a raised cliff between Ballochantuy and the Barr Water (NGR NR 666 340). Another possible source, much nearer to hand, which requires further research, is Glas Eilean, a small rocky island in the Sound of Islay adjacent to Jura. There a metre-thick band of reddish-brown, fine-grained sandstone is exposed (Pringle & Bailey 1944 : 250).

Several pieces of red sandstone were recovered from the excavations, and others were spotted still in situ in walling on Eilean Mór and Eilean na Comhairle. These include a jamb stone, reused, in the entrance to the great hall, and another jamb stone in the doorway in the cross-wall inside (both trench 10).

A number of small pieces were recovered in and around the chapel, and a piece in the wall of the castle on Eilean na Comhairle, facing Eilean Mór, may be all that is left of a window or door with sandstone dressings. Small pieces were noted, reused in the phase 1 walling of the north gable and west wall of building C. The badly burnt remains of a red sandstone, paved floor were identified in building 12.3. Apart from the jamb of the entrance to the great hall, the only piece of red sandstone that is ornamented is a

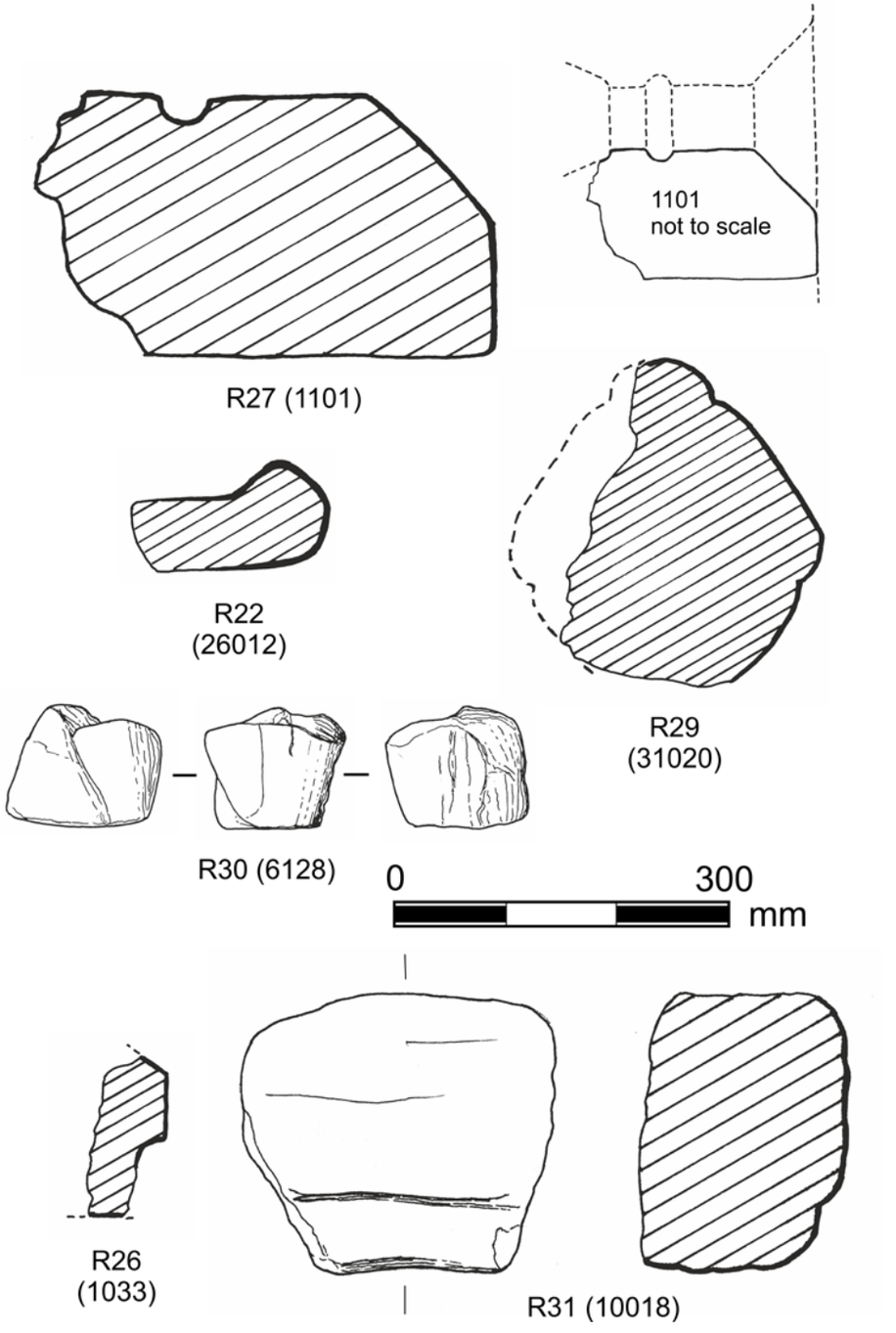


Illustration C2.14
Architectural pieces

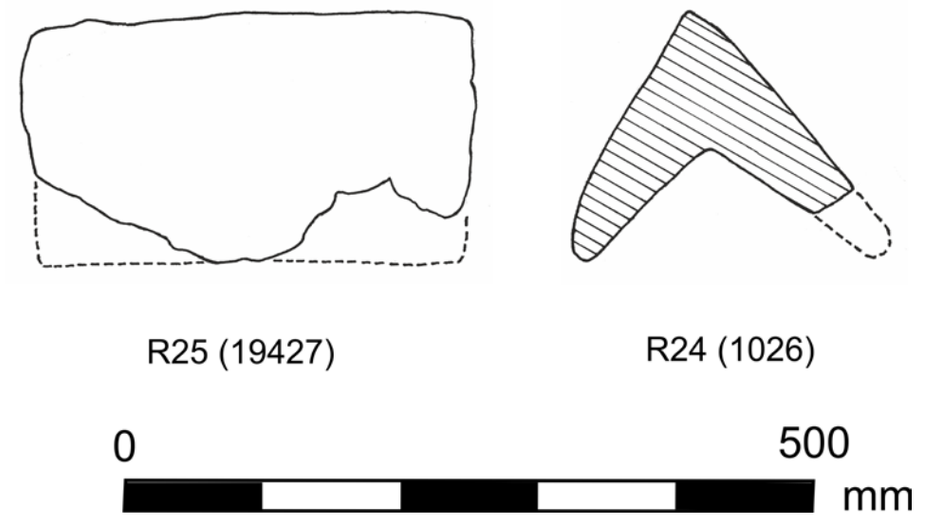


Illustration C2.15
Architectural pieces

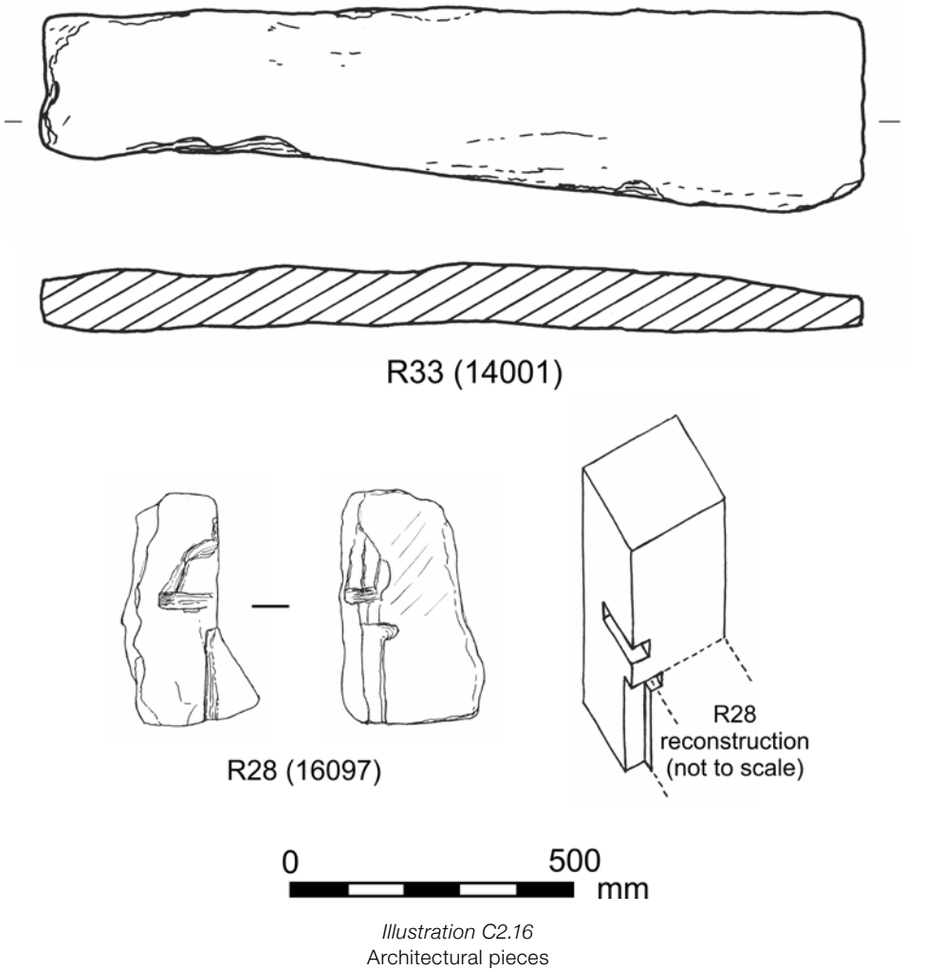


Illustration C2.16
Architectural pieces

smallish piece with nail-head decoration (R21). It was found reused in the wall of building B. With such a small broken piece it is not obvious how it was used. It may, however, be a better preserved piece of the mouldings on the west jamb of the remodelled great hall door. They would originally have been made for a door, or perhaps even a window opening or fireplace, perhaps of 14th-century date. It is possible that they could have been recycled from another building at Finlaggan, like an earlier chapel or from the castle on Eilean na Comhairle. There is also a block (R22) from the chapel with a roll moulding and a possible fragment of a paving slab (R23).

White sandstones

Colour varies from white to light grey, light olive-grey, 'buff' and grey-yellow. Quarry sources have not been identified, but are likely to be in Kintyre, Arran or Ulster. Some faces preserve the traces of diagonal tooling.

White sandstone was found in situ as a quoin at the south-east corner of the chapel. Other pieces from in and around the ruins of the chapel are apparently from its door and window embrasures. Two pieces of roof ridge from trench 19 are less certainly from the chapel.

A piece of roof ridge (SF 11017) from a dump of slates within the ruined great hall is a clear indication of how that building's roof was finished off. White sandstone also occurs in the great hall as jamb stones for the main door and a door in the internal screens wall, and other pieces from round about, including a voussoir checked for a door (R31) and a label stop or corbel in the form of a human head (R32), are likely to have formed part of the structure of the great hall. The entrance to building C still has sandstone jamb stones in position.

Epidiorite

A few pieces of epidiorite have been recovered from among the medieval ruins on Eilean Mór and Eilean na Comhairle. The rock in question is not from the immediate locality of Finlaggan but could have been quarried further afield in Islay. It may have been valued as a good rock for making doorsteps and lintels, thus the doorstep of the entrance into the great hall and a supposed lintel (R33) recovered from the ruins of the chapel.

Catalogue of architectural pieces

Some of the 14 pieces listed here, on the basis of their contexts, can obviously be associated with particular buildings – the tower on Eilean na Comhairle, the great hall and the chapel. Some caution, however, has to be exercised in making such deductions, since it is clear that there was considerable recycling of stonework for use in later structures across both islands. Two pieces are deserving of

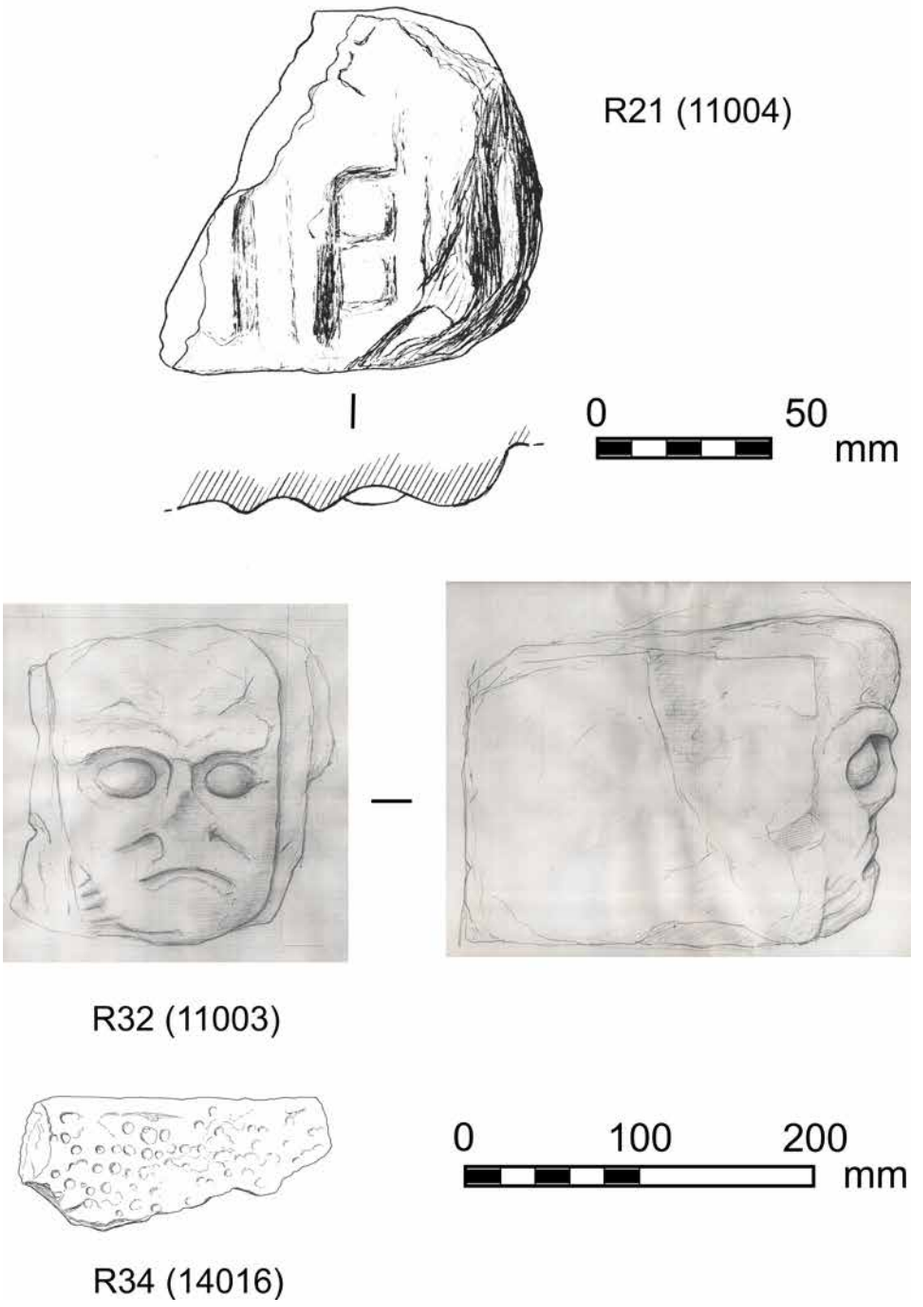


Illustration C2.17
Architectural pieces; illustration of R32 by Marion O'Neil

some comment: R21, probably a fragment of a rybat, and R32, a label stop or corbel in the form of a human head, both found to have been incorporated in the walling of structure B, a post-medieval house partially built on the reduced wall of the great hall. They are, therefore, likely to have come from the hall. The nail-head decoration on R21 is typical of 13th-century work (Fawcett 2002: 54). R32 is similar to the label stops on the hood-moulds of two doors in the choir of the cathedral of Argyll in the island of Lismore (*Finlaggan*, Illus 14.4). This work is now considered to date to the 13th century, in the years after 1225 (Fawcett 2002: 137; 2011: 147). The Lismore heads are representations of clerics but R32 is not clearly so (RCAHMS 1975: 157–60). It is possible that both R21 and R32 decorated the great hall entrance excavated in trench 10, reckoned to show evidence of having been reset.

R21 RYBAT? SANDSTONE (ILLUS C2.17)
Fragment of 'red' (5YR 4/3 reddish-brown) sandstone, possibly from a door jamb, decorated with a quadrant hollow between fillets and a band of nail-head decoration. 110 by 103 by 90mm
SF 11004; [11003] wall of house B

R22 MOULDING, SANDSTONE (ILLUS C2.14)
Block of red sandstone with roll moulding. 175 by 95 by 95mm
SF 26012; from clearance work around the chapel in 1998

R23 PAVING SLAB? SANDSTONE
Pink sandstone corner of a slab, medium coarse grained; quartz grains sub-rounded; gritty to touch but quite well cemented; no obvious bedding; mafics and mica very low or absent; no clasts; slight reaction to dilute hydrochlorite acid. 80 by 83mm; Th: 42mm
SF 31026; from clearance work around the chapel in 1998
Not illustrated

R24 ROOF RIDGE, SANDSTONE (ILLUS C2.15)
Broken piece of 'white' (light yellowish-brown) sandstone roof ridge. Ht: 160mm; L: 190mm; W: 205mm
SF 1026; [1007] embedded in the gravel horizon in the burial ground

R25 ROOF RIDGE, SANDSTONE (ILLUS C2.15)
'White' (2.5Y 7/3 pale yellow) sandstone roof ridge (broken) with inverted V cross section (see R24). L: 335mm; Ht: 200mm
SF 19427; [19005] remains of wall of str 19.2
See also SF 2042, 11017, 19040

R26 RYBAT, SANDSTONE (ILLUS C2.14)
White sandstone jamb stone, possibly from the chapel door. Surviving L: 143mm; Ht: 120mm
SF 1033; [1007] embedded in the gravel horizon in the burial ground

R27 RYBAT, SANDSTONE (ILLUS C2.14)
'White' (2.5Y 6/3 light yellowish-brown) sandstone jamb stone, probably from a window in the chapel. 440 by 220 by 150mm
SF 1101; [1039] tumble beside the exterior of the south chapel wall
See also SF 26007

R28 RYBAT? SANDSTONE (ILLUS C2.16)
'White' sandstone, much-damaged dressed stone with slots for hinges or other fixings. 410 by 270 by 190mm
SF 16097; [16045] mortar debris and sandstone block, castle demolition

R29 MULLION? SANDSTONE (ILLUS C2.14)
Broken grey-yellow sandstone carved block, possibly a window mullion. 260 by 240 by 170mm
SF 31020; from clearance work around the chapel in 1998. Now at Finlaggan Visitor Centre

R30 CARVED SANDSTONE (ILLUS C2.14)
A carved piece of grey-yellow sandstone, perhaps from the cap of a nook-shaft in a door or window opening. 107 by 114 by 112mm
SF 6128; [6004] palisade bank

R31 VOUSSOIR, SANDSTONE (ILLUS C2.14)
'White' (2.5Y 6/3 light yellowish-brown) sandstone voussoir . 250 by 280 by 180mm
SF 10018; [10020] recovered from rubble adjacent to the cross-wall in the great hall

R32 LABEL STOP OR CORBEL IN THE FORM OF A HUMAN HEAD, SANDSTONE (C2.17; *Finlaggan*, ILLUS 11.25)
'White' (2.5Y 7/3 pale yellow) sandstone. Ht: 200mm; W: 185mm; L: 250mm
SF 11003; [11003] positioned in the core of the wall of house B, immediately to the south of the entrance in the west wall

R33 LINTEL? METABASITE (ILLUS C2.16)
Slab of metabasite, undecorated. The slab is roughly dressed. It is broken the complete length of one side, making it impossible to ascertain its original width. L: 1.45m; maximum surviving W: 0.35m
SF 14001; found among the rubble in the interior of the chapel. It is now positioned outside the north-west corner of the chapel

R34 ALTAR TOP? CHLORITE SCHIST (ILLUS C2.17)
Piece of worked chlorite schist slab with chamfered edge and pitting on the underside to help secure the slab in place. 190 by 79 by 30mm
SF 14016; recovered in 1998 from debris around the altar inside the chapel
See also SF 14017, 14018.

Roof slates (Illus C2.18–19)

NIGEL A RUCKLEY

Roof slates, some complete, most fragmentary, are one of the most ubiquitous finds from many of the trenches excavated on Eilean Mór. There are none from the excavations on Eilean na Comhairle or around that island, with one exception, a probable roof slate reshaped as a pot-lid (SF 25019), from the medieval midden [25008]. The slates have been divided into four groups, type A, B, C and D, on the basis of their petrology. Excluding pieces recut to form other artefacts such as pot-lids, tablemen and game boards, the site database of finds has entries for 217 roof slates, of which 177 are type A, 12 type B, 17 type C, 2 type D and 9 unspecified. This is rather fewer than the number of pieces observed in our work on Eilean Mór, since in the excavation process many reused as pinnings and drain covers, for example, were not removed, and only those fragments deemed to be of a largish size and/or with evidence of fixing holes were retrieved and given a finds number. The overall picture provided by the site database, that the majority of slates are type A with only small numbers of types B, C and D, is believed to be accurate.

Type A roof slates

Type A roof slates are grey in colour when freshly broken and weather, in the ground, to a buff colour that is usually only skin deep. Their quarry source is presently unknown, though it is assumed likely that they originate from the West Highlands. In petrological terms they have been identified as a low-grade, flaggy, micaceous semi-pelitic schist. They could have come from a formation in the Appin or Argyll Group of the Dalradian sequence, some of which are known in Islay. Such a formation has been quarried for roof slates at Port Ellen, but it is evident that this is not the source of the Finlaggan type A slates, nor are they from any of the other slate quarries in the island mentioned by Wilkinson (1907).

The thickness of these slates varies from slate to slate and over the area of each individual piece, mostly from 6 to 16mm. Fixing holes, typically 16 to 20mm in diameter, were cut in them from both sides near the head of the slates. There is no direct evidence of whether iron nails or wooden pegs were used for fixing them. Several iron nails were recovered in the excavations but they mostly look on the small side, their heads not being broad enough to hold the slates securely in place. We have, therefore, supposed that these slates were secured with wooden pegs, fixed through wooden battens (sarking).

Relatively few type A slates are complete enough to assess their overall size and shape. It is clear that they did vary considerably in size. R47 (SF 14024) is a complete example of a small one, 287mm in height by 106mm wide. It is rectangular with a single fixing hole, 18mm in diameter, near its top edge. R41 (SF 12586) is a complete example of a large slate with two fixing holes. It also is rectangular, with a height of 335mm and width of 300mm. Fragments indicate that some slates were much bigger than that, like R40 (SF 11035) with a width of 510mm. Table C2.1 gives sizes for 17 type A slates measured in the field in 1993, showing a range of heights from 155 to 360mm and widths from 127 to 298mm. It is a reasonable assumption that slates were cut to random sizes at the quarry and then positioned by the roofers with larger slates at the bottom of the roof and smaller ones towards the top.

Height (mm)	Width (mm)	Context	Notes
205	170	12101	Turf and topsoil
170	140	12130	Floor of str 12.5
360	250	12109	Drain cover in str 12.5
340	210	12109	Drain cover in str 12.5
340	298	12109	Drain cover in str 12.5
357	185	12109	Drain cover in str 12.5
347	246	12109	Drain cover in str 12.5
320	228	12109	Drain cover in str 12.5
290	175	12135	On kerb of road to east of hall
180	125	12135	On kerb of road to east of hall
280	220	12135	On kerb of road to east of hall
240	230	12135	On kerb of road to east of hall
285	192	12135	On kerb of road to east of hall
200	127	12135	On kerb of road to east of hall
295	210	12000	
240	147	12000	
155	150	12000	

Table C2.1
Type A roof slates

Some of the slates have shouldered, rounded or peaked tops and a single peg-hole near the top. Others are rectangular, often with two peg-holes. These two types suggest roofs with different patterns of cover. The peaked, single-holed slates might well have been positioned in a pattern described as 'double lap-headed fixed random slating'. The rectangular single- and double-pegged slates would be typical of a pattern of double lap-centre pegged random slating (Emerton 2000: 4).

Type B roof slates

Type B roof slates are of local phyllite, dark grey in colour, slightly foliated, with finely disseminated cubes of pyrite, varying in size from the microscopic to 3mm across. There is a disused quarry for such slate near to Finlaggan at Esknish (Emeraconart), NGR NR 3734 6504. The Finlaggan material probably came from there or nearby.

Thicknesses for the few surviving pieces of type B slate vary from 8 to 22mm, and peg-holes from 16 to 17mm in diameter have been noted. Very few are reasonably complete, but they could be over 280mm in length and about 160mm wide. They are single holed with peaked or rounded tops.

One complete type B slate, R53 (SF 12595), reused as a drain cover in the 16th century in building 12.5, was cut deliberately and precisely with a thinner upper portion, perhaps to fit as a replacement in an existing roof. That roof, in this case, was almost certainly on the nearby great hall. The use of readily available local phyllite for repair work may also explain the presence of other type B slates.

Type C roof slates

Type C roof slates closely resemble slate from the Easdale slate belt in Argyll. They are fine grained with extremely small cubes of pyrite disseminated throughout, and occasional larger cubes up to 3mm across. They exhibit a grey-blue lustre that, with excessive weathering, can be dulled with iron staining. Thicknesses of up to 12mm have been noted, but most surviving pieces are flakes, not of full thickness. The suspension holes are often less than 10mm in diameter and were probably for iron nails rather than wooden pegs (R60–R64). Only three were complete enough to be measurable:

- SF 0103 [loch]: 310 by 205mm (R58)
- SF 0104 [loch]: 375 by 250mm (R59)
- SF 0500 [5036] debris, natural: 270 by 135 by 12mm

Type D roof slates

Type D roof slates are of metabasite (epidiorite), slightly foliated, green coloured, containing thin creamy laths like crystals as well as occasional inclusions; iron-rich dark brown stains. There are only two (incomplete) examples (R66, R67), both from the old ground surface [17002] adjacent to the chapel. One of them has a broken peg-hole.

Distribution and use

The distribution of roof slates (Table C2.2) gives some idea of which buildings at Finlaggan, all on Eilean Mór, had slate roofs, although, as already noted, there is also considerable evidence for roof slates being reused and reshaped for other purposes like pot-lids and drain covers. Building 12.5, dating to the 16th century, still had several roof slates in situ as drain covers (*Finlaggan*, Illus 12.53), and most of these were not removed in the process of our excavations in trench 12. The recovery of fragments of type A roof slates from within and around the chapel are a strong indication that the chapel was roofed with them. The finds database also lists 39 recovered from the loch adjacent to the chapel. Three pieces of grey-yellow sandstone roof ridge were also discovered nearby – R24 from the gravel spread in trench 1 and the other two down the slope to the north in trench 19, one (SF 19040) in topsoil and R25 (SF 19427) incorporated in the wall of building 19.2.

The key dating evidence for the chapel is the late 14th-century halfgroat of Robert II (SF 14011) recovered from the mortar of its south wall. That is consistent with the statement in the *Book of Clanranald* that John I Lord of the Isles 'covered' the chapel (Cameron 1894: 2.159). 'Covered' translates the Gaelic word *cumhduigh*. We are grateful to the Gaelic scholar Ronald Black for pointing out to us that this may have been used to mean 'permanently covered', as opposed to *thugh*, 'thatched'.

The context is a list of good works carried out by John I Lord of the Isles in his lifetime in support of the church. He made a donation to Iona, and also covered the chapel on Orsay (off the Rhinns of Islay). The writer's interest is confined to showing John's devoutness, but the archaeological evidence from Finlaggan demonstrates that roofing the chapel with slate was part of a much bigger building project, including the great hall and other buildings, and John was probably the instigator, even if the work was largely achieved in the time of his successor, Donald.

The evidence that the great hall had a slate roof is incontrovertible. There is a dump of slate fragments in the south-west corner of the hall [11017] which is about two thirds type A to one third type C, all but one of which, R40 (SF 11035), were not lifted. There was also a piece of roof ridge (SF 11017) carved in white sandstone. Many pieces of type A slates were also recovered from trench 12, overlying the surface of the cobbled road along the east wall of the great hall and in the adjacent topsoil and garden soil. It is most likely that these are also from the roof of the great hall. It was further observed that the cross-wall inserted in the hall had type A and C slates used as pinnings. All this suggests a major refurbishment of the hall roof using type A slates.

Location	Type: quantity	Probable origin	Notes
Loch	A: 39, C: 3	Chapel, strs J, H	Sectors 3, 4
Trench 1	A: 4	Chapel, str J	
Trench 2	A: 10, B: 2, C: 2		Post-medieval reuse
Trench 4	A: 3		Post-medieval reuse
Trench 5	A: 5, C: 2	Str P	
Trench 6	A: 2	Chapel, strs J, H	
Trench 7	A: 1, C: 2	Chapel	
Trench 8	A: 15, B: 1, C: 3	Chapel	
Trench 9	A: 2		
Trench 10	A: 2, C: 2	Great hall	
Trench 11	A: 1	Great hall	
Trench 12	A: 67, B: 2, C: 4	Great hall	Post-medieval reuse
Trench 14	A: 22, B: 4, C: 1	Chapel	
Trench 17	B: 2, D: 2	Chapel	
Trench 18	A: 1, B: 1, C: 1		Post-medieval reuse
Trench 19	A: 4	Chapel	

Table C2.2
Roof-slate distribution

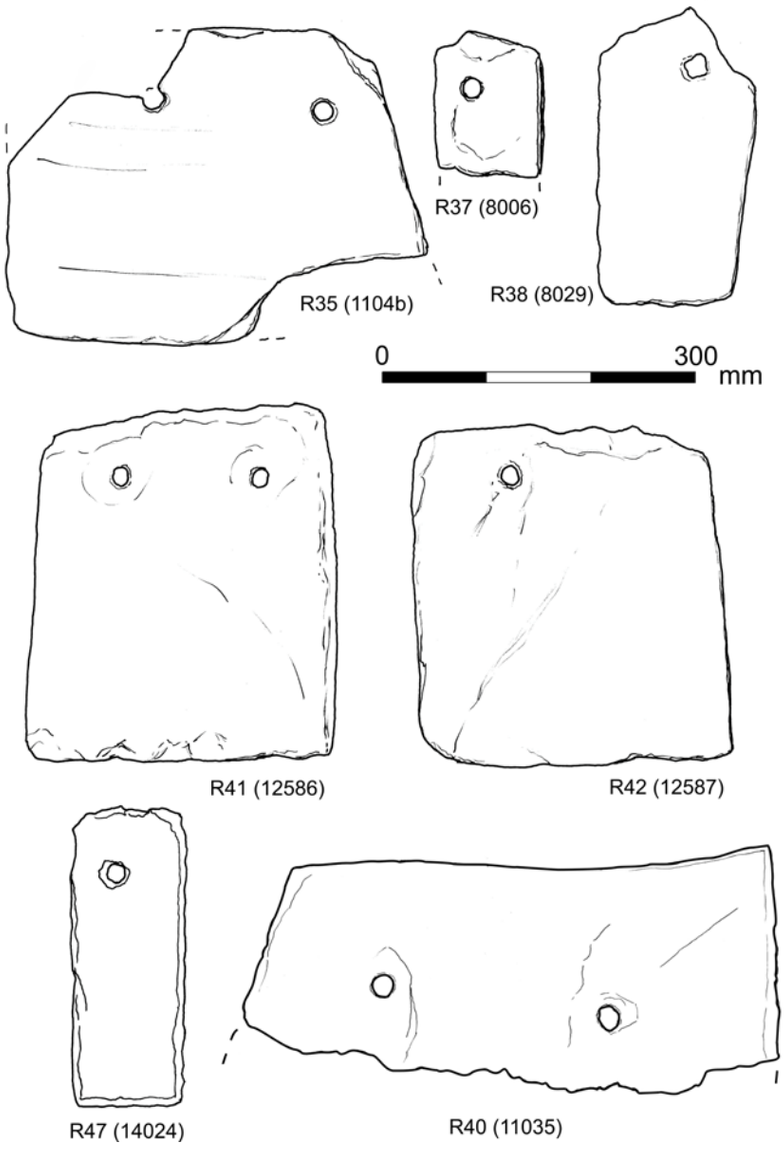


Illustration C2.18
Roof slates

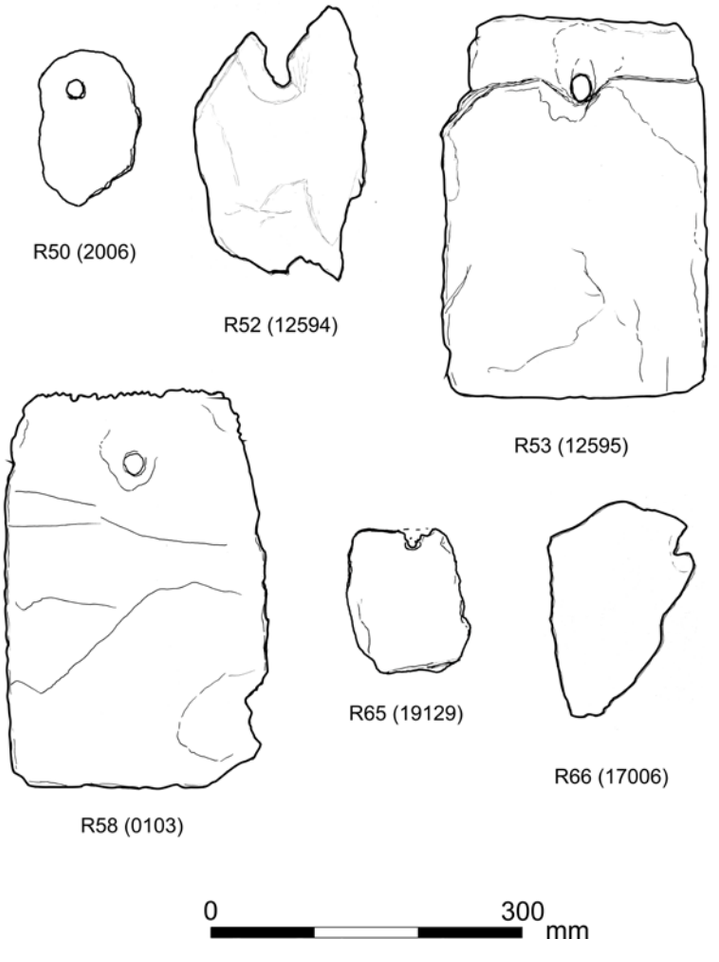


Illustration C2.19
Roof slates

Type C slates, however, also seem particularly to be associated with the great hall, being present in the dump [11017] in the south-west corner and generally in the demolition deposits [10013] within the hall walls, and in the garden soil [12193] just to the east. A possible explanation for their presence is that they were recycled from an earlier hall roof.

From the tumble and debris in and around the ruins of building H in trench 8, and also from the area immediately adjacent to H's end wall in trench 6, were excavated over 200 pieces of type A roof slates and about 30 fragments of type B. This can be taken as evidence for the roof covering of building H, and probably the adjacent building J as well. Little of the latter was excavated, but several type A slates were recorded among the tumble [1002] from its wall in trench 1.

Only seven pieces of types A and C roof slate were recovered in limited excavations in trench 5. It is possible that they belonged to the roof of building P, identified as of 16th-century date.

Catalogue of select roof slates

R35 roof slate, semi-pelitic schist (illus C2.18)
Type A; largely complete, with two peg-holes; 310 by 405 by 18mm
SF 1104b; [1002] cobbling in entrance of building J facing the burial ground

R36 roof slate, semi-pelitic schist
Type A; fragment with two peg-holes; 180 by 250mm
SF 5040; [5042] tumble in entrance of building M
Not illustrated

R37 roof slate, semi-pelitic schist (illus C2.18)
Type A; pointed top, pierced; surviving L: 135mm; W: 100mm
SF 8006; [8002] topsoil

R38 roof slate, semi-pelitic schist (illus C2.18)
Type A; pointed top, pierced; 285 by 155mm
SF 8029; [8002] topsoil

R39 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; two peg-holes; 215 by 445 by 14mm
SF 8240; [8055] tumble in alley between strs H and J
Not illustrated

R40 ROOF SLATE, SEMI-PELITIC SCHIST (ILLUS C2.18)
Type A; two peg-holes; W: 510mm
SF 11035; [11017] slate dump in great hall

R41 ROOF SLATE, SEMI-PELITIC SCHIST (ILLUS C2.18)
Type A; two peg-holes; 335 by 300 by 17mm
SF 12586; [12109] drain covering in building 12.5

R42 ROOF SLATE, SEMI-PELITIC SCHIST (ILLUS C2.18)
Type A; pierced; 310 by 310 by 15mm
SF 12587; [12109] drain covering in building 12.5

R43 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; pierced; 335 by 210 by 14mm
SF 12589; [12109] drain covering in building 12.5
Not illustrated

R44 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; pierced; 315 by 220 by 14mm
SF 12590; [12109] drain covering in building 12.5
Not illustrated

R45 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; pierced; 350 by 218 by 14mm
SF 12591; [12109] drain covering in building 12.5
Not illustrated

R46 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; pierced; 340 by 240 by 19mm
SF 12592; [12109] drain covering in building 12.5
Not illustrated

R47 ROOF SLATE, SEMI-PELITIC SCHIST (ILLUS C2.18)
Type A; pierced; 287 by 106 by 13mm
SF 14024; clearance work in 1998, adjacent to exterior east wall of chapel

R48 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; pointed top, pierced; 310 by 130 by 8mm
SF 18171; [18007] turf gatehouse wall
Not illustrated

R49 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; pierced; 310 by 155 by 15mm
SF 19037; [19001] topsoil
Not illustrated

R50 ROOF SLATE, PHYLLITE (ILLUS C2.19)
Type B; rounded top, pierced; 155 by 96 by 8mm
SF 2006; [2003] tumble from walls of building K

R51 ROOF SLATE, PHYLLITE
Type B; pierced; 260 by 165 by 15mm
SF 12593; [12101] topsoil
Not illustrated

R52 ROOF SLATE, PHYLLITE (ILLUS C2.19)
Type B; with peaked top, pierced; 267 by 166 by 18mm
SF 12594; [12101] topsoil

R53 ROOF SLATE, PHYLLITE (ILLUS C2.19)
Type B; pierced, and with thinner upper portion; 360 by 250 by 10mm
SF 12595; [12109] drain covering in building 12.5

R54 ROOF SLATE, PHYLLITE
Type B; fragment, 285 by 230mm
SF 14021; [14006] fill of charnel pit inside chapel
Not illustrated

R55 ROOF SLATE, PHYLLITE
Type B; fragment with edge of nail- or peg-hole; 174 by 103mm
SF 14022; [14006] fill of charnel pit inside chapel
Not illustrated

R56 ROOF SLATE, PHYLLITE
Type B; fragment with probable edge of nail- or peg-hole; 84 by 166mm
SF 14023; [14006] fill of charnel pit inside chapel
Not illustrated

R57 ROOF SLATE, PHYLLITE
Type B; broken, surviving size 247 by 142 by 11mm; peg-hole diameter: 16mm
SF 18172; [18035] silting
Not illustrated

R58 ROOF SLATE, PYRITOUS SLATE (ILLUS C2.19)
Type C; pierced; 375 by 250 by 4mm; peg-hole diameter: 18mm
SF 0103; the loch, adjacent to the chapel on Eilean Mór

R59 ROOF SLATE, PYRITOUS SLATE
Type C; pierced; 310 by 205 by 4mm; peg-hole diameter: 24mm
SF 0104; the loch, adjacent to the chapel on Eilean Mór
Not illustrated

R60 ROOF SLATE, PYRITOUS SLATE
Type C; fragment with possible nail- or peg-hole; 148 by 76mm
SF 7027; [7015] lazy bed
Not illustrated

R61 ROOF SLATE, PYRITOUS SLATE
Type C; fragment, 68 by 36mm, with nail-hole, Diam: 8mm
SF 8186; [8016] tumble within str H
Not illustrated

R62 ROOF SLATE, PYRITOUS SLATE
Type C; fragment, 43 by 39mm, with nail-hole, Diam: 5mm
SF 8254; [8055] tumble in alley between strs H and J
Not illustrated

R63 ROOF SLATE, PYRITOUS SLATE
Type C; fragment, 70 by 51mm, with nail-hole, Diam: 7mm
SF 8526; [8035] floor of str H
Not illustrated

R64 ROOF SLATE, PYRITOUS SLATE
Type C; fragment, 74 by 63mm, with two nail-holes, only 20mm apart, Diam: 6mm and 7mm
SF 10015; [10013] demolition from great hall
Not illustrated

R65 ROOF SLATE, PYRITOUS SLATE (ILLUS C2.19)
Type C; pierced; 132 by 112mm
SF 19129; [19009] floor of str 19.2

R66 ROOF SLATE, METABASITE (ILLUS C2.19)
Type D; fragment, pierced; 208 by 179 by 13mm
SF 17006; [17002] old ground surface

R67 ROOF SLATE, METABASITE
Type D; fragment, 200 by 104 by 13mm
SF 17007; [17002] old ground surface
Not illustrated.

Gaming equipment and pot-lids (Illus C2.20–22)

MARK A HALL

Gaming is the predominant theme of this section and it encompasses both diverse materials and a range of types, including – because of their gaming relevance – three bone playing pieces or tablemen (for their catalogue entries see the following chapter). It also includes, among the class of stone discs, objects that are almost certainly not items of gaming equipment. They are listed here as discs form a prosaic descriptive category, and treated in this way they can perhaps more readily be compared with previously reported assemblages, notably those from Whithorn (Nicholson 1997: 447–49), Jarlshof (Hamilton 1956: 69,

114, 119, 135, 141, 143, 150, 165, 168, 180, 184) and Hurly Hawkin (Henshall 1983: 233–35), three sites that suffice to illustrate the widespread occurrence of such assemblages in Scotland, both temporally and spatially.

The principal art of play to be dealt with here is that of board games. A brief look at the cultural background of such gaming will be followed by a discussion of the finds, including three bone tablemen (B1, B2, B5). All the gaming equipment other than these three appears likely to have been cut from roof slates (attributable to four types of rock) used in the later medieval period to roof some of the main buildings at Finlaggan. It is noteworthy that no dice, of any material, were recovered; one would certainly have expected them to be in use, both to govern moves in board games and in the playing of dice games.

Cultural background

The combined evidence of historical sources and archaeology demonstrates a long-lived tradition of gaming, and in particular board games as an essential aspect of court or elite lifestyles, in the west of Scotland, but by no means restricted to them. Hall (2017) gives the most recent and up-to-date account. Board games remained important throughout the medieval period. For early historic Scotland, Anna Ritchie has demonstrated how they were an example of the cultural tradition common to Picts, Scots and other Celtic peoples but also, more specifically, how they were a 'direct link between Ireland, Dalriada and northern Pictland, presumably through a common heritage' (1987: 62).

Later, a poem from the time of Angus Mor shows that gaming pieces were still important to the elite of society. The most recent translation entitles it the 'Poem of Aenghus Mor Mac Domhnaill, King of the Isles', and verse two runs, 'To you he left his position, yours each breastplate, each treasure, his hats, his stores, his slender swords, yours, his brown ivory chessmen' (Clancy 1998: 288; for an earlier translation, see Bergin 1935: 57; for a full discussion of the significance of the lines, see Hall 2014b). Skill at board games was an equally admired trait in both Gaelic and Norse society, not only on the Western Scottish seaboard but more widely. Power's (1987 : 69–89) examination of magic and questing in the respective literatures of both cultures, for example, identified a number of 14th-century Icelandic texts where chess formed a key opening, probably deriving from a pre-14th-century Gaelic model. The game referred to in these and other texts, where specified, is in the main chess. Finds of chess pieces are rare in Scotland, but, with the exception of one, they are all from the west coast. The Lewis chess pieces are well known (see Caldwell et al 2009), and for a review of the rest, including Skye, Rothesay, Kirkwall and Perth, see Hall (2014a). The main geographical focus of these finds and their quality is sufficient to indicate the importance of high-status gaming in the Western Isles of Scotland. These chess pieces are generally dated to the 11th–13th centuries and, as with tablemen (see below), chess pieces from the end of the medieval period are much rarer finds (I know of none from Scotland). That the status of the game was maintained is indicated by the variety of text references. These include inventories, romance tales and moral treatises, a number of which are quoted in the *Dictionary of the Older Scottish Tongue* (under the heading 'ches') and the *Etymological Dictionary of the Scottish Language* (Jamieson 1882: 490, for tables).

With the passing of the lords of the Isles we still perceive an echo of the role of gaming from Donald Monro's 1549 account of the Western Isles. He states that the Council of the Isles met at Finlaggan 'albeit their Lord were at his hunting or at any other games' (Munro 1961: 57), though here gaming and sport seem to be identifying not the strength of the lords but their self-indulgence and lack of responsibility.

To this general background let us now add the specific details furnished by the excavations at Finlaggan. To date these have revealed no gaming material of the quality of the pieces discussed above. In part this may be down to the peripatetic nature of the Lordship of the Isles, which would no doubt have seen the best pieces in transit with their lord and much more carefully looked after. We know from evidence elsewhere that it is usually in exceptional circumstances that the best quality pieces are thrown away, a good example being the Gloucester tabulae set discussed below. The bulk of the evidence from Finlaggan is more prosaic and indicates that such pastimes were not confined to the amusements of the elite but much more widely played. By the end of the medieval period in Europe its various nationals had their own idea as to the relative status of the most popular games – *chess, tables* and *nine men's morris* – with the first equated with kings and nobles, the second with burgesses and the third with the peasantry (see Hall 2001). The evidence from Finlaggan is broadly in line with this .

Graffiti gaming boards

R68, a fragment from a gaming board, probably for alquerque, scratched as a graffito on a micaceous semi-pelitic schist (type A) roof slate, was found in the foundation trench for the south-east wall of building H. Its use as a gaming board may pre-date its use as a building slate, possibly having been scratched out to pass the time during construction work. The design of the board occupies the upper portion of a subsequently reshaped or damaged slate and comprises two conjoined squares cut by horizontal, vertical and diagonal lines. In the left-hand square the central crossing point for all the lines is marked by a circle, somewhat broken, and there is a hint of something similar in the right-hand square.

Treating the surviving squares of the board singly allows us to identify them as boards for the game *three men's morris* (part of the *merels* group of games), but there seems little good reason to do this as they are so clearly conjoined. Accepting that the board is incomplete, it seems far more likely that it is a fragment from an *alquerque* board (see Murray 1952: fig 27; Parlett 1999: fig 151(a)). We should note, however, that the two circles at the centre of each square (described above) do not normally occur on an *alquerque* board. Murray (1952: 46) notes that such a circle on a *nine men's morris* board is where captured men are placed. Graffiti boards on stone are common in Britain (as they are in other media: see Croft 1987), particularly for the *merels* group of games. Examples include Old Sarum, Wiltshire (Saunders & Saunders 1991: 174, fig 51), Castle Acre Castle, Norfolk (Coad & Streeten 1982 : 260–61), Tintagel, Cornwall (Thorpe 1988: 70–72), the Isle of Man (Cubbon 1960 : 60–70; Freke 2002 : 276–81), Whithorn, Wigtownshire (Nicholson 1997: 449), and Jedburgh Abbey, Roxburghshire (Gallagher 1995: 108–09). For Scotland generally, see Robertson (1967: 321–23), now updated by Hall (2014a, 2017).

However, *alquerque* boards are comparatively rare. Parlett (1999: 244, following Murray 1952: 66) cites an example in the cloisters of Norwich Cathedral (and Murray also cites an example in St Mary's Church, Cavendish, Suffolk). Despite a detailed search I have not found the board in Norwich Cathedral, but Norwich does furnish a further example. It is on a block of stone in the south-east corner of Norwich Castle (on the present mezzanine floor of the keep, originally the chapel on the Norman first floor). Its height and positioning make it unplayable, and presumably it was a mason's piece, used during construction (cf Wharram Percy, North Yorkshire – see Atkin & Tompkins 1988: 26), or perhaps a board inscribed as an apotropaic symbol (cf Nevern Castle, Wales – Caple 2012). It was noted above that the Finlaggan example was possibly made and used under similar circumstances of masonic activity. This is by no means certain. It could conceivably be the remains of a slate board kept in building H during its occupancy and at some point broken and/or lost. I have written elsewhere on the 'mental ephemeracy' of such stone boards which, though executed in the most durable of materials, can often represent very short-term activity (M A Hall 1998: 148).

Although we can describe this with some certainty as an *alquerque* board, it is less easy to be certain about the specific game(s) played on it. The Spanish *Alfonso Codex* of 1283 (a gaming compendium compiled for King Alfonso X of Leon and Castille) describes three variations of the game for three, nine and twelve pieces per player (of whom there were two). The three and nine variations equate to *three* and *nine men's morris*. Today, however, alquerque is classified separately from such merels games (eg Parlett 1999 and Murray 1952). It also has parallels with the chase game of *fox and geese*. The Spanish variant of this (*catch the hare*) is also recorded in the Alfonso manuscript as being played on the alquerque board (Parlett 1999: 187, fig 12.1). That said, the types of board used for *nine men's morris* and *alquerque* were, again according to the *Alfonso Codex*, different (see pl 28, Alquerque, and pl 50, Nine Men's Morris, in Endrei & Zolnay 1986). The gaming pieces used on each board – resembling chess pawns – do appear to have been identical. It should of course come as no surprise to learn that boards and pieces were used as flexibly as possible. From the 14th century in Europe triple gameboards (combining *chess*, *tables* and *merels*) were increasingly popular.

In terms of the stone discs discussed below, just under half (14 out of 29) of the small size category would be useable on this board, as would naturally rounded pebbles or small stones. This is not the high-status gaming of the *Alfonso Codex*, for example.

R69, a fragment of Easdale-type slate, might be a piece of another gaming board, and one of the very large discoids, R78, has a pattern of three horizontal and five vertical lines forming an irregular cell design, with a further four transverse/diagonal lines intercutting them. This appears to have been a gaming board, again most likely for alquerque, which has been cut down from a larger slate to form a semicircular pot-lid. Although stones bearing board designs do get cut down to form gaming pieces – a recent example from Deer Abbey, Aberdeenshire, is pending publication by Hall – at around 15cm the Finlaggan example (R78) seems much too large to be a gaming piece, and a pot-lid seems more likely. The surviving element of the design may have been seen as apotropaic.

Stone discs

Although all the stone discs from Finlaggan are listed here (Tables C2.3–6), there is no certainty that they were all used for playing games. The larger of the discs are probably not gaming pieces and this may also be true of some of the smaller pieces. The degree of uncertainty in identifying the function of these pieces reminds us of the plurality, multiplicity even, of function possible for some items of material culture (whether it be simultaneous or successive). As McLees (1990: 67) observed when discussing the stone discs from Trondheim:

> It is possible that these stone discs represent finished items designed for some other function or that the majority were blanks destined to become perforated and perhaps decorated spindle whorls. An alternative function might be as components in some sort of rudimentary system of weights and measures or (as suggested by Ian Reed) tokens relating to counting or tallying, perhaps a rudimentary precursor of post-medieval 'counting money'.

There are, of course, other approaches to such material, and to cite but one useful example, the discs from Scalloway in Shetland are treated separately as either pot-lids (both for cooking pots and storage jars) and gaming counters (Sharples 1998: 144–46, 180).

A total of 47 discs or discoids were recovered by excavation at Finlaggan. They have been divided by size into four groups, small, medium, large and very large. Comparable if slightly larger collections have been recovered from Jarlshof, Hurly Hawkin and Whithorn. As with the assemblage from Whithorn, Finlaggan has produced none of the more polished types identified in Henshall's scheme for the Hurly Hawkin material, most of them being roughly chipped discs. It is worth noting that much smaller quantities of discs or discoids (of stone and other materials) have been found throughout Britain dating from the Neolithic to post-medieval. A non-exhaustive list includes: Clatchard Craig, Fife (Close-Brooks 1987: 175); Ballock Hill, Angus (Peltenburg 1983: 188); Liddle and Beaquoy, Orkney (Hedges 1977: 68); North Ronaldsway, Orkney (MacGregor 1975 : fig 19, no. 284); Scalloway, Shetland (Sharples 1998: 144–46, 180); Kildonan Bay, Kintyre (Fairhurst 1939: 212–14); Smailholm Tower, Roxburghshire (Good & Tabraham 1989: 253); Threave Castle, Dumfries and Galloway (Good & Tabraham 1981: 117); Tantallon Castle, East Lothian (Caldwell 1992: 347); Urquhart Castle, Inverness-shire (Samson 1983: 475, no. 93); Perth (*eg* Stones 1989: mf13: C10 – the material from Mill Street and Kinnoull Street has not been published but is in the collections held at Perth Museum ; Bowler *et al* 1996 : 965; Smith *et al* 2011: 138); Ballacagan Lough and Ballanorris, Isle of Man (Bersu 1977: 64–66); Tintagel, Cornwall (Nowakowski & Thomas 1992: 10); Beverley, Yorkshire (Foreman 1992: 125); Lincoln (Mann 1982: 13–15); Winchester, Hampshire (Brown 1990: 696); and York (Addyman & Priestley 1977: 139). The assemblage from Trondheim, Norway (McLees 1990: 67–70), serves to remind us that there are also notable continental occurrences.

Small discoids

Thirty small discoids were recovered, varying in diameter from 11 to 35mm, with two thirds of them (19) coming in at 20–35mm. The thickness varies from 0.5mm to 6mm, though predominantly it is 1 to 2.5mm (20 examples). Fourteen of the discoids are 20mm or below in diameter, making them suitable for use on the graffiti gaming board discussed above. Weighing the pieces gave no further sense of conformity and did not suggest usage as weights for any of them. This might be a fruitful area of future research across all the assemblages of discs, very few of which have ever been weighed.

SF 12001 bears possible graffiti scratch marks of intersecting lines and has a polished finish. SF 17004 is a crudely pentagonal fragment, 25 by 30mm, with traces of scratched circles on one face, and may be compared to a bone fragment from Trondheim (McLees 1990: 200). Its colouring is distinctive, being silver-grey on the plain side and a sandy-brown colour on the decorated face. The pattern of circles may be imitating similar patterns seen on the simpler form of bone (and wood) tablemen, similar to the simple example from Finlaggan. The context (17019) where this fragment was found was the fill of the grave of a six-month-old infant, hidden outside the wall of the chapel. If deliberately included in the burial, it might have been seen as having an apotropaic function.

SF 19215 has one face marked with a graffito vertical line cut by a horizontal. SF 6114 has one face marked with a crude X and a different, hard to decipher, symbol in each of its quadrants. Its meaning remains elusive. Was it meant to imitate a coin? A crudely scratched X is also to be found on the disc SF 19267 and (of much smaller size) on disc SF 12266. The purpose of these remains unclear. They may be talismanic Christian crosses or they may, as David Caldwell has observed, be crude representations of coinage. There are depictions of possible coins in other media shown as discs with long crosses. In St Mary's Beverley, Yorkshire, a misericord includes a figure offering a long cross silver penny. The penny is depicted as a large disc bearing a simple cross (Remnant 1969: 177, no. 3; Laird 1986 : illus 41). A misericord from the Oude Kerk, Amsterdam, shows a man defecating money, rendered as discs bearing long crosses (Alexandre-Bidon 2001: fig 1; Jones 2002: 284). The Ghent-produced psalter of 1320–30 (now Bodleian Library, Douce MS 6, fol 157v) shows a monster head spewing forth gold coins stamped with a cross (Camille 1992: illus 77). Finally we

SF no.	Diameter (mm)	Thickness (mm)	Slate type	Context
4041	19	2		4015
5017	23	4		5016
6114	11	1		6022
6152	25	2		6022
7101	16		C	7017
7101	16		C	7017
7107	18	2.2		7007
7124	14	0.5		7007
7282	22	1		7027
8420	15			8081
9026	14			9003
10036	20	2		10031
12001	21	1		12002
12018	23	2	B	12015
12034	15	2		12015
12266	23			12101
12338	35	2.5		12130
12363	25	6	A	12110
12437	28	1		12140
12443	32	1		12142
17004	30	1.5		17019
19215	21	1.5		19009
19229	21	1		19009
19267	31	2.5		19008
19317	16	1		19012
19451	35	1.5		19120
19451	17	2.5		19120
19487	20	3		19115
19493	33	2		19120
19505	20	2		19112

Table C2.3
Small discoids

SF no.	Diameter (mm)	Thickness (mm)	Slate type	Context
4002	50	3	B	4007
7000	45			7088
7018	45	7	A	7014
7029	47	10	A	7011
8041	46	7		8028
12441	53	6		12145
12538	45	3.5		12156
19485	55	4		19121

Table C2.4
Medium discoids

have Hans Sebald Beham's 1529 engraving, *Death and the Lascivious Maiden*, which includes a small boy whose hand dips into a sack of coins, again discs bearing long crosses (Jones 2002: fig 12.7). The limited finds assemblage recovered by excavation at Dundrennan Abbey includes a small stone counter decorated with a cross and circle on one side (Ewart 2001: 47, no. 43 and illus 38). Might they have also been imitations of the holy communion wafer or host, from which they derived a supernatural, talismanic role? Could the Finlaggan cross-marked discs then have been some form of token or counting money as well as or instead of gaming pieces, possibly with an amuletic import? In the context of this discussion it is worth noting that the coin assemblage from Finlaggan does not include any reckoning counters.

Such discoids have generally been accepted as gaming counters – though Henshall (1983: 235) explores the possibility of rubbing or grinding tools – and there seems no obvious reason to suggest otherwise for Finlaggan. Given the postulated broader function of Finlaggan as a high-status feasting site, then one would expect evidence of such corollary activity. The overlap of some of these pieces with the gaming board from the site palpably supports this. The contexts in which the pieces were found are all secondary in terms of gaming activity and indicate the fate of pieces post-gaming or as a result, perhaps, of loss. Those that were lost would presumably be no great harm, and the ephemeral nature of the discs (or rather of their use, see above) certainly makes loss likely. Further, the contexts of discovery (middens, gardening soil, post-holes, etc) indicate loss or deliberate disposal.

Medium discoids

Eight medium discoids were recovered by excavation at Finlaggan. They vary in diameter from 45 to 55mm and in thickness from 3 to 7mm. The small numbers recovered in this distinctive size range gives them a descriptive group coherence. The nature of the disc SF 12538 (from the wall line of a later medieval house), which survives as a half-fragment and appears to be centrally holed, may support the notion of a loom weight or spindle whorl, but one should also note the idea of a holed gaming piece being so holed for stacking purposes (Hall & Leahy 1996: 236, following Brown 1990: 696).

If these pieces were used on a gaming board, it would have to be somewhat larger than the one found at Finlaggan (R68; see above). The similar distribution across the site of these medium discs to the smaller discs perhaps supports a similar function. More straightforward

SF no.	Diameter (mm)	Thickness (mm)	Slate type	Context
6129	60	5		6004
12318	65			12101
12319	72	6	B	12101
12442	72	12		12145
12488	70			12129

Table C2.5
Large discoids

SF no.	Diameter (mm)	Thickness (mm)	Slate type	Context
2004	144	32	A	2002
2163	94	18	D	2047
12509	148	12		12140
25019	149	7.5	C	25008

Table C2.6
Very large discoids

counting aids cannot be ruled out nor other usage such as stands, a suggestion made for some of the discoids from Bailie Hill, York (Addyman & Priestley 1977: 139). The middle size range also falls into the grouping-size that Hamilton suggested could be used as plugs for skin floats for fishing at Jarlshof, Shetland (1956: 8–11). In discussing broadly comparable sized pieces from Lincoln (both of micaceous sandstone and trimmed pottery sherds and tiles), Mann (1982: 13) noted that when found on sites in Scandinavia (*eg* Lund), such discs are generally termed gaming counters (Mårtensson 1976: fig 333). In discussing a group of such discs from excavations at Eastgate, Beverley, Foreman (1992: 125) notes a reference from the *Collins Field Guide to Archaeology* (1963) recording the discovery of 50 stone discs at Haworth, Yorkshire, suggesting their use in the Pennine game of 'road bawls' (played in the 19th century). Foreman suggested from this a possible use in a rolling or casting game. We should also remember the siting of Finlaggan on its own loch might also have facilitated some use on ice in a proto-curling game. Valerie Dean (*pers comm*) has suggested a use similar to that of peevers in hopscotch, noting that a number of roughly rounded pieces of pantile were recovered by excavation at the pre-19th-century village of Nether Crammond.

Large discoids

Five of the large size of discoid were recovered from Finlaggan. Their diameters vary from 60 to 72mm and their thickness from 5 to 12mm. The largest piece at 72mm is also the thickest at 12mm.

Again the spatial spread of these larger discoids is comparable to that of the previous categories. Discoids of this size are generally accepted as pot-lids. At Jarlshof a number of similar discs, recovered from the middens of the Wheelhouse and the Norse phases, were interpreted in this way (Hamilton 1956: 114). Similarly the discoids of 65–82mm found at Whithorn have been interpreted as pot-lids or weights for a lighter pot-covering (Nicholson 1997: 448). The latter suggestion was made in the context of the majority of the ceramic vessels (except the flagons) being too large for the possible lids found. Of comparable size are the chipped amphora discs found both on Tintagel island and in Tintagel churchyard, Cornwall, and these have been interpreted as the neck-stoppers for amphorae (Nowakowski & Thomas 1992: 10; Morris *et al* 2000: 211, fig 11). Most of the discs recovered were much bigger than the graffiti gaming boards also recovered (Thorpe 1988: 70–71). Some of them do fit into a reconstructed amphora neck (Charles Thomas, *pers comm*). O'Riordain (1940) is followed by Bersu (1977: 66) in suggesting and then discarding the idea that such large discs were unfinished loom weights or spindle whorls, and Bersu notes further that one was used as a palette.

Very large discoids

Four of these very large pieces were recovered from Finlaggan. They range from 94 to 149mm in diameter and from 7.5 to 32mm in thickness.

As at Whithorn (Nicholson 1997: 449), Ballacagan (Bersu 1977: 66), Kildonan Bay

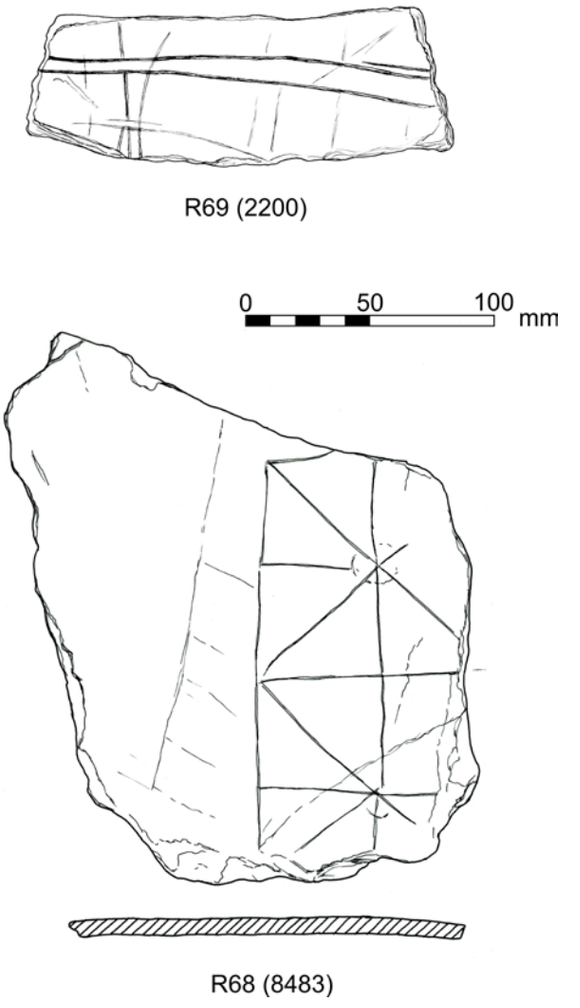


Illustration C2.20
Fragments of slate gaming boards: R68 (SF 8483), R69 (SF 2200)

(Fairhurst 1939: 212), Sandal Castle, Wakefield (not published in the final report – Mayes & Butler 1983 – but see *Wakefield Express* 1972), and Jarlshof (Hamilton 1956: 143, 180, 184), for example, the size of the pieces makes their interpretation as pot-lids acceptable (but note the discussions above). The Finlaggan examples would only fit the largest of the Finlaggan cooking pots (if an overlap was not critical they could be used with some of the smaller ones, of course).

Catalogue of illustrated stone gaming equipment and pot-lids

R68 FRAGMENT FROM A GAMING BOARD, SEMI-PELITIC SCHIST (ILLUS C2.20)
Probably for alquerque, scratched as a graffito on a type A roof slate. L: 195mm; W: 224mm; Th: 6mm

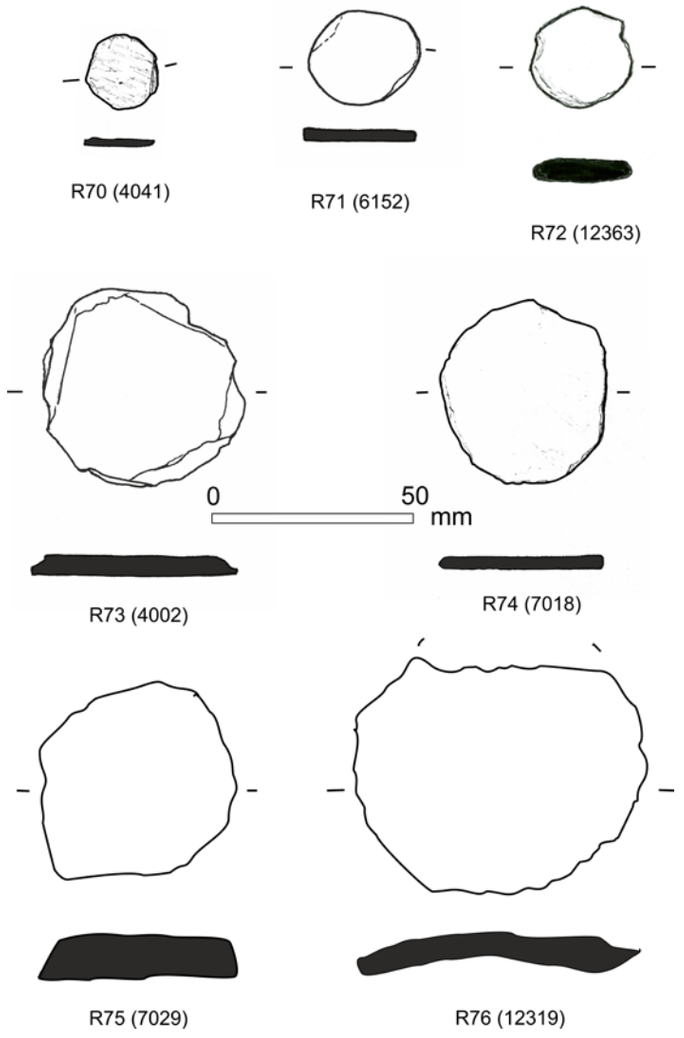


Illustration C2.21
Discoids

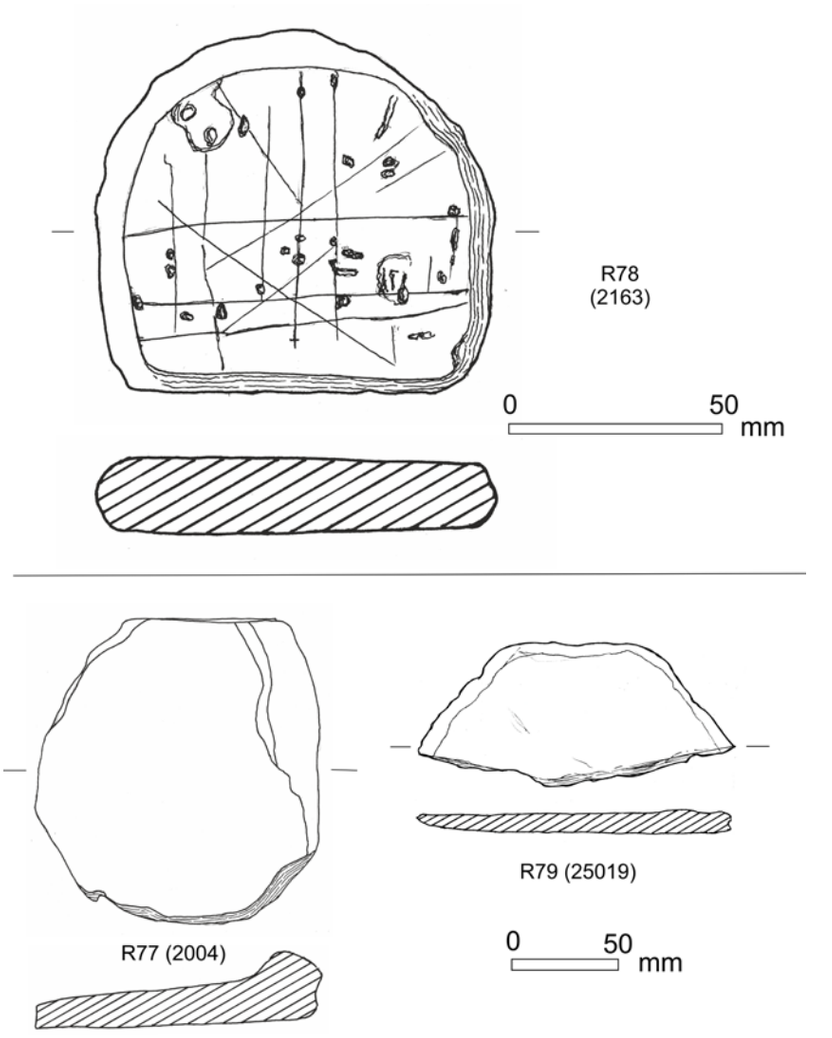


Illustration C2.22
Discoids

SF 8483; [8112] fill of the foundation trench for the south-east wall of building H

R69 gaming board? pyritous slate (illus C2.20)
Fragment of type C slate cut with grooves. 172 by 62mm
SF 2200; [2047]? booked as from [2048], the possible remains of the east wall of structure K.2, encased in the core [2047] of the east wall of building K.1

R70 small discoid, stone (illus C2.21)
Gaming piece? Diam: 19mm; Th: 2mm
Wt: 1.06g
SF 4041; [4015] drain across road 4014

R71 small discoid, stone (illus C2.21)
Gaming piece? Diam: 25mm; Th: 2mm
Wt: 2.9g
SF 6152; [6022] midden

R72 small discoid, semi-pelitic schist (illus C2.21)
Gaming piece? Shaped from type A slate. Diam: 25mm; Th: 5.7mm
SF 12363; [12110] rake-out from oven

R73 medium discoid, phyllite (illus C2.21)
Shaped from type B slate. Diam: 50mm; Th: 3mm
Wt: 19.26g
SF 4002; [4007] topsoil

R74 medium discoid, semi-pelitic schist (illus C2.21)
Shaped from type A slate. Diam: 45mm; Th: 5mm
Wt: 3.41g
SF 7018; [7014] tumble

R75 medium discoid, semi-pelitic schist (illus C2.21)
Shaped from type A slate. Diam: 47mm; Th: 10mm
SF 7029; [7011] tumble

R76 large discoid, phyllite (illus C2.21)
Shaped from type B slate. Diam: 27mm; Th: 6mm
SF 12319; [12101] turf and topsoil

R77 very large discoid, semi-pelitic schist (illus C2.22)
Roughly circular slab cut from a type A slate, probably used as a pot-lid. 135 by 144 by 32mm
SF 2004; [2002] tumble from wall of building K/K.1

R78 VERY LARGE DISCOID, STONE (ILLUS C2.22)
Roughly D-shaped (but originally circular?) slab of metabasite; made from a type D roof slate, scored on one side with criss-cross lines – of a gaming board? Reshaped for use as a pot-lid? 94 by 83 by 18mm
SF 2163; [2047] clay core of wall [2014] of building K.1

R79 VERY LARGE DISCOID, PYRITOUS SLATE (ILLUS C2.22)
Pot-lid? About one half surviving, roughly cut from type C slate. Diam: 149mm; Th: 7.5mm
SF 25019; [25008] medieval midden.

Other gaming pieces of bone

MARK A HALL

In addition to the stone discs discussed above, excavations recovered three bone counters or playing pieces (Illus C6.1). All are readily identifiable as tablemen for the tables group of games, a family of games probably deriving from the Roman game of *tabula* and surviving today as backgammon (Murray 1952: 57–69; Parlett 1999: 58–87). Played throughout the medieval period, their popularity is demonstrated by the finds of pieces and boards (notably, for example, the set from Gloucester, for which see Watkins 1985: 41–69 and Darvill 1988: 81–85) and by the medieval depictions of the game (eg the misericords in Manchester Cathedral and St George's Chapel, Windsor, both late 15th century; see Hall & Leahy 1996 and Hall 2014b). It is noticeable that no dice were found at Finlaggan, an essential for tables games. The disc pieces or counters could also be readily used for merels, alquerque and later draughts, where dice were not necessary. The more elaborate bone pieces also suggest that there was at least one elaborate decorated board of wood and/or bone in use at Finlaggan.

Full discussions and comparanda of the bone pieces have appeared in Hall (2014a, 2017) and so only a summary is given here.

B1 and B2 are of comparable size, were found together and are of a fully decorative form. Though one is zoomorphic and the other of interlace design, this does not argue against a close association because they may well represent opposing sides of the same set of pieces (the one side fabulous beasts and the other of geometric or abstract forms). Of course, we cannot rule out the pieces representing two sets, with each side in each set being of similar design but distinguished by colour. Sets may also have been of mixed media. Egan (1998: 294) suggested that black-stained wooden discs could have been opposed by bone or ivory pieces rather than pale wooden ones. In contrast the third piece, B5 (for the purposes of this discussion, a 'group'), is about as third as big again as the other two and more simply decorated. Both 'groups' fit into recognised series.

B1 is a zoomorphic piece, possibly representing a unicorn or (less likely, given the apparent single horn) a stag (cf Beckwith 1972 : cat 159, illus 256; McLees 1990: 64–65, 204, fig 26). It was also noted by McLees (ibid: 65) that the backward-looking animal motif is 'not uncommon in connection with Continental gaming discs, often very finely carved'. The 15th-century context of the Finlaggan piece places it at the end of the series and suggests a devolved (?) style, a robust one in the local tradition of West Highland art, of which hunting scenes of deer played an important part (Steer & Bannerman 1977: 186–87).

Its companion piece, B2, is not zoomorphic but bears an interlace design. Though it is rather worn and decayed to the extent of breaking up, the design appears to be composed of two bands of interlace with pellets used to fill in the gaps. In this it resembles some of the interlace and pellet work on the Fife and Eglinton bone caskets (Callander 1926; Glenn 2003: 186–91). Such caskets and the importance of the casket as a motif in West Highland art (Steer & Bannerman 1977) suggest a further possible relevance to this discussion. Such caskets would have had a number of storage uses, 'letters, personal ornaments, keys etc.' (p 176), and one of these could well have been gaming pieces. The Fife and Eglinton caskets would certainly have had the capacity for such storage. Such caskets were common in medieval Europe and found in other materials – ivory, wood and leather (see for example Cherry 1982: 132–40). Fragments, particularly of bone, found on various sites support the number of surviving complete examples. Particularly relevant here are those found at Loughor Castle in Glamorgan, interpreted as the remains of a box for storing gaming pieces (for chess and tables) found at the same site (Redknap 1993: 150–58). The possessions of Henry VIII included large numbers of caskets, chests and boxes, some used to store chess sets and tables sets, as recorded in the inventory made following his death (Starkey 1999: eg nos 3085, 3228, 3234, 3444 and 11662; see also Hayward 1997: 8–15). Several casket mounts and keys have been recovered from Finlaggan (described and listed in Chapter C4), including – from the same context as B1 and B2 – a latch from a casket lock (C95), as well as F14, an iron purse bar.

With the Fife and Eglinton caskets, a combination of interlace styles and other motifs enables their dating to be satisfactorily settled as later medieval. But B2 bears only pellet and interlace, and so a slightly earlier date cannot be ruled out. A somewhat larger whale-bone playing piece, decorated with a similar interlace pattern, was found in a cave in Rhum and donated to the National Museum of Scotland (accession no. H.NS 92), where it is dated to the 15th or 16th century. There is a similar bone tableman from a 12th-century context at Ashagover Abbey, Lough Carrib (Roe 1945: 157, fig 3), and also a wooden disc from Trondheim, carved with double-thread interlace and dated to the late 11th or early 12th century (McLees 1990: 72).

If the combined weight of evidence for B1 and B2 indicates a pre-15th-century date, what does the wider picture of such playing pieces suggest? From Scotland there is a small tally of figurative bone gaming pieces, including Iona, Kirkwall, Dalcross Castle, Melrose Abbey and Stonehaven, and others bearing interlace and floral motifs, including Rhum, Threave Castle and Perth (for details and references, see Hall 2014a). None of these pieces have a fully secure archaeological context and on artistic grounds they have been dated to the 11th–12th centuries, and so considered to be Romanesque. The wider European series is discussed in detail in Mann (1977); invariably these are all of skeletal material (the copper alloy exceptions all come from Ireland – including the four discussed in Roe (1945: 766–69) – and have been reinterpreted as weights and are so displayed in the '*Medieval Ireland, 1150–1550*' gallery in the National Museum, Dublin).

The vitality and prevalence of the West Highland art tradition does not exclude the possibility of such gaming pieces but the figurative nature of all but two of them suggests that they do owe something to the earlier Romanesque tradition. Does this then also indicate a strand of conservatism within the West Highland culture?

The third tableman (B5) is of a different, commoner group, a somewhat larger disc of bone with the upper surface incised with two concentric circles just inside the rim and a central compass point within a small circle. Its condition is marred by a series of deep splits running across the upper surface and penetrating deeply into it. The simpler geometric style of decoration on this piece distinguishes it from the other two bone playing pieces, and again is consistent with a wider series of such pieces. These simpler forms of tablemen come in a variety of materials – skeletal, stone, reused pottery and wood – with a variety of ring and dot and/or concentric circle decoration. Examples across these various media include pieces from Perth High Street (MacGregor 2011 : cat 4, illus 52), Urquhart Castle (Samson 1983 : 475, fig 6) and Aberdeen (MacGregor 1982: 182, illus 104, where they are described as spindle whorls, but they do fit with this series too; the ambiguity between such spindle whorls and/or gaming pieces is discussed by MacGregor, 1985: 137 and 187, and also in Hall & Leahy 1996: 235). They range in date from the 12th to the 15th

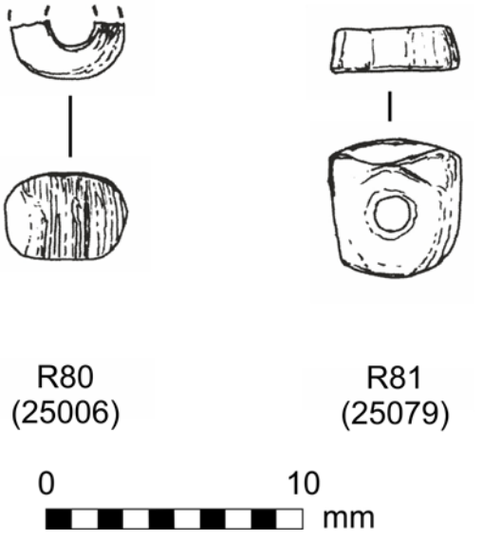


Illustration C2.23
Amber beads: R80 (SF 25006), R81 (SF 25079)

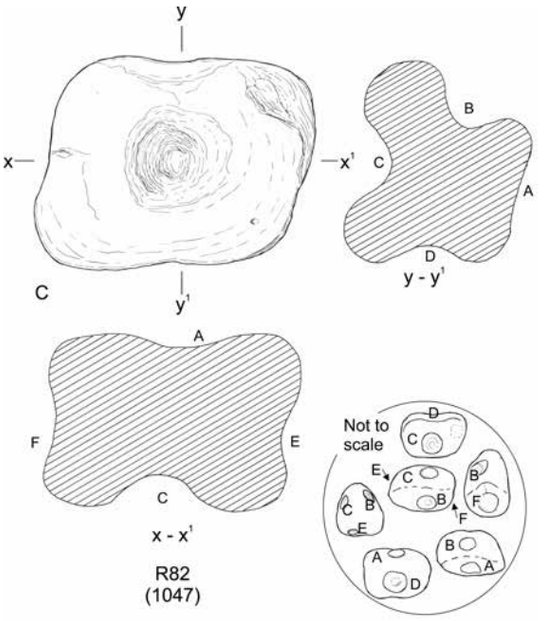


Illustration C2.24
Bullaun: R82 (SF 1047)

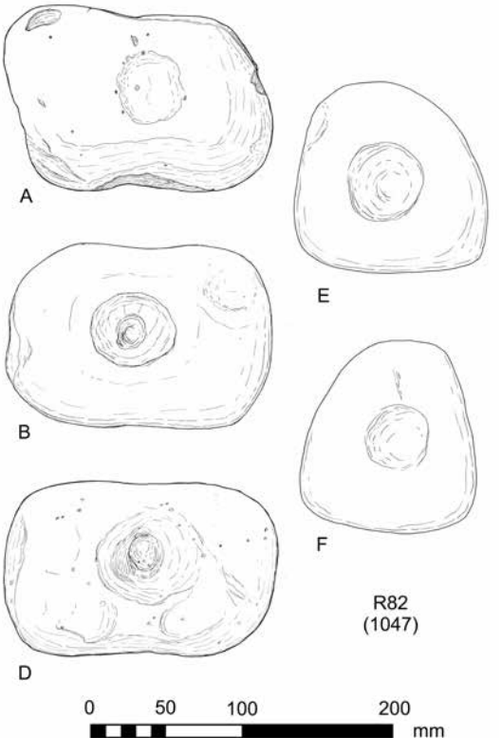


Illustration C2.25
Bullaun: R82 (SF 1047)

century. Outside Scotland the picture is similar, and a brief list could cite Goltho in Lincolnshire (Beresford 1987: 191–92), Loughor Castle, Glamorgan (Redknap 1993: 150–58), London (Egan 1998: 294), York (Rogers 1993: 1405–06) and Trondheim, Norway (McLees 1990: 61–72 and catalogue).

This single piece from Finlaggan is less accomplished than the two figurative pieces and may, like the stone discs, indicate gaming practised across all social levels at Finlaggan. The lord of the Isles and his elite companions were peripatetic in their occupation of Finlaggan, and so it would have been for their prized sets of chess and tables. What was not peripatetic was the poorer-quality material culture of the permanent occupants who kept the site maintained and ticking over in readiness for the return of their lord.

Note: for catalogue entries for B1, B2 and B5, see Chapter C6.

Miscellaneous stone artefacts (Illus C2.23–32)

Miscellaneous stone artefacts include R80 and R81, two very small amber beads, recovered from the medieval midden deposits adjacent to Eilean na Comhairle. The amber is probably of Baltic origin. There are also items for ritual use, equipment for food preparation and hones for sharpening tools. Two possible gun stones, R98 and R99, have been identified.

R82, a bullaun from the burial ground, is one of the most intriguing finds from the excavations, apparently of ritual significance (C2.24–25; *Finlaggan*, Illus 9.8). The term 'bullaun' is derived from Irish antiquarian and archaeological literature where it is generally used to describe a wide range of rock hollows and basins, some formed in living rock, often found at churches and burial grounds (Hamlin 2008: 144–54). Sometimes they are reused querns or are carved in commemorative monuments. They are very common in Ireland, and also at ecclesiastical sites in the West Highlands and Islands of Scotland. In Islay may be noted the saddle querns at the old parish church of Kildalton and the church at Kilnave, the cups ground in the base of a 14th-century cross at the old parish church of Kilchoman and the enlarged cup in a group of prehistoric cup marks on a rock outcrop at the medieval church at Kilchiaran.

The date and function of these bullauns is not well understood and they have been identified as a medieval phenomenon, though perhaps with an increased popularity from later medieval to early modern times. In some respects they are contiguous with a broader category of fonts and basins with sometimes elusive uses. The deepest of the cups in the Kilchoman cross base contains a stone pestle, and there are two traditions relating to it. One was that rotating the pestle was to invoke a blessing, if turned clockwise, and a malediction, if turned anticlockwise. The second claimed that expectant mothers

Illustration C2.26
Bullaun: R83 (SF 2085)

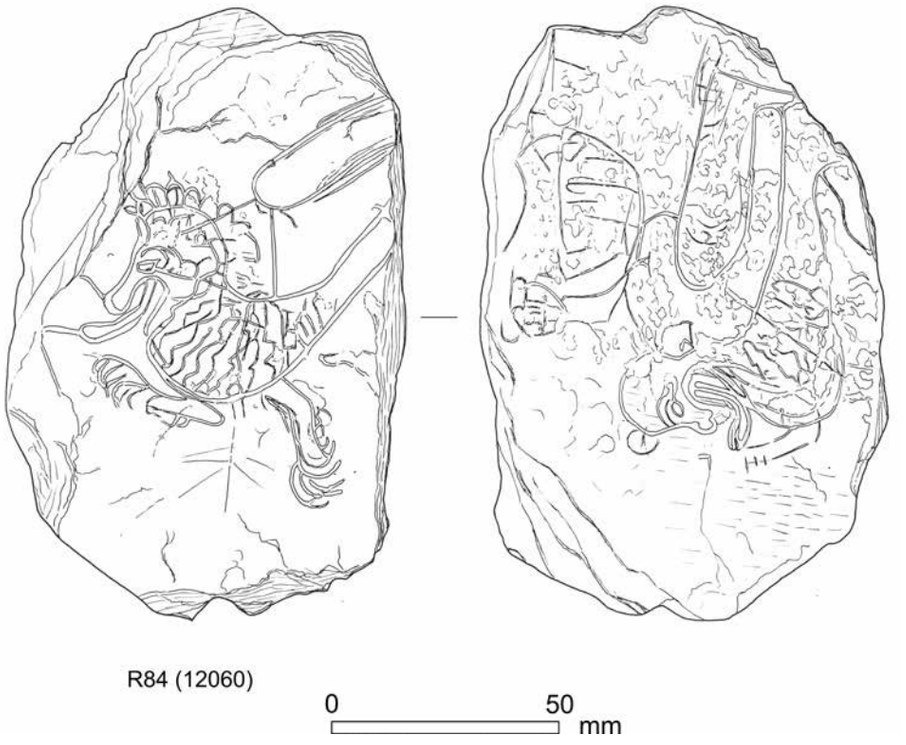


Illustration C2.27
Decorated roof-slate: R84 (SF 12060)

rotated the stone in order to conceive a boy (Caldwell 2017: 13). The Islay bullauns, as those elsewhere, fill with rainwater and nowadays attract offerings of coins.

The Finlaggan bullaun, a roughly rectangular boulder, 180 by 130 by 120mm, with a cup in each face, appears unique. In the description that follows, and Illus C2.24 and C2.25, the faces have been labelled by us as A to F. When found it was lying on surface 1007, resting on face B between graves 1017 and 1016, oriented approximately north–south, with face F to the north and face E to the south. The head of the Finlaggan cross had toppled over it. It is not clear if the bullaun had been positioned between the two graves prior to the demolition of the cross, or whether it ended up here as part of a wider process of destruction and vandalism on a date sometime in the years between the mid-16th and the mid-17th century.

The circular hollows pecked in the centre of each face are each about 45 to 55mm in diameter. One, in face A, is shallow, about 10mm in depth. The other five have been deepened by drilling or rotating a stone bit or pestle, forming cups as much as 35mm in depth. The cup in face D has a distinct channel or hollow leading to the face edge, which could have facilitated the pouring off of liquid or the positioning of a wick if the intention had been to use it as a simple lamp (*Finlaggan*, Illus 9.8). There is also a distinct cup, about 30mm in diameter and 5mm deep, on the margin between faces A and B, and a less well-defined pecked area on face C, adjacent to face F. This might suggest that the stone was, at the time it was abandoned, still in a process of being transformed through use.

Another stone (R83) recovered from Eilean Mór at the time of the excavations may also be identified as a bullaun that has later been reused in wall building (Illus C2.26). The stone in question appears to be a reused, very worn, sandstone dressing with shallow basins, top and bottom. Pieces of roof slate with scratched images and inscriptions are a well-known phenomenon from high-status medieval residential sites, for example Dundonald Castle in Ayrshire (Caldwell 2004: 107–10). Many are best interpreted as casual doodles and graffiti, but R84 from Finlaggan (Illus C2.27), owing to how and where it was deposited, may also be suspected of having had a ritual function. It has graffiti of animals on both faces and it was found in the wall of building 12.5, possibly positioned there deliberately when it was erected in the 16th century.

The needs of food preparation have contributed a mortar and several querns. The mortar, R85 (Illus C2.28), only about half surviving,

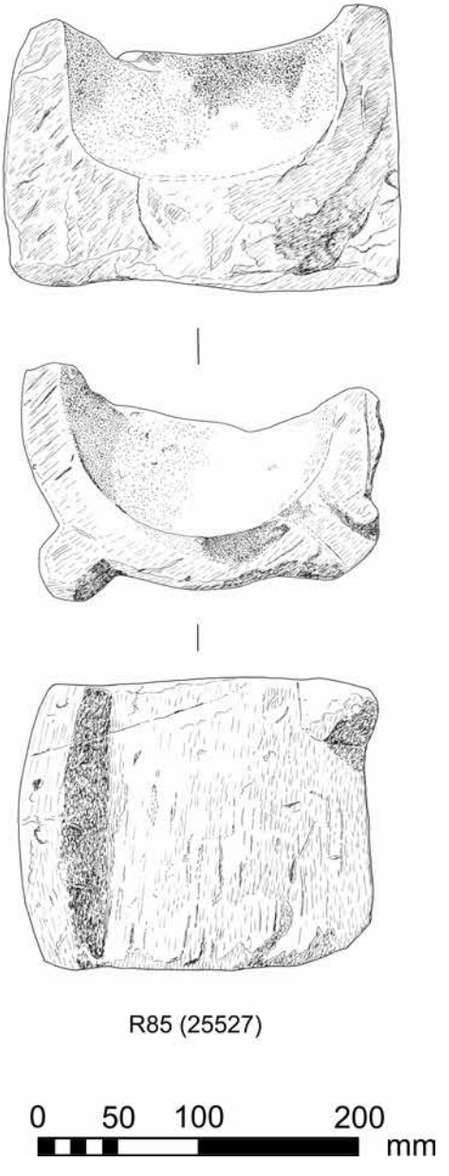
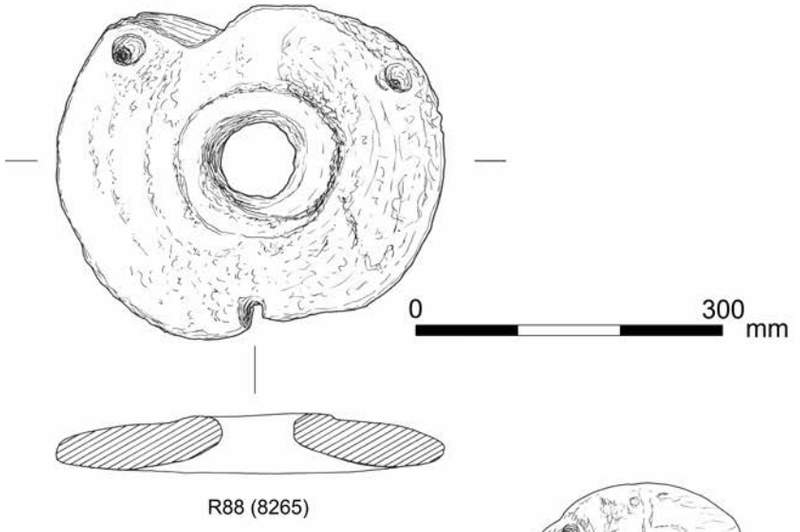
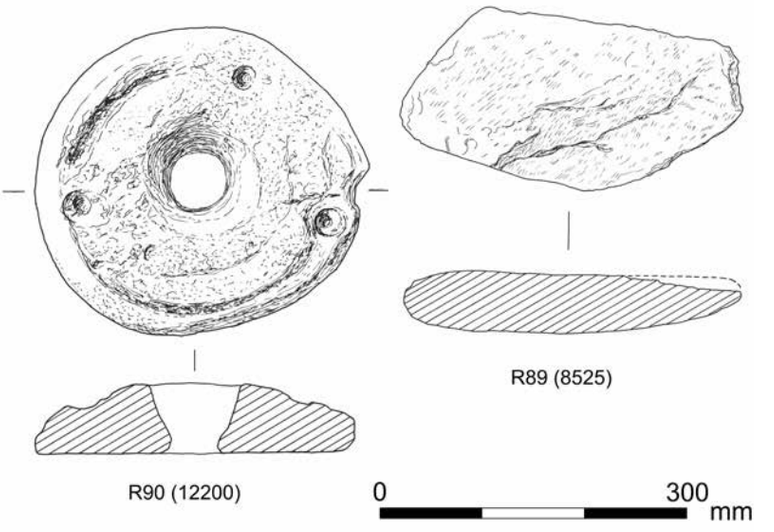


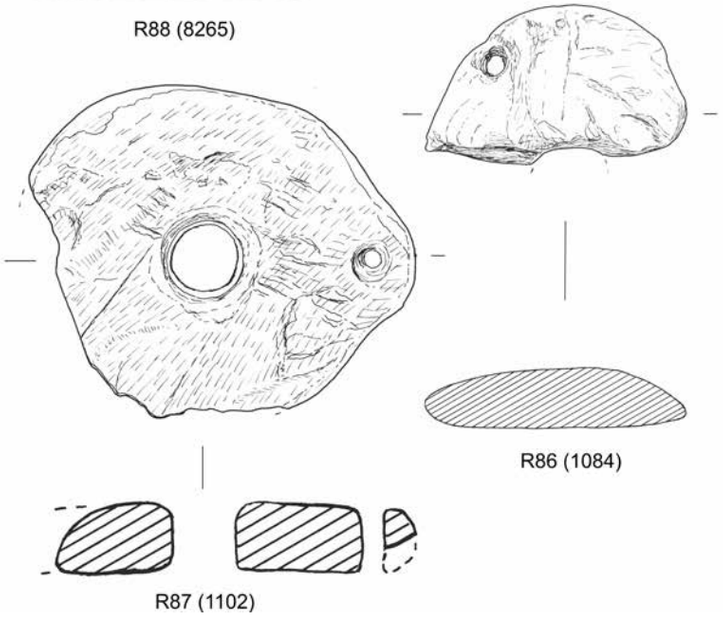
Illustration C2.28
Mortar: R85 (SF 25527)

had been discarded in earlier medieval times in the midden adjacent to Eilean na Comhairle. It is clearly not of local origin, but an import for preparation of luxury foodstuffs and spices.

The remains of six rotary querns, R86–R91, were recovered (Illus C2.29–30). Rotary querns consist of two, normally circular, stones, an upper and a lower. The lower, which remained stationary in use, has a central hole for a wooden spindle connecting it to the upper stone. The latter has a larger central aperture through which grain was fed. The turning of the upper stone by means of a handle caused the grain to be ground. Four of the Finlaggan pieces are upper stones and at least one of the







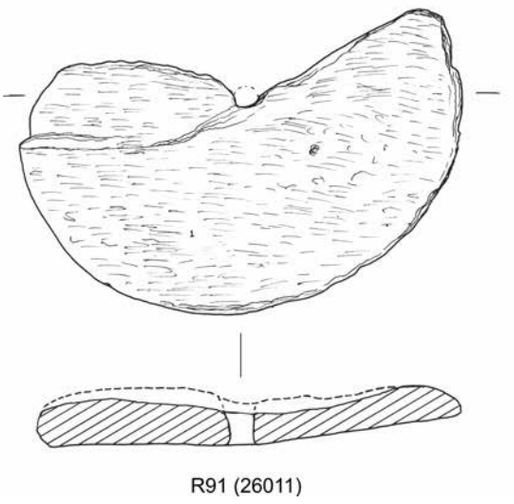


Illustration C2.29
Querns

Illustration C2.30
Querns

other two is a lower stone; they are probably all of medieval date and local manufacture. All were discarded, once broken, or reused as building material. R87, recovered from the loch, was probably reused as an anchor. A local design feature is the way that its handle-hole is contained in a projecting lug. This feature is also seen on R90, found in building 12.5, where it may have been reused as paving. It is relatively small and decorated with cups and grooves, which perhaps suggests that it was not for general use. Both of these querns became inoperable because their handle-holes had broken. The other three querns were reused as building blocks. R88 is the only one with a collar round its feeder pipe (central hole). It also has decorative cups in its upper surface.

Arthur Mitchell (1881: 51–57) found rotary querns still extensively in use in the West Highlands and Islands and the Northern Isles in the late 19th century, noting that their manufacture and sale was a specialist activity undertaken on a part-time basis by some men. He described and illustrated them ready for use on wooden trays supported on legs, and Fenton (1976: fig 46b) illustrated one on a flagstone platform in a house at Lungar, North Ronaldsway, Orkney, in 1964. In earlier times they may more typically have been positioned on the ground, as in the illustration provided by Pennant (1774: xxxiv, p 286) of two women in Skye sitting with a quern between them, both grasping the handle to turn it.

R96, a well-formed hone of siltstone with broad faces suitable for sharpening knives, was recovered from the levelling for the floor of building 12.1 (Illus C2.31). Other pieces of stone used for sharpening would have been more suitable for use on sickle or scythe blades.

A probable gun stone (R98) was recovered from the edge of Eilean na Comhairle (Illus C2.32). It suggests an undocumented attack on the island in the late 15th or 16th century. Small gun stones like this were fired from wrought iron breech-loading guns, which served essentially as anti-personnel weapons. Possibly to be identified as another gun stone is R99, also with impact damage. It was recovered from Context C23046, interpreted as secondary occupation within the dun, or later tumble.

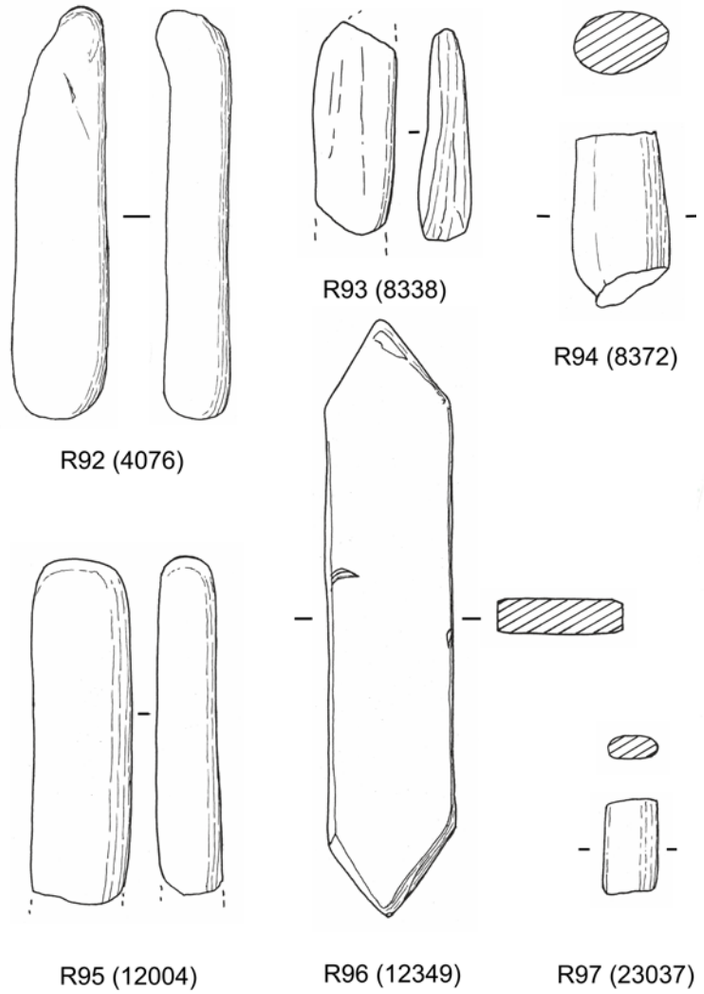


Illustration C2.31
Hones

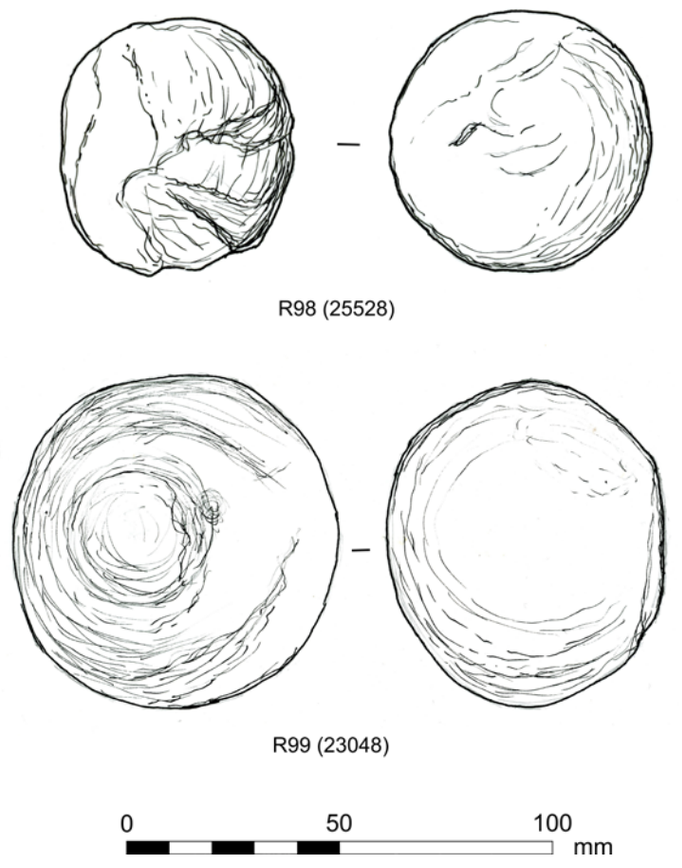


Illustration C2.32
Gun stones: R98 (SF 25528), R99 (SF 23048)

Catalogue of stone artefacts

R80 BEAD, AMBER (ILLUS C2.23)
Globular, half missing. Diam: 4.72mm; Ht: 3.35mm
SF 25006; [25008] medieval midden

R81 BEAD, AMBER (ILLUS C2.23)
Rectangular. 5.46 by 4.97 by 2.70mm
SF 25079; [25008] medieval midden

R82 BULLAUN, METABASITE (C2.24, C2.25; *Finlaggan*, ILLUS 9.8)
Cup-marked stone, roughly rectangular in shape with one pecked circular hollow in the centre of each face. 180 by 130 by 120mm
SF 1047; [1007] lying on the surface of 1007 under the cross-head and between graves 1017 and 1016

R83 BULLAUN? SANDSTONE (ILLUS C2.26)
Broken block of very pale brown, fine-grained sandstone (10YR 7/3), probably a very worn reused rybat. It has a roughly pecked cup in its upper surface, 140mm in diameter and 30mm deep, and another, 60mm in diameter and 15mm deep, in its lower surface. Overall it measures 355 by 190 by 185mm
SF 2085; [2000] spoil-heap

R84 DECORATED PIECE OF PYRITOUS ROOF-SLATE (ILLUS C2.27)
Fragment of type C slate, scratched on both sides with representations of a crowned heraldic lion and another unidentified beast. 133 by 86mm
SF 12060; [12016] east wall of building 12.5

R85 MORTAR, LIMESTONE (ILLUS C2.28)
Cylindrical shaped mortar, only about half surviving, with a lug and a spout. Ht: 169mm; Diam: 219mm
SF 25527; [25009] wall or revetment within medieval midden 25008

R86 QUERN, MICA-SCHIST (ILLUS C2.29)
Piece of an upper stone of a rotary quern with handle-hole. 195 by 235mm, originally with a diameter of about 420mm; maximum thickness 70mm; handle-hole: 23 by 25mm
SF 1084; [1005] incorporated in upper surface of cross plinth

R87 QUERN, SCHIST (ILLUS C2.29)
Upper stone of rotary quern with a lug containing the handle-hole. 390 by 315 by 70mm
SF 1102; recovered from the loch, about 40m south-east of the chapel, during the bathymetric survey in 1990

R88 QUERN, MICA-SCHIST (ILLUS C2.29)
Upper stone of rotary quern with a collar round its hopper-hole (feeder pipe), a handle-hole (broken) and two conical cups (25 and 28mm deep) which could have given purchase to ancillary handles when in use. Its underside is noticeably dished. Maximum Diam 380mm; maximum Th: 50mm
SF 8265; [8043] trodden into path from the ruins of building H westwards between buildings H and F1 to the shore

R89 ROTARY QUERN, STONE (ILLUS C2.30)
Segment of probable bottom stone of a rotary quern with a diameter of about 470mm; garnetiferous micaceous schist. 332 by 172 by 40mm
SF 8525; [8035] post-medieval occupation in area of building H

R90 QUERN, STONE (ILLUS C2.30)
Upper stone of rotary quern with a lug containing a (broken) handle-hole. It is decorated with two concentric grooves and three small cups. 2.5Y 5/1 grey. 300 by 330 by 85mm
SF 12200; [12130] floor of building 12.5

R91 QUERN, METABASITE (ILLUS C2.30)
Broken lower stone of a rotary quern, of foliated porphyritic metabasite uncovered outside the east wall of the chapel, from which it had evidently fallen. Diam: 435mm; Diam of hole: 25mm; Th: 55mm
SF 26011; from the debris outside the east wall of the chapel (1998)

R92 HONE, SILTSTONE (ILLUS C2.31)
Hone of fine-grained siltstone, well polished from use on both its upper and bottom surfaces. 160 by 35 by 30mm
SF 4076; [4023] decomposed mortar from building L.1

R93 HONE, STONE (ILLUS C2.31)
Hone, broken at both ends, with polished, scratched surfaces. 85 by 32 by 21mm
SF 8338; [8062] floor of str H

R94 HONE, STONE (ILLUS C2.31)
Segment, L: 69mm
SF 8372; [8035] post-medieval deposit in ruins of building H

R95 HONE, SILTSTONE (ILLUS C2.31)
Hone of fine-grained siltstone, broken at one end. 137 by 39 by 26mm
SF 12004; [12002] agricultural activity

R96 HONE, SILTSTONE (ILLUS C2.31)
Hone, rectangular with pointed ends, of light yellowish-brown siltstone. 242 by 50 by 15mm
SF 12349; [12124] levelling for floor of building 12.1

R97 HONE, SILTSTONE (ILLUS C2.31)
Segment of a siltstone hone. L: 36mm
SF 23037; [23024] post-castle midden

R98 GUN STONE? (ILLUS C2.32)
Stone ball of unidentified sedimentary rock, not of local Islay origin. It shows signs of impact, with about a third missing. Diam: 58 by 66.5mm
SF 25528; [25001] turf and topsoil

R99 GUN STONE? (ILLUS C2.32)
Stone ball, one side flattened by impact. Diam: 78mm
SF 23048; [23046] secondary occupation within the dun, or later tumble.

CHAPTER C3

Ceramics: wheel-made, handmade, crucibles

VALERIE E DEAN & JO DAWSON

The total ceramic assemblage comprises over 2,000 sherds, 810 (41%) of which are wheel-made and 1,127 (56%) are handmade, with a total weight of 18.945kg (Illus C3.1), including a number of prehistoric and possibly prehistoric sherds (less than 3%). Twelve sherds of modern vessels from surface contexts have been omitted from the report. As the detailed reports below by Val Dean and Jo Dawson indicate, the wheel-made pottery was all imported to Islay, while the handmade vessels were probably mostly locally made. Much of the material was abraded, and there were few large sherds. Very few joins were made and no complete vessel profiles were possible, making it difficult to determine vessel forms, although wheel-made jugs seem to be well represented, and many of the handmade vessels appear to have been relatively small and globular with everted rims. The wet-sieved midden at Eilean na Comhairle (trench 25) produced 103, predominantly tiny, wheel-made sherds which could not be allocated to the fabric sub-groups described below; they were merely loosely categorised.

	Sherds	Weight (g)	Rims	Estimated vessel nos
Type 1: White gritty	307	2.220	31	79
Type 2: Redware	67	0.380	13	35
Type 3: Reduced gritty ware	254	3.725	5	44
Type 4: Oxidised gritty ware	159	2.445	12	50
Totals	787	8.770	61	208

Table C3.1
Scottish wheel-made pottery, quantification

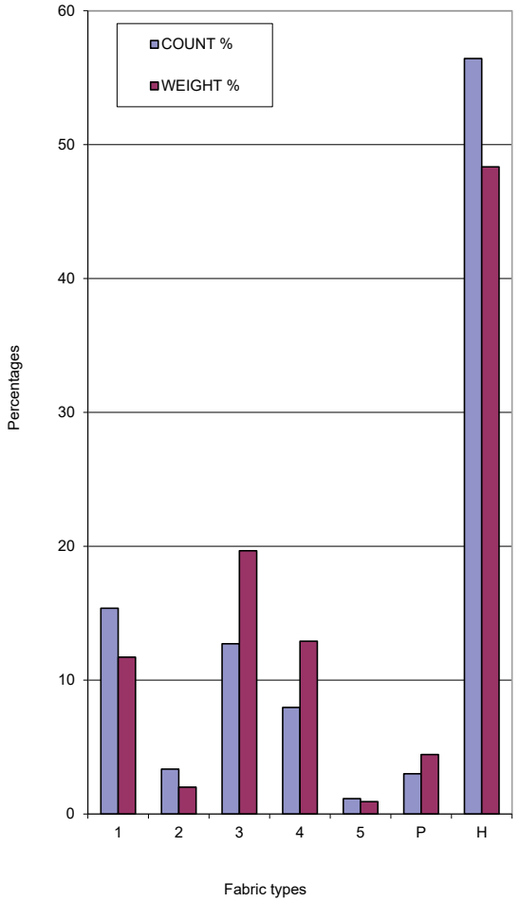


Illustration C3.1
Comparative percentages of all pottery from Finlaggan, wheel-made fabric types 1–5, prehistoric (P) and handmade (H)

The wheel-made pottery

Valerie E Dean

This report deals with the 810 sherds of wheel-made pottery, which have a weight of 8.945kg and represent a minimum count of 223 vessels. The Scottish medieval pottery (types 1–4) comprises 98.04% (weight) and 97.16% (count) of the sherd assemblage for this category, and imported medieval pottery (type 5) comprises 1.96% (weight) and 2.84% (count) (Illus C3.2).

Methodology

On the basis of fabric analysis, the pottery was divided into five main groups (types 1–5), which were then subdivided. Type 5 includes all 23 sherds recognised as coming from beyond Scotland. Detailed fabric descriptions are based on the method outlined by Orton et al (1993). Colour descriptions and classifications are taken from the *Munsell soil colour charts.* The work was carried out by visual examination, with a binocular microscope at ×20 where appropriate. Without thin-sectioning and geological analysis, detailed identification of inclusions was not practicable. Differentiation between natural inclusions in the clay matrix and added temper has not been made. Where fabric is described as being unglazed, this simply means that no glazed sherds were found in that group.

Quantification is given by sherd, weight and minimum vessel numbers in each group (Table C3.1). Figures for the vessels are based on the rim count, where rims were present, otherwise on estimates. Caution should be exercised with regard to quantification, both of sherd numbers and weights, since the many fragments of just a few large jugs could distort the figures; this could also account for the very few rim sherds.

Scottish and European pottery

There are 787 sherds considered to be Scottish medieval pottery. The bulk of the material is probably Scottish but, given the west-coast

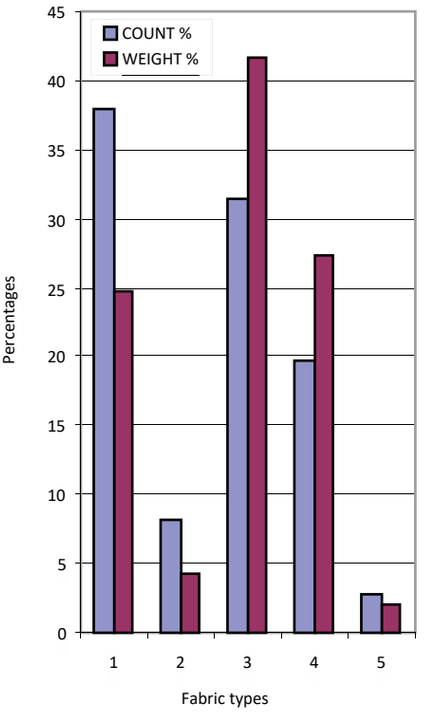


Illustration C3.2
Comparative percentages of wheel-made pottery, fabric types 1–5

location of Finlaggan, imports from Ireland, England and the Isle of Man are a distinct possibility. Wherever possible, sources or parallels are given.

Type 1: Scottish white gritty ware

A range of fabrics, with wide variations in colour from light grey to light brown and pink, but rarely white. Many sherds have a reduced grey core, but are of a coarser fabric than the reduced gritty wares, suggesting a transitional stage between the two groups; few sherds are light-coloured throughout, which appears to be a common feature of west-coast pottery (Derek Hall, pers comm). Gritty grey fabric with a white border has been found at Rothesay Castle (Bob Will, pers comm), at Dundonald Castle (Caldwell 2004: 94) and at Auldhill, West Kilbride (Franklin 1998: 53–59). Another feature shared with Rothesay Castle material is the unusual decoration of strap handles, where the central groove is inlaid with a thumbed strip of clay (P9), a feature which also occurs on Ayr handles (Franklin & Hall 2012: illus 30, no. 166). Three sherds are fragments of arms from anthropomorphic vessels of 13th- to 14th-century type. There are very few of the distinctive clubbed rims typical of the Scottish east-coast white gritty cooking pots, which also goes to suggest a likely west-coast origin. As at Ayr, the variations in the whiter fabrics suggest more than one kiln source for these (ibid, 40, 51). White gritty wares are generally considered to span the period from the 12th to early 15th centuries (Dean 2008: 453–54). The earliest firm date is from an assemblage from Kelso Abbey which was found in a pit which had been sealed by the later 12th century (Haggarty 1985 : 395–98).

Type 1.1 (P1–P24)

A fairly hard fabric, 3–10mm thick, with a hackly texture, slightly rough feel and rough fracture. Outer surfaces range from light brown (7.5YR 6/4) to pale brown (10YR 6/3) and very pale brown (10YR 7/3), inner surfaces range from grey to pinkish-white (7.5YR 5/1–8/2) to pale brown (10YR 6/3) and the cores range from grey (7.5YR 6/1) to dark grey (10YR 4/1). Inclusions are abundant, fairly sorted, medium to coarse, sub-angular, translucent quartz; sparse, fairly sorted, medium to coarse, sub-round haematite; and a moderate amount of mica. There is some external glazing, mostly abraded, dull and patchy but occasionally even and shiny; it varies from brown (7.5YR 4/4) to light olive-brown (2.5Y 5/6) and dark olive-green (5Y 3/2). Applied ridged strips are very dark grey (5Y 3/1) **(**P18**)**. There is some internal pink (7.5YR 8/4) to very pale brown (10YR 8/3) slip. Some external sooting is visible, as well as all-over burning. Some sherds show finger-rilling, traces of wavy, combed decoration, and a strap handle has been pierced by a pinhole (P8). There are parts of face-mask jugs, in imitation of Scarborough ware of the late 13th to early 14th centuries (P21–P22).
Forms*:* cooking pots, jars (?), jugs.

Type 1.2 (P25–P26)

A hard fabric, 3–9mm thick, with a fine texture, fairly smooth feel and slightly rough fracture. Outer surfaces range from very pale brown (5YR 8/3) to reddish-yellow (7.5YR 7/6) and light grey (10YR 7/1), inner surfaces range from pink (7.5YR 7/4) to very pale brown (10YR 8/4) and cores are light grey to very pale brown (10YR 6/1–7/3). Inclusions are abundant, fairly sorted, fine to medium, sub-angular, translucent quartz; sparse, fairly sorted, fine to medium, sub-angular haematite; and sparse mica. The external glaze is abraded, patchy and dull, and is light olive-brown (2.5Y 5/4) to pale olive (5Y 6/4). One sherd has an internal reddish-yellow (5YR 6/6) slip.
Forms: cooking pots (?), jugs?

Type 1.3 (P27–P33)

A hard fabric, 3–9mm thick, with an irregular texture, slightly rough feel and rough fracture. Outer surfaces are strong brown to pink (7.5YR 4/4–7/4), inner surfaces are light grey to very pale brown (10YR 7/2–8/2) and the cores are pink (7.5YR 7/4) to light grey (10YR 6/1). Inclusions are abundant, poorly sorted, fine to coarse, rounded, translucent quartz; a moderate amount of poorly sorted, fine to coarse, sub-angular haematite; and sparse mica. There are external runs of dull, olive-brown (2.5Y 4/4) glaze, abraded and patchy areas, and some glossy glaze. There is some external, reddish-yellow (5YR 6/6) slip?, and one sherd has an overall brown (10YR 8/3) slip. There is an arm from an anthropomorphic jug (P21).
Forms: cooking pots (?), jugs.

Type 1.4

A soft fabric, *c* 3mm thick, with a fine texture, powdery feel and a clean break; it is abraded. Surfaces are pink (7.5YR 8/4) with a pinkish-white (7.5YR 8/2) core. Inclusions are a moderate amount of well-sorted, very fine but very occasionally coarse, sub-angular, translucent quartz; a moderate amount of well-sorted, very fine, sub-angular haematite; and a moderate amount of mica. One sherd has an external, yellowish-brown (10YR 5/4) glaze.
Forms: none identified.

Type 2: Scottish redware

Overall, this iron-rich fabric has a distinctive strong orange colour, and it can be soft and fine (sub-groups 2.2–5) or hard and rough (sub-groups 2.1, 2.6, 2.7). Again, it resembles material from Ayrshire, but also material such as that from Bothwell Castle, Lanarkshire (Cruden 1954: 140–70), and the Stenhouse kiln site near Falkirk (NMS reference collection; Hall & Hunter 2001: 97–168; Hall 2009: 3–19). The small size of this group, 4.3% of wheel-made fabrics, may be an indication of the lack of availability. The wide variation in fabrics could suggest non-local sources, with sub-group 2.1 being very like Kelso Abbey (Roxburghshire) material (Cox et al 1985: 381–98) and sub-groups 2.6 and 2.7 bearing some resemblance to fabric from Downpatrick in Northern Ireland (NMS reference collection). This variation in fabrics has also been noted by Hall (D W Hall 1998: 170) and suggested by him as being due to each burgh producing its own redwares. Ayr, too, produced very little redware (Franklin & Hall 2012: 40), although excavations at Whithorn in Galloway produced a sizeable assemblage of red/orange-bodied fabrics, dating from the early 13th to early 15th centuries (Clarke 1997: 511–13).

Type 2.1 (P34–P36)

A hard fabric, 3–7mm thick, with an irregular texture and rough feel and fracture. The outer surface is reddish-brown to reddish-yellow (5YR 5/4–6/6), the interior is reddish-yellow (5YR 6/6 – 7.5YR 6/6) and the core is reddish-yellow (5YR 6/6–6/8). Inclusions generally are abundant, very poorly sorted, medium to coarse, sub-angular, translucent and occasionally white quartz; a moderate amount of very poorly sorted, medium to very coarse, sub-round haematite; and a moderate amount of mica. The external glaze is patchy, abraded, flaking and both dull and shiny; it varies from dark brown (7.5YR 3/4) to yellowish-brown (10YR 5/4).
Forms: cooking pots, jugs.

Type 2.2 (P37–P40)

A medium-hard fabric, 3–7mm thick, with an irregular texture, and slightly rough feel and fracture. The colour is fairly uniform throughout, and is reddish-yellow (5YR 5/4–7/6 to 7.5YR 6/6–7/6). Inclusions are abundant, fairly sorted, fine to medium, sub-round quartz; a moderate amount of poorly sorted, fine to medium, sub-round haematite; and sparse mica. Glaze is very sparse and generally abraded, dull and occasionally shiny, and can be on exteriors or inside the vessel neck; it varies from yellowish-red (5YR 4/6) to strong brown (7.5YR 5/6) to light olive-brown (2.5Y 5/4). There is some external sooting. Rilling is visible on some sherds.
Forms: cooking pot, urinal, jar, unidentified small vessels.

Type 2.3 (P41)

A hard fabric, 4–7mm thick, with a fine texture, smooth feel and slightly rough fracture. The outer surfaces are yellowish-red (5YR 5/6) to brown (7.5YR 4/2) and the inner surfaces and cores are yellowish-red (5YR 5/6–5/8). Inclusions are a moderate amount of fairly sorted, fine to medium and occasionally coarse, sub-round, translucent and white quartz, and a moderate amount of mica. The external glaze is abraded, sparse and dull, and is dark reddish-brown (5YR 3/3) to brown (10YR 4/3). There is some external sooting. One sherd has had portions of two compass-drawn circles, 40mm in diameter, incised in it prior to glazing (P41).
Forms: cooking pot (?), jar?

Type 2.4 (P42)

A soft fabric, 5–12mm thick, with a fine texture, powdery feel and slightly rough fracture; most sherds are very abraded. The fabric is reddish-yellow (5YR 6/6–6/8 to 7.5YR 6/6). Inclusions are occasional, poorly sorted, medium to coarse, sub-round quartz; a moderate amount of poorly sorted, fine to medium, sub-round haematite; and a moderate amount of mica. The external glaze is very abraded and dull, and varies from yellowish-brown (10YR 5/6) to olive-yellow (2.5Y 6/6).
Forms: cooking pot (?), jar?

Type 2.5

A hard fabric, *c* 5mm thick, with an irregular texture, smooth feel and slightly rough fracture. The outer surface is light reddish-brown (5YR 6/4) and the interior and core are reddish-yellow (5YR 6/8). Inclusions are a moderate amount of fairly sorted, fine and occasionally medium, sub-angular, translucent quartz; a moderate amount of fairly sorted, fine to medium, sub-angular, white rock; a moderate amount of poorly sorted, fine to medium, sub-round, haematite; and a moderate amount of mica. There are flecks of an external glaze, which is light olive-brown (2.5Y 5/4). The sherd has internal finger-rilling.
Forms: none identified.

Type 2.6 (P43)

A hard fabric, *c* 5mm thick, with a hackly texture and rough feel and fracture. It is reddish-yellow (7.5YR 6/6). Inclusions are abundant, poorly sorted, very fine to medium, sub-angular quartz; a moderate amount of fairly sorted, fine to medium, sub-angular, black rock; and sparse, fairly sorted, medium, sub-round haematite. The external glaze streaks are abraded and dull, and are pale yellow (5Y 7/4).
Forms: jug?

Type 2.7

A hard fabric, 3mm thick, with a fine texture and rough feel and fracture. The outer surfaces are brown (7.5YR 5/4) with a light brown (7.5YR 6/4) core. Inclusions are abundant, well-sorted, very fine, sub-angular, translucent and occasionally white quartz; sparse, well-sorted, very fine, rounded, red haematite; frequent, well-sorted, very fine, rounded, black rock; and moderate, very fine mica. It is unglazed, with fine, pimply surfaces and some finger-rilling.
Forms: none identified.

Type 3: Scottish reduced gritty ware

Although still gritty, these fabrics are finer than the partially reduced white gritty wares but are quite different from the Scottish post-medieval reduced wares, such as those produced at Throsk, near Stirling, in the 17th and early 18th century (Caldwell & Dean 1992: 1–46). The fabrics are usually completely reduced and are mid-grey in colour throughout, although some are pale grey and others have a very thin light margin, giving a sandwich effect; the external glaze is generally olive. Parallels can be found with Ayr's grey reduced ware, which was present from early 13th-century levels (Franklin & Hall 2012: 39), and with material from Bothwell Castle in the Clyde Valley (Cruden 1954: 140–70), where vessels were dated to the 13th and 14th centuries. However, at Fast Castle in Berwickshire they were found in a quarry pit where deposits could be dated to between the start of the 15th century and the beginning of the 17th century (Mitchell et al 2001: 28).

Type 3.1 (P44–P52)

A hard fabric, 5–10mm thick, with a fine texture and slightly rough feel and fracture. External surfaces range from reddish-brown (5YR 5/4) through brown (7.5YR 5/4) to grey (10YR 5/1), interiors vary from light brown (7.5YR 6/4) to dark greyish-brown (10YR 4/1) and cores vary from dark grey (7.5YR 4/1) to very dark grey (10YR 3/1). Inclusions are moderate amounts of well-sorted, fine, sub-round, translucent quartz; sparse, fairly sorted, medium, sub-round, black rock; and very sparse mica. Jugs appear to have an all-over, external glaze which is mostly abraded and dull; its colour varies from olive-brown (2.5Y 4/4) to olive (5Y 5/4). Some vessels have finger-rilling, which can be pronounced on vessel interiors; there is some knife-trimming on the lower body, and some bases show signs of stacking in the kiln.
Forms: jugs.

Type 4: Scottish Oxidised gritty ware

This ware may simply be an oxidised version of the reduced ware. The difference between these may be due to the fact that it is practical for firing purposes to stack narrow-necked vessels, such as jugs; this has the effect of restricting the supply of air to the interiors, resulting a reduced, grey fabric. Vessels whose rims are wider than their bases, such as some cooking pots, would not lend themselves to stacking, so would be put at the top of others, allowing oxidisation. Fewer jugs have been identified in type 4 fabrics. A small jar of oxidised gritty ware was used in Ayr 1292 x 1360 as a container for a hoard of coins and silver brooches (Dean 2008: 442–43, 454).

Type 4.1 (P53–P64)

A hard fabric, 3–12mm thick, with an irregular texture, slightly rough feel and rough fracture. Outer surfaces are reddish-yellow (5YR 6/6 – 7.5YR 6/6), interiors are reddish-brown to reddish-yellow (5YR 5/4–6/6) and greyish-brown (10YR 5/2), and cores are grey (10YR 5/1). Inclusions are abundant, well-sorted, fine to medium, sub-round, translucent quartz; sparse, fairly sorted, medium, sub-round haematite; and very sparse mica. Jugs appear to have an all-over glaze, and some sherds have a patchy glaze; glazing is pitted, abraded and dull, and varies from strong brown (7.5YR 4/6) to olive-brown (2.5Y 4/4) and olive (5Y 5/3). Some sherds show knife trimming, there is internal finger-rilling and some bases bear stack-marks. A strap handle is pierced by multiple pinholes, perhaps to ensure even firing (P63). Some sherds are sooted.
Forms: cooking pots (?), jugs.

Type 4.2 (P65)

A hard fabric, *c* 3mm thick, with fine texture, slightly rough feel and rough break. Inclusions are abundant, well-sorted, fine and occasionally medium, sub-angular, translucent quartz. External surface is yellowish-red (5YR 5/8), the interior is grey (10YR 5/1) and the core is dark grey (10YR 4/1). Only flecks remain of an external glaze.
Forms: none identified.

Type 4.3

A medium-hard fabric, *c* 5mm thick, with smooth texture and feel, and a clean break. External surface is light reddish-brown (10YR 6/4), the interior is reddish-brown (5YR 5/4) and the core is grey (10YR 5/1). Inclusions are sparse, fairly sorted, fine and occasionally medium, sub-angular, translucent quartz; sparse, poorly sorted, fine to medium, sub-angular haematite; and a moderate quantity of mica. The external glaze has been abraded off.
Forms: none identified.

Type 4.4 (P66–P67)

A fairly soft fabric, 3–8mm thick, with a fine texture, smooth feel and slightly rough fracture; the sherds are abraded; it is not unlike fabric from Threave Castle in Galloway (NMS reference collection). Both external and internal surfaces are reddish-yellow (5YR 6/6 – 7.5YR 6/6) and cores are dark grey (7.5YR 4/1) to light brownish-grey (10YR 6/2). Inclusions are a moderate amount of well-sorted, fine, sub-round, translucent quartz; a moderate amount of fairly sorted, fine to medium, rounded haematite; and abundant mica. The external glaze is patchy, with runs, and is very abraded and dull; the colour varies from yellowish-brown (10YR 5/6) to light olive-brown (2.5Y 5/4).
Forms: jugs, a small vessel.

Type 5: Pottery from continental Europe

Twenty-three sherds of fabrics from beyond Scotland were noted, although in some cases their fragmentary condition makes positive identification difficult. Twenty-one of these are of French origin, one is from the Rhineland and one is possibly from the Low Countries. Some of it is good-quality material, in particular a Beauvais stoneware drinking cup and sherds of a Saintonge polychrome pitcher.

Saintonge polychrome (P68–P70)

Five sherds of a smooth, very pale brown fabric with a translucent cream glaze or a dull, light coppery-green glaze with a brown line. The sherds include a flat-topped rim with part of a parrot-beak spout, possibly part of a three-handled pitcher (P68), a rounded rim (P69) and a splayed base (P70). It is believed that pottery of this type was imported into the British Isles from about 1275 to about 1325 (Haggarty 2008).

Saintonge mottled green glaze (P71)

Eight sherds of a hard, fine, light grey fabric with a shiny, mottled and pitted bright green glaze. There is a flat-topped rim (P71). Pottery of this type may have been exported into the British Isles from about the middle of the 13th century (Haggarty 2008).

Saintonge all-over green glaze

Three very small body-sherds of a smooth, very pale brown fabric with a dull, light coppery-green glaze. These may be contemporary with the polychrome wares (Haggarty 2008).

Saintonge? (P72)

A shoulder sherd of a jug (?) in a very thin, soft, very pale brown fabric with a shiny, pale yellow-green glaze over an applied, rouletted strip.

North French (P73–P75)

One sherd is a very small rod handle in a smooth, fine, pinkish-white fabric with a tiny fleck of bright green glaze (P74), 13th to 14th century. An upright rim sherd of a small jar is of a very thin, fine, light brown fabric with an external, abraded, shiny, slightly mottled bright green glaze (P73), 15th to 16th century? One base sherd of a small bowl (?) is of a hard, fine, light brown fabric with a shiny rich green glaze externally and mottled yellow-brown glaze internally (P75), 16th century.

Beauvais stoneware (P76)

One sherd of a fine, light grey stoneware drinking-bowl with a patch of shiny olive-yellow glaze on the underside; second half of the 15th century to first half of the 16th century.

Rhineland (P77)

One sherd of a grey stoneware strap handle with a slightly matt yellow-brown glaze; late 14th to 15th century.

Low Countries redware? (P78)

A rounded rim sherd of a gritty, yellowish-red fabric with a dull yellow-brown glaze on the exterior; 14th to 17th century.

Discussion

With contribution by David H Caldwell

The Scottish wheel-made pottery is unlikely to have been made locally, due to the lack of natural resources. Interestingly, as much of the material bears a resemblance to fabrics from Ayrshire and Bothwell Castle this suggests sources in the south-west of Scotland. In particular, the grey core of the white gritty ware appears to be a west-coast feature (Derek Hall, pers comm). The ownership by the lords of the Isles of the lands of Greenan beside the burgh of Ayr by 1456 (Munro & Munro 1986: xxxvii–xxxviii) may be a key factor in this regard. It would not be surprising if much of the Scottish wheel-made pottery at Finlaggan was shipped from Ayr. Recent chemical analysis of sherds of white gritty and Scottish redware (red gritty) from Baliscate in Mull indicates a source in the Clyde Valley (Hall et al 2017: 57). Whether from there or elsewhere, we may envisage that much of the Finlaggan Scottish wheel-made pottery came as containers for food and drink, rather than empty vessels straight from the kiln or a supplier of pots.

The very small percentage (9.26%) of redware in the assemblage may be due to the lack of communication with the sources of supply. Redware seems to be more abundant in the area between the River Tay and the Moray Firth (Haggarty 1997: 497), which may be a reflection of the clay sources, and it could be that some reached Finlaggan from the Inverness area via the Great Glen route. A northern Irish origin cannot be ruled out, especially since other material from the west of Scotland at Castle Sween in Argyll is suspected of coming from the kiln site at Downpatrick (Caldwell & Stewart 1997: 549). The acquisition of the Glens of Antrim by John, a younger son of John I Lord of the Isles, about 1390 (Caldwell 2017: 56) may be significant in this respect. Whether resulting from trade, pillage, or payments as rents or for military service, there can be no doubt that there was throughout the medieval period, and as late as the 17th century, a significant flow of goods from Ireland to Islay.

Of the reduced and oxidised wares, a number of the forms which could be identified appear to be jugs, suggesting that their presence may be a result of their use as containers for wine brought to Finlaggan. A number of the stone discoids recovered from the excavations, wrapped in skin, gut or fabric, could have been used to plug the necks of such vessels.

It is interesting that most of the material imported from Europe is from France, with only a couple of sherds from the Rhineland and the Low Countries. As noted by Thoms (1983: 254–55), the greatest concentration of French wares in Scotland is up the west coast, whereas pottery from Germany and the Low Countries is more commonly found on the east side of the country. This said, the European imported wares comprise a tiny part (2–3%) of the assemblage, in line with the assemblage excavated from Ayr (Franklin & Hall 2012: 39–69). Ireland, too, yields quantities of French wares, for example in Dublin (Gahan & Walsh 1997: 109–23) and at Carrickfergus (Audrey Gahan, pers comm). The pottery is presumably a by-product of a trade in wine, principally claret. The Saintonge jugs would have been containers for particularly fine vintages or been used to decant wine imported in barrels. No doubt considerable costs were involved in transporting the wine from Bordeaux to Islay, probably via intermediary ports in Britain or Ireland. The Finlaggan sherds are a clue to the affluence and good taste of the lords of the Isles.

The relatively small number of wheel-made sherds of pottery across the whole site suggests that vessels of this type were not commonly in use, and it is therefore appropriate to minimise rather than maximise their presence. As a rough estimate, at Finlaggan we excavated 500 cubic metres of deposits dating to the medieval period or later. From the whole assemblage it has been possible to identify 78 separate wheel-made vessels that have left enough evidence, though sometimes only in the form of one sherd, for illustration. This might be compared with the assemblage of medieval pottery from

an excavation at Kirk Close in the Scottish burgh of Perth. The location was the back lands of a town important in the medieval period. From a maximum of 129 cubic metres of deposits, 133 identifiable vessels of medieval pottery worthy of illustration were recovered (Holdsworth 1987: 18, 120). A superficial review of data from other urban sites in Scotland does not suggest that the quantities from Kirk Close are unusual.

The distribution of pottery across Eilean Mór and Eilean na Comhairle offers some insights into its use. Here, however, it must be remembered that it is probable that a high proportion of the sherds from the excavations were not recovered from the contexts in which they were originally used, broken or lost, but were churned up and redeposited by subsequent human activities including digging, building and gardening. In the account of the excavations in trench 12 (see *Finlaggan* Chapter 12) this process was demonstrated by the distribution of sherds of a vessel of oxidised gritty ware (*Finlaggan*, Illus 12.26). Nevertheless, it appears a reasonable assumption that most sherds have not travelled laterally by such processes too far from their original location.

The main concentrations of wheel-made pottery were in the midden adjacent to Eilean na Comhairle (trench 25), and trench 12 in the area of the kitchens next to the great hall on Eilean Mór. This squares with the idea that wheel-made pottery was associated with luxury food or drink, and was even used at the table of the lords. Conversely, there is very little handmade pottery from trench 25 (14 sherds) but a considerable quantity from trench 12 (193 sherds), probably suggesting in the latter case that it was used in the preparation of food. Otherwise there were notable concentrations of handmade pottery in trenches 7, 8 and 19, perhaps indicative of the lower status of those who occupied or used these areas of Eilean Mór. High status, however, is surely indicated by the presence of 10 of the 16 sherds of 13th-century pottery from the Saintonge region of France from trench 25, adjacent to the castle keep. None come from the general area of the kitchens, but such fine pottery would presumably not have been used for cooking or storage.

The distribution of white gritty wares may also be of some significance. There are 293 sherds, 232 of which were recovered from the midden deposits in trench 25, adjacent to Eilean na Comhairle, or nearby. Only 6 of the other 61 sherds come from the general area of the kitchens on Eilean Mór, 3 of them from trench 12 and 3 from trench 4. Of the 352 sherds of pottery from trench 25, 136 are Scottish red, reduced gritty and oxidised gritty wares.

It is possible to discern from all this not just a distribution based on use and/or the status of the users, but a chronological spread as well. The evidence may be indicating that the midden in trench 25 was initially being created at a time when Scottish white gritty was the main imported pottery at Finlaggan, and the kitchens in the area of trench 12 on Eilean Mór were only developed at a time when white gritty wares were replaced by others from the Scottish mainland, perhaps at some time in the course of the 13th century.

The use of reduced gritty ware (fabric 3.1) at Finlaggan as late as the 15th century may be indicated by the recovery of 11 sherds (see finds catalogue under SF 7150) from the floor deposits [7027] of building V.1 in trench 7, which also produced a James III groat (SF 7310; coin report N34). There is also one sherd (SF 7251; ceramics report P54) of oxidised gritty ware (fabric 4.1) from the same context.

Wheel-made medieval pottery from Lowland Scotland and further afield has also been found in smaller quantities at other high-status sites in the West Highlands and Islands, including Castle Sween in Knapdale. Much of its structure dates to the 13th, or even 12th, century, and excavations there have led to the recovery of sherds of white gritty, red and reduced gritty wares (described in the report, respectively, as Light Gritty, Red Gritty and Reduced Gritty: Caldwell & Stewart 1997). At Achanduin Castle on the island of Lismore, probably built by the MacDougalls about 1295–1310, there were no sherds of these wares and only one sherd of a Saintonge jug of late 13th- or early 14th-century date (Caldwell & Stell 2017: 31, 32). The Achanduin evidence can only be used with caution as suggesting that the range of Scottish wares under discussion essentially date prior to about 1300. Achanduin, in a geographically different location to Finlaggan, subject to very different political control and influences, may have had very different supply lines. Hall et al (2017: 57) suggest a date in the late 14th to early 15th century for sherds of Scottish white gritty and redware (red gritty) recovered from Baliscate in Mull.

It is noticeable that there is no pottery from the 17th to earlier 18th centuries, such as slipware or post-medieval reduced and oxidised wares, reinforcing other evidence that habitation on Eilean Mór and Eilean na Comhairle had largely ceased by then.

Catalogue of illustrated wheel-made pottery (Illus C3.3–8)

P1 JUG (?) RIM
Unglazed. White gritty ware, fabric 1.1
SF 23021; [23011] buried topsoil over ruins of castle and pre-dating construction of str (a)

P2 RIM
Unglazed. White gritty ware, fabric 1.1
SF 25240; [25006] sand, beach deposit, as 25002

P3 JUG (?) RIM
Externally glazed. White gritty ware, fabric 1.1
SF 25259; [25007] gravel with washout and debris, equivalent to 25003

P4 JUG RIM AND NECK
Glazed externally
White gritty ware, fabric 1.1
SF 25515; [25004] iron pan

P5 JUG (?) RIM AND PART OF STRAP HANDLE
Externally glazed. White gritty ware, fabric 1.1
SF 25383; [25008] medieval midden

P6 BODY SHERD
Horizontal band of fine grooves from a straight-sided vessel, with tiny specks of glaze externally
White gritty ware, fabric 1.1
SF 24013; [24020] make-up for castle floor

P7 JUG (?) SHOULDER
Glazed externally. White gritty ware, fabric 1.1
SF 25026; [25007] gravel with washout and debris, equivalent to 25003

P8 STRAP HANDLE
Incompletely pierced by occasional pinholes, unglazed. White gritty ware, fabric 1.1
SF 6105; [6010] revetment of palisade bank

P9 STRAP HANDLE WITH CENTRAL APPLIED THUMBED STRIP
Glazed externally. White gritty ware, fabric 1.1
SF 25392 [25008] medieval midden

P10 COOKING POT (?) RIM
Unglazed. White gritty ware, fabric 1.1
SF 25329; [25006] sand, beach deposit, as 25002

P11 COOKING POT (?) RIM
Unglazed; sooted exterior. White gritty ware, fabric 1.1
SF 18064; [18015] collapsed gatehouse debris

P12 COOKING POT (?) RIM
Traces of glaze externally. White gritty ware, fabric 1.1
SF 18027; [18006] collapsed gatehouse debris

P13 COOKING POT (?) RIM
Externally glazed; all-over sooting and very abraded. White gritty ware, fabric 1.1
SF 25480; [25000] unstratified

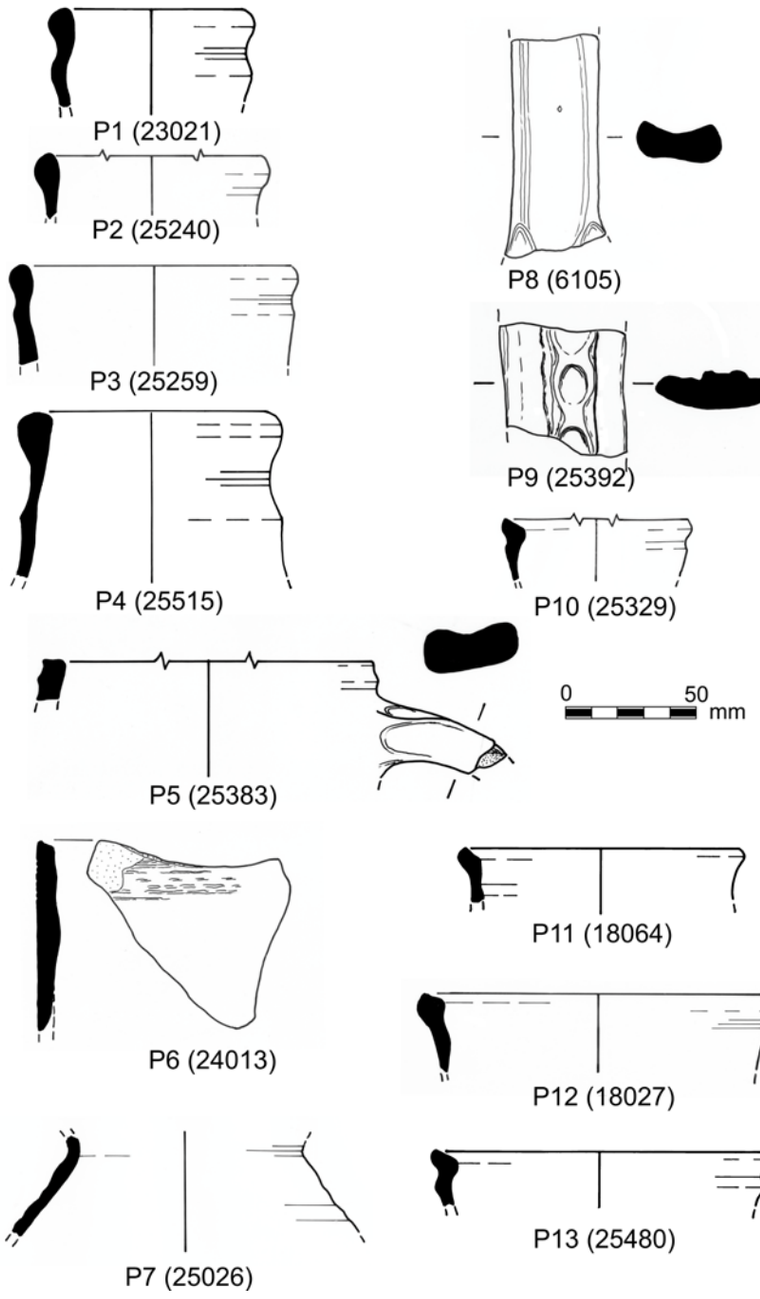


Illustration C3.3
Wheel-made pottery

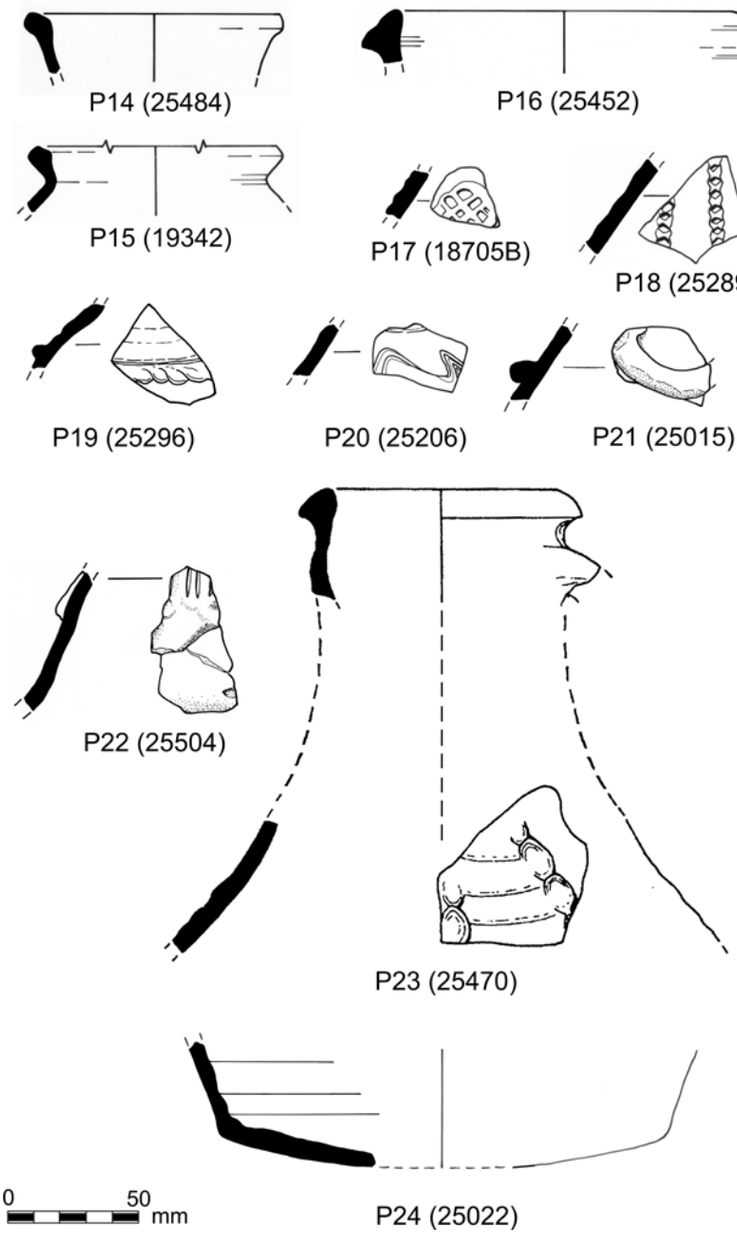


Illustration C3.4
Wheel-made pottery

P14 RIM SHERD
Splashes of glaze externally. White gritty ware, fabric 1.1
SF 25484; [25008] medieval midden

P15 COOKING POT RIM
Unglazed, with sooted exterior. White gritty ware, fabric 1.1
SF 19342; [19003] sandy soil and gravel under the lazy beds

P16 RIM
Traces of glaze externally. White gritty ware, fabric 1.1
SF 25452; [25003] gravel, beach deposit

P17 BODY SHERD
Applied gridiron pad, externally glazed. White gritty ware, fabric 1.1
SF 18705B; [18007] turf gatehouse wall

P18 BODY SHERD
Applied ridged strips, glazed externally. White gritty ware, fabric 1.1
SF 25289; [25007] gravel with washout and debris, equivalent to 25003

P19 BODY SHERD
Applied twisted cordon, glazed externally. White gritty ware, fabric 1.1
SF 25296; [25008] medieval midden

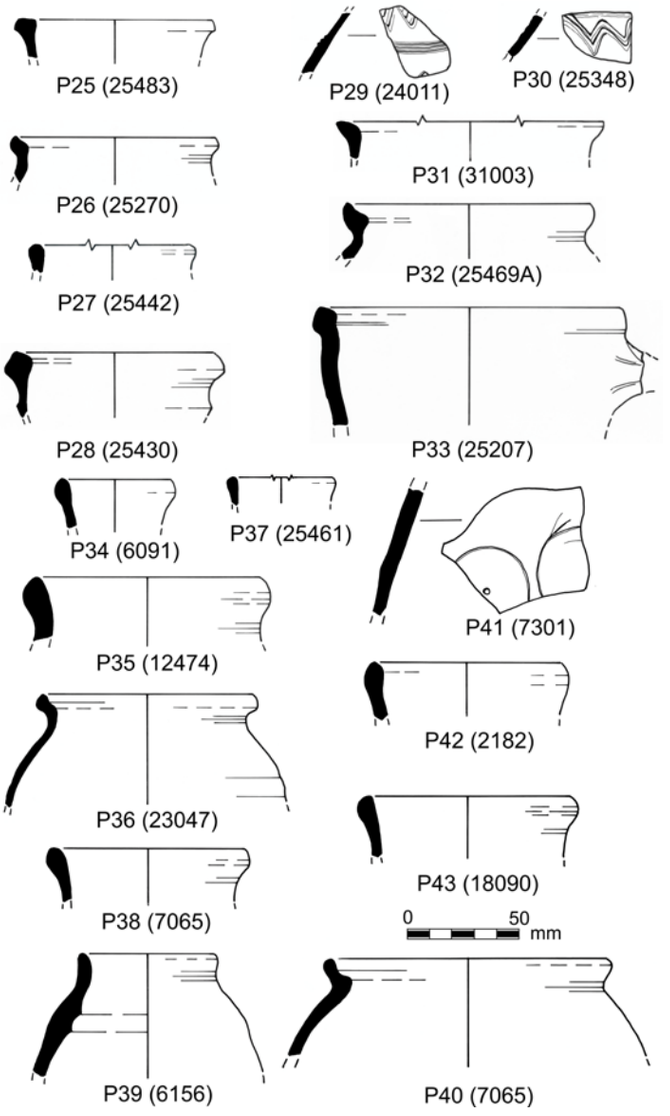


Illustration C3.5
Wheel-made pottery

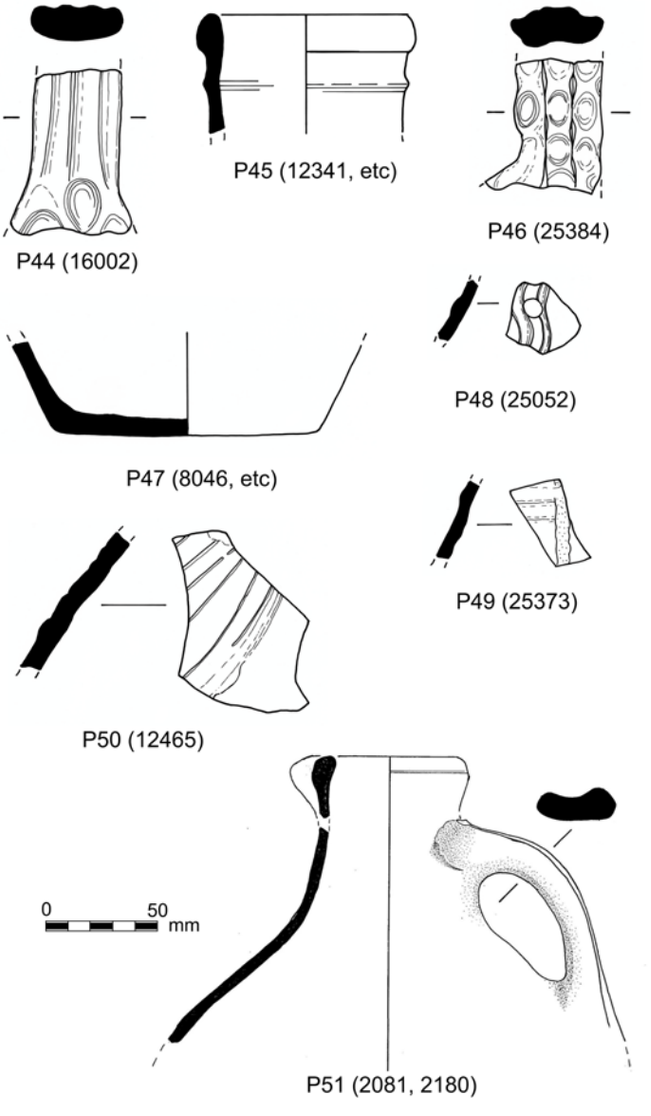


Illustration C3.6
Wheel-made pottery

P20 BODY SHERD
Wavy combed decoration, glazed externally. White gritty ware, fabric 1.1
SF 25206; [25002] sand, beach deposit

P21 ARM FROM AN ANTHROPOMORPHIC JUG (?)
Externally glazed. White gritty ware, fabric 1.1
SF 25015; [25003] gravel beach

P22 ANTHROPOMORPHIC JUG (?) RIM AND NECK
With applied limb (?) and glaze externally. White gritty ware, fabric 1.1
SF 25504; [25008] medieval midden

P23 JUG RIM AND BODY SHERDS
With radiating applied (?) thumbed strips on shoulder and very dark grey glaze externally. Thumbing at top of handle extends to outer edge of rim. White gritty ware, fabric 1.1
SF 25470; [25008] medieval midden

P24 LOWER BODY AND BASE SHERD
Splashes of glaze on underside of base. White gritty ware, fabric 1.1
SF 25022; [25008] medieval midden

P25 RIM SHERD
Thin glaze externally. White gritty ware, fabric 1.2
SF 25483; [25008] medieval midden

P26 COOKING POT RIM
Unglazed, with all-over sooting. White gritty ware, fabric 1.2
SF 25270; [25008] medieval midden

P27 RIM
Unglazed. White gritty ware, fabric 1.3
SF 25442; [25002] sand, beach deposit

P28 COOKING POT (?) RIM
With all-over slip. White gritty ware, fabric 1.3
SF 25430; [25004] iron pan

P29 BODY SHERD
With two bands of wavy combed decoration separated by a grooved band; traces of very

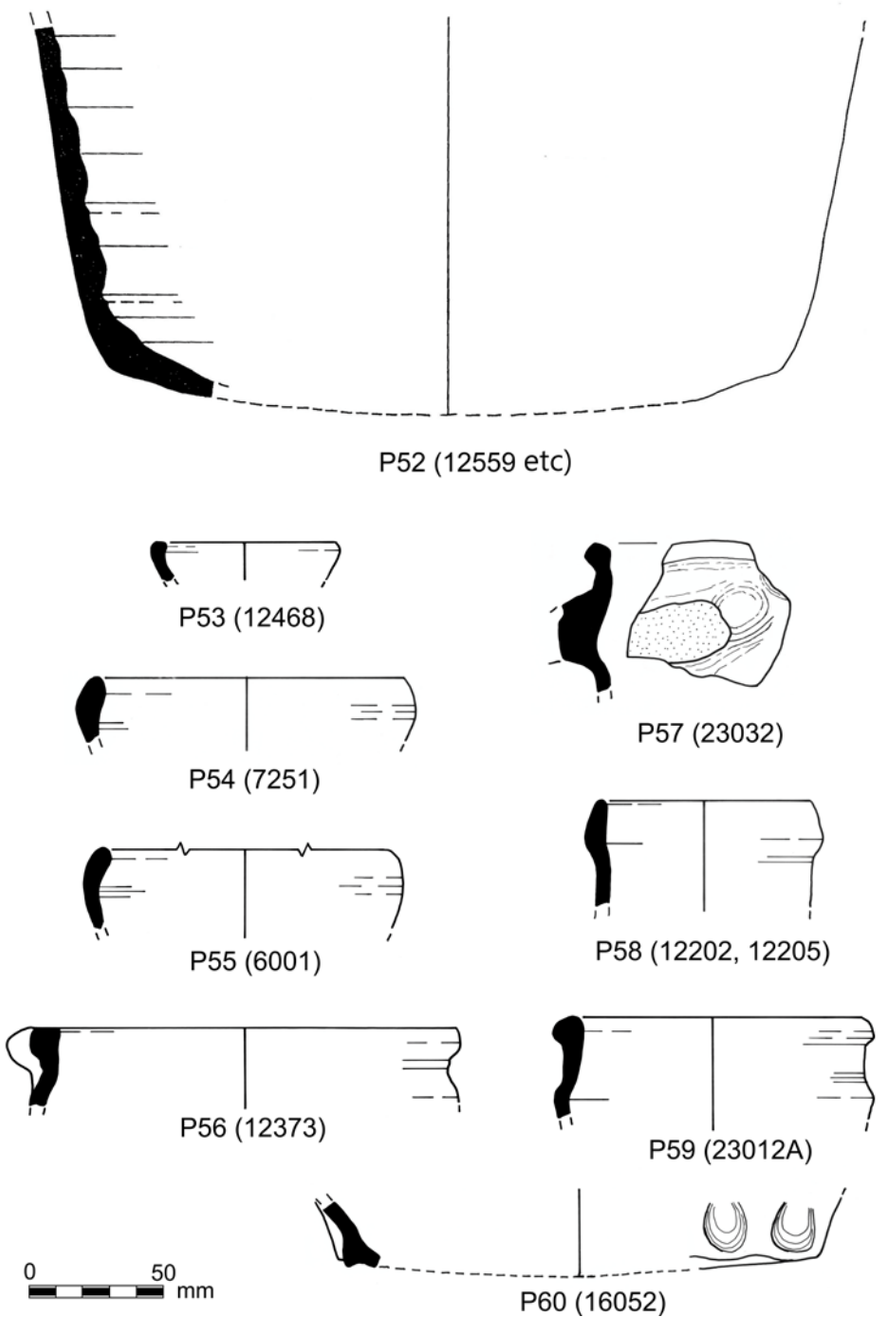


Illustration C3.7
Wheel-made pottery

abraded glaze externally. White gritty ware, fabric 1.3
SF 24011; [24018] mortar debris from castle demolition

P30 BODY SHERD
With wavy combed decoration, unglazed. White gritty ware, fabric 1.3
SF 25348; [25040] FN 98 excavation

P31 RIM SHERD
White gritty ware, fabric 1.3
SF 31003; from Loch

P32 COOKING POT (?) RIM
Glazed externally. White gritty ware, fabric 1.3
SF 25469A; [25008] medieval midden

P33 JUG RIM AND TRACE OF HANDLE
Glazed externally. White gritty ware, fabric 1.3
SF 25207; [25002] sand, beach deposit

P34 COOKING POT RIM AND SHOULDER
Tiny specks of glaze externally; sooted exterior. Redware, fabric 2.1
SF 6091; [6018] gravel spread (worm activity)

P35 RIM
With blistered glaze externally. Redware, fabric 2.1
SF 12474; [12105] path associated with str 12.12

P36 COOKING POT RIM AND SHOULDER
Very thin-walled, unglazed; sooted exterior. Redware, fabric 2.1
SF 23047; [23033] pre-castle ground surface

P37 RIM
With tiny specks of glaze externally. Redware, fabric 2.2
SF 25461; [25002] sand, beach deposit

P38 RIM
With tiny specks of glaze externally. Redware, fabric 2.2
SF 7065; [7011] tumble

P39 JAR RIM AND SHOULDER
With splashes of glaze externally and even coating inside the neck. Redware, fabric 2.2
SF 6156; [6022]

P40 COOKING POT RIM AND SHOULDER
With tiny specks of glaze externally; sooted exterior. Redware, fabric 2.2
SF 7065; [7011] tumble

P41 BODY SHERD
With segments of two incised compass-drawn circles, 40mm in diameter, underlying tiny flecks of glaze. Redware, fabric 2.3
SF 7301; [7041] core of bank of str W

P42 RIM SHERD
Unglazed. Redware, fabric 2.4
SF 2182; [2023]

P43 RIM SHERD
With splashes of glaze externally. Redware, fabric 2.6
SF 18090; [18040] palisade bank

P44 GROOVED STRAP HANDLE
With glazed upper surface. Reduced gritty ware, fabric 3.1
SF 16002; [16001] topsoil

P45 JUG RIM AND NECK
With glaze externally. Reduced gritty ware, fabric 3.1

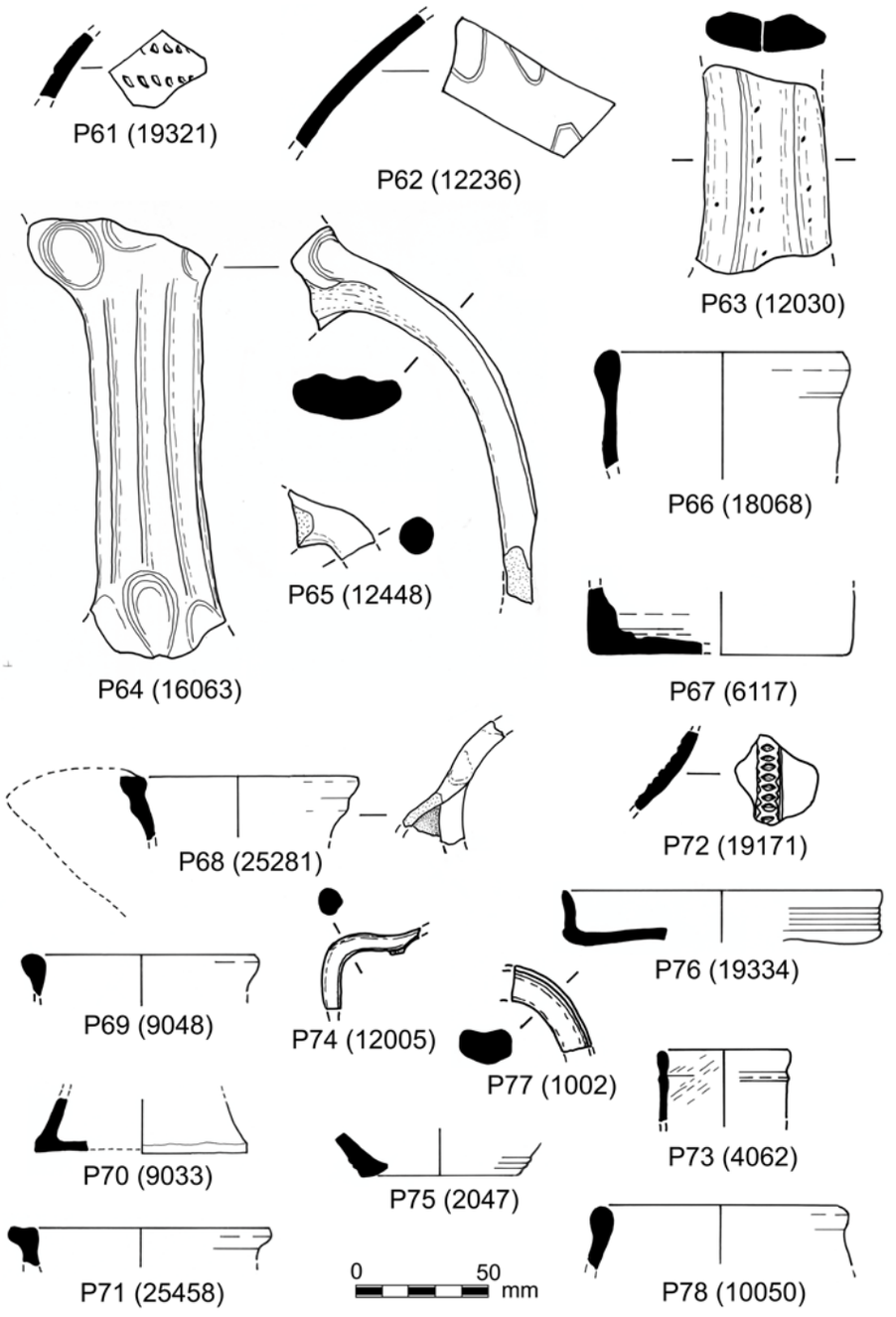


Illustration C3.8
Wheel-made pottery

SF 12341; [12110] oven rake-out, building 12.6
SF 12337; [12130] floor of building 12.5
SF 12101; [12101] topsoil

P46 STRAP HANDLE
With central applied thumbed strip, glazed externally. Reduced gritty ware, fabric 3.1
SF 25384; [25008] medieval midden

P47 LOWER BODY AND BASE SHERDS
With abraded glaze all over exterior and a stacking mark on the base. Reduced gritty ware, fabric 3.1
SF 8046; [8013] tumble from wall of building H
SF 8003; [8002] topsoil
SF 8002; [8002] topsoil
SF 8117; [8016] tumble within building H

P48 BODY SHERD
With applied serpentine strip with central pellet, glazed externally. Reduced gritty ware, fabric 3.1
SF 25052; [25005] sand with washout and debris, equivalent to 25002

P49 BODY SHERD
With abraded applied ridged strip, glazed externally. Reduced gritty ware, fabric 3.1
SF 25373; [25005] sand with washout and debris, equivalent to 25002

P50 BODY SHERD
With radiating diagonal scores, glazed externally. Reduced gritty ware, fabric 3.1
SF 12465; [12145] gravel spread over floor of south room of str 12.5

P51 LARGE JUG RIM, UPPER BODY AND HANDLE
Glazed externally. Reduced gritty ware, fabric 3.1
SF 2180; [2037] floor of str K.1
SF 2081; [2015] floor of str K.1

P52 LOWER BODY AND BASE
With glaze all over exterior. Reduced gritty ware, fabric 3.1
SF 12559; [12131] wall of str 12.5
SF 12570; [12000] unstratified
SF 12072; [12044] hearth in str 12.4
SF 12305; [12030] silt underlying building sequence

P53 RIM
With degraded glaze externally. Oxidised gritty ware, fabric 4.1
SF 12468; [12150] debris from demolition of building 12.6

P54 RIM
With very abraded glaze externally. Oxidised gritty ware, fabric 4.1
SF 7251; [7027] floor of str V.1

P55 RIM
With degraded glaze externally. Oxidised gritty ware, fabric 4.1
SF 6001; [6002] paved road from great hall to chapel

P56 COOKING POT (?) RIM AND PART OF PULLED SPOUT
With very abraded glaze externally. Oxidised gritty ware, fabric 4.1
SF 12373; [12130] floor of building 12.5

P57 JUG RIM AND PART OF HANDLE
With very abraded glaze externally. Oxidised gritty ware, fabric 4.1
SF 23032; [23021] washout, castle demolition

P58 JUG RIM AND NECK
With very abraded glaze externally. Oxidised gritty ware, fabric 4.1
SF 12205; [12101] topsoil
SF 12202; [12101] topsoil

P59 JUG (?) RIM
Unglazed. Oxidised gritty ware, fabric 4.1
SF 23012A; [23011] buried topsoil over ruins of castle and pre-dating construction of str (a)

P60 LOWER BODY AND EDGE OF THUMBED BASE
With very abraded glaze externally. Oxidised gritty ware, fabric 4.1
SF 16052; [16017] floor deposit in house (a)

P61 BODY SHERD
With two bands of stabbed decoration, glazed externally. Oxidised gritty ware, fabric 4.1
SF 19321; [19006] lazy bed

P62 BODY SHERD
With two bands of single wavy incised decoration and abraded glaze externally. Oxidised gritty ware, fabric 4.1
SF 12236; [12101] topsoil

P63 STRAP HANDLE PIERCED BY SEVERAL PINHOLES
With very abraded glaze on its upper surface. Oxidised gritty ware, fabric 4.1
SF 12030; [12015] make-up layer for str 12.1

P64 GROOVED STRAP HANDLE
Glazed on upper surface. Oxidised gritty ware, fabric 4.1
SF 16063; [16018] levelling up in courtyard

P65 SMALL ROD HANDLE
Unglazed. Oxidised gritty ware, fabric 4.2
SF 12448; [12145] gravel spread over floor of south room of str 12.5

P66 JUG (?) RIM AND NECK
With very abraded glaze externally. Oxidised gritty ware, fabric 4.4
SF 18068; [18007] turf gatehouse wall

P67 LOWER BODY AND BASE SHERD
With abraded glaze all over its exterior. Oxidised gritty ware, fabric 4.4
SF 6117; [6022] midden

P68 THREE-HANDLED PITCHER (?) RIM AND PART OF SPOUT
With, externally, creamy-white glaze with light and dark green streaks. Saintonge polychrome, fabric 5
SF 25281; [25004] iron pan

P69 RIM
With all-over creamy-white glaze with apple-green spot. Saintonge polychrome, fabric 5
SF 9048; [9011] midden

P70 JUG (?) LOWER BODY AND PART OF BASE
With creamy-white glaze on the exterior of the body. Saintonge polychrome, fabric 5
SF 9033; [9011] midden

P71 JUG (?) RIM
With mottled apple-green glaze externally. Saintonge mottled green glaze, fabric 5
SF 25458; [25002] sand, beach deposit

P72 BODY SHERD
With applied ridged strip and pale yellow-green glaze externally. Saintonge (?), fabric 5
SF 19171; [19007] lazy bed

P73 SMALL VESSEL RIM AND SIDE
With diagonal throwing scratches on interior and mottled bright green glaze externally. North French, fabric 5
SF 4062; [4024] decomposed mortar washed from walls of str L.1

P74 TINY ROD HANDLE
With fleck of soft green glaze. North French, fabric 5
SF 12005; [12003] decayed mortar from wall of building 12.1

P75 LOWER SIDE AND PART OF BASE
With shiny apple-green glaze externally and mottled yellow-brown glaze internally. North French, fabric 5
SF 2047; [2005] floor of building K

P76 DRINKING BOWL RIM, SIDE AND BASE
With glazed area on exterior of base. Beauvais stoneware, fabric 5
SF 19334; [19007] lazy bed

P77 FLATTENED ROD HANDLE
With all-over semi-matt yellow-brown glaze. Rhineland, fabric 5
SF 1002; [1007] gravel spread in burial ground

P78 JAR (?) RIM
With orange-brown glaze externally. Low Countries redware, fabric 5
SF 10050; [10048] make-up for great hall phase 1 floor.

The handmade pottery

Jo Dawson

There are 1,191 sherds of handmade pottery from excavations on the two islands. As noted above in the section on prehistoric finds, these will undoubtedly include some prehistoric sherds, but only 14 have been so listed in the finds catalogue since it has so far not proved possible to date most of this material on the basis of appearance, technology or material. Most of the sherds are small and there are very few joins. Because of this, and the relative scarcity and unevenness of rim sherds, it has proved difficult to suggest a minimum number of vessels present. The following is edited and reduced from previous research (Dawson 2002a, 2002b).

Methodology

An initial survey suggested that most of the sherds were from globular pots with everted rims, and this supposition largely helped to define the characteristics chosen to assess the pottery.

Each sherd was examined for a range of characteristics: organics in fabric, sand in fabric, blackening on interior only, blackening on exterior only, blackening on both surfaces, unblackened, scrape marks on interior, scrape marks on exterior, rim sherd, base sherd, shoulder sherd, stabbed dot decoration, incised line decoration. Rim sherds were measured using a radius sheet in order to compute the overall rim diameter. Given the apparent irregularity of a lot of the handmade vessels and the shortness of many of the arcs that were measured, it has to be understood that these estimates of rim diameter are very approximate.

During examination it quickly became apparent that the fabric of the handmade pottery was broadly uniform in character, with no readily assignable groups. The sherds had been fired to different levels of hardness, from hard to medium soft. Differences in the firing conditions resulted in varying sherd colours, including orange and greyish-brown. Because the firing conditions were not thought to relate to different fabrics or vessel types, colour and hardness were not routinely recorded. The two significant variables that could be observed in the fabric were the grain size of the coarse mineral components and the proportions of organic matter present. Both of these presented a continuum between the extreme forms of highly organic to weakly organic, and fine grain size to sandy. Owing to the subtlety in the differences in fabric type, many did not sit happily in any particular group. This together with small sherd sizes made it inevitable that many could not be assigned to any particular type. These are referred to below as 'uncategorised'.

A more detailed examination was made of the handmade pot sherds from trench 7. This trench had one of the largest concentrations of handmade sherds, a total of 242, from a relatively small area and a limited range of contexts. Almost all of them came from the area of the trench between structures V and W, and from two deposits sandwiched between turf and topsoil and the truncated bank of structure 7.2

[7042, 7029] that represents the timberwork defence of Eilean Mór. The two deposits in question are a dark brown silty peat [7007], representing a medieval midden, overlying a thin gravelly spread [7017] created by earthworm activity. This midden appears to result from the occupation of building V.

It was hoped that it would be possible to identify a higher proportion of sherds that joined together and thus have an improved knowledge of vessel shapes and numbers. There are 127 sherds from C7007 and 67 from C7017. Relatively few joins, however, could be detected, and only in cases where sherds lay next to each other in the ground. This indicates a low sherd to vessel ratio – that is, that only a small proportion of each pot has been recovered. This phenomenon may result from a yearly clear-out of a midden for use as manure. Imperfect removal of the deposits could have resulted in the observed results: small numbers of sherds from a large number of vessels.

Vessel forms

Globular pots with everted rims

The basic form of most of the pots – small, globular, with everted rims – is confirmed by a survey of those sherds with features diagnostic of overall shape. Rim sherds are invariably everted, though the angle through which the eversion has been carried out varies from sherd to sherd. Some have round and others bevelled external edges, but this distinction is not thought to be significant, because of the uneven nature of the rims. Other sherds identified as necks form a concave curve in the vertical plane while simultaneously forming a convex curve in the horizontal plane. The almost complete absence of flat base sherds supports the assumption that the vessels were rounded at the bottom.

Diameters were taken of 53 rim sherds, giving the following approximate range of sizes:

Rim diameter (mm)	Sherds
60	5
80	27
100	11
120	6
140	1
160	2
220	1

These pots can be seen to fit into the Hebridean tradition of making *crogans* – unglazed globular handmade pots fired in the domestic hearth as recently as the 19th century (Cheape 1993: 109). A crogan containing a coin hoard dated to *c* 1670 was found at Stornoway (Dean 2008: 451–52). Because of the long duration of the tradition, this ceramic material is of limited value in dating. Progress in understanding has been limited by the small size of assemblages on individual sites and the lack of well-stratified groups. It is presumably also the case that since these pots were produced locally they may contain regionally specific stylistic characteristics. The assemblage from Finlaggan is thought to be the largest and best stratified of its kind and may help the development of a more holistic understanding of the Hebridean potting tradition.

Useful comparisons can be made with a small excavated assemblage from Breacachadh Castle, a Maclean stronghold on the island of Coll. It was occupied and probably greatly improved by Lachlan Maclean of Duart, who held or claimed considerable lands on Islay, in the late 16th century (Maclean-Bristol 1999: 216). Four everted-rim pots from a deposit sealed in the late 16th century have rim diameters of approximately 40, 60, 70, 100 and 210mm (Turner & Dunbar 1973: 182–83). A rural site, possibly with a medieval chapel, was excavated at Baliscate in Mull in 2012 and assemblage of medieval wheel-made and handmade pottery reported on by Derek Hall, George Haggarty and Richard Jones (Ellis 2017: 55–62). The handmade pottery, presumably of local manufacture, appeared mostly to be from cooking pots, commonly with a red-brown, highly micaceous fabric, several with 'slash and stab' decoration.

Other vessel forms

There is limited evidence that other forms of handmade vessels were present. From trench 1 come fragments of a jug (P79), apparently made in imitation of imported wheel-made vessels. A strap handle with slashed lines from Baliscate (Ellis 2017: illus 32, 3027), from a context dated to the late 14th or early 15th century, is not dissimilar. From trench 12 were excavated sherds forming most of a sagging flat base (P94), 125mm in diameter. All that can be said of the vessel's overall form is that it had a sharp angle between base and body.

Fabrics

Fine clay containing organics

Voids left by organics burnt out of the fabric during firing are clearly visible where they are present on the surfaces and/or along breaks. A preliminary assessment of the surface impressions and voids in a small number of sherds has led to the identification of ferns, sedges or rushes, and barley. Occasionally pieces of the charred plants themselves have survived the firing process and are visible in the fabric. The presence of voids and charred organics might in some cases result from accidental incorporation in the clay used to make the vessel, or else from contact between the freshly potted vessel and plant parts. In most cases, however, it can be assumed the voids and charred plant remains result from their deliberate addition to the clay as a temper. It may either have been added as animal dung or finely chopped plants.

Sandy clay fabric (with or without organics)

A small number of sherds are composed of fabric which is noticeably sandier than the fine clay of the majority of sherds. Only a small percentage of these contain organics. For any given sherd made of sandy clay fabric, the grain size of the sand is relatively uniform. Grain size, however, varies between different sherds. With decreasing grain size the distinction between fine clay and sandy clay becomes increasingly difficult to make consistently. It is probable that grains of sand have not been added as a temper but are naturally occurring inclusions in the clay. Some of the crogan ware from Breacachadh Castle, Coll, has coarse micaceous sand temper (Turner & Dunbar 1973: 182–83).

Surface treatments and characteristics

Smoothing

Although smoothing is visible on many of the sherd surfaces it was not recorded on a sherd-by-sherd basis. Smoothing would have been carried out by the potter's hand, or perhaps with a piece of leather. There were no clear examples of burnishing or coating the surfaces with a slip.

Scrape marks

Extensive surface striations or scrape marks have been noted on six sherds. Two of them, from trenches 2 and 8, are unstratified, three are from a medieval midden [6022] in trench 6 and the sixth is from a 16th-century context [8015] in trench 8. The scrapes may have been made by straw or similar material stuffed inside the vessels or around their bases for support while they were being dried out or finished off.

Stabbed dot and incised line decoration

These two types of decoration may be variations of the same technique but they appear to be found independently of each other, mainly around the tops of the vessels. It is not unlike decoration on pottery from Baliscate in Mull, and it has been suggested that each area may have its local design (Derek Hall, pers comm).

Stabbed dot decoration has also been found on a crogan from Breacachadh Castle on Coll, which had been sealed by a late 16th-century construction (Turner & Dunbar 1973: 182–83).

Similar decoration appears on vessels of medieval Ulster coarse pottery; these vessels are also globular in form with small rim diameters, the rims being slightly everted or upright. Stabbed dot decoration is often found on the mostly flattened rim tops (Cormac McSparron, pers comm).

Blackening

Blackening has been observed on the inner and/or outer surfaces of many of the sherds. This may have been caused by fire clouding in the firing process or encrustation with burnt material during use. Examination of a small number of obviously encrusted sherds using a binocular microscope has led to the impression that the encrustations are more in keeping with a thick starchy-type deposit, as opposed to a less viscous oil or wax.

Technology of manufacture

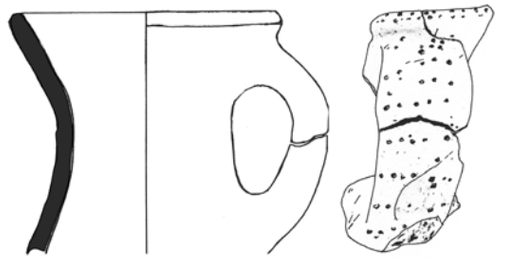
The clay for the handmade pots is likely to have been dug locally. The addition of organics would have allowed greater expansion and contraction of the fabric without cracking, meaning a greater resistance to thermal shock. This would have created pots suitable for use as cooking vessels. Conversely, the pots with sand inclusions may have been inclined to crack up when heated if the sand expanded and contracted at a different rate from the clay matrix.

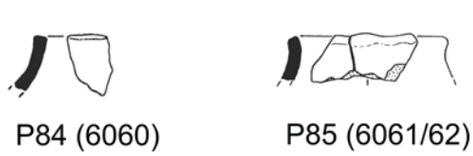
The prepared clay is likely to have been formed into pots either by coil building or using the pinch pot technique. In the former method the clay is rolled into sausage shapes which are then coiled together to form the vessel. In the latter, a lump of clay is worked by the fingers, gradually hollowing out the interior and shaping the exterior of the pot. An examination of some of the sherds suggests, on the basis of the shape of the breaks and the orientation of the inclusions, that both methods were used.

The variations in fabric colour and possible fire clouding suggest an uncontrolled firing environment, such as would exist in a bonfire or a domestic hearth. Voids in the clay matrix caused by organics being burnt out indicate the presence of oxygen during firing. In such conditions organics burn out from 200 to 650–700°C. The presence of a small number of sherds with carbonised organics probably indicates that they were fired in conditions where there was a lack of oxygen.

Catalogue of illustrated handmade pottery (Illus C3.9–11)

P79 JUG RIM WITH ATTACHED SKEWED STRAP HANDLE
Stabbed decoration on handle and rim top





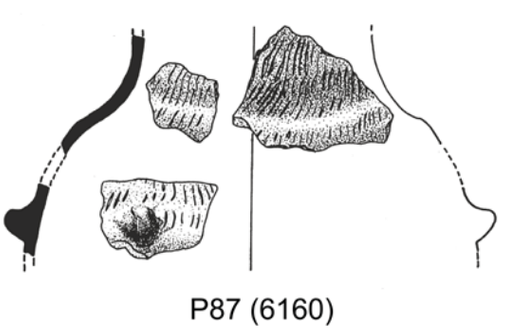
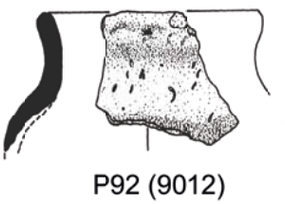


Illustration C3.9
Handmade pottery



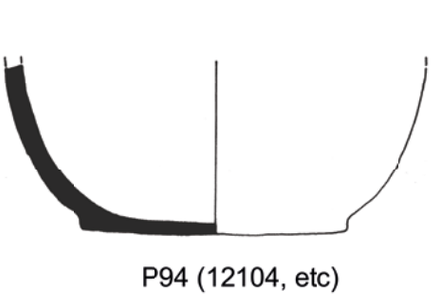


Illustration C3.10
Handmade pottery

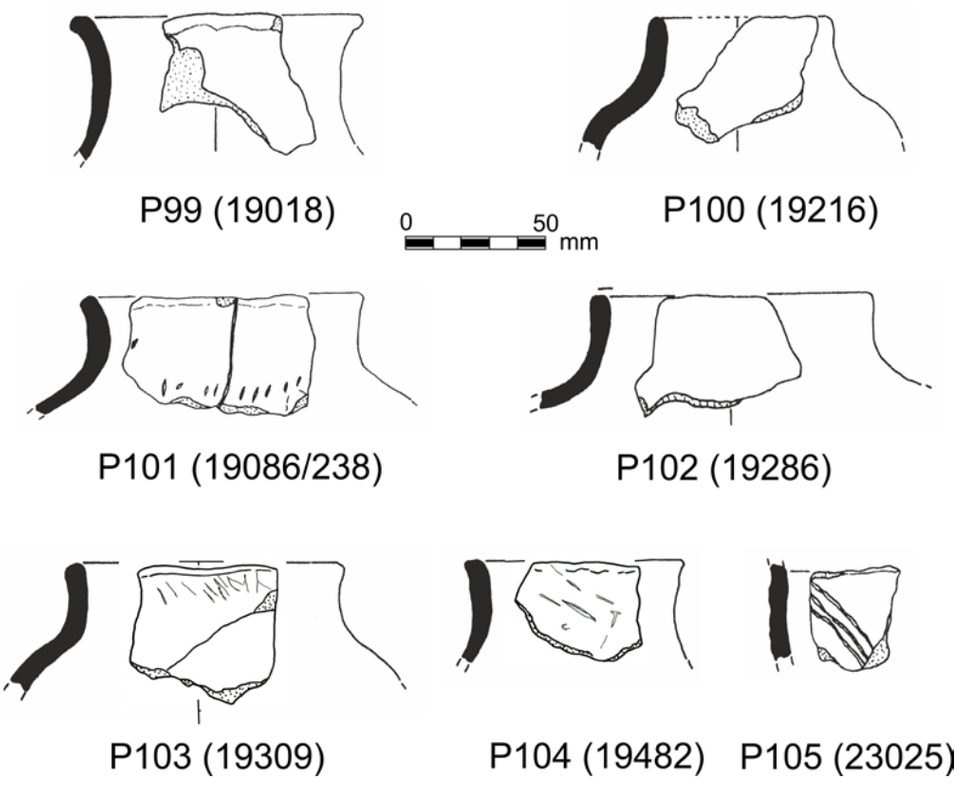


Illustration C3.11
Handmade pottery

SF 1064 and SF 1094; [1007] gravel spread in burial ground [illus by D Caldwell]

P80 RIM
With stabbed decoration on both surfaces. Oxidised surfaces
SF 2090; [2030] wall of str K/K.1

P81 SHOULDER?
Stabbed decoration. Oxidised surfaces
SF 2127; [2033] floor of str K

P82 RIM AND SHOULDER SHERDS
Oxidised surfaces with grass impressions. Heavily sooted
SF 2176; [2037] floor of str K.1

P83 RIM AND NECK
Slashed decoration on neck. Fine pink fabric
SF 2186; [2047] wall of K/K.1

P84 RIM WITH GRASS IMPRESSIONS
Sooted surfaces
SF 6060; [6018] gravel spread (worm activity)

P85 RIM SHERDS
Oxidised surfaces. Heavily gritted
SF 6061 and SF 6062; [6018] gravel spread (worm activity)

P86 RIM
Stabbed decoration on upper surface. Oxidised surfaces
SF 6098; [6018] gravel spread (worm activity)

P87 JUG? SHOULDER AND BODY SHERDS
Applied knob. Diagonal slashed decoration. Oxidised surfaces. Heavily sooted
SF 6160; [6033] midden

P88 BODY SHERD WITH INTEGRAL KNOB
SF 7148; [7027] floor of str V.1

P89 RIM SHERDS WITH RESIDUE (?)
Grass impressions. Oxidised exterior. Heavy sooting
SF 7200; [7017] garden soil

P90 SHOULDER SHERD
Grass impressions
SF 8091; [8012] weathering north-west of str H

P91 RIM AND SHOULDER
Oxidised exterior, sooted. Grass impressions
SF 9011; [9004] tumble from str F

P92 RIM AND SHOULDER
Slashed (?) decoration on neck. Oxidised exterior, sooted. Grass impressions
SF 9012; [9004] tumble from str F

P93 RIM
Oxidised surfaces. Sooted exterior. Grass impressions
SF 10017; [10013] demolition deposit, great hall

P94 BASE AND LOWER BODY SHERDS
Slightly oxidised. Sooted surfaces
SFs 12104, 12107, 12167, 12175, 12283, 12284 and 12285; [12101] topsoil
SF 12334 and SF 12335; [12130] floor of building 12.5

P95 RIM AND NECK
Faint scored decoration on lower neck. Heavily sooted
SF 12112; [12101] topsoil

P96 RIM AND SHOULDER
Stabbed decoration on rim top and shoulder. Oxidised surfaces, sooted
SF 12231; [12101] topsoil

P97 BODY SHERD WITH LOWER END OF STRAP HANDLE
Stabbed decoration on handle. Oxidised surfaces, heavily sooted exterior
SF 12238; [12101] topsoil

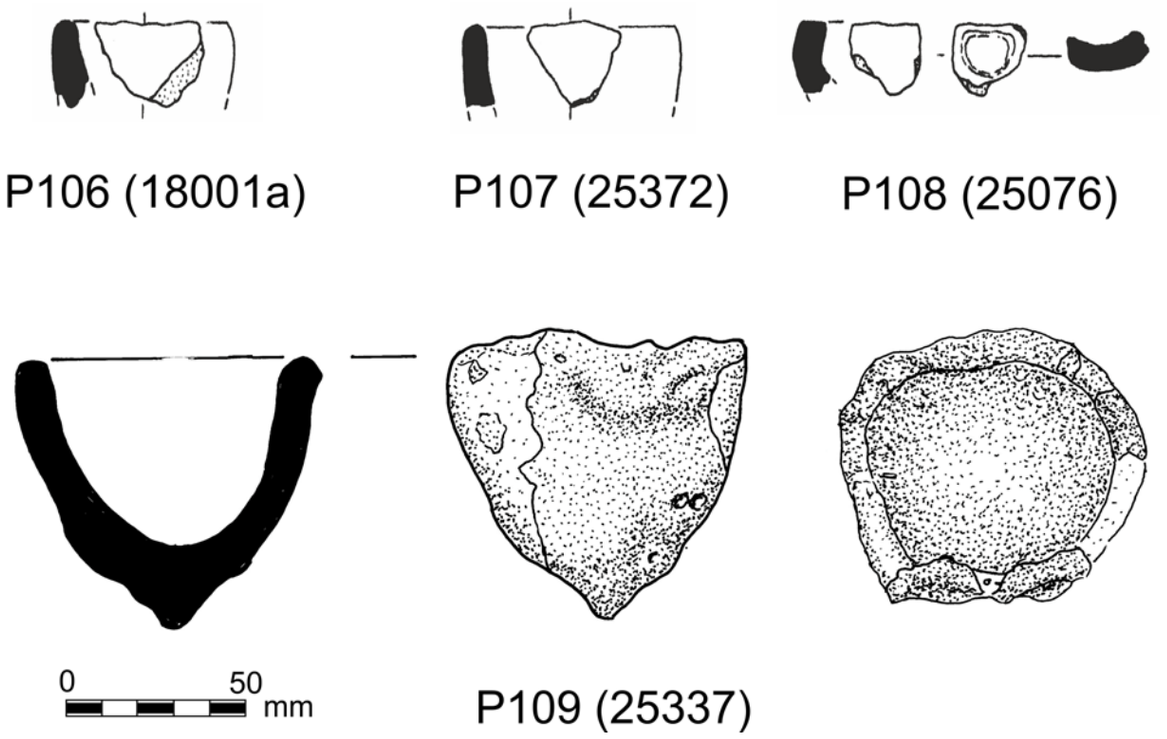


Illustration C3.12
Crucibles

P98 BASE SHERDS
SF 12420; [12134] floor of south room of building 12.5

P99 RIM AND NECK
Oxidised exterior with grass impressions
SF 19018; [19001] topsoil

P100 RIM AND SHOULDER
SF 19216; [19009] floor deposit, str 19.2

P101 RIM SHERDS
Slashed decoration on neck. Knob or handle (?) scars. Oxidised surfaces with grass impressions. Sooted exterior
SF 19086; [19002] topsoil
SF 19238; [19006] lazy bed

P102 RIM
Oxidised surfaces with grass impressions. Slight sooting on rim
SF 19286; [19012] occupation deposit, str 19.10

P103 RIM SHERDS
Faint stabbed decoration on neck. Oxidised exterior. Grass impressions. Heavy sooting
SF 19309; [19012] occupation deposit, str 19.10

P104 RIM
Possible scored decoration. Grass impressions. Sooted surfaces
SF 19482; [19121] fill 19122, a post-hole in str 19.9

P105 BODY SHERD
Diagonal slashed decoration. Oxidised surfaces. Sooted exterior
SF 23025; [23028] turf and soil on edge of island; not a secure context.

The crucibles

Valerie E Dean

The remains of 12 small crucibles have been identified within the handmade pottery assemblage. Eight of these were recovered from the midden [trench 25] adjacent to the Council Isle, and the other four came from separate trenches on the large isle.

In most cases, the sherds are so tiny that identification of forms presents difficulties. However, at least one vessel is bag-shaped (P109) and similar to type E from Dunadd Fort in mainland Argyll (Lane & Campbell 2000: 135). Several appear to have been relined.

However, it is notoriously difficult to assign small crucibles to any particular period, and these simple handmade thumb pots are such examples.

Catalogue of illustrated crucibles (Illus C3.12)

P106 CRUCIBLE RIM
Lightly vitrified, cracking, orange oxidisation on exterior. Extra layers inside and out
SF 18001a; [18000] unstratified

P107 CRUCIBLE RIM
Vitrified on top edge
SF 25372; [25004] iron pan

P108 CRUCIBLE SHERD, POSSIBLY A LID
Thin slag on interior. Extra layer on exterior
SF 25076; [25008] medieval midden

P109 CRUCIBLE
Exterior and interior slaggy and vitrified, orange tinge on external slag. Slight cracking
SF 25337; [25008] medieval midden.

CHAPTER C4

Coins and other non-ferrous artefacts

Over 150 items of medieval or later copper alloy, over 30 of silver and over 30 of lead are individually listed in the finds database, including coins, dress fittings, fragments of utensils, musical instrument pegs, keys and assorted mounts. This material was all processed and conserved by conservation staff in NMS. The range and function of objects is dealt with in some detail in this chapter, and the more significant ones listed in the select catalogue in Chapter C7.

Copper, lead and silver were all potentially available in the medieval period in the near vicinity of Finlaggan (Caldwell 2017: 231–40). A number of the artefacts recovered from Finlaggan, including crucibles, pieces of copper alloy sheet from which objects have been cut, and lead sprues, indicate metalworking on-site. There are also a certain number of artefacts, including brooches and musical instrument pegs, that in cultural terms or design clearly belong in a West Highlands and Islands milieu, whereas many others – buckles, mounts, etc – are identical or similar to such items recovered in archaeological assemblages from all over Britain and further afield. Items like coins issued by Scottish and English kings and a pilgrim badge from Rome (SF 30095) are clearly not local.

These observations underlay a scientific research project on the Finlaggan material, reported below, undertaken and written up in 2000 by Helen Spencer, using non-destructive XRF. Limited revision was undertaken in 2019.

The coins

Nicholas Holmes

The 44 coins recovered included 20 English silver pennies and cut halfpennies from the period 1180 to 1314, 19 Scottish silver and billon coins from the period 1280 to 1513, four British issues of the late 19th and 20th centuries and one unidentifiable item. Many of these were metal-detector finds from both the excavation site and its environs, and discussion will therefore focus initially on the entire body of finds as a group, considering what the pattern of coin loss might suggest about monetary activity in this part of Islay in the medieval and early post-medieval period. Individual coins of particular archaeological or numismatic significance will then be considered separately.

It will be convenient to divide the assemblage (ignoring the modern issues) into two groups, with the early pennies and cut halfpennies being considered first. The introduction of the groat in the middle of the 14th century coincides approximately with the period when the predominance of English coins among finds from Scotland ends and coins of the Scottish kings can be seen to have supplied most of the country's requirements. From the end of the 14th century onwards, smaller denominations were minted in increasingly debased metal.

Late 12th to mid-14th century

From the period when the penny was the largest denomination struck in Scotland and England, there are 21 finds from Finlaggan. Of these, all are English with the exception of one second coinage penny of Alexander III (catalogue N21). They may be summarised as follows:

	Pennies	Cut halfpennies	Fragments less than half
Short cross (1180–1247)	3	1	–
Long cross (1247–78)	3	2	1
Single cross (1279–*c* 1314)	11	–	–

Insofar as it is possible to generalise on the basis of such a small sample, the presence of these coins in and around Finlaggan would seem to suggest that money was being used on Islay throughout this period. The idea that a coin-using economy was largely a feature of the major burghs in medieval Scotland has been fairly successfully discredited by the number of metal-detector finds from relatively out-of-the-way places in recent years – these include a fair proportion of short cross and long cross cut halfpennies, which are an indicator of genuine money use, rather than simply hoarding of quantifiable amounts of silver. The discovery of similar evidence on Islay should not be particularly surprising, therefore. Although the scarcity of Scottish issues in this group of finds is notable – particularly the absence of the relatively common cut halfpennies of William the Lion's latest (Hue Walter) coinage – the low overall number of short cross and long cross coins renders this statistically insignificant. The English : Scottish ratio of 11 : 1 in the case of the later, single cross, issues is in line with the evidence from the many Scottish hoards of the period.

Mid-14th to early 16th century

The finds from this period comprise six Scottish silver groats and three halfgroats, ranging in date from 1367 to *c* 1500, and nine billon coins from the reigns of the first four Jameses (1424–1513). These may usefully be subjected to a general comparison with groups of coins from a similar period found during archaeological excavations and by detectorists elsewhere in Scotland.

The silver coins are rather more numerous than might have been expected, and may perhaps be divisible into two groups. From the last third of the 14th century (David II, Robert II and the heavy coinage of Robert III) come two groats and two halfgroats (N22–N25). These are of types which are found occasionally as single finds during excavations and as unassociated finds by detectorists, and which are of no great rarity within the general corpus of surviving Scottish medieval issues. The period 1424 to 1484 is represented by just one fragment of a James I 'fleur-de-lis' groat (N26), but the silver of James II and the early part of the reign of James III is rarely found outside hoards in any case. Of greater significance is the presence of three specimens of the class VI groats of James III (N32–N34) and one halfgroat of a rare variety from the early part of James IV's reign (N37). These may all be regarded as unusual finds, and their presence may indicate a period of unusual activity in the area, perhaps in the 1490s. (The James III groats all display some evidence of wear in circulation, while the halfgroat is in close to mint condition.)

Base metal coins comprise two billon pennies of James I (N27, N28), three of James II (N29–N31) and two of James III (N35, N36), together with two placks of James IV (N38, N39). The presence of the seven pennies – and particularly of those of James II, which have rarely been found outside a small group of hoards – clearly indicates the use of these low-value denominations for everyday transactions on Islay. Notable by their absence, however, are specimens of the copper coinage of the second half of the 15th century – the 'Crux Pellit' issues and the regal and 'ecclesiastical' farthings. These, especially the 'Crux Pellits', have been relatively common finds in all parts of Scotland since the 1980s , and there is no obvious explanation for their absence from Finlaggan, unless unfavourable soil conditions have prevented their survival.

It is notable that there are no examples of pennies of James IV. His early types are rare, but those of the second issue, the minting of which commenced around 1500, are extremely common, and the absence of these from a site which has produced so many earlier billon pennies suggests a decline in monetary activity

towards the end of the 15th century. The minting of James IV's placks, of which two were recovered at Finlaggan (N38, N39), commenced soon after the king's accession in 1488, but one of the two specimens has Roman lettering, which is not considered to have been introduced until the latter part of his reign.

Conclusions

Although Finlaggan has produced more medieval coins than any excavated site in Scotland in recent years, with the exception of Whithorn, the numbers are still not large in statistical terms. Some caution must therefore be exercised when using the evidence to draw conclusions about the nature and scale of human activity in the area. The following suggestions may be worth examining in the light of other forms of evidence.

First, finds of silver pennies and cut halfpennies are indicative of the use of coins as money in the 13th and earlier 14th centuries. The high purchasing power of individual coins will have ensured that, as elsewhere, the use of money will have been combined with a widespread system of credit and barter.

Second, the presence of groats and halfgroats from the late 14th and early 15th centuries suggests the continuation of a similar system during this period. In the middle decades of the 15th century the introduction of billon pennies allowed the use of money for smaller transactions, with the use of good silver coins in trade declining. Evidence from Scotland as a whole suggests that the latter were usually withdrawn from circulation and hoarded, as the price of silver rose.

Third, there is some suggestion of a change in the nature of human activity in the area at the end of the 15th century, perhaps around the 1490s. An influx of higher-value coins seems to have been accompanied by a cessation of the loss of small change.

Fourth, the latest coin found in the vicinity dates from around 1510 (plack N39). There are no James IV pennies of the type which formed the bulk of small change in circulation throughout the first half of the 16th century, and none of the extremely common base metal coins of the later 16th and 17th centuries. It is hard to imagine any settled presence in the area at that time without at least a few of these coins being lost.

Items of numismatic interest

Among the English long cross coins are two halfpennies cut from what appear to be contemporary imitation pennies (N8, N10). These appear to have been made largely in Westphalia and Frisia and exist in large numbers (North 1995), although few examples have so far been recorded from Scottish provenances. North records one reverse die (97) with the last two parts of the legend reading 'EON / kAN', as N8 here, this being an imitation of an issue of Willeme at Canterbury, but the two dies are not the same. The inscriptions on N10 are blundered.

N13 is one half of an Edward I penny which has been broken along the line of two of the cross arms. This may be a coincidence, but it may be an unofficial cut halfpenny. Cutting of single cross pennies was not an approved practice, since round halfpennies and farthings were also being struck as part of the same issue, but these fractions were made in comparatively small numbers, and cutting is known to have continued, although on a far smaller scale than previously. Also among the Edwardian coins is a continental imitation of a penny of London (N20).

The Scottish halfgroat of James IV (N37) belongs to a rare sub-variety which bears a five-pointed star to either side of the king's neck. The writer has examined five examples, all of which share the same reverse die. Two obverse dies are represented, with the Finlaggan specimen being linked with the two coins in the British Museum's collections. The second obverse is represented by Burns 2, fig 669, and a coin found during excavations at Whithorn in the early 1960s.

Catalogue of coins

England

N1 HENRY II – RICHARD I, CUT HALFPENNY, SHORT CROSS I–IVA, AIMER, LONDON (1180–1204/5)
19.0mm; 0.69g; die axis 3.0
Obv: [ ] CVSR / [ ]
Rev: + AIMER · [ ]
Abrasions on reverse; worn
SF 30012; sector 1
Not illustrated

N2 JOHN – HENRY III PENNY, SHORT CROSS VIC1, RAUF, BURY ST EDMUNDS (*c* 1215–17)
18.5 by 18.0mm; 1.41g; die axis 10.5
Obv: h [ENR] ICVSR / EX
Rev: + RAVF · ONSANTAD
Both sides slightly off-centre; moderate wear
SF 25101; [25004] iron pan
Not illustrated

N3 HENRY III PENNY, SHORT CROSS VIIB(A), HENRI, CANTERBURY (*c* 1222–36)
9.0 by 18.0mm; 1.21g; die axis 12.5
Obv: hENRICVSR / EX
Rev: [+] hENRIONCANT
Reverse slightly off-centre; slightly buckled; some flattening; moderate wear
SF 30014; sector 1
Not illustrated

N4 HENRY III PENNY, SHORT CROSS VIIB, RICARD, LONDON (1217–42)
16.0mm; 0.94g; die axis 10.5
Obv: hENRICVSR / EX
Rev: + RICARDONLVND
Fairly worn (abraded during cleaning)
SF 30007; sector 3
Not illustrated

N5 HENRY III PENNY, LONG CROSS 5B, WILLEM , CANTERBURY (1251–72)
18.5 by 18.0mm; 1.38g; die axis 3.0
Obv: hENRICVSREXIII
Rev: WIL / LE [M] / ONC / AN; ON ligatured
Some accretion; moderate wear
SF 30003; sector 2
Not illustrated

N6 HENRY III PENNY, LONG CROSS 5B–C, HENRI, LONDON (1251–72)
16.0 by 16.5mm; 1.00g; die axis 3.0
Obv: hE [NRIC] VSREXIII
Rev: hEN / RIO / [N] LV / DEI (?); EN ligatured
Fairly worn (abraded during cleaning)
SF 30002; sector C1
Not illustrated

N7 HENRY III PENNY, LONG CROSS 5(G?), WILLEM, CANTERBURY (1251–72)
19.0 by 18.0mm; 1.26g; die axis 11.0
Obv: hENRICVSREX / III; NR ligatured
Rev: WIL / LEM / ONC / ANT; EM, ON and AN ligatured
Slightly buckled; slightly uneven striking; moderate wear
SF 30030; sector C1
Not illustrated

N8 HENRY III CUT HALFPENNY, LONG CROSS 5, PROBABLY A CONTEMPORARY IMITATION, AS OF NICHOLE OR WILLEME, CANTERBURY (1251–72)
18.0mm; 0.85g; die axis 5.5
Obv: hE [ ]
Rev: [ ] / [ ] / EON / k [ ] N; first N reversed
Some flattening and light pitting; fairly worn
SF 30021; sector 1
Not illustrated

N9 HENRY III PENNY FRAGMENT, LONG CROSS; UNCERTAIN CLASS, MINT AND MONEYER (1247–72)
0.43g
Obv: illegible
Rev: illegible
About one quarter of coin; surface corrosion on obverse; worn
SF 18002; [18002] topsoil over ruins of gatehouse
Not illustrated

N10 CUT HALFPENNY, CONTEMPORARY IMITATION, LONG CROSS TYPE (*c* 1247–72)
18.0mm; 0.66g; die axis uncertain
Obv: EN [ ] EHC; second E reversed; crowned bust facing, without sceptre

Rev: blundered lettering
Slight wear
SF 30013; sector 1
Not illustrated

N11 EDWARD I PENNY, 3D, LONDON (*c* 1280–81)
18.5 by 19.0mm; 1.40g; die axis 9.5
Some surface corrosion; moderate wear
SF 30029; sector 2
Not illustrated

N12 EDWARD I PENNY, 7A, LONDON (1292–96)
18.0mm; 1.27g; die axis 4.0
Composite S; incurved letters; as SCBIN 304; Greenhalgh (1989), class 7vi
Some edge damage; slight to moderate wear
SF 30011; sector 2
Not illustrated

N13 HALF OF AN EDWARD I PENNY, 9B, LONDON (1299–1301)
16.5mm; 0.54g; die axis 9.0
? pot-hook Ns ; unbarred N on reverse
Broken roughly along line of cross arms – possibly an unofficial cut halfpenny. Slightly buckled; obverse very worn; reverse fairly worn
SF 15002; [15004] floor of building C; 14th century
Not illustrated

N14 EDWARD I PENNY, 10CF1, LONDON (*c* 1305–06)
18.0mm; 1.33g; die axis 8.0
Double-struck in both legends; mostly moderate wear
SF 30010; sector 2
Not illustrated

N15 EDWARD I PENNY, 10CF2A, DURHAM (*c* 1306–07)
17.5 by 16.5mm; 1.10g; die axis 8.5
Uneven striking; bent, fairly worn
SF 30024; sector 2
Not illustrated

N16 EDWARD I–II PENNY, 10CF3A1, LONDON (*c* 1307–09)
17.0 by 18.0mm; 1.32g; die axis 12.0
Slight flattening and surface corrosion; moderate wear
SF 30044; sector 4
Not illustrated

N17 EDWARD I–II PENNY, 10CF(3B?), LONDON (*c* 1307–09)
19.0mm; 1.27g; die axis 9.0
Folded over; much of obverse obscured; fairly worn
SF 25141; shallow water off Eilean Mór (sector 2?)
Not illustrated

N18 EDWARD II PENNY FRAGMENT, 11B2, DURHAM (*c* 1312–14)
17.5mm; 0.72g; die axis 1.5
Just over half of coin; buckled; worn
SF 30027; sector 2
Not illustrated

N19 EDWARD II PENNY, 11B3, DURHAM (*c* 1312–14)
18.0mm; 1.25g; die axis 2.0
As SCBIN 843
Mostly worn
SF 30001; sector 2
Not illustrated

N20 CONTEMPORARY IMITATION OF A PENNY OF EDWARD I, LONDON (*c* 1280 – 1300)
19.5 by 19.0mm; 0.95g; die axis 6.5/12.5
Obv: EDWR'A (?) . . .
Rev: CIVI / TAS / LON / DON; second N double-barred
Obverse double-struck at 180°; slightly cracked and buckled; slight to moderate wear
SF 30004; sector C1
Not illustrated

Scotland

N21 ALEXANDER III PENNY, SECOND COINAGE, MB2, 24 POINT REVERSE (1280–86+)
17.0 by 18.0mm; 1.05g; die axis 12.0
Much edge damage, with part of legendary circle folded back onto reverse side; slight to moderate wear
SF 30023; shallow water adjacent to settlement no. 38, Rudh' a' Chròcuin
Not illustrated

N22 DAVID II HALFGROAT, THIRD COINAGE (1367–71)
24.0 by 23.5mm; 1.80g; die axis 12.0
Obv: + DA [VID] · DEI · GRA · REX [·] SCO [TO] RVm; cross stops
Rev: +DnS / PROT / ECTOR / mEV [S] // VILL / AED / InBV / RGh
Slightly buckled; some surface corrosion; moderate wear
SF 25179; sector 1
Not illustrated

N23 ROBERT II GROAT, EDINBURGH (1371–90)
26.0 by 27.0mm; 2.92g; die axis 11.0
Obv: [+] ROBER [ ] RA [ ] SCOT [ ] Vm
Rev: + DnS : P / [ ] CTOR / [ ] LD / ATORmS // VILL / AED / InBV / RGh; stop is pellet over crescent
Chipped at 9.0–10.5 (obverse); some surface corrosion; probably moderate wear
SF 30045; sector 2
Not illustrated

N24 ROBERT II HALFGROAT, EDINBURGH (1371–90)
22.5 by 22.0 mm; 1.73g; die axis 8.0
Obv: [+ ROBE] RTVS · D [E] I · GRA [ ]; cross stops
Rev: + DnS / [ ] / [ ] / [ ] VS // VILL / [ ] D / InBV / RGh
Badly bent; some black accretion, especially on obverse; fairly worn
SF 14011; as [1039], found in 1998 encased in mortar, fallen from south wall of chapel
Finlaggan, Illus 9.34

N25 ROBERT III GROAT, HEAVY COINAGE, SECOND ISSUE, PERTH (1390–1403)
24.5mm; 2.23g; die axis 4.5
Obv: [ROBERTVS :] DEI : GRA : REX : SCOTTORVm; stops are double saltires / double crosses; seven-arc tressure; lis on cusps
Rev: + DnS [ ] P / TECTOR / Ms [ ] / ATORmS // VILL / ADE · / PER / Th; saltire ; saltire stop
Clipped; chipped; broken in two and repaired; fairly worn
SF 30028; sector 2
Not illustrated

N26 JAMES I GROAT FRAGMENT, FIRST VARIETY, EDINBURGH (1424–37)
0.98g; die axis 12.0
Obv: + I [ ] X · SCOTOR :; stops are lis and double cross; sceptre on dexter side
Rev: + D [nS] P : / TEC [ ] / [ ] / [ ] // VILL / A · E [ ] / [ ] / [ ] Gh :; stops are double saltire, double lis; lis in first and third angles; pellets, with point between, in second and fourth
About one third of coin; slightly abraded; moderate wear
SF 30006; sector 2
Not illustrated

N27 JAMES I BILLON PENNY FRAGMENT, GROUP B, EDINBURGH (1424–37)
0.37g; die axis 6.5
Obv: + IAC [ ] CIA [ ] R; cross to left of crown
Rev: [ ] / [ ] ED / InBV : / [ ]; double saltire stop
About one third of coin; some surface accretion; fairly worn
SF 30017; sector 2
Not illustrated

N28 JAMES I BILLON PENNY, UNCERTAIN GROUP, EDINBURGH (1424–37)
16.0mm; 0.83g; die axis uncertain
Obv: no detail survives
Rev: [ ] / [ ] ED / InBV / · [ ]; lis stop; no extra symbols in angles of cross
Obverse highly corroded; reverse fairly worn
SF 30008; sector 3
Not illustrated

N29 JAMES II BILLON PENNY, SECOND COINAGE, SECOND ISSUE, HOLMES TYPE BI, EDINBURGH (1451–60)
15.0 by 14.5mm; 0.55g; die axis 11.0
Obv: legend illegible
Rev: [VIL] / [LAE] / DIB / VIG; no extra ornaments in angles of cross
Reverse from same die as Burns 554 and 554a, Leith hoard 51, etc
Much damaged; worn and corroded
SF 30005; sector 3
Not illustrated

N30 JAMES II BILLON PENNY, SECOND COINAGE, SECOND ISSUE, UNCERTAIN TYPE, EDINBURGH (1451–60)
17.0 by 16.0mm; 0.60g; die axis uncertain
Obv: illegible
Rev: [VIL] / LAE / DInB / VR [G]; saltires between pellets in angles of cross
Bent; edge damaged; obverse extremely worn; reverse worn
SF 30009; sector 3
Not illustrated

N31 JAMES II BILLON PENNY, SECOND COINAGE, SECOND ISSUE, UNCERTAIN TYPE AND MINT (1451–60)
14.5mm; 0.77g; die axis uncertain
Obv: illegible; unclothed bust
Rev: illegible, apart from double saltire stop at beginning of one quarter; possibly saltires between pellets in angles of cross
Much surface corrosion; probably fairly worn
SF 30019; shallow water adjacent to settlement no. 38, Rudh' a' Chròcuin
Not illustrated

N32 JAMES III GROAT, CLASS VIE, EDINBURGH (*c* 1484–89)
24.5 by 24.0mm; 2.72g; die axis 3.5
Obv: · IACOBVS : DEI : GRACIA : REX : COTRV; initial mark is small cross (?); double annulet stops; annulet on inner circle in front of face
Rev: + DnSP . / : ROTCT / ORmET . / CRATO . // + VIL / · LAE : / · DIn : / · BVRG; stops are single and double annulets, except saltire before DIn; crowns in first and third angles of cross; annulet between pellets in second and fourth
Reverse from same die as Burns 45
Fairly worn
SF 6102; [6018] gravel spread
Not illustrated

N33 JAMES III GROAT, CLASS VIF, EDINBURGH (*c* 1484–89)
24.0 by 23.0mm; 2.08g; die axis 7.5
Obv: · IACOBVS : DEI : [GRA] CIA : REX : SCOT; initial mark is saltire; double annulet stops; annulet on inner circle behind head
Rev: + DnS [ ] P / RO : TEC / TO [ ] C (or E) / [ ] // + VII / IAE / DIn / BRVG; double annulet stop; annulet between pellets in first and third angles of cross; crowns in second and fourth
Uneven striking; clipped; slight pitting on obverse; moderate wear
SF 6053; [6018] gravel spread
Not illustrated

N34 JAMES III GROAT, CLASS VIG, EDINBURGH (*c* 1484–89)
25.0 by 25.5mm; 2.63g; die axis 8.0
Obv: + IACOBVS : DEI : GRACIA : TEX : COTR; double annulet stops; annulet on inner circle in front of neck
Rev: cross fleury DnSP / : ROTCT / : ORmET / ERATO . // cross fleury VIL / LAE / : DIn / · BRVG; single and double annulet stops, except saltire after ERATO; crowns in first and third angles of cross; annulet between pellets in second and fourth
Reverse slightly off-centre; moderate wear
SF 7310; [7027] floor of str V.1; 15th century
Not illustrated

N35 JAMES III BILLON PENNY, CLASS CVB (*c* 1475–82)
13.5mm; 0.38g; die axis 4.0
Obv: IAC [ ]
Rev: + VILL / [ ] / [ ] / VRGh
Corroded; moderate wear
SF 30015; sector 2
Not illustrated

N36 JAMES III BILLON PENNY, CLASS CIV–CV (*c* 1475–82)
13.0 by 14.0mm; 0.30g; die axis 7.0
Obv: illegible
Rev: [ ] / A · E [ ] / InB / [ ] Gh; saltire stop
Piece missing at 4.0–5.0 (obverse); corroded; probably only moderate wear
SF 30016; sector 2
Not illustrated

N37 JAMES IV HALFGROAT, LIGHT COINAGE, CLASS IIIA (*c* 1490–1500)
20.0 by 18.5mm; 1.02g; die axis 7.5
Obv: crown IACOBVS · DEI · GRA REX · SCOTTOR; five-pointed star to either side of neck
Rev: SALVV · / FAC · PO / PVLVV · / TVDnE // VILL · / AEI / InB / VRGE; five-pointed stars in first and third angles of cross; pellets in second and fourth
Reverse from same die as Burns 669
Small chip at 5.0–7.0 (obverse); slight double-striking on obverse; slight wear
SF 12329; [12000] spoil-heap
Not illustrated

N38 JAMES IV BILLON PLACK, TYPE IIF (1488–1513)
23.0 by 21.0mm; 1.21g; die axis 9.5
Buckled, chipped and cracked; much edge damage; some surface corrosion; moderate wear
SF 30022; sector 5 (adjacent to trench 18)
Not illustrated

N39 JAMES IV BILLON PLACK, TYPE IVB (1488–1513)
24.0mm; 1.50g; die axis 9.5
Chipped; slight flattening; moderate wear
SF 1099; [1007] gravel spread in burial ground
Not illustrated

Great Britain

N40 VICTORIA, BRONZE HALFPENNY (1862)
3.59g
Edge corroded; green patina; moderate wear
SF 21006; [21001] topsoil
Not illustrated

N41 VICTORIA, BRONZE HALFPENNY (1860–94)
4.19g
Much surface corrosion; degree of wear uncertain
SF 30018; shallow water adjacent to settlement no. 38, Rudh' a' Chròcuin
Not illustrated

N42 ELIZABETH II, ONE NEW PENNY (1979)
Not illustrated

N43 ELIZABETH II, FIVE PENCE (1990)
SF 30026; sector 2
Not illustrated

Other

N44 COPPER ALLOY DISC, OTHERWISE UNIDENTIFIABLE
22.0mm; 3.03g
Surfaces corroded; no details visible
SF 30020; shallow water adjacent to settlement no. 38, Rudh' a' Chròcuin
Not illustrated.

The copper alloy artefacts

There are 149 copper alloy artefacts listed in the catalogue in this chapter. A deliberately broad-brush approach has been taken to classifying them, despite the meticulous work of finds specialists displayed for other medieval assemblages like those from London, Winchester and Perth (Egan & Pritchard 1991; Biddle 1990; TFAC 2011). Although many of the Finlaggan finds can be compared with classified examples from these and other sites, this writer is hesitant about imposing too much certainty on function and dating just because these appear to have been established for objects from elsewhere. Many items like buckles may not have changed in form over very long periods of time, and although some may have been appropriate for particular functions, like fastening spurs, that does not limit the probability

that the same type of buckles were also used, for example, for fastening bags and dog collars.

The catalogue of copper alloy artefacts commences with brooches and progresses to list other items of jewellery and clothing accessories and fittings, especially buckles, several of which were not necessarily worn by humans (C1–C82). The assemblage includes an important group of artefacts that can be identified as fittings for dog collars and leashes (C83–C90), and a collection of mounts which appear likely to have come from caskets or book bindings (C91–C105). Some of the keys and locks (C106–C120) were probably for caskets or locking chests. Other finds (C121–C137), musical instrument pins, knife mounts, a mirror case, etc, include personal possessions and tools. There are fragments of bronze vessels (C138–C148), perhaps mostly for culinary use. Finally there is C149, a copper tube encased in baked clay for which it has not yet been possible to suggest a convincing use. Since almost all of these artefacts are depicted in Illus C4.1–20, it is hoped that they will provide a useful key to locating objects of a particular type, irrespective of the interpretations suggested for them here.

Unless otherwise stated in the catalogue descriptions, the copper alloy artefacts might all date within the period from the beginning of the 13th century to the end of the 15th century. In some cases it has been possible to suggest a narrower date band, either on the basis of the style and type of the artefact in question or else taking stratigraphic evidence into consideration.

Analysis of copper alloy artefacts

Helen Spencer

The aims of this study were to:

1. Investigate the technology of the production of copper alloy artefacts at Finlaggan and to see what alloys were used during this period.
2. To see if there were significant differences in the composition of objects made locally and those imported, and therefore learn more about the organisation of copper alloy production in the area around Finlaggan and of the extent of trade of copper alloy into the area.

Preliminary analysis of some copper alloy finds from the site was carried out in 1999 (Caldwell & Eremin, 1999). This analysis involved the non-destructive analytical survey by XRF of 40 copper alloy artefacts in order to obtain semi-quantitative compositions of their surfaces.

The preliminary results indicated that the assemblage was predominantly of copper–tin alloy – bronze. Artefacts were classified on typological grounds as to whether they were 'local' (14 artefacts) or 'foreign' (26 artefacts), and the analytical results were compared with these judgements. Both groups of 'local' and 'foreign' copper alloys appeared to be manufactured from a full suite of alloys, with gunmetals being a higher proportion of the local group. Gunmetal artefacts were probably derived from melting artefacts consisting of a range of zinc-rich and tin-rich copper alloys. Therefore the greater proportion of gunmetal in the local assemblage could indicate that the local production involved mainly melting down scrap metal to produce new artefacts on-site. The residues inside a crucible (SF 25446) from Eilean na Comhairle were analysed and found to contain copper, zinc, lead and tin, which suggests that it was used for mixed copper alloys.

Elemental analysis of medieval copper alloys

The main uses of elemental analysis have been to elucidate technological understanding of the metalworkers and to determine the source of the metal, and therefore infer trade routes and connections (Willett 1981). The composition of copper alloy objects may be characteristic of the period of manufacture, fabrication method and geographical location.

There has been surprisingly little work on the elemental analysis of copper alloys from the medieval period in Britain. Brownsword & Pitt (1983) and Brownsword & Ciuffini (1988) have analysed a large amount of non-ferrous medieval metalwork from England and Wales. Analysis has concentrated on groups of similar objects. For example, groups of mortars, weights and scales have been analysed (Brownsword & Pitt 1983), as have candlesticks from various sites across Britain (for example Brownsword & Ciuffini 1988).

Analyses of assemblages of copper alloy metal from Roman sites (eg Dungworth 1995) and Anglo-Saxon sites (Mortimer 1988) have been reported. However, there are few instances of analysis of a whole assemblage of copper alloy material from a single site in the medieval period. Blades (1995) carried out analysis of 1,300 copper alloy artefacts, using inductively coupled plasma atomic emission spectroscopy (ICP-AES), from a number of sites in England, with the specific aims of characterising the alloys in use for small finds from these sites. He examined differences in the alloy and trace element compositions in metals from the end of the Roman period to the later medieval period. Caple (1986) analysed medieval pins to understand the development of the technology and craft specialisation of copper alloy pin production in the medieval period.

Much of the current body of knowledge about medieval metalworking has been gleaned from historical and written sources such as customs accounts and braziers' wills (Blair & Blair 1991). While documentary evidence is substantial for some larger cities and ports such as London and Bristol, there is little documentary evidence recording the production and distribution of metal in Scotland during this period.

Medieval copper alloy production and distribution

The medieval period saw an expansion in the mining of metals in England and continental Europe and there was greater specialisation, with different alloy types being chosen to produce different artefacts. England was the principal source of tin throughout the medieval period in western Europe, and also produced large quantities of lead. However, copper and zinc were predominantly mined on the continent, although there is evidence that copper was mined in Cornwall, Yorkshire and Cumberland in the 13th century (Blair & Blair 1991). Calamine (zinc ore) was mined extensively at Aachen on the present-day German–Belgian border and copper was taken there for the brass to be produced, rather than the bulky calamine transported elsewhere for smelting (Blades 1995). It is thought that zinc ore was not mined in England until the reign of Elizabeth I (1558–1603), and it is believed that all brass was imported from Europe.

Documentary evidence records that both copper and zinc ores were imported into Britain, as well as metallic copper and brass (Blair & Blair 1991). Production of objects was on a workshop scale, with each workshop being versatile in its production of a range of objects. The later medieval period in England shows a greater proportion of gunmetal and brass being used than in the earlier Saxon period. Bronze was the most popular alloy, followed by brass and then gunmetal (Blair & Blair 1991). Geographical variation in the alloys across Britain is thought to be minimal (Blades 1995).

Properties of copper alloys

Combinations of different metals with copper produce alloys with different physical and mechanical properties. Additions of small amounts of tin, zinc and lead in particular can affect the strength, ductility and casting properties, as well as producing alloys of different colours. Therefore the choice of alloy composition was important when making copper alloy objects. The analysis may indicate whether conscious choices were made by metalworkers in the medieval period to produce different objects. In many cases the raw material may not have been available in order for the optimum alloy to be produced.

Copper–tin alloys (bronze)

General-purpose bronzes were widely used (3–10% Sn). An addition of up to 10% tin produces an alloy with superior casting properties to pure copper. But at greater than 10%, the alloy is unsuitable for wrought working. The colour of the alloy also changes with varying tin content, from red-brown at low tin levels to whitish at high tin levels (>20%).

SF no.	Object type	Fe	Co	Ni	Cu	Zn	As	Pb	Ag	Sn	Sb
1035	Buckle	12.16	0.08	0.02	44.53	3.27	0.00	19.73	0.50	18.55	1.16
1058	Needle	0.64	0.00	0.02	85.46	2.46	0.00	1.81	0.31	8.95	0.34
1082	Buckle	1.77	0.00	0.02	93.11	1.46	0.00	3.01	0.08	0.49	0.06
3003	Vessel leg	3.04	0.05	0.00	53.94	1.43	1.55	5.22	1.22	32.77	0.78
7272	Musical instrument peg	0.73	0.01	0.04	5.61	0.03	0.00	66.08	0.96	20.39	6.15
7316	Brooch	2.54	0.00	0.01	83.66	3.09	0.12	4.18	0.17	6.16	0.06
8025	Buckle	0.09	0.00	0.02	92.02	1.10	0.41	1.72	0.35	4.26	0.02
8027	Brooch	1.93	0.04	0.00	60.31	6.89	0.00	5.71	12.31	12.44	0.37
8285	Mount	3.49	0.02	0.19	81.19	6.32	0.71	7.49	0.15	0.26	0.18
8328	Casket key	1.34	0.00	0.00	53.13	2.56	0.04	4.60	1.22	36.05	1.05
8423	Tag end	1.43	0.00	0.00	59.50	3.28	0.67	3.60	1.04	30.02	0.46
8512	Buckle	4.09	0.01	0.02	78.60	6.03	0.00	9.09	0.33	1.66	0.18
8521	Buckle	4.61	0.00	0.24	71.21	5.22	1.65	9.77	0.89	5.59	0.82
8523	Strip	3.38	0.00	0.01	79.77	1.56	0.24	1.76	0.34	12.05	0.88
8524	Mirror or seal case	4.18	0.00	0.09	80.01	4.51	0.03	10.41	0.21	0.33	0.20
12076	Vessel sherd	4.42	0.00	0.13	44.80	0.76	0.00	18.69	0.53	18.26	12.41
12134	Buckle	0.58	0.00	0.10	89.67	7.11	0.00	2.18	0.04	0.28	0.03
12146	Buckle	11.37	0.02	0.02	65.02	5.44	0.00	4.44	0.68	12.94	0.07
12282	Casket key	4.98	0.01	0.05	20.33	2.56	2.50	38.36	0.67	27.50	3.05
12390	Vessel foot	1.67	0.01	0.03	24.88	0.76	0.63	24.82	0.44	45.97	0.80
12445	Buckle-plate	2.11	0.00	0.00	80.55	3.06	0.35	1.47	0.37	12.10	0.00
16043	Sheet-metal scrap	4.71	0.00	0.06	79.74	6.92	0.94	7.18	0.05	0.38	0.03
16053	Barrel padlock	0.23	0.01	0.00	80.91	4.69	1.92	3.98	0.16	7.67	0.44
18132	Dress or hair pin	12.24	0.00	0.01	58.04	0.54	1.76	13.76	0.18	13.08	0.40
19331	Ring	21.05	0.06	0.01	25.99	0.58	2.49	12.36	1.04	34.82	1.62
19359	Buckle	10.43	0.04	0.02	62.75	5.92	0.00	14.23	1.36	5.15	0.09
23023	Dress or hair pin	3.18	0.00	0.02	57.81	1.32	0.00	5.27	0.45	31.13	0.82
24009	Buckle-plate	0.68	0.00	0.08	84.03	3.86	0.75	1.03	0.29	8.76	0.50
25094	Sheet-metal scrap	8.64	0.04	0.42	76.87	0.91	2.30	1.31	0.33	8.98	0.20
25106	Sheet-metal scrap	2.32	0.00	0.03	87.82	0.76	0.39	2.05	0.13	6.14	0.34
25108	Link	40.64	0.28	0.00	48.95	0.40	0.01	4.04	0.06	5.41	0.21
25111	Sheet-metal scrap	5.26	0.01	0.00	73.35	6.35	2.33	4.35	0.30	7.48	0.57
25113	Sheet-metal scrap	60.45	0.36	0.00	19.98	0.93	0.65	4.43	0.56	12.27	0.36
25117	Musical instrument peg	0.88	0.00	0.00	89.83	2.26	0.15	0.94	0.05	5.67	0.21
25123	Hinge pin	28.19	0.11	0.00	51.32	1.24	0.22	4.58	0.12	13.87	0.36
25127	Weight?	59.05	0.29	0.01	12.62	1.36	0.02	5.93	0.08	20.47	0.17
25128	Crucifix	24.98	0.05	0.00	38.24	5.59	0.00	10.49	0.37	19.23	1.05
25131	Casket key	24.75	0.09	0.00	32.28	2.71	0.00	17.80	0.26	21.75	0.38
25134	Sheet-metal scrap	23.41	0.12	0.00	62.68	0.27	1.02	3.40	0.15	8.62	0.35
25135	Staple	34.67	0.24	0.01	44.21	2.69	1.83	5.97	0.63	9.20	0.56
25136	Key	38.49	0.14	0.00	50.25	2.40	0.00	2.04	0.09	6.38	0.22
25137	Sheet-metal scrap	3.68	0.01	0.01	84.81	0.31	0.88	1.69	0.12	8.24	0.25
25152	Strap end	45.32	0.11	0.00	41.47	3.72	0.00	2.53	0.19	6.47	0.21
25154	Barrel padlock key	99.38	0.54	0.00	0.05	0.02	0.00	0.00	0.01	0.01	0.00
25157	Ring	21.02	0.12	0.00	32.65	0.22	0.16	1.56	0.28	43.51	0.48
25166	Sheet-metal scrap	57.16	0.32	0.00	30.24	2.18	0.96	3.05	0.23	5.40	0.47
25168	Sheet-metal mount	0.40	0.00	0.03	91.30	0.66	0.59	0.69	0.11	5.93	0.29
25169	Wire brooch	19.51	0.17	0.12	73.35	1.52	0.00	0.41	0.10	4.74	0.11
25173	Sherd of cast metal pot	48.75	0.14	0.00	18.63	0.10	0.00	21.12	0.08	10.86	0.31
25174	Buckle	9.06	0.00	0.02	49.59	0.43	0.05	9.22	0.22	30.87	0.52
25177	Sheet-metal scrap	18.77	0.05	0.05	32.20	0.09	0.83	19.40	0.19	27.76	0.66
25180	Strap holder	9.39	0.03	0.01	63.27	2.95	0.00	12.43	0.22	11.47	0.23
25183	Sheet-metal mount	0.03	0.00	0.01	99.34	0.00	0.23	0.07	0.16	0.01	0.16
30036	Buckle-plate	34.08	0.00	0.00	46.49	0.50	1.72	4.14	0.27	12.11	0.48
30039	Knife pommel	5.19	0.00	0.00	94.76	0.00	0.01	0.02	0.00	0.00	0.01
30075	Mount	33.80	0.19	0.00	48.03	6.58	1.03	5.28	0.08	4.61	0.40
30085	Rolled sheet	16.49	0.00	0.00	69.43	9.02	0.04	1.22	0.20	3.46	0.06
30096	Heraldic harness mount	2.67	0.00	0.04	94.53	0.52	0.00	1.61	0.17	0.03	0.45
30101	Buckle	7.81	0.04	0.00	70.33	4.56	0.44	9.46	0.11	7.00	0.26
30103	Sheet-metal mount	19.66	0.00	0.00	59.38	0.11	1.60	3.98	0.06	14.96	0.25
30113	Sheet-metal scrap	0.28	0.00	0.08	91.75	2.97	0.66	0.26	0.13	3.64	0.23
30114	Barrel padlock	52.21	0.27	0.00	41.61	1.62	0.00	2.36	0.02	1.84	0.07
30116	Sheet-metal scrap	0.33	0.00	0.00	94.05	0.00	0.96	0.86	0.08	3.42	0.30
30117	Sheet-metal mount	8.38	0.04	0.00	56.03	1.75	0.01	1.50	1.05	30.01	1.22
30118	Mount	38.25	0.00	0.00	52.33	0.04	0.97	2.39	0.13	5.48	0.42
30119	Knife pommel	29.60	0.00	0.00	61.08	3.71	0.34	4.31	0.06	0.88	0.03
30120	Vessel foot	26.03	0.05	0.19	24.84	4.48	0.00	37.87	0.04	5.09	1.40
30122	Mount, cross-shaped	36.10	0.00	0.03	55.02	2.81	0.82	1.07	0.93	3.22	0.00
30123	Strap clasp	24.84	0.06	0.00	49.20	2.00	0.00	11.18	0.20	11.85	0.68
30124	Musical instrument peg	6.62	0.05	0.02	82.70	2.06	0.91	1.19	0.39	5.53	0.53

Table C4.1
XRF analysis of copper alloy artefacts – raw data (percentages)

SF no.	Object type	Fe	Co	Ni	Cu	Zn	As	Pb	Ag	Sn	Sb
30126	Vessel leg	17.95	0.05	0.00	48.07	0.26	0.00	21.33	0.10	11.73	0.51
30128	Buckle	24.97	0.17	0.01	50.62	0.72	1.71	12.40	0.17	8.98	0.27
30130	Key	3.32	0.03	0.00	70.67	5.38	0.00	14.72	0.10	5.51	0.28
30131	Buckle	42.04	0.00	0.00	29.64	4.23	2.31	15.27	0.08	6.11	0.33
30132	Sheet-metal scrap	7.01	0.00	0.01	78.27	2.38	0.00	3.48	0.06	8.57	0.23
30133	Strap end	32.08	0.00	0.04	48.26	2.40	1.93	6.37	0.16	8.36	0.39
30134	Buckle	9.35	0.03	0.02	79.31	6.57	0.00	4.46	0.07	0.17	0.02
30136	Casket key	54.30	0.33	0.00	32.23	0.93	1.39	1.01	0.64	9.07	0.09
30145	Vessel leg	16.07	0.12	0.01	47.13	3.01	4.36	19.26	0.16	9.28	0.60
30148	Mount	24.14	0.00	0.00	50.72	0.70	1.81	7.31	0.30	14.31	0.72
30150	Stud	3.45	0.03	0.01	28.26	1.06	0.16	1.77	0.07	65.18	0.02
30153	Sheet-metal mount	9.14	0.05	0.10	75.30	9.61	0.00	2.25	0.04	3.50	0.03
30154	Buckle	40.39	0.06	0.00	34.27	7.46	0.33	5.66	0.10	11.30	0.43
30156	Mount	25.81	0.00	0.04	49.14	1.98	3.26	3.44	0.12	15.84	0.37
30157	Sheet-metal mount	0.65	0.00	0.00	70.14	1.89	0.12	0.46	0.27	25.49	0.99
30159	Sheet-metal mount	27.13	0.07	0.00	25.32	1.52	0.00	5.05	0.13	40.39	0.39
30161	Dog collar mount	0.20	0.01	0.00	92.68	1.71	0.02	0.60	0.07	4.47	0.23
30169	Dress or hair pin, head	1.19	0.00	0.01	37.87	0.10	0.01	0.91	0.04	59.77	0.10
30170	Lead scrap	3.44	0.00	0.03	0.56	0.04	0.06	73.09	0.06	22.70	0.01
30171	Sheet-metal scrap	1.69	0.00	0.04	0.48	0.00	0.00	97.33	0.07	0.35	0.03
30171	Sheet-metal scrap	11.03	0.00	0.03	74.84	0.43	0.17	1.99	0.24	10.87	0.40
30171	Sheet-metal scrap	46.56	0.00	0.00	41.35	1.56	0.04	3.97	0.15	5.80	0.56
30171	Sheet-metal scrap	14.72	0.00	0.02	64.44	2.94	1.37	5.20	0.18	10.58	0.54
30171	Sheet-metal scrap	76.92	0.00	0.00	12.15	0.64	0.12	2.71	0.11	7.17	0.17
30171	Sheet-metal scrap	3.92	0.00	0.03	80.96	10.67	0.00	1.75	0.11	2.51	0.04
30171	Sheet-metal scrap	43.95	0.00	0.01	43.25	6.52	0.77	0.69	0.34	4.47	0.01
30172	Washer	21.71	0.00	0.01	52.09	4.23	0.00	14.27	0.13	7.20	0.36
30173	Waste, lump	45.43	0.22	0.00	39.61	4.14	0.00	5.70	0.19	4.25	0.45
30173	Sheet-metal scrap	31.53	0.17	0.00	53.91	4.39	0.00	2.06	0.27	7.33	0.33
30174	Sheet-metal scrap	36.05	0.15	0.00	51.01	5.44	0.03	1.48	0.18	5.43	0.24
30174	Sheet-metal scrap	6.84	0.02	0.00	81.64	2.92	0.20	1.66	0.18	6.01	0.53
30174	Sheet-metal scrap	35.33	0.18	0.02	53.75	1.28	0.00	1.87	0.10	7.24	0.24
30174	Sheet-metal scrap	25.33	0.09	0.00	56.35	4.90	0.10	6.05	0.17	6.66	0.34
30174	Sheet-metal scrap	7.61	0.03	0.01	76.12	9.79	0.00	1.05	0.11	5.02	0.26
30175	Sheet-metal scrap	38.82	0.24	0.00	46.61	4.94	0.05	2.94	0.13	5.91	0.36
30175	Sheet-metal scrap	30.20	0.12	0.00	56.23	0.99	0.00	1.70	0.27	10.22	0.26
30175	Sheet-metal scrap	19.85	0.07	0.00	67.54	3.09	0.08	2.82	0.36	5.78	0.41
30175	Sheet-metal scrap	37.60	0.20	0.00	46.00	3.57	0.00	4.08	0.16	8.31	0.08
30176	Sheet-metal scrap	12.19	0.05	0.00	77.71	2.56	0.15	1.70	0.16	5.12	0.36
30176	Sheet-metal scrap	52.66	0.29	0.00	40.92	0.54	0.04	1.73	0.11	3.35	0.36
30177	Mount/washer	0.05	0.00	0.03	99.17	0.38	0.02	0.28	0.05	0.00	0.02
30178	Sheet-metal scrap	12.92	0.08	0.00	73.66	0.04	0.71	2.83	0.11	9.39	0.27
30179	Sheet-metal scrap	18.17	0.14	0.02	66.73	0.52	1.11	3.76	0.11	9.08	0.37
30180	Sheet-metal scrap	10.68	0.04	0.06	64.68	0.49	1.72	3.40	0.12	18.43	0.38
30181	Waste, lump	28.87	0.00	0.02	27.09	0.10	0.29	32.53	0.13	10.40	0.48
30181	Sheet rivet	66.02	0.00	0.00	24.57	0.29	0.34	1.93	0.09	6.17	0.22
30181	Strip	16.34	0.00	0.00	75.01	2.68	0.29	0.65	0.18	4.51	0.18
30183	Sheet-metal scrap	11.30	0.09	0.00	52.05	0.65	0.78	5.16	0.36	28.26	1.36
30184	Sheet-metal scrap	5.10	0.04	0.00	85.72	0.64	0.02	1.10	0.19	6.84	0.36
30185	Waste, lump	58.28	0.19	0.00	33.41	2.72	0.00	0.64	0.05	4.68	0.04
30186	Waste, lump	13.66	0.03	0.00	64.42	1.48	0.03	4.59	0.17	14.98	0.64
30187	Sheet-metal scrap	21.82	0.06	0.00	58.56	7.15	0.00	4.97	0.14	6.96	0.34
30188	Stud	8.37	0.05	0.05	89.07	0.13	0.66	0.95	0.28	0.01	0.43
30189	Sheet-metal scrap	27.09	1.74	1.66	0.62	0.62	0.79	4.58	0.00	62.89	0.02
30190	Link	3.53	0.03	4.42	0.62	0.11	0.00	90.86	0.42	0.00	0.00
30191	Sheet-metal scrap	21.49	0.13	0.00	64.27	2.49	0.75	3.04	0.22	7.25	0.37
30192	Sheet-metal scrap	0.19	0.00	0.00	93.04	2.76	0.67	0.47	0.13	2.70	0.04
30193	Sheet-metal scrap	25.48	0.17	0.00	49.46	6.75	0.00	3.52	0.16	14.27	0.21
30194	Sheet-metal scrap	22.27	0.12	0.00	61.89	0.11	1.28	3.60	0.12	10.41	0.23
30195	Sheet-metal scrap	10.00	0.05	0.00	77.11	0.61	0.57	1.97	0.09	9.33	0.27
30196	Sheet-metal scrap	45.59	0.13	0.02	18.59	0.06	0.73	10.54	0.07	23.91	0.36
30197	Buckle	3.09	0.00	0.01	57.15	2.07	0.72	0.38	0.05	36.19	0.00
30198	Sheet-metal scrap	27.52	0.24	0.00	16.47	0.75	0.03	0.51	0.70	50.18	3.60
30199	Handle	36.33	0.08	0.00	35.63	2.23	0.11	1.03	0.35	22.72	1.23
30200	Buckle	5.60	0.02	0.00	82.85	7.12	0.03	1.54	0.12	2.51	0.21
30213	Mount	37.97	0.00	0.00	32.10	1.75	0.58	5.54	17.17	4.76	0.12
31017	Dog collar mount	0.28	0.00	0.02	84.58	10.37	0.01	0.71	0.07	3.71	0.24
31018	Dog collar mount	0.34	0.00	0.00	81.93	12.21	0.00	0.87	0.08	4.49	0.08
31043	Clasp	2.50	0.00	0.02	78.47	0.02	0.06	0.03	0.01	18.89	0.00

Table C4.1 (cont.)
XRF analysis of copper alloy artefacts – raw data (percentages)

Copper–zinc alloys (brass)

These alloys are good for cast and wrought work and produce a yellowish metal which is more ductile and malleable than bronze. Brasses of this period contained up to 30% zinc and were used for wrought items (such as pins and wire) and small cast items (such as handles and buckles).

Copper–tin–zinc alloys (gunmetal)

These are known as gunmetals by analogy with the modern equivalent and are suitable for general-purpose casting as well as wrought working.

Leaded alloys

When lead is added to any of the above alloys it will improve their casting properties, as it makes the alloy more fluid and lowers its melting point. Heavily leaded bronze was common for large cast vessels such as mortars, ewers and cauldrons.

X-ray fluorescence method

Analyses were carried out in three different areas on the surface of each object. The average of these three analyses was taken. The analysed area was irradiated with a primary X-ray beam produced by a rhodium target X-ray tube. The primary beam was collimated to give an area of about 4 by 2mm. Secondary X-rays were detected with a silicon (lithium) solid state detector. The detection limit varied depending on the elements, matrix and analytical conditions, but was typically in the range of 0.05–0.2%.

We employed an Oxford Instruments ED2000 energy-dispersive XRF system running XpertEase V2.42 software. A rhodium primary X-ray tube was used, and the results were quantified using the 'copper alloy 98' method. The primary beam was an area of about 4 by 2mm. Secondary X-rays were detected with a silicon-lithium detector. Spectrums were collected under two conditions with the copper alloy 98 method. The first condition was 35kV with a thin rhodium filter and then 50kV with a thick copper filter to ensure maximum detection and sensitivity for elements of interest in copper alloys. The elements that were measured were iron, nickel, copper, zinc, arsenic, and lead, silver, tin and antimony . The copper alloy 98 method is not optimised for lead alloys, and the accuracy of the results for the composition of the lead particularly is uncertain at high lead levels, as none of the standards available had high lead contents. Standards were repeatedly analysed throughout the analysis work to ensure that the data was comparable.

Abrasion of a small number of objects was agreed with the curator to provide a more accurate measure of the original composition of the alloy. The area to be abraded was analysed first so a direct comparison could be made. A small area, approximately 4 by 4mm, was abraded with sandpaper and polished with carborundum paper to achieve a smooth surface for analysis. The abraded area was then analysed.

Problems with analysis

The majority of the analyses were carried out on the surface of the artefacts. Due to the timetable, some of these artefacts had been mechanically cleaned prior to analysis while others had not. The extent of corrosion on the surface of the object can affect the element composition. The corrosion layer has a different composition to the metal, and the depth of penetration of the primary X-ray beam is thin. A number of objects have particularly high iron levels on their surfaces. This is primarily from the burial environment and the corrosion layers.

The degree of corrosion affecting an object can influence the XRF results greatly. In addition to the increase of iron in corrosion layers, the iron content of the surface of the object may be increased due to permeation from surrounding groundwater. The increase in surface iron concentration is greatest where corroding iron objects are also present in the burial environment (Blades 1995). Iron can be found in copper alloys in concentrations greater than 1% due to its introduction into the smelting process as iron oxide, sometimes added to the furnace as a fluxing material. However, there are a large number of analyses that show iron to be present at over 5%, in some cases as high as 50%. From the normalised data only the broad alloy type is indicated.

Corrosion phenomena can alter the surface composition of copper alloy objects. A study by Dungworth (1995) looked at the composition of copper alloy finds and the composition change as the corrosion products were removed. It was found that the surface of objects that had not been cleaned was depleted in zinc and tin compared with the composition of the alloy once corrosion products were removed. Dorigo et al (1998) studied the corrosion composition of three Roman copper alloy artefacts by scanning electron microscopy (SEM) and energy-dispersive X-ray spectroscopy (EDSX) . Decuprification of copper–tin alloys was shown to increase the concentration of tin on the surface of the corroded objects (Dorigo et al 1998). The corrosion process also resulted in an enrichment of lead compounds in the corrosion surface.

A further corrosion phenomenon is dezincification of brasses, which is common in brasses with a zinc content of greater than 15% (Weisser 1975). It is also possible to get redeposition of copper on the surface.

Most of the surface area being analysed was uneven, and this means that the incident angle of the X-rays was not always constant (Tate 1986). This makes the results obtained less accurate.

Results

The raw data is displayed in Table C4.1.

The greatest problem with these results is the high level of iron present on the surface of many of the objects. Nearly half the objects have over 5% iron present on the surface. The higher the level of iron, the more difficult it becomes to discuss the results. The high level of iron disguises the true content of the other elements present. Therefore in the detailed discussion of the results all the objects with surface iron contents over 10% have been discounted, as the data cannot be used to reach meaningful conclusions. Thus only general observations can be made. Little can be said about the minor element compositions, as the majority of the objects are too corroded for meaningful judgements to be made.

Abrading the surface of a number of other artefacts would have produced more accurate data. The objects that were of particular interest were the cast metal vessel fragments, the buckles, the keys and the pins. In consultation with the curator it was decided that it was not acceptable to abrade any of the buckles and pins, as they were thin and fragile. It is possible that some may be required for display at a later date and an abraded area would be highly visible on the small objects. It was, however, possible to select a number of the pieces of sheet metal scrap for abrading, along with the more substantial vessel fragments which were of particular interest.

The objects were divided into different types on the basis of manufacture. The copper alloy sheet metal was generally produced from low tin bronze. A typical composition is approximately 90% copper and 5% tin, with the rest of the alloy being made up of impurities (or high iron contamination on the surface). Most of the sheet fragments contain very little lead (<2%). The presence of lead in sheet metal would make it brittle and difficult to hammer.

The contents of copper/tin, copper/zinc and copper/lead for the sheet metal and the cast buckles can be compared (Illus C4.1–3).

The majority of the small copper alloy objects were produced from a mixed copper–tin–lead alloy termed gunmetal. The concentrations of each of these three metals vary greatly. Most buckles are made from gunmetal, many with over 10% lead and over 5% zinc. All the buckles would have been made by casting. Bronze and gunmetal are popular choices for the

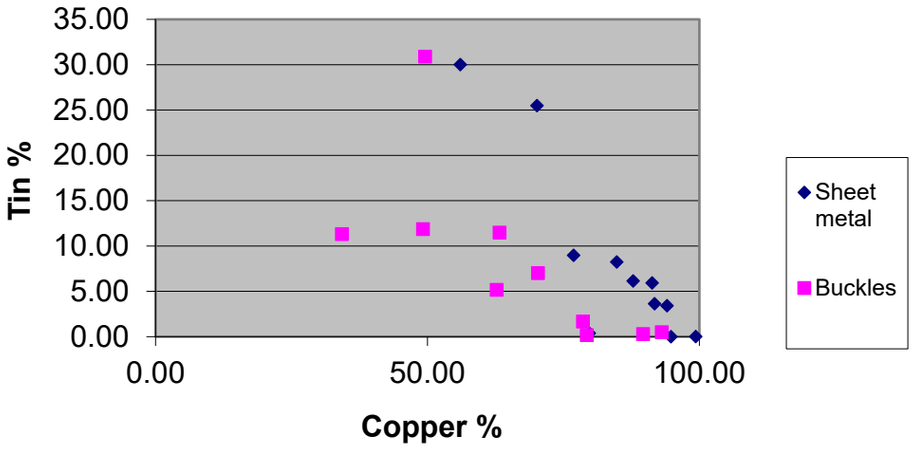


Illustration C4.1
Comparison of copper and tin content of sheet metal and buckles

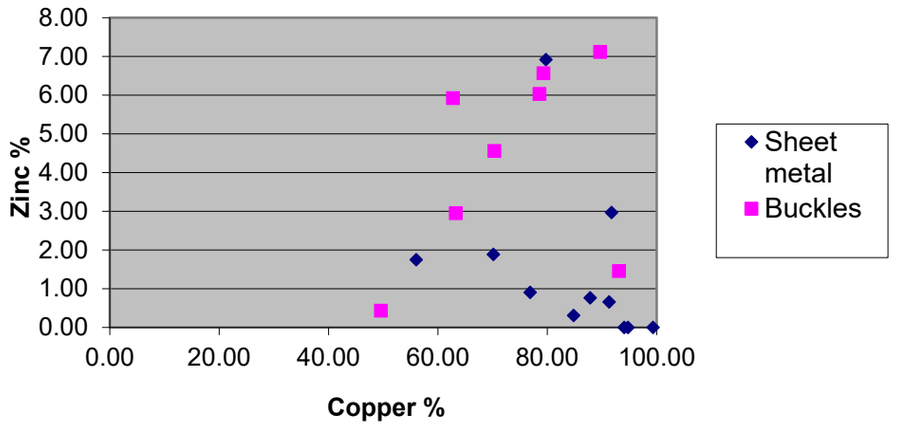


Illustration C4.2
Comparison of copper and zinc content of sheet metal and buckles

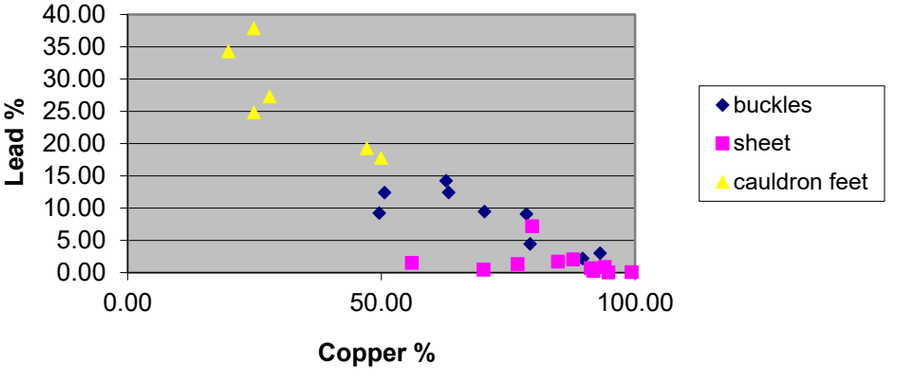


Illustration C4.3
Comparison of copper and lead content of sheet metal and buckles

manufacture of small cast objects, as lead lowers the melting point and makes the metal more viscous for casting. Gunmetal was also likely to result from the recycling of metal. The desired appearance and colour of the objects may have been a factor in the choice of alloy for many of the small cast objects such as buckles and brooches.

Six keys were analysed, C106–C109, C111, C112 (SF 8328, 12282, 25131, 25136, 30130, 30136). C112 had a surface iron content of over 50%, so the data only determines broad alloy composition. The other five keys were produced from gunmetal. Three of them were heavily leaded. They would have been produced by casting.

Whether an object is to be cast, wrought or hammered affects the choice of alloy. For instance, wrought worked alloys such as wires and sheets are usually made from unleaded alloys (<4% Pb).

Three dress pins (SF 18132, 23023, 30169) and one needle (SF 1058) were analysed. Two of the pins had a surface iron concentration of over 10%. All three pins were produced from leaded bronze. Brass is known to have been particularly popular in the medieval period for producing wire and pins, as it has excellent ductile properties, superior to those of bronzes (Caple 1995). However, none of the pins or wire objects analysed from Finlaggan have over 2% zinc. It is likely that these pins were not made in a specialist workshop.

A number of objects had very high tin contents on the surface. The globular head of a dress or hair pin (SF 30169) had a surface tin content of 59.77%. There was little iron present on the surface. It looks like it was tinned for decorative purposes. A ring (SF 19331) also had a high tin content, and the visible appearance of the surface supports the suggestion that the surface was deliberately tinned. However, high tin levels on the surface can occur for different reasons, such as deliberate tinning of the surface, enrichment caused by corrosion processes or 'tin sweat' on cast low-tin objects (Meeks 1993). Therefore, a fuller characterisation of the surfaces of these objects is necessary for them to be confirmed as being deliberately tinned.

The five vessel legs/feet analysed were all made from gunmetal and contain copper, zinc, tin and lead, with a high percentage of lead (19–37% Pb). Larger cast objects are generally made from leaded alloys, particularly leaded bronze (Blades 1995), as lead decreases the melting point of the alloy and increases its fluidity. However, a lead content of higher than 20% does not improve these qualities and can produce poor-quality brittle metal. Lead was a relatively cheap alloy, and it is thought that it was added in greater quantities because of its cheapness compared to tin, copper and zinc.

Object	Fe	Ni	Cu	Zn	As	Pb	Ag	Sn	Sb
Vessel foot 1 *before abrasion*	36.3	n.d.	36.5	2.4	1.8	13.8	0.1	8.8	0.5
Vessel foot 1 *abraded*	0.6	n.d.	83.4	2.9	n.d.	7.4	0.1	4.9	0.4
Vessel foot 2 *before abrasion*	41.7	n.d.	14	3	2	26.6	n.d.	11.2	0.9
Vessel foot 2 *abraded*	1.5	0.2	82.4	3.4	n.d.	6.3	0.1	4.8	1.1
Vessel foot 3 *before abrasion*	1.8	0.1	20.3	0.4	2	25.9	0.4	48.7	0.6
Vessel foot 3 *abraded*	0.8	0.1	28.7	0.7	n.d.	24.5	0.2	44	0.8

Table C4.2
XRF analyses of three cauldron feet, before and after abrasion (percentages)

Two vessel body sherds which were analysed have noticeably different compositions from the legs/feet (Illus C4.3). The legs are made from gunmetal while the bowl fragments are made from a heavily leaded bronze. One of the legs has a particularly high tin (45%) content. The body sherds also show high antimony levels. One piece has an average antimony level of 11.26%. The XRF program is not calibrated for such high levels of antimony and so is likely to be inaccurate; however, a number of late or post-medieval artefacts analysed by Blades (1995: 136) were found to have up to 13% antimony. The lead content of these artefacts was also high, typically 15–30%. This is similar to the composition of the body sherds. The high levels of lead and antimony make the alloy weak and brittle and unsuitable for wrought fabrication. However, this alloy, while unsuitable for many purposes, would have been able to be used as a relatively cheap casting alloy for producing items such as cooking vessels.

Analysis by Lewis et al (1987) of a collection of cauldrons and skillets from the Nant Col hoard, a medieval hoard of metal from Wales, showed similar composition to these cauldron bowl fragments. It is not reported which parts of the cauldron were analysed. However, broad similarities were that they were leaded bronzes with low nickel and zinc contents and a high antimony content. Lewis et al used these compositions to date the cauldrons. After analysing a large number of cooking pots and other domestic vessels, they determined a trend in the composition of leaded bronzes. Domestic vessels of the 14th century were characterised by a relatively high tin content (5–10%), a low nickel content (<0.1%) and a low antimony content (<1%). Later vessels from the 16th and 17th centuries had lower tin contents (1–5%), higher nickel content (0.4–0.8%) and higher antimony content (2–5%). Leaded bronzes from the 15th century tend to lie between these two compositions. It was also hypothesised that objects with a higher zinc content were produced on the continent rather than in Britain, due to no documented zinc mining in Britain before the late 16th century (Lewis et al 1987).

Using these criteria it was hypothesised that the cauldrons from the Nant Col hoard were of a 15th-century date as they were of an intermediate composition. The vessel fragments from Finlaggan also appear to be an intermediate composition, with low nickel and zinc but higher concentration of antimony. Following the criteria set by Lewis et al (1987), this would also suggest a 15th-century date for them.

It has been suggested that the ores which produced metal with high levels of antimony came from the smelting of fahlerz ores, which are rich in antimony and arsenic (Blair 1996). Werner (1977) showed from documentary evidence that in the 14th and 15th centuries copper produced from the Harz region in Germany was rich in arsenic and antimony impurities, as the purer copper ores had been depleted. This made the ores more difficult to smelt and produced poor-quality copper containing large amounts of antimony, arsenic and nickel impurities. Analysis of medieval artefacts from all over Europe has shown that these impurities are present in many artefacts that are dated later than the 14th century (Werner 1977). Therefore it is suggested that high levels of arsenic, antimony and nickel in the same artefacts are probably indicative of a German origin for the copper ore (Blades 1995: 137). Brownsword (1991) has suggested that high antimony/arsenic alloys could have resulted from the use of antimonial sulphide ores found in Cornwall and Devon, although no such evidence of mining in this area at this time has been found. Dungworth and Nicholas (2004) highlighted the 'distinctive nature' of an antimony-rich leaded copper alloy used to cast medieval and post-medieval cauldron fragments from England. They attribute this to the use of fahlerz ores which were smelted and liquated to provide primarily silver, with the by-products being suitable to produce cast cauldrons.

A further suggestion for the production of high antimony alloys is that copper was alloyed with speiss, a by-product of smelting lead-copper zinc ores (Werner 1977). This was recycled and reprocessed to extract useful metals, but Dungworth and Nicholas (2004) argue that the levels of cobalt and nickel in the cauldron fragments they analysed are not high enough for the ore to be from this source.

It is interesting that the compositions of the vessel legs and bowl sherds from Finlaggan are very different. In the analysis of cauldrons from the Nant Col hoard, no mention is made of any difference in the composition between the legs and the bowl, although Lewis et al (1987) do not state where on the cauldrons the analyses were carried out. Three of the vessel feet (SF 30145, 30120, 12390) were abraded to reveal fresh metal, and as expected the composition of the feet changed as the corrosion surface was removed (Table C4.2). The proportion of iron dropped and the proportion of copper rose as expected. The proportion of the heavier elements lead, tin and antimony also fell as the corrosion surface was removed. The change in the proportion of lead is particularly noticeable. Vessel foot 2 (SF 30120) had a lead composition of 26.65% when first analysed. Dorigo et al (1998) confirm that lead can be enriched in surface corrosion. Once the corrosion layer had been removed, the composition dropped to 6.34%. This emphasises that many

Object	Fe	Ni	Cu	Zn	As	Pb	Ag	Sn	Sb
Sheet fragment B *before abrasion*	48.9	n.d.	38.3	4.1	n.d.	0.6	0.02	6.3	0.2
Sheet fragment B *abraded*	0.9	n.d.	86	9	n.d.	0.8	0.1	4	0.2
Sheet fragment C *before abrasion*	3.8	n.d.	84.2	2.7	0.4	1.2	0.1	6.7	0.5
Sheet fragment C *abraded*	1.5	n.d.	91.4	1.7	n.d.	0.8	0.1	4	0.2
Sheet fragment D *before abrasion*	9	n.d.	80.5	2.3	0.3	1.9	0.1	5	0.3
Sheet fragment D *abraded*	1.3	0.1	88.6	3.2	0.2	1.6	0.1	4.2	0.2

Table C4.3
XRF analyses of three pieces of sheet metal, before and after abrasion (percentages)

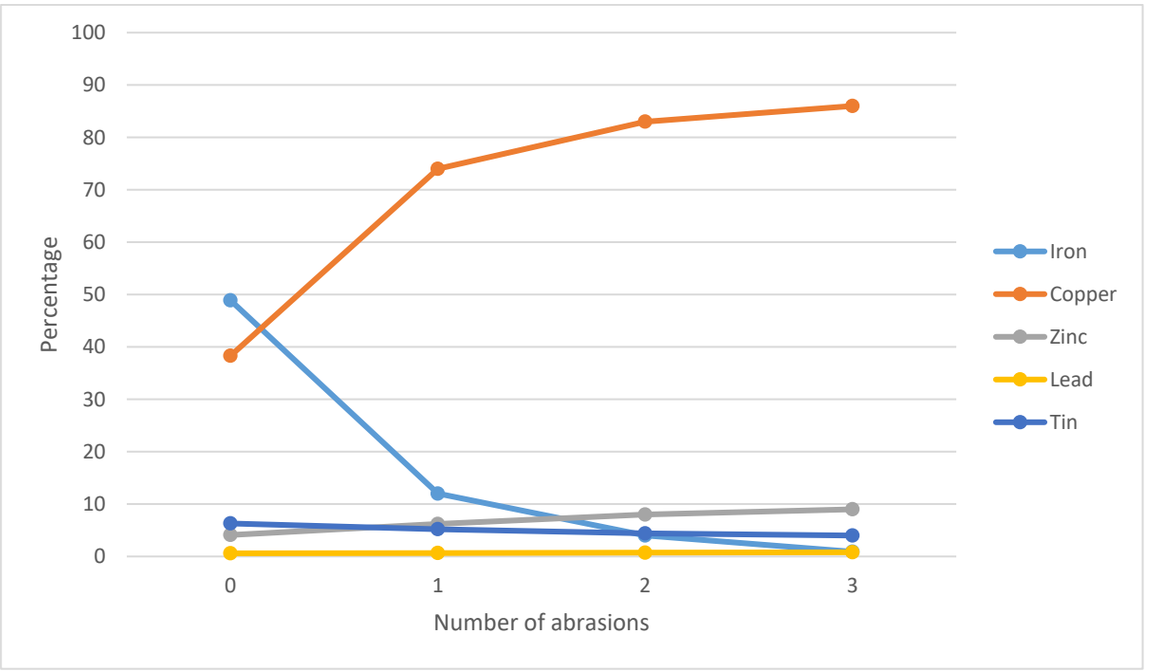


Illustration C4.4
Change in elemental composition after abrasion of pieces of sheet metal

of the XRF results for the objects that were not abraded are difficult to interpret.

Arsenic was detected in all the corrosion layers but not after the surfaces had been abraded. It appears that the arsenic levels are a corrosion phenomenon.

Three pieces of sheet metal (Table C4.3) were also abraded to show the difference in composition between the corroded surface and the bulk metal. Plate B was abraded four times. Each time slightly more corrosion was removed. This gives a picture of the changing elemental composition through the surface of the object. Illus C4.4 shows that it is the proportion of copper that is affected most. As the corrosion surface is removed the iron content drops, while the copper content increases. The proportion of zinc also increases. However, the proportion of lead drops slightly as the corrosion layer is removed. All the pieces of sheet metal have a higher proportion of copper in the bulk metal than in the corrosion layer. This confirms that the sheet metal was primarily made from a high copper alloy.

Conclusions

This project involved two stages. The analysis of the objects by XRF enabled a suite of elements to be identified and quantified without need for destructive analysis. However, the corroded state of archaeological objects means that the results cannot be considered to be an accurate analysis of the original bulk metal composition. Therefore surface analysis can only provide certain information and must be used with caution. Abrading the surface of objects allowed for a more accurate composition to be obtained. However, abrading archaeological objects is not always an option as the original surface detail will be removed.

The analysis of this assemblage has confirmed that specific alloys were chosen to produce different types of artefact. The sheet and plate metal are high copper alloys, while cast objects were made from bronze or gunmetal. The high quantity of objects made from gunmetal suggests that there was recycling of metal, which may indicate a lack of fresh supplies of metal entering the region due to economic or geographical reasons (Blades 1995). The lack of brass in the assemblage also suggests that there was little fresh metal coming into the area. It is likely that because of the geographical position of Islay this was the case.

This study is one of the first analytical studies of Scottish medieval copper alloys. The analytical work has determined that the main copper alloy used at Finlaggan was gunmetal, indicating that many of the objects were made out of recycled metal. The vessel fragments may be exceptions, as their composition is unique in this assemblage. The question of determining 'foreign' objects on the basis of their composition has not been possible due to the highly corroded surfaces.

Catalogue of copper alloy artefacts

Illustrations by Marion O'Neil: C16, C18, C22–C24, C41, C48, C51, C56, C60, C62, C63, C66–C68, C85, C93, C95, C99, C101, C112, C113, C118, C122, C127, C134, C138, C146, C147.

Brooches (Illus C4.5, C4.23)

There are five ring brooches, three of which (C1–C3) can readily be identified as types worn in the Islands and Highlands in medieval times. Typically, they have flat hoops and are engraved with star, chevron or foliage designs. Compare, for example, the brooches from Castle Sween in Knapdale (Ewart & Triscott 1997: no. 65, p 546, illus 18) and Dunstaffnage Castle in Lorn (Lewis 1997: no. 8, p 581, illus 17; Breen et al 2011: 173, illus 7). The twisted wire brooch (C5) is a type hitherto not identified from Scotland.

C1 BROOCH, COPPER ALLOY

Annular brooch engraved with a pattern of chevrons. The hoop is riveted together and notched for its pin, which has a ribbed head. The decoration is crisp and shows no sign of wear. Diam: 45mm
15th century
SF 1005; [1007] gravel spread in burial ground

C2 BROOCH, COPPER ALLOY
Annular brooch engraved with a continuous foliage design (Illus C4.23). The two ends of the hoop overlap at the notch cut to house the pin, which is broken. Diam: 40mm
15th century
SF 7041; [7007] garden soil

C3 BROOCH, COPPER ALLOY (GUNMETAL)
Annular brooch with part of its hoop and pin missing; engraved on one side with a bold chevron design, and on the other with faint traces, possibly of a foliage design similar to that on another brooch, C2 . Diam: 37mm; Th: 1.6mm
15th century
SF 7316; [7027] floor deposits in building V.1; 15th century

C4 BROOCH, COPPER ALLOY (GUNMETAL, WITH 12% SILVER)
Annular brooch decorated with egg and dart; incomplete and lacking its pin. Diam: 21mm
15th century
SF 8027; [8002] topsoil

C5 BROOCH, COPPER ALLOY (BRONZE)
Annular brooch formed of twisted wire with a loop for a (missing) pin. 20 by 19mm. Wire Diam: 0.6mm
SF 25169; [25008] medieval midden; 13th century.

Rings (Illus C4.5)

C6 RING, COPPER ALLOY (BRONZE)
Finger ring, or pendent loop for a belt accessory (?). Diam: 20 by 21mm
SF 8025; [8002] topsoil

C7 RING, COPPER ALLOY (BRONZE)
Finger (?) ring. D-shaped cross section.
Diam: 23mm; Ht: 3.5mm
SF 35157; sector C1/C2

Pendant (Illus C4.5)

C8 PENDANT, COPPER ALLOY
Triangular, pierced for suspension. 28.5 by 16.5mm
SF 30115; sector 4, adjacent to str X.

Chain (Illus C4.5)

C9 CHAIN, COPPER ALLOY
Chain consisting of seven (plus one detached) rings, each about 5mm in diameter, each ribbed, thus giving the impression that the chain is composed of sets of two interlinking rings. Possibly part of a dog leash.
SF 25097; [25005] sand with washout and debris, equivalent to 25002.

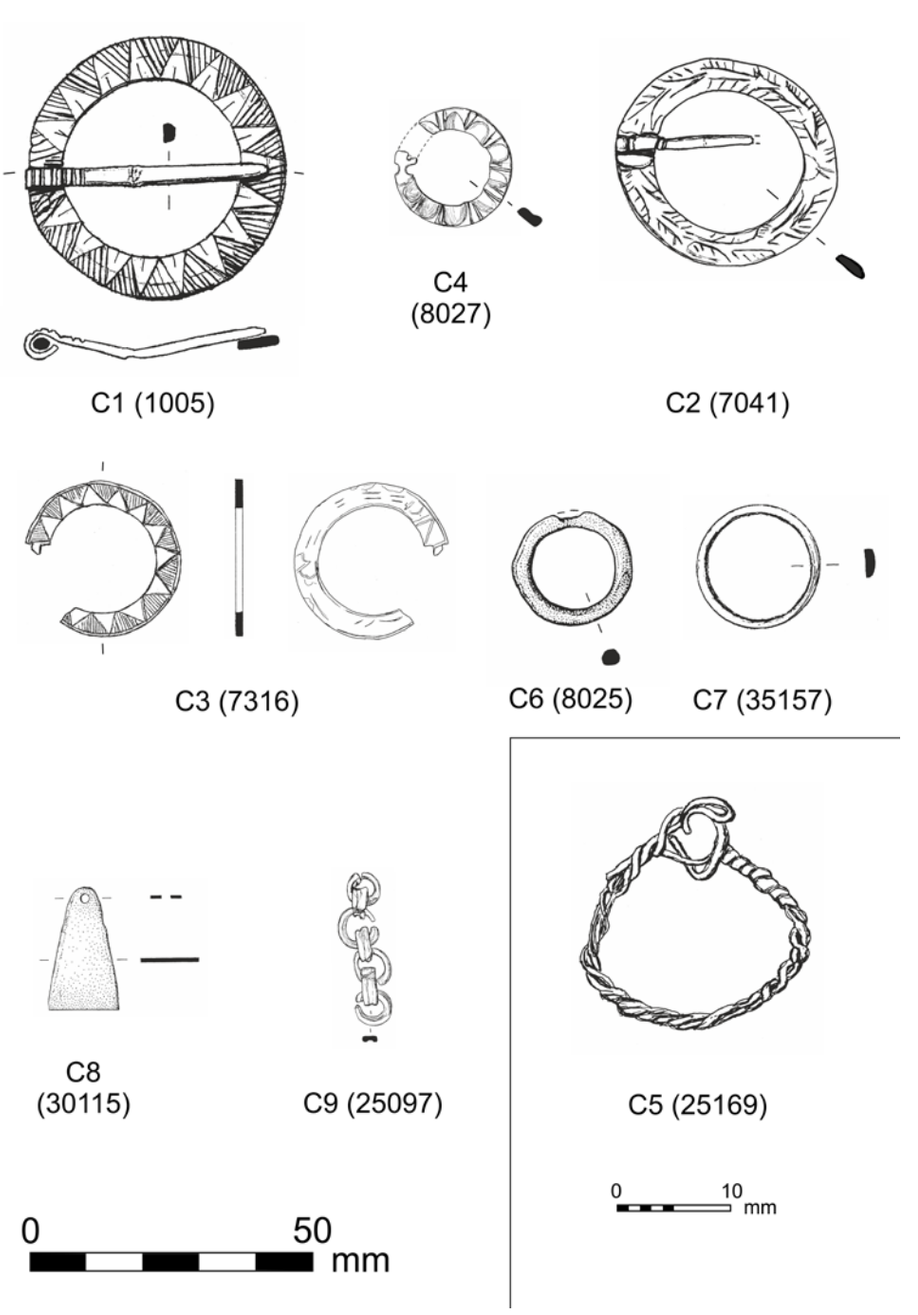


Illustration C4.5
Copper alloy artefacts: brooches etc

Pins (Illus C4.6)

Dress or hair pins like C10 appear to have been quite common in medieval Scotland and Ireland. C11 may be a simpler version of pins, like two from Urquhart Castle, Inverness-shire, with frustum-shaped heads (Batey 1992). The context from which C11 was recovered suggests that it may date to the 12th or 13th century. C12, with its pierced, disc-shaped head, can be compared to bone ones from Wood Quay, Dublin, dated to the 13th century. The pin head, C14, has a tin coating to make it look like silver. The globular, bobbled pin-head, C13, is not certainly medieval in date, and may represent a loss by a visitor in relatively recent times.

C10 DRESS OR HAIR PIN, COPPER ALLOY (LEADED BRONZE)
Stick pin with grooved conical head.
L (as bent): 62mm
SF 18132; [18065] clayey silt forming the matrix for the cobbled causeway extension [18055]; 12th–13th century

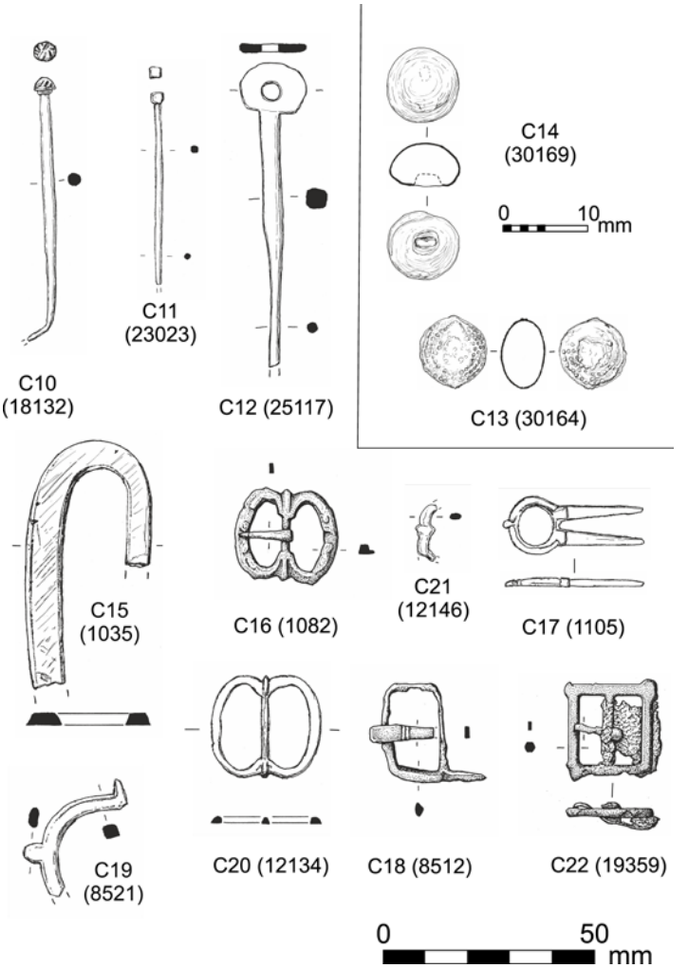


Illustration C4.6
Copper alloy artefacts: pins, buckles etc

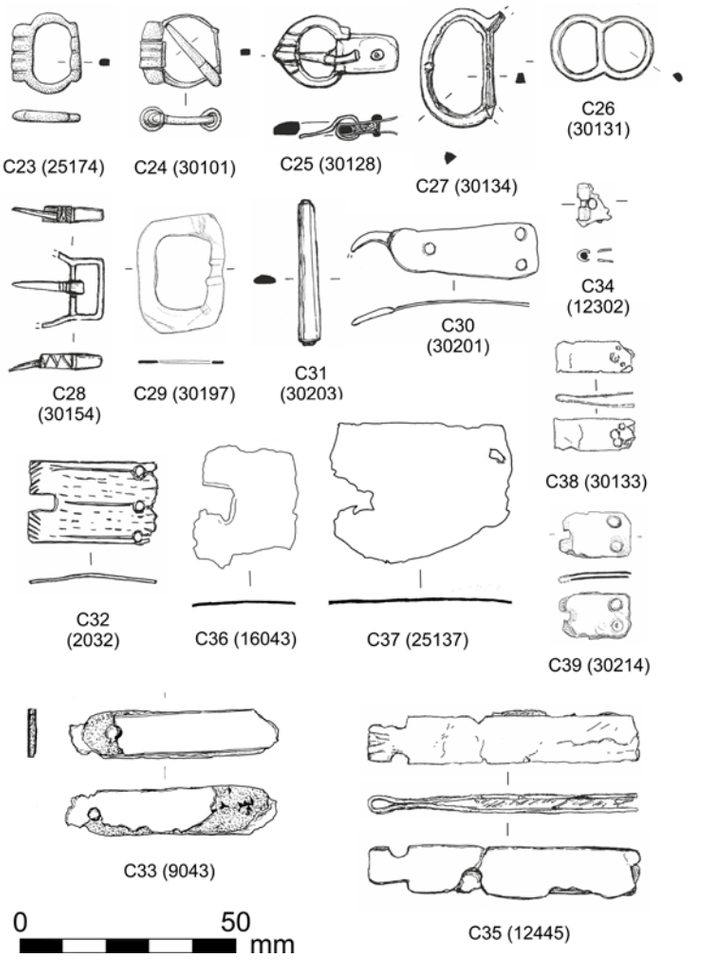


Illustration C4.7
Copper alloy artefacts: buckles and buckle-plates

C11 DRESS OR HAIR PIN, COPPER ALLOY (LEADED BRONZE)
Stick pin, lacking its point, with squared head. L: 68.5mm
12th–13th century
SF 23023; [23018] make-up layer under castle floor; 12th–13th century

C12 HEAD OF DRESS OR HAIR PIN, COPPER ALLOY (GUNMETAL)
Stick pin with pierced, flat, oval head, lacking its point. L: 72mm
SF 25117; [25004] iron pan

C13 HEAD OF DRESS OR HAIR PIN, COPPER ALLOY (LEADED BRONZE)
Shaped like a plum stone, formed from two hollow cups braised together, decorated all over with repoussé bobbles. 6.8 by 4.8mm
14th–15th century?
SF 30164; sector 3

C14 HEAD OF DRESS OR HAIR PIN, COPPER ALLOY (LEADED BRONZE, TINNED SURFACE)
Globular with socket on underside for a shaft. 8.5 by 6mm
SF 30169; sector 3.

Buckles (Illus C4.6–7)

Of note is an unusual decorated and gilt buckle, C28. The high lead and tin content of C15, respectively almost 20% and 19%, would have given it the appearance of silver. The tin, however, may alternatively have been a surface coating, given extra adhesion by the diagonal file marks on both sides of the buckle frame. The decoration of incised dashes on buckle-plate C32 is reminiscent of that found on animals on 16th- and 17th-century Highland brooches. Also likely to be of that or more recent date is C19, a loop-shaped buckle-pin, similar to one excavated at Cruggleton Castle in Wigtownshire (Ewart 1985: fig 32, no. 11).

C15 BUCKLE, COPPER ALLOY (GUNMETAL)
Buckle with D-shaped frame, broken and incomplete; diagonal file marks on both sides; possibly originally plated with tin. 57 by 29mm
15th century
SF 1035; [1007] gravel spread in burial ground

C16 BUCKLE, COPPER ALLOY
Buckle with double-oval frame, complete with pin. Ht: 22mm; L: 24mm
15th century
SF 1082; [1007] gravel spread in burial ground

C17 BUCKLE, COPPER ALLOY
Buckle with oval frame and forked spacers, lacking its pin and plate. 14 by 33mm
15th century
SF 1105; [1033] water-washed sand and grit by the edge of the loch

C18 BUCKLE, COPPER ALLOY (GUNMETAL)
Buckle with rectangular frame and central bar; incomplete and bottom portion of pin lacking. 23 by 27mm
15th century
SF 8512; [8016] tumble within building H

C19 BUCKLE, COPPER ALLOY (GUNMETAL)
Loop-shaped pin of a buckle, incomplete. 27 by 30mm
16th or 17th century
SF 8521; [8000] spoil-heap

C20 BUCKLE, COPPER ALLOY (LEADED BRASS)
Buckle with double-oval frame, lacking its pin. 24 by 26mm
15th century
SF 12134; [12101] topsoil

C21 BUCKLE, COPPER ALLOY (GUNMETAL)
Fragment of ornate, possibly double-oval frame. Surviving L: 13.5mm
SF 12146; [12101] topsoil

C22 BUCKLE, COPPER ALLOY (GUNMETAL)
Buckle with rectangular frame with central bar, expanded rounded corners, pin and remains of a buckle-plate. 22.5 by 24.5mm
SF 19359; probably from [19014] clayey silt with flecks of charcoal, remains of medieval house 19.10

C23 BUCKLE, COPPER ALLOY (LEADED BRONZE)
Buckle with convex sides and thick outside edge with grooves; pin lacking. 18 by 16mm
SF 25174; [25002] sand, beach deposit

C24 BUCKLE, COPPER ALLOY (GUNMETAL)
Buckle with convex sides and thick outside edge with grooved roller; complete with pin. 17 by 19mm.
SF 30101; sector 1

C25 BUCKLE, COPPER ALLOY (LEADED BRONZE)
Buckle, possibly for a spur strap, with oval-shaped frame and plate; traces of gilding. 17.5 by 28mm
SF 30128; sector C1

C26 BUCKLE, COPPER ALLOY (GUNMETAL)
Buckle with double-oval frame, lacking its pin. 15 by 23mm
SF 30131; sector 2

C27 BUCKLE, COPPER ALLOY (LEADED BRASS)
Buckle with double-oval frame, half missing. 23 by 20mm
SF 30134; sector 3

C28 BUCKLE, COPPER ALLOY (GUNMETAL)
Buckle with central bar and pin, dividing a larger oval (broken) frame from a smaller rectangular one. The exterior sides, with traces of gilding, are ornamented with a chevron pattern. 18 by 21.5mm
SF 30154; sector 2

C29 BUCKLE, COPPER ALLOY (GUNMETAL)
Rectangular frame lacking a pin, possibly an unfinished buckle. 26 by 20 by 0.84mm
SF 30197; sector 4

C30 BUCKLE, COPPER ALLOY
Oval (incomplete) frame with integral plate with three rivet holes. 43 by 12.5mm
SF 30201; sector 1

C31 MOUNT, COPPER ALLOY
Possibly the central bar from a buckle.
L: 34mm
SF 30203; sector 1

Buckle-plates (Illus C4.7)

C32 BUCKLE-PLATE, COPPER ALLOY
Top side only survives, with slot for pin, three rivet holes and scalloped end; decorated with incised dashes. 19 by 29.5mm
Highland, 16th century
SF 2032; [2030] wall of str K.1; 16th century

C33 BUCKLE-PLATE, COPPER ALLOY
Incomplete, with shank of copper alloy rivet retaining fragment of leather strap. 47 by 10mm; metal thickness: 0.27mm; leather thickness: 1.23mm
SF 9043; [9000] unstratified

C34 BUCKLE-PLATE, COPPER ALLOY
Fragment with piece of buckle frame still in place. 10.5 by 7.4 by 3.17mm
SF 12302; [12030] silt underlying building sequence; 13th century

C35 BUCKLE-PLATE? COPPER ALLOY (GUNMETAL)
Long, narrow, recessed, possibly for hinged plate; containing mineralised leather. 63 by 11mm
SF 12445; unstratified

C36 BUCKLE-PLATE? COPPER ALLOY (LEADED BRASS)
One side only, with recess for pin. 29 by 23 by 0.49mm
SF 16043; [16010] 19th-century clearance within house (a)

C37 BUCKLE-PLATE? COPPER ALLOY (BRONZE)
One side only, with recess for pin and rivet hole. 41 by 32 by 0.52mm
SF 25137; [25002] sand, beach deposit

C38 BUCKLE-PLATE, COPPER ALLOY (GUNMETAL)
7 by 18mm
SF 30133; sector 3

C39 BUCKLE-PLATE, COPPER ALLOY
Small, rectangular, with slot for pin and two rivets. 16.65 by 11.07mm; thickness of sheet metal: 0.25mm
SF 30214; sector 2

Strap-clasps (Illus C4.8)

C40 CLASP, COPPER ALLOY
The clasp, perhaps for a book, is stretched into a long point and engraved with a double line forming a saltire. Only a part of the hinged plate survives. 74 by 24mm
SF 19418; [19001] topsoil

C41 CLASP, COPPER ALLOY (GUNMETAL)
Perhaps for a book, one side only, with two rivet holes. 13 by 82mm;
metal thickness: 1.26mm
SF 24009; no context noted on finds sheet but possibly [24013] tumble from wall of building (b)

C42 CLASP, COPPER ALLOY
Perhaps for a book, with two rivet holes. 39 by 9mm; metal thickness: 0.23mm
SF 25107; [25002] sand, beach deposit
A similar one is listed in the main finds catalogue as SF 25098

C43 CLASP, COPPER ALLOY (BRONZE)
Perhaps for a book. 39 by 34 by 9mm
SF 30036; sector 1

C44 CLASP, COPPER ALLOY (GUNMETAL)
Perhaps for a book. 19 by 8 by 0.64mm
SF 30075; sector 3

C45 FOLDING STRAP-CLASP, COPPER ALLOY (GUNMETAL)
Clasp with plate for mounting on a strap, secured by a rivet, and folding end with a bar mount attached by a rivet. The frame has convex sides. 12.5 by 40.5mm
14th–15th century
SF 30123; sector 2

C46 CLASP? COPPER ALLOY
L: 40mm; Th: 0.66mm
SF 30210; sector 2

Strap-end mounts (Illus C4.8)

C47 STRAP-END MOUNT, COPPER ALLOY (GUNMETAL)
Tongue-shaped strap-end made from a sheet of metal folded lengthwise and secured by a single rivet (missing). The upper surface is decorated

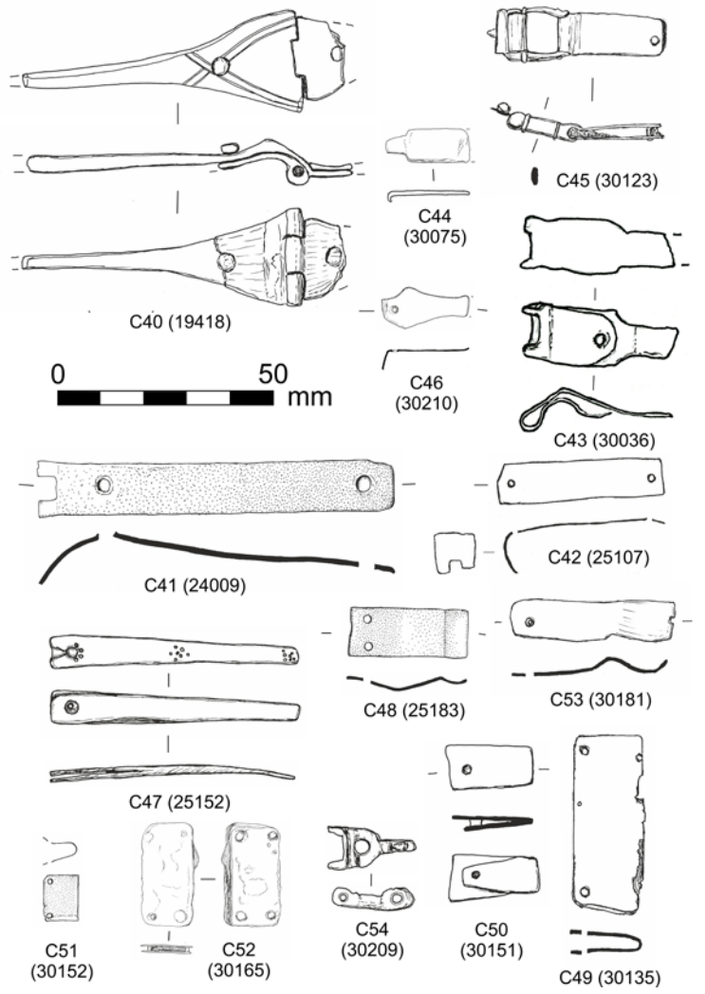


Illustration C4.8
Copper alloy artefacts: strap mounts

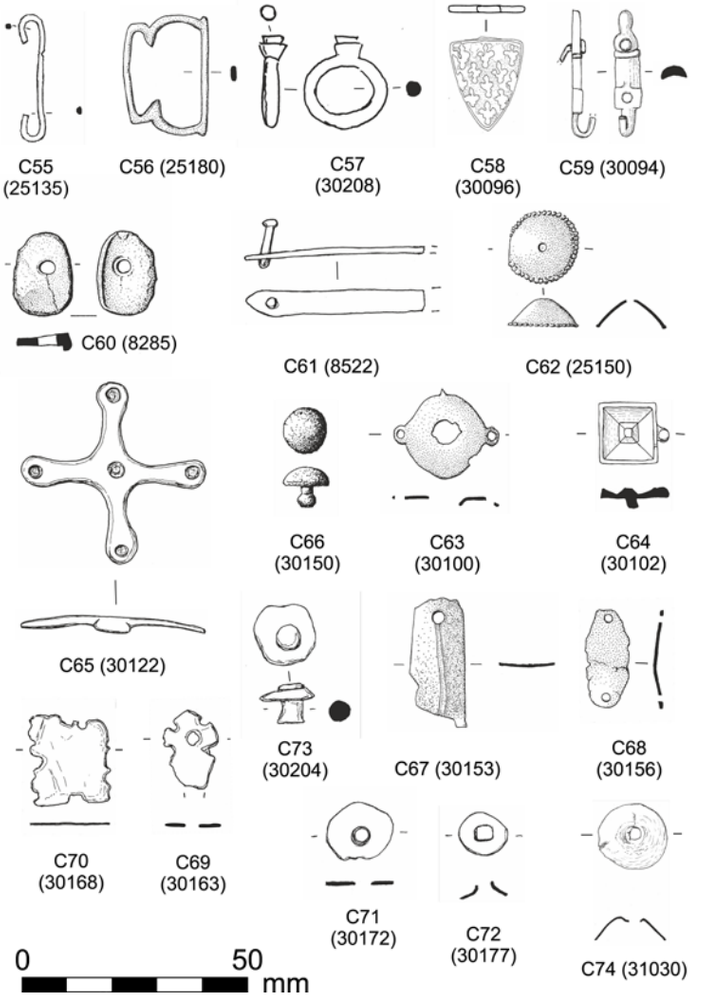


Illustration C4.9
Copper alloy artefacts: strap mounts

with three groups of lightly punched dots. 57 by 7.5 by 4mm
14th–15th century
SF 25152; from loch adjacent to Eilean Mór

C48 STRAP-END MOUNT? COPPER ALLOY (COPPER)
Sheet-metal mount with two rivet holes. 11 by 27mm
SF 25183; [25007] gravel with washout and debris, equivalent to 25003

C49 STRAP-END MOUNT, COPPER ALLOY
16 by 41mm
SF 30135; sector C2

C50 STRAP-END MOUNT, COPPER ALLOY
Mount bent over, still retaining some mineralised leather, held in place by a rivet. 21 by 11mm
SF 30151; sector 2

C51 STRAP-END MOUNT, COPPER ALLOY
Strap end formed of folded sheet metal, with two rivet holes. 14 by 10 by 8.5mm
SF 30152; sector 4, adjacent to str X

C52 STRAP-END MOUNT? COPPER ALLOY
Two rectangular plates held together with four rivets. Fragments of a mineralised leather strap remain. 23 by 12 by 3mm
SF 30165; sector 3

C53 STRAP-END MOUNT? COPPER ALLOY (GUNMETAL)
Possibly a strap end, with two rivet holes. 38 by 9 by 0.80mm
SF 30181

C54 STRAP-END MOUNT, COPPER ALLOY
Hinged loop from two-piece strap-end, with central hole. 21 by 10mm
Late 14th – early 15th century
SF 30209; sector 4, near structure X.

Strap holders (Illus C4.9)

C55 STAPLE, COPPER ALLOY (GUNMETAL)
Staple with in-turned arms, both broken. 28 by 6mm
SF 25135; [25004] iron pan

C56 STRAP HOLDER, COPPER ALLOY (GUNMETAL)
Strap holder with convex sides and internal projections. 26.5 by 18.5mm
SF 25180; sector C2

C57 STRAP LOOP, COPPER ALLOY
Circular frame with external rivet. 20.5 by 18.5mm
SF 30208; sector 1.

Heraldic pendant mount (Illus C4.9, C4.24)

Heraldic pendants similar to C58 have turned up in some numbers in Scotland. They are normally identified as ornaments from horse harnesses. While the heraldry on many clearly relates to their owners, in the case of this example from Finlaggan with the French royal arms it is safer to assume that it merely expresses the allegiance of its owner.

C58 HERALDIC MOUNT, COPPER ALLOY AND ENAMEL

Shield-shaped pendant, mount at top broken off. The heraldic design has been a blue field scattered with gold fleur-de-lis (azure, semé-de-lis, or), the form of the royal arms of France until the late 14th century. There are now no traces of gilding and the enamel has turned pale blue. 21 by 16 by 2mm
14th century
SF 30096; sector 1.

Pendant strap mount (Illus C4.9)

C59 STRAP MOUNT, COPPER ALLOY

Bar mount with rivet for securing it to a belt, and loop for holding a pendant mount.
L: 29mm
SF 30094; sector 2.

Strap mounts (Illus C4.9)

C60 MOUNT, COPPER ALLOY (LEADED BRASS)

18 by 18mm
SF 8285; [8000] unstratified

C61 MOUNT, COPPER ALLOY

Broken bar mount with copper rivet. L: 40mm
SF 8522; [8000] spoil-heap

C62 MOUNT, COPPER ALLOY

Dome-shaped mount with beaded edge, for a strap or girdle. An alternative explanation is that it is the top portion of a rumbler bell, perhaps for hanging on a dog collar. Ht: 6mm; Diam: 14.5mm
SF 25150; [25008] medieval midden; 13th century

C63 EYELET? COPPER ALLOY

Flat, centrally pierced, circular mount with rivet holes for attachment. 20 by 23mm
SF 30100; sector 3

C64 MOUNT, COPPER ALLOY

Square mount with central pyramidal boss. 10.5 by 14mm
SF 30102; sector 2

C65 MOUNT, COPPER ALLOY (GUNMETAL)

Cross-shaped mount with central iron rivet and others in each of the expanded terminals of its arms. 41 by 41mm
SF 30122; sector 2

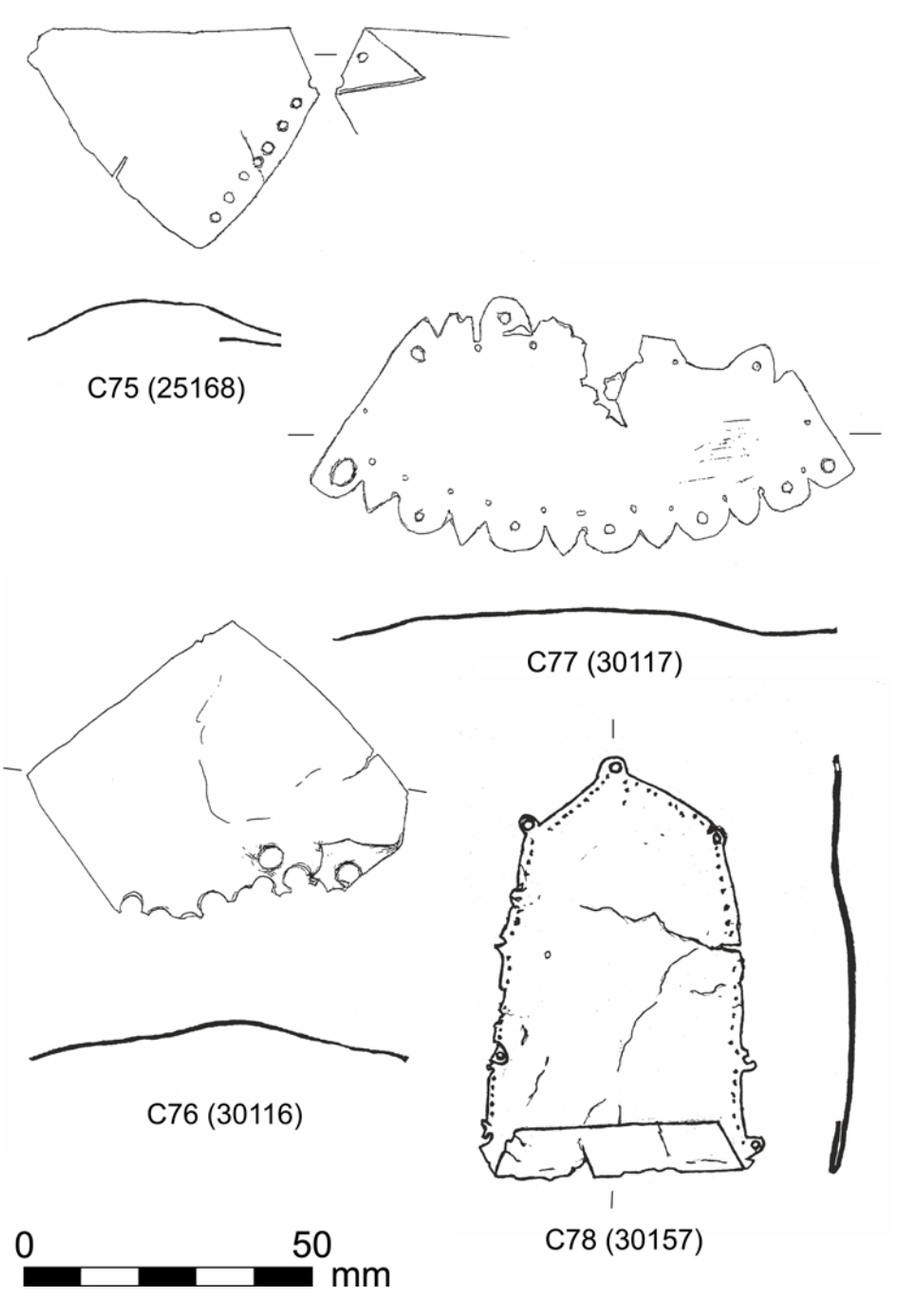


Illustration C4.10
Copper alloy artefacts: sheet-metal mounts

C66 STUD, COPPER ALLOY (BRONZE, TINNED SURFACE?)

Stud with domed head. Diam: 9mm
SF 30150; sector 4

C67 MOUNT, COPPER ALLOY (GUNMETAL)

Bar mount, broken, 28.5 by 12.5mm
SF 30153; sector 3

C68 MOUNT, COPPER ALLOY (GUNMETAL)

22 by 10mm
SF 30156; sector 1

C69 MOUNT, COPPER ALLOY

Trefoil-shaped terminal pierced for a rivet. 18 by 12 by 1mm
SF 30163; sector 3

C70 MOUNT, COPPER ALLOY
Shield-shaped mount. 20 by 17 by 0.5mm
SF 30168; sector 3

C71 WASHER, COPPER ALLOY (GUNMETAL)
With punched circular rivet-hole.
Diam: 15mm; Th: 0.62mm
SF 30172; sector 3

C72 WASHER/MOUNT, COPPER ALLOY (COPPER)
Punched with square rivet-hole. Diam: 10mm; Ht: 4mm; metal thickness: 0.94mm
SF 30177; sector 3

C73 RIVET, COPPER ALLOY
14 by 13 by 9mm
SF 30204; sector 3

C74 MOUNT, COPPER ALLOY
Circular dome-shaped mount, possibly for a strap or girdle. Ht: 5.2mm; Diam: 14.2mm
SF 31030; [25040] FN 98 excavation.

Applied sheet mounts (Illus C4.10)

C75 MOUNT, COPPER ALLOY (BRONZE)
Sheet-metal mount, now folded, one edge with stitching holes. 46 by 40mm
SF 25168; [25007] gravel with washout and debris, equivalent to 25003

C76 MOUNT, COPPER ALLOY (BRONZE)
Pierced piece of sheet metal. The piercings may relate to the manufacture of dome-headed rivets similar to the one illustrated as C89 (Illus C4.12). 53 by 50mm
SF 30116; sector 1

C77 MOUNT, COPPER ALLOY (BRONZE)
Sheet-metal mount with scalloped edge and stitching holes. 94 by 44mm
SF 30117; sector 4, adjacent to str X

C78 MOUNT, COPPER ALLOY (GUNMETAL)
House-shaped mount of sheet metal with folded bottom edge and piercings in loops, probably originally nine, around its sides and top for attachment. These edges are also decoratively fringed with a series of small indentations. 72 by 49mm
SF 30157; sector 2.

Aglets (Illus C4.11)

C79 AGLET (LACE END), COPPER ALLOY (GUNMETAL)
Surviving L: 23mm; Diam: 3mm
SF 8423; [8000] unstratified

C80 AGLET (LACE END), COPPER ALLOY
38 by 6.5mm; metal thickness: 0.63mm
SF 30084; sector 2

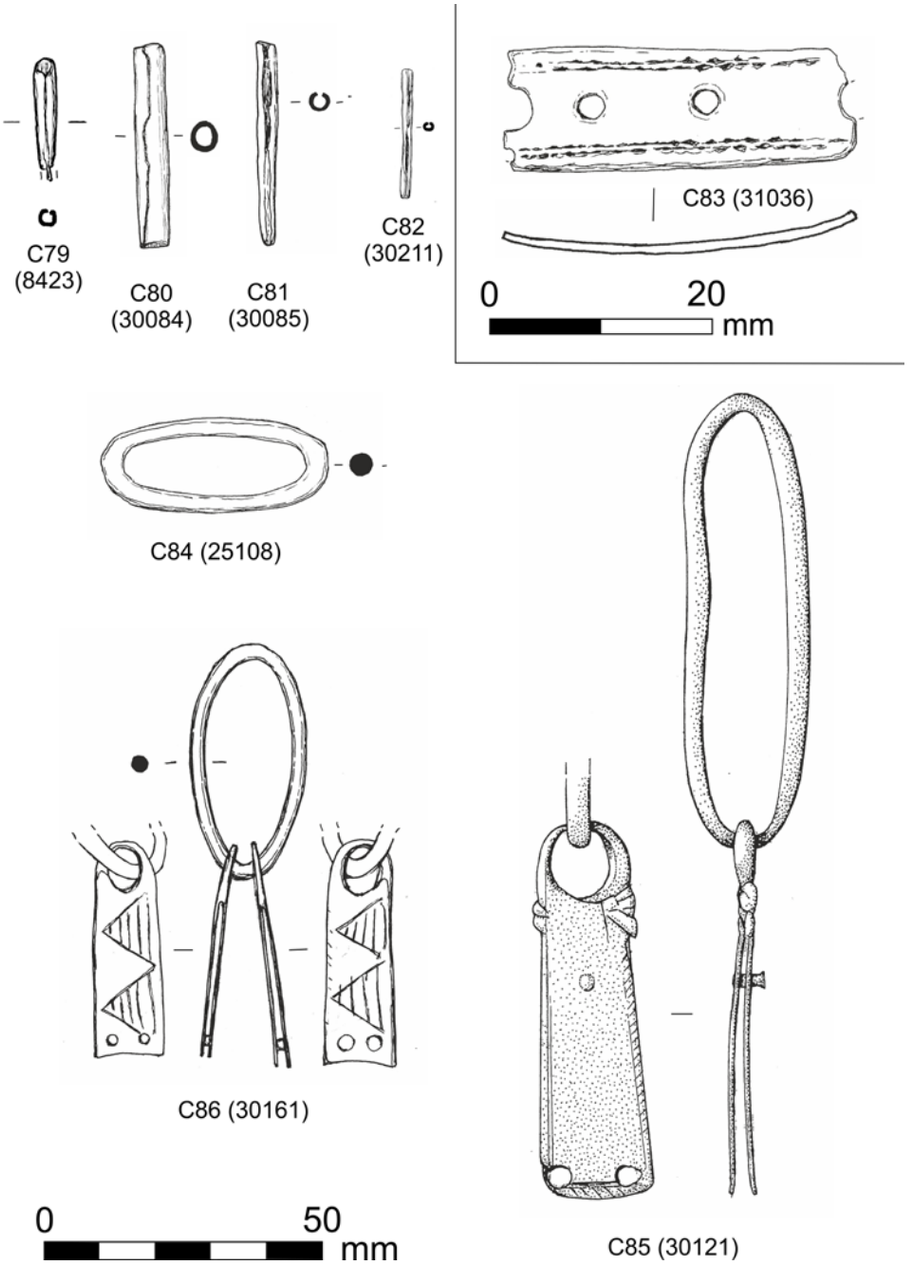


Illustration C4.11
Copper alloy artefacts: dog collar mounts

C81 AGLET (LACE END), COPPER ALLOY (GUNMETAL)
36.5 by 3.5mm
SF 30085; sector 2

C82 AGLET (LACE END), COPPER ALLOY
23 by 2mm
SF 30211; sector 3.

Dog collar fittings (Illus C4.11–12, C4.25–27)

C87–C90 possibly represent a pair of collars, not recovered from the main excavations but evidently from the medieval midden (25008) adjacent to Eilean na Comhairle. The lack of any trace of leather, which should have survived well in waterlogged conditions, is probably an indication that the collars were fashioned of cloth with gilt mounts and studs. A 13th-century date would seem appropriate for the dragonesque heads ornamenting the

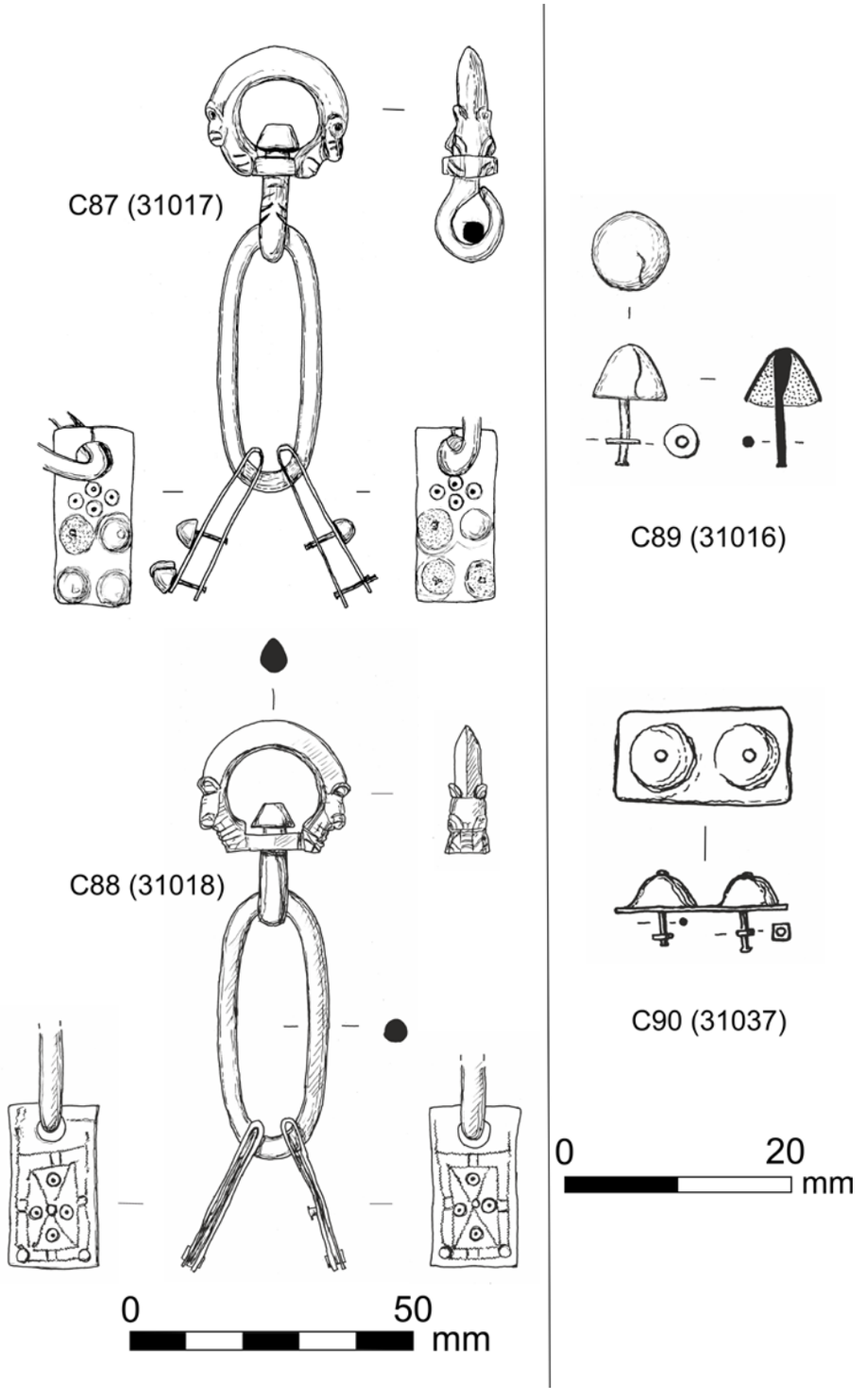


Illustration C4.12
Copper alloy artefacts: dog collar mounts

swivel rings. They are similar to the animal heads joining the stems to the bowls of the silver spoons, thought to date to about 1200, from a hoard deposited in the Iona Nunnery (Glenn 2003: 19–23). Other copper alloy mounts identified as from dog collars are known from Scottish sites, including a 12th-century one from Rattray Castle in Aberdeenshire, also with dragonesque heads (Hinton 2005: 182, fig 6.7). The leashes might have consisted of metal chains, like C9. Gold and silver ones are described in early Irish poems (McManus 2018: 151, n 9).

C83 DOG COLLAR (?) BUCKLE-PLATE, COPPER ALLOY
Broken buckle-plate with two pinholes for adjusting the size of the collar, flanked by larger rivet-holes; decorated with double lines of punched opposed triangles. 30 by 11 by 0.4mm
SF 31036; [25044]; 13th century

C84 LINK, COPPER ALLOY
Oval link, probably for attaching a leash to a dog collar. 41 by 17.5mm
SF 25108; [25008] medieval midden; 13th century

C85 STRAP-END MOUNT AND LINK, COPPER ALLOY (BRONZE)
Probably from a dog collar, for attaching a leash. Link: 81 by 22mm; strap-end mount: 68 by 20mm
SF 30121; sector 1

C86 MOUNT, FROM DOG COLLAR? COPPER ALLOY (BRONZE)
Oval link with two strap-end mounts engraved on one side with triangles. Link: 43 by 27mm; strap-end mounts: 77 by 25mm and 80 by 26mm
SF 30161; sector 3

C87 MOUNT, FROM DOG COLLAR? COPPER ALLOY (GUNMETAL)
Mount consisting of a swivel ring decorated with dragonesque heads, connected to an oval link, mounted with two strap-end mounts, each engraved with ring and dot motifs and with four dome-headed rivets for securing the collar ends (Illus C4.25). Only four of the rivet heads remain in situ. Swivel head: 22 by 25mm; link: 49 by 18mm; strap-end plates: 32 by 14mm
SF 31017; FN 98; 13th century

C88 MOUNT, FROM DOG COLLAR? COPPER ALLOY (GUNMETAL)
Mount consisting of a swivel ring decorated with dragonesque heads, connected to an oval link, mounted with two strap-end mounts, each engraved with saltire designs with ring and dot motifs. Both terminal plates have mineralised cloth (?) trapped in them, the collar

ends being secured by three rivets in each mount, their heads flush with the mount surface. Swivel head: 23 by 27mm; link: 47 by 19.5mm; strap-end plates: 29 by 15mm
SF 31018; FN 98 2 sf 2 A [052]; 13th century

C89 MOUNT, FROM DOG COLLAR? COPPER ALLOY

SF 31016; FN 98 [b1 a2] Sector C1 excavation
SF 31016 is similar to 52 other dome-headed mounts [SF 31031–35], all identified as used decoratively on one or more dog collars. The heads are of sheet metal, formed on a mandrel with an overlap, and fitted internally with a long copper alloy pin (Illus C4.26). Several mounts still retain traces of gilding and are filled with lead to give them weight and solidity and hold the pins in place. Some pins still have small copper alloy circular washers. Typical dimensions are: Ht (of head): 5.1mm; Diam: 6.6mm;
total length including pin: 10.2mm
FN 98 [25052] (51 mounts); 13th century
FN 98 [25055] (1 mount); 13th century

C90 MOUNT, FROM DOG COLLAR? COPPER ALLOY

One of 18 rectangular sheet-metal mounts, with traces of gilding, each embossed with two domes (Illus C4.27). They have been snipped from larger sheets of metal and do not have well-finished edges. The domes have been fitted with copper alloy pins which pierce and are secured at the crowns. The domes were originally also filled with lead. Some pins still have small rectangular copper alloy washers. Typical dimensions are Ht (of plate): 2.9mm; Ht (including pins): 6mm;
plate: 15.4 by 8.6mm
SF 31037–31039
FN 98 [25050] (3 mounts); 13th century
FN 98 [25052] (15 mounts); 13th century.

Mounts from caskets, books etc (Illus C4.13–14)

Fifteen mounts (C91–C105) have been identified as belonging to caskets or possibly books. Some of the keys (C106, C107, C112, C113, C115) listed in the next section are supposed to be from casket locks. Caskets are represented on medieval West Highland grave-slabs, presumably as a key indicator of status or wealth. Examples include Iona nos 159 and 191 (RCAHMS 1982: 225, 228). Two complete caskets believed to come from the area of the Lordship of the Isles survive, both now in NMS. Both are of whale bone decorated with interlace panels and have copper alloy mounts (Glenn 2003: 186–91). One of them is known to have come from Eglinton Castle in Ayrshire, the home of the Montgomeries, earls of Eglinton. It may be of relevance to note that an ancestor, Sir John Montgomerie of Ardrossan, married Agnes, a daughter of John I Lord of the Isles (Munro & Munro 1986: 298). Such caskets, however, were probably more typically of wood, perhaps covered in leather, like one in NMS (H.UD 12). Some of the Finlaggan mounts, for example C94, C100, C101 and C104, are not dissimilar to those on a wooden casket, now in the National Museum of Ireland in Dublin, recovered from a bog at Knockmore in Co Clare (Rynne 1971).

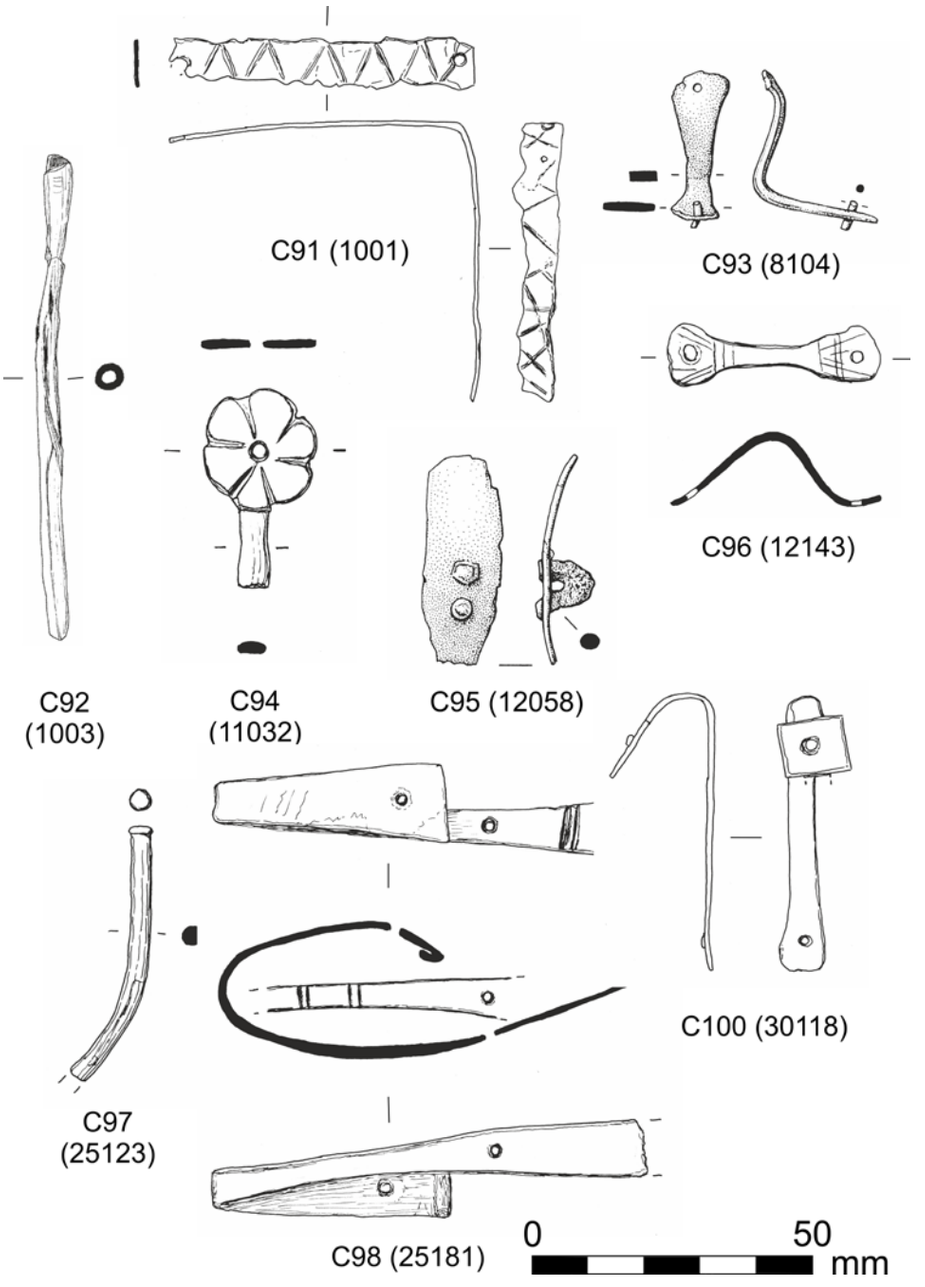


Illustration C4.13
Copper alloy artefacts: casket mounts etc

C91 MOUNT, COPPER ALLOY

L-shaped mount with zig-zag engraving, for reinforcing a corner, eg of a casket. 50 by 54 by 8mm
SF 1001; [1001] topsoil

C92 MOUNT, COPPER ALLOY

Made from a rolled sheet of metal, forming a tube, perhaps to reinforce the corner or edge of a metal box or reliquary. L: 88mm; maximum Diam: 5mm; metal thickness: 1.27mm
SF 1003; [1007] gravel spread in burial ground

C93 MOUNT, COPPER ALLOY
L-shaped mount with two piercings for rivets, one of which is still in place, for reinforcing a corner, eg of a casket. 28 by 22.5mm
SF 8104; [8016] tumble within str H

C94 MOUNT, COPPER ALLOY
Mount with sexfoil terminal. L: 35mm
SF 11032; [11018] floor of building B; 16th century

C95 HASP, COPPER ALLOY
Hasp, probably for a lock on a casket. The loop is a different alloy from the plate. 37 by 14mm
SF 12058; [12023] floor of building 12.2; 15th century

C96 MOUNT, COPPER ALLOY
L-shaped mount with two piercings for rivets; for reinforcing a corner, eg of a casket. 37 by 12.5 by 10mm
SF 12143; [12101] topsoil

C97 HINGE PIN? COPPER ALLOY (LEADED BRONZE)
Possibly a hinge pin, for example from a casket, bent out of shape and missing one end.
L: 47mm
SF 25123; [25008] medieval midden; 13th century

C98 MOUNT FROM A CASKET OR BOOK? COPPER ALLOY
Strap mount, one end broken, with two rivet holes, deformed by being bent over on itself.
L (as bent): 75mm
SF 25181; [25008] medieval midden; 13th century

C99 MOUNT FROM A CASKET? COPPER ALLOY (LEADED BRONZE)
Sheet-metal mount with a trefoil terminal pierced with a rivet hole. 20 by 34 by 15mm
SF 30103; sector 1

C100 MOUNT, FROM A CHEST OR A CASKET? COPPER ALLOY (LEADED BRONZE)
Strap mount, broken and bent double. 20 by 48 by 12mm
SF 30118; sector 2

C101 MOUNT, FOR A CASKET? COPPER ALLOY (LEADED BRONZE)
Corner strap mount with circular terminal pierced with a rivet hole. 30.5 by 7 by 10mm
SF 30148; sector 3

C102 STRAP MOUNT, FOR A CASKET? COPPER ALLOY
Strap mount terminating in two rivet positions. L: 29.5mm
SF 30162; sector 1

C103 HASP? COPPER ALLOY
Broken; possibly originally enamelled with animal design (Illus C4.28). 52 by 14 by 0.9mm
SF 30167; sector 3

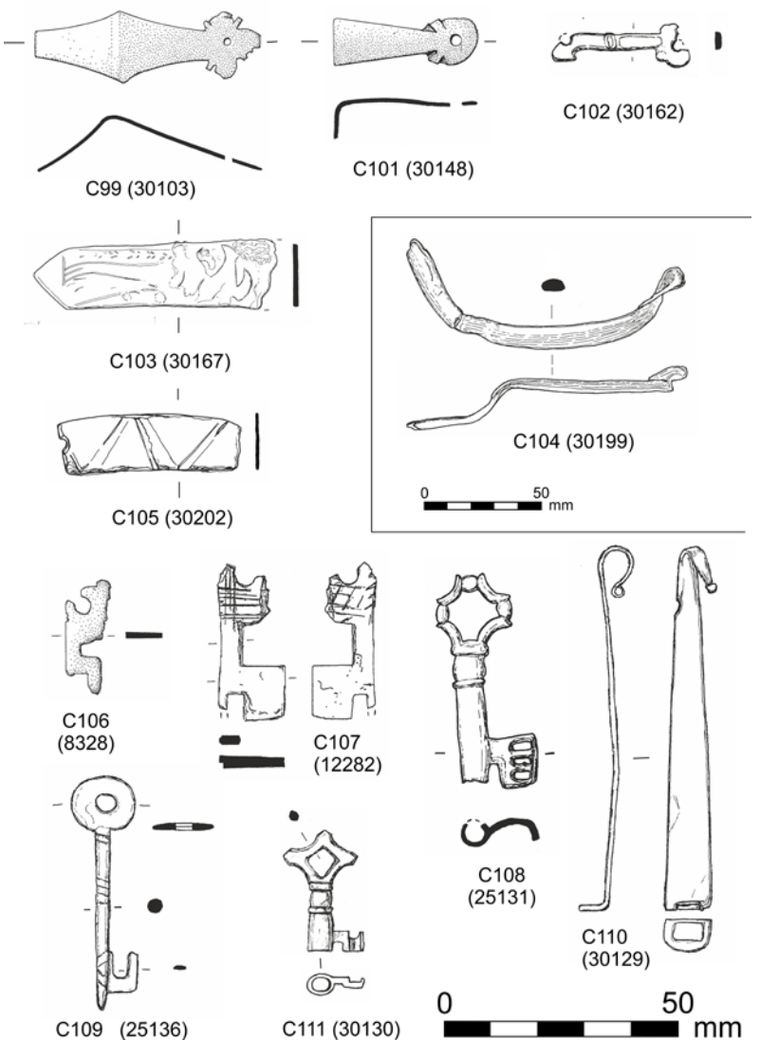


Illustration C4.14
Copper alloy artefacts: casket mounts and keys

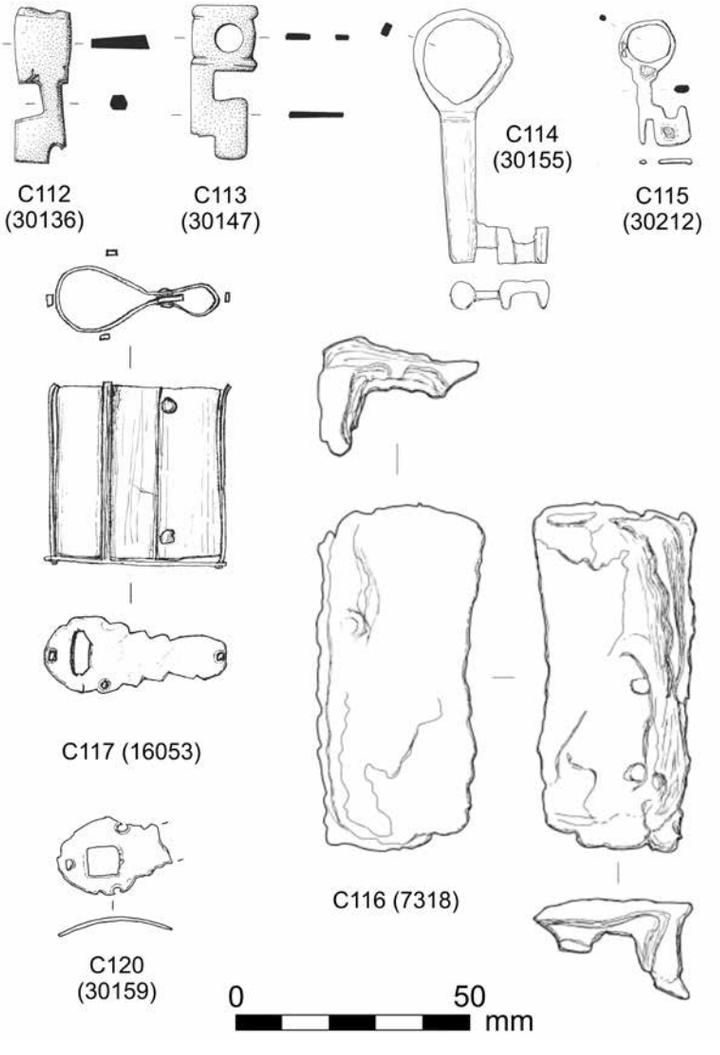


Illustration C4.15
Copper alloy artefacts: keys and locks

C104 HANDLE, FOR A CASKET? COPPER ALLOY (GUNMETAL)
Loop handle, broken and bent out of shape.
L: 122mm
SF 30199: sector 4

C105 MOUNT, COPPER ALLOY
Broken strap mount with rivet hole, engraved with chevrons. 37 by 12 by 0.62mm
SF 30202; sector C1.

Keys (Illus C4.14–15)

C106 KEY, COPPER ALLOY (GUNMETAL)
Casket key, cut from sheet metal; suspension hole punched through; top, and bottom of shank, missing. 24.5 by 9mm
SF 8328; [8062] floor of building H; 15th century

C107 KEY, COPPER ALLOY (GUNMETAL)
Casket key, cut from a sheet of metal, with punched-out suspension hole and crudely decorated with incisions; top, and bottom of shank, missing. 33 by 14 by 2mm
SF 12282; [12101] topsoil

C108 KEY, COPPER ALLOY (GUNMETAL)
With hollow stem, curved perforated bit and quatrefoil-shaped bow. Ht: 45mm
SF 25131; sector C1/C2

C109 KEY, COPPER ALLOY (GUNMETAL)
Key with solid stem projecting beyond the bit and bow like a pierced disc. 50 by 14mm
SF 25136; sector C1/C2

C110 KEY, COPPER ALLOY
Padlock key, stem with hooked terminal and laterally set bit. 78 by 10 by 8mm
SF 30129; sector C1

C111 KEY, COPPER ALLOY (GUNMETAL)
Key with quatrefoil bow, hollow stem and channelled bit. L: 38mm
SF 30130; sector C2

C112 KEY, COPPER ALLOY (BRONZE)
Casket key, cut from sheet of metal; bottom of shank missing. 33 by 11mm
SF 30136; sector 1

C113 KEY, COPPER ALLOY
Casket key, cut from sheet metal; suspension hole punched through; end of shank missing. 33 by 14mm
SF 30147; sector 3

C114 KEY, COPPER ALLOY
Key with solid stem, circular bow and channelled bit. L: 55mm
SF 30155; sector 1

C115 KEY, COPPER ALLOY
Casket key with circular bow, cut from sheet metal. 28.5 by 12.5mm
SF 30212; sector 3

Locks (Illus C4.15–16)

C116 PADLOCK? COPPER ALLOY
Fragmentary remains of a rectangular casing, probably for a padlock. 74 by 35mm
SF 7318; [7000] spoil-heap

C117 PADLOCK, COPPER ALLOY (GUNMETAL)
Barrel padlock made from a single sheet of metal which has been bent back on itself and joined with two iron rivets. The internal lock mechanism and back plate are missing. The front plate is decorated with a toothed edge. It is attached by rivets to four narrow strips running the length of the padlock and originally secured to the other end by the missing back plate. L: 38mm; Ht: 38mm; W: 16mm
SF 16053; [16018] levelling up in courtyard

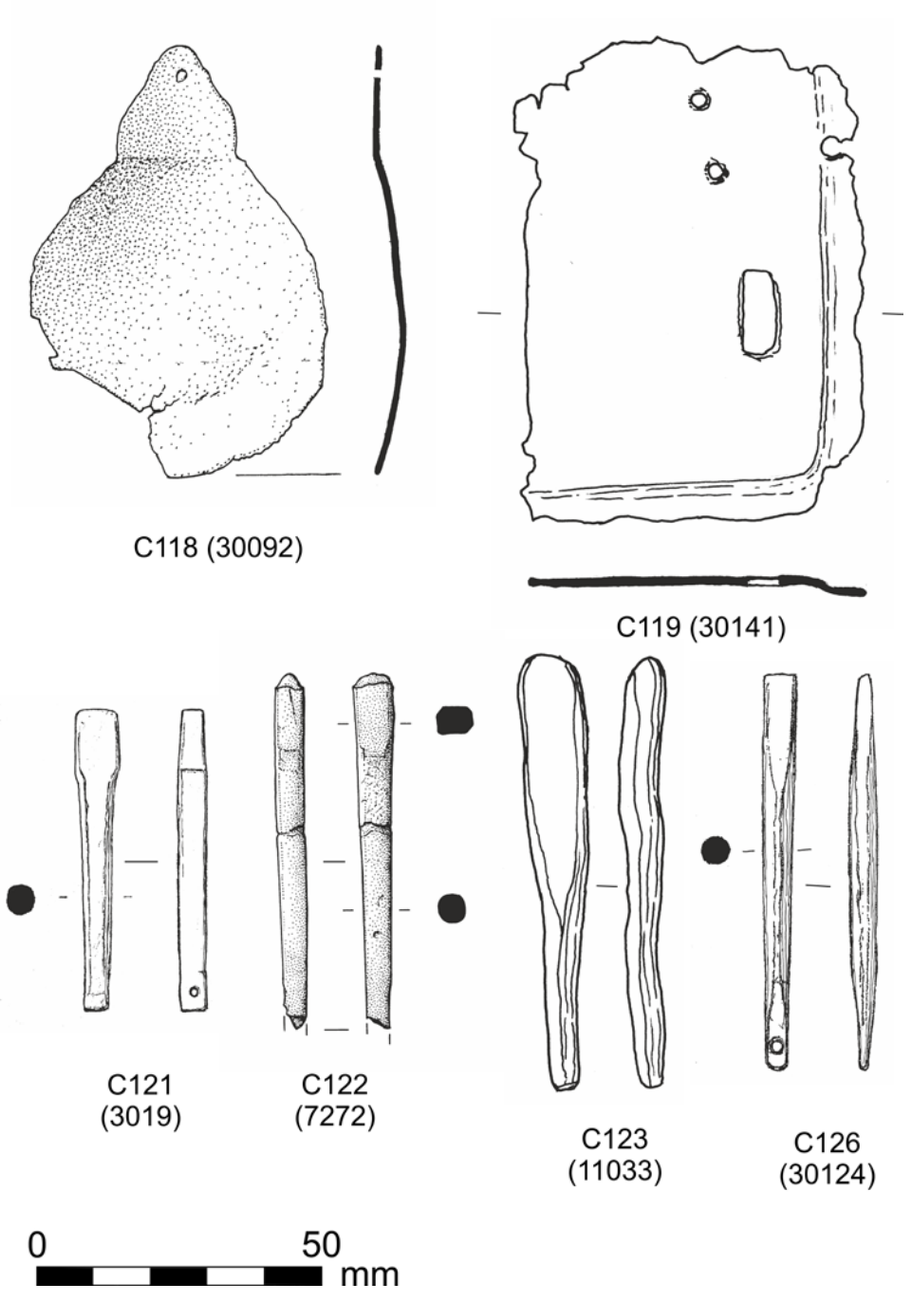


Illustration C4.16
Copper alloy artefacts: locks, musical instruments and pegs

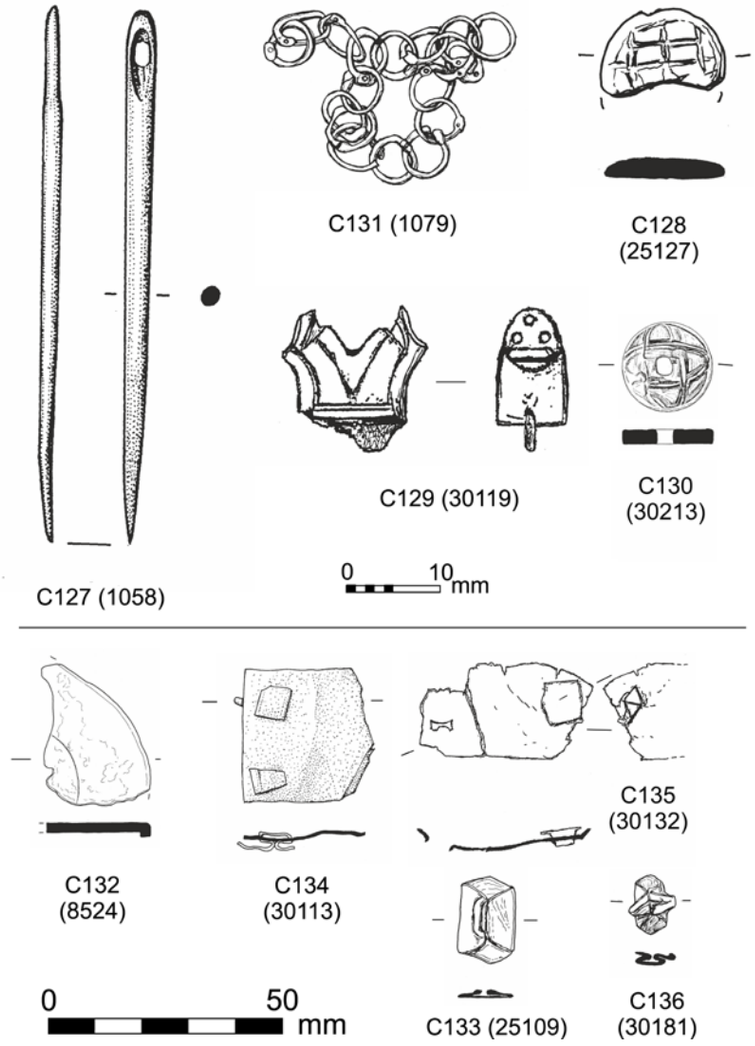


Illustration C4.17
Copper alloy artefacts: implements, patches and rivets

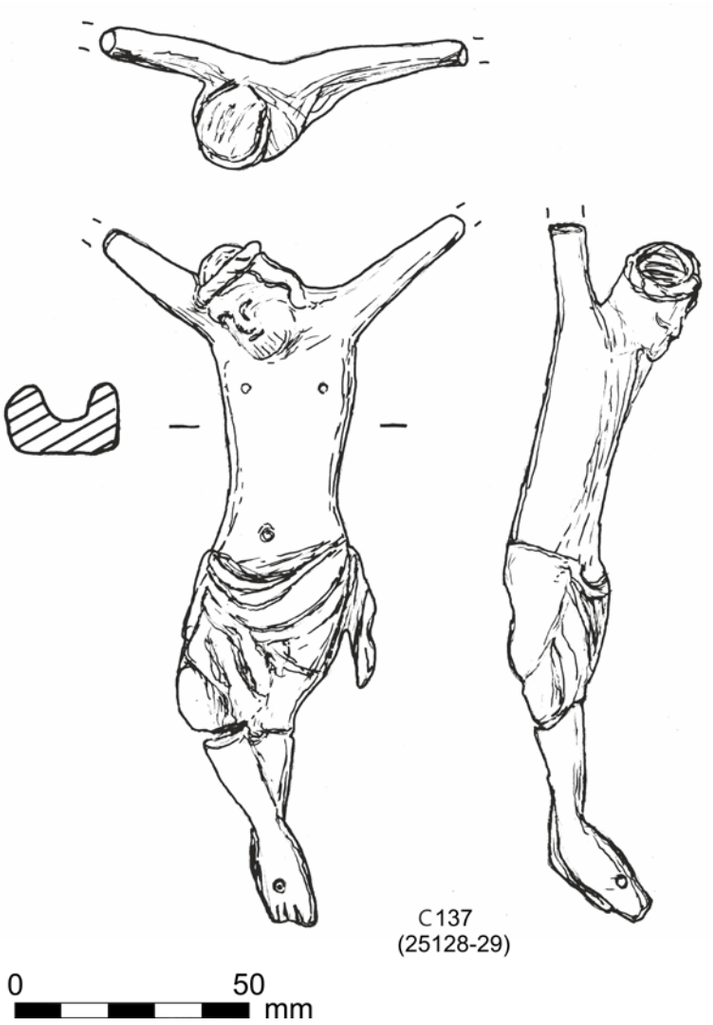


Illustration C4.18
Copper alloy artefacts: Christ figure from a crucifix, C137 (SF 25128–29)

C118 MOUNT, COPPER ALLOY
Cover for keyhole? 50 by 34mm
SF 30092; sector 3

C119 LOCKPLATE? COPPER ALLOY
Fragment. 68 by 47mm
SF 30141; sector 3

C120 MOUNT, COPPER ALLOY (BRONZE, TINNED SURFACE?)
End mount for barrel padlock with square key-hole? 24 by 16mm
SF 30159; sector 1

Musical instrument pegs and strings (Illus C4.16)

C121 MUSICAL INSTRUMENT PEG, COPPER ALLOY
Probably for a wire-strung harp or clarsach.
L: 53mm; Diam of string hole: 1.3mm
12th–15th century
SF 3019; [3014] palisade bank that replaced the gatehouse; late 16th century

C122 MUSICAL INSTRUMENT PEG, LEAD/TIN ALLOY
Broken, lacking its tip and string hole.
L: 62mm
SF 7272; [7100] bank of str V.1

C123 MUSICAL INSTRUMENT PEG? COPPER ALLOY
Possibly a harp peg, unfinished or a crude replacement, lacking the bottom of its shaft and string hole. L: 76.5mm
SF 11033; [11000] unstratified, found in 1994 to the north-west of building C in lee of cross-wall

C124 WIRE, COPPER ALLOY
Length approximately 180mm; Diam: 0.5mm
SF 25100; [25008] medieval midden; 13th century
Not illustrated

C125 WIRE, COPPER ALLOY
Length approximately 60mm; Diam: 0.6mm
SF 25151; [25003] gravel, beach deposit
Not illustrated

C126 MUSICAL INSTRUMENT PEG, COPPER ALLOY (GUNMETAL)
Probably for a wire-strung harp or clarsach.
L: 70mm; Diam of string hole: 1.8mm
SF 30124; sector 3.

Needle (Illus C4.17)

C127 NEEDLE, COPPER ALLOY (GUNMETAL)
L: 57mm
SF 1058; [1007] gravel spread in burial ground.

Weight (Illus C4.17)

C128 WEIGHT? COPPER ALLOY (LEADED BRONZE)
Disc shaped, with a 'bite' out of it; decorated on its upper surface with a grid pattern.

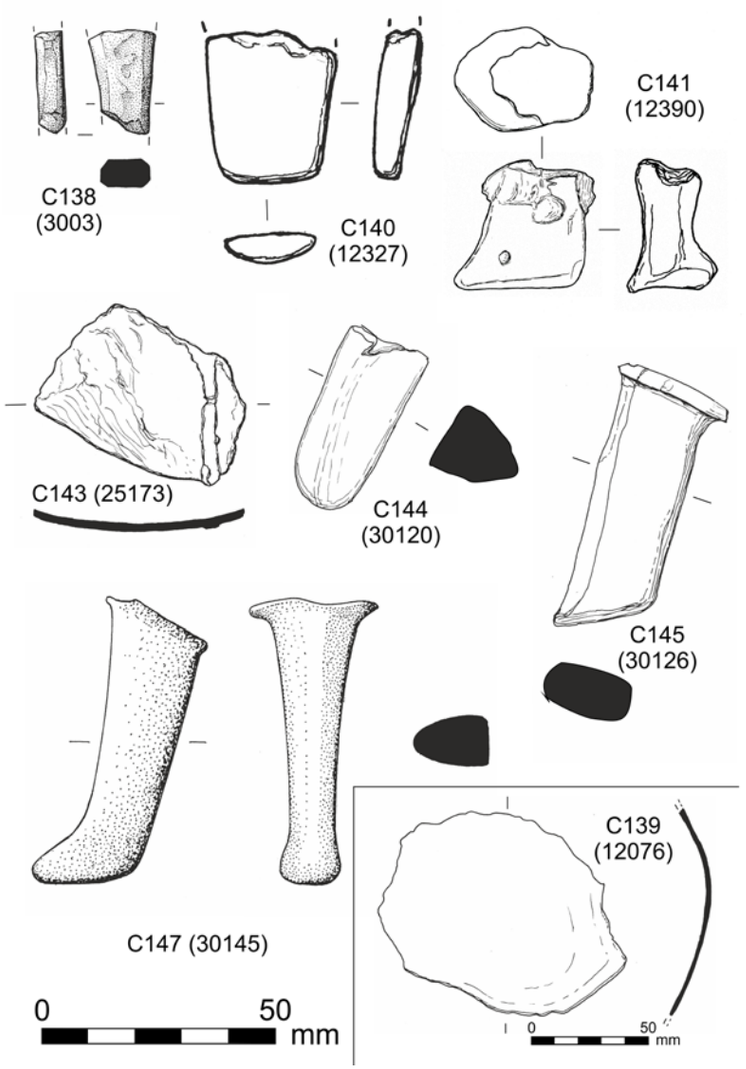


Illustration C4.19
Copper alloy artefacts: vessel fragments

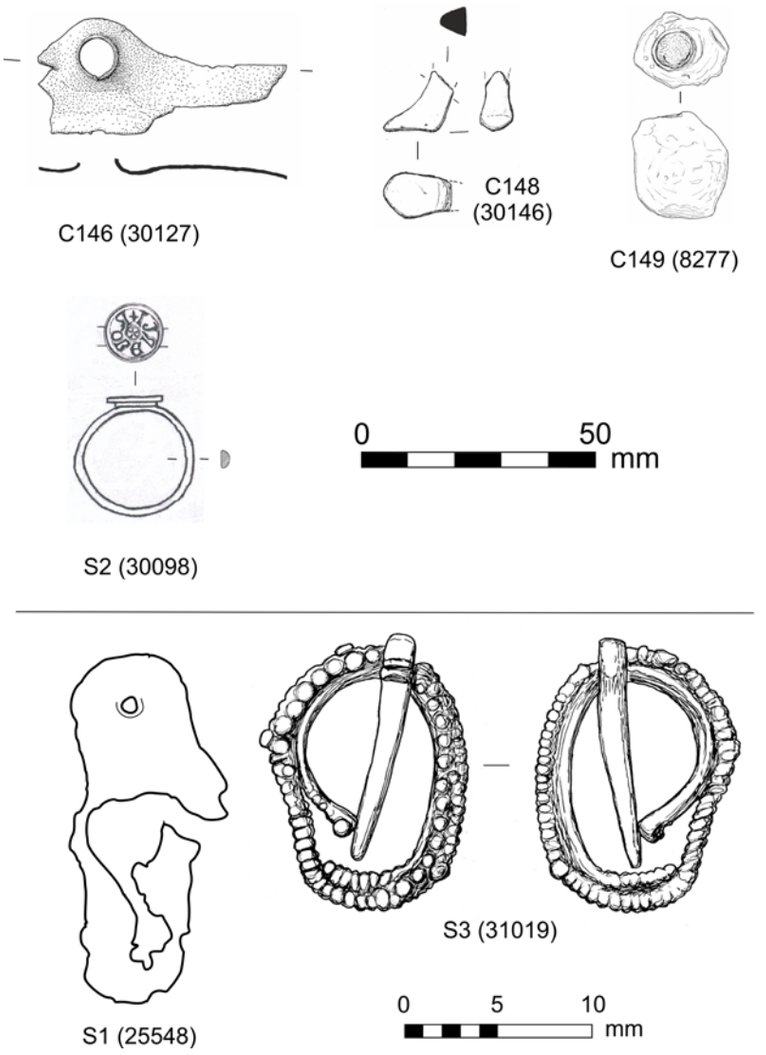


Illustration C4.20
Copper alloy artefacts: vessel fragments; silver artefacts

12.28 by 8.3 by 1.95mm; Wt: 0.75g
SF 25127; sector C1

Knives (Illus C4.17)

C129 CAP FOR A KNIFE HILT, COPPER ALLOY (LEADED BRASS)
Cap in the form of two opposed hoofs. The bottom is grooved for a scale tang, some of which is still in place. 16 by 16 by 7mm
1st half of 16th century
SF 30119; sector 3
Another similar, SF 30039, is listed in the select catalogue

C130 MOUNT, COPPER ALLOY (GUNMETAL), WITH REMAINS OF A SILVER COATING
Circular mount, pierced centrally, with quatrefoil design. Possibly the pommel cap from a knife. Diam: 12mm; Th: 2mm
SF 30213; sector C1.

Mail (Illus C4.17)

C131 MAIL, COPPER ALLOY
Group of interlinked riveted links, each about 6 to 6.5mm in diameter, along with over 20 detached and broken links. The group possibly formed one or more triangular fringes to a mail garment.
SF 1079; [1007] gravel spread in burial ground.

Mirror (Illus C4.17)

Although a mere fragment, the identification of C132 as the 'robust' case for a mirror is made with some confidence, since these artefacts are well known in the archaeological literature for the medieval period (for example, Egan & Pritchard 1991: 361–62). Other more complete examples are known, within the area of the Lordship of the Isles, from Tungadal in Skye (Miket & Roberts 2007: 26) and (in a private collection) from adjacent to the island dwelling of Eilean Mhic Iain in Loch Lossit, Islay. See L4 for a lead alloy mirror-case from Finlaggan.

C132 MIRROR, COPPER ALLOY (LEADED BRASS)
Fragment of small circular mirror-case.
27 by 24mm
The case would have consisted of two circular discs, hinged together. They were recessed on their interior faces for housing the (glass) mirror.
SF 8524; [8000] spoil-heap

Rivets and patches (Illus C4.17)

C133 SHEET METAL RIVET, COPPER ALLOY
18.5 by 12 by 2.7mm.
Sheet metal thickness: 0.26mm
SF 25109; [25000] unstratified

C134 PATCH, COPPER ALLOY (GUNMETAL)
Patch of sheet metal with two sheet rivets.
28 by 28mm
SF 30113; sector 2

C135 PATCH, COPPER ALLOY (GUNMETAL)
Patch of sheet metal with a sheet rivet.
37 by 21mm
SF 30132; sector 3

C136 SHEET RIVET, COPPER ALLOY (BRONZE)
19 by 16mm. Sheet metal thickness: 0.54mm
SF 30181; sector 4.

Crucifix (C4.18; Finlaggan, Illus 5.50)

C137 CHRIST FIGURE, COPPER ALLOY (GUNMETAL) WITH TRACES OF GILDING
The cast corpus from a crucifix, consisting of (SF 25128) the head, torso, upper arms and upper legs and (SF 25129) the feet and lower legs. Christ is bearded and has a crown of thorns; his body, clad only in a loin cloth gathered at his left side, is slumped. Nipples and navel are rendered as circular hollows. The hair has a central parting and is shoulder length. The two pieces together measure: Ht: 145mm; W: 80mm.

SF 25128–29: found in August 1997 in the bed of the loch about 5m to the north-east of Eilean Mhuireill. The two pieces lay separately, but close to each other. The broken ends of both pieces show signs of wear from immersion in the water, suggesting that the piece was broken in antiquity.

Vessels (Illus C4.19–20)

None of the vessel fragments are large enough or sufficiently diagnostic to identify them with any precision. Leg C141, found in the kitchen (str 12.6) is likely to be from a large cooking pot. Other pieces, including C138, C142, C145 and C147, are probably from ewers or aquamaniles.

C138 HANDLE? COPPER ALLOY (LEADED BRONZE)
Segment of cast metal object, possibly a vessel handle. L: 22mm
SF 3003; [3001] topsoil

C139 POT, COPPER ALLOY (LEADED BRONZE, WITH OVER 12% ANTIMONY)
Cast metal body sherd from a large pot or cauldron. 107 by 88mm
SF 12076; [12001] topsoil

C140 LEG, COPPER ALLOY
From cast metal pot, probably for cooking. 33 by 27 by 8mm
SF 12327; [12000] spoil-heap

C141 VESSEL LEG, COPPER ALLOY (GUNMETAL)
Cast metal leg of large, probably cooking, vessel. 27 by 27 by 20mm
Found along with fragments of mineralised wood.
SF 12390; [12138] floor deposit building 12.6; 15th century

C142 VESSEL, CAST BRONZE
Body sherd with attached stub of a strap handle, probably from a late medieval ewer. 23.5 by 16.5 by 13mm
SF 19400; [19003] subsoil for lazy beds
Not illustrated

C143 POT, COPPER ALLOY (LEADED BRONZE)
Sherd of cast pot with rib. 43 by 25 by 1.5mm
SF 25173; [25002] beach deposit

C144 VESSEL FOOT, COPPER ALLOY (GUNMETAL)
Ht: 39mm
SF 30120; sector 2

C145 POT LEG, COPPER ALLOY (GUNMETAL)
Ht: 58mm
SF 30126; sector 4

C146 FRAGMENT OF RIM AND HANDLE OF VESSEL, COPPER ALLOY
24 by 53mm
SF 30127; sector C2

C147 VESSEL LEG, COPPER ALLOY (GUNMETAL)
Leg of a cast metal pot or ewer. L: 61mm
SF 30145; sector 2

C148 VESSEL LEG, COPPER ALLOY
Leg of a cast metal pot or ewer. 16 by 18mm
SF 30146; sector 2.

Miscellaneous (Illus C4.20)

C149 BAKED CLAY, COPPER
Copper alloy tube encased in a lump of baked clay. 27 by 22 by 19mm; diameter of copper alloy socket: 10mm
SF 8277; [8044] turf bank/wall of building H.1; 12th–13th century.

Silver artefacts (Illus C4.20, C4.29)

Mount S1 has been interpreted as the covering of a bar mount in base metal or other material, with a central lobe. Copper alloy bar mounts of similar size and shape, for decorating belts and straps, are a well-known medieval type (for example, Egan & Pritchard 1991: 213–14).

Finger ring S2 with its engraved, reversed inscription, was intended to be used as a signet seal, perhaps by a visitor to Islay.

Brooch S3 is a smaller, more complex example of a type of annular brooch with ribbed hoop, examples of which are known from elsewhere in Scotland, including three silver ones from a coin hoard deposited in Dumfries about 1310 (Callander 1924: 161, fig 1, nos 2, 3, 4) and a copper alloy example from Auldhame in East Lothian, dated to the 13th or 14th century (Crone & Hindmarch 2016: 70–71, figs 60, 61).

S1 GIRDLE OR STRAP MOUNT, SILVER
Bar mount of sheet metal, crushed and torn. It had terminal lobes pierced for rivets and a larger open central lobe. L: 18.5mm; metal thickness: 0.38mm
SF 25548; [25008] midden; 13th century

S2 SIGNET RING, SILVER
The hoop is D-shaped in section. The disc-shaped bezel (Illus C4.29) has a central cinquefoil surrounded by the inscription, reversed: +ROBERTI. Diam: 25mm;
Diam of bezel: 12mm
15th century
SF 30098; sector 4, between structures X and V

S3 BROOCH, SILVER
Brooch, complete with pin, but damaged by being squeezed from its circular form to one more like an ear. Its hoop is formed of a coiled length of ribbed wire, decorated on its front with a continuous series of balls or baubles. 14 by 11mm
SF 31019; [25044] FN 98; 13th century.

Lead working and lead artefacts

Not all the lead artefacts are of local manufacture. This is clearly the case with pilgrim badge L1. Only half of it was recovered, having been neatly broken in two in antiquity. The surviving piece has an image of St Peter with a key. The missing half would have featured St Paul. This is a well-known type of pilgrim souvenir from Rome, dating to the 13th or 14th century. A fragment of another similar badge was recovered from excavations at Whithorn in Wigtownshire (Hill 1997: 395, illus 10.78, no. 2). The sole right to cast and sell lead and pewter badges with images of St Peter and St Paul for the benefit of visitors was given by the pope in 1199 (Spencer 1968: 141, pl IV, 7). The corner piercings were so that they could be sewn on to clothing. In this case it may be supposed that the badge has been deliberately halved so that one portion could be given, for example as a betrothal gift. The significance of this Finlaggan find is that it suggests pilgrimage from the Isles to Rome, a process not recorded in surviving documentary records. The actual context may have been the first papal jubilee of 1300, when a plenary indulgence was granted to pilgrims visiting the basilicas of both St Peter and St Paul (Spencer 2010: 249).

A decorative button (L2), with a cross and pellet design reminiscent of the reverse of many late 13th- to 15th-century coins, and a decorated mirror-case (L4) were probably manufactured in mainland centres in England

SF no.	Catalogue no.	Context	Diameter (mm)	Weight (g)	Notes
7000		7007			
7317		7000	14.79	15.88	
8351	L7	8075	15.6	21.87	With extended sprue
14009	L8	14025	13.6	13.85	From grave 14.1
18079	L9	18003	14.5	12.57	
18170		18000	11.61	6.27	
30215		Loch	15.5	19.09	
30216		Sector 1	15.24	20.15	
30217		Sector 5	14.47	18.83	
30218	L11	Sector 5	24	56.46	
30221		Sector 5	14.84	18.12	
30223		Sector 3	15.32	20.32	
30224	L12	Sector 3	9.71	4.94	With textile impression
30225		Sector 3	6.39	1.64	

Table C4.4
Lead shot

or Scotland. For a copper alloy mirror-case, see C132.

A lead seal matrix (L5) included here was not actually found as part of the Finlaggan archaeological project but was a casual find from the shore of Loch Finlaggan prior to excavations commencing. Lead matrices are by no means uncommon among Scottish late medieval seals. The iconography of the design, featuring a kneeling image of the owner, hands raised in prayer before the Virgin and Child, can be regarded as typical. The supplicant in such designs is often framed in some way and/or rendered at a smaller size to indicate that he is not actually in the presence of the adored, or is unworthy of such an honour. In this case the adorer is separated from the Virgin and Child by a tree. The bird above is possibly intended to represent the Holy Ghost. A copper alloy seal matrix of a 13th-century monk of Crossraguel Abbey in Ayrshire has a similar theme, in this case with the kneeling owner in a niche below (Caldwell 1982: 48, C57).

The seal is vesica-shaped, a form often favoured by clerics, and although this one has a shield of arms, more often associated with secular lords and gentlemen, its ownership by a churchman is probable; however, the identification of the cleric himself has so far proved difficult.

The actual matrix itself is a competent piece of work, most probably cast using another one as a model. The design and lettering are both crude and untidy, suggesting that they are the work of a craftsman inexperienced in producing such work. He may have been locally based, operating sometime in the 14th or 15th century.

A seal of another type, almost certainly not local, is a lead sealing (L6) which would have been attached to a bale of cloth or used to close a bag or other container of merchandise. The design on the seal served as a form of identification and mark of quality.

Evidence for the exploitation of the lead ore (galena) around Loch Finlaggan in earlier times has been given in the section on lead mining in *Finlaggan* Chapter 4 . Other work by Dr Michael Cressey on sediment cores from Islay lochs has indicated that lead mining extends back to the 13th century and probably earlier (Caldwell 2014a: 84). Some of the lead artefacts listed below are, therefore, very probably of local lead. There are several sprues from the casting of small lead objects (L25–L33), for instance pieces of gun shot. It is regrettable that these are neither datable of themselves nor from meaningful contexts.

Fourteen pieces of lead shot are listed in Table C4.4. Only one of these, L8, is from a meaningful context, the fill [14025] of grave 14.1, which is likely to date to the 16th century. The shot, found under the skull, may have contributed to the death of the occupant. The other pieces of shot could date any time from the 16th through to the 19th century. Some or all may reflect the local popularity of hunting and shooting. The possibility that some relate to military activity, for instance an attack on the islands, cannot be discounted. L7 has an extended sprue, probably to aid the attachment of a paper cartridge. L9 has indentations of six pieces of buck shot which were tightly packed with it in a cartridge, a process described by Sivilich (2016: 30–35) as 'buck and ball'. L12, with a diameter of almost 10mm, is of the size that would have been fired from early 17th-century Scottish pistols. Its surface has textile impressions imparted from its wadding when it was fired.

L10 is a possible fragment of a composite lead and stone cannon ball, shattered on impact, recovered from trench 19. It might have had a diameter of about 42mm. Encasing pieces of stone, or cubes of iron, in lead is a well-documented method of producing shot for smaller pieces of artillery in the 15th and 16th centuries. The National Museum of Scotland has a small group from Tantallon Castle in East Lothian (Caldwell 1992: 343–44, nos 57–63).

L14–L17 are a small group associated with building 12.6, especially an oven. They can be identified as pieces from one or more lead alloy cooking or drinking vessels.

Most of the other lead artefacts are undiagnostic pieces of scrap metal. L20 may have served to hold glass in a window in the chapel, and it might be expected that others are scrap from plumbing or the manufacture of containers.

Catalogue of lead alloy items

Illustrations by Marion O'Neil: L1, L5.

Pilgrim badge (Illus C4.21, C4.30)

L1 PILGRIM BADGE, CAST LEAD
Rectangular badge with piercings for attachment at the corners; half only with image of St Peter with a key. Legend: . . . +.SIG[N]A APOSTOLORV . . . 31 by 22mm
SF 30095; sector 1.

Dress accessories (Illus C4.21)

L2 BUTTON, LEAD ALLOY
Button, half missing, of cast metal, with a design of a cross with three pellets in each quarter. Diam: 18.15mm; Th (at rim): 2.62mm
SF 12328; [12000] spoil-heap

L3 AGLET, LEAD
31 by 6mm
SF 30232; sector C2.

Mirror (Illus C4.21)

L4 MIRROR CASE, LEAD ALLOY
Cast metal circular broken leaf of a mirror case, decorated with a design of raised ring and dot motifs against a cross-hatched background. Diam of lid: 27mm; metal thickness: 0.9mm
SF 30160; sector 1.

Seals (Illus C4.21, C4.31, C4.32)

L5 SEAL MATRIX, LEAD
Vesica-shaped matrix, the back with a loop, broken, for suspension. The seal design, described as impressed (Illus C4.31), has a centrally placed tree with a kneeling figure to the

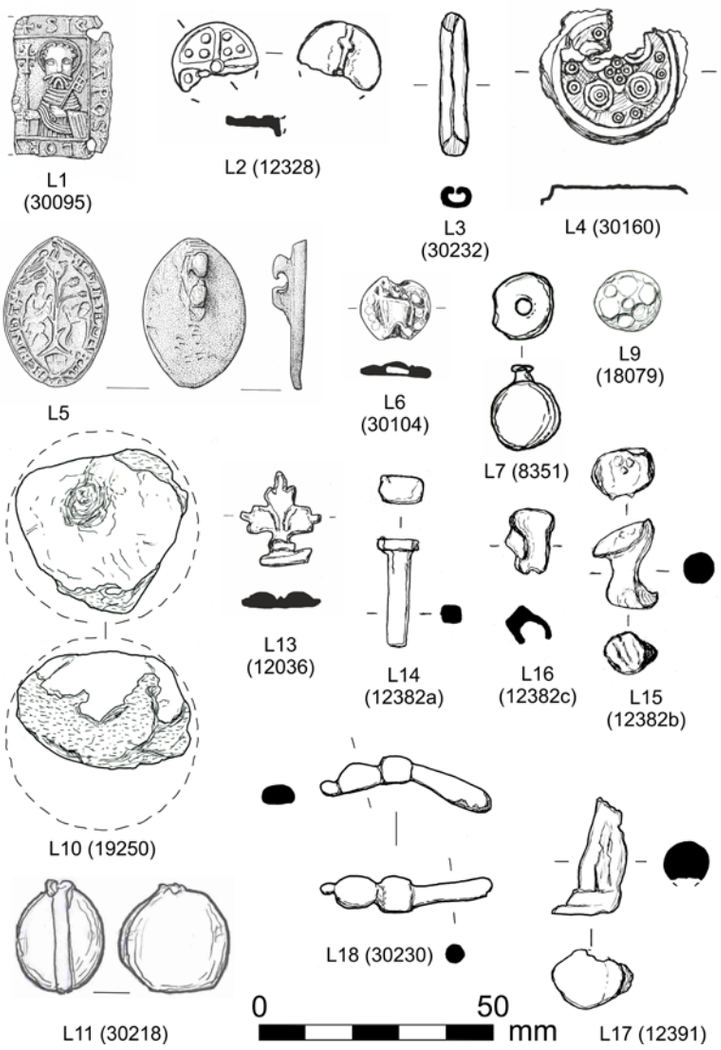


Illustration C4.21
Lead alloy artefacts

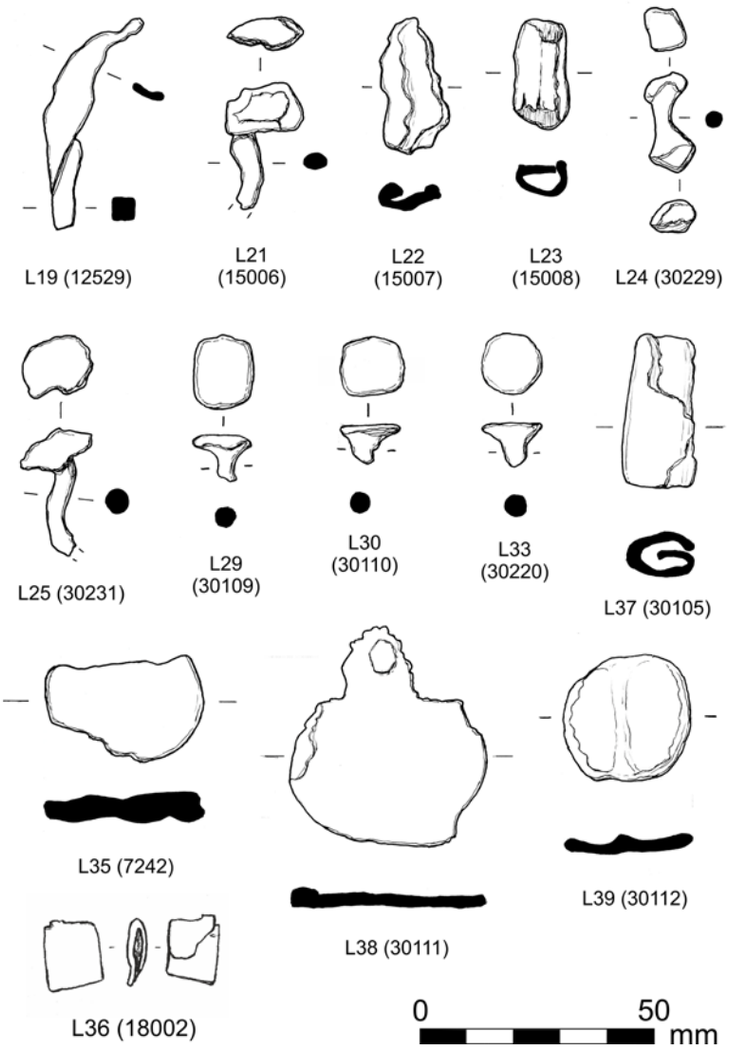


Illustration C4.22
Lead alloy artefacts

left, hands clasped in prayer, and a seated Virgin and Child to the right. A large bird, wings partially stretched, perches on top of the tree, and there is a shield beneath with an unidentified charge. It has an inscription around the edge. 32.5 by 22 by 7mm
Found on the shore of Loch Finlaggan about the 1920s and gifted to the Finlaggan Trust by Ronald Currie

L6 SEALING
Oval-shaped sealing impressed over cords or wires, now missing. The design, on one side only, consists of a shield, with no trace of a charge, possibly with a crest, surrounded by a band with an illegible inscription (Illus C4.32). 13 by 14mm
SF 30104; sector 1.

Gun shot (Illus C4.21)

L7 LEAD SHOT
Piece of lead shot with extended sprue. Diam: 15.6mm; Wt: 21.87g
SF 8351; [8075] alignment of boulders at water's edge

L8 LEAD SHOT
Gun shot, possibly chewed. Diam: 13.6mm; Wt: 13.85g
SF 14009; [14025] grave 14.1, underneath the skull; 16th century
Not illustrated

L9 LEAD SHOT
With indentations of six pieces of buck shot. 14.5 by 11.75mm; Wt: 12.57g
SF 18079; [18003] silting

L10 CANNON BALL? LEAD AND STONE
Possibly a fragment of a composite piece of shot with a stone core enclosed in lead. 38 by 34 by 22mm. It could have been about 42mm in diameter.
SF 19250; [19006] lazy bed

L11 LEAD SHOT
With prominent casting seam and flattened patch, possibly from impact. Maximum Diam: 24mm; Wt: 56.46g
SF 30218; unprovenanced; probably sector 5

L12 LEAD SHOT
With textile impression. Diam: 9.71mm; Wt: 4.94g
SF 30224; sector 3
Not illustrated.

Vessels, decorative mounts (Illus C4.21)

L13 FLEUR-DE-LIS, LEAD ALLOY
Decorative piece of cresting with traces of gilding. 21 by 20 by 4mm
SF 12036; [12033] fill of foundation trench of east wall of building 12.6; 15th century

L14 HINGE PIN? LEAD
For example, from the hinged lid of a vessel. L: 23mm
SF 12382a; [12137] slumped wall of oven; 15th century

L15 BRIDGE? LEAD
For example, for connecting a tubular spout to the body of a vessel. L: 20mm
SF 12382b; [12137] slumped wall of oven; 15th century

L16 FRAGMENT, LEAD
Possibly part of a hinge. L: 15mm
SF 12382c; [12137] slumped wall of oven; 15th century

L17 VESSEL LEG, LEAD ALLOY
Small damaged leg with broad foot. Surviving Ht: 25.7mm
SF 12391; [12138] floor deposit building 12.6; 15th century

L18 MOUNT, LEAD
Strap mount, broken and bent. L: 38.5mm
SF 30230; sector 2.

Building and other structural pieces (Illus C4.22)

L19 CAULKING? LEAD
Ribbon of metal partially twisted into a square-sectioned rod. L: 46mm
SF 12529; [12131] wall of str 12.5 ; 15th century

L20 WINDOW CAMES? LEAD
Two pieces: one misshapen with mortar adhering to it, 65 by 20mm; the other a piece of sheet metal folded round upon itself, 16 by 12mm
SF 14014; [14002] 19th-century disturbance within the chapel
Not illustrated

L21 NAIL, LEAD
Small nail or rivet, circular shank. Surviving L: 27mm; head: 16.3 by 10.8mm
SF 15006; [15000] Building C watching brief, April 1997

L22 WINDOW CAME? LEAD
Length of channelled lead. L: 28.8mm
SF 15007; [15000] Building C watching brief, April 1997

Illustration C4.23
Copper alloy brooch: C2 (SF 7041) (© National Museums Scotland)

Illustration C4.24
Copper alloy enamelled heraldic pendant: C58 (SF 30096) (© National Museums Scotland)

Illustration C4.25
Copper alloy dog collar mount and connected swivel ring for a leash: C87 (SF 31017)

Illustration C4.26
Copper alloy dog collar mounts: C89

Illustration C4.27
Copper alloy dog collar mounts: C90

L23 WINDOW CAME? LEAD
Length of folded-over lead. L: 22mm
SF 15008; [15000] Building C watching brief, April 1997

L24 RIVET, LEAD
Small rivet, circular shank, double-ended with rectangular heads. L: 20.5mm
SF 30229; sector 2

L25 NAIL, LEAD
Small nail or rivet with circular shank. Surviving L: 27mm; head: 13.2 by 12.4mm
SF 30231; sector 3.

Sprues (Illus C4.22)

L26 SPRUE, LEAD
13 by 12.5 by 7mm
SF 30106; sector 1
Not illustrated

Illustration C4.28
Copper alloy hasp (?): C103 (SF 30167)

Illustration C4.29
Silver finger-ring, bezel: S2 (SF 30098)

Illustration C4.30
Lead pilgrim-badge from Rome: L1 (SF 30095) (© National Museums Scotland)

Illustration C4.31
Lead seal matrix, impression: L5 (© National Museums Scotland)

Illustration C4.32
Lead sealing: L6 (SF 30104) (© National Museums Scotland)

L27 SPRUE, LEAD
12 by 13 by 7mm
SF 30107; sector 1
Not illustrated

L28 SPRUE, LEAD
12.5 by 13 by 8mm
SF 30108; sector 1
Not illustrated

L29 SPRUE, LEAD
13.5 by 15 by 9mm
SF 30109; sector 1

L30 SPRUE, LEAD
13.5 by 12.5 by 8.5mm
SF 30110; sector 1

L31 SPRUE, LEAD
19 by 12mm
SF 30166; sector 1
Not illustrated

L32 SPRUE, LEAD
Diam: 13mm; Ht: 8mm
SF 30219; sector 4, adjacent to str X
Not illustrated

L33 SPRUE, LEAD
Diam: 13mm; Ht: 9mm
SF 30220; sector 4, adjacent to str X

Scrap and miscellaneous (Illus C4.22)

L34 SCRAP WITH LEAD RIVET
76 by 52 by 20mm
SF 7079; [7007] garden soil
Not illustrated

L35 SCRAP, LEAD
Partial disc. 34 by 22 by 6mm
SF 7242; [7009] lazy bed

L36 STRIP, LEAD
Folded piece of metal. 12 by 15mm
SF 18002; [18002] topsoil over ruins of gatehouse

L37 SCRAP, LEAD
Fishing weight (net sinker)? Rolled piece of sheet metal. Ht: 32.5mm; Diam: 18mm; Wt: 26.09g
SF 30105; loch
Cf SF 19364

L38 SCRAP, LEAD
Fragment of sheet lead containing a lead nail or rivet. 47 by 42 by 2.4mm
SF 30111; sector 3

L39 DISC, LEAD
Creased. Diam: 21mm; Wt: 10.66g
SF 30112; unstratified.

CHAPTER C5

Iron working and iron artefacts

Given that one of the medieval grave-slabs (R7) now in the chapel on Eilean Mór commemorates a smith, perhaps one of the hereditary ones who served the lords of the Isles, it should hardly seem surprising that there is evidence from the excavations for blacksmithing. It takes the form of several fragments of slag and pieces of hearth bottom (Table C5.1).

None of this material appears to come from meaningful contexts, apart from SF 6047, a largish piece supposed to have been deliberately placed in the bottom of a post-hole of structure 6.1 (post-medieval watchtower), to provide stability and perhaps to inhibit the timber it supported from rotting. Much of the rest of it comes from Eilean na Comhairle, some of it from contexts associated with the castle. It provides evidence for local smithing, perhaps the making of nails and other fittings used in construction.

Catalogue of iron artefacts

Illustrations by Marion O'Neil: F1, F3, F5–F7, F15, F22, F34, F41, F42, F49, F50, F80, F118, F130, F127.

Buckles (Illus C5.1)

These buckles were not all necessarily for clothing and belts. Some may have been for harnesses, dog collars, etc.

FI BUCKLE, IRON
Annular brooch with flat frame and pin.
Diam: 28 by 29.5mm
SF 4100; [4000] spoil-heap

SF no.	Context	Description	Height (mm)	Width (mm)	Diameter (mm)	Weight (g)	Notes
2024	2010	Loch-side silt	61	46	44		
6047	6020	Post-hole in str 6.1	136	112	60		
7007	7007	garden soil	42	36			
7261	7043	Lazy bed	22	19		5.22	
8444	8089	Disturbed natural clay				250.00	Several small fragments
10028	10013	Great hall demolition	35	30	25	31.05	
15005	15014	Make-up for floor of str C	34	45	8	7.98	
16001	16001	Topsoil	125	120	40	488.20	
16026	16011	19th-century clearance				128.80	Crumbly pieces
16055	16003	Wall of str (a)	53	33	21	59.24	
16064	16018	Levelling up in courtyard	80	70	32	149.24	Several small fragments
16096a	16076	Castle, foundation trench	190	150	80	1455.00	
16096b	16076	Castle, foundation trench	85	30	30	210.50	
16096c	16016	Castle, foundation trench	200	150	75	1276.60	
16101	16030	Castle demolition				260.00	Crumbly pieces
23013	23002	Washout, wall of str (a)	100	100	50	1075.70	
23045	23018	Castle midden	115	89	58		Hearth base
25017	25008	Midden			5	0.13	Dribble
25091	25007	Washout and debris	17	26	8	2.80	Hearth base
25092	25000	Eilean na Comhairle shore	90	90	50	225.00	Hearth base
25139		Eilean Mór, off jetty	55	50	35	136.87	Several pieces
25143	25008	Midden			5	0.68	Dribbles
25153	25006	Washout	35	34	21	20.58	Slag bubble
25172	25008	Midden	60	50	15	92.89	Hearth base
25185		Loch, near chapel				147.96	Several small fragments
25186	25003	Eilean na Comhairle shore	27	18	12	6.00	
30227		Eilean na Comhairle shore	62	44	20	95.34	

Table C5.1
Distribution of slag

F2 BUCKLE, IRON
Buckle with D-shaped frame, part of pin surviving. Frame: 26 by 34mm
SF 7237; [7009] lazy bed

F3 BUCKLE, IRON
16 by 26.5mm
SF 8422; unstratified

F4 BUCKLE, IRON
Rectangular, with pin. 40 by 52mm
SF 10026; [10013] demolition deposit, great hall
Image from radiograph

F5 BUCKLE? IRON
Broken D-shaped frame. 35 by 39mm
SF 12053; [12023] floor of building 12.2

F6 BUCKLE, IRON
Diam: 45mm
SF 12325; [12101] topsoil.

Clasp (Illus C5.1)

F7 CLASP, IRON
S-shaped fastener. 52 by 13mm
SF 30091; sector 1.

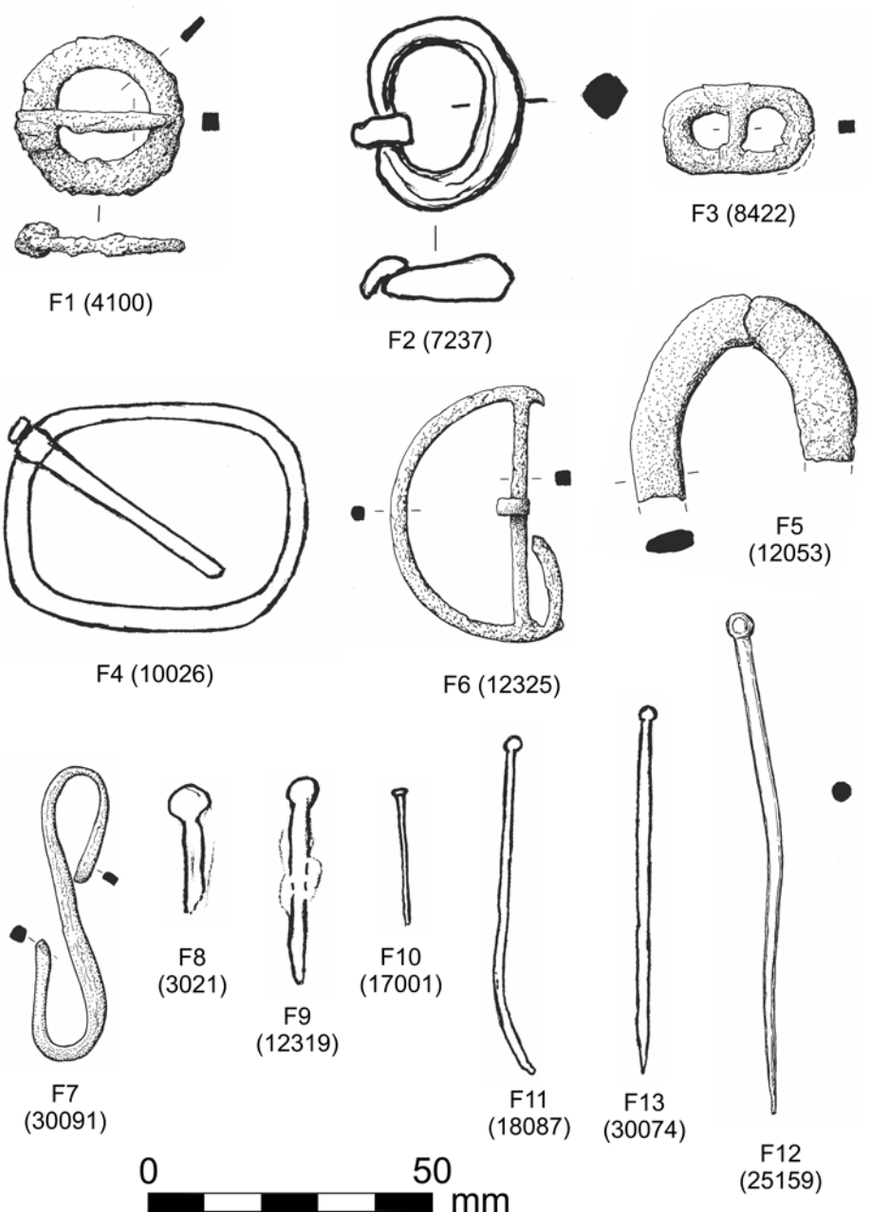


Illustration C5.1
Iron artefacts: buckles, clasp and pins

Pins (Illus C5.1)

One of the pins (F10) listed here, from its size and context, is likely to have been used to fasten a shroud. There has to be some doubt as to whether all the rest are hair or dress pins. It is possible that some are teeth, for example for heckles, or else had some other function as fasteners.
For other hair or dress pins of copper alloy, and comments on their use, see above.

F8 PIN OR NAIL, IRON
L: 23mm
SF 3021; [3026] thin gravel spread, post-collapse of gatehouse
Image from radiograph

F9 PIN OR NAIL
L: 36mm
SF 12319; [12101] topsoil
Image from radiograph

F10 SEWING PIN, IRON
L: 24mm
SF 17001; [17001] topsoil
Image from radiograph

F11 SEWING PIN, IRON
L: 60mm
SF 18087; [18015] collapsed gatehouse debris
Image from radiograph

F12 DRESS OR HAIR PIN, IRON
Stick pin with polygonal head. L: 88mm
SF 25159; [25008] medieval midden

F13 PIN OR NAIL, IRON
L: 65mm
SF 30074; sector 1
Image from radiograph.

Purse (Illus C5.2, C5.19)

Purses suspended on a metal bar were popular in England and Wales in the 15th and 16th centuries. There is limited evidence of their popularity in Scotland, which is perhaps surprising since purses (sporrans) hung from the waist were to become part of the Scottish national dress. For a leather drawstring pouch or purse, see H3.

F14 PURSE MOUNT, IRON
Purse bar with two arms and a central block with a suspension loop. A radiograph (Illus C5.19) shows it pierced vertically to allow the suspension loop to swivel, and an aperture in each arm for attaching the purse.
L: 169mm
SF 12057; [12023] floor of building 12.2.

Strap slides (Illus C5.3)

The identification of all the links or loops listed here as strap slides is by no means certain. Strap

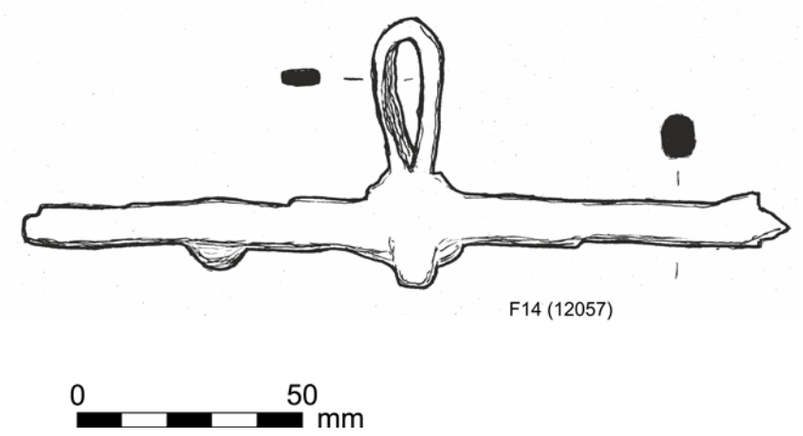


Illustration C5.2
Iron artefacts: purse mount

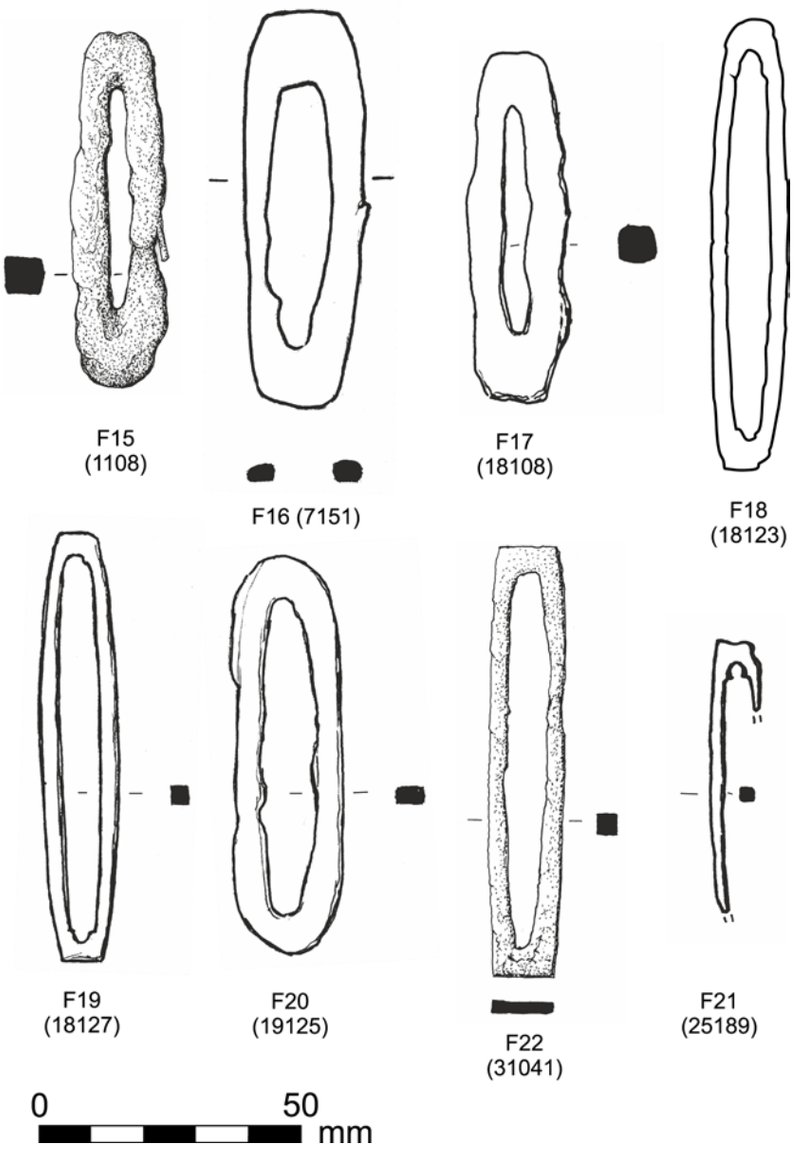


Illustration C5.3
Iron artefacts: strap slides

slides could readily have dropped off the end of their straps when being unfastened, so it perhaps should not be surprising that so many have been recovered. However, their size implies broader straps than is otherwise evident from belt and strap fitments, including buckles, recovered from these excavations, made of either iron or copper alloy. An alternative suggestion that has sometimes been advanced, for example in relation to similar items from Urquhart Castle on Loch Ness, is that they were strike-a-lights, although they mostly do not appear to be broad enough to sit comfortably over the fingers for such a use (Samson 1983: 469, 472). 'Slotted pointed tools' are an enigmatic type known from several early historic and Viking age sites in Britain and Ireland. Attention is drawn to them here since many are similar to the Finlaggan 'strap slides', but they have pointed blades which are not evident on any of the Finlaggan pieces. For a discussion of them see Lane & Redknap (2019: 233–38).

F15 STRAP SLIDE, IRON
Oval-shaped link. 68 by 18mm
SF 1108; unstratified

F16 STRAP SLIDE, IRON
75 by 23mm
SF 7151; [7027] floor of str V.1
Image from radiograph

F17 STRAP SLIDE, IRON
67 by 19 by 9mm
SF 18108; [18007] turf gatehouse wall

F18 STRAP SLIDE, IRON
86 by 14mm
SF 18123; [18053] turf platform for gatehouse
Drawn from radiograph

F19 STRAP SLIDE, IRON
81 by 15mm
SF 18127; [18065] paving in gatehouse

F20 STRAP SLIDE, IRON
75 by 21mm
SF 19125; [19009] floor of str 19.2

F21 STRAP SLIDE, IRON
Broken, 52 by 9mm
SF 25189; [25003] gravel, beach material

F22 STRAP SLIDE, IRON
83 by 16 by 2.5mm
SF 31041; sectors 2/3.

Mail (Illus C5.4)

Mail armour has a considerable antiquity, and warriors from the West Highlands and Islands continued to rely on it, rather than plate armour, throughout medieval times and the 16th century. Often the main protective garment that was worn was a padded or quilted

coat known as an aketon (Scots, actoun), with a mail collar or coif (mail hood), and an iron basinet (helmet). Habergeons (mail coats) were worn by some instead of, or over, their aketons (Caldwell 2007: 151–59). It should not be surprising, therefore, that rings or fragments of mail were lost from time to time. See C131 for a group of copper alloy mail rings.

F23 MAIL RING, IRON
Diam: 16mm
SF 8307; [8024] north-west wall of str J
Image from radiograph

F24 MAIL RING, IRON
Diam: 16mm
SF 9060; [9000] spoil-heap
Image from radiograph

F25 MAIL RING? IRON
Perhaps a washer rather than an unriveted mail link. Diam: 9.4mm; Th: 0.53mm
SF 12412; [12134] str 12.7?
Not illustrated

F26 MAIL, IRON
Heavily corroded lump with links visible in a radiograph. 85 by 71mm
SF 16068; [16018] levelling up in courtyard
Not illustrated; identified from radiograph

F27 MAIL, IRON
Small corroded lump with links visible in radiograph. 21 by 12mm
SF 19370; [19024] fill of post-hole 19023, str 19.4
Not illustrated; identified from radiograph

F28 MAIL RING, IRON
A riveted ring, 12 by 15mm
SF 23036; [23026] pre-castle midden
Image from radiograph

Arrowheads (Illus C5.4)

Bows remained a key weapon for warriors from the Islands and West Highlands throughout medieval times and the 16th century. The contingents from Argyll that fought at the battle of Pinkie in 1547 are described in contemporary sources as archers (Caldwell 2007: 163). Bows were also used for hunting, especially deer. The bows used for both activities were presumably the same, but modern classifications of medieval arrowheads have sought to distinguish war arrows from hunting arrows (London Museum 1967: 65–73; Jessop 1996). In broad terms it has been supposed that arrowheads with barbs and/or relatively broad heads were for hunting, whereas arrows with small, narrow points and especially long, bodkin-like heads were for penetrating armour. Thus at least five of the Finlaggan arrowheads (F29, F31, F33, F34, F36) would be considered as hunting types, while only one (F32) is unambiguously a military type. It is similar to one from Urquhart Castle on Loch Ness (Samson 1983: 468, no. 87). An impressive series of bodkin-like arrowheads have also come from Urquhart Castle, which was held by the forces of the lords of the Isles for a time in the 15th century, but it is not known if these arrowheads relate to their occupation.

This distinction between hunting and military types of arrows is all very well in theory but cannot be backed up by meaningful medieval evidence as far as Scotland is concerned. It is, therefore, appropriate to consider the possibility that some of the Finlaggan finds relate to one or more military exploit. The possibility that some of these projectile points might have been for darts (javelins) rather than arrows should also be considered. The evidence for the use of throwing weapons of this type among the Scots is tenuous but not unlikely, since they are recorded among the equipment employed by the galloglass in Ireland (Caldwell 2007: 161–62).

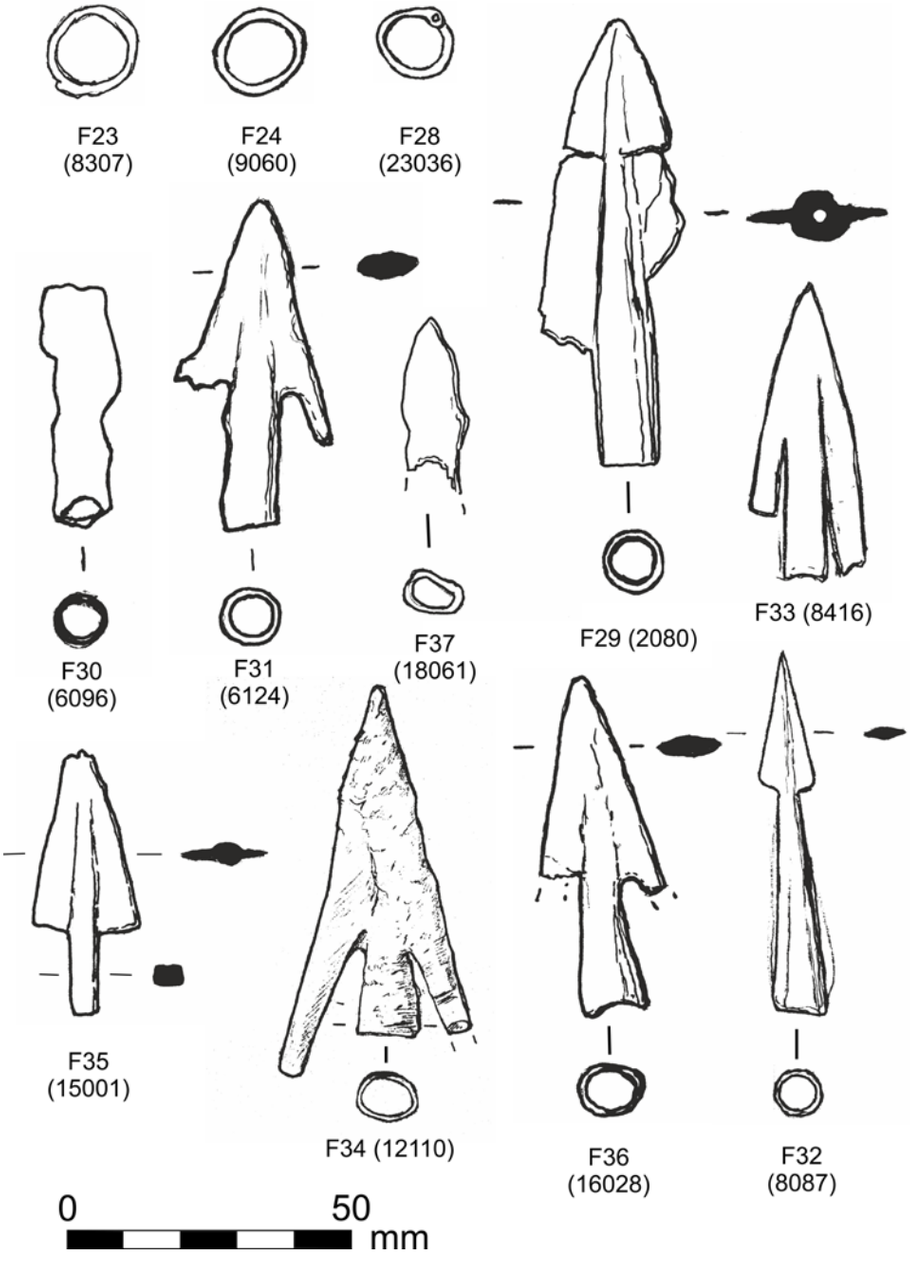


Illustration C5.4
Iron artefacts: mail rings and arrowheads

Medieval arrowheads mostly have a socket for securing them to their shafts, but one of the Finlaggan ones (F35) has a tang, a typologically early feature, suggestive of a 13th-century date.

F29 ARROWHEAD (OR DART OR JAVELIN PROJECTILE POINT?), IRON
Socketed arrowhead with leaf-shaped blade and prominent midrib. Ht: 79mm; socket diameter: 8.5mm
SF 2080; [2017] floor of building K.1

F30 ARROWHEAD, IRON
Fragment of a socketed arrowhead. Ht: 43mm; socket diameter 7mm
SF 6096; [6018] gravel spread

F31 ARROWHEAD, IRON
Socketed arrowhead with short barbs. Ht: 60mm; socket diameter: 8 by 9mm
SF 6124; [6022] midden

F32 ARROWHEAD, IRON
Socketed arrowhead with small narrow point. Ht: 64mm; socket diameter: 5mm
SF 8087; [8016] tumble within str H

F33 ARROWHEAD, IRON
Socketed, with long barbs, one broken. 52 by 20mm
SF 8416; [8088] upper fill of post-hole 8116 in str H.1
Image from radiograph

F34 ARROWHEAD, IRON
Socketed, with long barbs. 62 by 34mm; socket diameter: 10 by 8mm
SF 12110; [12101] topsoil

F35 ARROWHEAD, IRON
Tanged, with broad triangular head with central rib. 47 by 19mm
SF 15001; [15006] disturbed natural clay

F36 ARROWHEAD, IRON
Socketed arrowhead with short barbs, both broken. Ht: 60mm; socket diameter: 8 by 9mm
SF 16028; [16015] pre-19th-century ground surface in courtyard

F37 ARROWHEAD, IRON
Socketed arrowhead with leaf-shaped blade (Jessop 1996: type M10). 31 by 11mm; socket diameter: 5 by 6mm
SF 18061; [18015] collapsed gatehouse debris

F38 ARROWHEAD, IRON
Only the socket survives but a record drawing made at the time of recovery suggests it would have had a form similar to F32.
Present Ht: 30mm
SF 19058; [19001] topsoil
Not illustrated.

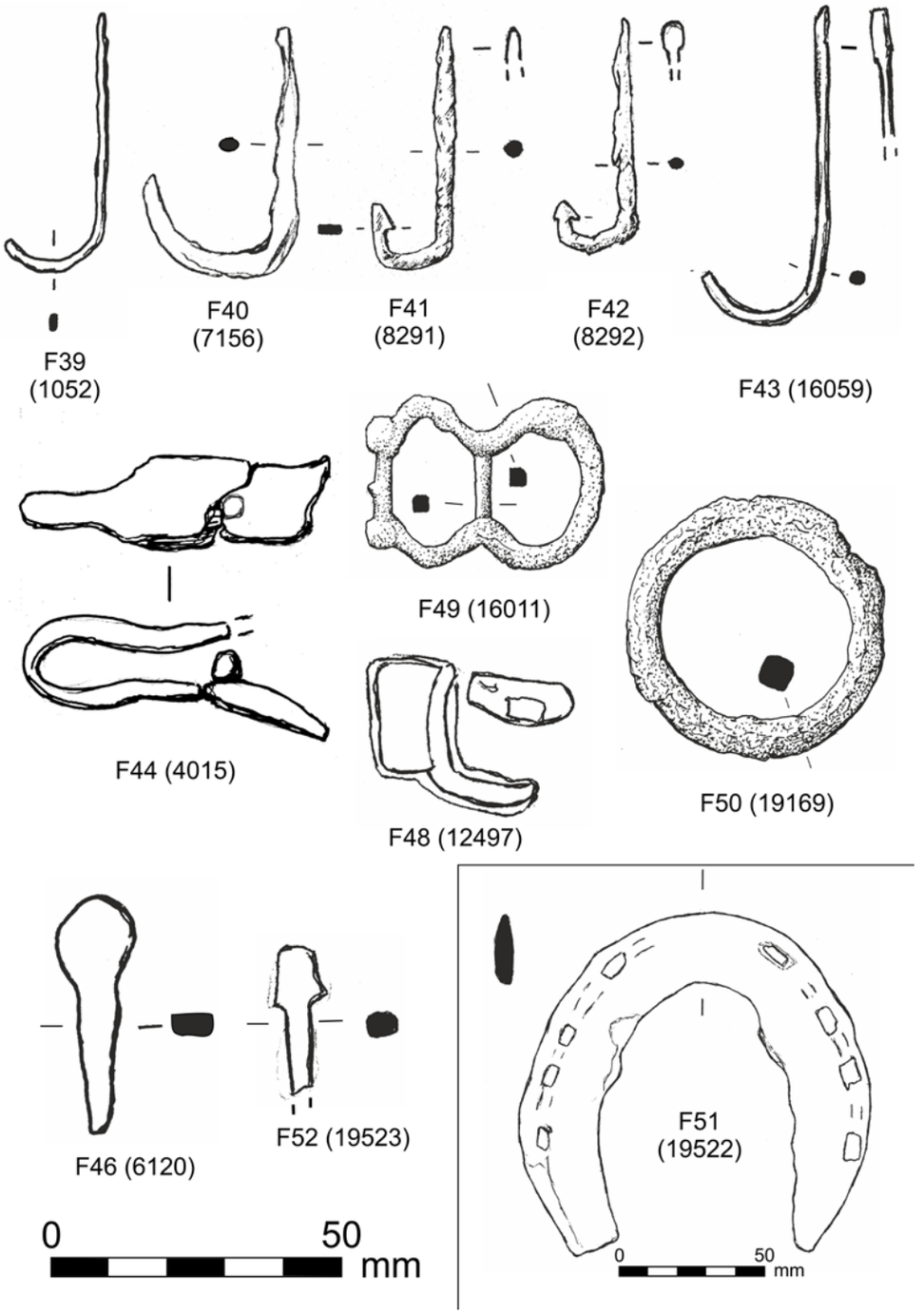


Illustration C5.5
Iron artefacts: fishhooks and horse equipment

Fishhooks (Illus C5.5)

Only F41 and F42 are certainly fishhooks, and none come from useful contexts. All five are considerably bigger than the hooks used by fishermen and anglers in recent times for catching fish in freshwater lochs and rivers. They appear only to be of a practical size for line-fishing in the sea. Their presence at Finlaggan is difficult to explain.

F39 FISHHOOK? IRON
Broken. Surviving size: 45 by 20mm
SF 1052; [1002] cobbling in entrance of building J facing the burial ground

F40 FISHHOOK? IRON
43 by 26mm
SF 7156; [7036] make-up deposit under str V

F41 FISHHOOK, IRON
Barbed fishhook with flat-headed shank. 42 by 14mm
SF 8291; [8000] spoil-heap

F42 FISHHOOK, IRON
Barbed fishhook with flat-headed shank. 39 by 14mm
SF 8292; [8000] spoil-heap

F43 FISHHOOK, IRON
Broken, barb missing, flat-headed shank. L: 55mm
SF 16059; [16018] levelling up in courtyard.

Horse equipment (Illus C5.5)

The horseshoe and distinctive horseshoe nails listed here are evidence that, at least occasionally, in the medieval period horses were taken on to Eilean Mór. The suggested dating derives from a detailed study of a large corpus of such material from excavations in London (Clark 2004: 86–88). The identification of F50 as the cheek piece from a bit is less certain, but it is also worth bearing in mind that some of the copper alloy and iron buckles and other fittings listed elsewhere could well be from horse harnesses. F48 is a T-shaped frame designed to link two straps of different widths. F49 is also for linking two straps together. Both are probably harness buckles.

F44 STRAP LOOP, IRON
One arm broken, part of rivet surviving. 53 by 22 by 15mm
For harness?
SF 4015; [4007] topsoil

F45 HORSESHOE NAIL, IRON
'Fiddle-key nail'. Head: 15 by 12mm; L: 38mm
SF 6084; [6018] gravel spread
Not illustrated

F46 HORSESHOE NAIL, IRON
'Fiddle-key nail'. L (incomplete): 41mm
12th–13th century
SF 6120; [6022] midden

F47 HORSESHOE NAIL, IRON
'Fiddle-key nail'. L: 39mm
SF 12219; [12101] topsoil
Not illustrated

F48 BUCKLE? IRON
Broken T-shaped frame. 23 by 29mm
SF 12497; [12105] path associated with str 12.1
Image from radiograph

F49 BUCKLE, IRON
Double, for attaching two straps. 30 by 41mm
SF 16011; [16010] 19th-century clearance within house (a)

F50 HORSE BIT? IRON
Possibly a cheek piece. Diam: 44mm
SF 19169; [19009] floor of str 19.2

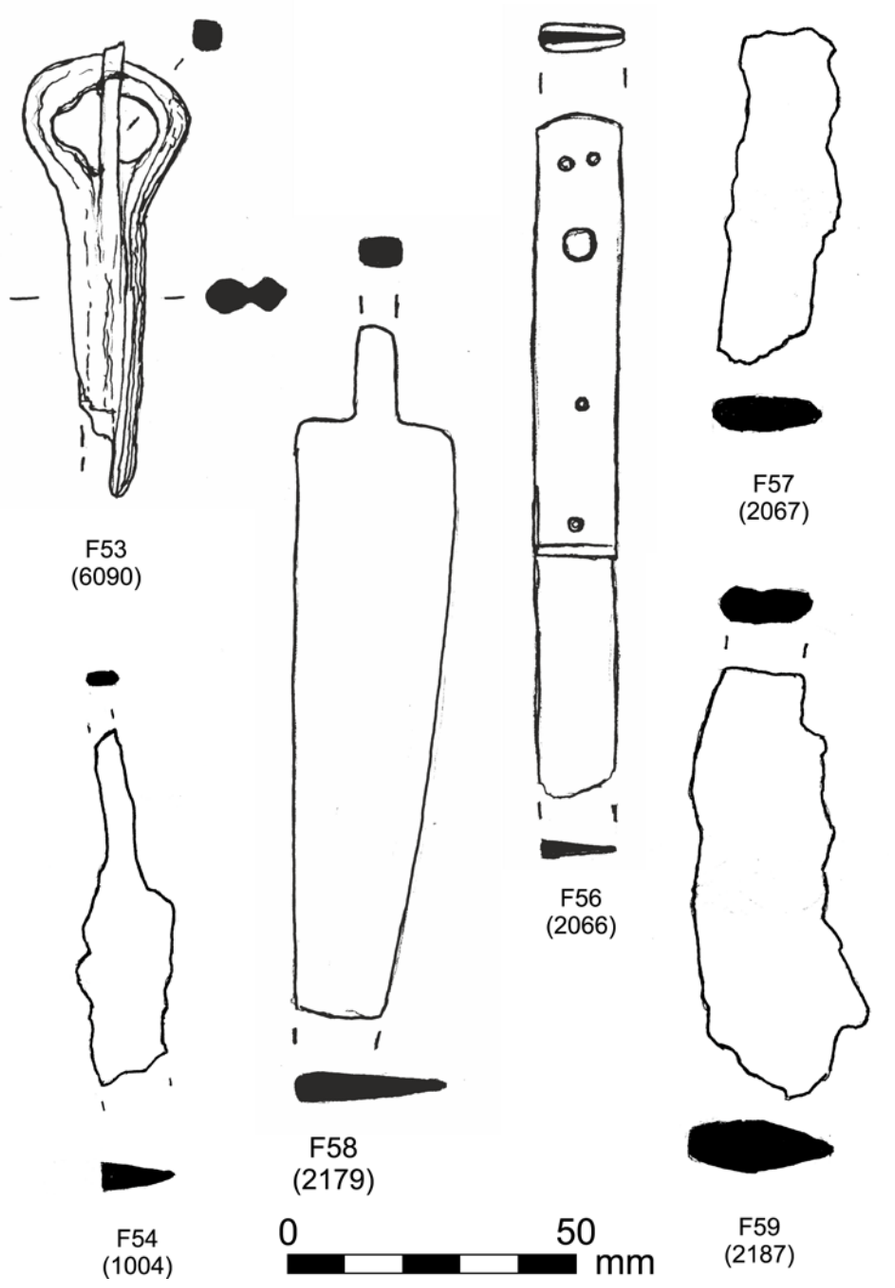


Illustration C5.6
Iron artefacts: Jew's harp and knives

F51 HORSESHOE, IRON
Horseshoe. 116 by 120mm
13th–14th century (Clark's type 3)
SF 19522 ; spoil-heap

F52 HORSESHOE NAIL, IRON
Nail with expanded head and ears. L (incomplete): 26mm
13th–14th century
SF 19523; spoil-heap

Jew's harp (Illus C5.6, C5.20)

Jew's harps occur quite widely in northern Europe in the Middle Ages (Ypey 1976). They were known in Scotland as trumps and are mentioned in documentary sources from the late 16th century (*DSL: sv* 'Trump'). They appear to have been popular in the West Highlands. This one is similar to ones discovered at Achanduin Castle in Lismore (Caldwell & Stell 2017: 42) and Castle Sween in Knapdale (Ewart & Triscott 1997 : 539–40, no. 27).

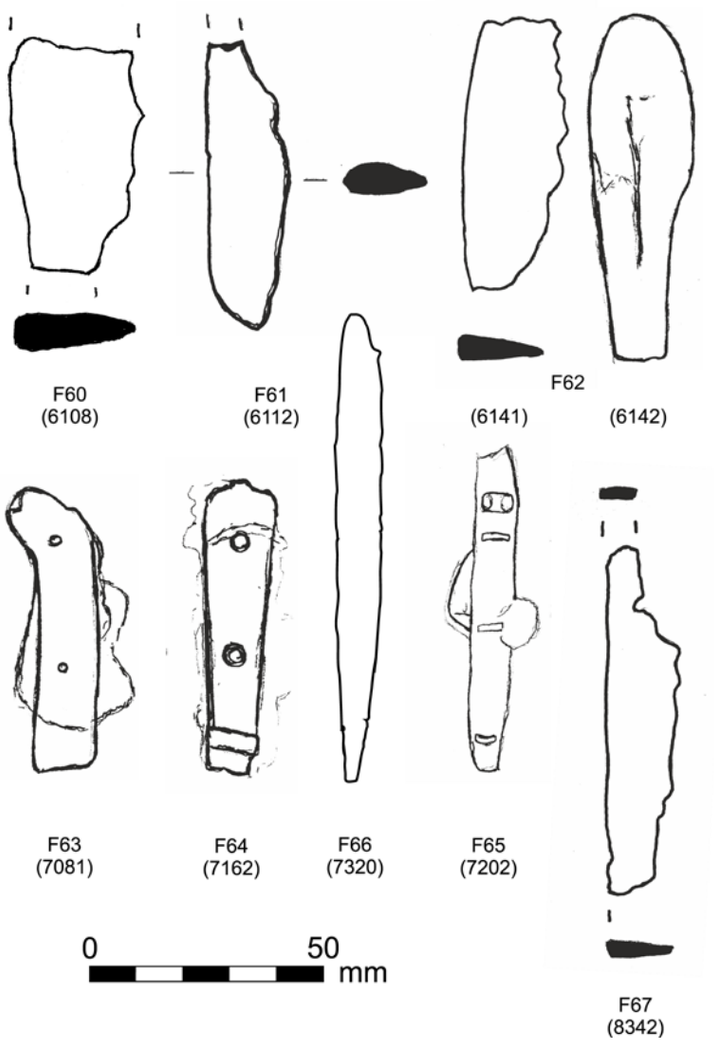


Illustration C5.7
Iron artefacts: knives

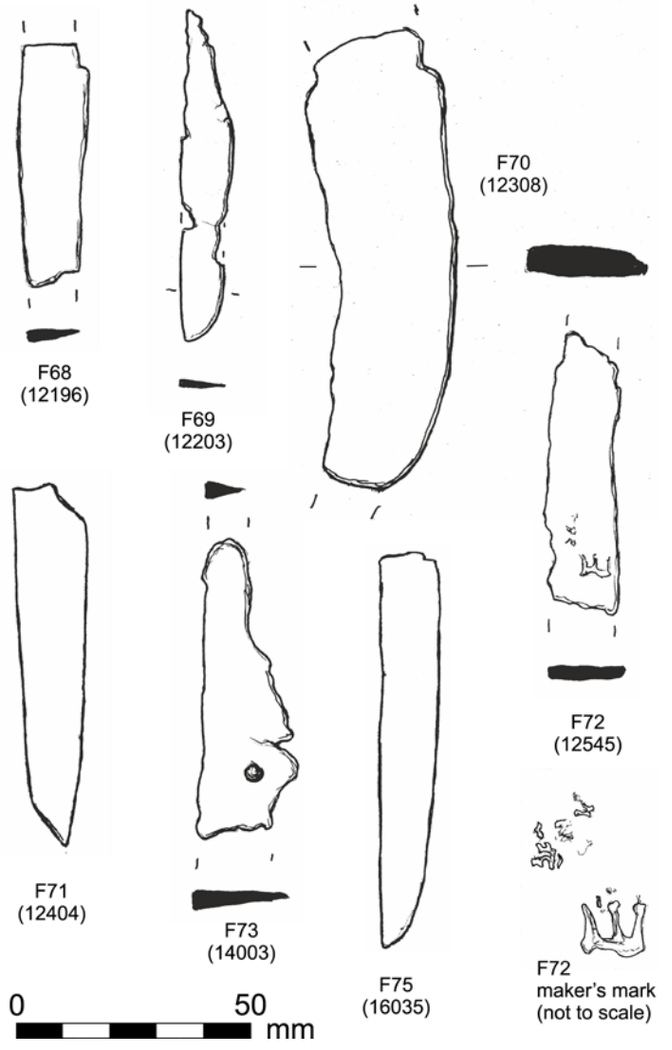


Illustration C5.8
Iron artefacts: knives

F53 JEW'S HARP, IRON
L: 80mm
SF 6090; [6018] gravel spread.

Knives (Illus C5.6–9)

Medieval knives for personal use, especially for cutting up food when eating, typically have backed, pointed blades, and can be divided into two groups on the basis of their tangs. Whittle tangs are narrow and were enclosed in a grip or handle; scale tangs are broad and flat and had scales attached on both surfaces to form a handle. Handles would typically have been of wood, sometimes bone and other organic materials. The two types may reflect the output of different workshops rather than function or date. Two pommels or caps of copper alloy (C129, C130), presumably for personal knives, are listed above. F58 is large enough to have been a dagger. F79, with its curved blade, may have had some specialised use.

It is probable that some of these knives were manufactured locally. F72, however, is most likely to be the product of a workshop in a major town, hence the need for the inlaid maker's mark, part of the process of regulating quality and supply that existed in such centres.

F65 (SF 7202), the grip of a scale-tang knife with copper alloy mounts and rivets and wooden scales, is shown in Illus C5.21 in three stages of its identification. (A) is a drawing from the finds notebook for trench 7, made at the time of its discovery, showing it concreted with corrosion products and not immediately identifiable. (B) is a radiograph made in the laboratory of NMS which enabled it to be identified as a knife. Note how the copper alloy rivets and the lining for the suspension hole are shown side-on. (C) is the object as conserved. The small detached copper alloy pierced plate was probably mounted between the grip and the blade.

F54 KNIFE, IRON
Whittle-tang knife, broken. Surviving L: 62mm
SF 1004; [1007] gravel spread in burial ground

F55 KNIFE, IRON AND COPPER ALLOY
Fragmentary remains of a knife with scale tang and copper alloy riveted shoulder plate.
Surviving L: 47mm
SF 1089; [1007] gravel spread in burial ground
Not illustrated

F56 KNIFE, IRON, WOOD AND COPPER ALLOY
The mineralised wooden hilt and upper part of the blade of a scale-tang knife. It has a copper alloy hilt mount and cap, four tubular copper alloy

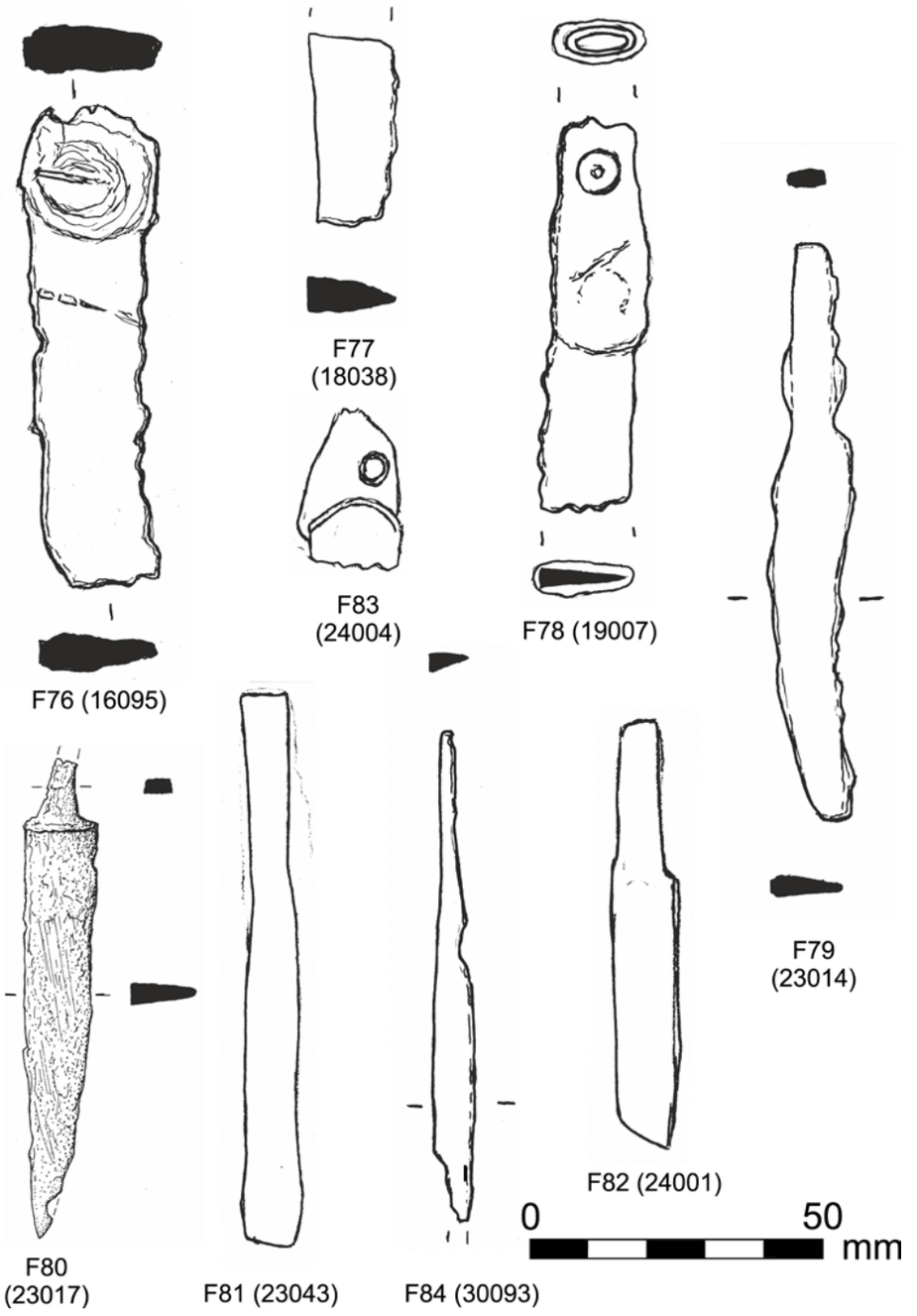


Illustration C5.9
Iron artefacts: knives

rivets to secure the scales, and a larger aperture, copper mounted, for suspension. Surviving L: 117mm; hilt L: 77mm
SF 2066; [2015] floor of building K.1

F57 KNIFE? IRON
Probably a broken knife blade. Surviving L: 60mm
SF 2067; [2015] floor of building K.1

F58 KNIFE, IRON
Knife with whittle tang; point missing. L: 137mm
SF 2179; [2037] floor of building K.1
Image from radiograph

F59 KNIFE? IRON
Probably broken whittle-tang knife. Surviving L: 76mm
SF 2187; [2037] floor of building K.1

F60 BLADE? IRON
Length of metal with wedge-shaped cross section. L: 51mm
SF 6108; [6024] fill of post-hole 6048 in palisade

F61 KNIFE, IRON
L (incomplete): 60mm
SF 6112; [6022] midden

F62 KNIFE, IRON
Two pieces, broken in antiquity. SF 6141 is part of the blade; L: 58mm. SF 6142 is the rest of the blade with its scale (?) tang; L: 74mm
SF 6141, 6142; [6026] fill of post-hole 6046 in str 6.2
Image of SF 6142 from radiograph

F63 KNIFE, IRON AND WOOD
Handle of scale-tang knife with mineralised remains of wooden scales, fastened by two rivets. L: 60mm
SF 7081; [7024] post-hole (fill of)
Image from radiograph

F64 KNIFE, IRON AND COPPER ALLOY
Scale-tang knife handle with copper alloy hilt mount (blade/hilt) and two hollow rivets; most of the blade is missing. L: 63mm
SF 7162; [7007] garden soil
Image from radiograph

F65 KNIFE? IRON, WOOD, COPPER ALLOY (ILLUS C5.7, C5.21)
Scale-tang knife handle with wooden scales secured by three copper alloy (brass) rivets. There is a brass-lined suspension hole and associated brass mount. L: 84mm
SF 7202; [7017] garden soil

F66 KNIFE, IRON
L: 100mm
SF 7320; [7000] spoil-heap
Image from radiograph

F67 KNIFE, IRON
Scale-tang knife. L (incomplete): 75mm
SF 8342; unstratified

F68 KNIFE, IRON
L: 61mm
SF 12196; [12101] topsoil

F69 KNIFE? IRON
Probable remains of a scale-tang knife, now disintegrated. 71 by 23mm
SF 12203; unstratified – probably from topsoil

F70 KNIFE? IRON
Probably the curved blade of a knife with convex cutting edge. L: 98mm
SF 12308; [12124] levelling for floor of building 12.1

F71 KNIFE, IRON
Blade only. L: 78mm
SF 12404; [12123] levelling for floor of building 12.1
Image from radiograph

F72 KNIFE, IRON
Length of blade with inlaid copper maker's marks, an open capital E and a (?) crown. L: 61mm
SF 12545; [12157] cobbled path between buildings 12.2 and 12.6

F73 KNIFE, IRON
Whittle-tang knife, part of tang and upper part of blade only. A radiograph indicates a rivet hole for securing a guard or hilt mount.
L: 64mm
SF 14003; [14004] charnel deposit

F74 KNIFE? IRON
Corroded lump of broken pieces possibly including remains of a scale tang and a pommel.
43 by 26mm
SF 16031; [16010] 19th-century clearance within house (a)
Not illustrated

F75 KNIFE, IRON
Blade. L: 84mm
SF 16035; [16010] 19th-century clearance within house (a)
Image from radiograph

F76 KNIFE, IRON
Incomplete scale-tang knife. L: 82mm
SF 16095; [16065] make-up for castle plinth

F77 KNIFE, IRON
Portion of blade. 32 by 15mm
SF 18038; [18015] collapsed gatehouse debris

F78 KNIFE, IRON AND WOOD
Whittle-tang knife with remains of mineralised wooden hilt. L: 67mm
SF 19007; [19001] topsoil

F79 KNIFE, IRON
Whittle-tang knife with curved blade.
L: 99mm
For leather working?
SF 23014; [23002] washout from ruin of str (a)

F80 KNIFE, IRON
Whittle-tang knife with bolster, missing most of its tang. L: 82mm
SF 23017; [23011] buried topsoil over ruins of castle and pre-dating construction of str (a)

F81 KNIFE? IRON
L: 94mm
SF 23043; [23045] dun wall
Image from radiograph

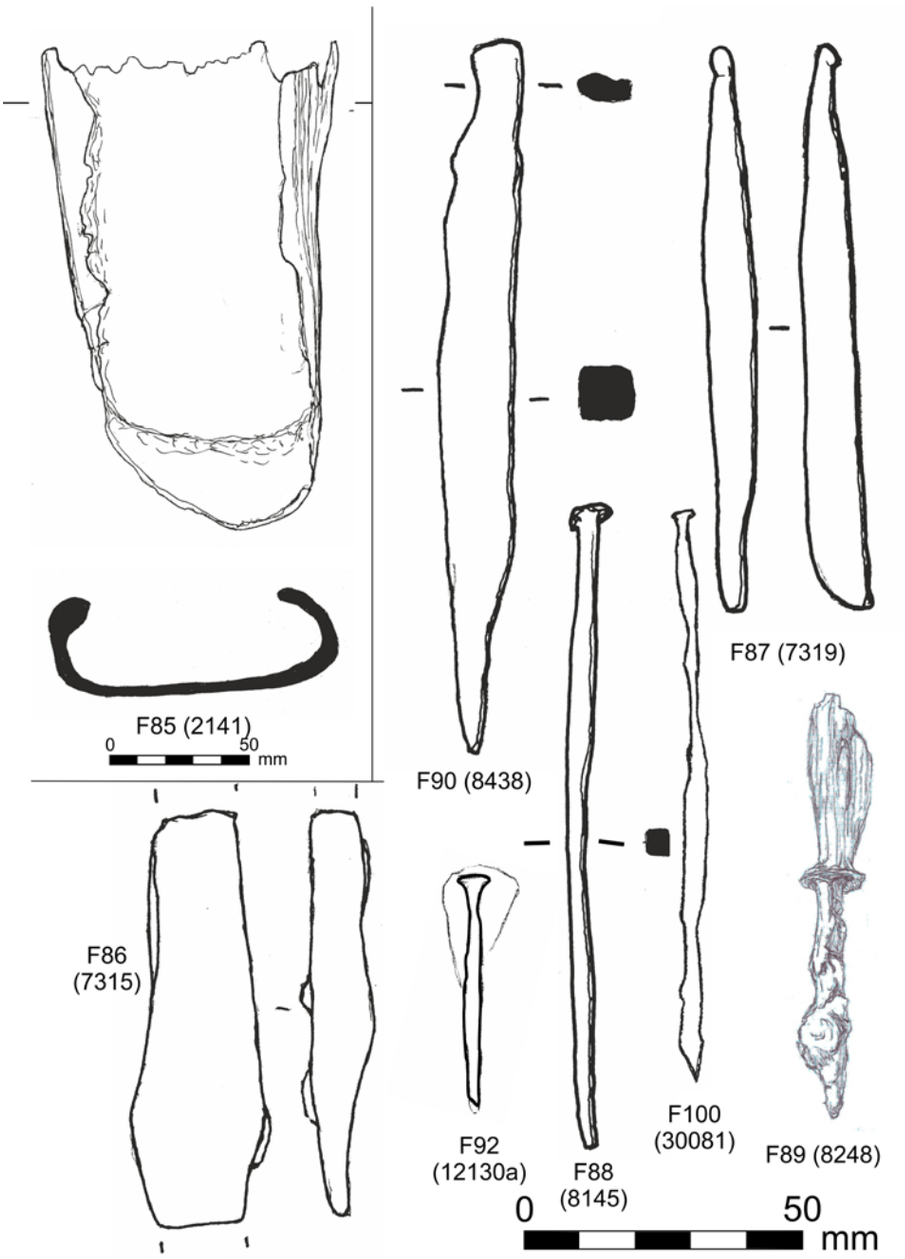


Illustration C5.10
Iron artefacts: tools

F82 KNIFE, IRON
L: 73mm
SF 24001; [24002] mortar washout from wall 24003
Image from radiograph

F83 KNIFE, IRON
Part of scale-tang knife? L: 27mm
SF 24004; [24002] mortar washout from wall 24003
Image from radiograph

F84 KNIFE, IRON
Whittle-tang knife. L: 83mm
SF 30093; sector 1.

Tools (Illus C5.10, C5.11)

The ploughshare F85 is very similar to one dated to the early 16th century in the collection of the Ulster Museum, Belfast. It is from Massereene Friary in Co Antrim. Augur bits like F91 and F96 would have been used to drill the holes for wooden pegs holding together the

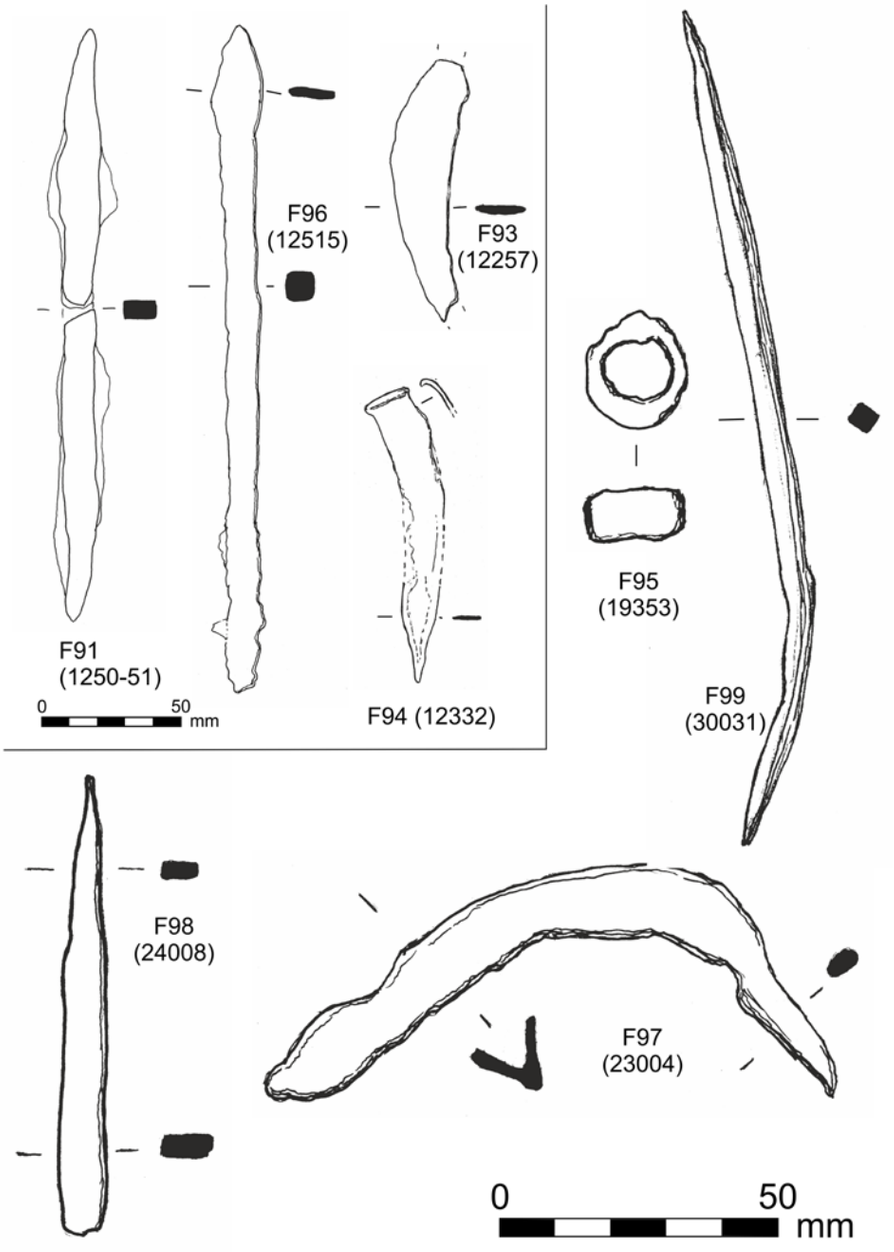


Illustration C5.11
Iron artefacts: tools

timber frameworks of house walls and roofs. Other tools listed here would have been used by metal and leather workers.

F85 PLOUGHSHARE, IRON (ILLUS C5.10, C5.22)
Ploughshare or sock; a socketed wedge with reinforced tip and flat base. 37 by 185mm
SF 2141; [2007/2047] from under the stone setting 2007 in wall 2047 (building K or K.1)

F86 UNIDENTIFIED TOOL? IRON
Portion of blade/shank. 73 by 24 by 10mm
SF 7315; [7027] floor of str V.1

F87 RAKE TOOTH? IRON
L: 103mm
SF 7319; [7027] floor of str V.1

F88 HECKLE TOOTH? IRON
L: 116mm
SF 8145; [8016] tumble within str H

F89 AWL? IRON AND WOOD
Small tool with broken iron shank (L: 42mm) and remains of wooden handle. L: 76mm
SF 8248; [8043] path from building H ruins heading west
Cf SF 25569

F90 RAKE TOOTH? IRON
L: 128mm
SF 8438; [8114] fill of post-hole 8116 in str H.1

F91 AUGUR BIT, IRON
Much-wasted spoon blade and lanceolate-shaped terminal. L: 219mm
SF 1250 and 1251; [12023] floor of building 12.2

F92 HECKLE TOOTH? IRON
Broken. L: 43mm
SF 12130a; [12101] topsoil
Image from radiograph

F93 SICKLE? IRON
Fragment of blade. 94 by 22mm
SF 12257; [12101] topsoil

F94 UNIDENTIFIED TOOL, IRON
L: 105mm
SF 12332; [12124] levelling for floor of building 12.1

F95 COLLAR, IRON
Perhaps a mount from the handle of a tool, or a ferrule. Diam: 18mm; Ht: 9mm
SF 19353; [19014] clayey silt with flecks of charcoal, remains of medieval house 19.10

F96 AUGUR BIT, IRON
Much-wasted spoon blade and lanceolate terminal. L: 240mm
SF 12515; [12151] str 12.4?

F97 UNIDENTIFIED OBJECT, IRON
L: 52mm
SF 23004; [23002] washout from ruin of str (a)

F98 REAMER? IRON
Woodworking tool. L: 83mm
SF 24008; [24013] tumble from north wall of str (b)

F99 AWL, IRON
Diamond sectioned. L: 150mm
For leather working
SF 30031; sector C1

F100 HECKLE TOOTH? IRON
L: 103mm
SF 30081; sector 3
Image from radiograph.

Furniture and furnishings (Illus C5.12, C5.13)

Medieval houses were not generally provided with large quantities of furniture, and those items there were, including chests, tables and

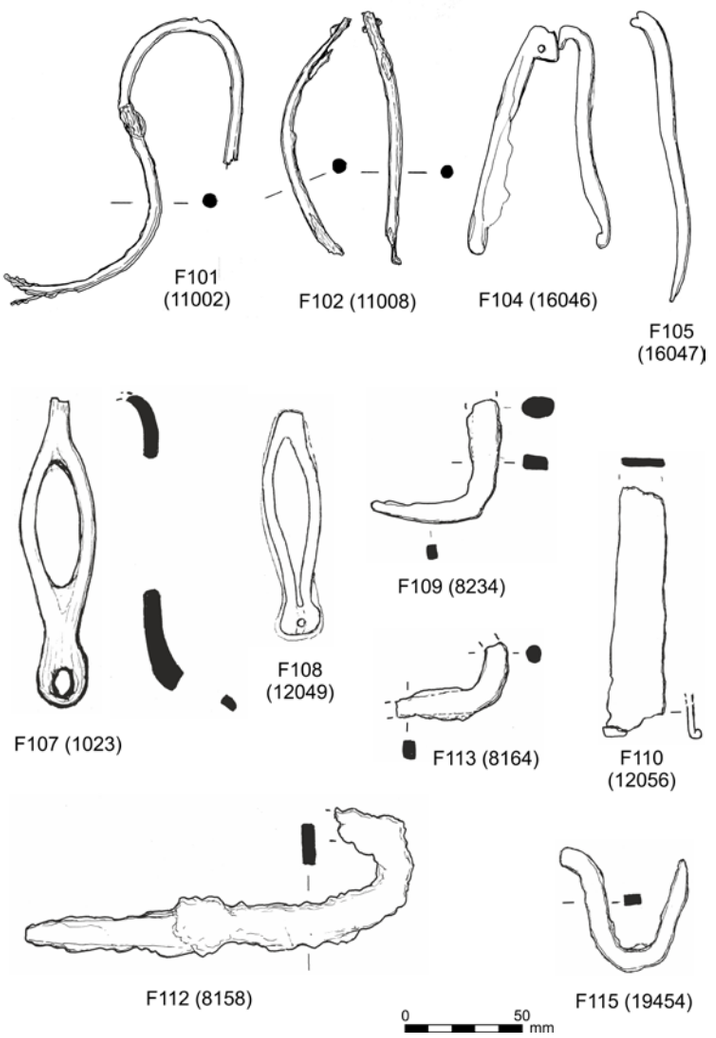


Illustration C5.12
Iron artefacts: furniture and furnishings

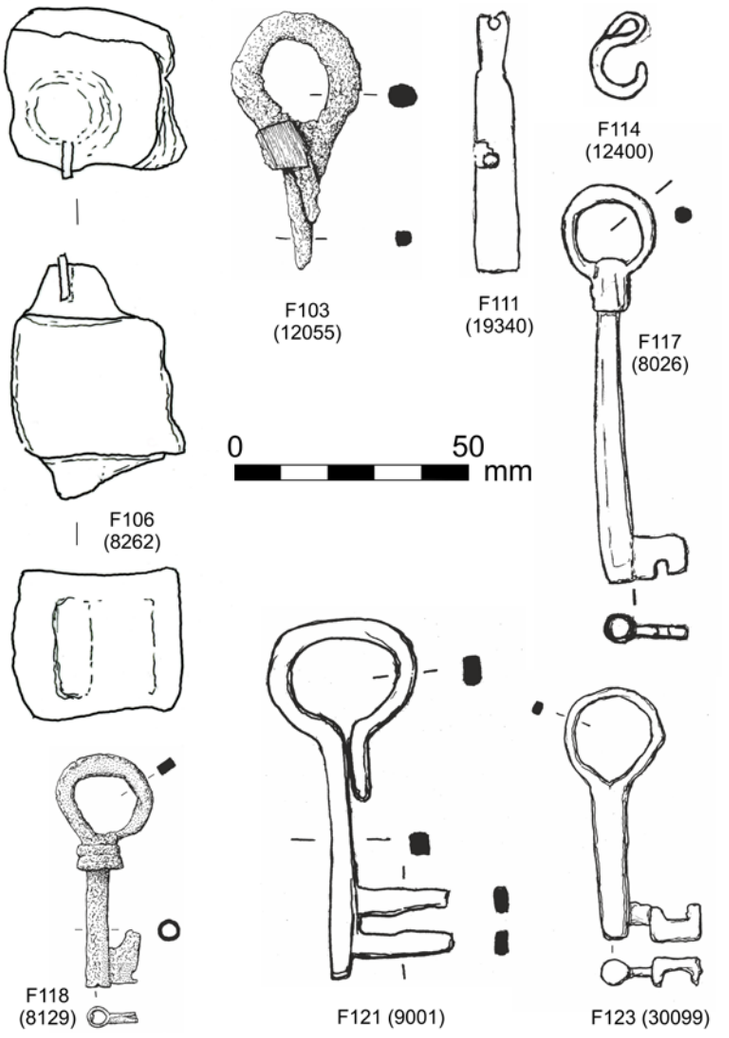


Illustration C5.13
Iron artefacts: furniture and furnishings, and keys

benches, were jointed with little or no use of metal fittings. Since no wood has survived from the buildings excavated at Finlaggan, the few pieces of metal fittings recovered are potentially a valuable indication of what has been lost. The handle F103, the hasp F108 and the hinge strap F110 , all from the floor of building 12.2, could all be fittings from one or more chests.

The hinge pivot F109 might be from a window shutter, either in building J or building H. Four iron keys, including two for padlocks, are also listed from trench 8. At least one of them (F119) is associated with building H, as are two hooks (F112, F113), both recovered from the collapse of the south-east wall of that structure. Unfortunately neither is sufficiently diagnostic for us to identify a particular function for either.

Listed under handles are two (F104, F105) from building (a) on Eilean na Comhairle and another (F102), along with a possible suspension hook (F101), from building B on Eilean Mór. Unfortunately, none of these have secure medieval or 16th-century contexts. They are interpreted as the means of suspending pots, either of metal or ceramic, over a fire.

F101 POT HOOK? IRON
Large hook, broken, formed of rod, possibly for suspending pots. Diam *c* 5.3mm; L: 128mm
SF 11002; [11001] topsoil, in building B

F102 POT HANDLE? IRON
Two lengths of bent rod, possibly originally forming a hinged handle with hooked ends for gripping the rim of a pot. Diam: *c* 5.3mm; each piece approximately 125mm in length
SF 11008; [11001] topsoil, in building B

F103 HANDLE, IRON
Loop handle with traces of wood at the base of the loop. 55 by 28mm
SF 12055; [12023] floor of building 12.2

F104 POT HANDLE? IRON
Two arms, originally hinged, hooked for gripping the rim of a pot. 99 by 61mm
SF 16046; [16010] 19th-century clearance in building (a)
Image from radiograph

F105 POT HANDLE? IRON
An arm of a hinged pot-handle like SF 16046. L: 125mm
SF 16047; [16010] 19th-century clearance in building (a)
Image from radiograph

F106 FRAME? IRON
Foot of frame or stand for drying grain in a kiln? 52 by 38 by 33mm
SF 8262; [8040] fill of kiln within ruins of building H

F107 HASP, IRON
Loop-shaped, curved hasp squeezed into a figure-of-eight shape; probable hook at the larger end broken off. 132 by 32mm
SF 1023; [1007] gravel spread in burial ground

F108 HASP, IRON
Figure-of-eight-shaped loop hasp. 95 by 24mm
SF 12049; [12023] floor of building 12.2
Image from radiograph

F109 HINGE PIVOT, IRON
49 by 46mm
SF 8234; [8055] tumble in alley between strs H and J

F110 HINGE STRAP? IRON
L: 107mm
SF 12056; [12023] floor of building 12.2

F111 STRAP MOUNT, IRON
With two rivets. L: 54.5mm
SF 19340; [19003] subsoil under the lazy beds
Image from radiograph

F112 WALL HOOK (OR PADLOCK HASP?), IRON
Made from a bar of metal, rectangular in cross section, about 16 by 5mm. Overall L: 187mm
SF 8158; [8021] collapsed material from south-east wall of str H

F113 HOOK, IRON
Broken curved rod, partly circular in cross section and partly rectangular. L: 51mm
SF 8164; [8021] collapsed material from south-east wall of str H

F114 HOOK, IRON
18 by 13mm
SF 12400; [12131] wall of building 12.5
Image from radiograph

F115 HOOK? IRON
54 by 56mm
SF 19454; [19120] fill of pit 19134.

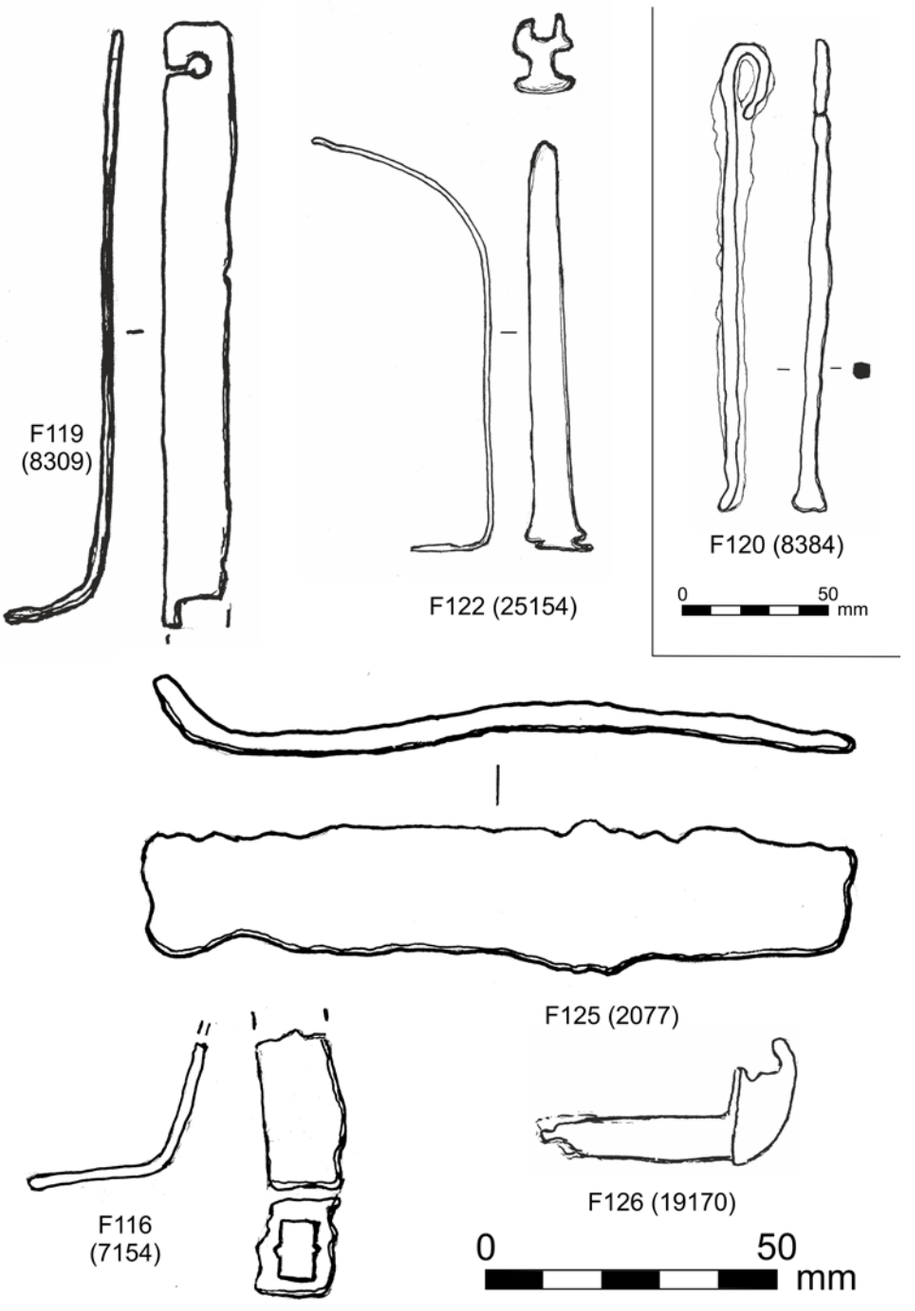


Illustration C5.14
Iron artefacts: keys and locks

Keys (Illus C5.13, C5.14)

The keys are distinguished either as padlock keys, ones which worked by being slid into their lock mechanisms, or just as 'keys', that is ones which operated in a rotary fashion as traditional-type keys nowadays. Both types may have operated locks on furniture and main doors.

All the keys conform to types that can be identified from all across Britain. Several schemes have been proposed by finds specialists for their classification, for example in a study of medieval finds from Winchester (Biddle 1990: 1005, 10024) and a more general survey of medieval British ironwork (Goodall 2011: 237–43). There does not appear, at this stage, to be any sound basis for recognising regional varieties or closely datable types of relevance to the Finlaggan assemblage.

F116 PADLOCK KEY? IRON
Plain broken stem with bit set laterally. L: 40mm; metal thickness: 2mm
SF 7154; [7027] floor of str V.1

F117 KEY, IRON
Key with small circular bow with collar below, hollow shank and small ward with one cleft. L: 85mm
SF 8026; [8002] topsoil

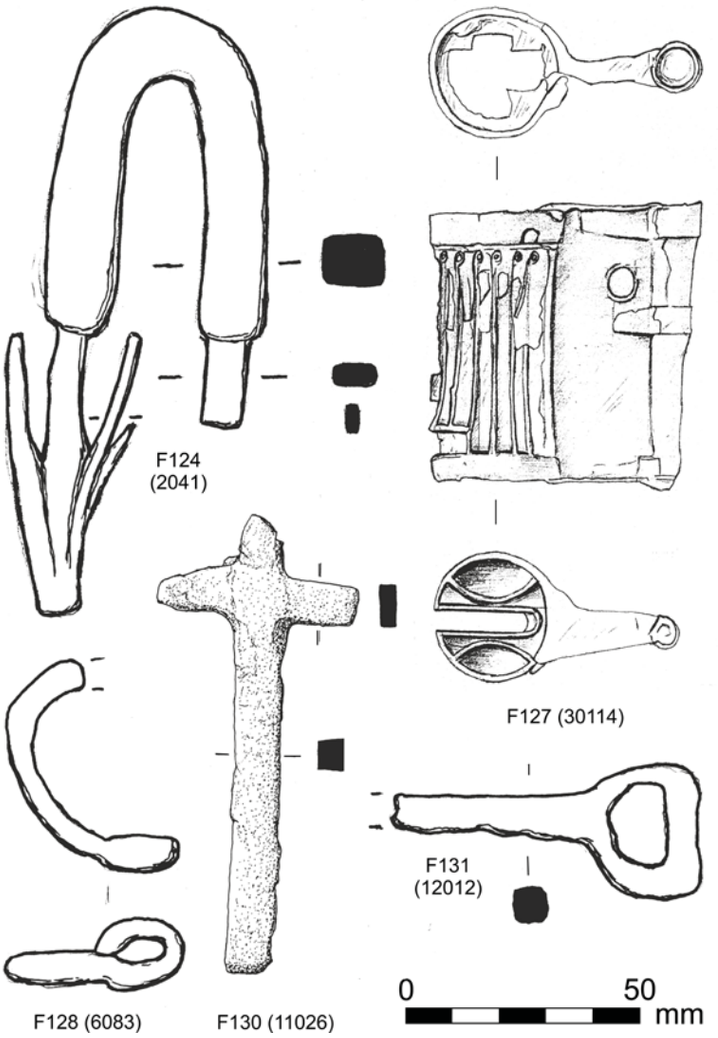


Illustration C5.15
Iron artefacts: locks and miscellaneous objects

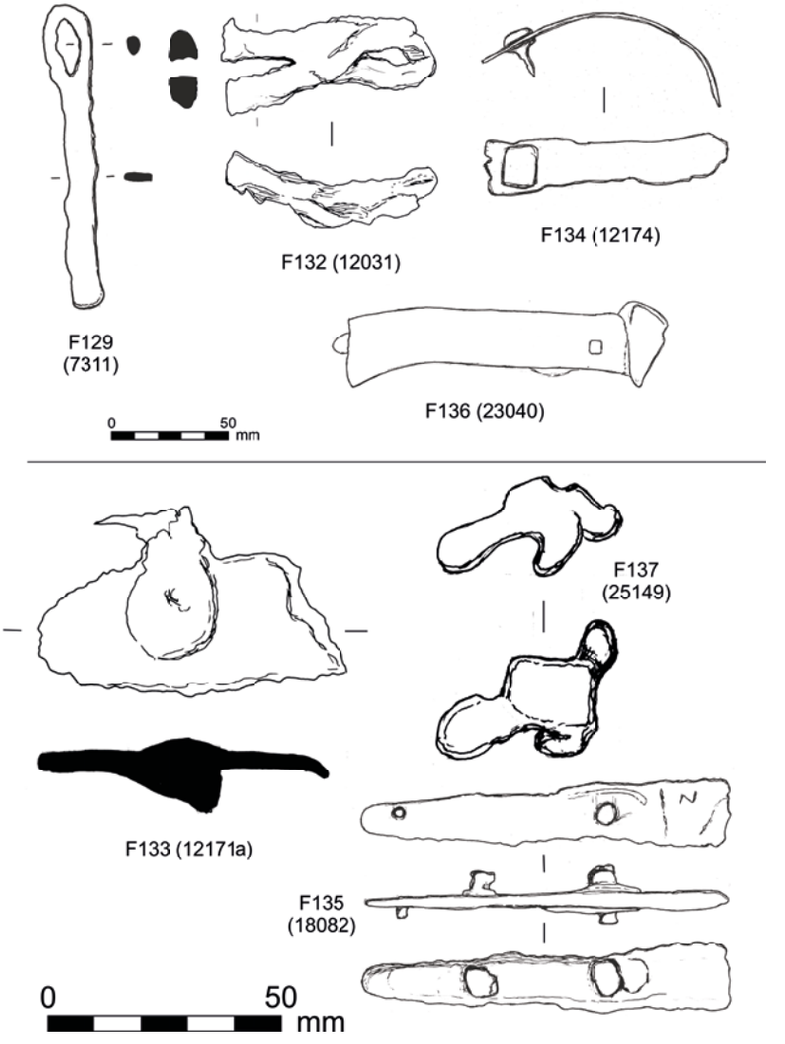


Illustration C5.16
Iron artefacts: miscellaneous objects

F118 KEY, IRON, COPPER PLATED
Key with circular bow and collar, hollow shank and simple ward (type 3). 50 by 17mm
SF 8129; [8016] tumble within str H

F119 KEY, IRON
Padlock key with the bit set laterally to the stem. L: 103mm
SF 8309; [8042] floor of str H

F120 KEY? IRON
Padlock key, the bit broken? L: 162mm
SF 8384; unstratified

F121 KEY, IRON
Key with oval bow formed by bending the rectangular-sectioned solid shank into shape. The shank projects below the ward, which is cut in two horizontally (type 8). 77 by 26mm
SF 9001; [9002] topsoil

F122 KEY, IRON
Padlock key with the bit set laterally to the stem. 72 by 6 by 2mm
SF 25154; [25003] gravel, beach deposit

F123 KEY, IRON, TIN PLATED
Key with circular bow, solid shank and ward cut with vertical channels (type 6). 54 by 21mm
SF 30099; sector 1.

Locks (Illus C5.14, C5.15)

F124 PADLOCK, IRON
The hasp with attached spring for a barrel padlock. 130 by 54mm
SF 2041; [2013] tumble in north entrance of building K

F125 LOCK BOLT? IRON
123 by 22mm
SF 2077; [2015] floor of building K.1

F126 UNIDENTIFIED OBJECT, IRON
Possibly a barrel padlock bolt. L: 43mm
SF 19170; [19009] floor of str 19.2
Image from radiograph

F127 PADLOCK, IRON COATED IN COPPER ALLOY (GUNMETAL)
Barrel padlock with cylindrical ribbed case to which the tube for housing the hasp is attached by a fin. 58 by 61 by 28mm
SF 30114; sector C1

Miscellaneous (Illus C5.15, C5.16)

F128 SWIVEL RING? IRON
Broken. 42 by 36 by 16mm
SF 6083; [6018] gravel spread

F129 HASP/LATCH? IRON
Bar of metal, rectangular in section, formed into a loop at one end. L: 130mm
SF 7311; [7027] floor of str V.1

SF no.	Catalogue no.	Context	Description	Length (mm)	Width (mm)
1077		1007	Gravel spread in burial ground	80	29
1096		1012	Grave, group 3		30
2009		2010	Old ground surface	78	29
2070		2016	Drain in str K.1		30
2140		2033	floor of str K		25
6118	F138	6022	Medieval midden		30
7028		7011	Tumble		30
7052	F139	7007	Garden soil		
7156	F40	7036	Make-up deposit	43	26
7299	F140	7041	Core of bank of str W	53	25
7321		7088	fill of pit 7086 in str V.2	90	30
7328		7017	Garden soil	74	35
8102		8016	Tumble in str H	83	39
8217		8011	Tumble from str H	64	20
8293	F141	8053	Tumble in str H	20	15
9047	F142	9016	Old ground surface	71	26
12025		12017	Post-medieval agriculture	70	39
12147		12101	Topsoil		22
12411		12130	Floor of building 12.5	95	18
12452		12150	Demolition of str 12.6	62	26
12478		12145	gravel spread over floor of south room of str 12.5	64	30
12502		12131	wall of str 12.5		40
12543		12156	Bank of building 12.2		36
16060		16018	Levelling up in courtyard	113	45

Table C5.2
Staples

F130 CRUCIFORM-SHAPED MOUNT, IRON
Possibly part of a sword hilt. L: 98mm; W: 43mm; Th: 6.5mm
SF 11026; [11015] debris on surface of paved road to west of great hall

F131 HASP/LATCH? IRON
Bar of metal, square in section, formed into a loop at one end. L: 65mm
SF 12012; [12014] floor of building 12.1

F132 UNIDENTIFIED OBJECT (TOOL?), IRON
Formed of a rod of iron bent round in a loop with two splayed legs. 89 by 33mm
SF 12031; [12015] levelling for floor of building 12.0

F133 GUN LOCK? IRON
Possibly the rear end of a snap or flint lock, with much of the cock still in place.
65 by 34mm
SF 12171a ; [12101] topsoil
Image from radiograph

F134 MOUNT, IRON
Curved strap mount with nail or rivet.
103 by 23mm
SF 12174; [12101] topsoil

F135 UNIDENTIFIED MOUNT, IRON
Tapering plate with rounded end, mounted on both sides with knobs; probably a mechanism of some sort. There are possible remains of a spring on the interior surface. This side also has a rivet at the rounded end for securing it into wood, traces of which remain in the corrosion deposits. 79 by 14mm
SF 18082; [18015] collapsed gatehouse debris

F136 UNIDENTIFIED OBJECT – HINGE STRAP? IRON
L: 143mm
SF 23040 [23018] make-up layer for castle floor

F137 UNIDENTIFIED OBJECT, IRON
A rectangular plate with legs (one missing) at each corner. 41 by 29 by 22mm
SF 25149; [25008] medieval midden

Staples (Table C5.2)

Twenty-two U-shaped iron staples have been recovered, mostly about 60 to 90mm in length (Table C5.2). F142 is typical of the group. They probably had a variety of uses, including joining timbers and attaching other metal fittings. Several come from contexts that indicate they belonged in medieval buildings, including V and V.1 (both trench 7), building H (trench 8), and buildings 12.4, 12.5, 12.6 and 12.7 (trench 12). Two other staples (F139, F141) are of a different type, smaller, with in-turned clenched arms.

Illustrated staples (Illus C5.17)

F138 STAPLE, IRON
U-shaped staple. 30 by 30mm
SF 6118; [6022] midden

F139 STAPLE, IRON
Clenched, in-turned arm; other end missing. 31 by 6mm
SF 7052; [7007] garden soil

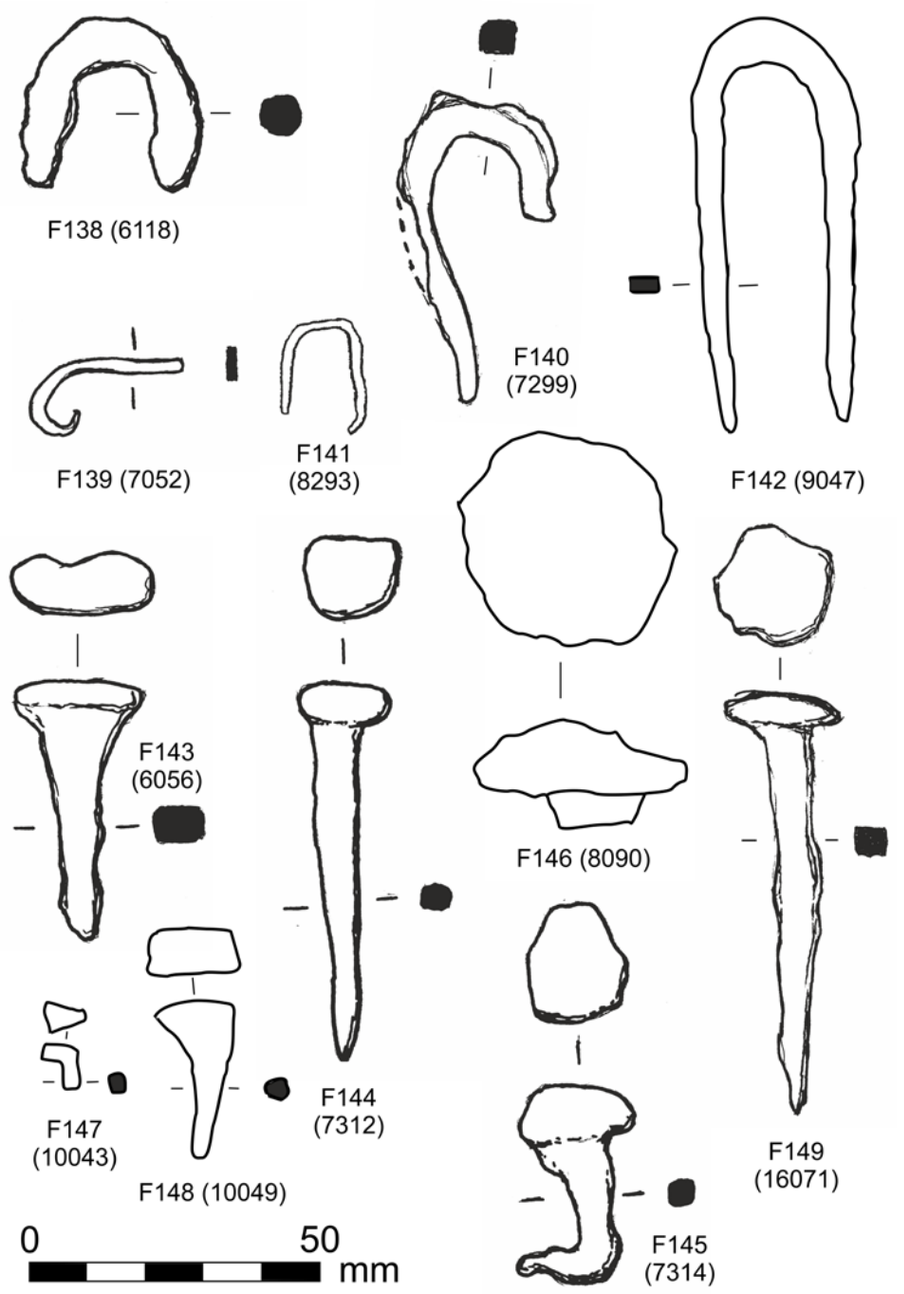


Illustration C5.17
Iron artefacts: staples and nails

F140 STAPLE, IRON
U-shaped staple, one arm broken. 53 by 25mm
SF 7299; [7041] core of bank of str W

F141 STAPLE, IRON
Rectangular staple with in-turned clenched arms. 20 by 15mm
SF 8293; [8053] tumble within building H
Image from radiograph

F142 STAPLE, IRON
U-shaped staple. 71 by 26mm
SF 9047; [9016] old ground surface.

Nails and rivets (Tables C5.3, C5.4)

Nails and rivets, almost all manifestly of medieval date, are one of the largest categories of finds from the Finlaggan excavations. Over 500 pieces of ironwork are listed as nails in the overall catalogue of artefacts, and 74 as rivets or roves. Both figures are likely to be underestimates. Over 1,200 iron artefacts were recovered from the excavations on the two islands, about 500 of which are merely listed as pieces of iron. It is probable that many of them are fragments of nail shanks or roves from rivets.

Nails were primarily used for fastening wood, probably at Finlaggan mostly structural timber in buildings rather than furnishings (four nails for securing horseshoes are listed with other horse equipment above). The nails almost all have shanks which are square in cross section. Very few appear to be complete in length, many having been broken when the structures they secured were dismantled or destroyed. Several are noticeably curved or bent, perhaps as a result of their being pulled out with a claw hammer or pincers at the end of their active life. Others are clenched, that is, have had their points beaten sideways. This would have been done to hide projecting nails and/or provide extra strength to the joins between timbers.

The majority of the heads are flat and range in shape from roughly circular to approximately square. As a continuum, the majority cluster more at the square end. There does not appear to be an obvious way to group the majority of them, other than as small – with a head of less than about 20 by 20mm – and large. The large nails mostly have heads between 20 and 30mm across, but there are a few which might be described as very large, with heads about 33 to 36mm across, for example F146. A typical length for a small nail is about 50 to 60mm, and for a large one 60 to 100mm.

A few nails have characteristics which suggest that they may have been designed for specific functions:

- Brads: shaped like a '7'; only one small example has been recognised, F147
- Narrow heads: rectangular or, in at least one case, almost like a figure of eight, for example F143
- Round heads: with well-formed, large, flat circular heads, for example F153

After nails, rivets (clench bolts) are the largest category of iron objects recovered from the excavations. They are, essentially, nails which have roves (pierced plates) fitted over their shanks. It is believed that they were particularly used to fasten together two layers of timber, as for instance the boards making up a door or shutter, or else to grip the overlapping edges of planks, as in the clinker construction of boats. It is possible that their numbers have been underestimated since it is not always easy to distinguish broken or incomplete ones from nails. The heads are indistinguishable from the majority of nails already described. Many of the roves are either rectangular or

Type	SF no.	Context	Head (mm)	Length (mm)	Notes
Large	2017	2010	29	40	
Small	5032	5028	16 x 14	29	
Small	6012	6007	15 x 13	31	
Large	6019b	6006	20 x 18	41	Broad, narrow shank
Large	6038	6019	20 x 21	42	
Narrow head	6056	6018	25 x 10	39	
Horseshoe	6084	6018	15 x 12	38	Complete
Large	6111	6010	20 x 18	35	
Horseshoe	6120	6022		41	
Small	7312	7027	16 x 14	66	Complete
Small	7313	7027	14	42	
Large	7314	7027	20 x 18	34	Clenched
Sprig	8145	8016		116	Complete
Large	8212	8016	32 x 32	40	
Large	8335	8062	24 x 24		
Large	8354	8062	25 x 22		
Large	8366	8088	24 x 21		
Circular head	8408	8069	24	30	
Large	8412	8034	24 x 22	36	Clenched
Large	8413	8091	24 x 20		
Large	8417	8088	24 x 24		
Large	8424	8102	20 x 20		
Large	8441	8114	28 x 28		
Large	12121	12101	20	51	
Small	12122	12101	18	49	
Small	12125	12101	17	44	
Small	12127	12101	16	29	Clenched
Large	12137	12101	26	40	
Large	12160	12101	23	50	
Large	12165	12101	21	72	
Small	12171b	12101	16	32	
Small	12191	12101	15	40	Extracted
Large	12201	12101	22	25	
Horseshoe	12219	12101	14	39	Complete
Small	12232	12101	17	42	
Large	12235a	12101	25	40	
Large	12235b	12101	30	42	
Small	12243	12101	15	24	
Large	12245	12101	24	103	Complete
Small	12260	12101	18	48	Clenched
Small	12261	12101	19	47	
Large	12270	12101	25	70	Complete
Small	12275	12101	18	42	
Large	12367	12130	21	50	
Large	12370	12134	21 x 20	44	Extracted
Large	12380	12124	24	69	Extracted
Small	12386	12132	19	27	Extracted
Small	12392	12138	14	41	
Small	12396	12134	19	75	Clenched
Large	12415	12141	21	39	
Large	12439	12117	20	45	Extracted
Large	12463	12105	24	63	Extracted
Small	12487	12105	18	31	Extracted
Small	12514	12151	14	35	
Large	14012b	14002	23 x 20	39	
Small	14012c	14002	20 x 12	43	
Large	16022	16008	24	78	Extracted
Small	16040	16015	17	46	
Large	16071	16010	20 x 19	72	Complete
Large	16098	16000	21 x 18	46	Extracted
Circular head	16099	16000	25	35	
Large	18016	18017	20	40	
Small	18054	18015	16	34	
Large	18081	18015	23 x 19	83	Complete
Large	18093	18007	22 x 19	49	Extracted
Small	19285	19012	18	52	
Small	19294	19012	17 x 13	54	Extracted
Small	19336	19012	10 x 9	46	
Horseshoe	19523	19000		26	
Small	23001	23002	19 x 19	54	Extracted
Small	23010	23002	18 x 12	19	
Circular head	24002	24002	25	43	Extracted
Small	24007	24013	18 x 13	61	Extracted
Large	24010	24013	27 x 21	42	

Table C5.3
Nails

lozenge shaped, many ranging in size from about 24 by 20mm to 28 by 24mm. The measurement of most significance for these rivets should be the distance between their heads and roves, representing the thickness of timber that they secured. Regrettably this is in most cases not possible to give with any accuracy. About 20mm is possibly a reasonably typical length.

Two strips of conjoined roves (SF 16030, F160) have been recovered, illustrating how they were forged and snipped into individual pieces. Two other roves (F158, F159) appear to be ornamental in nature.

The distribution of nails, rivets and other ironwork appears to offer some clues as to the construction of individual buildings. Table C5.4 lists all significant concentrations and

Trench	Contexts	Interpretation	Nails	Rivets	Unspecified
3 18	3012, 3025, 3016 18006, 18007, 18015, 18016	Gatehouse	14	10	8
19	19001–03, 19006–08, 19112	Post-medieval agriculture	15	2	27
19	19009	Str 19.2	2		9
19	19049	Str 19.7	1		
19	19116, 19121	Str 19.9	1		1
19	19012	Str 19.10	5		4
7	7007, 7009, 7015–17, 7022, 7087	Garden soil, lazy beds, etc	66	17	31
7	7027	Str V.1	5	5	11
7	7030, 7101	Str 7.2		1	2
7	7088, 7091	Str V.2	6	3	5
1	1007	Building J	26	5	
6	6002, 6004, 6006–08, 6010, 6014, 6018–20, 6024, 6025	Str 6.1	26	4	3
6	6022	Medieval midden	9	1	1
8	8015, 8035, 8040, 8041	Post-medieval activity, kiln	14		7
8	8024, 8027	Building J	1	1	4
8	8000, 8002, 8011, 8012, 8016, 8021, 8023, 8031, 8034, 8038, 8042, 8043, 8045, 8053, 8055, 8062, 8065, 8109, 8123	Building H (and J)	82	5	51
8	8052, 8064, 8069, 8081, 8083, 8086, 8088, 8091, 8102, 8114	Building H.1	13		5
9	9003, 9009, 9011	Strs 9.1, 9.2, E.1, E.2, F1	8	1	
10	10000	Unstratified	10		2
10	10031	Midden	33		
10	10008–11, 10013, 10026, 10030, 10034	Great hall	20	1	4
11	11000	Unstratified	7	1	
11	11014, 11018, 11031	Building B	3		2
11	11010, 11015	Great hall	9	1	1
2	2005, 2013, 2033, 2038	Building K	9	9	
2	2010, 2011, 2015, 2024, 2034, 2035, 2037, 2039, 2047	Building K.1	14	15	1
4	4002, 4007, 4012, 4019–21, 4023, 4024, 4028, 4029	Building L.1	24	5	19
12	12105	Buildings 12.2 and/or 12.5	7		
12	12015, 12123, 12124	Building 12.2	10	2	1
12	12023, 12122, 12132, 12139–42	Building 12.3	16	31	2
12	12117, 12156	Building 12.4	3		1
12	12033, 12130, 12131, 12134	Building 12.5	12	3	5
12	12110, 12138, 12145, 12162	Building 12.6	11		2
16	16018, 16042, 16044, 16061	Castle	3		3
23	23002	Building (a)	3	1	7
23	23011, 23017, 23018, 23021, 23026, 23033	Castle	2	1	7
24	24002, 24013	Building (b)	7		3

Table C5.4
Distribution of nails and rivets

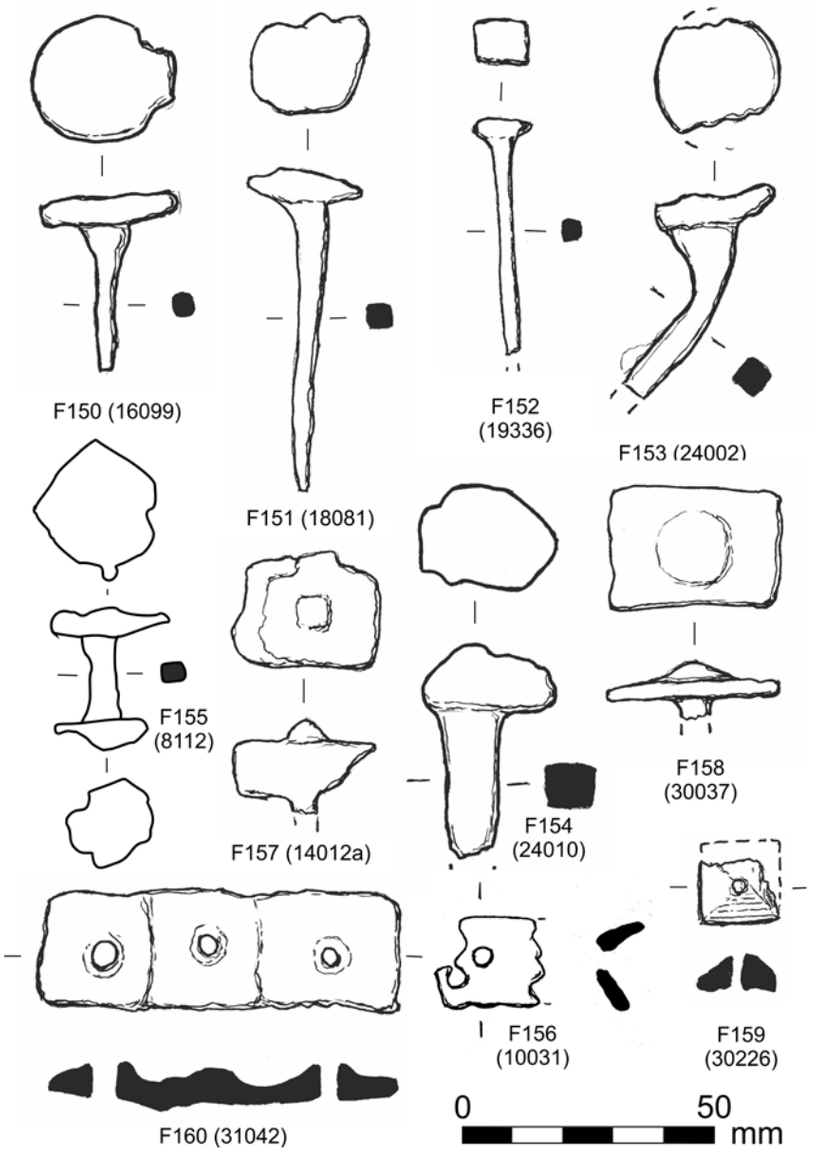


Illustration C5.18
Iron artefacts: nails and rivets

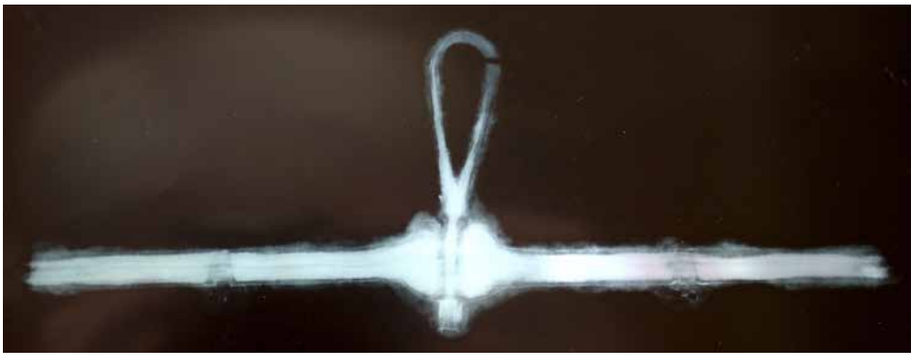


Illustration C5.19
Iron purse mount: F14 (SF 12057) (© National Museums Scotland)

groupings of such material on a trench-by-trench basis. In our interpretations of buildings H and J (trenches 8, 1) and of the great hall (trenches 10, 11), it is suggested that many of the nails may have been for securing timber floorboards, or else the boards used as sarking to support slate roofs. Concentrations of rivets associated with the gatehouse in trenches 3 and 18, building V in trench 7, and building 12.3 in trench 12 have been interpreted as fastenings for weatherboards arranged clinker fashion. A similar type of walling has been postulated, also on the basis of the recovery of rivets, for the upper story of the courtyard façade of the hall block in Achanduin Castle, Lismore, dating to about 1300 (Caldwell and Stell 2017: 58). The walls and roof of building 12.3 might actually have consisted of an upturned boat.

There is little evidence that nails and rivets played a significant part in the construction of post-medieval structures at Finlaggan, with two notable exceptions. First, the supposed watchtower, structure 6.1, excavated in trench 6. It was apparently entirely of timber. Second, a number of nails and rivets were found associated with building K, some of them trodden into the earth floor. It is possible that they were redeposited from building K.1. Four nails, however, were found in the tumble [2013] in the north entrance of building K, along with the remains of an iron padlock (F124), suggesting that they were from a timber door or door frame.

Illustrated nails (Illus C5.17, C5.18)

F143 NAIL, IRON
Narrow (figure of eight?) head, broken shank. Head: 25 by 10mm; L: 39mm
SF 6056; context not noted at time of discovery, but probably [6018] gravel spread

F144 NAIL, IRON
Small nail. Head: 16 by 14mm, L: 66mm
SF 7312; [7027] floor of str V.1

F145 NAIL, IRON
Large nail, clenched. Head: 20 by 18mm; L: 34mm
SF 7314; [7027] floor of str V.1

F146 NAIL, IRON
Very large, circular nail head. Diam: 36mm; shank section: 14 by 14mm
SF 8090; [8011] tumble from north-west wall of str H

F147 NAIL, IRON
Brad, with small, narrow head, 7 by 5mm. Surviving L: 8mm
SF 10043; [10031] midden deposit

Illustration C5.20
Iron Jew's harp: F53 (SF 6090)
(© National Museums Scotland)

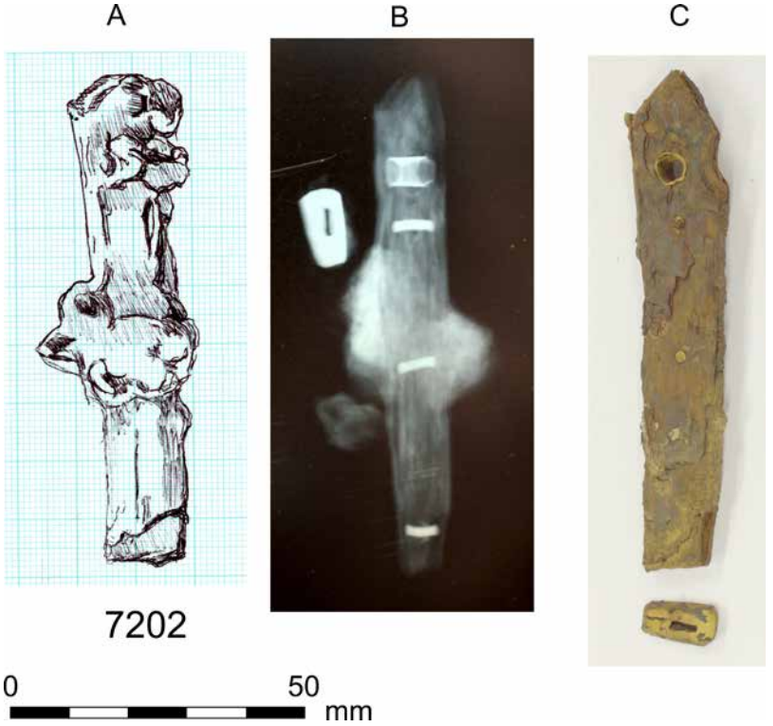


Illustration C5.21
The grip of a scale-tang knife: (A) as discovered; (B) radiograph; (C) as conserved: F65 (SF 7202)
(© National Museums Scotland)

F148 NAIL, IRON
Small nail, broken shank. Head: 14 by 9mm; surviving L: 28mm
SF 10049; [10039] soil build-up beneath road [10010]

F149 NAIL, IRON
Large nail. Head: 20 by 19mm; L: 72mm
SF 16071; [16010] 19th-century clearance within house (a)

Illustration C5.22
Iron ploughshare: F85 (SF 2141) (© National Museums Scotland)

F150 NAIL, IRON
With broad circular head, broken shank. Diameter of head: 25mm; L: 35mm
[SF 16099; 16000] spoil-heap

F151 NAIL, IRON
Large nail. Head: 23 by 19mm; L: 83mm
SF 18081; [18015] collapsed gatehouse debris

F152 NAIL, IRON
Small nail, broken shaft. Head: 10 by 9mm; L: 46mm
SF 19336; [19012] occupation deposit, str 19.10

F153 NAIL, IRON
With broad circular head, broken, bent (extracted) shank. Diam of head: 25mm; L: 43mm
SF 24002; [24002] mortar washout from wall 24003

F154 NAIL, IRON
Large nail, broken shank. Head: 27 by 21mm; L: 42mm
SF 24010; [24013] tumble from north wall of str (b)

Illustrated rivets (Illus C5.18)

F155 RIVET, IRON
Clench bolt, complete. Ht: 28mm; bolt head: 20 by 19mm; rove 24 by 20mm
SF 8112; [8016] tumble within str H

F156 ROVE, IRON
22 by 18mm
SF 10031; [10031] midden deposit

F157 RIVET, IRON
SF 14012a; [14002] redeposited material, 19th-century digging

F158 RIVET, IRON
Decorative rectangular rove with neat, low-domed shank, head lacking. Rove 35 by 25mm; surviving Ht: 12mm
SF 30037; sector C1

F159 ROVE, IRON
Decorative pyramidal-shaped rove (broken). 16mm square by 7mm high
SF 30226; sector 4

F160 ROVES, IRON
Strip of three unused roves. 72 by 24mm
SF 31042; sectors 2/3.

CHAPTER C6

Ivory, bone, horn, leather and wood

Bone, ivory and horn

The fragmentary remains of a composite double-sided comb (B7) were recovered from the midden deposits adjacent to Eilean na Comhairle. It is of a type (13) well known from 12th- and 13th-century contexts in excavations in Scandinavia, Orkney and Shetland (Ashby 2015: 267–68). All the teeth have been broken off adjacent to the central plate, perhaps because they were being recycled for other purposes. A decorated mount (B3) from a medieval grave inside the chapel might either have been a scale from a knife handle or a mount from a box or chest. A possible shroud pin (B4) also came from about the chapel. Three playing pieces (B1, B2, B5) are dealt with more fully in the report on gaming equipment by Mark Hall.

Only one piece of ivory was recovered, identified as the T-shaped terminal of one of the arms of a crucifix (B6). Like the playing pieces of the late 12th and early 13th century, mostly of walrus ivory, in the hoard discovered in the Isle of Lewis, the surfaces of this Finlaggan crucifix arm are covered with a network of channels, due, perhaps, to some type of fungal attack associated with plant root systems. This phenomenon is as yet little understood or researched, but does seem particularly to be associated with ancient ivory and bone excavated in Scotland. It was found in 1998 in debris in front of the altar in the chapel. It is possible that it is a relic that was actually incorporated in the altar. The altar probably dates, like the chapel, to the late 14th century, but the object itself might well be of considerably earlier date.

B8 is the only horn artefact that has been identified, surviving as fragments attached to an iron mount. It is probable that it represents the remains of a drinking horn.

Catalogue of bone, ivory and horn artefacts (Illus C6.1)

B1 PLAYING PIECE, BONE
Circular tableman carved with a unicorn. Diam: 29mm; Th: 4–5.5mm
SF 12047; [12023] floor deposits, building 12.2

B2 PLAYING PIECE, BONE
Circular tableman carved with an interlace design. Diam: 32mm; Th: 6.54mm
SF 12048; [12023] floor deposits, building 12.2

B3 DECORATED MOUNT, BONE
Length of bone carved with a central band of cord decoration, perhaps either a decorative mount from a box or chest, or else a scale from a knife handle. The back is crudely cut with criss-cross lines. 35 by 19mm
SF 14010; [14006] from the region of the pelvis of the body interred in grave 14.6

B4 SHROUD PIN? BONE
Piece of perforated bone. 13 by 4.5 by 4mm
SF 17005; [17000] spoil-heap

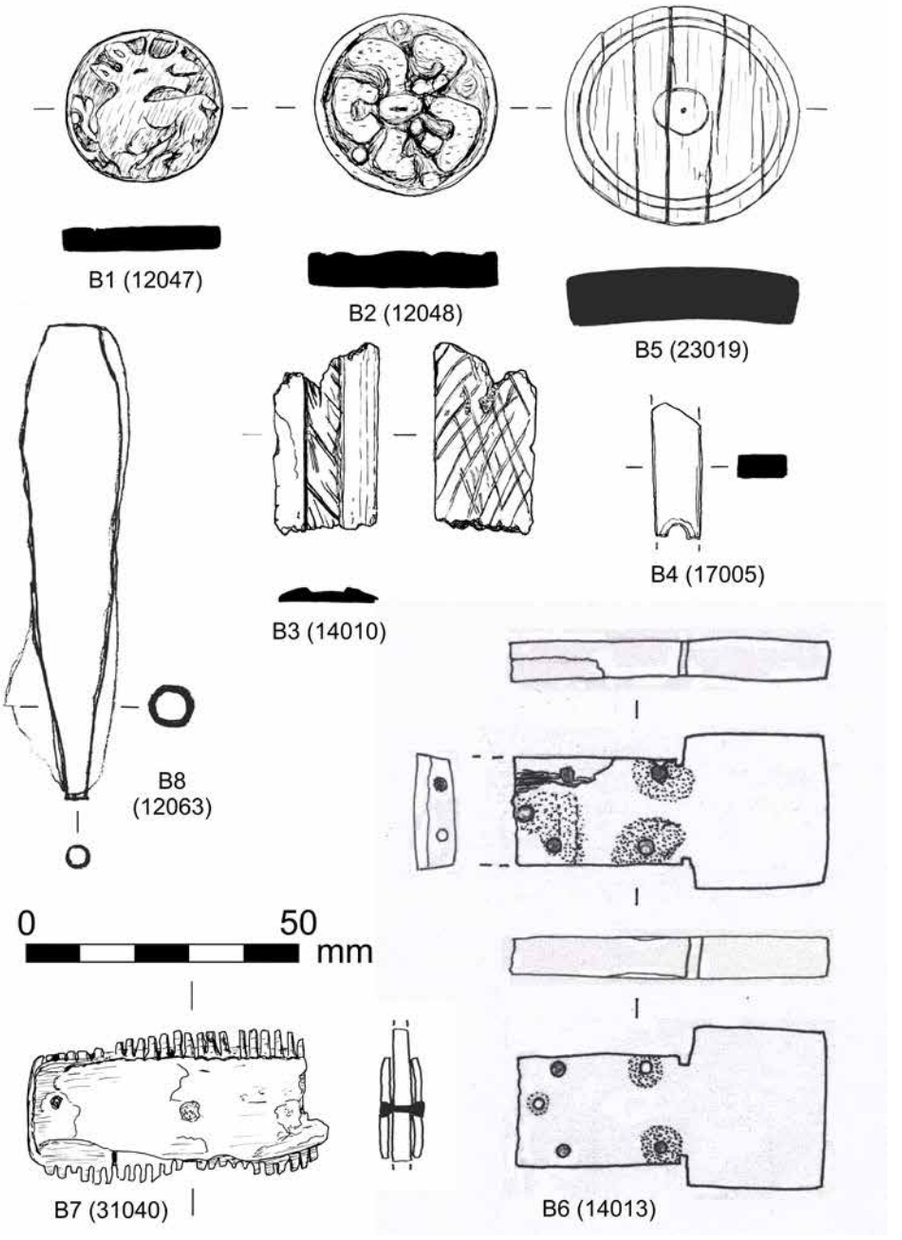


Illustration C6.1
Bone, horn and ivory artefacts

B5 PLAYING PIECE, BONE
Circular tableman decorated with compass-drawn concentric circles. Diam: 41–43 mm; Ht: 9mm
SF 23019; [23007] cobbled area to west of building (a)

B6 CRUCIFIX, ELEPHANT IVORY (*Finlaggan*, ILLUS 9.33)
T-shaped terminal of an arm or the head of a cross, pierced with rivet holes for metal attachments. 55.5 by 28 by 9mm
SF 14013; from clearance inside the chapel in 1998 in the equivalent of [14002] redeposited material, 19th-century digging

B7 COMB, BONE
The end fragment of a double-sided composite comb. The surviving three blocks of teeth are held in place by iron rivets. Two blocks had 6 teeth, one 10 teeth per side, now all reduced to stubs. 56 by 27mm
SF 31040; Fn 98 1

B8 DRINKING HORN, HORN AND IRON
The fragmentary remains of the iron base mount of a horn, still containing considerable remains of horn. There is a rivet hole for securing it. An X-ray suggests that the mount was relatively complete, but badly corroded, when excavated, with a total length of 87mm.
SF 12063; [12023] floor of building 12.2.

Leather

Items of leather, apart from one undiagnostic piece (SF 18107) from a ditch fill [18031] in trench 18, were only recovered from trench 25, all from the midden deposit [25008] associated with the erection and use of the castle on Eilean na Comhairle. There were some 100 pieces, mostly very small, many evidently derived from shoes, including soles, rands, top bands, toggles, laces and other pieces discarded as unusable. H5 is a fragment of a strap or belt. H3 can be identified as a pouch or purse closed by a drawstring, made from a rectangular piece of leather folded double. Other comparable drawstring pouches have been recovered from excavations in London (Egan & Pritchard 1991: 342–47).

Much or all of this debris may represent the activity of one or more cobblers. W26, a small awl (SF 25569), still with its wooden handle, was also recovered from the midden. It is a type of tool that would have been used by leather workers. The more substantial pieces of leather include H1, the sole and much of the uppers of a typical medieval turnshoe, that is, one made by sewing the upper and sole together and then turning them inside out (see Grew & de Neergaard 2001 for construction of medieval shoes and terminology). The sole was long and slender with a narrow waist and gently curved, pointed forepart. The assemblage also contains another similar sole, H2. Comparable soles have been described elsewhere by Thomas as type 4 turnshoes, and, for instance in Perth, have been shown to date from the mid-12th to the mid-14th century (Thomas & Bogdan

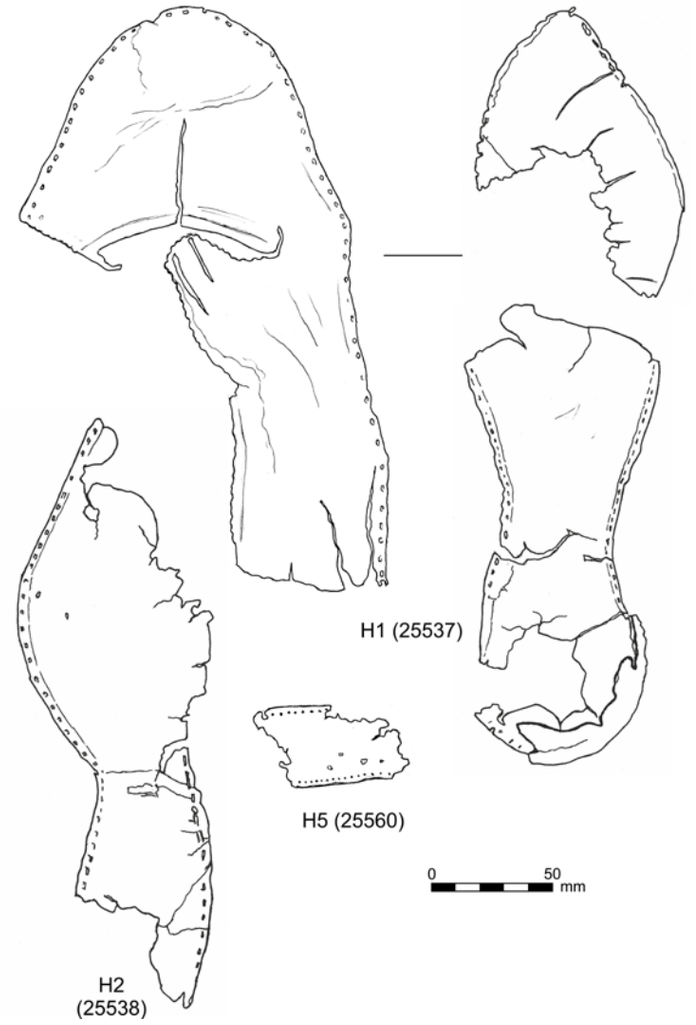


Illustration C6.2
Leather artefacts

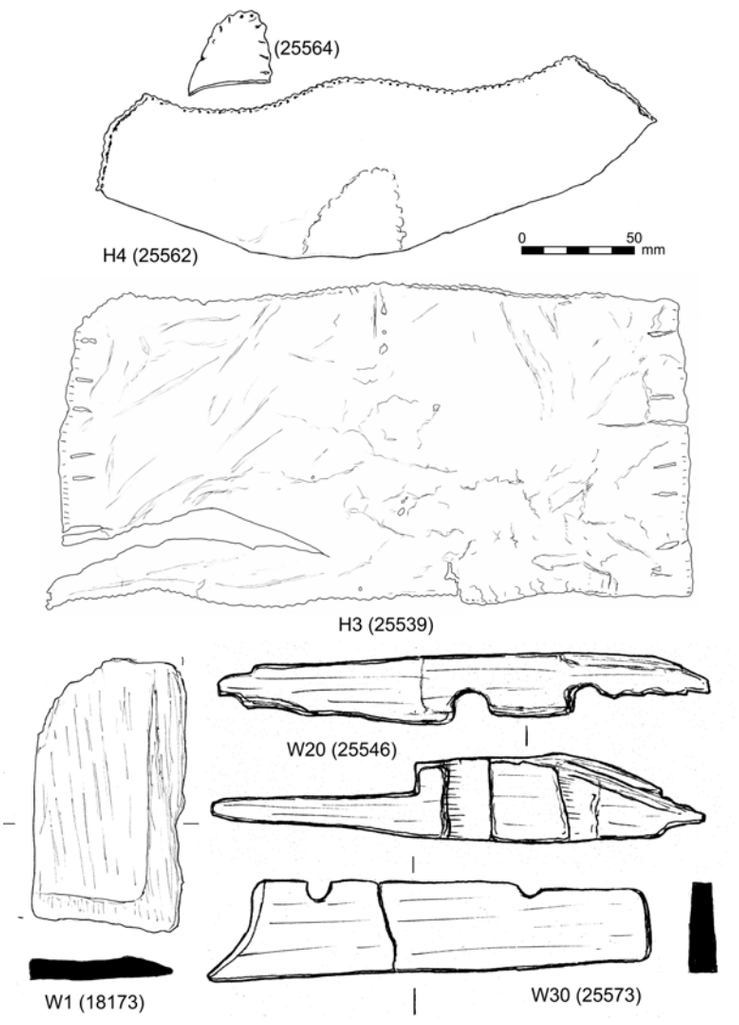


Illustration C6.3
Leather and wooden artefacts

2012: 170). In Anglo-Scandinavian and medieval York they have been classified as type e2 soles of early 13th-century or later date (Mould et al 2003: 3273, fig 1594). No attempt has been made to identify the species from which the leather has come. None of the thread, probably of wool, used in stitching the shoes together has survived.

All the leather has been conserved by freeze-drying in the NMS Conservation Laboratory. This technique results in a certain amount of shrinkage, computed on the basis of outline drawings of the unconserved pieces to average about 6 to 7%. The sizes given in the catalogue are of pieces as conserved.

Catalogue of illustrated leather (Illus C6.2, C6.3)

H1 SHOE, RIGHT; LEATHER
Substantial remains of a low ankle right shoe of turnshoe construction; one-piece vamp and vamp wing with single slash at the throat; front fastened with two slits in the latchet for toggles; top edges originally oversewn. Much of the sole, with evident signs of wear, survives in two pieces, indicating that it was long and slender with a narrow waist and gently curved, pointed forepart. The heel has the remains of a clump sole applied to its underside as a repair. Uppers and sole were held together by grain/flesh stitching, and the now missing quarters were attached by edge/flesh stitching. The overall length as complete would be about 300mm.
SF 25537; [25008] medieval midden
The illustration shows outside views (grain side) of upper and sole

H2 SOLE, LEFT; LEATHER
Substantial remains of a long slender sole with narrow waist and gently curved, pointed forepart. A curved line of stich holes across the forepart indicates that it has been repaired with a clump sole. The overall length as complete would be about 300mm.
SF 25538; [25008] medieval midden
The illustration shows the under (grain) side of the sole

H3 DRAWSTRING POUCH, LEATHER
One-piece pouch or purse formed from a doubled-over rectangular piece of leather. The sides were probably sewn flesh side to flesh side with binding stitching prior to the piece been turned so that the grain side was to the exterior. There are six slits each side for the drawstring (now missing), and the pouch mouth was oversewn, perhaps to help secure a lining. 278 by 140mm
SF 25539; [25008] medieval midden
The illustration shows the outside (grain) side of the pouch, spread flat

H4 QUARTERS WITH HEEL STIFFENER OF A SHOE, LEATHER
The top and sides of the quarters (SF 25562) have flesh edge stitching; the bottom is roughly cut with no sign of stitching. 230 by 74 by 1.27mm.
The heel stiffener (SF 25564) is D-shaped with binding stitch, except along its bottom edge, and its impression can be traced on the interior (flesh side) of the quarters. 31 by 35 by 0.85mm.
SF 25562, 25564; [25008] medieval midden
The illustrations show the inside (flesh) side of the quarters and the grain side of the heel stiffener

H5 STRAP, LEATHER
Very thin length of a strap, both finished edges fringed with stitching holes. 65 by 34 by 0.25mm
SF 25560; [25008] medieval midden
The illustration shows the grain side.

Wood

Woodworking debris and some wooden artefacts were recovered, mostly from the waterlogged deposits in trench 25. Much of this material consists of the ends of pegs used in construction, many roughly rounded to a diameter of 10 to 15mm. The pegs had been made a few centimetres longer than necessary. After they had been driven home, the portion standing proud was part cut with a knife and then knocked off with a hammer. Hence the many stubs recovered in our excavations.

Some of the identifiable artefacts, like the pieces of vessels W4, W17 and W21, may have been jettisoned after damage in use. Staved cups from contexts of the second half of the 13th century at Perth High Street have been considered to represent the work of Scottish craftsmen and to be the antecedents of the distinctive Scottish quaichs of later times (Maxwell 1983; Curteis et al 2012: 230–34). W4 may also be part of that tradition. Other pieces, like the pins and arrow shaft, may have broken in the process of manufacture. W2 and W3 could plausibly either be identified as fragments of toggles, of a type represented in the finds from Caerlaverock Castle in Galloway (Laing 1999: no. 230), or else be from the tips of spindles used in hand spinning.

W16 is a musical instrument peg with spatulate head, similar to those of copper alloy. The latter are generally supposed to have been used in wire-strung harps or clarsachs. Wooden pegs were probably unsuitable for that, suggesting that this one belonged to a different type of instrument strung with gut. Two similar wooden pegs were recovered from Lochpairc Crannog, near Tuam in Ireland (MacAlister et al 1916: 150, pl XVII, figs 34, 35).

No scientific analysis has been undertaken to identify the species of individual items. It appears, however, that much of the wood is oak, along with other local trees, including hazel, willow, birch and alder. Alder may have been the preferred wood for turned bowls and handles.

Catalogue of illustrated worked wood (Illus C6.3–7)

W1 PANEL, WOOD
Corner of wooden panel with bevelled edges. 122 by 66 by 8mm
SF 18173; [18031] fill in ditch 18032

W2 TOGGLE OR SPINDLE, WOOD
Half section only of leaf-shaped tip. L: 33mm
SF 25170a; [25008] medieval midden

W3 TOGGLE OR SPINDLE TIP, WOOD
Half section only of leaf-shaped tip. L: 38mm
SF 25170b; [25008] medieval midden

W4 BOWL STAVE, WOOD
From a staved bowl with protruding foot, grooved on the exterior below its rim for a hoop, notched in the interior for a base plate. 70 by 21 by 7.5mm. The bowl would have had 20 staves and a rim diameter of about 120mm.
SF 25170c; [25008] medieval midden

W5 UNIDENTIFIED OBJECT, WOOD
Possibly a tool, snapped in two at division between handle and blade. L: 71mm
SF 25171; [25008] medieval midden

W6 PEG TIP, WOOD
Pointed, neatly cut off, with patch of bark. L: 25mm; Diam: 14mm
SF 25176; [25008] medieval midden

W7 BUNG? WOOD
Disc shaped. Diam: 57mm; Th: 20mm
SF 25178; [25008] medieval midden

W8 PEG TIP, WOOD
Pointed and charred, partially cut and snapped off at the top. L: 63mm; Diam: 10mm
SF 25183; [25008] medieval midden

W9 PIN, WOOD
Globular head and upper shaft, half section. L: 30mm
SF 25186; [25008] medieval midden

W10 PIN SHANK, WOOD
Surviving L: 26mm
SF 25187a; [25008] medieval midden

W11 PIN POINT, WOOD
Surviving L: 12.5mm
SF 25187b; [25008] medieval midden

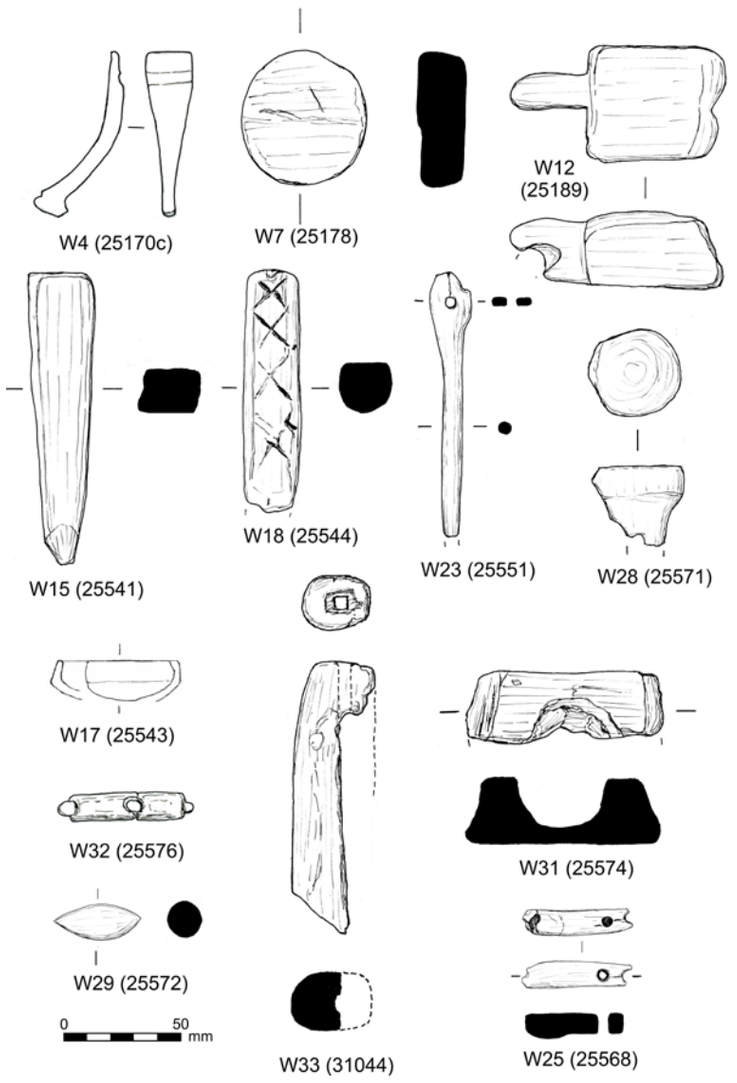


Illustration C6.4
Wooden artefacts

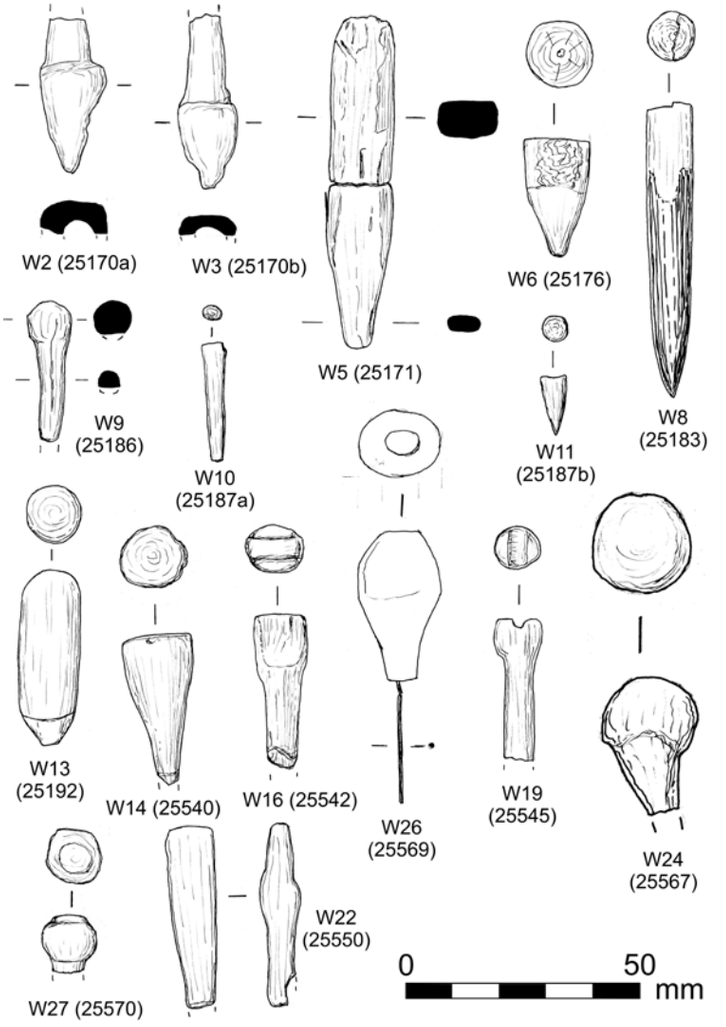


Illustration C6.5
Wooden artefacts

W12 TENON, WOOD
Tenon, pierced for a dowel, of a mortise and tenon joint. 93 by 49 by 33mm
SF 25189; [25008] medieval midden

W13 HANDLE? WOOD
Cylindrical with pointed end. L: 38mm
SF 25192; [25008] medieval midden

W14 PIN, WOOD
Flat head and upper part of shank, fire blackened. L: 32mm; diameter of head: 13mm
SF 25540; [25008] medieval midden

W15 WOODWORKING WEDGE? WOOD
Squared oak. L: 63mm
SF 25541; [25008] medieval midden

W16 PEG, WOOD
With spade-shaped head, for a musical instrument? L: 33mm; head: 11.5 by 10mm
SF 25542; [25008] medieval midden

W17 CUP OR LID, WOOD
Fragments of a small turned cup or lid. Rim diameter: approximately 50mm;
vessel height: 19mm
SF 25543; [25008] medieval midden

W18 HANDLE? WOOD
Handle with flat surface decorated with incised trellis pattern. L: 52mm
SF 25544; [25008] medieval midden

W19 ARROW? WOOD
Possibly the broken end of an arrow shaft, swelling into a distinct bulb grooved for a bowstring; alternatively a broken tuning peg for a musical instrument. L: 30mm; diameter of head: 10 by 9mm
SF 25545; [25008] medieval midden

W20 WOOD
Piece of structural timber with two dowel-holes. 219 by 39 by 30mm
SF 25546; [25008] medieval midden

W21 SCOOP, WOOD
Probably ash or alder. L: 260mm; Ht: 76mm; W (reconstructed): 144mm
SF 25547; [25008] medieval midden

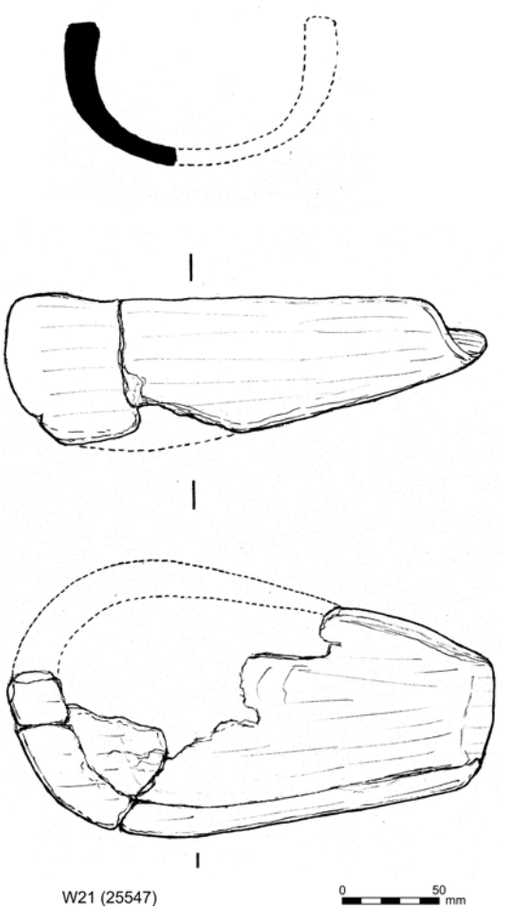


Illustration C6.6
Wooden scoop: W21 (SF 25547)

W22 PEG, WOOD
Head and part of shaft. 38 by 11 by 9.5mm
SF 25550; [25008] medieval midden

W23 PIN, WOOD
Pin with pierced, flattened, spatulate head, tip missing. L: 57mm.
SF 25551; [25008] medieval midden

W24 PIN HEAD, WOOD
Globular head and short section of shank. L: 30mm; diameter of head: 22mm
SF 25567; [25008] medieval midden

W25 PEG? WOOD
Peg, with holes, all scorched. Three have been drilled right through, vertically; two only partially, horizontally from one side. L: 47mm
SF 25568; [25008] medieval midden

W26 AWL, WOOD AND IRON
Complete handle with a considerable length of shank surviving. L of handle: 32mm; overall L: 58mm
SF 25569; [25008] medieval midden

W27 PIN HEAD, WOOD
Globular pin head. 12 by 12mm
SF 25570; [25008] medieval midden

W28 KNIFE POMMEL, WOOD
Flat-topped, turned. Diam: 20mm
SF 25571; [25008] medieval midden

W29 TOGGLE? WOOD
Pointed, cylindrical oval object. 38 by 15mm
SF 25572; [25008] medieval midden

W30 SCRAP, WOOD
With edges of two peg-holes. L: 197mm
SF 25573; [25008] medieval midden

W31 UNIDENTIFIED OBJECT, WOOD
Broken, rectangular mount, crudely hollowed out as a support. 86 by 30 by 27mm
SF 25574; [25008] medieval midden

W32 UNIDENTIFIED OBJECT, WOOD (HAZEL?)
Squarish rod with a drill-hole, 7mm in diameter and tenons at both ends. Now fractured either side of the drill-hole. L: 60mm
SF 25576; [25008] medieval midden
Illustration drawn from photograph

W33 HILT OF WEAPON OR TOOL, WOOD (ALDER?)
Broken, pierced for whittle tang.
Surviving L: 118mm
SF 31044; [057 B1] FN 98 Sector C1 excavation

W34 LARGE STAVED CONTAINER, WOOD AND IRON (ILLUS C6.7)
The upper portion of a staved, barrel-like vessel, the 14 staves held in place at the rim by an iron hoop, and also pierced by gut (?) to help draw them together. At least two holes below the rim could have held a handle. Rim diameter: 48cm; surviving Ht: 24cm.

Perhaps originally constructed for food storage, but reuse as part of a still or as a kibble for extracting ore from mining operations are options worth considering.

SF 0105: recovered in 1990 from the bottom of the loch adjacent to the bridge between Eilean Mór and the loch-side. It had possibly been washed down the Finlaggan River.

Illustration C6.7
Wooden staved vessel or barrel: W34

CHAPTER C7

Select catalogue of artefacts

In this select list of finds, items are listed by small find number. Unless otherwise stated, it can be taken as a reasonable assumption that finds date to the period from about AD 1100 to about 1600. Very few individual items can be dated precisely with any confidence. Dates, where suggested, are intended only for guidance, based on current knowledge and comparison with similar items from other locations.

0103 ROOF SLATE, PYRITOUS SLATE
Type C; pierced; 375 by 250 by 4mm; peg-hole diameter: 18mm
The loch, adjacent to the chapel on Eilean Mór
R58: Illus C2.19

0104 ROOF SLATE, PYRITOUS SLATE
Type C; pierced; 310 by 205 by 4mm; peg-hole diameter: 24mm
The loch, adjacent to the chapel on Eilean Mór
R59: not illustrated

0105 LARGE STAVED CONTAINER, WOOD AND IRON
The upper portion of a staved, barrel-like vessel, the 14 staves held in place at the rim by an iron hoop and also pierced by gut (?) to help draw them together. At least two holes below the rim could have held a handle. Rim diameter: 48cm; surviving Ht: 24cm .
Perhaps originally constructed for food storage, but reuse as part of a still or as a kibble for extracting ore from mining operations are options worth considering.
Recovered in 1990 from the bottom of the loch adjacent to the bridge between Eilean Mór and the loch-side. It had possibly been washed down the Finlaggan River.
W34: Illus C6.7

1001 MOUNT, COPPER ALLOY
L-shaped mount with zig-zag engraving, for reinforcing a corner, eg of a casket. 50 by 54 by 8mm
[1001] topsoil
C91: Illus C4.13

1002 FLATTENED ROD HANDLE
With all-over semi-matt yellow-brown glaze, wheel-made pottery. Rhineland, fabric 5
[1007] gravel spread in burial ground
P77: Illus C3.8

1003 MOUNT, COPPER ALLOY
Made from a rolled sheet of metal, forming a tube. L: 88mm; maximum Diam: 5mm; metal Th: 1.27mm
[1007] gravel spread in burial ground
C92: Illus C4.13

1004 KNIFE, IRON
Whittle-tang knife, broken.
Surviving L: 62mm
[1007] gravel spread in burial ground
F54: Illus C5.6

1005 BROOCH, COPPER ALLOY
Annular brooch engraved with a pattern of chevrons. The hoop is riveted together and notched for its pin, which has a ribbed head. The decoration is crisp and shows no sign of wear. Diam: 45mm
15th century
[1007] gravel spread in burial ground
C1: Illus C4.5

1023 HASP, IRON
Loop-shaped, curved hasp squeezed into a figure-of-eight shape; probable hook at the larger end broken off. 132 by 32mm
[1007] gravel spread in burial ground
F107: Illus C5.12

1026 ROOF RIDGE, SANDSTONE
Broken piece of 'white' (light yellowish-brown) sandstone roof ridge. Ht: 160mm; L: 190mm; W: 205mm
[1007] embedded in the gravel horizon in the burial ground
R24: Illus C2.15

1033 RYBAT, SANDSTONE
White sandstone jamb stone, possibly from the chapel door. Surviving L: 143mm; Ht: 120mm
[1007] embedded in the gravel horizon in the burial ground
R26: Illus C2.14

1035 BUCKLE, COPPER ALLOY (GUNMETAL)
Buckle with D-shaped frame, broken and incomplete. 57 by 29mm
15th century
[1007] gravel spread in burial ground
C15: Illus C4.6

1037 CROSS HEAD, CHLORITE SCHIST
Disc head of chlorite schist cross with short arms carved on both sides with interlace designs contained within a roll moulding, tracing the outline of the cross with its short arms. The main face, which evidently faced (true) ESE, is in pristine condition. It has a central boss, plain but for a central hollow made by the compasses used to lay out the design. It is set within a ring interlaced with a band which develops into half-palmettes in the arms and a cross-crosslet in the head. The other side shows considerable wear from exposure to the prevailing wind and rain, enough to suggest that it stood in place for a considerable period of time. It measures 0.48m across its arms and 0.572m in maximum surviving height.
Islay? 14th or 15th century
Found in the burial ground adjacent to its plinth [1005]
R20: C2.10; *Finlaggan*, Illus 9.7

1047 BULLAUN, METABASITE
Cup-marked stone, roughly rectangular in shape with one pecked circular hollow in the centre of each face. 180 by 130 by 120mm
SF 1047; [1007] lying on the surface of 1007 under the cross-head and between graves 1017 and 1016
R82: C2.24, C2.25; *Finlaggan*, Illus 9.8

1052 FISHHOOK? IRON
Broken. Surviving size: 45 by 20mm
[1002] cobbling in entrance of building J facing the burial ground
F39: Illus C5.5

1058 NEEDLE, COPPER ALLOY (GUNMETAL)
L: 57mm
[1007] gravel spread in burial ground
C127: Illus C4.17

1064 JUG RIM WITH ATTACHED SKEWED STRAP HANDLE
Stabbed decoration on handle and rim top; handmade pottery
SF 1064 and SF 1094; [1007] gravel spread in burial ground
P79: Illus C3.9

1077 STAPLE, IRON
U-shaped staple, one arm broken. 80 by 29mm
[1007] gravel spread in burial ground
Not illustrated

1079 MAIL, COPPER ALLOY
Group of interlinked riveted links, each about 6 to 6.5mm in diameter, along with over 20 detached and broken links. The group possibly formed one or more triangular fringes to a mail garment.
[1007] gravel spread in burial ground
C131: Illus C4.17

1082 BUCKLE, COPPER ALLOY
Buckle with double-oval frame, complete with pin. Ht: 22mm; L: 24mm
15th century
[1007] gravel spread in burial ground
C16: Illus C4.6

1083 PREHISTORIC POTTERY RIM SHERD
The everted rim, about 250mm in diameter, is bevelled both internally and externally and decorated with short diagonal slashes. The vessel exterior has grouped horizontal and diagonal impressed lines, probably arranged overall in panels. The fabric is light yellowish-brown and well smoothed, and contains sparse, large inclusions, one 9 by 15 by 7mm. Wt: 44.44g
Possibly Early Bronze Age
[1049] clay soil within an early historic grave
[1049] excavated in trench 1 in the burial ground
X18: Illus C1.4

1084 QUERN, MICA-SCHIST
Piece of an upper stone of a rotary quern with handle-hole. 195 by 235mm, originally with a diameter of about 420mm; maximum Th: 70mm; handle-hole: 23 by 25mm
[1005] incorporated in upper surface of cross plinth
R86: Illus C2.29

1089 KNIFE, IRON AND COPPER ALLOY
Fragmentary remains of a knife with scale tang and copper alloy riveted shoulder plate. Surviving L: 47mm
[1007] gravel spread in burial ground
F55: not illustrated

1094 JUG RIM WITH ATTACHED SKEWED STRAP HANDLE
Stabbed decoration on handle and rim top; handmade pottery
SF 1064 and SF 1094; [1007] gravel spread in burial ground
P79: Illus C3.9

1096 STAPLE, IRON
U-shaped staple, both arms broken. 50 by 30mm
[1012] grave, group 3
Not illustrated

1099 COIN, BILLON
Plack, James IV, 1488–1513
[1007] gravel spread in burial ground
N39: not illustrated

1101 RYBAT, SANDSTONE
'White' (2.5Y 6/3 light yellowish-brown) sandstone jamb stone, probably from a window in the chapel. 440 by 220 by 150mm
[1039] tumble beside the exterior of the south chapel wall
R27: Illus C2.14

1102 QUERN, SCHIST
Upper stone of rotary quern with a lug containing the handle-hole. 390 by 315 by 70mm
Recovered from the loch, about 40m south-east of the chapel, during the bathymetric survey in 1990
R87: Illus C2.29

1104B ROOF SLATE, SEMI-PELITIC SCHIST
Type A; largely complete, with two peg-holes; 310 by 405 by 18mm
[1002] cobbling in entrance of building J facing the burial ground
R35: Illus C2.18

1105 BUCKLE, COPPER ALLOY
Buckle with oval frame and forked spacers, lacking its pin and plate. 14 by 33mm
15th century
[1033] water-washed sand and grit by the edge of the loch
C17: Illus C4.6

1108 STRAP SLIDE, IRON
Oval-shaped link. 68 by 18mm
Unstratified
F15: Illus C5.3

1250–51 AUGUR BIT, IRON
Much-wasted spoon blade and lanceolate-shaped terminal. L: 219mm
[12023] floor deposits, building 12.2
F91: Illus C5.11

2004 VERY LARGE DISCOID, SEMI-PELITIC SCHIST
Roughly circular slab, possibly cut from a type A slate, probably used as a pot-lid. 135 by 144 by 32mm
[2002] tumble from wall of building K/K.1
R77: Illus C2.22

2006 ROOF SLATE, PHYLLITE
Type B; rounded top, pierced. 155 by 96 by 8mm
[2003] tumble from walls of building K
R50: Illus C2.19

2009 STAPLE, IRON
78 by 29mm
[2010] loch-side silt
Not illustrated

2017 NAIL, IRON
Large nail, broken shank. Head: 29mm across; L: 40mm
[2010] loch-side silt
Not illustrated

2024 SLAG, IRON WORKING
61 by 46 by 44mm
[2010] loch-side silt
Not illustrated

2032 BUCKLE-PLATE, COPPER ALLOY
One side only decorated with incised dashes. 19 by 29.5mm
Highland, 16th century
[2030] wall of str K.1; 16th century
C32: Illus C4.7

2041 PADLOCK, IRON
The hasp with attached spring for a barrel padlock. 130 by 54mm
[2013] tumble in north entrance of building K
F124: Illus C5.15

2042 ROOF RIDGE, SANDSTONE
White sandstone roof ridge
[2013] collapse of building K, rubble in door passage
Not illustrated

2047 LOWER SIDE AND PART OF BASE
With shiny apple-green glaze externally and mottled yellow-brown glaze internally; wheel-made pottery. North French, fabric 5
[2005] floor of building K
P75: Illus C3.8

2063 HINGE STRAP, IRON
Fragment of strap hinge. 50 by 28mm
[2015] floor of building K.1
Not illustrated

2066 KNIFE, IRON, WOOD AND COPPER ALLOY
The mineralised wooden hilt and upper part of the blade of a scale-tang knife. It has a copper alloy hilt mount and cap, four tubular copper alloy rivets to secure the scales, and a larger aperture, copper mounted, for suspension. Surviving L: 117mm; hilt L: 77mm
[2015] floor of building K.1
F56: Illus C5.6

2067 KNIFE? IRON
Probably a broken knife blade.
Surviving L: 60mm
[2015] floor of building K.1
F57: Illus C5.6

2070 STAPLE, IRON
U-shaped staple, both arms broken.
36 by 30mm
[2016] drain, str K.1
Not illustrated

2077 LOCK BOLT? IRON
123 by 22mm
[2015] floor of building K.1
F125: Illus C5.14

2079 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; fragment with part of hole for mounting. 150 by 138mm
[2017] floor of K.2. Record photos and plans show it came from within the drain [2016] dug from the floor of structure K.1
Not illustrated

2080 ARROWHEAD (OR DART OR JAVELIN PROJECTILE POINT?), IRON
Socketed arrowhead with leaf-shaped blade and prominent midrib. L: 79mm; socket diameter: 8.5mm

[2017] floor of building K.1
F29: Illus C5.4

2081 large jug rim, upper body and handle
Glazed externally; wheel-made pottery. Reduced gritty ware, fabric 3.1
SF 2180; [2037] floor of str K.1
SF 2081; [2015] floor of str K.1
P51: Illus C3.6

2085 bullaun? sandstone
Broken block of very pale brown, fine-grained sandstone (10YR 7/3), probably a very worn reused rybat. It has a roughly pecked cup in its upper surface, 140mm in diameter and 30mm deep, and another, 60mm in diameter and 15mm deep, in its lower surface. Overall it measures 355 by 190 by 185mm.
[2000] spoil-heap
R83: Illus C2.26

2090 rim
With stabbed decoration on both surfaces. Oxidised surfaces; handmade pottery
[2030] east wall of str K.1
P80: Illus C3.9

2108 mail, iron
A link. Diam: 12mm
[2039] gravel horizon, underlying external trodden surface [2038]
Not illustrated

2127 shoulder?
Stabbed decoration. Oxidised surfaces; handmade pottery
[2033] floor of str K
P81: Illus C3.9

2140 staple, iron
U-shaped staple, both arms broken. 33 by 25mm
[2033] floor of str K
Not illustrated

2141 plough share, iron
Plough share or sock; a socketed wedge with reinforced tip and flat base. 37 by 185mm
[2007/2047] from under the stone setting 2007 in wall 2047 (building K.1)
F85: Illus C5.10, C5.22

2147 microlith, flint
Retouched blade of orange flint. 7.81 by 3.56 by 1.65mm
[2042] floor of str K.1
Not illustrated

2163 pot-lid, stone
Roughly D-shaped (but originally circular?) slab of metabasite; possibly made from a type D roof slate, scored on one side with criss-cross lines – of a gaming board? 94 by 83 by 18mm
[2047] clay core of wall [2014] of building K.1
R78: Illus C2.22

2176 rim and shoulder sherds
Oxidised surfaces with grass impressions. Heavily sooted; handmade pottery
[2037] floor of str K.1
P82: Illus C3.9

2179 knife, iron
Knife with whittle tang; point missing. L: 137mm
[2037] floor of building K.1
F58: Illus C5.6

2182 rim sherd
Unglazed; wheel-made pottery. Redware, fabric 2.4
[2023] gravel and sand fill in pit 2058, str K.2
P42: Illus C3.5

2186 rim and neck
Slashed decoration on neck. Fine pink fabric; handmade pottery
[2047] wall of K.1
P83: Illus C3.9

2187 knife? iron
Probably broken whittle-tang knife. Surviving L: 76mm
[2037] floor of building K.1
F59: Illus C5.6

2200 gaming board? pyritous slate
Fragment of type C slate cut with grooves. 172 by 62mm
[2047]? booked as from [2048], the possible remains of the east wall of structure K.2, encased in the core [2047] of the east wall of building K.1
R69: Illus C2.20

3003 handle? copper alloy (leaded bronze)
Segment of cast metal object, possibly a vessel handle. L: 22mm
[3001] topsoil
C138: Illus C4.19

3012 unidentified object, iron
Possibly a nail. 28 by 17mm
[3012] turf platform for gatehouse
Not illustrated

3018 crucible rim, tiny
Slight vitrification. Possible residue on rim; handmade pottery
[3026] thin gravel spread, post-demise of gatehouse
Not illustrated

3019 musical instrument peg, copper alloy
Probably for a wire-strung harp or clarsach. L: 53mm; diameter of string hole: 1.3mm
12th–15th century
[3014] palisade bank that replaced the gatehouse; late 16th century
C121: Illus C4.16

3020 rivet, iron
32 by 25mm
[3016] lazy bed
Not illustrated

3021 nail or pin, iron
L: 23mm
[3026] thin gravel spread, post-demise of gatehouse
F8: Illus C5.1

3022 rove, iron
24 by 18mm
[3012] turf platform for gatehouse
Not illustrated

3024 rivet, iron
27 by 25mm
[3025] post-hole in gatehouse
Not illustrated

3025a rove, iron
18 by 16mm
[3025] post-hole in gatehouse
Not illustrated

3025b rove, iron
18 by 17mm
[3025] post-hole in gatehouse
Not illustrated

3026 rivet, iron
36 by 22mm
[3025] post-hole in gatehouse
Not illustrated

3027 rivet, iron
44 by 18mm
[3025] post-hole in gatehouse
Not illustrated

4002 medium-sized discoid, phyllite
Shaped from type B slate? Diam: 50mm; Th: 5mm; Wt: 19.26g
[4007] topsoil
R73: Illus C2.21

4015 strap loop, iron
One arm broken, part of rivet surviving. 53 by 22 by 15mm
For harness?
[4007] topsoil
F44: Illus C5.5

4025 RUBBER, STONE
Crinan grit? Flat underside polished smooth. 70 by 95 by 85mm
Prehistoric?
[4012] topsoil
X13: Illus C1.3

4041 DISCOID, STONE
Small discoid, a gaming piece? Cut from type C slate. 19 by 18 by 2mm; Wt: 1.06g
[4015] drain across road 4014
R70: Illus C2.21

4046 TOBACCO PIPE, CLAY
Piece of bowl. 17 by 17mm
[4024] decomposed mortar washed from walls of str L.1
Not illustrated

4052 SCRAPER, FLINT
Cream-yellow flint. 31.57 by 23.96 by 7.90mm
Mesolithic (catalogue of struck lithics 1074)
[4020] sandy gravel shore
X6: Illus C1.2

4062 SMALL VESSEL RIM AND SIDE
With diagonal throwing scratches on interior and mottled bright green glaze externally; wheel-made pottery. North French, fabric 5
[4024] decomposed mortar washed from walls of str L.1
P73: Illus C3.8

4076 HONE, SILTSTONE
Hone of fine-grained siltstone, well polished from use on both its upper and bottom surfaces. 160 by 35 by 30mm
[4023] decomposed mortar from building L.1
R92: Illus C2.31

4100 BUCKLE, IRON
Annular buckle with flat frame and pin. Diam: 28 by 29.5mm
[4000] spoil-heap
F1: Illus C5.1

5014 PENKNIFE, STEEL WITH BRASS MOUNTS AND BONE GRIPS
Late 19th or 20th century. L: 78mm
[5002] dump or backfill of hole dug into earlier tumble within building P
Not illustrated

5017 SMALL DISCOID, STONE
Gaming piece? Diam: 23mm; Th: 4mm
[5016] paved path along north side of building P
Not illustrated

5032 NAIL, IRON
Small nail, broken shank. Head: 16 by 14mm, L: 29mm
[5028] tumble from wall of building M
Not illustrated

5038 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; with peg-hole. L: 275mm
[5040] floor of building P
Not illustrated

5040 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; fragment with two peg-holes. 180 by 250mm
[5042] tumble in entrance of building M
R36: not illustrated

6001 RIM
With degraded glaze externally; wheel-made pottery. Oxidised gritty ware, fabric 4.1
[6002] paved road from great hall to chapel
P55: Illus C3.7

6012 NAIL, IRON
Small nail, broken shank. Head: 15 by 13mm; L: 31mm
Context not noted at time of discovery, but probably [6007] subsoil
Not illustrated

6019A ROVE, IRON
28 by 23mm
[6006] wall of str S.1
Not illustrated

6019B NAIL, IRON
Large nail with broken shank, rectangular in cross section; 20 by 18mm, L: 41mm
[6006] wall of str S.1
Not illustrated

6038 NAIL, IRON
Large nail, broken shank. Head: 21 by 20mm, L: 42mm
[6019] fill of post-hole 6037
Not illustrated

6045 ROVE, IRON
[6018] gravel spread
Not illustrated

6046 RIVET, IRON
[6020] fill of post-hole 6041
Not illustrated

6047 SLAG, IRON WORKING
136 by 112 by 60mm
[6020] fill of post-hole 6041
Not illustrated

6053 COIN, SILVER
Groat, James III, Edinburgh, *c* 1484–89
[6018] gravel spread
N33: not illustrated

6056 NAIL, IRON
Narrow (figure of eight?) head, broken shank. Head: 25 by 10mm: L: 39mm
Context not noted at time of discovery, but probably [6018] gravel spread
F143: Illus C5.17

6060 RIM WITH GRASS IMPRESSIONS
Sooted surfaces; handmade pottery
[6018] gravel spread (worm activity)
P84: Illus C3.9

6061–62 RIM SHERDS
Oxidised surfaces. Heavily gritted; handmade pottery
SF 6061 and SF 6062; [6018] gravel spread (worm activity)
P85: Illus C3.9

6083 SWIVEL RING? IRON
Broken. 42 by 36 by 16mm
[6018] gravel spread
F128: Illus C5.15

6084 HORSESHOE NAIL, IRON
'Fiddle-key nail'. 15 by 12mm; L: 38mm
[6018] gravel spread
F45: not illustrated

6090 JEW'S HARP, IRON
L: 80mm
[6018] gravel spread
F53: Illus C5.6, C5.20

6091 COOKING POT RIM AND SHOULDER
With tiny specks of glaze externally; sooted exterior; wheel-made pottery. Redware, fabric 2.1
[6018] gravel spread (worm activity)
P34: Illus C3.5

6096 ARROWHEAD, IRON
Fragment of a socketed arrowhead. L: 43mm; socket diameter: 7mm
[6018] gravel spread
F30: Illus C5.4

6098 RIM
Stabbed decoration on upper surface. Oxidised surfaces; handmade pottery
[6018] gravel spread (worm activity)
P86: Illus C3.9

6102 COIN, SILVER
Groat, James III, Edinburgh, *c* 1484–89
[6018] gravel spread
N32: not illustrated

6103 MAIL, IRON
A link. 12 by 13mm
[6018] gravel spread
Not illustrated

6105 STRAP HANDLE, INCOMPLETELY PIERCED BY OCCASIONAL PINHOLES
Unglazed; wheel-made pottery. White gritty ware, fabric 1.1

[6010] revetment of palisade bank
P8: Illus C3.3

6108 blade? iron
Length of metal with wedge-shaped cross section. L: 51mm
[6024] fill of post-hole 6048 in palisade
F60: Illus C5.7

6111 nail, iron
Large nail, broken shank. Head: 20 by 18mm, L: 35mm
[6010] revetment of palisade bank
Not illustrated

6112 knife, iron
L (incomplete): 60mm
[6022] midden
F61: Illus C5.7

6114 small discoid, stone
Gaming piece or counter? One side is divided by an incised cross into quadrants with crude motifs. Diam: 11mm; Th: 1mm
[6022] midden
Not illustrated

6117 lower body and base sherd
With abraded glaze all over its exterior; wheel-made pottery. Oxidised gritty ware, fabric 4.4
[6022] midden
P67: Illus C3.8

6118 staple, iron
U-shaped. 30 by 30mm
[6022] midden
F138: Illus C5.17

6120 horseshoe nail, iron
'Fiddle-key nail'. L (incomplete): 41mm
12th–13th century
[6022] midden
F46: Illus C5.5

6124 arrowhead, iron
Socketed arrowhead with short barbs. Ht: 60mm; socket diameter: 8 by 9mm
[6022] midden
F31: Illus C5.4

6128 carved sandstone
A carved piece of grey-yellow sandstone, perhaps from the cap of a nook-shaft in a door or window opening. 107 by 114 by 112mm
[6004] palisade bank
R30: Illus C2.14

6129 large discoid, stone
Gaming piece or pot-lid? Diam: 60mm; Th: 5mm
[6004] palisade bank
Not illustrated

6141–42 knife, iron
Two pieces, broken in antiquity. SF 6141 is part of the blade; L: 58mm. SF 6142 is the rest of the blade with its scale (?) tang; L: 74mm
[6026] fill of post-hole 6046 in str 6.2
F62: Illus C5.7

6144 daub
Two pieces of daub with impressions of withies
[6010] revetment of palisade bank
Not illustrated

6152 discoid, stone
Small gaming piece? Diam: 24 by 27mm; Th: 2.5mm; Wt: 2.9g
[6022] midden
R71: Illus C2.21

6156 jar rim and shoulder
With splashes of glaze externally and even coating inside the neck; wheel-made pottery. Redware, fabric 2.2
[6022] midden
P39: Illus C3.5

6160 jug? shoulder and body sherds
Applied knob. Diagonal slashed decoration. Oxidised surfaces. Heavily sooted; handmade pottery
[6033] midden
P87: Illus C3.9

7000 lead shot
[7007] garden soil
Not illustrated

7007 slag, iron working
42 by 36mm
[7007] garden soil
Not illustrated

7018 medium-sized discoid, semi-pelitic schist
Cut from type A slate? Diam: 45mm; Th: 5mm; Wt: 3.41g
[7014] tumble
R74: Illus C2.21

7027 roof slate, pyritous slate
Type C; fragment with possible nail- or peg-hole. 148 by 76mm
[7015] lazy bed
R60: not illustrated

7028 staple, iron
U-shaped staple, broken; W: 30mm
[7011] tumble
Not illustrated

7029 medium-sized discoid, semi-pelitic schist
Shaped from type A slate? Diam: 47mm; Th: 10mm
[7011] tumble
R75: Illus C2.21

7029 nail, iron
Large nail, broken shank. Head: 23mm across; surviving L: 32mm
[7029] debris from str V.1
Not illustrated

7041 brooch, copper alloy
Annular brooch engraved with a continuous foliage design. The two ends of the hoop overlap at the notch cut to house the pin, which is broken. Diam: 40mm
15th century
[7007] garden soil
C2: Illus C4.5, C4.23

7052 staple, iron
Clenched, in-turned arm; other end missing. 31 by 6mm
[7007] garden soil
F139: Illus C5.17

7063 key? iron
[7007] garden soil
Not illustrated

7065 rim
With tiny specks of glaze externally; wheel-made pottery. Redware, fabric 2.2
[7011] tumble
P38: Illus C3.5

7065 cooking pot rim and shoulder
With tiny specks of glaze externally; sooted exterior; wheel-made pottery. Redware, fabric 2.2
[7011] tumble
P40: Illus C3.5

7079 scrap with lead rivet, lead
76 by 52 by 20mm
[7007] garden soil
L34: not illustrated

7081 knife, iron and wood
Handle of scale-tang knife with mineralised remains of wooden scales, fastened by two rivets. L: 60mm
[7024] post-hole (fill of), str 7.1
F63: Illus C5.7

7088 nail, iron
Small nail. Head: 11mm across; L: 55mm
[7022] path to structure X
Not illustrated

7089 nail, iron
Large nail, broken shank. Head: 24mm across; surviving L: 43mm
[7022] path to structure X
Not illustrated

7096 SHERD OF SCOTTISH REDUCED GRITTY POTTERY
Fabric 3.1; wheel-made pottery
[7022] path to str X
Not illustrated

7107 SMALL DISCOID, STONE
Gaming piece? Diam: 18mm; Th: 2.2mm
[7007] garden soil
Not illustrated

7119 SHERD OF SCOTTISH REDUCED GRITTY POTTERY
Fabric 3.1; wheel-made pottery
[7007] garden soil
Not illustrated

7124 SMALL DISCOID, STONE
Playing piece? Diam: 14mm; Th: 0.5mm
[7007] garden soil
Not illustrated

7141 RIVET, IRON
Clench bolt, complete. Ht: 58mm; bolt head: 14mm across; rove: 35 by 29mm
[7007] garden soil
Not illustrated

7148 BODY SHERD WITH INTEGRAL KNOB
Handmade pottery
[7027] floor of str V.1
P88: Illus C3.9

7150 SHERD OF SCOTTISH REDUCED GRITTY POTTERY
Fabric 3.1; wheel-made pottery
[7027] floor deposits of building V.1
Also 10 other sherds of the same fabric from the same context: SF 7152, 7153, 7205, 7277, 7278, 7283–86, 7322
Not illustrated

7151 STRAP SLIDE, IRON
Rectangular link of flat metal. 75 by 23mm
[7027] floor of str V.1
F16: Illus C5.3

7154 PADLOCK KEY? IRON
Plain broken stem with bit set laterally. L: 40mm; metal thickness: 2mm
[7027] floor of str V.1
F116: Illus C5.14

7156 FISHHOOK? IRON
43 by 26mm
[7036] make-up deposit under str V
F40: Illus C5.5

7158 SHERD OF SCOTTISH REDUCED GRITTY POTTERY
Fabric 3.1; wheel-made pottery
[7039] earth core of the wall of str V.1
Not illustrated

7162 KNIFE, IRON AND COPPER ALLOY
Scale-tang knife handle with copper alloy hilt mount (blade/hilt) and two hollow rivets; most of the blade is missing. L: 63mm
[7007] garden soil
F64: Illus C5.7

7200 RIM SHERDS WITH RESIDUE (?)
Grass impressions. Oxidised exterior. Heavy sooting; handmade pottery
[7017] garden soil
P89: Illus C3.9

7202 KNIFE? IRON, WOOD, COPPER ALLOY
Scale-tang knife handle with wooden scales secured by three copper alloy (brass) rivets. There is a brass-lined suspension hole and associated brass mount. L: 84mm
[7017] garden soil
F65: Illus C5.7, C5.21

7219 NAIL, IRON
Large nail, broken shank. Head: 25mm across; surviving L: 50mm
[7017] garden soil
Not illustrated

7237 BUCKLE, IRON
Buckle with D-shaped frame, part of pin surviving. Frame: 26 by 34mm
[7009] lazy bed
F2: Illus C5.1

7242 SCRAP, LEAD
Partial disc. 34 by 22 by 6mm
[7009] lazy bed
L35: Illus C4.22

7244 NAIL, IRON
Small nail. Head: 15mm across; L: 61mm
[7027] floor of building V.1
Not illustrated

7247 CORE, FLINT
Single-platformed core, cream-yellow flint. 27.78 by 16.17 by 16.30mm
Mesolithic (catalogue of struck lithics 1301)
[7027] floor of building V.1
X7: Illus C1.2

7251 RIM
With very abraded glaze externally; wheel-made pottery
Oxidised gritty ware, fabric 4.1
[7027] floor of str V.1
P54: Illus C3.7

7257 NAIL, IRON
Large nail, broken shank. Head: 20mm across; surviving L: 45mm
[7087] tumble in str W
Not illustrated

7272 MUSICAL INSTRUMENT PEG, LEAD/TIN ALLOY
Broken, lacking its tip and string hole. L: 62mm
[7100] wall of str V.1
C122: Illus C4.16

7281B RIVET? IRON
37 by 23mm
[7027] floor of str V.1
Not illustrated

7281C RIVET? IRON
33 by 28mm
[7027] floor of str V.1
Not illustrated

7281D ROVE? IRON
22 by 15mm
[7027] floor of str V.1
Not illustrated

7281E ROVE? IRON
20 by 12mm
[7027] floor of str V.1
Not illustrated

7281F ROVE? IRON
19 by 7mm
[7027] floor of str V.1
Not illustrated

7281G ROVE? IRON
22 by 9mm
[7027] floor of str V.1
Not illustrated

7282 SMALL DISCOID, STONE
Gaming piece? Diam: 22mm; Th: 1mm
[7027] floor of str V.1
Not illustrated

7299 STAPLE, IRON
U-shaped staple, one arm broken. 53 by 25mm
[7041] core of bank of str W
F140: Illus C5.17

7301 BODY SHERD
With segments of two incised compass-drawn circles, 40mm in diameter, underlying tiny flecks of glaze; wheel-made pottery. Redware, fabric 2.3
[7041] core of bank of str W
P41: Illus C3.5

7309A ROVE, IRON
24 by 24mm
[7017] garden soil
Not illustrated

7309B ROVE, IRON
26 by 24mm
[7017] garden soil
Not illustrated

7310 COIN, SILVER
Groat, James III, Edinburgh, *c* 1484–89
[7027] floor of str V.1
N34: not illustrated

7311 HASP/LATCH? IRON
Bar of metal, rectangular in section, formed into a loop at one end. L: 130mm
[7027] floor of str V.1
F129: Illus C5.16

7312 NAIL, IRON
Small nail. Head: 16 by 14mm, L: 66mm
[7027] floor of str V.1
F144: Illus C5.17

7313 NAIL, IRON
Small nail, broken shank. Head: 14mm across; L: 42mm
[7027] floor of str V.1
Not illustrated

7314 NAIL, IRON
Large nail, clenched. Head: 20 by 18mm; L: 34mm
[7027] floor of str V.1
F145: Illus C5.17

7315 UNIDENTIFIED TOOL? IRON
Portion of blade/shank. 73 by 24 by 10mm
[7027] floor of str V.1
F86: Illus C5.10

7316 BROOCH, COPPER ALLOY (GUNMETAL)
Annular brooch with part of its hoop and pin missing; engraved on one side with a bold chevron design, and on the other with faint traces, possibly of a foliage design similar to that on another brooch, SF 7041. Diam: 37mm; Th: 1.6mm
15th century
[7027] floor deposits in building V.1; 15th century
C3: Illus C4.5

7317 LEAD SHOT
Diam: 14.79mm; Wt: 15.88g
[7000] spoil-heap
Not illustrated

7318 PADLOCK? COPPER ALLOY
Fragmentary remains of a rectangular casing, probably for a padlock. 74 by 35mm
[7000] spoil-heap
C116: Illus C4.15

7319 RAKE TOOTH? IRON
L: 103mm
[7027] floor of str V.1
F87: Illus C5.10

7320 KNIFE, IRON
L: 100mm
[7000] spoil-heap
F66: Illus C5.7

7321 STAPLE, IRON
U-shaped staple, one arm broken. 90 by 30mm
[7088] fill of pit 7086 in str V.2
Not illustrated

7328 STAPLE, IRON
U-shaped staple. 74 by 35mm
[7017] garden soil
Not illustrated

8002–03, 8046, 8117 LOWER BODY AND BASE SHERDS
With abraded glaze all over exterior and a stacking mark on the base; wheel-made pottery. Reduced gritty ware, fabric 3.1
SF 8002; [8002] topsoil
SF 8003; [8002] topsoil
SF 8046; [8013] tumble from wall of building H
SF 8117; [8016] tumble within building H
P47: Illus C3.6

8006 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; pointed top, pierced. Surviving L: 135mm; W: 100mm
[8002] topsoil
R37: Illus C2.18

8025 LOOP, COPPER ALLOY (BRONZE)
Finger ring, or pendent loop for a belt accessory (?). Diam: 20 by 21mm
[8002] topsoil
C6: Illus C4.5

8026 KEY, IRON
Key with small circular bow with collar below, hollow shank and small ward with one cleft. L: 85mm
[8002] topsoil
F117: Illus C5.13

8027 BROOCH, COPPER ALLOY (GUNMETAL, WITH 12% SILVER)
Annular brooch decorated with egg and dart; incomplete and lacking its pin. Diam: 21mm
15th century
[8002] topsoil
C4: Illus C4.5

8029 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; pointed top, pierced. 285 by 155mm
[8002] topsoil
R38: Illus C2.18

8031 NAIL, IRON
Small nail. Head: 12mm across; L: 54mm
[8002] topsoil
Not illustrated

8032 NAIL, IRON
Small nail, bent (extracted) shank. Head: 18mm across; surviving L: 36mm
[8002] topsoil
Not illustrated

8041 MEDIUM DISCOID, STONE
Gaming piece? Diam: 46mm; Th: 7mm
[8028] gravel horizon
Not illustrated

8046 LOWER BODY AND BASE SHERDS
See 8002 above

8060 NAIL, IRON
Very large nail, clenched. Head: 36 by 34mm; L: 47mm
[8011] tumble from north-west wall of str H
Not illustrated

8068 ROVE? IRON
25 by 18mm
[8011] tumble from north-west wall of str H
Not illustrated

8081 NAIL, IRON
Small nail. Head: 1 by 11mm; L: 52mm
[8011] tumble from north-west wall of str H
Not illustrated

8083 NAIL, IRON
Large nail, broken shank. Head: 25 by 20mm; surviving L: 34mm
[8016] tumble within str H
Not illustrated

8087 ARROWHEAD, IRON
Socketed arrowhead with small narrow point. L: 64mm; socket diameter: 5mm
[8016] tumble within str H
F32: Illus C5.4

8090 NAIL, IRON
Very large, circular nail head. Diam: 36mm; shank section: 14 by 14mm
[8011] tumble from north-west wall of str H
F146: Illus C5.17

8091 SHOULDER SHERD
Grass impressions; handmade pottery
[8012] weathering north-west of str H
P90: Illus C3.10

8102 STAPLE, IRON
U-shaped staple, one arm broken. 83 by 39mm
[8016] tumble within str H
Not illustrated

8104 MOUNT, COPPER ALLOY
L-shaped mount with two piercings for rivets, one of which is still in place; for reinforcing a corner, eg of a casket. 28 by 22.5mm
[8016] tumble within str H
C93: Illus C4.13

8108 NAIL, IRON
Very large nail, broken shank. Head: 36 by 24mm; surviving L: 37mm
[8015] wall of kiln
Not illustrated

8112 RIVET, IRON
Clench bolt, complete. Ht: 28mm; bolt head 20 by 19mm; rove 24 by 20mm
[8016] tumble within str H
F155: Illus C5.18

8117 LOWER BODY AND BASE SHERDS
See 8002 above

8129 KEY, IRON, COPPER PLATED
Key with circular bow and collar, hollow shank and simple ward. 50 by 17mm
[8016] tumble within str H
F118: Illus C5.13

8131 NAIL, IRON
Small nail, bent (extracted) shank. Head: 11mm across; L: 45mm
[8021] collapsed material from south-east wall of str H
Not illustrated

8143 ROVE, IRON
32 by 26mm
[8016] tumble within str H
Not illustrated

8145 HECKLE TOOTH? IRON
L: 116mm
[8016] tumble within str H
F88: Illus C5.10

8149 NAIL, IRON
Small nail, bent (extracted) shank. Head: 11 by 7mm; surviving L: 48mm
[8016] tumble within str H
Not illustrated

8155 NAIL, IRON
Small nail, broken shank. Head: 16mm across; surviving L: 30mm
[8021] collapsed material from south-east wall of str H
Not illustrated

8158 WALL HOOK (OR PADLOCK HASP?), IRON
Made from a bar of metal, rectangular in cross section, about 16 by 5mm. Overall L: 187mm
[8021] collapsed material from south-east wall of str H
F112: Illus C5.12

8164 HOOK, IRON
Broken curved rod, partly circular in cross section and partly rectangular. L: 51mm
[8021] collapsed material from south-east wall of str H
F113: Illus C5.12

8176 NAIL, IRON
Small nail, broken shank. Head: 12 by 11mm; surviving L: 35mm
[8023] debris in passage between buildings H and J
Not illustrated

8186 ROOF SLATE, PYRITOUS SLATE
Type C; fragment with nail-hole. 67 by 36mm
[8016] tumble in str H
R61: not illustrated

8212 NAIL, IRON
Large nail, broken shank. Head: 32 by 32mm; L: 40mm
[8016] tumble within str H
Not illustrated

8217 STAPLE, IRON
U-shaped, complete. 64 by 20mm
[8011] tumble from north-west wall of str H
Not illustrated

8220 RIVET? IRON
63 by 55mm
[8039] silty clay impregnated with peat ash, overlying the alley between strs H and J
Not illustrated

8225 NAIL, IRON
Small nail, bent (extracted) shank. Head: 16 by 10mm; L: 45mm
[8038] tumble in alley between buildings H and J
Not illustrated

8234 HINGE PIVOT, IRON
49 by 46mm
[8055] tumble in alley between strs H and J
F109: Illus C5.12

8237 CORE, SINGLE PLATFORMED, DEEP ORANGE-RED FLINT
34.94 by 26.01 by 20.54mm. Mesolithic (catalogue of struck lithics 1319)
[8043] post-medieval path
X8: Illus C1.2

8240 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; upper portion only, full width, with two peg-holes. 215 by 445 by 14mm
[8055] tumble in alley between strs H and J
R39: not illustrated

8241 ROVE, IRON
37 by 26mm
[8042] floor of str H
Not illustrated

8247 NAIL, IRON
Small nail with bent (extracted) shank. Head: 18mm across; L: 60mm
[8043] path from building H ruins heading west
Not illustrated

8248 AWL? IRON AND WOOD
Small tool with broken iron shank (L: 42mm) and remains of wooden handle. L: 76mm
[8043] path from building H ruins heading west
F89: Illus C5.10

8250 NAIL, IRON
Disc-shaped head. Diam: 18mm
[8040] fill of kiln within ruins of building H
Not illustrated

8251 NAIL, IRON
Disc-shaped head. Diam: 19mm; surviving L: 29mm
[8040] fill of kiln within ruins of building H
Not illustrated

8254 ROOF SLATE, PYRITOUS SLATE
Type C; fragment, 43 by 39mm, with nail-hole, Diam: 5mm
[8055] tumble in alley between strs H and J
R62: not illustrated

8256 NAIL, IRON
17 by 13mm; surviving L: 38mm
[8040] fill of kiln within ruins of building H
Not illustrated

8257 NAIL, IRON
Narrow head, 24 by 13mm; surviving L: 25mm
[8055] tumble in alley between strs H and J
Not illustrated

8262 FRAME? IRON
Foot of frame or stand for drying grain in a kiln? 52 by 38 by 33mm
[8040] fill of kiln within ruins of building H
F106: Illus C5.13

8264 NAIL, IRON
Large nail, broken shank. Head: 24 by 15mm; surviving L: 27mm
[8043] path from building H ruins heading west
Not illustrated

8265 QUERN
Upper stone of rotary quern with a collar round its hopper-hole (feeder pipe), a handle-hole (broken) and two conical cups (25 and 28mm deep) which could have given purchase to ancillary handles when in use. Its underside is noticeably dished. Maximum Diam: 380mm; maximum Th 50mm
[8043] trodden into path from the ruins of building H westwards between buildings H and F1 to the shore
R88: Illus C2.29

8268 ROVE, IRON
28 by 26mm
[8040] fill of kiln within ruins of building H
Not illustrated

8272 NAIL, IRON
Large nail, broken shank. Head: 21 by 17mm; surviving L: 19mm
[8043] path from building H ruins heading west
Not illustrated

8277 BAKED CLAY, COPPER
Copper alloy tube encased in a lump of baked clay. 27 by 22 by 19mm; diameter of copper alloy socket: 10mm
[8044] turf bank/wall of building H.1; 12th–13th century
C149: Illus C4.20

8282 NAIL, IRON
Small nail, broken shank. Head: 18 by 12mm; surviving L: 31mm
[8055] debris in alley between buildings H and J
Not illustrated

8285 MOUNT, COPPER ALLOY (LEADED BRASS)
18 by 18mm
[8000] unstratified
C60: Illus C4.9

8291 FISHHOOK, IRON
Barbed fishhook with flat-headed shank. 42 by 14mm
[8000] spoil-heap
F41: Illus C5.5

8292 FISHHOOK, IRON
Barbed fishhook with flat-headed shank. 39 by 14mm
[8000] spoil-heap
F42: Illus C5.5

8293 STAPLE, IRON
Rectangular staple with in-turned clenched arms. 20 by 15mm
[8053] tumble within building H
F141: Illus C5.17

8307 MAIL RING, IRON
Diam: 16mm
[8024] north-west wall of str J
F23: Illus C5.4

8309 KEY, IRON
Padlock key, with stem pierced for suspension and laterally set (now broken) bit. L: 103mm
[8042] floor of str H
F119: Illus C5.14

8323 RIVET, IRON
Clench bolt, complete, with rectangular rove. Ht: 40mm; bolt head: 14 by 14mm; rove: 21 by 20mm
[8042] floor of str H
Not illustrated

8328 KEY, COPPER ALLOY (GUNMETAL)
Casket key, cut from sheet metal; suspension hole punched through; top, and bottom of shank, missing. 24.5 by 9mm
[8062] floor of building H; 15th century
C106: Illus C4.14

8335 NAIL, IRON
Large. Head: 24 by 24mm
[8062] trampled surface under kiln
Not illustrated

8338 HONE
Hone, broken at both ends, with polished, scratched surfaces. 85 by 32 by 21mm
[8062] floor of str H
R93: Illus C2.31

8342 KNIFE, IRON
Scale-tang knife. L (incomplete): 75mm
Unstratified
F67: Illus C5.7

8347 NAIL, IRON
Small nail, clenched. Head: 14 by 13mm; L: 27mm
[8065] floor of building H
Not illustrated

8351 LEAD SHOT
Piece of lead shot with extended sprue. Diam: 15.6mm; Wt: 21.87g
[8075] alignment of boulders at water's edge
L7: Illus C4.21

8354 NAIL, IRON
Large nail. Head: 25 by 22mm
[8062] trampled surface under kiln
Not illustrated

8361 PREHISTORIC POTTERY BODY SHERDS (9)
Yellowish-red ware with rough-feeling surfaces and reduced core; tempered with angular stones up to 6mm across. Th: 10mm; Wt (total): 37.79g
[8061] fill of 8129, foundation trench of wall of str H
X20: not illustrated

8366 NAIL, IRON
Large nail, broken shank. Head: 24 by 21mm, L: 35mm
[8088] upper fill of post-hole 8116 in str H.1
Not illustrated

8372 HONE
Segment of a hone, broken at both ends. L: 69mm
[8035] post-medieval deposit in ruins of building H
R94: Illus C2.31

8384 KEY? IRON
Padlock key with hooked terminal, wards missing. L: 162mm
Unstratified
F120: Illus C5.14

8407 ARROWHEAD, FLINT
Leaf shaped, of cream/yellow flint. 44.66 by 30.27 by 7.86mm
Neolithic (catalogue of struck lithics 1204)
[8069] tumble from wall of building H.1
X9: Illus C1.2

8408 NAIL, IRON
Broad circular head, broken shank. Diam of head: 24mm; L: 30mm
[8069] tumble from wall of building H.1
Not illustrated

8412 NAIL, IRON
Large nail, broken shank, clenched. Head: 24 by 22mm; L: 36mm
[8034] drain within str H
Not illustrated

8413 NAIL, IRON
Large nail. Head: 24 by 20mm
[8091] floor of str H.1
Not illustrated

8416 ARROWHEAD, IRON
Socketed, with long barbs, one broken. 52 by 20mm
[8088] upper fill of post-hole 8116 in str H.1
F33: Illus C5.4

8417 NAIL, IRON
Large nail, broken shank. Head: 24 by 24mm; L: 40mm
[8088] fill of post-hole 8106
Not illustrated

8418 ROVE, IRON
24 by 22mm
[8088] upper fill of post-hole 8116 in str H.1
Not illustrated

8422 BUCKLE, IRON
Oval, with central bar. 16 by 26.5mm
Unstratified
F3: Illus C5.1

8423 AGLET (LACE END), COPPER ALLOY (GUNMETAL)
Surviving L: 23mm; Diam: 3mm
[8000] unstratified
C79: Illus C4.11

8424 NAIL, IRON
Large nail. Head: 20 by 20mm
[8102] floor of str H.1
Not illustrated

8438 RAKE TOOTH? IRON
L: 128mm
[8114] fill of post-hole 8116 in str H.1
F90: Illus C5.10

8440 NAIL SHANK, IRON
Surviving L: 45mm
[8114] fill of post-hole 8116 in str H.1
Not illustrated

8441 NAIL, IRON
Large nail. Head: 28 by 28mm
[8114] upper fill of post-hole 8116 in str H.1
Not illustrated

8444 SLAG, IRON WORKING
Several small fragments of iron smithing slag. Total Wt: 250g
[8089] disturbed natural clay
Not illustrated

8483 FRAGMENT FROM A GAMING BOARD, SEMI-PELITIC SCHIST
Fragment from a gaming board, probably for alquerque, scratched as a graffito on a type A slate. L: 195mm; W: 224mm; Th: 6mm.
[8112] fill of the foundation trench for the south-east wall of building H
R68: Illus C2.20

8512 BUCKLE, COPPER ALLOY (GUNMETAL)
Buckle with rectangular frame and central bar; incomplete and bottom portion of pin lacking. 23 by 27mm
15th century
[8016] tumble within building H
C18: Illus C4.6

8516 NAIL, IRON
Large nail, broken shank. Head: 21mm across; surviving L: 49mm
[8016] tumble within building H
Not illustrated

8519 ROVE, IRON
25 by 25mm
[8016] tumble within building H
Not illustrated

8521 BUCKLE, COPPER ALLOY (GUNMETAL)
Loop-shaped pin, incomplete. 27 by 30mm
17th century
[8000] spoil-heap
C19: Illus C4.6

8522 MOUNT, COPPER ALLOY
Broken bar mount with copper rivet. L: 40mm
[8000] spoil-heap
C61: Illus C4.9

8524 MIRROR-CASE FRAGMENT, COPPER ALLOY (LEADED BRASS)
Fragment of small circular mirror-case. 27 by 24mm
The case would have consisted of two circular discs, hinged together. They were recessed on their interior faces for housing the (glass) mirror.
[8000] spoil-heap
C132: Illus C4.17

8525 ROTARY QUERN, STONE
Segment of probable bottom stone of a rotary quern with a diameter of about 470mm; garnetiferous micaceous schist. 332 by 172 by 40mm.
[8035] post-medieval occupation in area of building H
R89: Illus C2.30

8526 ROOF SLATE, PYRITOUS SLATE
Type C; fragment, 70 by 51mm, with nail-hole, Diam: 7mm
[8035] floor of str H
R63: not illustrated

9001 KEY, IRON
Key with oval bow formed by bending the rectangular-sectioned solid shank into shape. The shank projects below the ward, which is cut in two horizontally. 77 by 26mm
[9002] topsoil
F121: Illus C5.13

9011 RIM AND SHOULDER
Oxidised exterior, sooted. Grass impressions; handmade pottery
[9004] tumble from str F
P91: Illus C3.10

9012 RIM AND SHOULDER
Slashed (?) decoration on neck. Oxidised exterior, sooted. Grass impressions; handmade pottery
[9004] tumble from str F
P92: Illus C3.10

9018 NAIL, IRON
Small nail. Head: 13 by 12mm; L: 53mm
[9004] tumble from str F
Not illustrated

9032 SHERD OF WHITE GRITTY POTTERY
[9011] midden
Not illustrated

9033 JUG (?) LOWER BODY AND PART OF BASE
With creamy-white glaze on the exterior of the body; wheel-made pottery. Saintonge polychrome, fabric 5
[9011] midden
P70: Illus C3.8

9034A NAIL, IRON
Small nail, broken shank. Head: 15 by 8mm; surviving L: 23mm
[9009] demolition tips
Not illustrated

9034B NAIL, IRON
Small nail, broken shank. Head: 19 by 14mm; surviving L: 14mm
[9009] demolition tips
Not illustrated

9035 SHERD OF WHITE GRITTY POTTERY
[9011] midden
Not illustrated

9042 SHERD OF WHITE GRITTY POTTERY
[9013] cobbled road
Not illustrated

9043 BUCKLE-PLATE, COPPER ALLOY
Incomplete, with shank of copper alloy rivet retaining fragment of leather strap. 47 by 10mm; metal thickness: 0.27mm; leather thickness: 1.23mm
[9000] unstratified
C33: Illus C4.7

9046 SHERD OF REDUCED GRITTY POTTERY
[9021] soil within the cobbled surface of road 9013
Not illustrated

9047 STAPLE, IRON
U-shaped staple, 71 by 26mm
[9016] old ground surface
F142: Illus C5.17

9048 RIM
With all-over creamy-white glaze with apple-green spot; wheel-made pottery. Saintonge polychrome, fabric 5
[9011] midden
P69: Illus C3.8

9060 MAIL RING, IRON
Diam: 16mm
[9000] spoil-heap
F24: Illus C5.4

10002 KNIFE FRAGMENT? IRON
Perhaps part of the tang of a scale-tang knife. 25 by 18mm
[10009] mortar washout from hall
Not illustrated

10006 NAIL, IRON
Small nail, broken shank. Head: 10 by 9mm; surviving L: 27mm
[10013] demolition deposit, great hall
Not illustrated

10015 ROOF SLATE, PYRITOUS SLATE
Type C; fragment, 74 by 63mm, with two nail-holes, only 20mm apart, Diam: 6mm and 7mm
[10013] great hall demolition
R64: not illustrated

10017 RIM
Oxidised surfaces. Sooted exterior. Grass impressions; handmade pottery
[10013] demolition deposit, great hall
P93: Illus C3.10

10018 VOUSSOIR, SANDSTONE
'White' (2.5Y 6/3 light yellowish-brown) sandstone voussoir. 250 by 280 by 180mm
[10020] recovered from rubble adjacent to the cross-wall in the great hall
R31: Illus C2.14

10021 NAIL, IRON
Small nail, bent (extracted) shank. Head: 12 by 11mm; surviving L: 40mm
[10013] demolition deposit, great hall
Not illustrated

10022 NAIL, IRON
Large nail, broken shank. Head: 20 by 17mm; surviving L: 56mm
[10013] demolition deposit, great hall
Not illustrated

10026 BUCKLE, IRON
Rectangular, with pin. 40 by 52mm
[10013] demolition deposit, great hall
F4: Illus C5.1

10028 SLAG, IRON WORKING
35 by 30 by 25mm; Wt: 31.05g
[10013] demolition deposit, great hall
Not illustrated

10031 ROVE, IRON
22 by 18mm
[10031] midden deposit
F156: Illus C5.18

10033 NAIL, IRON
Small nail, broken shank. Head: 17 by 15mm; surviving L: 18mm
[10031] midden deposit
Not illustrated

10035 NAIL, IRON
Small nail, broken shank. Head: 15 by 14mm; surviving L: 15mm
[10031] midden deposit
Not illustrated

10036 SMALL DISCOID, STONE
Gaming piece? Diam: 20mm; Th: 2mm
[10031] midden deposit
Not illustrated

10042A NAIL, IRON
Small nail with bent shank (extracted) and heart-shaped head. 11 by 11mm; L: 35mm
[10010] paved road to south of great hall
Not illustrated

10042B NAIL, IRON
Large nail, broken shank. Head: 21 by 15mm; surviving L: 30mm
[10010] paved road to south of great hall
Not illustrated

10043 NAIL, IRON
Brad, with small, narrow head, 7 by 5mm. Surviving L: 8mm
[10031] midden deposit
F147: Illus C5.17

10044 NAIL, IRON
Large nail, broken shank. Head: 21 by 18mm; surviving L: 15mm
[10031] midden deposit
Not illustrated

10045 NAIL, IRON
Small nail, broken shank. Head: 19 by 14mm; surviving L: 34mm
[10031] midden deposit
Not illustrated

10046 NAIL, IRON
Large nail, broken shank and narrow head, 25 by 10mm. Surviving L: 20mm
[10031] midden deposit
Not illustrated

10047 NAIL, IRON
Small nail, broken shank. Head: 14 by 12mm; surviving L: 35mm
[10031] midden deposit
Not illustrated

10049 NAIL, IRON
Small nail, broken shank. Head: 14 by 9mm; surviving L: 28mm
[10039] soil build-up beneath road [10010]
F148: Illus C5.17

10050 JAR (?) RIM
With orange-brown glaze externally; wheel-made pottery. Low Countries redware, fabric 5
[10048] make-up for great hall phase 1 floor
P78: Illus C3.8

10053 NAIL, IRON
Large nail, broken shank. Head: 20 by 18mm; surviving L: 73mm
[10030] collapse from hall roof
Not illustrated

10054 NAIL, IRON
Small nail, broken shank. Head: 16 by 16mm; surviving L: 22mm
[10031] midden deposit
Not illustrated

10055 NAIL, IRON
Large nail, broken shank; head: 20 by 15mm; surviving L: 23mm
[10031] midden deposit
Not illustrated

10056 NAIL, IRON
Large nail, broken shank. Head: 20 by 15mm; surviving L: 18mm
[10031] midden deposit
Not illustrated

10057 NAIL, IRON
Large nail, broken shank. Head: 20 by 19mm; surviving L: 31mm
[10031] midden deposit
Not illustrated

10059 RIVET, IRON
Clench bolt. Head: 20 by 14mm; rove: 20 by 20mm; Ht: 36mm
[10008] collapse from hall
Not illustrated

10060 NAIL, IRON
Large nail, broken shank. Head: 21 by 18mm; surviving L: 27mm
[10026] mortar wash from demolition of hall
Not illustrated

10061 NAIL, IRON
Large nail, curved (extracted) shank. Head: 22 by 20mm; surviving L: 29mm
[10026] mortar wash from demolition of hall
Not illustrated

11002 POT HOOK? IRON
Large hook, broken, formed of rod, possibly for suspending pots. Diam: *c* 5.3mm; L: 128mm
[11001] topsoil, in building B
F101: Illus C5.12

11003 LABEL STOP OR CORBEL IN THE FORM OF A HUMAN HEAD, SANDSTONE
'White' (2.5Y 7/3 pale yellow) sandstone. Ht: 200mm; W: 185mm; L: 250mm
[11003] positioned in the core of the wall of house B immediately to the south of the entrance in the west wall.
R32: C2.17; *Finlaggan*, Illus 11.25

11004 RYBAT? SANDSTONE
Fragment of 'red' (5YR 4/3 reddish-brown) sandstone, possibly from a door jamb, decorated with a quadrant hollow between fillets and a band of nail-head decoration. 110 by 103 by 90mm
[11003] wall of house B
R21: Illus C2.17

11008 POT HANDLE? IRON
Two lengths of bent rod, possibly originally forming a hinged handle with hooked ends for gripping the rim of a pot. Diam: *c* 5.3mm; each piece approximately 125mm in length
[11001] topsoil, in building B
F102: Illus C5.12

11010 SCRAP, LEAD
35 by 19 by 4mm
[11010] mortar wash from demolition of hall
Not illustrated

11014 NAIL, IRON
Small nail, bent (extracted) shank. Head: 18 by 12mm; L: 53mm
[11015] debris on surface of paved road to west of great hall
Not illustrated

11015 NAIL, IRON
Large nail, broken shank. Head: 22 by 20mm; surviving L: 19mm
[11015] debris on surface of paved road to west of great hall
Not illustrated

11017 ROOF RIDGE, SANDSTONE
White sandstone. L: 385mm; Ht: 220mm
[11017] debris (slate dump) in the south-west corner of the great hall
Not illustrated

11026 IRON
Possibly part of a sword hilt. L: 98mm; W: 43mm; Th: 6.5mm
[11015] debris on surface of paved road to west of great hall
F130: Illus C5.15

11027 NAIL, IRON
Small nail, broken shank. Head: 13 by 11mm; surviving L: 37mm
[11018] floor of building B
Not illustrated

11032 MOUNT, COPPER ALLOY
Mount with sexfoil terminal. L: 35mm
16th century
[11018] floor of building B
C94: Illus C4.13

11033 MUSICAL INSTRUMENT PEG? COPPER ALLOY
Possibly a harp peg, unfinished or a crude replacement, lacking the bottom of its shaft and string hole. L: 76.5mm
[11000] unstratified, found in 1994 to the north-west of building C in lee of the cross-wall
C123: Illus C4.16

11034 MICROLITH, FLINT
Cream-yellow flint. 12.68 by 6.46 by 2.02mm
Mesolithic (catalogue of struck lithics 1239)
[11015] debris from destruction of great hall
X3: Illus C1.2

11035 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; two peg-holes. W: 510mm
[11017] slate dump in great hall
R40: Illus C2.18

12001 SMALL DISCOID, STONE
Gaming piece? It bears possible graffiti scratch marks of intersecting lines and has a polished finish
Diam: 21mm; Th: 1mm
[12002] agricultural activity
Not illustrated

12004 HONE, SILTSTONE
Hone of fine-grained siltstone, broken at one end. 137 by 39 by 26mm
[12002] agricultural activity
R95: Illus C2.31

12005 TINY ROD HANDLE
With fleck of soft green glaze; wheel-made pottery. North French, fabric 5
[12003] decayed mortar from wall of building 12.1
P74: Illus C3.8

12012 HASP/LATCH? IRON
Bar of metal, square in section, formed into a loop at one end. L: 65mm
[12014] floor of building 12.1
F131: Illus C5.15

12025 STAPLE, IRON
U-shaped staple, one arm broken. 70 by 39mm
[12017] agricultural activity
Not illustrated

12030 STRAP HANDLE PIERCED BY SEVERAL PINHOLES
With very abraded glaze on its upper surface. Oxidised gritty ware, fabric 4.1
[12015] levelling for floor of building 12.0
P63: Illus C3.8

12031 UNIDENTIFIED OBJECT (TOOL?), IRON
Formed of a rod of iron bent round in a loop with two splayed legs.
89 by 33mm
[12015] levelling for floor of building 12.0
F132: Illus C5.16

12034 SMALL DISCOID, STONE
Gaming piece? Diam: 15mm; Th: 2mm
[12015] levelling for floor of building 12.0
Not illustrated

12036 FLEUR-DE-LIS, LEAD ALLOY
Decorative piece of cresting with traces of gilding. 21 by 20 by 4mm
[12033] fill of foundation trench of east wall of building 12.6; 15th century
L13: Illus C4.21

12037 NAIL, IRON
Large nail, broken shank. Head: 28mm across; surviving L: 86mm
[12023] floor deposits, building 12.2
Not illustrated

12039 NAIL, IRON
Very large nail, broken shank. Head: 33mm across; surviving L: 83mm
[12023] floor deposits, building 12.2
Not illustrated

12041 ROVE, IRON
28mm across
[12033] fill of foundation trench of east wall of building 12.6
Not illustrated

12042 ROVE, IRON
28 by 20mm
[12033] fill of foundation trench of east wall of building 12.6
Not illustrated

12046 NAIL, IRON
Large nail, broken shank. Head: 25mm across; surviving L: 67mm
[12015] make-up layer for building 12.0
Not illustrated

12047 PLAYING PIECE, BONE
Circular tableman carved with a unicorn. Diam: 29mm; Th: 4–5.5mm
[12023] floor deposits, building 12.2
B1: Illus C6.1

12048 PLAYING PIECE, BONE
Circular tableman carved with an interlace design. Diam: 32mm; Th: 6.54mm
[12023] floor deposits, building 12.2
B2: Illus C6.1

12049 HASP, IRON
Figure-of-eight-shaped loop hasp. 95 by 24mm
[12023] floor of building 12.2
F108: Illus C5.12

12053 BUCKLE? IRON
Broken D-shaped frame. 35 by 39mm
[12023] floor deposits, building 12.2
F5: Illus C5.1

12054 RIVET? IRON
53 by 39mm
[12023] floor deposits, building 12.2
Not illustrated

12055 HANDLE, IRON
Loop handle with traces of wood at the base of the loop. 55 by 28mm
[12023] floor deposits, building 12.2
F103: Illus C5.13

12056 HINGE STRAP?
L: 107mm
[12023] floor of building 12.2
F110: Illus C5.12

12057 PURSE MOUNT, IRON
Purse bar with two arms and a central block with a suspension loop. A radiograph (Illus C5.19) shows it pierced vertically to allow the suspension loop to swivel, and an aperture in

each arm for attaching the purse. L: 169mm
[12023] floor of building 12.2
F14: Illus C5.2, C5.19

12058 HASP, COPPER ALLOY
Hasp, probably for a lock on a casket. The loop is a different alloy from the plate. 37 by 14mm
[12023] floor deposits, building 12.2; 15th century
C95: Illus C4.13

12060 ENGRAVED PIECE OF PYRITOUS SLATE
Fragment of type C roof slate, scratched on both sides with representations of a heraldic lion and another unidentified beast.
133 by 86mm
[12016] east wall of building 12.5
R84: Illus C2.27

12061 NAIL, IRON
Large nail, broken shank. Head: 33mm across; surviving L: 55mm
[12023] floor deposits, building 12.2
Not illustrated

12063 DRINKING HORN, HORN AND IRON
The fragmentary remains of the iron base mount of a horn, still containing considerable remains of horn. There is a rivet hole for securing it. A radiograph suggests that the mount was relatively complete, but badly corroded, when excavated, with a total length of 87mm.
[12023] floor deposits, building 12.2
B8: Illus C6.1

12064 NAIL, IRON
Very large nail, broken shank. Head: 35mm across; surviving L: 82mm
[12023] floor deposits, building 12.2
Not illustrated

12065–66 NAIL, IRON
Very large nail. Head: 33mm across; L: 125mm
[12023] floor deposits, building 12.2
Not illustrated

12072, 12305, 12559, 12570 LOWER BODY AND BASE
With glaze all over exterior; wheel-made pottery. Reduced gritty ware, fabric 3.1
SF 12072; [12044] hearth in str 12.4
SF 12305; [12030] silt underlying building sequence
SF 12559; [12131] wall of building 12.5
SF 12570; [12000] unstratified
P52: Illus C3.7

12076 POT, COPPER ALLOY (LEADED BRONZE, WITH OVER 12% ANTIMONY)
Cast metal body sherd from a large pot or cauldron. 107 by 88mm
[12001] topsoil
C139: Illus C4.19

12101, 12337, 12341 JUG RIM AND NECK
With glaze externally; wheel-made pottery. Reduced gritty ware, fabric 3.1
SF 12101; [12101] topsoil
SF 12337; [12130] floor of building 12.5
SF 12341; [12110] oven rake-out, building 12.6
P45: Illus C3.6

12104, 12107, 12167, 12175, 12283–85, 12334, 12335 BASE AND LOWER BODY SHERDS
Slightly oxidised. Sooted surfaces; handmade pottery
SFs 12104, 12107, 12167, 12175, 12283, 12284 and 12285; [12101] topsoil
SFs 12334 and 12335; [12130] floor of building 12.5
P94: Illus C3.10

12107 BASE AND LOWER BODY SHERDS
See 12104 above

12110 ARROWHEAD, IRON
Barbed and socketed arrowhead. 62 by 34mm; socket diameter: 10 by 8mm
[12101] topsoil
F34: Illus C5.4

12112 RIM AND NECK
Faint scored decoration on lower neck. Heavily sooted; handmade pottery
[12101] topsoil
P95: Illus C3.10

12121 NAIL, IRON
Large nail, broken shank. Head: 20mm across; L: 51.5mm
[12101] topsoil
Not illustrated

12122 NAIL, IRON
Small nail, broken shank. Head: 18mm across; L: 49mm
[12101] topsoil
Not illustrated

12125 NAIL, IRON
Small nail, broken shank. Head: 17mm across; L: 44mm
[12101] topsoil
Not illustrated

12127 NAIL, IRON
Small nail, broken shank. Head: 16mm across; L: 29mm
[12101] topsoil
Not illustrated

12130A HECKLE TOOTH? IRON
Broken. L: 43mm
[12101] topsoil
F92: Illus C5.10

12134 BUCKLE, COPPER ALLOY (LEADED BRASS)
Buckle with double-oval frame, lacking its pin. 24 by 26mm
15th century
[12101] topsoil
C20: Illus C4.6

12137 NAIL OR RIVET, IRON
Large nail, broken shank. Head: 26mm across; L: 40mm
[12101] topsoil
Not illustrated

12143 MOUNT, COPPER ALLOY
L-shaped mount with two piercings for rivets; for reinforcing a corner, eg of a casket. 37 by 12.5 by 10mm
[12101] topsoil
C96: Illus C4.13

12146 BUCKLE, COPPER ALLOY (GUN-METAL)
Fragment of ornate, possibly double-oval frame. Surviving L: 13.5mm
[12101] topsoil
C21: Illus C4.6

12147 STAPLE, IRON
U-shaped staple, both arms broken.
25 by 22mm
[12101] topsoil
Not illustrated

12155 NAIL, IRON
Large nail, broken shank. Head: 29mm across; surviving L: 34mm
[12101] topsoil
Not illustrated

12160 NAIL, IRON
Large nail, broken shank. Head: 23mm across; L: 50mm
[12101] topsoil
Not illustrated

12165 NAIL, IRON
Large nail, broken shank. Head: 21mm across; L: 72mm
[12101] topsoil
Not illustrated

12167 BASE AND LOWER BODY SHERDS
See 12104 above

12171A GUN LOCK? IRON
Possibly the rear end of a snap or flint lock, with much of the cock still in place. 65 by 34mm
[12101] topsoil
F133: Illus C5.16

12171B NAIL, IRON
Small nail, broken shank. Head: 16mm across; L: 32mm
[12101] topsoil
Not illustrated

12174 MOUNT, IRON
Curved strap mount with nail or rivet. 103 by 23mm
[12101] topsoil
F134: Illus C5.16

12175 BASE AND LOWER BODY SHERDS
See 12104 above

12188 NAIL, IRON
Large nail, broken shank. Head: 30mm across; surviving L: 28mm
[12101] topsoil
Not illustrated

12191 NAIL, IRON
Small nail, broken, bent (extracted) shank. Head: 15mm across; L: 40mm
[12101] topsoil
Not illustrated

12196 KNIFE, IRON
L: 61mm
[12101] topsoil
F68: Illus C5.8

12200 QUERN, STONE
Upper stone of rotary quern with a lug containing a (broken) handle-hole. It is decorated with two concentric grooves and three small cups. 2.5Y 5/1 grey. 300 by 330 by 85mm
[12130] floor of building 12.5
R90: Illus C2.30

12201 NAIL, IRON
Large nail, broken shank. Head: 22mm across; L: 25mm
[12101] topsoil
Not illustrated

12202, 12205 JUG RIM AND NECK
With very abraded glaze externally; wheel-made pottery. Partially reduced gritty ware, fabric 4.1
SF 12202; [12101] topsoil
SF 12205; [12101] topsoil
P58: Illus C3.7

12203 KNIFE? IRON
Probable remains of a scale-tang knife, now disintegrated. 71 by 23mm
Unstratified – probably from topsoil
F69: Illus C5.8

12205 JUG RIM AND NECK
See 12202 above

12219 HORSESHOE NAIL, IRON
'Fiddle-key nail'. L: 39mm
[12101] topsoil
F47: not illustrated

12231 RIM AND SHOULDER
Stabbed decoration on rim top and shoulder. Oxidised surfaces, sooted; handmade pottery
[12101] topsoil
P96: Illus C3.10

12232 NAIL, IRON
Small nail, broken shank. Head: 17mm across; L: 42mm
[12101] topsoil
Not illustrated

12235A NAIL, IRON
Large nail, broken shank. Head: 25mm across; L: 40mm
[12101] topsoil
Not illustrated

12235B NAIL, IRON
Large nail, broken shank. Head: 30mm across; L: 42mm
[12101] topsoil
Not illustrated

12236 BODY SHERD
With two bands of single wavy incised decoration and abraded glaze externally; wheel-made pottery. Oxidised gritty ware, fabric 4.1
[12101] topsoil
P62: Illus C3.8

12238 BODY SHERD WITH LOWER END OF STRAP HANDLE
Stabbed decoration on handle. Oxidised surfaces, heavily sooted exterior; handmade pottery
[12101] topsoil
P97: Illus C3.10

12243 NAIL, IRON
Small nail, broken shank. Head: 15mm across; L: 24mm
[12101] topsoil
Not illustrated

12244 RIVET? IRON
Two pieces: 15 by 14mm; 22 by 15mm
[12101] topsoil
Not illustrated

12245 NAIL, IRON
Large nail. Head: 24mm across; L: 103mm
[12101] topsoil
Not illustrated

12257 SICKLE? IRON
Fragment of blade. 94 by 22mm
[12101] topsoil
F93: Illus C5.11

12260 NAIL, IRON
Small nail, clenched. Head: 18mm across; L: 48mm
[12101] topsoil
Not illustrated

12261 NAIL, IRON
Small nail, broken shank. Head: 19mm across; L: 47mm
[12101] topsoil
Not illustrated

12266 SMALL DISCOID, STONE
Gaming piece? Decorated on one side with small, crudely scratched cross
Diam: 23mm
[12101] topsoil
Not illustrated

12270 NAIL, IRON
Large nail. Head: 25mm across; L: 70mm
[12101] topsoil
Not illustrated

12275 NAIL, IRON
Small nail, broken shank. Head: 18mm across; L: 42mm
[12101] topsoil
Not illustrated

12282 KEY, COPPER ALLOY (GUNMETAL)
Casket key, cut from a sheet of metal, with punched-out suspension hole and crudely decorated with incisions; top, and bottom of shank, missing. 33 by 14 by 2mm
[12101] topsoil
C107: Illus C4.14

12283–85 BASE AND LOWER BODY SHERDS
See 12104 above

12288 RIVET, IRON
35 by 25mm
[12101] topsoil
Not illustrated

12300 ROVE, IRON
42 by 25mm
[12101] topsoil
Not illustrated

12302 BUCKLE-PLATE, COPPER ALLOY
Fragment with piece of buckle frame still in place. 10.5 by 7.4 by 3.17mm
[12030] silt underlying building sequence; 13th century
C34: Illus C4.7

12305 LOWER BODY AND BASE
See 12072 above

12308 KNIFE? IRON
Probably the curved blade of a knife with convex cutting edge. L: 98mm
[12124] levelling for floor of building 12.1
F70: Illus C5.8

12318 LARGE DISCOID, STONE
Pot-lid? Diam: 65mm
[12101] topsoil
Not illustrated

12319 LARGE DISCOID, PHYLLITE
Shaped from type B slate? Diam: 27mm; Th: 6mm
[12101] turf and topsoil
R76: Illus C2.21

12319 NAIL OR PIN, IRON
L: 36mm
[12101] topsoil
F9: Illus C5.1

12325 BUCKLE, IRON
Diam: 45mm
[12101] topsoil
F6: Illus C5.1

12327 LEG, COPPER ALLOY
From cast metal pot, probably for cooking. 33 by 27 by 8mm
[12000] spoil-heap
C140: Illus C4.19

12328 BUTTON, LEAD ALLOY
Button, half missing, of cast metal, with a design of a cross with three pellets in each quarter. Diam: 18.15mm
Th (at rim): 2.62mm
[12000] spoil-heap
L2: Illus C4.21

12329 COIN, SILVER
Halfgroat, James IV, Edinburgh, *c* 1490–1500
[12000] spoil-heap
N37: not illustrated

12331 RIVET OR NAIL, IRON
29 by 29mm
[12124] levelling for floor of building 12.1
Not illustrated

12332 UNIDENTIFIED TOOL, IRON
L: 105mm
[12124] levelling for floor of building 12.1
F94: Illus C5.11

12334, 12335 BASE AND LOWER BODY SHERDS
See 12104 above

12337 JUG RIM AND NECK
See 12101 above

12338 SMALL DISCOID, STONE
Gaming piece? Diam: 35mm; Th: 2.5mm
[12130] floor of building 12.5
Not illustrated

12341 JUG RIM AND NECK
See 12101 above

12342 RIVET, IRON
36 by 27mm
[12123] levelling for floor of building 12.1
Not illustrated

12347 NAIL, IRON
[12130] floor building 12.5
Not illustrated

12349 HONE, SILTSTONE
Hone, rectangular with pointed ends, of light yellowish-brown siltstone. 242 by 50 by 15mm
[12124] levelling for floor of building 12.1
R96: Illus C2.31

12354 NAIL, IRON
[12110] rake-out from kiln in building 12.6
Not illustrated

12363 SMALL DISCOID, SEMI-PELITIC SCHIST
Gaming piece? Shaped from type A slate. Diam: 25mm; Th: 5.7mm
[12110] rake-out from oven
R72: Illus C2.21

12367 NAIL, IRON
Large nail, broken shank. Head: 21mm across; L: 50mm
[12130] floor of building 12.5
Not illustrated

12370 NAIL, IRON
Large nail, broken, bent (extracted) shank. Head: 21 by 20mm, L: 44mm
[12134] floor, south chamber of building 12.5
Not illustrated

12373 COOKING POT (?) RIM AND PART OF PULLED SPOUT
With very abraded glaze externally; wheel-made pottery
Oxidised gritty ware, fabric 4.1
[12130] floor of building 12.5
P56: Illus C3.7

12380 NAIL, IRON
Large nail, broken shank. Head: 24mm across; L: 69mm
[12124] levelling for floor of building 12.1
Not illustrated

12382A HINGE PIN? LEAD
For example, from the hinged lid of a vessel. L: 23mm
[12137] slumped wall of oven; 15th century
L14: Illus C4.21

12382B BRIDGE? LEAD
For example, for connecting a tubular spout to the body of a vessel. L: 20mm
[12137] slumped wall of oven; 15th century
L15: Illus C4.21

12382C FRAGMENT, LEAD
Possibly part of a hinge. L: 15mm
[12137] slumped wall of oven; 15th century
L16: Illus C4.21

12386 NAIL, IRON
Small nail, broken, bent (extracted) shank. Head: 19mm across; L: 27mm
[12132] internal stone facing of wall of str 12.3
Not illustrated

12390 VESSEL LEG, COPPER ALLOY (GUNMETAL)
Cast metal leg of large, probably cooking, vessel. 27 by 27 by 20mm
Found along with fragments of mineralised wood. Misidentified as a casting sprue in Caldwell 2014b: 230
[12138] floor deposit str 12.6; 15th century
C141: Illus C4.19

12391 VESSEL LEG, LEAD ALLOY
Small damaged leg with broad foot. Surviving Ht: 25.7mm
[12138] floor deposit str 12.6; 15th century
L17: Illus C4.21

12392 NAIL, IRON
Small nail, broken shank. Head: 14mm across; L: 41mm
[12138] floor deposit str 12.6
Not illustrated

12396 NAIL, IRON
Small nail, clenched. Head: 19mm across; L: 75mm
[12134] floor, south chamber of building 12.5
Not illustrated

12400 HOOK, IRON
18 by 13mm
[12131] wall of str 12.5
F114: Illus C5.13

12401 NAIL, IRON
Small nail, bent (extracted) shank. L: 33mm
[12131] wall of str 12.5
Not illustrated

12404 KNIFE, IRON
Blade only. L: 78mm
[12123] levelling for floor of building 12.1
F71: Illus C5.8

12405 RIVETS, IRON
Six or more, typically 30 by 28mm
[12139] demolition of str 12.3
Not illustrated

12411 STAPLE, IRON
U-shaped staple, one arm broken. 95 by 18mm
[12130] floor of building 12.5
Not illustrated

12412 MAIL RING? IRON
Perhaps a washer rather than an unriveted mail link. Diam: 9.4mm; Th: 0.53mm
SF 12412; [12134] str 12.7?
F25: not illustrated

12415 NAIL, IRON
Large nail, broken shank. Head: 21mm across; L: 39mm
[12141] fill of foundation trench for wall of str 12.1
Not illustrated

12420 BASE SHERDS
Handmade pottery
[12134] floor, south chamber of building 12.5
P98: Illus C3.10

12424 RIVET, IRON
30 by 28mm
[12141] fill of foundation trench for wall of 12.1
Not illustrated

12431 RIVET, IRON
34 by 22mm
[12139] demolition of str 12.3
Not illustrated

12433 ROVE, IRON
30 by 30mm
[12134] floor, south chamber of building 12.5
Not illustrated

12437 RIVET OR NAIL, IRON
21 by 16mm
[12140] bank of str 12.3
Not illustrated

12437 SMALL DISCOID, STONE
Gaming piece? Diam: 28mm; Th: 1mm
[12140] bank of str 12.3
Not illustrated

12439 NAIL, IRON
Large nail, broken, bent (extracted) shank. Head: 20mm across; L: 45mm
[12117] fill of foundation trench of wall of str 12.1
Not illustrated

12441 MEDIUM DISCOID
Gaming piece? Diam: 53mm; Th: 6mm
[12145] gravel spread over floor of south room of str 12.5
Not illustrated

12442 LARGE DISCOID, STONE
Pot-lid? Diam: 72mm; Th: 12mm
[12145] gravel spread over floor of south room of str 12.5
Not illustrated

12443 SMALL DISCOID, STONE
Gaming piece? Diam: 32mm; Th: 1mm
[12142] floor deposit in str 12.2
Not illustrated

12444 RIVETS, IRON
Six or more, typically 30 by 30mm or 40 by 24mm
[12139] demolition of str 12.3
Not illustrated

12445 BUCKLE-PLATE? COPPER ALLOY (GUNMETAL)
Long, narrow, recessed, possibly for hinged plate; containing mineralised leather. 63 by 11mm
Unstratified
C35: Illus C4.7

12448 SMALL ROD HANDLE
Unglazed; wheel-made pottery. Oxidised gritty ware, fabric 4.2
[12145] gravel spread over floor of south room of str 12.5
P65: Illus C3.8

12452 STAPLE, IRON
62 by 26mm
[12150] demolition from str 12.6
Not illustrated

12454 RIVET, IRON
38 by 27mm
[12123] levelling for floor of building 12.1
Not illustrated

12456 ROVE, IRON
38 by 26mm
[12147] drain fill
Not illustrated

12458 RIVETS AND ROVES, IRON
Six or more rivets, typically 40 by 29mm
[12139] demolition of str 12.3
Not illustrated

12463 NAIL, IRON
Large nail with bent (extracted) shank. Head: 24mm across; L: 63mm
[12105] path associated with str 12.1
Not illustrated

12465 BODY SHERD
With radiating diagonal scores, glazed externally; wheel-made pottery. Reduced gritty ware, fabric 3.1
[12145] gravel spread over floor of south room of str 12.5
P50: Illus C3.6

12468 RIM
With degraded glaze externally; wheel-made pottery. Oxidised gritty ware, fabric 4.1
[12150] debris from demolition of building 12.6
P53: Illus C3.7

12474 RIM
With blistered glaze externally; wheel-made pottery. Redware, fabric 2.1
[12105] path associated with str 12.1
P35: Illus C3.5

12478 STAPLE, IRON
64 by 30mm
[12145] gravel spread over floor of south room of str 12.5
Not illustrated

12487 NAIL, IRON
Small nail, broken, bent (extracted) shank. Head: 18mm across; L: 31mm
[12105] path associated with str 12.1
Not illustrated

12488 LARGE DISCOID, STONE
Pot-lid? Diam: 70mm
[12129] collapsed wall of str 12.5
Not illustrated

12490 RIVET, IRON
45 by 31mm
[12129] collapsed wall of str 12.5
Not illustrated

12492 NAIL, IRON
L: 80mm
[12105] path associated with str 12.1
Not illustrated

12497 BUCKLE? IRON
Broken T-shaped frame. 23 by 29mm
[12105] path associated with str 12.1
F48: Illus C5.5

12502 STAPLE, IRON
U-shaped staple, both arms broken.
60 by 40mm
[12131] wall of str 12.5
Not illustrated

12509 VERY LARGE DISCOID, STONE
Pot-lid? Diam: 148mm; Th: 12mm
[12140] bank forming south and west of str 12.3
Not illustrated

12514 NAIL, IRON
Small nail, broken shank. Head: 14mm across; L: 35mm
[12151] str 12.4?
Not illustrated

12515 AUGUR BIT, IRON
Much-wasted spoon blade and lanceolate terminal. L: 240mm
[12151] str 12.4?
F96: Illus C5.11

12523 NAIL, IRON
Large nail, broken shank. Head: 21mm across; surviving L: 31mm
[12101] topsoil
Not illustrated

12529 CAULKING? LEAD
Ribbon of metal partially twisted into a square-sectioned rod. L: 46mm
[12131] wall of str 12.5 ; 15th century
L19: Illus C4.22

12538 MEDIUM DISCOID, STONE
Half-fragment, centrally holed. Diam: 45mm; Th: 3.5mm
[12156] bank of str 12.2
Not illustrated

12543 STAPLE, IRON
U-shaped staple, both arms broken. 36 by 36mm
[12156] bank of str 12.2
Not illustrated

12545 KNIFE, IRON
Length of blade with inlaid copper maker's marks, an open capital E and a (?) crown. L: 61mm
[12157] cobbled path between buildings 12.2 and 12.6
F72: Illus C5.8

12546 CRUCIBLE BODY
Extra layer inside. Residue on exterior, also cracking; handmade pottery
[12151] str 12.4?
Not illustrated

12553 BODY SHERD
Wheel-made pottery. White gritty ware, fabric 1.1
[12163] floor of str 12.7?
Not illustrated

12559 LOWER BODY AND BASE
See 12072 above

12570 LOWER BODY AND BASE
See 12072 above

12586 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; two peg-holes. 335 by 300 by 17mm
[12109] drain covering in building 12.5
R41: Illus C2.18

12587 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; pierced. 310 by 310 by 15mm
[12109] drain covering in building 12.5
R42: Illus C2.18

12589 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; pierced. 335 by 210 by 14mm
[12109] drain covering in building 12.5
R43: not illustrated

12590 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; pierced; 315 by 220 by 14mm
[12109] drain covering in building 12.5
R44: not illustrated

12591 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; pierced. 350 by 218 by 14mm
[12109] drain covering in building 12.5
R45: not illustrated

12592 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; pierced. 340 by 240 by 19mm
[12109] drain covering in building 12.5
R46: not illustrated

12593 ROOF SLATE, PHYLLITE
Type B; pierced. 260 by 165 by 15mm
[12101] topsoil
R51: not illustrated

12594 ROOF SLATE, PHYLLITE
Type B; with peaked top, pierced. 267 by 166 by 18mm
[12101] topsoil
R52: Illus C2.19

12595 ROOF SLATE, PHYLLITE
Type B; pierced, and with thinner upper portion. 360 by 250 by 10mm
[12109] drain covering in building 12.5
R53: Illus C2.19

14001 LINTEL? STONE
Slab of metabasite, undecorated. The slab is roughly dressed. It is broken the complete length of one side, making it impossible to ascertain its original width. L: 1.45m; maximum surviving W: 0.35m
Found among the rubble in the interior of the chapel; now positioned outside the north-west corner of the chapel
R33: Illus C2.16

14003 KNIFE, IRON
Whittle-tang knife, part of tang and upper part of blade only. The radiograph image indicates a rivet hole for securing a guard or hilt mount. L: 64mm
[14004] charnel deposit
F73: Illus C5.8

14004 GRAVE-SLAB, CHLORITE SCHIST
Corner of chlorite schist slab, lacking its full thickness and undecorated but for a groove defining the margin. 430 by 150mm.
[14002/part of 14010] capping of grave 14.2
R17: Illus C2.9
Identified as the upper-left corner of slab R11

14009 LEAD SHOT
Gun shot, possibly chewed. Diam: 13.6mm; Wt: 13.85g
[14025] grave 14.1, underneath the skull
L8: not illustrated

14010 DECORATED MOUNT. BONE
Length of bone carved with a central band of cord decoration, perhaps either a decorative mount from a box or chest, or else a scale from a knife handle. The back is crudely cut with criss-cross lines. 35 by 19mm
[14006] from the region of the pelvis of the body interred in grave 14.6
B3: Illus C6.1

14011 COIN, SILVER
Halfgroat, Robert II, Edinburgh, 1371–90
[1039] found in 1998 encased in mortar, fallen from south wall of chapel
N24: *Finlaggan*, Illus 9.34

14012A RIVET, IRON
[14002] redeposited material, 19th-century digging
F157: Illus C5.18

14012B NAIL, IRON
Large nail with broken shank. Head: 23 by 20mm, L: 39mm
[14002] redeposited material, 19th-century digging
Not illustrated

14012C NAIL, IRON
Small nail, broken shank. Head: 20 by 12mm, L: 43mm
[14002] redeposited material, 19th-century digging
Not illustrated

14013 CRUCIFIX, IVORY
T-shaped terminal of an arm or the head of a cross, pierced with rivet holes for metal attachments. 55.5 by 28 by 9mm
From clearance inside the chapel in 1998 in the equivalent of [14002] redeposited material, 19th-century digging
B6: C6.1; *Finlaggan*, Illus 9.33

14014 WINDOW CAMES? LEAD
Two pieces: one misshapen with mortar adhering to it, 65 by 20mm; the other a piece of sheet metal folded round upon itself, 16 by 12mm
[14002] 19th-century disturbance within chapel
L20: not illustrated

14016 ALTAR TOP? CHLORITE SCHIST
Piece of worked chlorite schist slab with chamfered edge and pitting on the underside to help secure the slab in place. 190 by 79 by 30mm
Recovered in 1998 from debris around the altar inside the chapel
R34: Illus C2.17

14017 ALTAR TOP? CHLORITE SCHIST
Piece of worked chlorite schist slab with chamfered edge and pitting on the underside to

help secure the slab in place. 320 by 240 by 27–37mm
Recovered in 1998 from debris around the altar inside the chapel
Not illustrated

14018 ALTAR TOP? CHLORITE SCHIST
Corner piece of worked chlorite schist slab with chamfered edges and pitting on the underside. 355 by 325 by 30mm
Recovered in 1998 from debris around the altar inside the chapel
Not illustrated

14019 GRAVE-SLAB, CHLORITE SCHIST
Undecorated fragment of top surface of slab. 375 by 245 by 47mm
Reused as paving adjacent to the altar in the chapel
Not illustrated

14021 ROOF SLATE, PHYLLITE
Type B; fragment. 285 by 230mm
[14006] fill of charnel pit inside chapel
R54: not illustrated

14022 ROOF SLATE, PHYLLITE
Type B; fragment with edge of nail- or peg-hole. 174 by 103mm
[14006] fill of charnel pit inside chapel
R55: not illustrated

14023 ROOF SLATE, PHYLLITE
Type B; fragment with probable edge of nail- or peg-hole. 84 by 166mm
[14006] fill of charnel pit inside chapel
R56: not illustrated

14024 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; pierced. 287 by 106 by 13mm
Clearance work in 1998, adjacent to exterior east wall of the chapel
R47: Illus C2.18

15001 ARROWHEAD, IRON
Tanged, with broad triangular head with central rib. Ht: 47mm; L: 19mm
[15006] disturbed natural clay
F35: Illus C5.4

15002 COIN, SILVER
Penny, Edward I, London, 1299–1301
[15004] floor of building C
N13: not illustrated

15006 NAIL, LEAD
Small nail or rivet, circular shank. Surviving L: 27mm; head: 16.3 by 10.8mm
[15000] Building C watching brief, April 1997
L21: Illus C4.22

15007 WINDOW CAME? LEAD
Length of channelled lead. L: 28.8mm
[15000] Building C watching brief, April 1997
L22: Illus C4.22

15008 WINDOW CAME? LEAD
Length of folded-over lead. L: 22mm
[15000] Building C watching brief, April 1997
L23: Illus C4.22

16002 GROOVED STRAP HANDLE
With glazed upper surface; wheel-made pottery. Reduced gritty ware, fabric 3.1
[16001] topsoil
P44: Illus C3.6

16011 BUCKLE, IRON
Double, for attaching two straps. 30 by 41mm
[16010] 19th-century clearance within house (a)
F49: Illus C5.5

16013 RIVET, IRON
28 by 27mm
[16010] 19th-century clearance within house (a)
Not illustrated

16015 RIVET, IRON
28 by 22mm
[16001] topsoil
Not illustrated

16022 NAIL, IRON
Large nail, bent (extracted) shank. Head: 24mm across; L: 78mm
[16008] 19th-century metalled surface in courtyard
Not illustrated

16023 RIVET, IRON
20 by 20mm
[16008] 19th-century metalled surface in courtyard
Not illustrated

16024 ROVE, IRON
36 by 27mm
[16008] 19th-century metalled surface in courtyard
Not illustrated

16025 HAMMER STONE
An unshaped cobble, 115mm long, battered at one end as a result of use as a hammer
Not certainly of prehistoric date
[16008] 19th-century metalled surface in courtyard
X12: Illus C1.3

16028 ARROWHEAD, IRON
Socketed arrowhead with short barbs, both broken. Ht: 60mm; socket diameter: 8 by 9mm
[16015] pre-19th-century ground surface in courtyard
F36: Illus C5.4

16029 MAIL RING, IRON
Diam: 10mm
[16010] 19th-century clearance within house (a)
Not illustrated

16030 ROVES, IRON
Two conjoined roves, 33 by 20mm
[16010] 19th-century clearance within house (a)
Not illustrated

16031 KNIFE? IRON
Corroded lump of broken pieces, possibly including remains of a scale tang and a pommel. 43 by 26mm
[16010] 19th-century clearance within house (a)
F74: not illustrated

16035 KNIFE, IRON
Blade, L: 84mm
[16010] 19th-century clearance within house (a)
F75: Illus C5.8

16038 RIVET, IRON
25 by 18mm
[16015] pre-19th-century ground surface in courtyard
Not illustrated

16040 NAIL, IRON
Small nail. Head: 17mm across; L: 46mm
[16015] pre-19th-century ground surface in courtyard
Not illustrated

16043 BUCKLE-PLATE? COPPER ALLOY (LEADED BRASS)
One side only, with recess for pin. 29 by 23 by 0.49mm
[16010] 19th-century clearance within house (a)
C36: Illus C4.7

16044 RIVET, IRON
42 by 26mm
[16010] 19th-century clearance within house (a)
Not illustrated

16046 POT HANDLE? IRON
Two arms, originally hinged, hooked for gripping the rim of a pot. 99 by 61mm
[16010] 19th-century clearance within house (a)
F104: Illus C5.12

16047 POT HANDLE? IRON
An arm of a hinged pot-handle like SF 16046. L: 125mm
[16010] 19th-century clearance within house (a)
F105: Illus C5.12

16052 LOWER BODY AND EDGE OF THUMBED BASE
With very abraded glaze externally; wheel-made pottery. Oxidised gritty ware, fabric 4.1
[16017] floor deposit in house (a)
P60: Illus C3.7

16053 PADLOCK, COPPER ALLOY (GUN-METAL)
Barrel padlock made from a single sheet of metal which has been bent back on itself and joined with two iron rivets. The internal lock mechanism and back plate are missing. The front plate is decorated with a toothed edge. It is attached by rivets to four narrow strips running the length of the padlock and originally secured to the other end by the missing back plate. L: 38mm; Ht: 38mm; W: 16mm
[16018] levelling up in courtyard
C117: Illus C4.15

16059 FISHHOOK, IRON
Broken, barb missing, flat-headed shank.
L: 55mm
[16018] levelling up in courtyard
F43: Illus C5.5

16060 STAPLE, IRON
113 by 45mm
[16018] levelling up in courtyard
Not illustrated

16063 GROOVED STRAP HANDLE
Glazed on upper surface; wheel-made pottery. Oxidised gritty ware, fabric 4.1
[16018] levelling up in courtyard
P64: Illus C3.8

16068 MAIL, IRON
Heavily corroded lump with articulated links visible in a radiograph. 85 by 71mm
[16018] levelling up in courtyard
F26: not illustrated

16071 NAIL, IRON
Large nail. Head: 20 by 19mm, L: 72mm
[16010] 19th-century clearance within house (a)
F149: Illus C5.17

16077 SHERD, WHEEL-MADE POTTERY
Oxidised gritty ware, fabric 4.1
[16031] fill of foundation trench for east wall of castle
Not illustrated

16089 SHERD, WHEEL-MADE POTTERY
White gritty ware, fabric 1.1
[16070] pre-castle medieval
Not illustrated

16090 RIVET, IRON
34 by 22mm
[16070] pre-castle medieval
Not illustrated

16092 SHERD
Wheel-made pottery. White gritty ware, fabric 1.1
[16070] pre-castle medieval
Not illustrated

16094 SHERD
Wheel-made pottery. Redware, fabric 2.2
[16070] pre-castle medieval
Not illustrated

16095 KNIFE, IRON
Incomplete scale-tang knife. L: 82mm
[16065] make-up for castle plinth
F76: Illus C5.9

16097 RYBAT? SANDSTONE
'White' sandstone, much-damaged dressed stone with slots for hinges or other fixings. 410 by 270 by 190mm
[16045] mortar debris and sandstone block, castle demolition
R28: Illus C2.16

16098 NAIL, IRON
Large nail with broken, bent (extracted) shank. Head: 21 by 18mm, L: 46mm
[16000] spoil-heap
Not illustrated

16099 NAIL, IRON
With broad circular head, broken shank. Diameter of head: 25mm, L: 35mm
[16000] spoil-heap
F150: Illus C5.18

16100 RIVET, IRON
Lozenge-shaped rove. 24 by 22mm; L: 36mm
[16000] spoil-heap
Not illustrated

16102 BOTTLE, GLASS
Clear glass, rectangular, medicine-type bottle, in pieces, with a wooden rod as a stopper. It contained a piece of folded paper with a message written in ink, now completely illegible. Estimated height about 11cm.
Victorian or early 20th century
[16001] topsoil within area of building (a)
Not illustrated

17000 MEDIUM DISCOID, STONE
Gaming piece? Diam: 45mm; Th: 3mm
[7088] fill of pit 7086 in str V.2
Not illustrated

17001 SEWING PIN, IRON
L: 24mm
[17001] topsoil
F10: Illus C5.1

17002 GRAVE-SLAB, TWO FRAGMENTS. CHLORITE SCHIST WITH PLANAR FABRIC
Two fragments, badly worn and lacking full thickness, both probably from the one slab with foliage scroll decoration and edge double roll-moulding. One piece is either from the top-right or bottom-left corner of the slab. 305 by 157 by 34mm, and 156 by 217 by 20mm.
14th or 15th century
[17002] found adjacent to each other in debris outside the east wall of the chapel
R13: Illus C2.13 (smaller piece is not illustrated)

17004 SANDSTONE FRAGMENT
Small piece of red sandstone
[17005] fill of foundation trench for the chapel
Not illustrated

17004 ENGRAVED SLATE
Fragment with interlace design. 25 by 30mm
Th: 1.5mm
[17019] the fill of burial 17021 containing infant burial 17020
Not illustrated

17005 SHROUD PIN? BONE
Piece of perforated bone. 13 by 4.5 by 4mm
[17000] spoil-heap
B4: Illus C6.1

17006 ROOF SLATE, METABASITE
Type D; fragment, pierced. 208 by 179 by 13mm
[17002] old ground surface
R66: Illus C2.19

17007 ROOF SLATE, METABASITE
Type D; fragment. 200 by 104 by 13mm
[17002] old ground surface
R67: not illustrated

18001A CRUCIBLE RIM
Lightly vitrified, cracking, orange oxidisation on exterior. Extra layers inside and out; hand-made pottery
[18000] unstratified
P106: Illus C3.12

18002 COIN, SILVER
Penny, Henry III (England), 1247–72
[18002] topsoil over ruins of gatehouse
N9: not illustrated

18002 STRIP, LEAD
Folded piece of metal. 12 by 15mm
[18002] topsoil over ruins of gatehouse
L36: Illus C4.22

18016 NAIL, IRON
Large nail, broken shank. Head: 20mm across; L: 40mm
[18017] collapsed gatehouse debris
Not illustrated

18024 RIVET, IRON
32 by 27mm
[18006] collapsed gatehouse debris
Not illustrated

18026 ROVE, IRON
26 by 22mm
[18006] collapsed gatehouse debris
Not illustrated

18027 COOKING POT (?) RIM
With traces of glaze externally; wheel-made pottery. White gritty ware, fabric 1.1
[18006] collapsed gatehouse debris
P12: Illus C3.3

18035 NAIL, IRON
Large nail, broken shank. Head: 20mm across; surviving L: 26mm
[18006] collapsed gatehouse debris
Not illustrated

18038 KNIFE, IRON
Portion of blade. 32 by 15mm
[18015] collapsed gatehouse debris
F77: Illus C5.9

18048 RIVET, IRON
34 by 24mm
[18007] turf gatehouse wall
Not illustrated

18054 NAIL, IRON
Small nail, broken shaft. Head: 16mm across; L: 34mm
[18015] collapsed gatehouse debris
Not illustrated

18061 ARROWHEAD, IRON
Socketed arrowhead with leaf-shaped blade (Jessop 1996: type M10). Ht: 31mm; L: 11mm; socket diameter: 5 by 6mm
[18015] collapsed gatehouse debris
F37: Illus C5.4

18064 COOKING POT (?) RIM
Unglazed; sooted exterior; wheel-made pottery. White gritty ware, fabric 1.1
[18015] collapsed gatehouse debris
P11: Illus C3.3

18068 JUG (?) RIM AND NECK
With very abraded glaze externally; wheel-made pottery. Oxidised gritty ware, fabric 4.4
[18007] turf gatehouse wall
P66: Illus C3.8

18079 LEAD SHOT
With indentations of six pieces of buck shot. 14.5 by 11.75mm; Wt: 12.57g
[18003] silting
L9: Illus C4.21

18081 NAIL, IRON
Large nail. Head: 23 by 19mm; L: 83mm
[18015] collapsed gatehouse debris
F151: Illus C5.18

18082 UNIDENTIFIED MOUNT OR MECHANISM, IRON
Tapering plate with rounded end, mounted on both sides with knobs; probably a mechanism of some sort. There are possible remains of a spring on the interior surface. This side also has a rivet at the rounded end for securing it into wood, traces of which remain in the corrosion deposits. 79 by 14mm
[18015] collapsed gatehouse debris
F135: Illus C5.16

18087 SEWING PIN, IRON
L: 60mm
[18015] collapsed gatehouse debris
F11: Illus C5.1

18090 RIM SHERD
With splashes of glaze externally; wheel-made pottery. Redware, fabric 2.6
[18040] palisade bank
P43: Illus C3.5

18093 NAIL, IRON
Large nail, broken, bent (extracted) shank. Head: 22 by 19mm; L: 49mm
[18007] turf gatehouse wall
Not illustrated

18108 STRAP SLIDE, IRON
67 by 19 by 9mm
[18007] turf gatehouse wall
F17: Illus C5.3

18111 WORKED WOOD
Squared timber, possibly a ladder style
[18031] fill in ditch 18032
Known from sketch in finds notebook; not illustrated

18123 STRAP SLIDE, IRON
86 by 14mm
[18053] turf platform for gatehouse
F18: Illus C5.3

18127 STRAP SLIDE, IRON
81 by 15mm
[18065] clay silt in paving in gatehouse
F19: Illus C5.3

18132 DRESS OR HAIR PIN, COPPER ALLOY (LEADED BRONZE)
Stick pin with grooved conical head.
L (as bent): 62mm
[18065] clayey silt forming the matrix for the cobbled causeway extension [18055]; 12th–13th century
C10: Illus C4.6

18152 BODY SHERD OF WHEEL-MADE POTTERY
Redware
[18086] fill of ditch 18050
Not illustrated

18165 NON-FERROUS RIVET HEADS OR BEADS
At least five, with frilly edges and each with a diameter of about 6mm
[18093] silting extending over the top of ditch 18032 in the north extension to tr 18
A lump of soil, about 18 by 21 by 6cm, was removed from Context 18093 for further examination and excavation in laboratory conditions. The excavators believed that they had found the remains of a dagger or sword. A radiograph taken in NMS failed to reveal any structure, only the presence of these non-ferrous objects, none of which were visible to the eye. There were also no signs of iron or iron corrosion deposits. Some twigs and two more substantial pieces of branch wood, one at least 45mm long with a diameter of about 21mm, the other 30mm long and 27mm in diameter, could be seen.
Not illustrated

18170 LEAD SHOT
Diam: 11.61 by 10.41mm; Wt: 6.27g
[18000] spoil-heap
Not illustrated

18171 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; pointed top, pierced.
310 by 130 by 8mm
[18007] turf gatehouse wall
R48: not illustrated

18172 ROOF SLATE, PHYLLITE
Type B; broken. Surviving size: 247 by 142 by 11mm; peg-hole diameter: 16mm
[18035] silting
R57: not illustrated

18173 PANEL, WOOD
Corner of wooden panel with bevelled edges. 122 by 66 by 8mm
[18031] fill in ditch 18032
W1: Illus C6.3

18705B BODY SHERD
With applied gridiron pad, externally glazed; wheel-made pottery. White gritty ware, fabric 1.1
[18007] turf gatehouse wall
P17: Illus C3.4

19007 KNIFE, IRON AND WOOD
Whittle-tang knife with remains of mineralised wooden hilt. L: 67mm
[19001] topsoil
F78: Illus C5.9

19018 RIM AND NECK
Oxidised exterior with grass impressions; handmade pottery
[19001] topsoil
P99: Illus C3.11

19037 ROOF SLATE, SEMI-PELITIC SCHIST
Type A; pierced. 310 by 155 by 15mm
[19001] topsoil
R49: not illustrated

19040 ROOF RIDGE, SANDSTONE
White sandstone roof ridge. L: 380mm; Ht: 205mm; maximum W: 175mm
[19001] topsoil
Not illustrated

19045 BEAD, GLASS
Cylindrical, dark blue glass bead. L: 6.46mm; Diam: 4.81mm
[19002] topsoil
Not illustrated

19055 MAIL, IRON
A link, 12 by 14mm
[19002] topsoil
Not illustrated

19058 ARROWHEAD, IRON
Only the socket survives but a record drawing made at the time of recovery suggests it would have had a form similar to SF 8087. Present Ht: 30mm
[19001] topsoil
F38: not illustrated

19074 ARROWHEAD, FLINT
Leaf-shaped arrowhead, broken, of orange-red flint. 21.78 by 14.26 by 2.65mm
Neolithic
[19001] topsoil
Not illustrated

19086, 19238 RIM SHERDS
Slashed decoration on neck. Knob or handle (?) scars. Oxidised surfaces with grass impressions. Sooted exterior; handmade pottery
SF 19086; [19002] topsoil
SF 19238; [19006] lazy bed
P101: Illus C3.11

19125 STRAP SLIDE, IRON
75 by 21mm
[19009] floor of str 19.2
F20: Illus C5.3

19129 ROOF SLATE, PYRITOUS SLATE
Type C; pierced. 132 by 112mm
[19009] floor of str 19.2
R65: Illus C2.19

19169 HORSE BIT? IRON
Possibly a cheek piece. Diam: 44mm
[19009] floor of str 19.2
F50: Illus C5.5

19170 UNIDENTIFIED OBJECT, IRON
Possibly part of a barrel padlock. L: 43mm
[19009] floor of str 19.2
F126: Illus C5.14

19171 BODY SHERD
With applied ridged strip and pale yellow-green glaze externally; wheel-made pottery. Saintonge (?), fabric 5
[19007] lazy bed
P72: Illus C3.8

19215 SMALL DISCOID
Tableman marked with a graffito vertical line cut by a horizontal. Diam: 21mm; Th: 1.5mm
[19009] floor deposit, str 19.2
Not illustrated

19216 RIM AND SHOULDER
Handmade pottery
[19009] floor deposit, str 19.2
P100: Illus C3.11

19223 ROVE, IRON
18 by 20mm
[19003] subsoil under the lazy beds
Not illustrated

19229 SMALL DISCOID, STONE
Gaming piece? Diam: 21mm; Th: 1mm
[19009] floor deposit, str 19.2
Not illustrated

19238 RIM SHERDS
See 19086 above

19250 CANNON BALL? LEAD AND STONE
Possibly a fragment of a composite piece of shot with a stone core enclosed in lead. 38 by 34 by 22mm. It could have been about 42mm in diameter.
[19006] lazy bed
L10: Illus C4.21

19261 PREHISTORIC POTTERY BODY SHERD
Gritty ware, the exterior brownish-yellow; the stone inclusions including fragments of quartz up to 7mm across. 46 by 24mm; Th: 12mm; Wt: 15.86g
[19006] lazy bed
X21: not illustrated

19267 SMALL DISCOID, STONE
Gaming piece? Decorated with crudely scratched cross on one side. Diam: 31mm; Th: 2.5mm
[19008] subsoil
Not illustrated

19285 NAIL, IRON
Small nail, broken shank. Head: 18mm across; L: 52mm
[19012] occupation deposit, str 19.10
Not illustrated

19286 RIM
Oxidised surfaces with grass impressions. Slight sooting on rim; handmade pottery
[19012] occupation deposit, str 19.10
P102: Illus C3.11

19294 NAIL, IRON
Small nail, broken, bent (extracted) shaft. Head: 17 by 13mm; L: 54mm
[19012] occupation deposit, str 19.10
Not illustrated

19309 RIM SHERDS
Faint stabbed decoration on neck. Oxidised exterior. Grass impressions. Heavy sooting; handmade pottery
[19012] occupation deposit, str 19.10
P103: Illus C3.11

19317 SMALL DISCOID, STONE
Gaming piece? Diam: 16mm; Th: 1mm
[19012] occupation deposit, str 19.10
Not illustrated

19321 BODY SHERD
With two bands of stabbed decoration, glazed externally; wheel-made pottery. Oxidised gritty ware, fabric 4.1
[19006] lazy bed
P61: Illus C3.8

19334 DRINKING BOWL RIM, SIDE AND BASE
With glazed area on exterior of base; wheel-made pottery. Beauvais stoneware, fabric 5
[19007] lazy bed
P76: Illus C3.8

19336 NAIL, IRON
Small nail, broken shaft. Head: 10 by 9mm; L: 46mm
[19012] occupation deposit, str 19.10
F152: Illus C5.18

19340 STRAP MOUNT, IRON
With two rivets. L: 54.5mm
[19003] subsoil under the lazy beds
F111: Illus C5.13

19340 PREHISTORIC POTTERY BODY SHERDS (2)
Well-smoothed ware, the exterior yellowish-brown; very gritty with stone inclusions up to 10mm across. Th: up to 14mm; total Wt: 10.77g
[19003] subsoil under the lazy beds
X22: not illustrated

19342 COOKING POT RIM
Unglazed, with sooted exterior; wheel-made pottery. White gritty ware, fabric 1.1
[19003] sandy soil and gravel under the lazy beds
P15: Illus C3.4

19353 COLLAR, IRON
Perhaps a mount from the handle of a tool, or a ferrule. Diam: 18mm; Ht: 9mm
[19014] clayey silt with flecks of charcoal, remains of medieval house 19.10
F95: Illus C5.11

19359 BUCKLE, COPPER ALLOY (GUNMETAL)
Rectangular frame with central bar, pin and remains of buckle-plate. 22.5 by 24.5mm
Context not noted at time of excavation, but probably [19014] clayey silt with flecks of charcoal, remains of medieval house 19.10
C22: Illus C4.6

19364 PIECE OF SCRAP, LEAD
Tightly rolled-up piece of sheet lead. 43 by 21 by 15mm
[19014] clayey silt with flecks of charcoal, remains of medieval house 19.10; 16th century
Not illustrated

19369 PREHISTORIC POTTERY BODY SHERDS (3)
Well-smoothed ware, the exterior light yellowish-brown; gritty with stone inclusions up to 10mm across. One sherd has the edge of a possible lug, another a fire-blackened exterior. Th: up to 15mm; total Wt: 75.32g
[19026] silty clay with charcoal in str 19.6
X23: not illustrated

19370 MAIL? IRON
Small corroded lump with links visible in a radiograph. 21 by 12mm
[19024] fill of post-hole 19023, str 19.4
F27: not illustrated

19387 PREHISTORIC POTTERY BODY SHERD
Well-smoothed ware, the exterior yellowish-brown; very gritty with stone inclusions. 20 by 27mm; Wt: 9.03g
[19031] fill of pit 19030, str 19.4
X24: not illustrated

19393 PREHISTORIC POTTERY BODY SHERD
Well-smoothed ware, the exterior yellowish-brown; very gritty with stone inclusions up to 3mm across. 37 by 33mm; Th: 9mm; Wt: 14.78g
[19026] silty clay with charcoal in str 19.6
X25: not illustrated

19394 PREHISTORIC POTTERY SHERDS, INCLUDING A RIM (4)
Brownware with smooth outer surface and rough interior; well tempered with stones including angular pieces of quartz up to 3mm across. The rim is simple and rounded. Th: up to 12mm; total Wt: 35.57g
[19027] stones in str 19.6
X26: not illustrated

19397 PREHISTORIC POTTERY BODY SHERD
Well-smoothed ware, the exterior light yellowish-brown, the interior fire-blackened; very gritty with stone inclusions up to 9mm across. 38 by 40mm; Th: 16mm; Wt: 21.92g
[19070] fill of [19065], str 19.3 post-hole
X27: not illustrated

19400 VESSEL, CAST BRONZE
Body sherd with attached stub of a strap handle, probably from a late medieval ewer. 23.5 by 16.5 by 13mm. Misidentified as a casting sprue in Caldwell 2014b: 230
[19003] subsoil for lazy beds
C142: not illustrated

19401 PREHISTORIC POTTERY BODY SHERDS (5)
Well-smoothed ware, the exterior yellowish-brown; very gritty with stone inclusions up to 10mm across. Th: up to 12mm; total Wt: 25.16g
[19047] a stony area in natural
X28: not illustrated

19404 SCRAPER, FLINT
Chalky flecked flint. 22.16 by 22.54 by 8.05mm
Mesolithic (catalogue of struck lithics 1030)
[19066] surface of natural
X5: Illus C1.2

19418 CLASP, COPPER ALLOY
The clasp, perhaps for a book, is stretched into a long point and engraved with a double line forming a saltire. Only a part of the hinged plate survives. 74 by 24mm
[19001] topsoil
C40: Illus C4.8

19427 ROOF RIDGE, SANDSTONE
'White' (2.5Y 7/3 pale yellow) sandstone roof ridge (broken). L: 335mm; Ht: 200mm
[19005] remains of wall of str 19.2
R25: Illus C2.15

19451 SMALL DISCOID, STONE
Gaming piece? Diam: 35mm; Th: 1.5mm
[19120] fill of pit 19134
Not illustrated

19451 SMALL DISCOID, STONE
Gaming piece? Diam: 17mm; Th: 2.5mm
[19120] fill of pit 19134
Not illustrated

19454 HOOK? IRON
54 by 56mm
[19120] fill of pit 19134
F115: Illus C5.12

19482 RIM
Possible scored decoration. Grass impressions. Sooted surfaces; handmade pottery
[19121] fill 19122, a post-hole in str 19.9
P104: Illus C3.11

19485 MEDIUM DISCOID, STONE
Gaming piece? Diam: 55mm; Th: 4mm
[19121] fill 19122, a post-hole in str 19.9
Not illustrated

19487 SMALL DISCOID, STONE
Gaming piece? Diam: 20mm; Th: 3mm
[19115] fill of post-hole 19129
Not illustrated

19493 SMALL DISCOID, STONE
Gaming piece? Diam: 33mm; Th: 2mm
[19120] fill of pit 19134
Not illustrated

19505 SMALL DISCOID, STONE
Gaming piece? Diam: 20mm; Th: 2mm
[19112] lazy bed
Not illustrated

19522 HORSESHOE, IRON
Horseshoe, 116 by 120mm
13th–14th century (Clark's type 3)
[Spoil-heap]
F51: Illus C5.5

19523 HORSESHOE NAIL, IRON
With expanded head and ears.
L (incomplete): 26mm
13th–14th century
[Spoil-heap]
F52: Illus C5.5

19524 PREHISTORIC POTTERY RIM SHERD, FOOD VESSEL TYPE
Well-smoothed ware, the exterior strong brown; tempered with sub-angular stones up to 8mm across; decorated on the exterior with sub-oval impressions made with a fibrous stalk. Rim diameter about 164mm; Wt: 16.88g
Bronze Age
[19026] silty clay with charcoal in str 19.6
X15: Illus C1.4
See also sherds SF 19525–19526

19525 PREHISTORIC POTTERY BODY SHERD, FOOD VESSEL TYPE
Ware and decoration as SF 19524, fire blackened on exterior. Wt: 42.31g; Th: 10mm
Bronze Age
[19026] silty clay with charcoal in str 19.6
X16: Illus C1.4
Probably the same vessel as SF 19524 and 19526

19526 PREHISTORIC POTTERY BODY SHERD, FOOD VESSEL TYPE
Ware and decoration as SF 19525, fire blackened on exterior. It is also decorated with diagonal incisions, including on an applied lug. Wt: 102.65g
Bronze Age
[19026] silty clay with charcoal in str 19.6
X17: Illus C1.4
Probably the same vessel as SF 19524 and 19526

19527 prehistoric pottery body sherd
Well-smoothed ware, the exterior yellowish-brown; very gritty with stone inclusions up to 3mm across. 40 by 25mm; Th: 11mm; Wt: 11.15g
[19026] silty clay with charcoal in str 19.6
X19: not illustrated

21005 point/piercer, flint
Cream-yellow flint. 44.05 by 13.63 by 6.92mm
Mesolithic (catalogue of struck lithics 812)
[21001] topsoil
X4: Illus C1.2

21128 microlith, flint
Cream-yellow flint. 8.08 by 3.08 by 1.52mm
Mesolithic (catalogue of struck lithics 498)
[21013] topsoil
X2: Illus C1.2

21128 microlith, flint
Cream-yellow flint. 15.70 by 4.95 by 1.43mm
Mesolithic (catalogue of struck lithics 499)
[21013] topsoil
X2: Illus C1.2

21128 microlith, flint
Cream-yellow flint. 14.00 by 6.10 by 2.36mm
Mesolithic (catalogue of struck lithics 500)
[21013] topsoil
X2: Illus C1.2

21141 microlith, flint
Cream-yellow flint. 12.47 by 3.70 by 1.99mm
Mesolithic (catalogue of struck lithics 343)
[21016] top fill of chamber cut in the summit of the mound at Cnoc Seannda
X1: Illus C1.2

21154 whirligig, bone
Circular bone disc pierced centrally and with a smaller hole off-centre. Diam: 63mm; maximum Th: 12.03mm
Iron Age
[21016] clayey silt deposit in the bottom of the chamber cut in the summit of the mound at Cnoc Seannda
X30: Illus C1.4, *Finlaggan* 7.9

21157 arrowhead, flint
Barbed and tanged arrowhead of light grey flint. 47.01 by 28.83 by 5.21mm
Chalcolithic or Bronze Age
[21016] bottom of the clayey silt deposit in the chamber cut in the summit of the mound at Cnoc Seannda
X10: Illus C1.2, *Finlaggan* 7.10

23001 nail, iron
Small nail, bent (extracted). Head: 19 by 19mm; L: 54mm
[23002] washout from ruin of str (a)
Not illustrated

23004 unidentified object, iron
L: 52mm
[23002] washout from ruin of str (a)
F97: Illus C5.11

23010 nail, iron
Small nail, broken shank. Head: 18 by 12mm; L: 19mm
[23002] washout from ruin of str (a)
Not illustrated

23012a jug (?) rim
Unglazed; wheel-made pottery. Oxidised gritty ware, fabric 4.1
[23011] buried topsoil over ruins of castle and pre-dating construction of str (a)
P59: Illus C3.7

23014 knife, iron
Whittle-tang knife with curved blade. L: 99mm
For leather working?
[23002] washout from ruin of str (a)
F79: Illus C5.9

23017 knife, iron
Whittle-tang knife with bolster, missing most of its tang. L: 82mm
[23011] buried topsoil over ruins of castle and pre-dating construction of str (a)
F80: Illus C5.9

23019 playing piece, bone
Circular tableman decorated with compass-drawn concentric circles. Diam: 41–43mm; Ht: 9mm
[23007] cobbled path to west of building (a)
B5: Illus C6.1

23021 jug (?) rim
Unglazed; wheel-made pottery. White gritty ware, fabric 1.1
[23011] buried topsoil over ruins of castle and pre-dating construction of str (a)
P1: Illus C3.3

23023 dress or hair pin, copper alloy (leaded bronze)
Stick pin, lacking its point, with squared head. L: 68.5mm
[23018] make-up layer under castle floor; 12th–13th century
C11; Illus C4.6

23025 body sherd
Diagonal slashed decoration. Oxidised surfaces. Sooted exterior; handmade pottery
[23028] turf and soil on edge of island; not a secure context
P105: Illus C3.11

23031 rove, iron
32 by 26mm
[23021] washout, castle demolition
Not illustrated

23032 jug rim and part of handle
With very abraded glaze externally; wheel-made pottery. Oxidised gritty ware, fabric 4.1
[23021] washout, castle demolition
P57: Illus C3.7

23036 mail ring, iron
A riveted ring, 12 by 15mm
[23026] pre-castle midden
F28: Illus C5.4

23037 hone, siltstone
Segment of a siltstone hone. L: 36mm
[23024] post-castle midden
R97: Illus C2.31

23040 unidentified object – hinge strap? iron
L: 143mm
[23018] make-up layer for castle floor
F136: Illus C5.16

23042 axehead, meta-quartzite
Polished stone axe. L: 121mm; maximum W: 61mm; maximum Th: 39mm; Wt: 426g
Neolithic
[23046] fill, or secondary occupation within dun
X11: Illus C1.3

23043 strap mount or knife, iron
L94mm
[23045] dun wall
F81: Illus C5.9

23045 slag, iron working
Piece of furnace bottom. 115 by 89 by 58mm
[23018] make-up layer for castle floor
Not illustrated

23047 cooking pot rim and shoulder
Very thin-walled, unglazed; sooted exterior; wheel-made pottery. Redware, fabric 2.1
[23033] pre-castle ground surface
P36: Illus C3.5

23047 rivet, iron
With lozenge-shaped rove. 25 by 20mm; L: 33mm
[23000] unstratified
Not illustrated

23048 gun stone?
Stone ball, one side flattened by impact. Diam: 78mm
[23046] secondary occupation within the dun, or later tumble
R99: Illus C2.32

24001 knife, iron
L: 73mm
[24002] mortar washout from wall 24003
F82: Illus C5.9

24002 NAIL, IRON
With broad circular head, broken, bent (extracted) shank. Diam of head: 25mm, L: 43mm
[24002] mortar washout from wall 24003
F153: Illus C5.18

24004 KNIFE, IRON
Part of scale-tang knife? L: 27mm
[24002] mortar washout from wall 24003
F83: Illus C5.9

24007 NAIL, IRON
Small nail with bent (extracted) shank. Head: 18 by 13mm; L: 61mm
[24013] tumble from north wall of str (b)
Not illustrated

24008 REAMER? IRON
Woodworking tool. L: 83mm
[24013] tumble from N wall of str (b)
F98: Illus C5.11

24009 CLASP, COPPER ALLOY (GUNMETAL)
Perhaps for a book, one side only, with two rivet holes. 13 by 82mm, metal thickness: 1.26mm
15th century
No context noted on finds sheet, but possibly [24013] tumble from wall of building (b)
C41: Illus C4.8

24010 NAIL, IRON
Large nail, broken shank. Head: 27 by 21mm; L: 42mm
[24013] tumble from north wall of str (b)
F154: Illus C5.18

24011 BODY SHERD
With two bands of wavy combed decoration separated by a grooved band; traces of very abraded glaze externally; wheel-made pottery. White gritty ware, fabric 1.3
[24018] mortar debris from castle demolition
P29: Illus C3.5

24013 BODY SHERD
With horizontal band of fine grooves from a straight-sided vessel, with tiny specks of glaze externally; wheel-made pottery. White gritty ware, fabric 1.1
[24020] make-up for castle floor
P6: Illus C3.3

24018 UNIDENTIFIED OBJECT, IRON
Hinge. 49 by 32mm
[24000] spoil-heap
Not illustrated

25006 BEAD, AMBER
Globular, half missing. Diam: 4.72mm; Ht: 3.35mm
[25008] medieval midden
R80: Illus C2.23

25015 ARM FROM AN ANTHROPOMORPHIC JUG (?)
Externally glazed; wheel-made pottery. White gritty ware, fabric 1.1
[25003] gravel beach
P21: Illus C3.4

25017 SLAG, IRON WORKING
Iron smithing dribble. Diam: 4.88mm; Wt: 0.13g
[25008] medieval midden
Not illustrated

25019 VERY LARGE DISCOID, PYRITOUS SLATE
Almost half of a crudely shaped discoid, probably for use as a pot-lid; perhaps shaped from a type C roofing slate. Diam: 149mm; Th: 7.5mm
[25008] medieval midden
R79: Illus C2.22

25020 SANDSTONE
Piece of grey sandstone. 54 by 60mm
[25008] medieval midden
Not illustrated

25022 LOWER BODY AND BASE SHERD
With splashes of glaze on underside of base; wheel-made pottery. White gritty ware, fabric 1.1
[25008] medieval midden
P24: Illus C3.4

25026 JUG (?) SHOULDER
Glazed externally; wheel-made pottery. White gritty ware, fabric 1.1
[25007] gravel beach (=25003)
P7: Illus C3.3

25039 RUBBER (?), STONE
Rounded stone of very fine conglomerate full of weathered quartz (Crinan grit?). There is a shallow cup on the top surface; one side is broken off. 177 by 139 by 45mm
[25023] organic-rich deposit, lower crannog structure
X14: Illus C1.3

25052 BODY SHERD
With applied serpentine strip with central pellet, glazed externally; wheel-made pottery. Reduced gritty ware, fabric 3.1
[25005] sand with washout and debris, equivalent to 25002
P48: Illus C3.6

25076 CRUCIBLE SHERD, POSSIBLY A LID
Thin slag on interior. Extra layer on exterior; handmade pottery
[25008] medieval midden
P108: Illus C3.12

25079 BEAD, AMBER
Rectangular. 5.46 by 4.97 by 2.70mm
[25008] medieval midden
R81: Illus C2.23

25091 SLAG, IRON WORKING
Piece of smithing hearth base. 17 by 26 by 8mm; Wt: 2.80g
[25007] gravel with washout and debris, equivalent to 25003
Not illustrated

25092 SLAG, IRON WORKING
Piece of hearth bottom. 90 by 90 by 50mm; Wt: 225g
[25000] from shore of Eilean na Comhairle
Not illustrated

25094 SHEET METAL SCRAP, COPPER ALLOY (BRONZE)
37 by 29 by 0.84mm
[25000] from shore of Eilean na Comhairle
Not illustrated

25097 MAIL, IRON
Fragment including at least eight broken rings. About 14 by 10mm
[25005] sand with washout and debris, equivalent to 25002
Not illustrated

25097 CHAIN, COPPER ALLOY
Chain consisting of seven (plus one detached) rings, each about 5mm in diameter, each ribbed, thus giving the impression that the chain is composed of sets of two interlinking rings. Possibly part of a dog leash.
[25005] sand with washout and debris, equivalent to 25002
C9: Illus C4.5

25098 BUCKLE-PLATE – BOOK CLASP? COPPER ALLOY
Buckle-plate, one side only, with one rivet hole. 38 by 9mm
15th century
[25005] sand with washout and debris, equivalent to 25002
Not illustrated

25100 WIRE, COPPER ALLOY
L approximately: 180mm; Diam: 0.5mm
[25008] medieval midden
C124: not illustrated

25101 COIN, SILVER
Penny, John I, Bury St Edmunds, *c* 1215–17
[25004] iron pan
N2: not illustrated

25106 SHEET METAL SCRAP, COPPER ALLOY (BRONZE)
[25002] sand, beach deposit
Not illustrated

25107 clasp, copper alloy
Perhaps for a book, with two rivet holes. 39 by 9mm; metal thickness 0.23mm
[25002] sand, beach deposit
C42: Illus C4.8

25108 link, copper alloy (bronze)
41 by 17.5mm
[25008] medieval midden; 13th century
C84: Illus C4.11

25109 sheet metal rivet, copper alloy
18.5 by 12 by 2.7mm. Sheet metal thickness: 0.26mm
[25000] unstratified, tr 25
C133: Illus C4.17

25111 sheet metal scrap, copper alloy (gunmetal)
[25000] unstratified, tr 25
Not illustrated

25113 sheet metal scrap, copper alloy (bronze)
[25000] unstratified, tr 25
Not illustrated

25117 dress or hair pin, copper alloy (gunmetal)
Stick pin with pierced, flat, oval head, lacking its point. L: 72mm
[25004] iron pan
C12: Illus C4.6

25123 hinge pin? copper alloy (leaded bronze)
Possibly a hinge pin, for example from a casket, bent out of shape and missing one end. L: 47mm
[25008] medieval midden; 13th century
C97: Illus C4.13

25127 weight? copper alloy (leaded bronze)
Disc shaped, with a 'bite' out of it; decorated on its upper surface with a grid pattern. 12.28 by 8.3 by 1.95mm; Wt: 0.75g
Sector C1
C128: Illus C4.17

25128–29 christ figure, copper alloy (gunmetal) with traces of gilding
The cast corpus from a crucifix, consisting of (SF 25128) the head, torso, upper arms and upper legs and (SF 25129) the feet and lower legs. Christ is bearded and has a crown of thorns; his body, clad only in a loin cloth gathered at his left side, is slumped. Nipples and navel are rendered as circular hollows. The hair has a central parting and is shoulder length. The two pieces together measure: Ht: 145mm; W: 80mm.
Found in August 1997 in the bed of the loch about 5m to the north-east of Eilean Mhuireill. The two pieces lay separately, but close to each other. The broken ends of both pieces show signs of wear from immersion in the water, suggesting that the piece was broken in antiquity.
C137: C4.18; *Finlaggan*, Illus 5.50

25131 key, copper alloy (gunmetal)
Key with hollow stem, curved perforated bit and quatrefoil-shaped bow. Ht: 45mm
Sector C1/C2
C108: Illus C4.14

25135 staple, copper alloy (gunmetal)
Staple with in-turned arms, both broken. 28 by 6mm
[25004] iron pan
C55: Illus C4.9

25136 key, copper alloy (gunmetal)
Key with solid stem projecting beyond the bit and bow like a pierced disc. 50 by 14mm
Sector C1/C2
C109: Illus C4.14

25136 mount, copper alloy (leaded bronze)
Strap mount from a casket, broken and bent double. 20 by 48 by 12mm
Sector 2
Not illustrated

25137 buckle-plate? copper alloy (bronze)
One side only, with recess for pin and rivet hole. 41 by 32 by 0.52mm
[25002] sand, beach deposit
C37: Illus C4.7

25141 coin, silver
Penny, Edward I–II, London, *c* 1307–09
Loch, shallow water off Eilean Mór (sector 2?)
N17: not illustrated

25143 slag, iron working
Iron smithing slag, two small pieces containing dribbles of 5mm or less in diameter; total Wt: 0.68g
[25008] medieval midden
Not illustrated

25145 slag, iron working
Iron smithing slag. 60 by 40 by 20mm; Wt: 50.38g
[25008] medieval midden
Not illustrated

25149 unidentified object, iron
A rectangular plate with legs (one missing) at each corner. 41 by 29 by 22mm
[25008] medieval midden
F137: Illus C5.16

25150 mount, copper alloy
Dome-shaped mount with beaded edge, for a strap or girdle. Ht: 6mm; Diam: 14.5mm
[25008] medieval midden; 13th century
C62: Illus C4.9

25151 wire, copper alloy
L approximately: 60mm; Diam: 0.6mm
[25003] gravel, beach deposit
C125: not illustrated

25152 strap-end mount, copper alloy (gunmetal)
Tongue-shaped strap-end made from a sheet of metal folded lengthwise and secured by a single rivet (missing). The upper surface is decorated with three groups of lightly punched dots. 57 by 7.5 by 4mm
14th–15th century
From loch adjacent to Eilean Mór
C47: Illus C4.8

25154 key, iron
Padlock key with laterally set bit and stem bent forward. 72 by 6 by 2mm
[25003] gravel, beach deposit
F122: Illus C5.14

25157 ring, copper alloy (bronze)
Finger (?) ring. D-shaped cross section. Diam: 23mm; Ht: 3.5mm
Sector C1/C2
Not illustrated

25159 dress or hair pin, iron
Stick pin with polygonal head. L: 88mm
[25008] medieval midden; 13th century
F12: Illus C5.1

25166 sheet metal scrap, copper alloy (gunmetal)
Sector 5
Not illustrated

25168 mount, copper alloy (bronze)
Sheet-metal mount, now folded, one edge with stitching holes. 46 by 40mm
[25007] gravel with washout and debris, equivalent to 25003
C75: Illus C4.10

25169 brooch, copper alloy (bronze)
Annular brooch formed of twisted wire with a loop for a (missing) pin. 20 by 19mm. Wire diameter: 0.6mm
[25008] medieval midden; 13th century
C5: Illus C4.5

25170a toggle or spindle, wood
Half section only of leaf-shaped tip. L: 33mm
[25008] medieval midden
W2: Illus C6.5

25170B TOGGLE OR SPINDLE TIP, WOOD
Half section only of leaf-shaped tip. L: 38mm
[25008] medieval midden
W3: Illus C6.5

25170C BOWL STAVE, WOOD
From a staved bowl with protruding foot, grooved on the exterior below its rim for a hoop, notched in the interior for a base plate. 70 by 21 by 7.5mm. The bowl would have had 20 staves and a rim diameter of about 120mm.
[25008] medieval midden
W4: Illus C6.4

25171 UNIDENTIFIED OBJECT, WOOD
Possibly a tool, snapped in two at division between handle and blade. L: 71mm
[25008] medieval midden
W5: Illus C6.5

25171 SHEET METAL RIVET, COPPER ALLOY
20 by 12.5mm
[25002] sand, beach deposit
Not illustrated; cf SF 25109

25172 SLAG, IRON WORKING
Piece of a smithing hearth base. 60 by 50mm; Th: 15mm; Wt: 92.89g. Also two small fragments
[25008] medieval midden
Not illustrated

25173 POT, COPPER ALLOY (LEADED BRONZE)
Sherd of cast pot with rib. 43 by 25 by 1.5mm
[25002] sand, beach deposit
C143: Illus C4.19

25174 BUCKLE, COPPER ALLOY (LEADED BRONZE)
Buckle with convex sides and thick outside edge with grooves; pin lacking. 18 by 16mm
[25002] sand, beach deposit
C23: Illus C4.7

25176 PEG TIP, WOOD
Pointed, neatly cut off, with patch of bark. L: 25mm; Diam: 14mm
[25008] medieval midden
W6: Illus C6.5

25177 SHEET METAL SCRAP, COPPER ALLOY (LEADED BRONZE)
[25000] shore of Eilean Mór
Not illustrated

25178 SPRUE? LEAD
15 by 20 by 5mm
[25000] unstratified, tr 25
Not illustrated

25178 BUNG? WOOD
Disc shaped. Diam: 57mm; Th: 20mm
[25008] medieval midden
W7: Illus C6.4

25179 COIN, SILVER
Halfgroat, David II, Edinburgh, 1367–71
Sector 1 (near jetty)
N22: not illustrated

25180 STRAP HOLDER, COPPER ALLOY (GUNMETAL)
Strap holder with convex sides and internal projections. 26.5 by 18.5mm
Sector C2
C56: Illus C4.9

25181 MOUNT FROM A BOOK? COPPER ALLOY
Strap with two rivet holes, bent back on itself. L (as bent): 75mm
[25008] medieval midden; 13th century
C98: Illus C4.13

25183 STRAP-END MOUNT? COPPER ALLOY (COPPER)
Sheet-metal mount with two rivet holes. 11 by 27mm
[25007] gravel with washout and debris, equivalent to 25003
C48: Illus C4.8

25183 PEG TIP, WOOD
Pointed and charred, partially cut and snapped off at the top. L: 63mm; Diam: 10mm
[25008] medieval midden
W8: Illus C6.5

25186 PIN, WOOD
Globular head and upper shaft, half section. L: 30mm
[25008] medieval midden
W9: Illus C6.5

25187A PIN SHANK, WOOD
Surviving L: 26mm
[25008] medieval midden
W10: Illus C6.5

25187B PIN POINT, WOOD
Surviving L: 12.5mm
[25008] medieval midden
W11: Illus C6.5

25188 WOOD
L: 51mm
[25008] medieval midden
Not illustrated

25189 STRAP SLIDE, IRON
Broken, 52 by 9mm
SF 25189; [25003] gravel, beach material
F21: Illus C5.3

25189 TENON, WOOD
Tenon, pierced for a dowel, of a mortise and tenon joint. 93 by 49 by 33mm
[25008] medieval midden
W12: Illus C6.4

25190 PEG? WOOD
Piece of shaft. L: 21mm
[25008] medieval midden
Not illustrated

25192 HANDLE? WOOD
Cylindrical with pointed end. L: 38mm
[25008] medieval midden
W13: Illus C6.5

25205 CRUCIBLE RIM, TINY
Residue on interior, also vitrification; hand-made pottery
[25002] sand, beach deposit
Not illustrated

25206 BODY SHERD
With wavy combed decoration, glazed externally; wheel-made pottery. White gritty ware, fabric 1.1
[25002] sand, beach deposit
P20: Illus C3.4

25207 JUG RIM AND TRACE OF HANDLE
Glazed externally; wheel-made pottery. White gritty ware, fabric 1.3
[25002] sand, beach deposit
P33: Illus C3.5

25240 RIM
Unglazed; wheel-made pottery. White gritty ware, fabric 1.1
[25006] sand, beach deposit, as 25002
P2: Illus C3.3

25259 JUG (?) RIM
Externally glazed; wheel-made pottery. White gritty ware, fabric 1.1
[25007] gravel with washout and debris, equivalent to 25003
P3: Illus C3.3

25270 COOKING POT RIM
Unglazed, with all-over sooting; wheel-made pottery. White gritty ware, fabric 1.2
[25008] medieval midden
P26: Illus C3.5

25281 THREE-HANDLED PITCHER (?) RIM AND PART OF SPOUT
With, externally, creamy-white glaze with light and dark green streaks; wheel-made pottery. Saintonge polychrome, fabric 5
[25004] iron pan
P68: Illus C3.8

25289 BODY SHERD
With applied ridged strips, glazed externally; wheel-made pottery. White gritty ware, fabric 1.1
[25007] gravel with washout and debris, equivalent to 25003
P18: Illus C3.4

25296 BODY SHERD
With applied twisted cordon, glazed externally; wheel-made pottery. White gritty ware, fabric 1.1
[25008] medieval midden
P19: Illus C3.4

25329 COOKING POT (?) RIM
Unglazed; wheel-made pottery. White gritty ware, fabric 1.1
[25006] sand, beach deposit, as 25002
P10: Illus C3.3

25337 CRUCIBLE
Exterior and interior slaggy and vitrified, orange tinge on external slag. Slight cracking; handmade pottery
[25008] medieval midden
P109: Illus C3.12

25348 BODY SHERD
With wavy combed decoration, unglazed; wheel-made pottery. White gritty ware, fabric 1.3
[25040] FN 98 excavation
P30: Illus C3.5

25372 CRUCIBLE RIM
Vitrified on top edge; handmade pottery
[25004] iron pan
P107: Illus C3.12

25373 BODY SHERD
With abraded applied ridged strip, glazed externally; wheel-made pottery. Reduced gritty ware, fabric 3.1
[25005] sand with washout and debris, equivalent to 25002
P49: Illus C3.6

25383 JUG (?) RIM AND PART OF STRAP HANDLE
Externally glazed; wheel-made pottery. White gritty ware, fabric 1.1
[25008] medieval midden
P5: Illus C3.3

25384 STRAP HANDLE WITH CENTRAL APPLIED THUMBED STRIP
Glazed externally; wheel-made pottery. Reduced gritty ware, fabric 3.1
[25008] medieval midden
P46: Illus C3.6

25392 STRAP HANDLE WITH CENTRAL APPLIED THUMBED STRIP
Glazed externally; wheel-made pottery. White gritty ware, fabric 1.1
[25008] medieval midden
P9: Illus C3.3

25430 COOKING POT (?) RIM
With all-over slip; wheel-made pottery. White gritty ware, fabric 1.3
[25004] iron pan
P28: Illus C3.5

25442 RIM
Unglazed; wheel-made pottery. White gritty ware, fabric 1.3
[25002] sand, beach deposit
P27: Illus C3.5

25446A CRUCIBLE RIM
Residue on interior, also vitrification; handmade pottery
[25002] sand, beach deposit
Not illustrated

25446B CRUCIBLE RIM, TINY
Extra layer on interior; handmade pottery
[25002] sand, beach deposit
Not illustrated

25452 RIM
With traces of glaze externally; wheel-made pottery. White gritty ware, fabric 1.1
[25003] gravel, beach deposit
P16: Illus C3.4

25458 JUG (?) RIM
With mottled apple-green glaze externally; wheel-made pottery. Saintonge mottled green glaze, fabric 5
[25002] sand, beach deposit
P71: Illus C3.8

25461 RIM
With tiny specks of glaze externally; wheel-made pottery. Redware, fabric 2.2
[25002] sand, beach deposit
P37: Illus C3.5

25469A COOKING POT (?) RIM
Glazed externally; wheel-made pottery. White gritty ware, fabric 1.3
[25008] medieval midden
P32: Illus C3.5

25470 JUG RIM AND BODY SHERDS
With radiating applied (?) thumbed strips on shoulder and very dark grey glaze externally. Thumbing at top of handle extends to outer edge of rim; wheel-made pottery. White gritty ware, fabric 1.1
[25008] medieval midden
P23: Illus C3.4

25480 COOKING POT (?) RIM
Externally glazed; all-over sooting and very abraded; wheel-made pottery. White gritty ware, fabric 1.1
[25000] unstratified
P13: Illus C3.3

25483 RIM SHERD
With thin glaze externally. White gritty ware, fabric 1.2
[25008] medieval midden
P25: Illus C3.5

25484 RIM SHERD
With splashes of glaze externally; wheel-made pottery. White gritty ware, fabric 1.1
[25008] medieval midden
P14: Illus C3.4

25504 ANTHROPOMORPHIC JUG (?) RIM AND NECK
With applied limb (?) and glaze externally; wheel-made pottery. White gritty ware, fabric 1.1
[25008] medieval midden
P22: Illus C3.4

25515 JUG RIM AND NECK
Glazed externally; wheel-made pottery. White gritty ware, fabric 1.1
[25004] iron pan
P4: Illus C3.3

25523 CRUCIBLE RIM
Extra layers inside and out. Vitrification; handmade pottery
[25004] iron pan
Not illustrated

25525 CRUCIBLE RIM, TINY
Residue inside and out. Vitrification; handmade pottery
[25002] sand, beach deposit
Not illustrated

25527 MORTAR, LIMESTONE
Cylindrical-shaped mortar, only about half surviving, with a lug and a spout. Ht: 169mm; Diam: 219mm
[25009] wall or revetment within medieval midden 25008
R85: Illus C2.28

25528 GUN STONE?
Stone ball of unidentified sedimentary rock, not of local Islay origin. It shows signs of impact, with about a third missing. Diam: 58 by 66.5mm
[25001] turf and topsoil
R98: Illus C2.32

25537 SHOE, LEATHER
Substantial remains of a low ankle right shoe of turnshoe construction; one-piece vamp and vamp wing with single slash at the throat; front fastened with two slits in the latchet for toggles; top edges originally oversewn. Much of the sole, with evident signs of wear, survives in two pieces, indicating that it was long and slender with a narrow waist and gently curved, pointed forepart. The heel has the remains of a clump sole applied to its underside as a repair. Uppers and sole were held together by grain/flesh stitching, and the now missing quarters were attached by edge/flesh stitching. The overall length as complete would be about 300mm.

[25008] medieval midden
H1: Illus C6.2, showing outside views (grain side) of upper and sole

25538 SHOE, LEATHER
Substantial remains of a long, slender left sole with narrow waist and gently curved, pointed forepart. A curved line of stich holes across the forepart indicates that it has been repaired with a clump sole. The overall length as complete would be about 300mm.
[25008] midden
H2: Illus C6.2, showing the under (grain) side of the sole

25539 DRAWSTRING PURSE, LEATHER
One-piece pouch or purse formed from a doubled-over rectangular piece of leather. The sides were probably sewn flesh side to flesh side with binding stitching prior to the piece been turned so that the grain side was to the exterior. There are six slits each side for the drawstring (now missing), and the pouch mouth was oversewn, perhaps to help secure a lining. 278 by 140mm
[25008] medieval midden
H3: Illus C6.3, showing the outside (grain) side of the pouch, spread flat

25540 PIN, WOOD
Flat head and upper part of shank, fire blackened. L: 32mm; diameter of head: 13mm
[25008] medieval midden
W14: Illus C6.5

25541 WOODWORKING WEDGE? WOOD
Squared oak. L: 63mm
[25008] medieval midden
W15: Illus C6.4

25542 PEG, WOOD
With spade-shaped head, for a musical instrument? L: 33mm; head: 11.5 by 10mm
[25008] medieval midden
W16: Illus C6.5

25543 CUP OR LID, WOOD
Fragments of a small turned cup or lid. Rim diameter approximately 50mm;
vessel Ht: 19mm
[25008] medieval midden
W17: Illus C6.4

25544 HANDLE? WOOD
Handle with flat surface decorated with incised trellis pattern. L: 52mm
[25008] medieval midden
W18: Illus C6.4

25545 ARROW? WOOD
Possibly the broken end of an arrow shaft, swelling into a distinct bulb grooved for a bowstring; alternatively a broken tuning peg for a musical instrument. L: 30mm; diameter of head: 10 by 9mm
[25008] medieval midden
W19: Illus C6.5

25546 WOOD
Piece of structural timber with two dowel-holes. 219 by 39 by 30mm
[25008] medieval midden
W20: Illus C6.3

25547 SCOOP, WOOD
Probably ash or alder. L: 260mm; Ht: 76mm; W (reconstructed): 144mm
[25008] medieval midden
W21: Illus C6.6

25548 GIRDLE OR STRAP MOUNT, SILVER
Bar mount of sheet metal, crushed and torn. It had terminal lobes pierced for rivets and a larger open central lobe. L: 18.5mm; metal thickness: 0.38mm
[25008] medieval midden; 13th century
S1: Illus C4.20

25550 PEG, WOOD
Head and part of shaft. 38 by 11 by 9.5mm
[25008] medieval midden
W22: Illus C6.5

25551 PIN, WOOD
Pin with pierced, flattened, spatulate head, tip missing. L: 57mm.
[25008] medieval midden
W23: Illus C6.4

25552 SHOE, LEATHER
Fragmentary sole (three pieces), possibly of similar type to the sole of SF 25537
[25008] medieval midden
Not illustrated

25560 STRAP, LEATHER
Fragment with stitching holes along both edges. 34 by 65 by 0.25mm
[25008] medieval midden
H5: Illus C6.2, showing the grain side

25562, 25564 SHOE, LEATHER
Quarters with a heel stiffener. The top and sides of the quarters (SF 25562) have flesh edge stitching; the bottom is roughly cut with no sign of stitching. 230 by 74 by 1.27mm.

The heel stiffener (SF 25564) is D-shaped with binding stitch, except along its bottom edge, and its impression can be traced on the interior (flesh side) of the quarters. 31 by 35 by 0.85mm.
[25008] medieval midden
H4: Illus C6.3, showing the inside (flesh) side of the quarters and the grain side of the heel stiffener

25567 PIN HEAD, WOOD
Globular head and short section of shank. L: 30mm; diameter of head: 22mm
[25008] medieval midden
W24: Illus C6.5

25568 PEG? WOOD
Peg, with holes, all scorched. Three have been drilled right through vertically; two only partially, horizontally from one side. L: 47mm
[25008] medieval midden
W25: Illus C6.4

25569 AWL, WOOD AND IRON
Complete handle with a considerable length of shank surviving. L of handle: 32mm;
overall L: 58mm
[25008] medieval midden
W26: Illus C6.5

25570 PIN HEAD, WOOD
Globular pin head. 12 by 12mm
[25008] medieval midden
W27: Illus C6.5

25571 KNIFE POMMEL? WOOD
Flat-topped, turned. Diam: 20mm
[25008] medieval midden
W28: Illus C6.4

25572 TOGGLE? WOOD
Pointed, cylindrical oval object. 38 by 15mm
[25008] medieval midden
W29: Illus C6.4

25573 SCRAP, WOOD
With edges of two peg-holes. L: 197mm
[25008] medieval midden
W30: Illus C6.3

25574 UNIDENTIFIED OBJECT, WOOD
Broken, rectangular mount, crudely hollowed out as a support. 86 by 30 by 27mm
[25008] medieval midden
W31: Illus C6.4

25575 TOOL, WOOD
Broken blade and stub of shaft. L: 166mm
[25019] crannog structure
X31: Illus C1.4

25576 UNIDENTIFIED OBJECT, WOOD (HAZEL?)
Squarish rod with a drill-hole, 7mm in diameter and tenons at both ends. Now fractured either side of the drill-hole. L: 60mm
[25008] medieval midden
W32: Illus C6.4 (drawn from photograph)

26007 RYBAT, SANDSTONE
Broken 'white' (brownish-yellow, 10YR 6/6) sandstone jamb stone from a window (?); probably similar to SF1101. 450 by 300 by 230mm

Recovered from the rubble against the exterior of the north wall of the chapel (1998)
Not illustrated

26010 GRAVE-SLAB, CHLORITE SCHIST
Bottom-right corner of a small slab showing part of the foliated semicircular base of a central cross, with the blade of a sword above, flanked by a single strand of plant-scroll terminating at the bottom in a dragon's head. Surviving L: 378mm; W: 154mm; Th: 43mm
Islay? 14th century
From the debris outside the east wall of the chapel (1998)
R14: Illust C2.4, C2.13

26011 QUERN, METABASITE
Broken lower stone of a rotary quern, of foliated porphyritic metabasite uncovered outside the east wall of the chapel, from which it had evidently fallen. Diam: 435mm; Diam of hole 25mm; Th: 55mm
From the debris outside the east wall of the chapel (1998)
R91: Illus C2.30

26012 MOULDING, SANDSTONE
Block of red sandstone with roll moulding. 175 by 95 by 95mm
From clearance work around the chapel in 1998
R22: Illus C2.14

30001 COIN, SILVER
Penny, Edward II, Durham, *c* 1312–14
Sector 2
N19: not illustrated

30002 COIN, SILVER
Penny, Henry III, London, 1251–72
Sector C1
N6: not illustrated

30003 COIN, SILVER
Penny, Henry III, Canterbury, 1251–72
Sector 2
N5: not illustrated

30004 COIN, SILVER
Penny (contemporary imitation), Edward I, London, *c* 1280–1300
Sector C1
N20: not illustrated

30005 COIN, BILLON
Penny, James II, Edinburgh, 1451–60
Sector 3
N29: not illustrated

30006 COIN, SILVER
Groat, James I, Edinburgh, 1424–37
Sector 2
N26: not illustrated

30007 COIN, SILVER
Penny, Henry III, London, 1217–42
Sector 3
N4: not illustrated

30008 COIN, BILLON
Penny, James I, Edinburgh, 1424–37
Sector 3
N28: not illustrated

30009 COIN, BILLON
Penny, James II, Edinburgh, 1451–60
Sector 3
N30: not illustrated

30010 COIN, SILVER
Penny, Edward I, London, *c* 1305–06
Sector 2
N14: not illustrated

30011 COIN, SILVER
Penny, Edward I, London, 1292–96
Sector 2
N12: not illustrated

30012 COIN, SILVER
Halfpenny, Henry II – Richard I, London, 1180–1204/5
Sector 1
N1: not illustrated

30013 COIN, SILVER
Halfpenny, imitation English, *c* 1247–72
Sector 1
N10: not illustrated

30014 COIN, SILVER
Penny, Henry III, Canterbury, (*c* 1222–36)
Sector 1
N3: not illustrated

30015 COIN, BILLON
Penny, James III, Edinburgh, *c* 1475–82
Sector 2
N35: not illustrated

30016 COIN, BILLON
Penny, James III, *c* 1475–82
Sector 2
N36: not illustrated

30017 COIN, BILLON
Penny, James I, Edinburgh, 1424–37
Sector 2
N27: not illustrated

30019 COIN, BILLON
Penny, James II, 1451–60
Loch, shallow water adjacent to settlement no. 38, Rudh' a' Chròcuin (NGR NR 386 681)
N31: not illustrated

30021 COIN, SILVER
Halfpenny, Henry III, Canterbury, 1251–72
Sector 1
N8: not illustrated

30022 COIN, BILLON
Plack, James IV, 1488–1513
Sector 5 (adjacent to trench 18)
N38: not illustrated

30023 COIN, SILVER
Penny, Alexander III, 1280–86+
Loch, shallow water adjacent to settlement no. 38, Rudh' a' Chròcuin (NGR NR 386 681)
N21: not illustrated

30024 COIN, SILVER
Penny, Edward I, Durham, *c* 1306–07
Sector 2
N15: not illustrated

30027 COIN, SILVER
Penny, Edward II, Durham, *c* 1312–14
Sector 2
N18: not illustrated

30028 COIN, SILVER
Groat, Robert III, Perth, 1390–1403
Sector 2
N25: not illustrated

30029 COIN, SILVER
Penny, Edward I, London, *c* 1280–81
Sector 2
N11: not illustrated

30030 COIN, SILVER
Penny, Henry III, Canterbury, 1251–72
Sector C1
N7: not illustrated

30031 AWL, IRON
Diamond sectioned. L: 150mm
For leather working
Sector C1
F99: Illus C5.11

30036 CLASP, COPPER ALLOY (BRONZE)
Perhaps for a book. 39 by 34 by 9mm
Sector 1
C43: Illus C4.8

30037 RIVET, IRON
Decorative rectangular rove with neat, low-domed shank, head lacking. Rove: 35 by 25mm; surviving Ht: 12mm
Sector C1
F158: Illus C5.18

30039 CAP FOR A KNIFE HILT, COPPER ALLOY (COPPER)
In the form of two opposed hoofs, with the underside grooved for a scale tang

Sector 5
Not illustrated (similar to SF 30119)

30044 COIN, SILVER
Penny, Edward I–II, London, *c* 1307–09
Sector 4
N16: not illustrated

30045 COIN, SILVER
Groat, Robert II, Edinburgh, 1371–90
Sector 2
N23: not illustrated

30074 NAIL OR PIN, IRON
L: 65mm
Sector 1
F13: Illus C5.1

30075 CLASP, COPPER ALLOY (GUNMETAL)
Perhaps for a book. 19 by 8 by 0.64mm
Sector 3
C44: Illus C4.8

30081 HECKLE TOOTH? IRON
L: 103mm
Sector 3
F100: Illus C5.10

30084 AGLET (LACE END), COPPER ALLOY
38 by 6.5mm; metal thickness: 0.63mm
Sector 2
C80: Illus C4.11

30085 AGLET (LACE END), COPPER ALLOY (GUNMETAL)
36.5 by 3.5mm
Sector 2
C81: Illus C4.11

30091 CLASP, IRON
S-shaped fastener. 52 by 13mm
Sector 1
F7: Illus C5.1

30092 MOUNT, COPPER ALLOY
Cover for keyhole? 50 by 34mm
Sector 3
C118: Illus C4.16

30093 KNIFE, IRON
Whittle-tang knife; L: 83mm
Sector 1
F84: Illus C5.9

30094 BELT MOUNT, COPPER ALLOY
Bar mount with rivet for securing it to a belt, and loop for holding a pendant mount. L: 29mm
Sector 2
C59: Illus C4.9

30095 PILGRIM BADGE, LEAD
Rectangular badge with piercings for attachment at the corners; half only, with image of St Peter with a key. Legend: . . . +.SIG[N]A APOSTOLORV . . . 31 by 22mm
Sector 1
L1: Illus C4.21, C4.30

30096 HERALDIC PENDANT, COPPER ALLOY (COPPER) AND ENAMEL
Shield-shaped pendant, mount at top broken off. The heraldic design has been a blue field scattered with gold fleur-de-lis (azure, semé-de-lis, or), the form of the royal arms of France until the late 14th century. There are now no traces of gilding and the enamel has turned pale blue. 21 by 16 by 2mm
Sector 1
C58: Illus C4.9, C4.24

30097 DOUBLE ANIMAL-HEADED BOW BROOCH, COPPER ALLOY
58.5 by 24 by 15.5mm
Insular, Iron Age, later first century BC to the first century AD
Sector 1
X29: Illus C1.5

30098 SIGNET RING, SILVER
The hoop is D-shaped in section. The disc-shaped bezel has a central cinquefoil surrounded by the inscription, reversed: +ROBERTI. Diam: 25mm; Diam of bezel: 12mm
15th century
Sector 4, between structures X and V
S2: Illus C4.20, C4.29

30099 KEY, IRON, TIN PLATED
Key with circular bow, solid shank and ward cut with vertical channels. 54 by 21mm
Sector 1
F123: Illus C5.13

30100 EYELET? COPPER ALLOY
Flat, centrally pierced, circular mount with rivet holes for attachment. 20 by 23mm
Sector 3
C63: Illus C4.9

30101 BUCKLE, COPPER ALLOY (GUNMETAL)
Buckle with convex sides and thick outside edge with grooved roller; complete with pin. 17 by 19mm.
Sector 1
C24: Illus C4.7

30102 MOUNT, COPPER ALLOY
Square mount with central pyramidal boss; 10.5 by 14mm
Sector 2
C64: Illus C4.9

30103 MOUNT FROM A CASKET? COPPER ALLOY (LEADED BRONZE)
Sheet-metal mount with a trefoil terminal pierced with a rivet hole. 20 by 34 by 15mm
Sector 1
C99: Illus C4.14

30104 SEALING, LEAD
Oval-shaped sealing impressed over cords or wires, now missing. The design, on one side only, consists of a shield, with no trace of a charge, possibly with a crest, surrounded by a band with an illegible inscription. 13 by 14mm
Sector 1
L6: Illus C 4.21, C4.32

30105 SCRAP, LEAD
Fishing weight? Piece of rolled sheet metal. 32.5 by 18mm; Wt: 26.09g
[Loch]
L37: Illus C4.22

30106 SPRUE, LEAD
13 by 12.5 by 7mm
Sector 1
Lead report no. 4
L26: not illustrated

30107 SPRUE, LEAD
12 by 13 by 7mm
Sector 1
Lead report no. 5
L27: not illustrated

30108 SPRUE, LEAD
12.5 by 13 by 8mm
Sector 1
Lead report no. 6
L28: not illustrated

30109 SPRUE, LEAD
13.5 by 15 by 9mm
Sector 1
L29: Illus C4.22

30110 SPRUE, LEAD
13.5 by 12.5 by 8.5mm
Sector 1
L30: Illus C4.22

30111 SCRAP LEAD
Fragment of sheet lead containing a lead nail or rivet. 47 by 42 by 2.4mm
Sector 3
L38: Illus C4.22

30112 DISC, LEAD
Creased. Diam: 21mm; Wt: 10.66g
SF 30112; unstratified
L39: Illus C4.22

30113 PATCH, COPPER ALLOY (GUNMETAL)
Patch of sheet metal with two sheet rivets. 28 by 28mm
Sector 2
C134: Illus C4.17

30114 padlock, iron coated in copper alloy (gunmetal)
Ribbed barrel-padlock case with attached fin and tube. 58 by 61 by 28mm
Sector C1
F127: Illus C5.15

30115 pendant, copper alloy
28.5 by 16.5mm
Sector 4, adjacent to str X
C8: Illus C4.5

30116 mount, copper alloy (bronze)
Pierced piece of sheet metal. 53 by 50mm
Sector 1
C76: Illus C4.10

30117 mount, copper alloy (bronze)
Pierced, with scalloped edge. 94 by 44mm
Sector 4, adjacent to str X
C77: Illus C4.10

30118 mount, from a chest or a casket? copper alloy (leaded bronze)
Strap mount, broken and bent double. 20 by 48 by 12mm
Sector 2
C100: Illus C4.13

30119 cap for a knife hilt, copper alloy (leaded brass)
Cap in the form of two opposed hoofs. The bottom is grooved for a scale tang, some of which is still in place. 16 by 16 by 7mm
1st half of 16th century
Sector 3
C129: Illus C4.17

30120 vessel foot, copper alloy (gunmetal)
Ht: 39mm
Sector 2
C144: Illus C4.19

30121 dog collar mount, copper alloy
Link: 81 by 22mm; strap-end mount: 68 by 20mm
Sector 1
C85: Illus C4.11

30122 mount, copper alloy (gunmetal)
Cross-shaped mount with central iron rivet and others in each of the expanded terminals of its arms. 41 by 41mm
Sector 2
C65: Illus C4.9

30123 folding strap-clasp, copper alloy (gunmetal)
Clasp with plate for mounting on a strap, secured by a rivet, and folding end with a bar mount attached by a rivet. The frame has convex sides. 12.5 by 40.5mm
14th–15th century
Sector 2
C45: Illus C4.8

30124 musical instrument peg, copper alloy (gunmetal)
Probably for a wire-strung harp or clarsach. L: 70mm; Diam of string hole: 1.8mm
Sector 3
C126: Illus C4.16

30126 pot leg, copper alloy (gunmetal)
Ht: 58mm
Sector 4
C145: Illus C4.19

30127 fragment of rim and handle of vessel, copper alloy
24 by 53mm
Sector C2
C146: Illus C4.20

30128 buckle, copper alloy (leaded bronze)
Buckle, possibly for a spur strap, with oval-shaped frame and plate; traces of gilding. 17.5 by 28mm
Sector C1
C25: Illus C4.7

30129 key, copper alloy
Padlock key, stem with hooked terminal and laterally set bit. 78 by 10 by 8mm
Sector C1
C110: Illus C4.14

30130 key, copper alloy (gunmetal)
Key with quatrefoil bow, hollow stem and channelled bit. L: 38mm
Sector C2
C111: Illus C4.14

30131 buckle, copper alloy (gunmetal)
Buckle with double-oval frame, lacking its pin. 15 by 23mm
Sector 2
C26: Illus C4.7

30132 patch with rivet, copper alloy (gunmetal)
37 by 21mm
Sector 3
C135: Illus C4.17

30133 buckle-plate, copper alloy (gunmetal)
7 by 18mm
Sector 3
C38: Illus C4.7

30134 buckle, copper alloy (leaded brass)
Buckle with double-oval frame, half missing. 23 by 20mm
Sector 3
C27: Illus C4.7

30135 strap-end mount, copper alloy
16 by 41mm
Sector C2
C49: Illus C4.8

30136 key, copper alloy (bronze)
Casket key, cut from sheet of metal; bottom of shank missing. 33 by 11mm
Sector 1
C112: Illus C4.15

30141 lockplate? copper alloy
Fragment. 68 by 47mm
Sector 3
C119: Illus C4.16

30145 vessel leg, copper alloy (gunmetal)
Leg of a cast metal pot or ewer. L: 61mm
Sector 2
C147: Illus C4.19

30146 vessel leg, copper alloy
Leg of a cast metal pot or ewer. 16 by 18mm
Sector 2
C148: Illus C4.20

30147 key, copper alloy
Casket key, cut from sheet metal; suspension hole punched through; end of shank missing. 33 by 14mm
Sector 3
C113: Illus C4.15

30148 mount from a casket? copper alloy (leaded bronze)
30.5 by 7 by 10mm
Sector 3
C101: Illus C4.14

30149 buckle, copper alloy
Buckle with rectangular frame, lacking its pin. 27 by 19mm
Sector 4
Not illustrated

30150 stud, copper alloy (bronze, tinned surface?)
Stud with domed head. Diam: 9mm
Sector 4
C66: Illus C4.9

30151 strap-end mount, copper alloy
Mount bent over, still retaining some mineralised leather, held in place by a rivet.
21 by 11mm
Sector 2
C50: Illus C4.8

30152 STRAP-END MOUNT, COPPER ALLOY
Strap end formed of folded sheet metal, with two rivet holes. 14 by 10 by 8.5mm
Sector 4, adjacent to str X
C51: Illus C4.8

30153 MOUNT, COPPER ALLOY (GUNMETAL)
Bar mount, broken. 28.5 by 12.5mm
Sector 3
C67: Illus C4.9

30154 BUCKLE, COPPER ALLOY (GUNMETAL)
Buckle with central bar and pin, dividing a larger oval (broken) frame from a smaller rectangular one. The exterior sides, with traces of gilding, are ornamented with a chevron pattern. 18 by 21.5mm
Sector 2
C28: Illus C4.7

30155 KEY, COPPER ALLOY
Key with solid stem, circular bow and channelled bit. L: 55mm
Sector 1
C114: Illus C4.15

30156 MOUNT, COPPER ALLOY (GUNMETAL)
22 by 10mm
Sector 1
C68: Illus C4.9

30157 CASKET OR RELIQUARY MOUNT, COPPER ALLOY (GUNMETAL)
House-shaped mount of sheet metal with folded bottom edge and piercings in loops, probably originally nine, around its sides and top for attachment. These edges are also decoratively fringed with a series of small indentations. 72 by 49mm
Sector 2
C78: Illus C4.10

30159 MOUNT, COPPER ALLOY (BRONZE, TINNED SURFACE?)
End mount for barrel padlock with square keyhole? 24 by 16mm
Sector 1
C120: Illus C4.15

30160 MIRROR CASE, LEAD ALLOY
Cast lead circular broken lid of a mirror case, decorated with a design of raised ring and dot motifs against a cross-hatched background. Diam of lid: 27mm; metal thickness: 0.9mm
Sector 1
L4: Illus C4.21

30161 MOUNT, FROM DOG COLLAR? COPPER ALLOY (BRONZE)
Oval link with two strap-end mounts engraved on one side with triangles. Link: 43 by 27mm; strap-end mounts: 77 by 25mm, and 80 by 26mm
Sector 3
C86: Illus C4.11

30162 STRAP MOUNT, FOR A CASKET? COPPER ALLOY
Strap mount terminating in two rivet positions. L: 29.5mm
Sector 1
C102: Illus C4.14

30163 MOUNT, COPPER ALLOY
Trefoil-shaped terminal pierced for a rivet. 18 by 12 by 1mm
Sector 3
C69: Illus C4.9

30164 PENDANT OR EARRING? COPPER ALLOY (LEADED BRONZE)
Shaped like a plum stone, formed from two hollow cups braised together, decorated all over with repoussé bobbles. There is the stub of a loop or other attachment device on one side. 6.8 by 4.8mm
14th–15th century?
Sector 3
C13: Illus C4.6

30165 STRAP-END MOUNT? COPPER ALLOY
Two rectangular plates held together with four rivets. Fragments of a mineralised leather strap remain. 23 by 12 by 3mm
Sector 3
C52: Illus C4.8

30166 SPRUE, LEAD
19 by 12mm
Sector 1
L31: not illustrated

30167 HASP? COPPER ALLOY
Broken; possibly originally enamelled with animal design. 52 by 14 by 0.9mm
Sector 3
C103: Illus C4.14, C4.28

30168 MOUNT, COPPER ALLOY
Shield-shaped mount. 20 by 17 by 0.5mm
Sector 3
C70: Illus C4.9

30169 HEAD OF DRESS OR HAIR PIN, COPPER ALLOY (LEADED BRONZE, TINNED SURFACE)
Globular with socket on underside for a shaft. 8.5 by 6mm
Sector 3
C14: Illus C4.6

30172 WASHER, COPPER ALLOY (GUNMETAL)
With punched circular rivet-hole. Diam: 15mm; Th: 0.62mm
Sector 3
C71: Illus C4.9

30177 WASHER/MOUNT, COPPER ALLOY (COPPER)
Punched with square rivet-hole. Diam: 10mm; Ht: 4mm; metal thickness: 0.94mm
Sector 3
C72: Illus C4.9

30181 SHEET RIVET, COPPER ALLOY (BRONZE)
19 by 16mm; sheet metal thickness: 0.54mm
Sector 4
C136: Illus C4.17

30181 STRAP-END MOUNT? COPPER ALLOY (GUNMETAL)
Possibly a strap-end mount, with two rivet holes. 38 by 9 by 0.80mm
C53: Illus C4.8

30197 BUCKLE, COPPER ALLOY (GUNMETAL)
Rectangular frame lacking a pin, possibly an unfinished buckle. 26 by 20 by 0.84mm
Sector 4
C29: Illus C4.7

30199 HANDLE, FOR A CASKET, COPPER ALLOY (GUNMETAL)
Loop handle, broken and bent out of shape. L: 122mm
Sector 4
C104: Illus C4.14

30201 BUCKLE, COPPER ALLOY
Oval (incomplete) frame with integral plate with three rivet holes. 43 by 12.5mm
Sector 1
C30: Illus C4.7

30202 MOUNT, COPPER ALLOY
Broken strap mount with rivet hole, engraved with chevrons. 37 by 12 by 0.62mm
Sector C1
C105: Illus C4.14

30203 MOUNT, COPPER ALLOY
Possibly the central bar from a buckle. L: 34mm
Sector 1
C31: Illus C4.7

30204 RIVET, COPPER ALLOY
14 by 13 by 9mm
Sector 3
C73: Illus C4.9

30206 IRON HOOP
From a large staved vessel. Recovered in 1993 from the loch adjacent to the 'trial' of the west-shore mine.
Not illustrated

30208 STRAP LOOP, COPPER ALLOY
Circular frame with external rivet. 20.5 by 18.5mm
Sector 1
C57: Illus C4.9

30209 STRAP-END MOUNT, COPPER ALLOY
Hinged loop from two-piece strap-end, with central hole. 21 by 10mm
Late 14th – early 15th century

Sector 4, near str X
C54: Illus C4.8

30210 clasp? copper alloy
L: 40mm; Th: 0.66mm
Sector 2
C46: Illus C4.8

30211 aglet (lace end), copper alloy
23 by 2mm
Sector 3
C82: Illus C4.11

30212 key, copper alloy
Casket key. 28.5 by 12.5mm
Sector 3
C115: Illus C4.15

30213 mount, copper alloy (gunmetal), with remains of a silver coating
Circular mount, pierced centrally, with quatrefoil design. Possibly the pommel cap from a knife. Diam: 12mm; Th: 2mm
Sector C1
C130: Illus C4.17

30214 buckle-plate, copper alloy
Rectangular with two rivets. 16.65 by 11.07mm; thickness of sheet metal, 0.25mm
Sector 2
C39: Illus C4.7

30215 lead shot
Diam: 15.5mm; Wt: 19.09g
Water's edge, Eilean Mór
Not illustrated

30216 lead shot
Diam: 15.24mm; Wt: 20.15g
Sector 1
Not illustrated

30217 lead shot
Diam: 14.47mm; Wt: 18.83g
Unprovenanced; probably sector 5
Not illustrated

30218 lead shot
With prominent casting seam and flattened patch, possibly from impact. Maximum Diam: 24mm; Wt: 56.46g
Unprovenanced; probably sector 5
L11: Illus C4.21

30219 sprue, lead
Diam: 13mm; Ht: 8mm
Sector 4, adjacent to str X
L32: not illustrated

30220 sprue, lead
Diam: 13mm; Ht: 9mm
Sector 4, adjacent to str X
L33: Illus C4.22

30221 lead shot
With flattened patch, possibly from impact. Diam: 14.84mm; Wt: 18.12g
Sector 5
Not illustrated

30223 lead shot
Diam: 15.32mm; Wt: 20.32g
Sector 3
Not illustrated

30224 lead shot
With textile impression. Diam: 9.71mm; Wt: 4.94g
Sector 3
L12: not illustrated

30225 lead shot
Diam: 6.39mm; Wt: 1.64g
Sector 3
Not illustrated

30226 rove, iron
Decorative pyramidal-shaped rove (broken). 16mm square by 7mm high
Sector 4
F159: Illus C5.18

30228 button, copper alloy
Dome-shaped button back with broken loop. Diam: 19.76mm
Sector C1
Not illustrated

30229 rivet, lead
Small rivet, circular shank, double-ended with rectangular heads. L: 20.5mm
Sector 2
L24: Illus C4.22

30230 mount, lead
Strap mount, broken and bent. L: 38.5mm
Sector 2
L18: Illus C4.21

30231 nail, lead
Small nail or rivet with circular shank. Surviving L: 27mm; head: 13.2 by 12.4mm
Sector 3
L25: Illus C4.22

30232 aglet, lead
31 by 6mm
Sector C2
L3: Illus C4.21

31003 rim sherd
Wheel-made pottery. White gritty ware, fabric 1.3
From the loch
P31: Illus C3.5

31016 dome-shaped mount, copper alloy, (traces of) gilding
Similar to SF 31031–35
[b1 a2] FN 98 Sector C1 excavation; 13th century
C89: Illus C4.12, C4.26

31017 mount, for dog collar? copper alloy (gunmetal)
Mount consisting of a swivel ring decorated with dragonesque heads, connected to an oval link, mounted with two strap-end mounts, each engraved with ring and dot motifs and with four dome-headed rivets for securing the collar ends. Only four of the rivet heads remain in situ. Swivel head: 22 by 25mm; link: 49 by 18mm; strap-end plates: 32 by 14mm
FN 98 Sector C1 excavation; 13th century
C87: Illus C4.12, C4.25

31018 mount, for dog collar? copper alloy (gunmetal)
Mount consisting of a swivel ring decorated with dragonesque heads, connected to an oval link, mounted with two strap-end mounts, each engraved with saltire designs with ring and dot motifs. Both terminal plates have mineralised cloth (?) trapped in them, the collar ends being secured by three rivets in each mount, their heads flush with the mount surface. Swivel head: 23 by 27mm; link: 47 by 19.5mm; strap-end plates: 29 by 15mm
[2 sf 2 A (052)] FN 98 Sector C1 excavation; 13th century
C88: Illus C4.12

31019 brooch, silver
Brooch, complete with pin, but damaged by being squeezed from its circular form to one more like an ear. Its hoop is formed of a coiled length of ribbed wire, decorated on its front with a continuous series of balls or baubles. 14 by 11mm
[25044] FN 98 Sector C1 excavation
S3: Illus C4.20

31020 mullion? sandstone
Broken grey-yellow sandstone carved block, possibly a window mullion. 260 by 240 by 170mm
From clearance work around the chapel in 1998. Now at Finlaggan Visitor Centre
R29: Illus C2.14

31021 sandstone
Fragment of a dressed opening or quoin with rounded corner, of light yellowish-brown sandstone, well sorted, fine to medium grained; mafics and mica very low or absent; no clasts. 110 by 50 by 100mm
From clearance work around the chapel in 1998
Not illustrated

31022 SANDSTONE
Fragment of dusky red sandstone, fine to medium, poorly sorted, iron rich; grains poorly cemented, sub-angular to sub-rounded; massive; no reaction to dilute hydrochlorite acid; no bedding; mafics and mica very low or absent; no clasts; quartz heavily iron stained. 76 by 62 by 50mm
As SF 31028
From clearance work around the chapel in 1998
Not illustrated

31023 SANDSTONE
Fragment of light reddish-brown sandstone, fine grained with rare medium grains. Traces of parallel bedding in units from 5 to 10mm thick; well cemented; mica and mafics very low or absent; no clasts. 159 by 115 by 150mm
From clearance work around the chapel in 1998; from north-east part of the chapel
Not illustrated

31024 SANDSTONE
Fragment of olive-coloured sandstone, poorly sorted, fine to medium coarse grained; very friable; very strong reaction to dilute hydrochlorite acid; mafics and mica very low or absent; no clasts. 60 by 55 by 40mm
From clearance work around the chapel in 1998
Not illustrated

31025 SANDSTONE
Fragment of light reddish-brown sandstone, fine grained, gritty, well cemented; grains sub-rounded; mafics and mica very low or absent; not fissile and of massive appearance; no clasts. 109 by 103 by 42mm
From clearance work around the chapel in 1998
Not illustrated

31026 SANDSTONE PAVING SLAB?
Pink sandstone corner of a slab, medium coarse grained; quartz grains sub-rounded; gritty to touch but quite well cemented; no obvious bedding; mafics and mica very low or absent; no clasts; slight reaction to dilute hydrochlorite acid. 80 by 83mm; Th: 42mm
From clearance work around the chapel in 1998
R23: not illustrated

31027 SANDSTONE
Fragment of light reddish-brown sandstone, fine to medium grained; well cemented in a very fine matrix; no obvious bedding; mafics and mica very low or absent; no clasts; moderate reaction to dilute hydrochlorite acid. 142 by 144 by 70mm
From clearance work around the chapel in 1998
Not illustrated

31028 SANDSTONE
Fragment of dusky red sandstone, fine to medium, poorly sorted, iron rich; grains poorly cemented, sub-angular to sub-rounded; massive; no reaction to dilute hydrochlorite acid; no bedding; mafics and mica very low or absent; no clasts; quartz heavily iron stained; one non-stained bleb 3mm in diameter. 61 by 59 by 49mm
As SF 31022
From clearance work around the chapel in 1998; from west interior of the chapel
Not illustrated

31029 SANDSTONE
Fragment of grey/pale olive sandstone, well sorted, fine to medium grained; massive; well cemented; mafics and mica very low or absent; no clasts. 103 by 98 by 55mm
From clearance work around the chapel in 1998
Not illustrated

31030 MOUNT, COPPER ALLOY
Circular dome-shaped mount, probably for a strap or girdle. Ht: 5.2mm; Diam: 14.2mm
[25040] FN 98
C74: Illus C4.9

31031–35 MOUNTS, FOR DOG COLLARS? COPPER ALLOY
Fifty-two dome-shaped mounts, possibly used decoratively on one or more dog collars. The heads are of sheet metal, formed on a mandrel with an overlap, and fitted internally with a long copper alloy pin. Several mounts still retain traces of gilding and are filled with lead to given them weight and solidity and hold the pins in place. Some pins still have small copper alloy circular washers. Typical dimensions are: Ht (of head): 5.1mm; Diam: 6.6mm; total length including pin 10.2mm
[25052] (51 mounts) FN 98 Sector C1 excavation
[25055] (1 mount) FN 98 Sector C1 excavation
See also 31016
C89: Illus C4.12, C4.26

31036 BUCKLE-PLATE, COPPER ALLOY
Broken buckle-plate with two pinholes flanked by larger rivet-holes; decorated with double lines of punched opposed triangles. 30 by 11 by 0.4mm
[25044] FN 98 Sector C1 excavation; 13th century
C83: Illus C4.11

31037–39 MOUNTS, FOR DOG COLLARS? COPPER ALLOY
Eighteen rectangular sheet-metal mounts, with traces of gilding, each embossed with two domes. They have been snipped from larger sheets of metal and do not have well-finished edges. The domes have been fitted with copper alloy pins which pierce and are secured at the crowns. The domes were originally also filled with lead. Some pins still have small rectangular copper alloy washers. Typical dimensions are: Ht (of plate): 2.9mm; Ht (including pins): 6mm; plate: 15.4 by 8.6mm
[25050] (3 mounts) FN 98 Sector C1 excavation
[25052] (15 mounts) FN 98 Sector C1 excavation
C90: Illus C4.12, C4.27

31040 COMB, BONE
Fragment of a double-sided composite comb with iron rivets. Two blocks had 6 teeth, one 10 teeth per side, now all reduced to stubs. 56 by 27mm
[Fn 98 1] FN 98 Sector C1 excavation
B7: Illus C6.1

31041 STRAP SLIDE, IRON
83 by 16 by 2.5mm
Sectors 2/3
F22: Illus C5.3

31042 ROVES, IRON
Strip of three unused roves. 72 by 24mm
Sectors 2/3
F160: Illus C5.18

31044 HILT OF WEAPON OR TOOL, WOOD (ALDER?)
Broken, pierced for whittle tang.
Surviving L: 118mm
[057 B1] FN 98 Sector C1 excavation
W33: Illus C6.4

35157 RING, COPPER ALLOY (BRONZE)
Finger (?) ring. D-shaped cross section. Diam: 23mm; Ht: 3.5mm
Sector C1/C2
C7: Illus C4.5

PART II

Environmental reports

Limited excavation inside the chapel on Eilean Mór and in the adjacent burial ground led to the recovery of human skeletal remains ranging in date from early historic to post-medieval times. Rich midden deposits were sampled in trenches 10 and 25. The former, which accumulated in the ruins of the great hall on Eilean Mór, was rich in limpets and other shells, along with animal bones. The latter, consisting of food and other debris thrown in the loch adjacent to Eilean na Comhairle in the earlier medieval period, included not just mammal bones but also bird and fish bones, seeds and nuts, indicative of high-status dining. Wood and charcoal surveyed here probably largely relates to construction activity. Wooden artefacts are dealt with in Chapter C6.

CHAPTER C8

Human bones

KATH MCSWEENEY

Trench 1

Methods

The bone was in a very dirty condition and could not be cleaned by dry brushing. Most was washed in lukewarm tap water. A few fragments, too friable to stand up to washing, were simply brushed. The skull of the main skeleton in 1020A, which was found to be entirely encased in solidified mud and had started to collapse, had to be entirely dismantled and each fragment washed separately. Similar treatment was given to the skull from the cist, which was also in a state of collapse.

In view of the intention to rebury the human remains and because of constraints of time, full reconstruction was not attempted but was restricted to those bones with very obvious joins, or where it was essential for interpretation. No preservative was used.

Estimations of age were based on epiphyseal fusion, dental attrition rates (Brothwell 1981), tooth development (van Beek 1983), mineralisation of costal cartilages (McCormick 1980) and pubic symphyseal changes (Todd 1920). Calculations of stature were obtained using the formulae recommended by Trotter and Gleser (1952).

Grave 1008

The remains of one, almost complete, individual were easily separable from fragments of at least three other incomplete skeletons. A group of disarticulated bone, reported to have been stacked over the feet of the complete body, probably largely accounts for the three additional incomplete skeletons. However, other isolated bones, bagged with the various anatomical elements of the main body, may have been scattered throughout the grave.

Main skeleton [1020A]

The skull was encased in a solid block of hardened mud and had to be completely dismantled. Unfortunately, despite most of the skull fragments being present, poor preservation meant that full reconstruction was not possible.

Dentition was full with the exception of one tooth lost post-mortem and three teeth lost ante-mortem.

All 24 vertebrae and most of the rib cage had survived, although in a very fragmentary state. Five cervical vertebrae were found to be complete and still in articulation with the skull, encased in the same block of hardened mud. Because of the very obvious pathological lesions on many of the thoracic vertebrae and rib fragments, great care was taken to reconstruct these as fully as possible. Fragments of sacrum were identified, but preservation was not good and reconstruction not possible. Both clavicles were present and almost complete. Right and left scapulae were in a very fragmentary condition. Four fragments of sternum were also identified.

Of the upper limbs, both humeri were rebuilt and were virtually complete, although neither of the forearms was intact. Preservation of the hands was very good, apart from some missing phalanges.

The lower body was well preserved. Most of the pelvic bones had survived, and the femora, tibiae and patellae were virtually complete, although there was some damage to the fibulae. Many of the foot bones had survived, although only 10 of a possible 26 phalanges could be accounted for.

Age: Epiphyseal fusion indicated that this individual had attained an age in excess of 25 years by the time of death. Dental attrition scored a rate of 25–35 years, although was of a degree that suggested the higher end of this range was the more likely. However, mineralisation of the costal cartilages and surface changes to the pubic symphysis both suggest an age of 35–40, and this is probably more accurate.

Sex: Several indicators point to male sex. The most diagnostic of these was a markedly square chin, pelvic shape, marked brow ridges, rounded eye orbits and elongated mastoid processes. While there is little doubt that this person is male, some female features were noted, particularly in the lower limbs. It is not unusual to find a mixture of sexual characteristics in the same individual, however, and in this case the evidence for male sex is by far the stronger.

Stature: Estimations of stature varied according to which bone was used. The humerus gave a height of 5ft 6in, the femur 5ft 6in, the tibia 5ft 3½in, and the femur and tibia together 5ft 3½ins. Stature derived from the humerus is unreliable and should be disregarded if estimations from other long bones can be obtained. The most accurate calculation will be that based on the combined lengths of the femur and tibia – 5ft 3½in.

Pathology: Enamel hypoplasia in the form of linear depressions on the crown was detected on 16 teeth. These defects in the enamel are caused by disturbances during growth as a result of periods of illness, vitamin deficiency or malnutrition during childhood. At least seven such periods were identified – at approximately 2, 3, 4, 5, 6, 9 and 12–13 years of age. In view of this frequency and regularity, it is very tempting to conclude that seasonal malnutrition was the cause.

A moderate degree of calculus (tartar) and periodontitis (infection of the alveolar bone surrounding the teeth) suggest that dental hygiene was poor. Horizontal bone loss with pitting of the alveolar surface was evident in both the maxilla and mandible.

Three teeth were missing at the time of death. The upper-left third molar had very shallow root sockets, indicating that remodelling of the alveolar bone was not complete and that the tooth had been lost only shortly before death. The alveolar bone at the site of the lower left second and third molars displayed no trace of sockets, and these teeth had either been lost sometime during life and remodelling of the sockets had taken place, or they had never erupted. While impaction of the third molar is a fairly common occurrence, it would be more unusual for both teeth to be retained in the jaw, and it is reasonable to assume that at least the second molar and possibly also the third had been lost during life.

Dental attrition was noticeably heavier on the right side. The cause of this is not clear, but it is doubtful whether the missing teeth would have had such an effect.

Advanced osteoarthritis of the costovertebral joints (that part of the back where the ribs articulate with the spine) was present. It occurred bilaterally, affected most of the thoracic spine and ribs, and was most severe in the lower part of the area where eburnation had occurred. Osteoarthritis had also affected the intervertebral joints of the lower cervical and thoracic spine, although to a lesser degree than in the costovertebral joints. Arthritic change had not affected the lumbar region, nor was there any evidence for osteophytosis, the bony lipping around the vertebral bodies, which can occur normally by middle age. It is very likely that this individual would have suffered pain on moving from the arthritis in the costovertebral joints, and on bending and possibly also walking from the degeneration of the intervertebral joints.

Morphological variation: Several wormian bones (extra bones in the sutures of the skull) were observed in the lambdoid suture. These are said to occur in about 50% of individuals.

There was evidence of distal rotation of both pairs of upper lateral incisors and canines,

resulting in heavy wear down the distal edges of the teeth.

Disarticulated bone with 1020A

Although only represented by a few bones each, the presence of at least three individuals was detected in addition to the main skeleton.

Only one fragment of skull, five teeth, three fragments of vertebrae, an incomplete scapula, fragments of humerus, radius, femur, a few hand and foot bones, and a number of unidentifiable fragments were present. Three fragments of animal long bone and an animal incisor were also identified.

Information on ageing, sexing and the minimum number of individuals present is as follows:

1. Skull: one fragment only, one individual.
2. Teeth: five teeth, probably from one individual, aged 17–25.
3. Vertebrae: two axis vertebrae and one immature body of lumbar vertebra were from at least two, or possibly three, individuals. Relative sizes of the axis vertebrae suggest one male and one female.
4. Scapula: one fragment; one individual.
5. Humerus: one fragment, male, aged over 19. One immature shaft, 10 years?
6. Radius: two fragments, possibly from the same individual, aged over 19.
7. Femur: three fragments, possibly from the same individual, female, aged over 18.
8. Hand bones: fragments only, possibly from the main body.
9. Foot bones: one fragment, one individual.

Age, sex and minimum number: At least three individuals were present in addition to the main burial in 1020A. These were one male aged over 19, one female aged over 18, and one child aged about 10 (?).

Pathology: There was a small carious lesion in the fissure between the two main cusps on the buccal side of the upper-right first molar.

Enamel hypoplasia was present on the upper-right first premolar. The damage occurred around five years of age.

Periodontitis had affected the alveolar bone surrounding the upper-right canine and neighbouring upper-right first premolar.

Group of disarticulated human bones [1020B]

This group was stacked over the feet of the main skeleton [1020A] and was assumed by the excavators to relate to earlier burials disturbed when grave 1008 was dug. It consisted of a few fragments from several individuals. No complete bones were present.

The following fragments were identified:

1. Skull: 56 fragments from at least two individuals; one male, the other probably female.
2. Teeth: 17 teeth, from at least five individuals, aged under 7, around 14, 17–25, 25–35 and 35–45.
3. Vertebrae: 5 incomplete vertebrae, possibly from the same individual, aged over 25.
4. Ribs: *23* fragments, no indication of the number of individuals present.
5. Radii: 3 fragments, possibly from one individual, aged around 19.
6. Pelvis: 3 fragments, possibly from one individual, a female aged under 23.
7. Femora: 2 fragments.
8. Hand/foot: 16 fragments, from at least two individuals, one aged around 16 and one aged over 16.

Age, sex and minimum number: The bone from this area came from at least five individuals, three adults, aged 17–25, 25–35 and 35–45, and two children, under 7 and around 14. At least one of the adults was a female, under 23 years, and at least one was male.

Pathology: Enamel hypoplasia was present on two matching upper premolars where damage had occurred in two distinct phases – at 6 years of age and at 5 years of age. On one lower premolar, the disruption to enamel development had occurred at 6 years of age. Two other teeth, an upper premolar and an upper lateral incisor, had slight horizontal enamel defects, which may also be hypoplastic.

Nine of the teeth (including the molar from the 14-year-old) had moderate to severe deposits of calculus, indicating that dental hygiene was poor. These calculus deposits may have prevented the detection of further evidence of enamel hypoplasia.

Grave 1050

Grave 1050 represents the remains of a lintel grave or long cist. The human remains from this cist were from one individual. Only the upper part of the body, the skull, shoulder, thorax, spine and upper limbs, remained. The anatomical findings are consistent with the archaeologists' report that the bottom portion of both cist and skeleton had been eroded out of the cliff.

The skull was the best-preserved anatomical area and was, with the exception of some of the smaller internal bones, fully reconstructed. There was some damage to the right side, caused by gnawing, and part of the left face was missing. Otherwise, the skull was complete.

The mandible body was intact. All teeth had been present at the time of death, although seven had been lost post-mortem.

Preservation of the thoracic area was variable. Only the upper two cervical vertebrae were complete. Fragments of eight thoracic, one lumbar and one other vertebra were identified, the remaining 13 vertebrae being missing. Both clavicles were present and mostly complete; both scapulae were also present but were only partly complete. The ribs were in a very fragmentary condition and the sternum was absent.

The condition of the upper limbs was also variable. The left humerus was in better condition than the right. Conversely, the lower left forearm was missing, while fragments of the right remained. A few right-hand bones were identified.

No fragments of bone from the lower body below the lumbar spine were identified.

Age: Slight dental attrition suggests an age range of 17–25 years. However, the degree of epiphyseal fusion in the ribs, vertebrae and humeri implies an age in excess of 24. The rate of attrition can vary depending on diet, and this individual was probably about 25 years of age at death.

Sex: Numerous indicators, including skull shape, pointed chin and the dimensions of the humerus, point to this individual being female.

Stature: Only the left humerus could be used to calculate stature and produced a probable height of 5ft 2in. However, as the humerus is less reliable for calculating stature than the lower limb bones, and is only used here because of the lack of other evidence, this estimate should be used with caution.

Pathology: Pitting and irregular bony growth producing a granular-like effect was visible over much of the outer layer of bone on the skull and mandible. This inflammation of the outer layer of bone, known as periostitis, had affected a large area of the skull and was present on the frontal, both parietals, on the occipital near the lambdoid suture and foramen magnum, on both temporals around the external auditory meatus, which appeared enlarged, and on the mastoid processes and on much of the mandible. It was particularly noticeable around the chin area.

In addition to infection on the outer surface of bone, the cranium appeared to be very dense and thicker than normal, particularly over the frontal, parietals and occipital. A general thickness of 8.5mm was reached over all of these areas. This compares with a mean of 5.2mm for 21-year-old females taken at a point midway between the nasion and bregma in a study conducted by Roche (1953). Examination of these areas of skull in section prior to reconstruction did not indicate that the extra thickness had been caused by the growth of additional layers of bone over the original surface or by irregular formation of the interior bone.

These pathological changes may be linked but, if so, the cause is not clear. Osteoarthritis was present in the costovertebral joints (area of articulation between the ribs and spine). Evidence for this was found in four left and one right rib and in one thoracic vertebra. Pathological change took the form of a slight to medium degree of pitting in the centre of the articulation with lipping around it. The changes were less advanced than those found in the main skeleton [1020A] in grave 1008.

Context	Phasing	Interpretation	Description of identified bones
14000	Present day	Topsoil	207 disarticulated, mostly fragments
14001	Present day	Washout from chapel walls	646 disarticulated, mostly fragments
14002	Victorian clearance	19th c redeposited grave fill	575 disarticulated, mostly fragments
14004	Pre-chapel	Redeposited human remains	1,060 disarticulated, mostly fragments
14005	16th century?	Last burial horizon	68 disarticulated?, mostly fragmentary
14006	Pre-chapel	Grave fill	20 disarticulated, mostly complete
14007	16th century burial	Grave fill	540 disarticulated, mostly fragments
17002	Modern, postmedieval	Old ground surface	48 disarticulated, mostly fragments
17003	Modern, postmedieval	Washout from chapel ruins	355 disarticulated, mostly fragments
17004	Chapel construction	Prechapel surface	485 disarticulated, mostly fragments
17005	Chapel construction	Fill of chapel foundation	48 disarticulated, mostly fragments
17019	Chapel construction	Foundation for chapel wall	7 disarticulated, mostly fragments
17020	Medieval? grave	Grave cut 17021	399 complete and fragments of bones from articulated infant skeleton
17023	Medieval	Turf bank	4 long bone fragments
17026	Prechapel	Fill of charnel pit 17025	86 disarticulated?, mostly fragments
17031	Medieval? grave	Fill of grave 17030	30 disarticulated?, mostly fragments
17037	Prechapel	In charnel pit 17025	21 disarticulated, mostly fragments

Table C8.1
Identified bones by context

Additional observations: Gnawing, probably by a small rodent, had caused surface damage to several bones. The shaft of the left humerus, right ulna, right scapula, right inferior surface of the mandible and right side of the skull were all affected. Damage was extensive on the articular head of the mandible and the right mastoid process, which had both been completely removed.

Several bones had blackened surfaces. The sternal half of the left clavicle, both scapulae, three fragments of vertebrae, the shaft and neck of the right humerus, the shaft of the right radius and the lower shaft of the right ulna were all affected. The blackening did not appear to have been caused by burning and may have been caused by post-mortem depositional changes.

Note

There is a full description of human bone fragments from trench 1, plus some miscellaneous possible human fragments from trenches 2 and 3, in the site archive.

Trenches 14 and 17

Introduction

The human remains discussed here were excavated during the 1993 season at Finlaggan and came from two trenches – trench 14, within the structure of the chapel, and trench 17, outside the east wall of the chapel. Bones from a total of 17 contexts were examined. The contexts producing human remains are detailed in Table C8.1. Excavation notes and plans suggest that, with the exception of the articulated skeleton of an infant (Context 17020), all of the remains were disarticulated. Skeletal recording forms included with excavation notes do provide information on articulated burials, which were left in situ .

Methods

Most of the remains had been cleaned prior to delivery. Those that had not were washed in simple tap water and lightly brushed.

Each fragment was examined and grouped according to anatomical area. Where, because of the size of the fragment or condition of the bone, this could not be established, fragments were classified as 'unidentified' or, in the case of long-bone shaft fragments where the specific arm or leg bone could not be distinguished, as 'long bone'.

Unless otherwise indicated, general methods of ageing and sexing used are those outlined in Bass (1987), Brothwell (1981) and, for dentition, van Beek (1983).

Condition of the remains

The human remains were fairly well preserved, although largely fragmentary, disarticulated and intermingled. The only full, articulated skeleton examined was that of an infant [17020] buried outside the east wall of the chapel. Those remains from the upper contexts were noticeably more fragmentary. A few matching bones were identified.

Description of the remains

A full inventory of the identified fragments of bone is lodged in the site archive.

Minimum number of adults

In the near absence of articulated skeletons, the following assessment of numbers of individuals has been based on a count of the skeletal elements present. The count varies depending on which bone is used. This is to be expected, as individual bones have differing survival rates, and many survive in such a fragmentary state that they cannot be used.

Table C8.2 indicates the number of adults present in trenches 14 and 17, according to a selection of the best bone counts. The final column represents the best count from each context, using all bones and taking into account age, sex and relative size. These figures, however, do not take into consideration the possible spread of bones from the same skeleton over more than one context.

The highest count, using a single bone, is 30 (the total for both trenches), obtained from mandible fragments. This is not dissimilar to the counts obtained from humerus and femur. Thirty, therefore, represents the absolute minimum number of adults present. The overall figure of 52 was obtained by taking into account age, sex and relative size of all bones within each context and adding the results

Context	Petrous	Mandible	Atlas	Humerus	Ulna	Femur	All
14000	4	3	0	1	2	1	4
14001	1	4	2	3	4	3	6
14002	1	3	3	2	2	2	8
14004	4	6	4	7	7	7	7
14005	1	0	1	0	0	1	2
14006	0	0	0	0	0	0	1
14007	2	4	1	3	2	1	4
Subtotal	13	20	11	16	19	15	32
17002	0	0	0	0	0	1	2
17003	6	4	0	2	2	4	7
17004	2	5	0	5	3	5	5
17005	1	0	1	2	0	0	2
17019	0	0	0	0	0	0	0
17020	0	0	0	0	0	0	0
17023	0	0	0	0	0	0	1
17026	0	1	0	1	1	1	1
17031	0	0	0	1	1	1	1
17037	0	0	0	0	0	0	1
Subtotal	9	10	1	11	7	12	20
Total	22	30	12	27	26	27	52

Table C8.2
Minimum number of adults

Context	Teeth	Mandible	Atlas	Humerus	Ulna	Femur	All
14000	0	0	0	0	0	0	1
14001	3	2	1	0	0	1	3
14002	6	1	2	3	0	2	6
14004	2	4	2	2	2	2	9
14005	1	0	0	1	0	0	5
14006	1	1	0	0	0	0	1
14007	1	1	0	2	1	4	6
Subtotal	14	9	5	8	3	9	31
17002	1	0	0	0	0	1	1
17003	0	0	0	1	0	2	2
17004	2	0	0	2	1	1	3
17005	1	0	0	1	0	1	2
17019	0	0	0	0	0	0	1
17020	1	1	1	1	1	1	1
17023	0	0	0	0	0	0	0
17026	0	0	0	4	1	3	4
17031	0	0	0	0	0	0	0
17037	0	0	0	0	0	0	1
Subtotal	5	1	1	9	3	9	15
Total	19	10	6	17	6	18	46

Table C8.3
Minimum number of children

together. If bones from the same skeleton were distributed over more than one context, this figure could be an overestimate. Information from the excavation notes suggests, however, that at least some of the contexts relate to clearly defined phases, and, taking this factor into account and the erosion and fragmentation that had clearly occurred, the higher figure is more likely to be a truer reflection of the number of adults present than is indicated by mandibles alone.

Minimum number of children

Relative sizes of bones from children of different ages can make the assessment of numbers more straightforward than that of adults. On the other hand, as immature bones are more fragile and do not survive as well, the preservation of skeletal elements and the identification of fragmentary remains can be poorer. These factors probably explain the large discrepancy between the highest count obtained from one skeletal element (19 from the teeth) and that considering age and size differences in each context (46) as shown in Table C8.3. It is likely that the higher figure is the more accurate.

The number of individuals recovered from the Finlaggan 1993 excavations was, therefore, at least 30 adults and 19 children, but is more likely to have been at least as many as 52 adults and 49 children.

Age at death: children

The assessment of minimum numbers indicated a high proportion of children among the remains from trenches 14 and 17. Ageing of immature remains is based on skeletal development, that is, the length of long bones or the degree of fusion of parts of bones, and tooth development. With a complete skeleton, consideration would be taken of all factors to arrive at an estimated age at death (based on comparisons with modern children). In the absence of articulated skeletons, the age of each individual bone has to be assessed. Different bones complete their development at different ages. For example, the epiphyses of hand and foot bones fuse at around 15 years, and an unfused bone may only indicate an age of 'under 15', while a partly fused vertebra would suggest an age of '3–7 years'. It can be difficult to correlate such differing age ranges. Counts of bones which could be narrowed down to specific age groups produced the results shown in Table C8.4. (It should be noted that the above information is based on individual bones or teeth and does not directly relate to individuals. It is also stressed that only those bones where a specific age range could be attributed have been included. Very wide age ranges such as 'child' or 'under 15' have not been used.)

	Dental evidence	Bone development	All
Foetal		1	1
Foetal/neonate		18	18
Infant (up to 2 years)		12	12
2 to 5 years	16	5	21
5 to 14	18	22	30
Adolescent (14 to 19)	9	4	13

Table C8.4
Age at death – children

In one case a bone was from a seven-month-old foetus, in 18 cases it was possible to estimate age as foetal or neonate, and 12 were from infants up to two years (this includes the baby skeleton 17020, which was about six months old). There were only five instances where bone development indicated an age in the two- to five-year category. However, there was a high proportion of teeth, which can be more accurately aged, in this range. A large number of bones and teeth came from children aged 5 to 14, and nine teeth and four bones were from adolescents. The absence of dental evidence for the earlier years is probably due to the fragility of very immature developing teeth. While it is not possible to specify how many individuals from each range were present, the above analysis gives an impression of relative age of death. It can be seen that significant numbers died at birth, in infancy and throughout childhood.

Age at death: adults

Ageing adult skeletons is more difficult than those of children. Once bones are fully developed, it is often only possible to say that an individual is 'adult'. Various methods of ageing can be utilised with varying degrees of accuracy, but these usually depend on good preservation of bone and full, articulated skeletons, and in the case of most of the Finlaggan remains they cannot be used. The degree of suture closure on the skull and the degeneration on the joints and spine, while giving a general impression of age, vary considerably between individuals, and for that reason are not accurate.

A useful, if often, misused, method of ageing is to assess the degree of wear on teeth. Attrition advances with age, but the rate at which the occlusal surfaces of teeth wear down is largely related to the nature of the diet. For example, modern diets tend to be much softer than those of previous generations, and attrition in modern populations is much less marked. Brothwell (1981: 72) devised a system of assessing age based on the degree of wear on molars. However, he based this on a study of British Neolithic skeletons, and his classifications are not therefore directly applicable to populations from other periods or different geographical regions. Ideally the degree of attrition in one individual should be considered along with other age markers in the same skeleton. The degree of attrition can then be compared with other individuals in the same population to arrive at standards of tooth wear for each age range. This is not possible with disarticulated bones.

In the near absence of articulated skeletons, it has been necessary to adopt Brothwell's method with the 'health warning' that it may not be directly applicable to the Finlaggan population. The results, shown in Table C8.5, do, however, provide an impression of *comparative* age differences.

The degree of attrition of permanent molars, both loose and in situ, has been divided into categories of slight, slight to moderate, moderate and advanced, and, under Brothwell's classification, would be assigned the age ranges of 17–25, 25–35, 35–45 and 45+, respectively.

Overall, 41% had slight wear (Brothwell's age range 17–25), 28% had slight to moderate wear (Brothwell's 25–35 classification), 24% had moderate wear (Brothwell's 35–45) and 7% had advanced wear (Brothwell's 45+). This suggests that the majority of adults died before they reached middle age, relatively few lived into middle age and very few beyond, although, as discussed above, if a very soft diet was consumed, true age at death may be greater than indicated.

Degree of attrition (age)	Loose teeth	Mandibles/maxillae	All
Slight (17–25)	20 (40%)	13 (42%)	33 (41%)
Slight to moderate (25–35)	14 (28%)	9 (29%)	23 (28%)
Moderate (35–45)	11 (22%)	8 (26%)	19 (24%)
Advanced (45+)	5 (10%)	1 (3%)	6 (7%)

Table C8.5
Tooth wear

The figures for loose teeth and those in situ are very similar, indicating that the results for loose teeth were not biased towards younger adults because of the fact that older individuals are more likely to have lost teeth during life. There was, in fact, very little evidence for tooth loss during life, with only two definite and two possible instances being noted. In addition, the prevalence of caries and periodontal disease was also very low. The low incidence of these conditions, all of which increase in frequency with advancing age, tends to confirm that, in general, adults did not live into advanced adulthood. (A fairly high degree of spinal degeneration and other forms of arthritic change was identified, and, while these conditions do progress with age, and their presence would often be indicative of advanced adulthood, early development can be brought on by particular lifestyles – see section on pathology below.)

Sex

Tables C8.6a and b list those bones where an indication of the sex of the individual could be ascertained.

The sexing of individual skeletons is by no means an exact science. The bones of males and females can have both male and female characteristics, or may have dimensions which lie between the range for modern males and females. Ideally, the sex of an individual would be assessed by applying various criteria to the entire skeleton, and the evaluation of sex based on a single bone is often only tentative.

The bones listed in the tables are the most sexually diagnostic and have been assigned probable or likely sex when compared to the dimensions of modern populations. Individual bones whose proportions are sexually indeterminate have not been included. The results do not directly relate to numbers of individuals, but the collated information can be used to give an impression of the ratio of males to females.

The tables indicate that, from trenches 14 and 17, 10 bones were probably from females, 26 were very likely to be from females, 16 were from individuals who were probably male and 32 were from persons who were almost definitely male, that is, 36 (43%) who were female or probably female and 48 (57%) who were male or probably male. These findings are based on mature bones, which become fully developed at ages of between 16 and 25, depending on the individual bone; no attempt was made to sex immature bones. The higher proportion of males to females may be

Context	Bone	Female?	Female	Male?	Male
14001	R mastoid	1			
14001	L mastoid				1
14001	R femur				1
14001	L femur	1	2		
14002	R mastoid			1	
14002	R ilium	1			
14002	L pubis		1		
14002	R femur				2
14002	L femur				1
14002	Femur			1	
14004	Skull			1	2
14004	Frontal			2	
14004	Occipital	1			
14004	R mastoid		1		1
14004	L mastoid		1		
14004	Mandible			1	
14004	R mandible		1		
14004	Sacrum				3
14004	R scapula				1
14004	R humerus		1		
14004	L humerus		3		2
14004	R pelvis	1	3		
14004	L pelvis		2		
14004	R femur		2		2
14004	L femur	1	2		1
14007	Frontal			1	
14007	R mastoid			1	
14007	R clavicle				1
14007	L humerus				2
14007	L femur				1
Total		6	19	8	21

Table C8.6a
Sex (trench 14)

Context	Bone	Female?	Female	Male?	Male
17003	R humerus		1		
17003	Humerus head				1
17003	R femur	1			1
17003	L femur			1	
17004	Frontal				1
17004	Occipital				1
17004	L temporal				1
17004	R temporal		1		
17004	Mandible	1			
17004	R mandible			1	
17004	L scapula				1
17004	R humerus			1	
17004	L humerus				3
17004	R ulna	1		1	
17004	R femur		1		
17004	L femur	1			
17004	Femur		2		
17004	L fibula		1	2	
17005	L humerus		1		1
17026	L pelvis				1
17026	R pelvis			1	
17031	L mastoid			1	
Total		4	7	8	11

Table C8.6b
Sex (trench 17)

indicative of a younger age at death of females, before they were skeletally mature. A high number of foetal or neonate bones were present, and one possible cause of early death may have been childbirth. It is also possible that female bones were not identified as such because their dimensions fell within the sexually indeterminate range.

Stature

Various bones can be used in the reconstruction of height with varying degrees of accuracy. The most accurate results are obtained using long bones of the limbs, with those of the legs providing the greatest degree of accuracy. Ideally, all six long bones should be used, although with disarticulated bones, as in the present circumstances, this is not usually possible. Only complete bones should be measured, and, as different equations are used, the sex of the individual should be known.

Table C8.7 lists assessments of height, in inches, obtained from all of the complete adult long bones from trenches 14 and 17. Where the sex of the bone is not known, alternative heights are shown for males and females. Each calculation carries a standard deviation, and this is indicated in the final column.

Of the bones in the table, in only three cases was the sex of the individual known with reasonable certainty. These were all from females. Another was probably male, a further four were probably female, and the remainder either had dimensions which were intermediate between the normal ranges for modern males and females or were sexually undiagnostic.

The heights obtained from the bones of almost certain female sex were 62 (± 1.75), 59 (±1.46) and 58 (±1.46) inches, and those of probable female sex, 59 (±1.75), 63 (±1.46), 60 (±1.46) and 60 (±1.46) inches. The height of the probable male was estimated at 65 (±1.60) inches, and three bones, a radius, an ulna and a humerus, of unknown sex all provided male heights of 67 inches (±1.70). Female heights for these bones are either the same or very similar, and greater than other heights obtained for females, and it is likely that these bones were from males. These latter measurements also represent the highest statures recorded. Five tibiae of unknown sex provided heights of between 59 inches and 63 inches, depending on female or male sex, and could be either.

Feature no.	Bone	Sex	Height (inches)	Standard deviation
14004	Tibia	?	62 M, 60 F	1.33 M, 1.44 F
14004	Tibia	?	63 M, 61 F	1.33 M, 1.44 F
14004	Tibia	?	63 M, 61 F	1.33 M, 1.44 F
14004	Tibia	?	63 M, 61 F	1.33 M, 1.44 F
14004	Tibia	?	61 M, 59 F	1.33 M, 1.44 F
14004	Humerus	M?	65	1.60 M
14004	Humerus	F	62	1.75 F
14004	Humerus	F?	59	1.75 F
14004	Humerus	?	63 M, 62 F	1.60 M, 1.75 F
14004	Femur	F?	63	1.46 F
14004	Femur	F	59	1.46 F
14004	Femur	F?	60	1.46 F
14004	Femur	F	58	1.46 F
14004	Femur	?	62 M, 60 F	1.29 M, 1.46 F
14004	Femur	F?	60	1.46 F
14004	Ulna	?	67 M, 67 F	1.70 M, 1.69 F
14004	Radius	?	59 M, 60 F	1.70 M, 1.67 F
17003	Radius	?	67 M, 67 F	1.70 M, 1.67 F
17004	Humerus	?	67 M, 66 F	1.60 M, 1.75 F

Table C8.7
Estimations of height

From the limited information available, therefore, a population of small stature is indicated, with males reaching 65 (±1.60) to 67 (±1.70) inches (an average of 66.5 inches) and females 58 (±1.46) to 62 (±1.75) inches (an average of 60 inches).

Pathology

A very high level of pathological lesions were noted, indicating that this was a population under a high degree of physiological stress. Because of the nature of the material, the full extent of disease in any individual could not be identified, and as a result much information is lost. The following discussion therefore can only be used to give an indication of the health of the population in general.

1. Dental disease

The most commonly identified dental lesion was hypoplasia. This does not provide evidence of disease *per se,* but is thought to be an indication of physiological stress, occurring through malnutrition or disease at the time the teeth were developing. The body reacts to such stress by ceasing normal development. This can lead to a permanently visible disruption of the tooth enamel, most commonly seen in linear form. By measuring the distance of these lines from the base of the crown, and comparing this with the average age of development, an indication of the age of the child when the disruption occurred can be reached. Such comparisons are based on modern populations and, as there is much variation in the rate of growth between individuals, can provide only an indication of true age. Hypoplasia can be caused by a range of congenital and infectious diseases and nutritional deficiencies, and it is not possible to identify the likely cause in any one individual. As some naturally occurring minor linear formations on enamel (perikymata) may be mistaken as hypoplastic lesions, only those most obvious lesions have been recorded. It should also be noted that hypoplastic lesions are more commonly detected on anterior teeth, and evidence can be lost through attrition or obscured by calculus.

Thirty-eight of 190 loose teeth (20%) and 14 of 45 fragments of mandibles or maxillae with teeth in situ (31%) showed evidence of hypoplasia. Many teeth displayed two or more lesions, indicating repeated disruptions. Periods of stress seem to have occurred at all stages of tooth development, rather than at a particular period of childhood.

The incidence of carious lesions is extremely low. Of 178 loose teeth (excluding deciduous and unerupted permanent teeth), nine had carious lesions (0.05%), and, of the 41 mandible and maxilla fragments with erupted permanent teeth present, seven had one cavity (0.17%). Dorothy Lunt, in her study of dental caries in Scottish prehistoric and medieval populations (1974), found that prevalence in the medieval period was 6.0%. Most of the carious lesions of the Finlaggan individuals were small and, as, also found by Lunt, were situated at the cemento-enamel junction, an indication of gingival recession. Lunt also found that the majority of individuals with carious lesions were over 30, and comments that this type of caries was a disease of middle and later life. The very low rate of caries among the Finlaggan remains is probably a consequence of (and helps to confirm) the young age of death.

Very few individuals had lost teeth before death. Of the 64 mandible and maxilla fragments, only two individuals (0.3%), an adult who had lost at least the left upper first two molars and an adult, aged 25–35, who had lost an upper-left lateral incisor, had missing teeth. In addition, an adult, aged 35–45, who was probably male (Context 14004, skull 2), and a male, aged 17–25 (grave 14.1, skull 34), had upper third molars missing. However, these teeth may have been congenitally absent, a relatively common occurrence with the third molar, or, especially in the case of the young male, had still to erupt.

Only two, or possibly three, individuals suffered from dental abscesses. The same individuals who had lost teeth during life also suffered from dental abscesses. The adult with two missing molars had abscesses at the roots of both premolars, which were missing post-mortem. General pitting of the surrounding bone suggests that the infection had spread to the surrounding tissues. The other had an abscess chamber at the root of the left first molar, also missing post-mortem. Another individual, who had a carious lesion on the right second molar and severe attrition, had a possible root abscess at the right first molar, also missing post-mortem. Because the teeth at the site of the abscesses had been lost after death, it is difficult to assess the cause of the abscesses. However, as all individuals also had caries, it is probable that these abscesses were the result of carious lesions penetrating the pulp chambers, allowing bacteria to spread down the tooth root and a body of pus to collect. In the third individual, advanced attrition may also have been related to the infection.

There was very little evidence for periodontal disease, an infection of the alveolar bones which hold the teeth in place. Although there had been a moderate degree of alveolar resorption in a few individuals, it did not appear to be associated with infection of the alveolar bone, and is therefore more likely to be due to natural resorption associated with ageing rather than periodontal disease. The low incidence of alveolar resorption is probably a consequence of the young age at death.

Dental calculus is not pathological in origin but is a natural development of the mineralisation of plaque, commonly found in human remains from archaeological contexts. Most adult teeth at Finlaggan had adhering deposits of calculus, although in the majority of cases this was slight or, occasionally, moderate in degree. The lack of heavy deposits of calculus is probably due to the young age of the population.

2. Trauma

The absence of articulated skeletons means that the full extent of trauma on an individual cannot be assessed, and only the effects on individual bones can be considered. For example, the tibial fracture mentioned below may have been associated with a fracture of the fibula, injury to the knee or ankle joint, or, indeed, injuries to other parts of the skeleton occurring at the same time. In addition, fractures often lead to secondary arthritis of an associated joint, and it is possible that some of the examples of arthritis found in this population may be due to traumatic damage, rather than related to occupation or the normal process of ageing.

Only two clear examples of bone fracture were identified. One was a fracture at the lower third of a left tibia belonging to an adult from Context 14007. The two broken ends had become displaced and mal-union had occurred. The bone had healed with some distortion and there was a loss of length of approximately 20mm. Such displacement indicates that the fibula would also have been broken. However, no associated fracture of a fibula was identified. An injury such as this would probably have been caused by a rotational force. This individual clearly survived this trauma but would have walked with a permanent limp, and may have suffered long-term pain from secondary arthritis which would probably have developed in associated joints.

Evidence for the other fracture could be seen on an incomplete left tibia belonging to a child from Context 14007. This had been broken (post-mortem) at the site of the callous formation (new bone which forms over the site of a fracture to allow healing to take place) and the success of the union cannot be established. There was also evidence of bone infection, indicating that an open fracture had occurred, enabling bacteria to enter the wound. The presence of callous formation indicates that healing had commenced but whether this injury was related to the cause of death is uncertain.

Another possible fracture of a tibia and fibula was noted on an adult from Context 14002. A right tibia with its upper end missing had evidence of infection of the shaft and what appeared to be callous formation at the damaged end. A fibula shaft from the same area had very similar infection and may well belong with the tibia. If this was a fracture of the tibia and fibula, the evidence of infection indicates that the fracture was open.

There was evidence for ligamentous damage, probably caused through trauma, on two patellae and an adult fibula from Context 17004, and a left tibia from Context 17005.

An area of pitting in the ankle end of an adult right tibia from Context 14004 may demonstrate the development of osteochondritis dissecans, a disruption of the blood supply to a joint which often follows injury.

A cranium belonging to a male aged 17–25 (grave 14.1, skull 34) with three cut marks provides strong evidence for violence. The largest cut, 125mm long, was situated on the right side and towards the posterior of the cranium. It had penetrated both tables, dislodging a piece of bone. Another cut, 50mm long, on the left parietal, had not penetrated the skull wall but had displaced a flake of outer table. A third, fine cut mark, on the right anterior part of the skull and 27mm long, had only affected the external surface of the skull. Each of these injuries had been caused by an instrument with a sharp blade, and, as there was no evidence of sawing, had probably been inflicted by a single blow. Possible implements include sword, cleaver or axe. There was no evidence of healing at the site of the wounds and so the injuries must have been caused perimortem. It is quite likely that these were related to the cause of death. (It is also possible, if unlikely, that the damage had been inflicted soon after death.)

Excavation notes indicate that only the skull of this individual was excavated, and that the rest of the skeleton was left in situ. A musket ball was reported as having been found underneath the skull. However, the skull wounds have clearly been caused by a sharp instrument and not by a gunshot wound. If the musket ball was associated with this individual, it is possible that it had been lodged in the area of the face, which was missing, without penetrating the braincase, or in the post-cranial skeleton.

3. Congenital disease

One lower lumbar vertebra (probably a fifth), belonging to an adult, had a separated left neural arch, a condition known as spondylolysis. Spondylolysis is a bony defect of the posterior part of the vertebra, thought to be congenital in origin (Roberts and Manchester 1995). In itself it can be asymptomatic, but, as in this case, is often aggravated by trauma, or the stress of repeated lifting or bending, which can cause fracture of the weakened area. In this case the separation was unilateral, resulting in lipping and eburnation of the corresponding right facet joints and vertebral body, and skewing of the spine. There was also evidence for some forward dislocation of the vertebra, and intrusion into the spinal canal. This suggests the development of another condition, spondylolisthesis, often secondary to spondylolysis. An almost complete sacrum from the same context which had enlarged lumbar facets joints, with eburnation and lipping, was probably associated with the lumbar vertebra. This individual would most likely have suffered from back pain, stiffness and possibly also sciatica.

4. Joint disease

There were numerous examples of degeneration of the spine and arthritis of other joints. Osteophytosis, or lipping, of vertebral bodies, and arthritis of the apophyseal joints of the spine, was commonly found on the Finlaggan adults. Several instances of Schmorl's nodes were also noted. These lesions on vertebral body surfaces result from pressure on the intravertebral discs and can be associated with general degeneration of the spine or related to traumatic incidences. The joints between the vertebrae and ribs were also commonly affected by arthritic change. Osteophytosis in one individual from Context 14004 was so severe that two cervical vertebrae had become fused.

Degeneration of the spine is mechanical in origin and advances with age. Studies have shown that many individuals are affected by the third decade of life and most by the fifth (Roberts and Manchester 1995: 107). Such a marked degree, among what appears to be a generally young population, is surprising. However, it is known that heavy manual occupation can increase the age of onset and severity of spinal degeneration, and it is possible that its prevalence is reflective of an arduous lifestyle rather than advanced age.

There were several examples of arthritis of the large joints – shoulder, elbow, knee and ankle (although not of the hip) – and of the hand and foot joints. In some cases the joint lesions were severe. Like spinal degeneration, the development of arthritis may be mechanical in origin and related to age or lifestyle, or can also develop following traumatic injury.

5. Infectious disease

There were some isolated instances of periostitis, a non-specific inflammation of bone, on the shafts of long bones. In some cases these were associated with fractures and therefore probably the result of trauma, but in three examples there was no obvious traumatic injury to the affected bones. There may, however, have been injury to the soft tissues only, with subsequent infection setting in and spreading to the bone.

No other evidence of infectious disease was noted. Such diseases are frequently short-lived and, especially in the past, often fatal. Their

short duration generally means that bony changes do not have time to develop, and their presence would not be detected in skeletal remains.

6. Metabolic disease

There was some evidence for anaemia in the population. Several fragments of cranium from Context 14004 had pitting on the external surface (porotic hyperostosis), and ten fragments of orbit from Contexts 14004, 17003 and 17004 had pitting in the upper orbits (cribra orbitalia). Both of these types of lesions are thought to be related to anaemia occurring during childhood. Anaemia may develop as a result of a deficiency of iron in the diet, injury or disease (Roberts and Manchester 1995: 165–71). It is not possible to establish the origin of the anaemia in any one individual, but where several individuals within a population are affected, poor diet may be the most likely cause.

7. Neoplastic disease

An almost complete frontal with five matching fragments of parietal, all from Context 17003, had numerous destructive lesions, generally circular in form, which occasionally coalesced. The lesions varied in size from about 5 to about 12mm, although one area of several coalesced lesions in the centre of the frontal bone measured 28 by 15mm. Most of the lesions affected only the outer table and the cortex of the skull, although some were underlain by corresponding areas of pitting on the internal surface, suggesting that complete perforation was imminent. Areas of incipient destruction were marked by pitting and/or colour change. In addition to the lesions on the cranial wall, the left orbit surface, brow ridges, and petrous part and subarcuate fossa of the temporal bone were also affected. On X-ray the lesions were even more marked, and several new lesions, not visible externally, could be seen.

The most likely diagnosis is one of multiple myeloma, a malignant disease originating in plasma cells in bone marrow (Roberts and Manchester 1995: 190). The lesions can occur throughout the skeleton and the most commonly involved sites are the skull, vertebrae, ribs and pelvis. No evidence of lesions in vertebrae, ribs or pelvis were noted, although, as these were mostly in a fragmentary state, bony changes, if present, may have been missed. The skull may be the earliest area affected, and it is possible that lesions on these other bones had not developed by the time of death. This disease is said to be rare in individuals below 40 and most commonly affects people between the ages of 50 and 60. Unfortunately it was not possibly to assess the skeletal age of the fragments, although they appeared to be from an adult.

A differential diagnosis may be secondary cancer, although in the opinion of Dr Iain MacLeod, consultant radiologist at the Edinburgh Dental Hospital, who arranged for the X-rays and photographs to be taken, this is a classic case of multiple myeloma.

As only about 15 examples are known, this disease is relatively rare in the palaeopathological record (Roberts and Manchester 1995: 192). It is unfortunate that, in the light of this relative rarity, the skull, said to originate from washout from the chapel ruins, cannot be placed in a firmer archaeological setting. Radiocarbon dating is therefore recommended.

Another malignant neoplasm was found on a mandible, from a person aged 17–25, from Context 14007 (grave 14.2). The lesion was on the right side of the posterior part of the mandible, near the angle, and measured approximately 40 by 30mm on the external surface and 25 by 20mm on the internal surface. The location of this tumour suggests that it may be evidence for the secondary spread of cancer. It could also have developed as a result of multiple myeloma, and, had it not originated from a different excavation trench, might quite reasonably have been said to belong with the affected skull.

Gnawed bones

Gnaw marks were noted on some bones as follows:

14000	2 radii
14001	humerus shaft, innominate bone (extensively chewed)
14002	12 femoral shafts
14004	humerus shaft
14007	5 long bone shafts
17003	femoral shaft
17004	radius and femoral shaft.

At least some of the gnawing appears to have been performed by large animals, rather than by small burrowing rodents. This suggests that the bones had been exposed at some stage.

Conclusions

At least 30 to 52 adults and 19 to 46 children were recovered from trenches 14 and 17. The upper range of the two groups is considered to be the more reliable, giving a total of 98 individuals. The proportion of the remains of children (47%) is surprisingly high, especially given that immature bone does not survive as well as that of adults. The reason for the high number of children is not clear. There were proportionately more children from trench 14 than trench 17, although children and adults were present in all contexts of both trenches. The was no evidence that the bones may have derived from an area set aside for the burial of children, and the obvious conclusion, therefore, is that child mortality in this population was high.

The remains of children of all ages were identified, and although there was a high proportion of remains of foetuses or neonates and of children up to five years, it is clear that the risk of early death was still high beyond this age.

The nature of the remains meant that assessing the age of adults was problematic. The only method available, an assessment of the degree of dental attrition based on Brothwell's standards (Brothwell 1981), is not directly applicable to medieval or post-medieval populations. This does suggest, however, that as the rate of attrition was in general not very advanced, many adults died in early adulthood and very few lived into middle age or beyond. This conclusion is corroborated by the extremely low rate of caries, periodontal disease and tooth loss during life, all of which become more prevalent with age. Other Scottish medieval populations have been found to have a much higher incidence of tooth decay (Lunt 1974).

The high rate of child mortality and the short lifespan of adults is highly suggestive of a population under severe stress.

A higher proportion of the bones of males appeared to be present, 57% as opposed to 43% of female bones. This may be because some females died before they were skeletally mature and therefore do not feature in the analysis of sex, or that, because of their robustness, their bones fall within sexually indeterminate ranges.

Relatively few bones could be used to assess height, and several of those which could were of unknown sex. However, the impression given is of a small population with male stature ranging from, approximately, 65 inches (5ft 5in, 1.651m) to 67 inches (5ft 7in, 1.702m) and females from 58 inches (4ft 10in, 1.473m) to 63 inches (5ft 3in, 1.6m).

A high rate of pathological lesions was noted. Many of these confirmed the impression of a population under severe physiological stress. Most individuals showed evidence of dental hypoplasia, a disruption in the development of teeth, caused through poor health or malnutrition during childhood. Many displayed evidence of more than one such period, and some had undergone several. Poor nutrition is the most likely cause of repeated periods of physiological stress. Further evidence for this conclusion is provided by the presence of anaemia among several individuals, the high rate of child mortality and early death in adulthood, and small stature.

Dental health was generally good, with a very low level of caries, ante-mortem tooth loss and periodontal disease. As these conditions become more prevalent with advancing age, low incidence rates are probably related to early death.

The high incidence of spinal degeneration and arthritis of the joints in such a young population is suggestive of a heavy, arduous lifestyle.

Little evidence of trauma was detected, although, as most of the bones were fragmented, evidence for this could have been missed. There was clear evidence of fracture in an adult tibia, which had healed badly, resulting in loss of length, and in a child's tibia, and a possible fracture of the tibia and fibula in another adult.

The only instance of violent activity was seen in cut marks on the skull of a young adult male. Three cuts, one of which had penetrated the cranial wall, appear to have been caused by a sword, cleaver or axe, or similar implement. As there was no evidence of healing on the skull, this injury probably resulted in death. (It is also feasible, however, that for some reason the wounds had been inflicted soon after death.) Excavation notes indicate that a musket ball was found in the grave with this skull. The skull wounds could not have been caused by a bullet, although, as the facial area of this skull was missing and the remainder of the skeleton was not excavated, it could have been lodged elsewhere.

Evidence for multiple myeloma, a malignant disease of the plasma cells, was detected on several adjoining skull fragments from trench 17. Only a few examples of this disease have been found in archaeological contexts. Malignant growth was also found in a mandible from trench 14. This lesion could also be due to multiple myeloma or may be the result of the secondary spread of cancer.

Gnawing of some bones, some of which was extensive, indicates that at least some of the remains had been exposed at some time.

CHAPTER C9

Mammal bones

NICOLA MURRAY

Recording and identification

A total of 27,919 mammal bone fragments were recovered from 325 contexts during the 1989–97 excavations at Finlaggan (including those at Rudh' a' Chròcuin and Cnoc Seannda). Bones were retrieved from 21 of the trenches studied and only two (20 and 22) produced no bone whatsoever.

All fragments were recorded. Where no identification was possible, fragments were simply counted and assigned to a size class. The size classes used were 0–5cm, 5–10cm and >10cm. Burning, gnawing or other damage was also recorded.

Where a fragment could be identified to element, the recording system proposed by Dobney and Rielly (1988) was utilised. This system divides each element up into a number of unique zones which are recorded as being either present or absent. The degree of preservation of each zone is further recorded as being less than or greater than 50%. Identified elements were then assigned either to species, genus or broad size class (large- or medium-sized mammals). The large mammal group includes equids, cattle and red deer, while the medium mammal group includes ovicaprids, pigs, roe deer and canids.

Wherever possible all limb bones were identified to species or genus level. Owing to the difficulty in distinguishing between the bones of sheep and goats, most of these elements were classed as ovicaprid. Occasional positive identifications to species level were made possible by use of the methods of Boessneck (1969) and Payne (1985). With the exception of mandibular and maxillary fragments, most cranial elements were only identified to their broad size class. An exception to this rule was made in the case of pigs, where many cranial fragments are readily identifiable to species. No attempt was made to identify ribs, vertebrae (other than the atlas and axis) or incisors (with the exception of pigs) beyond their broad size class.

Butchery marks such as those made by knives and choppers were recorded for each fragment, together with details of gnawing and burning. The state of fusion of all long bones was also assessed. Neonatal bones were identified, not only on the basis of the state of fusion of the articular ends, but also on the basis of overall size and the porosity of the bone's surface. The age stages of mandibular teeth were recorded for cattle, sheep and pigs following the method outlined by Grant (1982). The timetable of long bone fusion and tooth eruption for cattle and sheep was derived from Silver (1969) and for pigs from Bull and Payne (1982). Measurements were taken on all adult bones following the methods outlined by von den Driesch (1976).

A catalogue has been produced for the whole assemblage and is included in the site archive. Detailed analysis has only been undertaken on those samples which could be confidently assigned to a specific phase or period.

Phasing

Early levels

Small samples of animal bone were recovered from the Bronze Age kerb cairn on the mound at Cnoc Seannda (site no. 46, trench 21) and the secondary (Iron Age?) fill of the adjacent 'chamber'. Larger collections of animal bone were recovered from the Iron Age and early historic crannog contexts sampled in trench 25.

Earlier medieval (12th to 13th century)

Animal bones of earlier medieval date were recovered from a total of 16 contexts. Fifteen of the samples were from midden deposits on Eilean na Comhairle, while the 16th was recovered from the underwater midden deposits of trench 25 (25008). While all the samples were of broadly similar date and might therefore have been treated as a single entity, the sample from the underwater midden was large enough to be treated as a separate assemblage for the purposes of analysis.

Later medieval (14th to 15th century)

A small sample of animal bone was recovered from 16 later medieval contexts. Very small quantities were recovered from midden deposits associated with the great hall (trenches 10 and 11) and building C (trench 15), and a number of samples were recovered from Eilean na Comhairle (trenches 16, 23 and 24).

Post-medieval (16th to 17th century)

A sizeable sample of bone was recovered from 16th-century midden deposits on Eilean na Comhairle (trenches 16, 23 and 24), from building B (trench 11) and from trenches 10 and 15.

Recent (18th to 19th century)

A number of samples were derived from recent or surface deposits which are assumed to be either of 19th-century date or the result of 19th-century disturbance. As the true provenance of this material is uncertain, no further analysis of these samples was warranted at this time.

Species identified

The number of identified specimens (NISP) for each species is listed in Table C9.1 (see also Appendix 1). Appendix 2 provides information on mammal bone measurements. The four main food-bearing animals – cattle (*Bos taurus*), ovicaprids, pigs (*Sus scrofa*) and red deer (*Cervus elaphus*) – dominate the assemblages although ovicaprids and pigs are absent from the Bronze Age layers. One goat bone (*Capra hircus*) was identified from the post-medieval levels [10031], indicating that, while the majority of ovicaprid bones are probably of sheep (*Ovis aries*), at least some are derived from goat. Small numbers of other species are recorded in the medieval and post-medieval assemblages.

Hare (*Lepus* sp.) is present in the medieval assemblages in small numbers but absent from the later post-medieval levels. Brown hares (*Lepus europaeus*) are still found on Islay today, but mountain hares (*Lepus timidus*), which were introduced in the 19th century, are now extinct (Corbett and Harris 1991). It is not possible to distinguish between mountain hare and brown hare on the grounds of bone morphology, and it is impossible to know whether one or both species maintained a population on Islay in antiquity. The articulating elements of a single paw were recovered from one earlier medieval context, but all the other elements of the carcass are well represented elsewhere, suggesting that hare represented an occasional element in the medieval diet and that hunting or coursing with dogs may have been practised by the lords and their followers.

Three specimens of roe deer (*Capreolus capreolus*) were recovered from the earlier medieval midden deposits of trench 25. Although absent from most of the Scottish islands, roe deer are still present today on Islay (Corbett and Harris 1991). The three specimens which were recovered at Finlaggan included a mandibular tooth, a tarsal and a phalange. While they were recovered from three different but

Phase/context	Total	Cattle	Red deer	Ovicaprid	Pig	Hare	Roe deer	Horse	Dog	Cat	Otter
Chamber	6	5	1								
Kerb cairn	2	2									
Lower crannog	16	2	5	4	5						
Upper crannog	204	104	13	47	40						
Context 25008	2229	959	172	507	560	23	3	2	2		1
Earlier medieval	253	121	20	50	51	8			2	1	
Later medieval	132	86	4	24	15	1		1	1		
Post-medieval	552	375	6	152	12			2	5		

Table C9.1
Number of identified specimens (NISP)

adjacent metre squares within the underwater midden, it is quite possible that they were derived from a single individual. None of the bones is derived from a meat-bearing joint, and it is clear that roe venison did not form a regular part of the earlier medieval diet.

A total of five horse (*Equus ferus*) bones were recovered from the medieval and post-medieval levels. Three of these specimens were teeth and the remaining two were elements of the foot. The consumption of horse meat was forbidden by Pope Gregory II in letters to St Boniface in the early eighth century (Emerton 1940). Since none of the elements recovered was from a meat-bearing joint, it suggests that horse flesh, although available, was not consumed at Finlaggan during the medieval and post-medieval periods.

Dogs (*Canis lupus*) are represented in each of the medieval and post-medieval phases in small numbers. Most of the identified elements are derived from either the foot or the jaw. None of the elements is complete and it is not possible to estimate animal size.

A single mandible from a small cat (*Felis felis*) was recovered from the earlier medieval deposits on Eilean na Comhairle, and a single mandible of an otter (*Lutra lutra*) was recovered from the underwater deposits. Cats are a regular component in both urban and rural faunal assemblages of medieval date. The occurrence of a single specimen of otter in its natural freshwater habitat is more likely to be the result of accidental intrusion.

Fragmentation

The degree of fragmentation of a zooarchaeological assemblage may reflect purely taphonomic processes (trampling, gnawing, exposure to chemical weathering, soil conditions, etc), or it may be related to cultural activity in the form of butchery practices and cooking methods. The degree of fragmentation of each of the assemblages at Finlaggan can be ascertained by comparing the percentages of bone which fall into each of the three size classes. This method was adopted prior to the excavations of the underwater deposits in 1997 and, at the time, was considered appropriate for a heavily fragmented collection. Unfortunately the underwater deposits contained a substantial number of complete or near complete bones which could only be assigned to the >10cm category. This category must therefore be considered as a minimum measure of absolute size.

All the faunal material from Finlaggan is heavily fragmented, with over 50% of the specimens falling within the 0–5cm size class in all phases (Table C9.2). The degree of fragmentation varies greatly from one phase to another, however. The lowest degree of fragmentation can be seen in the upper crannog structure and the earlier medieval midden deposits of trench 25. The highest degree of fragmentation was recorded in the Bronze Age deposits from trench 21. There is a clear correlation between the degree of fragmentation and the percentage of specimens which could be identified to element (%IE) or to species (%ISP).

It could be argued that the underwater deposits of trench 25 were likely to have been subjected to far less exposure and trampling than the surface deposits, and that this variation may account for the relatively good state of preservation of the bones from the upper crannog structure and the earlier medieval midden. Certainly these two samples were subjected to less gnawing than the medieval and post-medieval samples from the surface deposits, suggesting that burial occurred fairly rapidly. The percentage of cut-marked bones is interesting in this regard, however. When assessing the site as a whole, there appears to be a strong correlation between the degree of fragmentation and the number of bones with cut marks, at least in those cases where sample sizes are sufficiently large to yield meaningful results. This suggests that the degree of

Phase/context	n	0–5cm (%)	5–10cm (%)	> 10cm (%)	Burnt (%)	Gnawed (%)	%IE	%ISP	%IE cutmarks
Chamber	83	95	4	1	1	0	7	7	17
Kerb cairn	34	97	3	0	0	0	6	6	0
Lower crannog	172	88	10	2	55	0	16	9	0
Upper crannog	840	53	31	15	18	0.5	49	24	4
Context 25008	10465	57	29	14	1	0.7	44	21	4
Early medieval	1219	51	44	5	3	3	43	21	10
Late medieval	696	59	35	6	3	3	37	19	14
Post medieval	3579	65	32	3	1	3	31	15	17

Table C9.2
Fragmentation patterns

fragmentation is also closely related to cultural behaviour.

Burning is another factor which may affect fragment sizes, and, while there is little burnt bone across the site as a whole, the lower crannog structure produced an exceptionally high degree of burning at 55%. This may account for the high degree of fragmentation witnessed in this phase. The Bronze Age samples are really too small to draw meaningful conclusions.

Economic analyses of the main food animals

The percentage of the main food-bearing animals has been calculated for each of the samples and these are listed in Table C9.3. When quantifying the species which were recovered, raw counts of the NISP have been used. There are clearly discrepancies between species in terms of the number of identifiable elements which could be recorded, particularly in the case of pigs where a number of additional cranial and distal limb elements have been identified and counted. This introduces a potential bias into the recording system which must be borne in mind when comparing relative proportions of the main food animals. Minimum numbers of individuals (MNI) have not been calculated, as it became clear during the course of analysis that at least some of the meat was being brought to the site in the form of ready-butchered joints rather than as complete carcasses.

With the exception of the very small sample from the lower crannog deposits, cattle dominate all the assemblages. A gradual increase in the proportion of cattle in the later medieval and post-medieval phases is mirrored by a decrease in the proportion of pig and red deer. There is also a slight increase in the proportion of ovicaprids in the post-medieval phase.

Sheep dominate many Iron Age sites in the Western Isles (Mulville 1999). This is thought to be related to the harshness of the outer Hebridean island environments and the relative hardiness of sheep. The rather milder environment of Islay is much better suited to grass production, and this is no doubt reflected in the prominent role of cattle in the samples from all phases.

The relatively large numbers of pig in the crannog deposits and the earlier medieval levels are of particular interest. Smith (2002) has reviewed the evidence for pig on archaeological sites in Scotland and has shown that they seldom exceed 15% of the NISP count on sites of any period. Consumption of pigs in late Iron Age Celtic society is often associated with feasting and high status (Green 1992). It seems possible, therefore, that Finlaggan was already a high status site long before the arrival of the lords of the Isles.

There are few genuinely comparable assemblages for the medieval period at Finlaggan, since most large-scale Scottish excavations of medieval date have been undertaken in the burghs of eastern and southern Scotland. These assemblages reflect a very different economic and social environment to that prevailing at Finlaggan. Few high-status sites have produced sizeable samples of animal bone. Two small samples of medieval bones were recovered during excavations at Castle Sween in Argyll, dating from the 13th–14th centuries and the 14th–15th centuries (McCormick 1997b). Cattle dominate both assemblages and pigs also play a relatively important role (12.5% and 19% respectively). Two other sites of interest are Urquhart Castle on Loch Ness and Ladyhill in Elgin (Smith 2002). As at Finlaggan and Castle Sween, cattle dominate both sites. While the relative proportion of pigs at these sites is lower than at Finlaggan (15.7% at Urquhart Castle and 13.4% at Ladyhill), they occur in rather larger proportions than was common on urban sites of a similar date. Red deer are also numerous in both assemblages, suggesting that hunting was being undertaken. There is good historical evidence to suggest that hunting and the consumption of venison in medieval Scotland may have been the preserve of the nobility (Gilbert 1979), and that the consumption of pork in rural settings was an indication of relative wealth (Grant 2002). The high proportion of pig and the relatively large quantities of red deer in the medieval deposits at Finlaggan may therefore reflect its high status as the seat of the lords of the Isles.

Phase/context	N	Cattle (%)	Red deer (%)	Ovicaprid (%)	Pig (%)
Bronze Age	8	87.5	12.5		
Lower crannog	16	13	31	25	31
Upper crannog	204	51	6	23	20
Earlier medieval 25008	2198	44	8	23	25
Earlier medieval	242	50	8	21	21
Later medieval	129	66	3	19	12
Post-medieval	545	69	1	28	2

Table C9.3
Percentage of main food-forming animals based on NISP

There is a marked decrease in the proportions of pig and red deer in the later medieval period at Finlaggan. This may be related to the changing nature of the site and the expansion of settlement on Eilean Mór. While small quantities of later medieval material were recovered from deposits associated with the great hall and the council chamber, the samples' sizes are too small to enable detailed analysis of spatial variation in meat consumption. The decline in hunting and pig rearing is even more marked in the post-medieval assemblages, where deer and pig constitute very minor components. This clearly reflects the marked change in status from noble site to farming township.

Aside from quantification of the main food animals, detailed zooarchaeological analyses are dependent upon the retrieval of large samples of bone. While the samples from the earlier phases and the later medieval period are too small to merit further study, both the earlier medieval and the post-medieval phases at Finlaggan have produced samples which are sufficiently large to conduct in-depth analyses of patterns of meat consumption and animal husbandry.

Earlier medieval meat consumption

The butchering of medium- and large-sized herbivores such as cattle and sheep produces large quantities of meat which are far in excess of the immediate needs of a single family unit. In cultures which lack a market structure, this surplus meat can be utilised in several ways. It can be preserved and stored by salting or potting, subdivided and distributed within an extended community, or used for large-scale communal feasting and conspicuous consumption.

Historical records suggest that feasting was a very important element within Highland society during medieval and early post-medieval times, and that a chief's status could be measured by his generosity and displays of hospitality (Dodgshon 1988). The food which was served during such events was probably used to reinforce social status. McCormick (2002) cites historical evidence from medieval Ireland for the division of animal carcasses and the distribution of joints of meat according to a strict social hierarchy. Similarly, Gibson and Smout (1988) present a number of examples of the use of food as an indicator of social status during the early post-medieval period in Scotland. In each of their examples, largely derived from southern Scotland, social distinctions were drawn either on the basis of the quantity of food served or on the perceived quality of the food itself, for example the presence or absence of meat or the quality of the bread or alcohol served.

It has already been shown that the consumption of large quantities of pork and venison

within the earlier medieval period at Finlaggan probably reflects the high status of the site. The visibility of feasting in the zooarchaeological record is rather limited, however, since the mass consumption of large quantities of meat over a short period of time produces very similar discard patterns to the more moderate consumption of food over a longer timescale. Conspicuous consumption may be visible, however, in terms of the quality of the meat which was served and the size of portions consumed. The two methods which have been employed here to investigate the quality and quantity of meat consumed during the earlier medieval period are carcass utilisation patterns and the analysis of fragmentation and butchery patterns.

Carcass utilisation patterns

In terms of the quality of the meat consumed, the most obvious differences between different portions of the carcass lie in the quality of meat and the quantity of fat which each part can provide. Meat quality can be determined by its degree of tenderness. This is related to the quantity of connective tissue in any given joint. Connective tissue varies in quantity throughout an animal's body, with much higher levels occurring in those areas of the body which work hardest. In the case of herbivores, the toughest cuts of meat are generally to be found in the forequarters and the most tender cuts are to be found in the rear and loin of the animal. An investigation of the portions of meat which were consumed at the site can be undertaken through the analysis of the parts of the carcass which are represented in the assemblage.

In order to determine whether entire carcasses were butchered on the site or whether there was any selectivity in the utilisation of the carcass, the relative proportions of the principal elements have been calculated for each of the four main food animals. Since large sample sizes are required, these analyses could only be undertaken on the medieval sample from the underwater midden (Context 25008). Minimum numbers of elements have been established for the context as a whole. The values obtained have been converted into percentages of the most commonly occurring element. The values for the first two cervical vertebrae (which occur only once in each skeleton) and the phalanges (of which there are 24 in each skeleton) have been amended in order to establish figures equivalent to the other elements. As bones do not all survive equally well in the archaeological record, the results are plotted in a bar chart in the order in which they are most likely to survive (Illus C9.1) . As a guide, they are also plotted against the survival figures recorded by Brain (1967) for a modern sample of bones which had been subject to butchery, gnawing and chemical weathering.

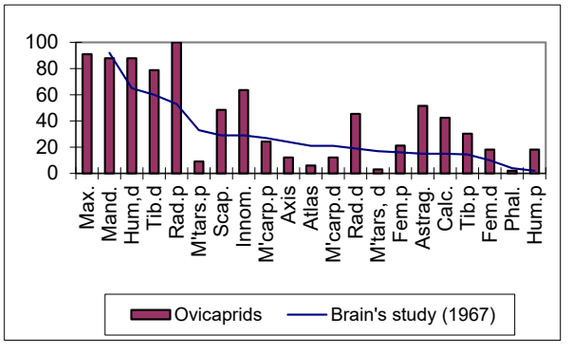


Illustration C9.1
Ovicaprid carcass utilisation in the earlier medieval period (Context 25008)

Since a number of elements could only be identified to medium or large mammal status, these records have also been listed in the results tables in order to determine whether butchery

Element	Ovicaprids	Medium mammals	Pigs
Maxilla (& teeth)	30		36
Mandible (& teeth)	29		25
Humerus, distal	29	0	17
Tibia, distal	26	5	13
Radius, proximal	33	1	6
Metatarsal, proximal	3	0	9
Scapula, distal	16	0	18
Innominate	21	4	12
Metacarpal, proximal	8	0	4
Axis	2	0	1
Atlas	1	0	2
Metacarpal, distal	4	0	4
Radius, distal	15	4	5
Metatarsal, distal	1	0	7
Femur, proximal	7	8	6
Astragalus	17	0	10
Calcaneus	14	3	15
Tibia, proximal	10	1	6
Femur, distal	6	3	7
Phalanges	8	4	33
Humerus, proximal	6	4	4

Table C9.4
Minimum number of elements for ovicaprids, pigs and the medium mammal category during the earlier medieval period (Context 25008)

Element	Cattle	Large mammals	Red deer
Maxilla (& teeth)	18		5
Mandible (& teeth)	15		4
Humerus, distal	16	2	7
Tibia, distal	37	4	18
Radius, proximal	20	0	6
Metatarsal, proximal	10	0	4
Scapula, distal	16	0	9
Innominate	30	2	14
Metacarpal, proximal	15	0	3
Axis	0	0	0
Atlas	0	0	1
Metacarpal, distal	8	0	3
Radius, distal	9	4	6
Metatarsal, distal	7	0	0
Femur, proximal	18	8	7
Astragalus	33	3	8
Calcaneus	39	1	12
Tibia, proximal	11	10	8
Femur, distal	18	7	3
Phalanges	79	1	3
Humerus, proximal	7	2	0

Table C9.5
Minimum number of elements for cattle, red deer and the large mammal category during the earlier medieval period (Context 25008)

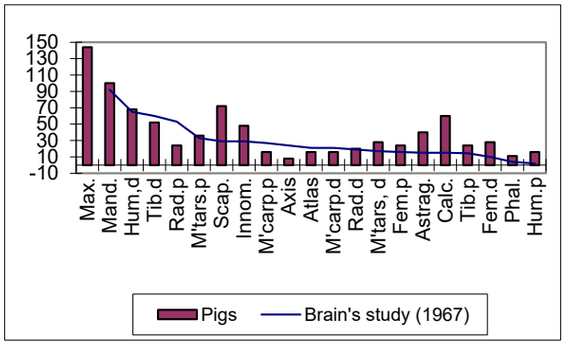


Illustration C9.2
Pig carcass utilisation in the earlier medieval period (Context 25008)

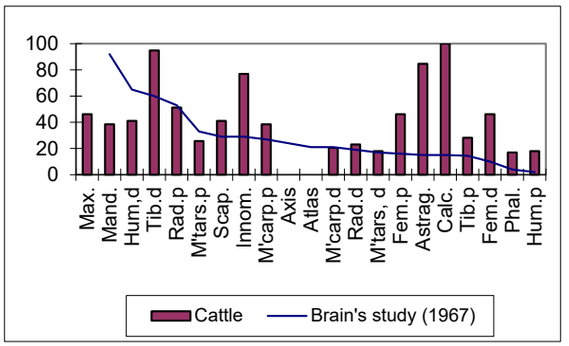


Illustration C9.3
Cattle carcass utilisation during the earlier medieval period (Context 25008)

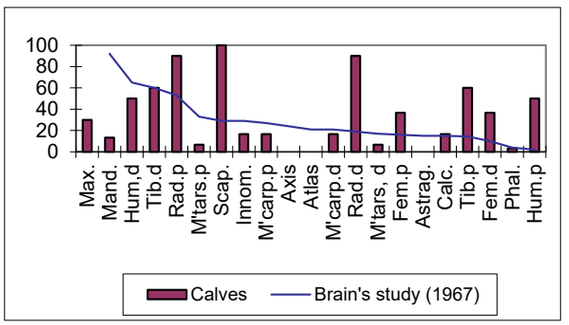


Illustration C9.4
Calf carcass utilisation during the earlier medieval period (Context 25008)

patterns, affecting identifiability, might be skewing the results. The results for ovicaprids, pigs and medium mammals are listed in Table C9.4 and for cattle, red deer and large mammals in Table C9.5. In all cases it will be noted that the tarsal bones (astragalus and calcaneus) occur in exceptionally large numbers. This is probably the result of the limited butchery of these two elements. As has already been discussed, the bones from Finlaggan are all heavily fragmented, with the significant exception of these two elements which generally survive well. This lack of fragmentation appears to have increased their identifiability and hence their relative abundance within the zooarchaeological record.

Lamb and mutton

Analysis of the relative proportions of ovicaprids indicates that many of the bones of the upper hind- and forelimbs (scapula, radius, innominate and tibia) are over-represented in the assemblage while the first two cervical vertebrae (axis and atlas) and the lower limb bones (metacarpals and metatarsals) are under-represented. Analysis of the medium mammal category indicates that the majority of the bones which could only be identified to element were also drawn from the upper fore- and hindlimbs, suggesting that this pattern is a genuine artefact and not a function of identifiability.

In terms of meat quality, the leg joint (comprised of innominate, femur, tibia, astragalus and calcaneus) and the shoulder joint (scapula, humerus, radius/ulna) provide prime-quality meat suitable for roasting. The first two cervical vertebra form a joint which is known today as scrag end of neck. This joint is high in connective tissue and is only suitable for stewing, where the long cooking times help to tenderise the meat. In conclusion, it appears that while all the elements of the carcass are represented in small numbers, certain high-quality elements were favoured and were being brought onto the site as ready-butchered joints.

Pork

Analysis of the relative proportions of pig bones (Illus C9.2) indicates that maxillae are over-represented in the collection, as are the scapulae and innominates. All other elements of the carcass are present to some degree, and while there is some variation from the expected proportions it is not possible to see any other clear patterns within the assemblage. It is apparent, therefore, that at least some preliminary butchery was being undertaken elsewhere and that certain elements, notably the head, scapula and innominate, may have been brought onto the site as ready-butchered joints.

Beef

In the analyses of carcass utilisation patterns of cattle, adult and neonatal bones have been considered separately, since neonatal animals would have been subject to different patterns of butchery and cooking than their more mature counterparts.

When considering the mature cattle, it is clear from Illus C9.3 that certain joints were favoured, while others are notable by their absence. There is a distinct over-representation of all the elements of the upper hindlimb (innominate, femur, tibia) and a clear under-representation of cranial elements and cervical vertebrae. This is matched in the analysis of the relative proportions of large mammal vertebrae (Table C9.6) by the under-representation of the cervical vertebrae in relation to the thoracic and lumbar vertebrae. In terms of meat quality, the flank (represented by the femur) and rump (represented by the femur and innominate) joints of the upper hindlimb and the ribs and loin joint of the back (represented by the thoracic and lumbar vertebrae) produce the finest-quality beef suitable for roasting. In contrast, the neck joint (represented by the cervical vertebrae) produces very tough meat which is only suitable for lengthy stewing. This suggests that the majority of the mature cattle bones from the earlier medieval period represent prime-quality beef joints, many of which were brought onto the site in a ready-butchered state.

Veal

In the case of calves, their relative fragility might adversely affect the expected preservation patterns. It should be noted, however, that the long bones were incredibly well preserved, with very little sign of butchery or fragmentation. From Illus C9.4 it may be seen that there is an under-representation of cranial elements, cervical vertebrae, metapodials and phalanges, and an over-representation of the long bones of the upper hind- and forelimb, suggesting that these were the favoured elements. Once again, this suggests that primary butchery was being undertaken elsewhere and that only certain ready-butchered joints were being brought onto the site for consumption.

	n	Rank	Expected rank (Brain 1967)	Differential
Axis	0	6.5	1	-5.5
Atlas	0	6.5	2	-4.5
Cervical	3	5	4	-1
Thoracic	28	2	5	+3
Lumbar	33	1	3	+2
Sacrum	5	3.5	6	+2.5
Caudal	5	3.5	7	+3.5

Table C9.6
Relative proportions of large mammal vertebrae from the earlier medieval period (Context 25008)

Venison

The sample of red deer bones from Context 20058 is much smaller and consequently yields less reliable results than those of the domestic species. Nonetheless, it is clear from Illus C9.5 that certain elements are under-represented within the assemblage, most notably the cranial elements, cervical vertebrae and metapodials. Those elements showing the greatest degree of over-representation (the innominate, femur and tibia) are all derived from the upper hind-limb and represent the elements of the carcass which produce the finest-quality meat. It is clear, therefore, that butchered red deer carcasses were not always being brought onto the site in their entirety and that only certain favoured elements are well represented within the collection.

Summary

Carcass utilisation patterns of each of the four main food animals during the earlier medieval period suggest that prime meat joints were favoured in each case and that at least some of the meat was being brought onto the site as ready-butchered joints. While lower-quality joints also occur, the poorest-quality cuts are invariably under-represented within the collections.

Fragmentation and butchery patterns

As has already been discussed, fragmentation patterns may reflect a number of taphonomic factors, including butchery, burning, trampling, gnawing and chemical weathering. It is clear from Table C9.2 that there is a strong correlation between fragmentation patterns and the cut-marking of bones in the medieval and post-medieval assemblages at Finlaggan, suggesting that fragmentation patterns are closely related to patterns of butchery and food preparation activities. Variation in fragment size may therefore be related to the method of cookery used, for example whether meat was cooked on or off the bone, or whether it was roasted or stewed. If meat is stripped from the bone prior to cooking, there is likely to be relatively little fragmentation of the long bones aside from that required to disarticulate joints. If meat is cooked on the bone, large joints prepared for roasting will be subjected to rather less butchery than joints which are broken up for stewing or marrow extraction. In order to investigate the butchery and food preparation activities of the two earlier medieval assemblages, two methods were used. The degree of fragmentation of the long bones and ribs was examined, and the extent of cut-marking was investigated.

In order to assess patterns of fragmentation, the percentage survival of each element was calculated. For every bone fragment recovered, a value of .75 was accorded to any zone of which more than 50% was preserved, and a value of .25 was accorded to any zone of which less than 50% was preserved. A total was calculated for each fragment and the average survival value for each element was established. It should be noted that the maximum survival value which can be attained using this method of calculation is 75%. The results are shown in Illus C9.6 and C9.7.

It is clear from Illus C9.6 that the cattle long bones from both assemblages are heavily fragmented and that, on average, no more than 34% of any element is preserved. In the case of the tibiae, radii and femora, no more than 20% of the element is preserved. The exceptions to this pattern are the two tarsal bones, the astragalus and calcaneus, which are generally well preserved and show few signs of butchery. The degree of fragmentation of the cattle bones in both assemblages is rather greater than might be expected if meat were being stripped from the bones prior to cooking. It seems likely, therefore, that the cattle long bones were being reduced to relatively small pieces for cooking in stews.

The sample sizes of sheep and pig bones from Eilean na Comhairle were too small to facilitate an investigation of this sort. It is clear from Illus C9.7 that the ovicaprid and pig bones from the underwater midden are generally less heavily fragmented than the cattle bones, although few elements have an average survival rate of more than 40%. The main exceptions to this pattern are the metapodials and tarsals, which exhibit little fragmentation. Once again, therefore, it seems likely that the ovicaprid and pig bones were being reduced to relatively small pieces for cooking in stews.

Fragmentation and cut-marking of ribs

From an analysis of the cattle bones in Illus C9.6, it is apparent that the degree of fragmentation in the earlier medieval samples varies slightly between the underwater midden deposits of trench 25 and the deposits from Eilean na Comhairle. While the degree of variation between the two earlier medieval assemblages is relatively slight when the assemblage is being considered as a whole, the distinction is much more pronounced when the ribs are examined separately (Illus C9.8 ; Tables C9.7, C9.8). In the case of the large mammal ribs, 17% of the Eilean na

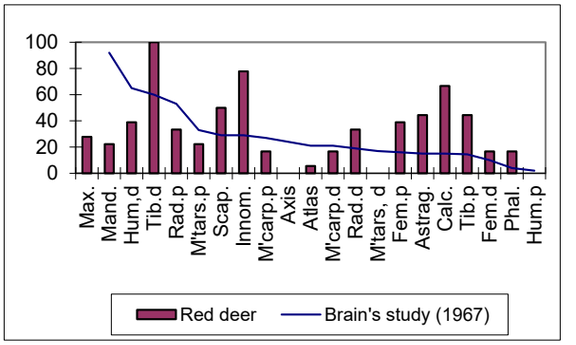


Illustration C9.5
Red deer carcass utilisation during the earlier medieval period (Context 20058)

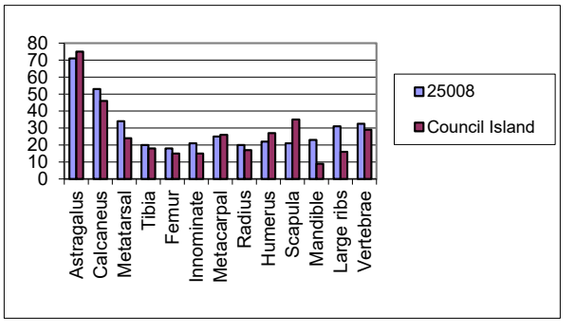


Illustration C9.6
Percentage survival of cattle bones from the earlier medieval period

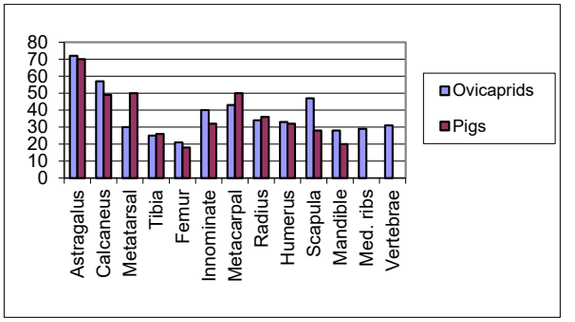


Illustration C9.7
Percentage survival of ovicaprid and pig bones from the earlier medieval period (Context 20058), also including medium mammal ribs and vertebrae

	N	0–5cm (%)	5–10cm (%)	> 10cm (%)	Cut-marked (%)
Eilean na Comhairle	93	32	65	3	23
Context 25008	687	22	62	16	4

Table C9.7
Fragmentation and cut-marking of medium mammal ribs

	N	0–5cm (%)	5–10cm (%)	> 10cm (%)	Cut-marked (%)
Eilean na Comhairle	47	17	66	17	40
Context 25008	676	2	5	73	15

Table C9.8
Fragmentation and cut-marking of large mammal ribs

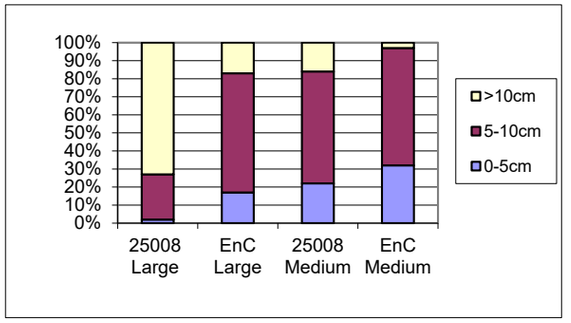


Illustration C9.8
Size distribution of large and medium mammal ribs from the underwater midden deposits (C20058) and the earlier medieval contexts on Eilean na Comhairle

Comhairle bones fall within the 0–5cm size category as compared to only 2% for the underwater deposits. Similarly, only 17% of the Eilean na Comhairle fragments are greater than 10cm in length, while 73% exceed that length in the underwater deposits. Medium mammal ribs also exhibit a lower degree of fragmentation in the underwater deposits, although the difference between the two collections is less marked.

It might be argued that there was minimal disturbance of the underwater samples after they were deposited, and that the effects of additional trampling and chemical weathering which might be expected in the Eilean na Comhairle deposits could account for these marked differences in fragment size. Certainly the Eilean na Comhairle assemblage was subjected to a greater degree of gnawing than the underwater sample. As with the assemblage as a whole, however, a comparison of the percentage of mammal rib fragments bearing cut marks indicates that the ribs from the Eilean na Comhairle deposits were much more extensively cut-marked than those from the underwater deposits (Tables C9.7, C9.8; Illus C9.9). In the case of the large mammal ribs, 40% of the Eilean na Comhairle bones exhibit cut marks, in contrast to the underwater deposits

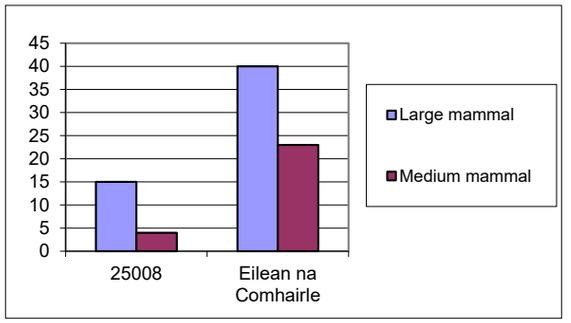


Illustration C9.9
Percentage of cut-marked ribs from the underwater midden deposits (C20058) and the earlier medieval deposits on Eilean na Comhairle

where the figure is only 15%. The medium-sized mammal ribs also exhibit far fewer cut marks in the underwater deposits (4%) than in the Eilean na Comhairle deposits (23%).

The low degree of fragmentation and cut-marking exhibited by the ribs from the underwater deposits suggests that the joints of meat represented by this sample were not being heavily processed during butchery and subsequent cooking. This suggests that either meat was stripped from the bones prior to cooking, or that the joints of meat which were prepared for cooking were relatively large. If the latter explanation were correct, this might indicate that roasting rather than stewing was the preferred method of cooking rib joints. In contrast, the meat portions represented by the ribs from the Eilean na Comhairle deposits were generally much smaller and were probably cooked in stews rather than as whole roasted joints.

Summary of meat consumption

A great deal of the meat which was being served at Finlaggan during the earlier medieval period appears to have been of high quality. Not only were the high-status foods of pork and venison included in the diet, but the majority of the joints which were prepared were from high-quality, tender cuts of meat. At least some of the meat was brought onto the site as ready-butchered joints.

Most of the bones were reduced to relatively small pieces suitable for cooking in stews, but in the underwater midden deposits the rib joints were not heavily butchered. These large portions of meat may have been suitable for open roasting. In contrast, the small size of the rib joints from the Eilean na Comhairle midden deposits suggest that these were being reduced to small portion sizes for cooking in stews.

One explanation for this distinction between the two samples is that the Eilean na Comhairle deposits represent the remains of everyday food refuse, while the underwater midden deposit represents the remains of feasting on a grander scale. Certainly the underwater deposits show signs of conspicuous consumption in the form of large portions of high-status, high-quality meat. It is tempting to imagine that the numerous boars' heads which are present within the sample were the centrepiece of the sort of magnificent medieval feasts described by Dodgshon (1988). Certainly the loch would have provided an ideal site for the rapid disposal of the large quantities of food waste which such communal feasting would produce.

Earlier medieval husbandry practices

In the non-market economy of the West Highlands and Islands during the medieval period, animal production was geared not towards the sale of stock, but rather towards the provision of food for household consumption, communal feasting and the payment of land rents. Historical records suggest that tribute flowed to the chief from his kinsmen and tenants in the form of livestock, butter, cheese, beer and meal (Dodgshon 1988). It is likely, therefore, that the livestock represented in the earlier medieval deposits at Finlaggan indicate the remains of those animals which were presented to the lords of the Isles, either as tribute or as rental payments in kind. The samples of these earlier medieval cattle, ovicaprids and pigs which were recovered from the underwater midden deposits in trench 25 are sufficiently large to investigate the patterns of animal husbandry employed on Islay. This may be done by examining the age and, if possible, the sex of the animals at death, through the analysis of long bone fusion, mandibular tooth eruption and wear, and long bone size.

Age and sex structure of the cattle cull

Determination of sex in cattle bones is usually dependent on the metrical analysis of metapodials, which show a considerable degree of sexual dimorphism (Grigson 1982). Ideally such analyses would be based on large samples of complete bones but, where material is heavily fragmented, the width of the distal articulation (Bd) is often used. Only four metacarpals could be measured from the earlier medieval deposits. These ranged in width from 49.1 to 54.9mm, with an average value of 51.5mm. Clearly this sample is far too small to illustrate sexual dimorphism in its own right. A comparison can be made with a large sample of complete metacarpals from Irish Early Christian and Viking period sites (McCormick 1992), however, which suggests that all Bd measurements of less than 55.5mm are female, while those above 57.5mm are male. As all four metacarpals from Finlaggan fall within the former size range, it suggests that they were all derived from female animals.

The long bone samples from the earlier medieval deposits were sufficiently large to merit an investigation of the age structure of the culled population. The state of fusion of the earlier medieval cattle bones is listed in Table C9.9. As neonatal bones can be assigned to an absolute age class, they have been treated separately. They are used in calculating the percentage survival in each age group, however, as shown in Illus C9.10. From this chart it may be seen that 47% of the cattle were killed at birth. The majority of the remainder (69%) survived to more than 3.5 years of age. Only 4% were killed during the second year of life and a further 13% were killed during the third year.

In contrast to the large sample of cattle long bones, only 15 cattle mandibles were recovered from the earlier medieval deposits. These can be assigned to one of three age groups (Silver 1969; Grant 1982):

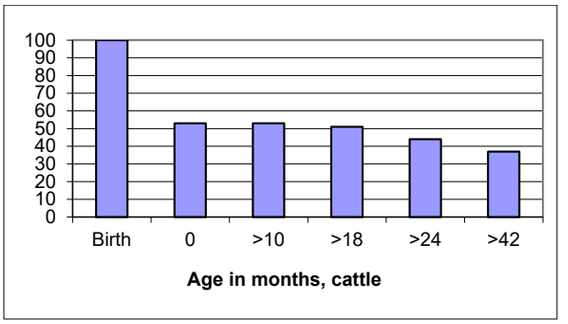


Illustration C9.10
Survivorship curve for early medieval cattle from (Context 20058)

Element	Fused	% fused	Unfused	% unfused	Neonatal
7–10 months					
Scapula, distal	21		0		30
		100		0	
12–18 months					
Humerus, distal	15		1		15
Radius, proximal	27		0		27
		96		4	
24–36 months					
Tibia, distal	32		5		18
Metacarpal, distal	5		3		5
Metatarsal, distal	6		1		2
		83		17	
42–48 months					
Calcaneus	18		12		5
Femur, proximal	16		2		11
Femur, distal	13		5		11
Ulna, proximal	9		5		26
Radius, distal	15		5		27
Tibia, proximal	5		6		18
Humerus, proximal	6		1		15
		69		31	

Table C9.9
The state of fusion of the articular ends of cattle long bones for the earlier medieval period (Context 20058), after Silver 1969

- *Neonatal*. Seven mandibles were recovered with the deciduous premolars in the process of eruption and with little or no wear. Eruption of these teeth occurs during the first three weeks of life.
- *Two–three years*. Two mandibles were assigned to this age group, one with dp4 in very heavy wear (Grant's stage m) and the other with p2 erupting. Since the permanent premolars erupt between the ages of 24 and 36 months, both these elements were assigned to the two- to three-year age class.
- *Greater than three years*. Six mandibles were recovered with all the permanent premolars and molars erupted and in moderate to heavy wear, indicating an age of more than three years.

The mandibular evidence appears to support that obtained from the analysis of long bone fusion, suggesting that the cattle cull consisted of large numbers of neonatal calves, small numbers of two- to three-year-old animals and substantial numbers of mature beasts. Legge (1981) suggested that this pattern of culling is strongly indicative of a dairying economy in which male calves are killed at birth and females are reared primarily for their milk. This would account for the large numbers of individuals surviving to more than four years of age (69% of the non-neonatal assemblage). In this scenario, the small numbers of animals killed in each of the other age groups might be interpreted as barren cows.

McCormick (1992) argues against this interpretation, suggesting that milk production in cows is dependent upon the continued presence of the calf. From his analyses of Early Christian faunal assemblages in Ireland, he concludes that a dairying economy would result in the cull of very few calves but large numbers of yearlings.

Large numbers of neonatal calves such as those recorded here have been found at many archaeological sites in the Western and Northern Isles from the Iron Age onwards. McCormick (1997a) argues that these calf deaths are the result of the marginality of the environment and the inability to produce sufficient stocks of winter fodder to maintain the surplus calves. He cites a number of historical references to the difficulties involved in maintaining stalled cattle through the winter months without the use of hay. There is no reason to suppose, however, that cattle herds cannot survive the winter months in the Northern and Western Isles in the absence of winter fodder. A herd of feral cattle on the island of Swona, Orkney, maintained a stable population for over eight years in the absence of any supplementary winter feed (Hall and Moore 1986). Clearly the ability to maintain a herd without supplementary winter feed in the form of hay is dependent upon maintaining an appropriate population density. This may be one explanation for the high numbers of neonatal calf deaths witnessed at Finlaggan and elsewhere.

There is good historical evidence to suggest that alternative means could be found to persuade a cow to continue to provide milk in the absence of her slaughtered calf (McCormick 1997a). Martin Martin, writing about 1695, describes the solution employed on Skye:

> When a calf is slain it is a usual custom to cover another calf with its skin, to suck the cow whose calf hath been slain, or else she gives no milk, nor suffers herself to be approached by anybody. (Martin 1703: 208)

Whether such methods were ever practised on the scale suggested by the high infant mortality at Finlaggan and elsewhere is open to conjecture.

In assessing the evidence from Finlaggan, it should be remembered that those few cattle bones which could be sexed all appear to be derived from mature female animals and that most animals were culled in their fourth or later years, evidence which is clearly compatible with a dairying economy. Given the predominance of cattle in the faunal assemblage at Finlaggan, it is clear that beef and veal production was a crucial aspect of cattle herding during the earlier medieval period. It seems highly likely, however, that dairying represented an equally important element of the

Element	Fused	% fused	Unfused	% unfused
10 months				
Humerus, distal	28		2	
Radius, proximal	33		1	
Scapula, distal	15		1	
		95		5
18–28 months				
Tibia, distal	17		5	
Metacarpal, distal	2		2	
Metatarsal, distal	0		0	
		73		27
30–36 months				
Calcaneus	4		8	
Femur, proximal	3		3	
Ulna, proximal	4		4	
Radius, distal	6		10	
		40		60
36–42 months				
Tibia, proximal	3		7	
Humerus, proximal	2		4	
Femur, distal	2		4	
		32		68

Table C9.10
The state of fusion of the articular ends of ovicaprid long bones for the early medieval period (underwater deposits only), after Silver 1969

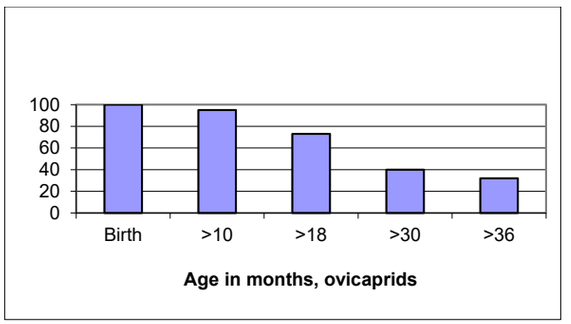


Illustration C9.11
Survivorship curve for early medieval ovicaprids from Context 20058

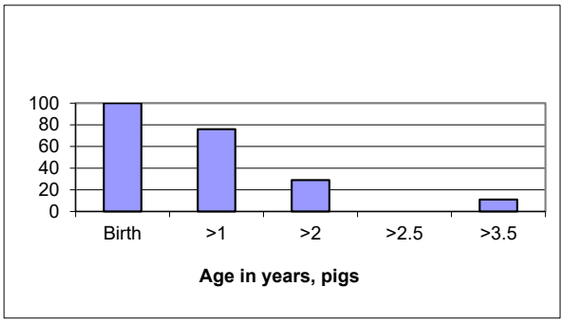


Illustration C9.12
Survivorship curve for earlier medieval pigs from Context 20058

production strategy and that dairy products also formed an important part of the diet.

Age structure of the ovicaprid cull

A sufficiently large sample of ovicaprid long bones was recovered from the early medieval deposits to merit an investigation of the age structure of the culled population. The state of fusion of the earlier medieval ovicaprid bones is listed in Table C9.10 and the resulting survivorship curve is shown in Illus C9.11.

The survivorship curve for ovicaprids suggests that very few animals were killed in their first year. Only 22% of the bones were derived from animals which had been killed between 18 and 28 months, 33% from animals killed between 2.5 and 3 years, and 32% from animals killed during their fourth or later years. It must be remembered, however, that fused articular surfaces are much more likely to survive than the unfused epiphyses, and that these figures may underestimate the proportions of younger animals killed. It is particularly interesting to note in this regard that 32% of the ovicaprid tibiae and 27% of the radii survive only as shaft fragments with none of the articular surface preserved. A substantial proportion of these are likely to have been derived from younger animals.

A sample of 31 mandibles was recovered from the early medieval deposits and these have been assigned to one of three age classes on the basis of the state of eruption and wear of the cheek teeth:

- *Neonatal*. One mandible with deciduous premolars in the process of eruption was assigned to this age category.
- *9–24 months*. Fourteen mandibles were assigned to this category on the basis of dp4s (deciduous premolars) in late wear or p4s (fourth premolars) in the early stages of eruption, m1s (first molars) in moderate to heavy wear, m2s (second molars) in light to moderate wear and m3 (third molars) either unerupted or in the process of erupting. Since m2 comes into wear at some point after the age of 9 months, p4 erupts between 21 and 24 months, and m3 erupts between 18 and 24 months, all these animals were aged at least 9 months old but less than 2 years old at the time of death (Silver 1969).
- *Greater than 2 years*. Sixteen mandibles were recovered with all the permanent teeth erupted and in the process of wear, indicating an age of more than 2 years at the time of death.

The evidence from the mandibular teeth appears to confirm the impression that unfused elements are under-represented within the long bone sample. On the basis of the mandibular evidence it may be suggested that, with the exception of a single neonatal lamb, no animals were killed during the first year of life, 45% were killed during their second year and 51% survived into the third or later years. The individuals which were killed during their second year of life had reached the optimum age for slaughter in terms of meat production (Uerpmann 1973). Since wool production does not decline until an animal is at least four to seven years old (Davis 1987), the culling of a substantial proportion (*c* 70%) of the sheep flock prior to that age suggests that wool production was a secondary consideration, and that the primary purpose of raising sheep during the earlier medieval period on Islay was for their meat.

Age structure and seasonality of the culling of pigs

The state of fusion of pig long bones is summarised in Table C9.11 and the resulting survivorship curve is shown in Illus C9.12.

The long bone evidence suggests that most pigs were culled in the first or second year of life. A quarter (24%) died before the age of one and at least 47% were killed during their second year. Only 11% survived to mature adulthood.

A sample of 24 mandibles provided ageing information and these were assigned to one of four age classes on the basis of the stages of

Element	Fused	Fusion visible	% fused	Unfused	% unfused
1 year					
Humerus, distal	10	4		3	
Radius, proximal	4	2		0	
Scapula, distal	10	1		7	
			76		24
2 years					
Tibia, distal	2	5		6	
Metacarpal, distal	0	0		4	
Metatarsal, distal	0	0		7	
			29		71
2.5 years					
Calcaneus	0	0		14	0
			0		100
3.5 years					
Femur, proximal	2	0		4	0
Femur, distal	1	0		6	0
Ulna, proximal	0	0		9	0
Radius, distal	0	0		5	0
Humerus, proximal	0	0		4	0
Tibia, proximal	0	1		6	1
			11		89

Table C9.11
State of fusion of the articular ends of pig long bones for the earlier medieval period (underwater deposits only), after Silver 1969

Element	Cattle	Large mammal	Ovicaprid	Medium mammal
Maxilla (& teeth)	11		16	
Mandible (& teeth)	15		24	
Humerus, distal	11	3	4	1
Tibia, distal	7	0	5	2
Radius, proximal	10	1	6	0
Metatarsal, proximal	11	0	1	0
Scapula, distal	13	1	5	0
Innominate	13	4	3	0
Metacarpal, proximal	14	1	7	0
Axis	1	1	0	0
Atlas	0	0	0	0
Metacarpal, distal	14	0	2	0
Radius, distal	2	0	3	0
Metatarsal, distal	7	3	1	0
Femur, proximal	3	3	1	1
Astragalus	11	0	4	0
Calcaneus	11	0	0	0
Tibia, proximal	0	0	0	1
Femur, distal	4	0	0	0
Phalanges	88	3	4	1
Humerus, proximal	2	0	0	0

Table C9.12
Minimum number of elements for cattle, ovicaprids, and large and medium mammals during the post-medieval period

eruption and wear of the cheek teeth (Bull and Payne 1982; Grant 1982):

- *4–6 months*. A single mandible was recovered with m1 in the process of erupting, indicating an age at death of 4–6 months.
- *7–13 months*. Three mandibles were recovered with dp4s in heavy wear (g), m1s in light wear (d) and m2s in the process of erupting, indicating death between 7 and 13 months.
- *17–22 months*. Eighteen mandibles were recovered with p4s in light wear (a–d), m1s in heavy wear (g–k), m2s in light–moderate wear (b–e) and m3s in the process of erupting, indicating death between 17 and 22 months.
- *Greater than 22 months.* Two mandibles were recovered with m3s in moderate or heavy wear, indicating death at some considerable time after the age of 22 months.

The mandibular evidence appears to support that obtained from the long bones, with substantial numbers being killed in the first two years of life and few individuals surviving into maturity.

In his account of early Irish farming, Kelly (1998) suggests that there was a degree of seasonality in the timing of pig reproduction, with most litters being born between April and June. A similar timetable for pig reproduction at Finlaggan would suggest that most pigs were killed during the winter months, between November and April in the case of the first-year cull and between September and February in the case of the second-year cull.

Summary of earlier medieval husbandry practices on Islay

In summary, earlier medieval farmers on Islay were probably raising at least some of their cattle, sheep and pigs as rental payments in kind or tribute for the chiefs who occupied Finlaggan. Most of the slaughtered cattle at Finlaggan were either neonatal calves, killed in the first few weeks of life, or mature adults, mostly aged four years or older. The slaughtered calves, representing nearly 50% of the assemblage, were probably all male, leaving an adult population of females to provide a ready source of milk and dairy products. The latter would only be slaughtered for beef once they had passed their prime reproductive years. The sheep were raised primarily for meat, with wool production a secondary consideration. Most of the pigs were slaughtered in either their first or second winters, and very small numbers were kept for breeding stock.

Post-medieval meat consumption

The sample of post-medieval bones from Finlaggan, while much smaller than that from the underwater midden deposit of trench 25, is

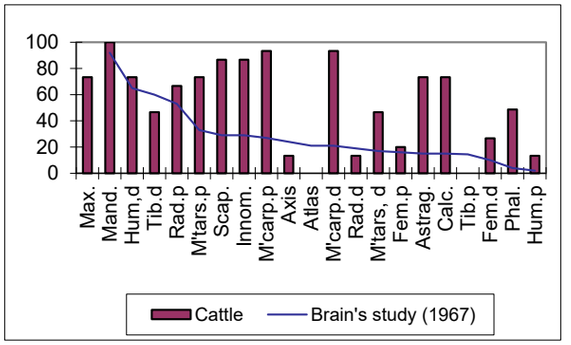


Illustration C9.13
Cattle carcass utilisation during the post-medieval period

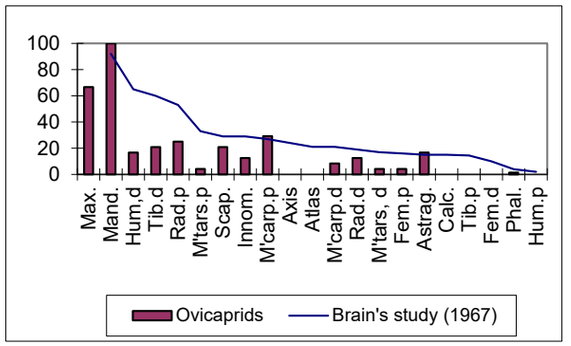


Illustration C9.14
Ovicaprid carcass utilisation during the post-medieval period

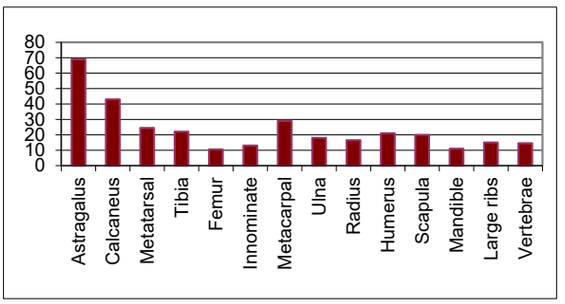


Illustration C9.15
Percentage survival of cattle long bones from the post-medieval period

nonetheless large enough to merit an investigation into the patterns of meat consumption in the 16th-century township. As with the earlier medieval period, the methods used here include analyses of carcass utilisation patterns, the degree of fragmentation of the long bones and ribs, and the extent of cut-marking.

Carcass utilisation in post-medieval cattle

Although the large mammal bones in the post-medieval sample may, theoretically, be derived from horse or red deer, in practice cattle represent 98% of the total identified large mammal bones. Similarly, ovicaprids represent 90% of the total medium mammal assemblage. It is reasonable to assume, therefore, that most of the bones which could only be identified to the large and medium mammal categories are derived from cattle and ovicaprids.

From an analysis of Table C9.12 and Illus C9.13 it is clear that there are some anomalies within the cattle sample. Maxillae, mandibles, cervical vertebrae and tibiae are all under-represented within the collection, while scapulae, humeri, metacarpals, innominates, femora, tarsals and metatarsals are over-represented. These gaps in the distribution cannot be accounted for by the unidentified elements which were only assigned to the large mammal category.

The relative proportions of those vertebrae which could be identified to element have also been analysed by ranking each sub-group of vertebrae and comparing the ranks obtained with those predicted by Brain's study (Brain 1967). While the sample is unfortunately very small, analysis of Table C9.13 indicates that the cervical vertebrae are under-represented in relation to the thoracic, lumbar, sacral and caudal vertebrae.

These variations in the relative proportions of different elements of the cattle skeleton suggest that primary butchery was being undertaken elsewhere and that only certain elements were brought onto the site. The very small numbers of cervical vertebrae and the under-representation of maxillae suggest that the neck and some of the crania were not utilised at Finlaggan. Similarly, the disproportionately low numbers of radii and tibiae suggest that these were not preferred joints of meat. The leg and shin joints which these elements represent have a great deal of connective tissue, which requires long cooking times. In contrast, the prime meat joints of the flank (femur), rump (femur and ischium), loin (ilium, sacrum and lumbar vertebrae), ribs (thoracic vertebrae) and chuck (thoracic vertebrae, scapula and proximal humerus) are all well represented in the sample, as is the poorer-quality clod joint (humerus). What is surprising, however, is the occurrence of large numbers of tarsals, metapodials and phalanges, representing the hock joint, apparently in preference to the leg and shin joints. The hock joints produce very poor-quality meat but are high in fat. This raises the possibility that the hock joint was preferentially selected, perhaps to create a dish such as potted hough which was popular in later centuries.

Ovicaprids

The ovicaprid sample from the post-medieval phase at Finlaggan is fairly small, but nonetheless yields some interesting, if anomalous, results (Table C9.12, Illus C9.14). Relatively large numbers of mandibles and maxillae survive, along with lots of loose teeth. Very small quantities of the other elements survive. If this pattern is a genuine artefact, it suggests that sheep's heads were being preferentially selected over almost all the other elements. Since teeth are the most robust elements in the skeleton and are most likely to survive in an archaeological assemblage, it is essential to consider taphonomic factors in the production of this pattern. Teeth are not predominant in the cattle assemblage, however, suggesting that, if taphonomic factors were involved, they must have had a greater relative impact on the ovicaprid bones than on the cattle. This seems unlikely, and it appears that this strange pattern of carcass utilisation may be a genuine artefact.

Fragmentation and butchery patterns

From an analysis of fragment sizes in Table C9.2, it is apparent that the post-medieval collection is heavily fragmented: 65% of fragments are less than 5cm in length and only 3% exceed 10cm. As a result, the proportion of identified specimens is low, at only 15%.

Only the cattle bone sample is sufficiently large to enable an analysis of long-bone fragmentation patterns (Illus C9.15). As with the cattle bones from the earlier medieval period, only the tarsal bones survive relatively intact. The remainder exhibit a high degree of fragmentation, with only one element producing an average survival rate of more than 25%. Clearly the bones were being reduced to very small portions, notably smaller than those in both earlier medieval assemblages, presumably for cooking in stews.

	n	Rank	Expected rank (Brain 1967)	Differential
Axis	1	5	1	-4
Atlas	0	7	2	-5
Cervical	1	5	4	-1
Thoracic	5	2	5	+3
Lumbar	4	3	3	0
Sacrum	7	1	6	+5
Caudal	3	4	7	+3

Table C9.13
Relative proportions of large mammal vertebrae from the post-medieval period

The high degree of fragmentation is also very visible among the ribs, where there is a marked reduction in size from the early to post-medieval periods. In the case of large mammal ribs, 89% of the post-medieval bones are less than 10cm in length, as compared to only 27% in the earlier medieval underwater deposits. A similar pattern may be seen with the medium-sized mammal ribs, where 63% of the post-medieval bones are smaller than 5cm in length and 96% are smaller than 10cm. The percentage of post-medieval rib fragments bearing cut marks is high, 36% in the case of large mammals and 23% in the case of medium-sized mammals. This suggests that the high degree of fragmentation was the result of deliberate butchery rather than accidental post-discard damage.

Summary of post-medieval meat consumption

The evidence from the post-medieval period suggests that high-quality meat joints were being preferentially selected and subsequently reduced to very small portions for cooking, presumably in stews. The lower-quality hock joint was also preferentially selected and subsequently fragmented for cooking, presumably for extraction and use of the marrow fat. In contrast to the high-quality joints of beef, the only elements of the sheep carcass which appear to have been preferentially selected are the skull and metacarpals, both of which represent very small quantities of poor-quality meat. The division of the beef joints into smaller, less conspicuous portions may be indicative of a shift from the large-scale feasting witnessed in the earlier medieval period to smaller-scale consumption in more modest households.

Post-medieval husbandry practices

During the 16th and 17th centuries there was a gradual shift away from rental payments in kind towards payments in cash (Caldwell 2017: 162–63) . Caldwell has also presented evidence for the export and sale of live beasts from Islay during the early 17th century in order to raise cash for rental payments to the crown, and speculated on the possibility of an earlier export trade during the later medieval period, organised and controlled by the lords of the Isles, and making use of the surplus cattle acquired through tribute and land rental payments (Caldwell et al 2000: 58–59). The introduction of a market economy and the production of livestock for export and commercial sale, in addition to domestic consumption, will inevitably result in new patterns of animal husbandry. The age structure of the cattle and ovicaprid samples from the post-medieval period have therefore been examined to investigate the effects of these changes in the economic environment on the cull patterns of domestic livestock.

Age structure of cattle

In the post-medieval assemblage only the cattle bone sample was considered large enough to merit an analysis of age structure through the state of fusion of the long bones. As with the early medieval sample, the neonatal bones were treated separately.

The findings are listed in Table C9.14 and the resulting survivorship curve is shown in Illus C9.16.

It will be immediately apparent that there is an anomaly in the survivorship curve, with greater numbers appearing to survive into the third year of life than had survived in the second. This is probably a function of the relatively small sample size. It may be seen that only 14% of the cattle were killed at birth. The majority of the remainder (67%) survived to more than 3.5 years of age. None were killed later in the first year of life and between 12 and 26% were killed in the second and third years.

The very small sample of mandibles and loose teeth provided no information on ageing.

It will be noted that the proportion of neonatal calves in the post-medieval assemblage is significantly smaller than that from the earlier medieval assemblage, and that the proportion of mature animals has increased to 67%. There

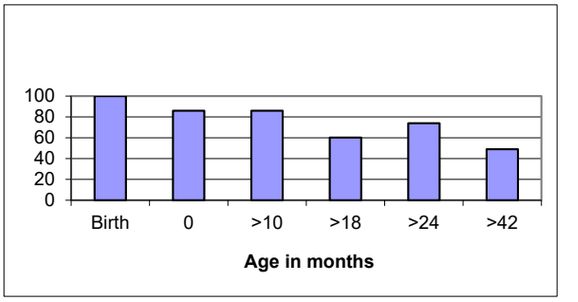


Illustration C9.16
Cattle survivorship curve for the post-medieval period

are two possible explanations for this change. Taphonomic factors must be considered, since the post-medieval assemblage was subject to a much higher degree of fragmentation and gnawing than the earlier medieval assemblage. This would affect fragile neonatal bones to a much greater extent than their more robust adult counterparts. The reduction in neonatal calves from 47% to 14% would seem to be too great, however, to be accounted for entirely by taphonomic considerations. An alternative explanation is that the marked decrease is a genuine artefact and the product of a new strategy geared towards the production of

Element	Fused	% fused	Unfused	% unfused	Neonatal
7–10 months					
Scapula, distal	11		2		2
		100		0	
12–18 months					
Humerus, distal	5		6		0
Radius, proximal	9		0		0
		70		30	
24–36 months					
Tibia, distal	7		0		2
Metacarpal, distal	11		3		2
Metatarsal, distal	6		1		0
		74		26	
42–48 months					
Calcaneus	2		1		0
Femur, proximal	1		2		0
Femur, distal	4		0		0
Ulna, proximal	0		1		2
Radius, distal	1		0		0
Tibia, proximal	0		0		2
Humerus, proximal	0		2		0
		57		43	

Table C9.14
State of fusion of the articular ends of cattle long bones for the post-medieval period, after Silver 1969

surplus stock for export. Under this strategy, fewer male calves would be killed at birth and these individuals would be raised for sale at market. They would therefore not occur in the zooarchaeological record. Female cattle could still be used for the production of milk and dairy products and ultimately for beef once they had passed their prime reproductive years.

The scenario presented here is supported by historical records which suggest that it was only worth rearing male calves if there was a market for young beef (Lucas 1989). It seems probable, therefore, that the changes in age structure observed between the earlier and post-medieval periods may well have been influenced by 16th-century contact with external markets.

Ovicaprid age structure

The sample of ovicaprid post-cranial elements from the post-medieval period was too small to analyse age structures effectively. A small sample of 14 mandibles provided ageing information on the basis of the state of eruption and wear of the mandibular cheek teeth. The mandibles were assigned to one of three age groups:

- *3 months.* Two mandibles were recovered with the first molars in the process of erupting, indicating that death had occurred at around 3 months of age.
- *<21 months.* Seven mandibles were recovered with the deciduous premolars in heavy wear and the permanent molars in crypt, indicating an age of less than 21 months but probably greater than 18 months.
- *>2 years.* Five mandibles were recovered with all the permanent premolars and molars erupted and in wear, indicating an age of greater than 24 months.

The evidence from the mandibles suggests that 64% of the sheep culled in the post-medieval period at Finlaggan were under two years of age. As with the earlier medieval period, the culling of a substantial proportion of the sheep flock at the point of maximum meat yield, but long before they had outlived their usefulness in terms of wool production, suggests that meat production for domestic consumption was the primary consideration. Domestic consumption of the meat would not preclude the export of sheep fells, however, of which the export from Scottish burghs increased throughout the 16th century (Guy 1986).

Summary

The samples of mammal bones from Finlaggan have produced some extremely interesting results in terms of the production and consumption of meat during the medieval and post-medieval periods. The unique sample of bones from the underwater midden of trench 25 has provided an insight into the conspicuous consumption of high-quality, high-status meat, probably related to feasting on a grand scale, during the earlier medieval period. In contrast the post-medieval sample illustrates the much more modest consumption of beef and mutton in a 16th-century farming township. The economic strategies in relation to livestock production also appear to have changed over this same period, with a greater emphasis on the production of cattle and sheep and a massive reduction in the production of pork. In relation to cattle, the primary considerations in the production strategy also appear to have changed. The emphasis on the production of dairy foods, veal and beef for domestic consumption and land rental payments in the earlier medieval period appears to have given way during the 16th century to a strategy with a greater emphasis on the production of beef, perhaps for live export to the markets of mainland Britain.

Appendix 1

The NISP for each context is shown in Table C9.15.

Table C9.15a Number of identified specimens for each context, trench 1

Context	n	Cattle	Ovicaprid	Pig	Red deer
1	2		2		
2	1	1			
7	3	2		1	
8	1	1			
20B	5	3		1	1
106	1		1		

Table C9.15b Number of identified specimens for each context, trench 2

Context	n	Cattle	Ovicaprid
5	1	1	
10	6	4	2
25	5		5
39	2	2	
42	1	1	
47	3	3	
48	1	1	

Table C9.15
Number of identified specimens for each context

Table C9.15c Number of identified specimens for each context, trench 4

Context	n	Cattle	Ovicaprid	Red deer
10	1	1		
24	2		1	1

Table C9.15d Number of identified specimens for each context, trench 5

Context	n	Cattle	Ovicaprid	Pig
1	4	1	3	
4	5	2	3	
7	2	2		
11	1	1		
18	1		1	
19	2	1	1	
28	6	4	1	1
29	2		2	
30	1	1		
31	1			1

Table C9.15e Number of identified specimens for each context, trench 6

Context	n	Cattle	Ovicaprid
11	1	1	
15	1	1	
18	7	6	1
21	1		1
22	1	1	

Table C9.15f Number of identified specimens for each context, trench 7

Context	n	Cattle
17	3	3
27	1	1
41	1	1
87	4	4

Table C9.15g Number of identified specimens for each context, trench 8

Context	n	Cattle	Ovicaprid	Pig	Horse
1	2	2			
2	2	1	1		
12	1	1			
16	9	9			
18	1			1	
24	14	7	4	3	
31	7		2		5
33	1		1		
34	1	1			
35	3	2	1		
55	4	3		1	
60	2	1	1		
65	1	1			
70	7	6	1		
71	1	1			
81	2		2		
100	1		1		
106	1	1			
110	2	2			
123	1			1	

Table C9.15 (cont.)
Number of identified specimens for each context

Table C9.15h Number of identified specimens for each context, trench 9

Context	n	Cattle
11	2	2

Table C9.15i Number of identified specimens for each context, trench 10

Context	n	Cattle	Ovicaprid	Pig	Hare	Goat	Horse	Dog
1	4	3	1					
7	1			1				
8	4	3						1
11	4	3	1					
13	38	26	12					
14	1	1						
17	1	1						
20	11	8	3					
21	7	7						
23	7	3	3				1	
25	2	2						
26	5	3	1		1			
27	1	1						
29	5	4	1					
30	15	14	1					
31	141	91	47	1		1		1
34	2	2						
39	3	3						

Table C9.15j Number of identified specimens for each context, trench 11

Context	n	Cattle	Ovicaprid	Pig	Dog
1	8	7	1		
13	1			1	
14	6	5			1
15	74	45	28		1
15/29	7	5	2		
19	5	4	1		
25	67	53	13	1	
30	24	21	2	1	
31	14	13	1		
33	6	6			

Table C9.15k Number of identified specimens for each context, trench 12

Context	n	Cattle	Ovicaprid	Pig	Red deer
23	1	1			
48	1				1
101	4	3		1	
105	5	4	1		
129	1		1		
131	1		1		
132	1	1			
145	1		1		
156	1	1			
160	2	1	1		

Table C9.15l Number of identified specimens for each context, trench 14

Context	n	Cattle	Ovicaprid
1	5		5
2	5	2	3
4	4	1	3

Table C9.15 (cont.)
Number of identified specimens for each context

Table C9.15m Number of identified specimens for each context, trench 15

Context	n	Cattle	Ovicaprid	Pig	Red deer	Rabbit	Dog
1	11	1	8			2	
2	5	2	3				
4	7	4	1	1			1
5	1				1		
8	12	7	3		2		
9	30	18	11	1			
14	7	4	3				
16	30	23	7				

Table C9.15n Number of identified specimens for each context, trench 16

Context	n	Cattle	Ovicaprid	Pig	Red deer	Hare	Dog	Cat
1	18	11	6		1			
9	8	6	1	1				
11	2		2					
15	2	1	1					
18	39	24	12	1	2			
29	1	1						
30	4	4						
31	12	7		1		4		
36	3	1		1	1			
44	9	4		5				
61	14	6	5	2	1			
63	33	16	8	4	3		2	
65	22	15	2	4				1
66	2	1					1	
70	14	7	2	5				
74	14	6	7	1				
76	6	2		2	2			

Table C9.15o Number of identified specimens for each context, trench 17

Context	n	Cattle	Ovicaprid	Pig	Red deer
3	28	4	22	1	1
4	33	15	14	2	2
5	2		2		
26	5	2	3		

Table C9.15p Number of identified specimens for each context, trench 18

Context	n	Cattle	Ovicaprid	Pig	Dog
4	2	1	1		
7	1	1			
31	2		1		1
48	2		2		
51	2		1	1	
53	4	2		1	1
65	1		1		

Table C9.15q Number of identified specimens for each context, trench 19

Context	n	Cattle
1	1	1
2	1	1
6	1	1
12	1	1

Table C9.15r Number of identified specimens for each context, trench 21

Context	n	Cattle	Red deer
3	6	5	1
15	1	1	
23	1	1	
33	1	1	

Table C9.15 (cont.)
Number of identified specimens for each context

Table C9.15s Number of identified specimens for each context, trench 23

Context	n	Cattle	Ovicaprid	Pig	Red deer	Hare	Horse	Otter
1	19	18	1					
4	1		1					
7	9	4	1	4				
9	8	6		1				1
10	10	7	1	1	1			
11	14	10	3	1				
12	1		1					
14	13	7	2	1	3			
18	60	32	7	16	4	1		
21	1			1				
22	6	2	2	1			1	
25	15	6	7	2				
26	5	1	1	1	2			
33	2	1	1					
34	28	13	4	9	3			
46	12	5	1	1	5			

Table C9.15t Number of identified specimens for each context, trench 24

Context	n	Cattle	Ovicaprid	Pig	Red deer	Hare	Horse
1	6	6					
2	50	40	7	2			1
9	13	9	2	2			
10	16	10	3	2	1		
11	4	1	3				
12	17	7	6	1	2	1	
13	4	3	1				
14	8	6	1	1			
16	19	12	2	2	1	2	
20	31	11	11	7	1	1	
21	3		1	2			
22	15	5	2	4	4		

Table C9.15u Number of identified specimens for each context, trench 25

Context	n	Cattle	Ovicaprid	Pig	Red deer	Roe deer	Hare	Horse	Dog	Cat	Otter
1	6	1	1	1							
2	20	97	40	47	10				1		
3	87	39	21	24	3						
4	81	24	29	23	4			1			
5	61	18	21	17	2			1	2		
6	20	7	5	8							
7	118	37	36	38	4		1	1		1	
8	2229	959	507	560	172	3	23	2	2		1
17	190	97	46	37	10						
19	14	7	1	3	3						
21	14	3	1	3	7						
22	16	2	4	5	5						
23	19	5	4	8	1				1		

Table C9.15 (cont.)
Number of identified specimens for each context

Appendix 2

Mammal bone measurements are shown in Table C9.16.

Table C9.16a Cattle measurements for the earlier medieval period

Element	Measure[a]	*N*	Range (mm)	Mean (mm)	SD
Scapula	GLP	8	60.0–63.0	61.6	1.1
	LG	7	49.4–54.8	52.7	1.9
	BG	7	40.9–43.7	42.2	1.1
Humerus	Bd	7	67.8–81.7	74.8	4.9
	BT	7	62.7–73.1	67.1	4.0
Radius	Bp	5	63.0–73.6	70.0	4.1
	BFp	7	58.8–67.2	64.0	3.4
	Bd	10	54.0–65.4	59.5	3.5
	BFd	10	46.2–60.2	55.0	4.7
Metacarpal	GL	1		181	
	Bd	4	49.1–54.9	51.5	2.5
	Dd	2	26.7–29.0	27.9	1.6
Innominate	LA	12	54.1–64.1	61.0	3.3
Femur	Bp	4	93.1–104.9	100.2	5.2
	DC	9	37.2–40.7	38.5	1.5
Tibia	Bp	1		88	
	Bd	30	50.5–56.8	54.4	1.6
	Dd	30	35.7–44.8	40.1	1.8
Metatarsal	GL	1		182	
	Bd	4	44.7–47.2	45.8	1.1
	Dd	4	25.5–28	26.6	1.2
Astragalus	GI(l)	28	54.6–64.1	59.0	2.2
	Bd	23	37.3–40.4	37.5	1.5
Calcaneus	GL	12	111.3–125.1	117.9	4.3

[a] Abbreviations used in Tables C9.16a–h follow von den Driesch (1976)

Table C9.16c Cattle measurements for the post-medieval period

Element	Measure	*N*	Range (mm)	Mean (mm)	SD
Scapula	BG	1		42.1	
Radius	Bp	1		68.4	
	BFp	1		65.6	
	Bd	2	44.6–44.7	44.6	0
Metacarpal	GL	1		166	
	Bd	9	48.8–52.6	50.5	1.4
	Dd	8	27–29.6	28	0.8
Innominate	LA	1		63	
Tibia	Bd	5	51.9–56.2	54.1	1.8
	Dd	6	35.1–41.8	39.6	2.6
Metatarsal	Bd	4	44.7–47.8	46.5	1.3
	Dd	4	25.2–27.7	26.5	1.2
Astragalus	GI(l)	4	55.1–60.8	58.9	2.6
	Bd	5	36.9–38.6	37.7	0.7
Calcaneus	GL	1		16.7	

Table C9.16b Cattle measurements for the later medieval period

Element	Measure	*N*	Range (mm)	Mean (mm)	SD
Scapula	GLP	2	56.25–65.7	61.0	6.7
	LG	2	48.6–57.2	52.9	6.1
	BG	1		39.2	
Humerus	Bd	2	68–76.6	72.3	6.1
	BT	2	62.8–70.7	66.7	5.6
Radius	BFp	1		66.4	
	Bd	1		60.9	
	BFd	2	46.2–48.9	47.4	1.7
Metacarpal	Bd	5	48.1–51.7	50.5	1.7
	Dd	5	25.9–28.3	27.5	1.0
Femur	DC	1		38.8	
Tibia	Dd	1		39.3	
Metatarsal	Bd	1		45.25	
Astragalus	GI(l)	2	56.5–57.3	56.9	0.6
	Bd	1		38.2	

Table C9.16d Ovicaprid measurements for the earlier medieval period

Element	Measure	*N*	Range (mm)	Mean (mm)	SD
Scapula	GLP	14	26.6–32.2	28.6	1.8
	LG	12	20.1–23.2	22.8	2.1
	BG	14	16.8–22.7	18.1	1.6
Humerus	Bd	19	24.6–30.2	26.8	1.5
	BT	23	22.9–28.6	25.5	1.5
Radius	GL	2	131.9–141	136.4	6.5
	Bp	25	21.1–32.4	26.6	2.5
	BFp	14	22.4–29.8	25.4	1.8
	Bd	3	23.1–27.4	25.8	2.4
	BFd	3	22.2–23.7	23.0	0.8
Metacarpal	GL	1		109.4	
	Bd	1		20.5	
	Dd	1		13.4	
Innominate	LA	10	21.8–27.6	24.91	1.9
Femur	Bp	2	39.7–42.3	41.0	1.8
	DC	2	17.8–18	17.9	0.1
	Bd	2	31.5–34.1	32.8	1.9
Tibia	Bd	16	22.1–25.4	23.7	0.9
	Dd	16	17–19.3	18.2	0.7
Astragalus	GI(l)	14	21.7–30.2	25.6	1.9
	Bd	8	16.3–18.2	17.2	0.8
Calcaneus	GL	5	48.1–58.7	52.3	4.3

Table C9.16
Mammal bone measurements

Table C9.16e Ovicaprid measurements for the later medieval period

Element	Measure	*N*	Range (mm)	Mean (mm)	SD
Humerus	BT	2	25–26.1	25.6	0.8
Radius	GL	1		13.1	
	Bp	1		26.7	
	BFp	1		24.8	
	Bd	1		24.4	
	BFd	2	19.8–22.5	21.1	1.9
Tibia	Bd	2	22.5–25.3	23.9	2.0
	Dd	2	17.6–18.6	18.1	0.7
Astragalus	GI(l)	1		26.4	
	Bd	1		17.5	

Table C9.16f Ovicaprid measurements for the post-medieval period

Element	Measure	*N*	Range (mm)	Mean (mm)	SD
Scapula	GLP	2	26.1–27.2	26.7	0.8
	LG	2	20.1–22.0	21.0	1.3
	BG	2	15.6–16.8	16.2	0.9
Humerus	GL	1		69.8	
	Bd	3	23.9–27.3	26.2	2.0
	BT	3	22.6–25.5	24.5	1.7
Radius	GL	1		119	
	Bp	5	25.6–29.8	27.3	1.7
	BFp	4	23.4–28.6	25.2	2.5
	Bd	1		23.9	
	BFd	1		21.5	
Metacarpal	GL	2	89.1–95.4	92.3	4.5
Femur	DC	1		18.9	
Tibia	Bd	5	21.5–24.6	23	1.4
	Dd	3	16.7–18.6	17.6	1.0
Metatarsal	Bd	1		19.6	
	Dd	1		12.7	
Astragalus	GI(l)	2	24.1–26.1	25.1	1.4
	Bd	3	16.3–18.3	17.3	1

Table C9.16g Pig measurements for the earlier and post-medieval periods

Element	Period	Measure	*N*	Range (mm)	Mean (mm)	SD
Scapula	Earlier medieval	BG	2	19.9–21.4	20.7	1.1
Humerus	Earlier medieval	Bp	1		42.9	
	Earlier medieval	Bd	12	34.4–39.8	36.8	1.6
	Earlier medieval	BT	10	26.6–38.9	31.0	4.2
Radius	Earlier medieval	Bp	5	24.8–29.7	26.2	2.0
	Earlier medieval	BFp	1		14.8	
Innominate	Earlier medieval	LA	6	26.6–34.6	30.8	3.0
Femur	Earlier medieval	Bp	1		51.2	
	Earlier medieval	DC	2	22.9–23	23.0	0.1
Tibia	Earlier medieval	GL	1		170	
	Earlier medieval	Bp	1		38.9	
	Earlier medieval	Bd	3	25–26.5	25.6	0.8
	Post-medieval		1		27.6	
	Earlier medieval	Dd	3	22.8–23.8	23.2	0.6
	Post-medieval		1		23.6	
Astragalus	Earlier medieval	GI(l)	2	34.9–40.4	37.7	3.9
	Post-medieval		1		39.9	
	Earlier medieval	Bd	1		24.2	
Calcaneus	Earlier medieval	GL	1		74.8	

Table C9.16h Red deer measurements for the earlier and post-medieval periods

Element	Period	Measure	*N*	Range (mm)	Mean (mm)	SD
Scapula	Earlier medieval	GLP	4	46.8–50	48.4	1.5
	Earlier medieval	LG	4	35.2–39.3	37.6	2.0
	Earlier medieval	BG	5	32.4–35.3	33.8	1.2
	Post-medieval	BG	1		30.8	
Humerus	Earlier medieval	Bd	3	42.4–50.4	47.3	4.3
	Earlier medieval	BT	3	42.9–46.5	45.0	1.9
Radius	Earlier medieval	Bp	2	46.4–46.8	46.6	0.3
	Earlier medieval	BFp	2	43.6–44.6	44.1	0.7
	Earlier medieval	Bd	2	41.8–42.1	42.0	0.2
	Earlier medieval	BFd	1		41.1	
Metacarpal	Earlier medieval	GL	2	225–238	231.5	9.2
	Earlier medieval	Bd	1		37.2	
	Earlier medieval	Dd	1		24.8	
Innominate	Earlier medieval	LA	5	44.3–51.1	47.8	2.6
Femur	Earlier medieval	Bp	2	75.8–81.5	78.6	4.0
	Earlier medieval	DC	4	30.8–34.6	32.2	1.8
	Earlier medieval	Bd	1		64.5	
Tibia	Earlier medieval	Bp	5	60.3–67.5	64.3	3.2
	Earlier medieval	Bd	10	41.2–46.1	43.6	1.6
	Earlier medieval	Dd	10	30.1–33.9	32.4	1.2
Astragalus	Earlier medieval	GI(l)	6	41.4–50.7	47.4	3.9
	Earlier medieval	Bd	7	38.7–48.4	44.9	3.8
Calcaneus	Earlier medieval	GL	8	94.4–111.9	105.1	5.5

Table C9.16 (cont.)
Mammal bone measurements

CHAPTER C10

Birds, fish, shells and insects

Bird remains

Nicola Murray

During the 1989–97 excavations at Finlaggan, 124 bird bone fragments were recovered from 31 contexts. While many of the fragments were complete or nearly complete, the state of preservation of the bone surface and articular ends was often poor. It is often impossible to differentiate between closely related species on the grounds of bone morphology (Cohen and Serjeantson 1996), and this difficulty increases where preservation is poor. All fragments were recorded and were identified either to order, family, genus or species. In many cases, however, it was not possible to identify beyond the level of order or family. Table C10.1 lists those families and species which were recorded, and Table C10.2 lists the number of identified specimens (NISP) recovered from dated contexts. No bird bones were recovered from the Bronze Age and Iron Age contexts.

Pelecaniformes are represented in the post-medieval period by two fragments of a single bone which is probably derived from either a cormorant (*Phalacrocorax carbo*) or shag (*Phalacrocorax aristotelis*). These seabirds both occur on Islay in the present day as common breeding and wintering birds.

Anseriformes are represented by small numbers of geese in the earlier medieval, post-medieval and recent phases and by a single specimen of a small duck in the post-medieval period. Two different sizes of geese are present in the collection. Large-sized geese were found in the earlier medieval, post-medieval and recent phases and may have been derived from either wild or domestic birds. The bones fall within the size range of Greenland white-fronted (*Anser albifrons*), greylag (*Anser anser*) and pink-footed geese (*Anser brachyrhynchus*), all of which occur on Islay in the present day (Lack 1986). Greenland white-fronted and greylag geese regularly winter on Islay, while pink-footed geese are much scarcer.

Two bones from a smaller-sized goose, falling within the size range of brent (*Branta bernicla*) or barnacle geese (*Branta leucopsis*), were recovered from the earlier medieval contexts and were almost certainly derived from wild birds. In the present day the Greenland breeding population of barnacle geese winters almost exclusively on Islay and the surrounding islands (Lack 1986). Pale-bellied brent geese winter in Ireland and only occur occasionally on Islay on passage. If similar migration routes and wintering areas existed in the medieval period, it is likely that these specimens are derived from wild barnacle geese.

The single specimen of a small-sized duck recovered from post-medieval contexts is most likely to have been teal (*Anas crecca*).

Galliformes are the largest group within the collection, representing 84% of the identified specimens. Of those galliform bones which could be identified to species, 95% were derived from very small, bantam-sized domestic fowl (*Gallus gallus*), suggesting that most of the rest of the Galliformes were also from domestic birds. Domestic fowl occurred in the early, late and post-medieval periods but is absent from the recent contexts. A single specimen could be positively identified to the Tetraonidae family, and is probably derived from either red or black grouse (*Lagopus lagopus scoticus, Tetrao tetrix*), since both species currently maintain a breeding population on Islay (Gibbons et al 1993). A single specimen of grey partridge (*Perdix perdix*) was recovered from the recent deposits. In the present day, grey partridges occur on Islay in small numbers (ibid).

One specimen of common crane (*Grus grus*) was recovered from the earlier medieval deposits. In the present day, cranes are rare visitors to Scotland. They bred in East Anglia until about 1600, however, and may have bred in Ireland until the 14th century (Dymond et al 1989). Their occurrence in the 12th- and 13th-century deposits on Islay is therefore perhaps not unexpected.

A single specimen of pigeon was recovered from the recent deposits and is likely to be derived from either a rock dove (*Columba livia*) or woodpigeon (*Columba palumbus*), both of which occur on Islay in the present day (Gibbons et al 1993).

Order	Family	Species	Common name
Pelecaniformes	Phalacrocoracidae		Cormorant/shag
Anseriformes	Anatidae		Goose (large)
			Goose (small)
			Duck (large)
			Duck (small)
Galliformes	Phasianidae	*Perdix perdix*	Grey partridge
		Gallus gallus	Domestic fowl (bantam)
	Tetraonidae		Grouse
Gruiform	Gruidae	*Grus grus*	Crane
Charadriiformes			Waders
Columbiformes	Columbidae		Pigeon

Table C10.1
Bird families and species recovered from Finlaggan, 1989–97

Period	*n*	Cormorant	Goose	Duck	Galliform	Partridge	Domestic fowl	Grouse	Crane	Waders	Pigeon
Earlier medieval	68		7		29		31		1		
Later medieval	4						3			1	
Post-medieval	17	1	1	1	7		6	1			
Recent	4		1			1				1	1

Table C10.2
Number of identified specimens from dated contexts

Context	Element[a]	Number	Species	Size[b]	Element % completeness	Erosion[c]	Texture[d]	Condition[e]	Comments
6008A	cver	2	Cod	L	70	3	4	7	
6008A	cver	1	Gadidae	M	50	4	4	8	
6008A	shell	2	Mussel						
6008A	shell	1	Oyster						
6008B	pcver	1	Cod	L	80	4	4	8	Partially burnt
6008B	cver	1	Cod	L	80	3	4	7	Partially burnt
6008C	basiocc	1	Gadidae	L	40	4	4	8	Burnt?
6008C	pcver	1	Cod	L	75	3	4	7	
6008C	cver	4	Cod	L	80	3	4	7	
6008C	cver	1	Cod	M	75	3	4	7	
6008D	den/l	1	Cod	M	40	4	4	8	
6008D	pcver	3	Cod	M	40	4	4	8	
6008D	pcver	1	Cod	L	60	3	4	7	
6008D	pcver	1	Cod	M	70	3	4	7	Partially burnt
6008D	pcver	1	Cod	L	80	3	4	7	Partially burnt
6008D	cver	2	Cod	L	80	3	4	7	Partially burnt
6008D	pcver	1	?		80	3	3	6	
6008E	cver	2	Cod	L	70	3	4	7	
6008E	pcver	6	Cod	M	50	4	4	8	Burnt/black
6008E	cver	3	Gadidae	M	30	4	4	8	Burnt/black
6008E	cver	1	Salmonidae	Mature	40	4	4	8	Burnt/black
6008F	cver	3	Gadidae	M	50	4	4	8	
6008F	pcver	1	Cod	M	80	3	4	7	
6008F	cver	2	Gurnard	Mature	80	3	4	7	
7008B	cver	1	Cod	L	60	3	4	7	
7008B	pcver	1	Cod	L	80	3	4	7	
7008B	pcver	2	Haddock	L	60	3	4	7	
7008B	cver	2	Cod	M	60	3	4	7	
7008B	pcver	1	Cod	M	60	3	4	7	
7008B	pcver	1	Cod	L	75	4	4	8	
7008B	pcver	1	Cod	L	60	4	4	8	Possible cut marks
7008B	cver	2	Cod	L	40	4	4	8	Fused
7008B	cver	2	Cod	M	70	4	4	8	
7008B	cver	1	Cod	S	80	3	4	7	
7008B	cver	1	Gadidae	M	50	4	4	8	
7008C	pcver	3	Cod	L	60	4	4	8	Burnt?
7008C	cver	1	Cod	L	50	4	4	8	
7008C	cver	1	Cod	M	60	4	4	8	
7008D	hyom	1	Gad	L	40	4	4	8	Medial
7008D	atver	1	Cod	L	60	4	4	8	
7008D	pcver	2	Cod	L	80	4	4	8	
7008D	pcver	2	Cod	M	70	4	4	8	
7008D	cver	2	Cod	L	80	4	4	8	
7008D	cver	2	Cod	L	60	4	4	8	Cut marks
7008D	cver	1	Haddock	M	50	4	4	8	
7008E	cver	1	Cod	M	70	3	4	7	
7008E	pcver	1	Cod	M	50	4	4	8	
7008E	pcver	2	Haddock	M	70	3	4	7	
7008E	paras	1	Gadidae	M	60	3	4	7	Medial

Table C10.3
Catalogue of fish bones and molluscan remains

Context	Element[a]	Number	Species	Size[b]	Element % completeness	Erosion[c]	Texture[d]	Condition[e]	Comments
7008F	cver	1	Cod	L	40	4	4	8	
7008F	pcver	1	Cod	VL	80	3	4	7	Burnt/black
7008F	basiocc	1	Cod	L	70	3	4	7	
7008F	pcver	1	Cod	S	70	3	4	7	
7008F	cver	1	Mackerel	Mature	80	3	3	6	
7008G	pcver	1	Cod	L	60	3	4	7	
8008D	cver	1	Cod	M	70	4	4	8	
8008E	pcver	1	Gadidae	M	50	4	4	8	Partially burnt
8008E	cver	1	Cod	L	60	3	4	7	
8008E	pcver	2	Cod	L	60	3	4	7	
8008E	cver	1	Cod	M	60	3	4	7	
7008A	cver	1	Cod	L	50	4	4	8	
7008A	cver	1	Cod	M	50	4	4	8	
7008A	shell	Fragments	Oyster						
7008B	pcver	1	Cod	L	60	3	3	6	Partially burnt
7008C	cver	1	Cod	M	70	3	4	7	
7008D	pcver	1	Cod	L	50	4	4	8	
7008D	cver	1	Salmonidae	Mature	60	4	4	8	70–90cm total length
7008D	cver	1	Salmonidae	Juvenile	50	4	4	8	< 50cm total length
7008E	pcver	1	Cod	L	80	4	4	8	
7008E	pcver	1	Cod	M	70	4	4	8	
7008E	shell		Limpet						
7008E	shell		Mussel						
7008F	pcver	1	Cod	L	80	3	4	7	
8008A	shell	2	Mussel						
8008A	cver	1	Cod	VL	90	3	4	7	
8008B	cver	1	Cod	L	50	4	4	8	
8008C	cver	2	Cod	L	80	4	4	8	Partially burnt/black?
8008D	pcver	1	Halibut?	Juvenile	60	4	4	8	
8008E	cver	1	Gadidae	M	40	4	4	8	
10031	pcver	1	Cod	L	80	3	4	7	Burnt/white
10035	pcver	1	Cod	L	80	3	3	6	

[a] Key to elements: atver = atlas vertebra; basiocc= basioccipital; cver= caudal vertebra; den/l= dentary, left side; hyom= hyomandibular; paras= parasphenoid; pcver= precaudal vertebra.

[b] Key to Gadidae size categories: S = small (15–30cm total length); M = medium (30–60cm); L = large (60–100cm).

[c] On a scale of 1 to 5 (none to extreme).

[d] On a scale of 1 to 5 (fresh to extremely crumbly).

[e] Sum of previous 2 columns.

Table C10.3 (cont.)
Catalogue of fish bones and molluscan remains

Fish remains

Ruby Ceron-Carrasco

The fish remains from Finlaggan were recovered mainly from the medieval midden [25008] in trench 25. These were retrieved by passing bulk samples through a 1mm mesh sieve. The midden was sampled in five subsequent metre squares, C6, C7, C8, D7 and D8, all of which contained fish remains.

Where possible, all the remains were identified to species level or to family group. Identification of the fish remains was done by reference to a modern fish-bone collection and to standard guides (Watt *et al* 1997). Nomenclature follows Wheeler and Jones (1989: 122–23).

All elements were examined for signs of butchery and burning. The colour of burnt bone was recorded to allow investigation into the nature of burning, that is, cooking, rubbish disposal, etc.

The sizes of the cod-family species, the Gadidae, have been given as an approximate size range. This was done by matching the archaeological material to modern fish skeletons of known size based on 'total body length'. Therefore, the elements were categorised as 'small' (15–30cm), 'medium' (30–60cm) and 'large' (60–120cm).

The recording of the preservation state of the fish bone was based on two characters: texture on a scale of 1 to 5 (fresh to extremely crumbly) and erosion also on a scale of 1 to 5 (none to extreme). The sum of both was used as an indication of bone condition; fresh bone would score 2 while extremely poorly preserved bone would score 10 (after Nicholson 1991).

Species	NISP
Cod	80
Haddock	5
Gadidae	12
Gurnard	2
Mackerel	1
Halibut	1
Salmonidae	3

Table C10.4
Fish species present in trench 25 medieval midden 25008

Results

The results are given in the catalogue presented as Table C10.3. The summary of species present and NISP (number of identified specimens) by element is given in Table C10.4. Most of the material was quite eroded and very fragile. The level of preservation of the fish bone was consistent, in terms of fragment size and condition. Bones were most frequently 40–70% complete. Their condition score was generally in the range of 7–8, indicating poorly to extremely poorly preserved bone.

A total of six taxa were identified, consisting of five identified to species and two to family level.

Taxonomical analysis

Cod (*Gadus morhua*) was the main species identified in the assemblage, with haddock (*Melanogrammus aeglefinnus*) and other unidentified Gadidae elements also present. Other marine fishes also identified were gurnard (*Eutrigla gurnardus*), mackerel (*Scomber scombrus*) and halibut (*Hippoglossus hippoglossus*). The freshwater species identified in the assemblage were Salmonidae remains (salmon, *Salmo salar; t*rout, *Salmo trutta*); these were relatively few when compared to the mainly marine species.

General discussion

The fish remains recovered at Finlaggan came from the earlier medieval midden [25008] adjacent to Eilean na Comhairle. Some of the fish bone remains were burnt black, indicating that these must have been burnt as domestic rubbish; most of the remains were also 'stained', possibly as a result of the waterlogged nature of the deposits.

The most likely source for fish to supply the demands of the household at Eilean na Comhairle is Loch Indaal and the Sound of Islay, both locations that would have allowed for relatively safe fishing for most of the species identified in the assemblage. It was reported in the *New Statistical Account* of the Islay parish of Kilchoman (*NSA* 1845: 7.648) that all kinds of white fish were abundant on the coast of Islay.

Species from the Gadidae group were the most common taxa found in the assemblage. These are referred to as 'white fishes'; this term also include the flatfishes. The industry of white fisheries can be traced as far back as the Norse period in Scotland. During the late 12th century the white fisheries were controlled by the Law of the Four Burghs, and were strictly burghal monopolies. Each burgh passed regulations to control the white fishing industry, relating to the price, quality and selling of fish, as well as the building of boats and harbours, and the provision of salt and wood for barrels (Anson 1950).

Cod (*Gadus morhua*) and haddock (*Melanogrammus aeglefinnus*) were the species identified as belonging to the Gadidae group.

Cod has been one of the most important food-fish in the British fauna; its value as a prime food is enormous, and when salted or dried it keeps for winter consumption or trade. The cod is a demersal fish, a bottom feeder. Its growth rate varies with different populations; a mature cod can reach 150cm in length. This species is widely distributed in a variety of habitats, from the shoreline to well down the continental shelf. The younger fish, however, usually live close inshore (Wheeler 1978). The cod remains recovered at Finlaggan were from specimens of 15–20cm, 30cm, 60cm and over 100cm in length. These may have been taken from the shore, particularly the 'small' and 'medium' size specimens, and the larger, mature specimens from boats using hooks and lines. At Finlaggan metal fishhooks were also recovered.

Haddock is a fish of the North Atlantic, a major commercial species, and is eaten fresh or smoked. It lives very near the bottom, but large shoals are occasionally found in mid-water. It attains a length of 76cm (Wheeler 1978). The haddock size and quality vary with location. It needs to be handled well and is generally gutted at sea; the skin is kept on to avoid tearing of the soft flesh. It does not take salt as well as cod, and for this reason it is mainly cured by drying and by smoking (Lockhart 1997). The elements recovered at Finlaggan were from specimens measuring 60cm in length. These may also have been taken from boats using hook and lines.

Halibut (*Hippoglossus hippoglossus*), a right-eyed flatfish, is a deep-water fish, but may be found at different depths over a wide range of marine substrates. It may attain a length of up to 2m and is found all around the British Isles. It is an important food-fish (its flesh being firm and of excellent flavour). It is caught mainly on hook and longline. The elements recovered at Finlaggan were from juveniles and may have been taken while fishing for cod and haddock. The other marine specimens identified in the assemblage may also have been caught in this way.

Mackerel (*Scomber scombrus*) belongs to the Scombridae marine fishes group. This family is found in tropical and warm temperate seas around the world, with relatively few species moving seasonally into cooler waters. The mackerel is a common North Atlantic fish living near the surface of the sea in huge schools above the continental shelf. It is found seasonally close inshore but is highly migratory, making migrations as well as moving north in the summer. This is an important food-fish. It is caught in various ways including nets and by hook (Wheeler 1978). It does not keep well after capture and therefore has to be eaten immediately, fresh, or to be processed by smoking because of its high oil content (Ellis 1995).

Grey gurnard (*Eutrigla gurnardus*), a species of the Triglidae family group, is an offshore fish, although it may occasionally be caught in very shallow water. It attains a maximum length of 45cm.

Salmonidae vertebrae were recovered from juvenile specimens of less than 30cm total length and from 'maturing' specimens of less than 70cm total length. Vertebrae were the only salmonid elements recovered, and it is not possible to identify these to species level. Therefore they may be assigned to either trout or salmon.

Salmon may have been caught from the sea or from rivers. Most of the rivers in Islay (as in other Hebridean islands) are short, often torrential in character and usually devoid of vegetations (Boyd and Boyd 1997). The small lochs in the island, including Finlaggan, would also have provided trout and salmon. Eel (*Anguilla anguilla*) is also present in the loch, but none were found among the fish remains recovered in the excavation. It is surprising therefore that so few salmonid remains were recovered at Finlaggan, since these species are common in the loch. It must also be stressed that salmonid vertebrae are quite robust and would have survived as well as those from the gadids found in the assemblage.

Conclusions

The fish remains from the early medieval midden at Finlaggan provide insight into some of the dietary aspects of a high-status household. The fact that most of the fish remains were from marine species indicate that a great amount of effort must have been put into providing fresh marine fish, as well as marine molluscs, to an inland site. Cod and haddock could also have been preserved in various ways to ensure a winter supply.

Very few salmon/trout remains were recovered from this deposit. This may indicate that if freshwater fish were easy to catch and plentiful, they may have mainly provided food to a lower-status sector of society.

Molluscs

E M Laurie & N Milner

Molluscs were found during excavations on both islands, although not in great abundance. The majority of molluscs were found in trench 10, mostly in the great hall of Eilean Mór, and these are thought to have been deposited in the 16th century, along with quantities of animal bones. This appeared to be one deposit with no obvious tip-lines or phases in it [10031]. Some molluscs, including land snails, were found in other contexts across both islands but in very small numbers. This report will focus on the marine shell found in the 10031 midden. A fuller report on the whole assemblage from the excavations and a catalogue of the shells is contained in the site archive.

Methodology

The mollusc component of the site deposit was received from the excavator and sorted into marine and land snail species. They were then counted, weighed and measured using established methods usually applied to prehistoric middens (see for example Milner 2009). The counts and weights provide information on the relative abundance of different species. Weights can be skewed, with heavier shells appearing more representative, but counts for minimum number of individuals (MNI) can also sometimes be skewed in favour of shells for which the hinges and apices survive well. Therefore both methods of quantification are used. Weighing is straightforward and requires shells to be weighed by context using electronic scales. An MNI count was made for each species: for gastropods all whole apices were counted; bivalves were counted by the hinges which had first been divided into left and right valves. Bivalve analysis was made on either the left or right valve numbers from any one context, using the highest count.

Measurements and age calculations were made on the two dominant species (limpets and cockles) in order to examine the morphology of the shell, which in turn can reveal something about the environment and the types of shore on which the shells were collected. Where a large number of shells were present for any one species in a single context, 100 specimens were randomly selected for measurement. The limpet heights and lengths were measured and the age estimated by counting exterior bands on the shell, which is a method that has been used elsewhere (Bailey and Craighead 2003; Milner *et al* 2007). These bands are sometimes not particularly clear but they are thought to provide a rough indicator of age, although this is currently being tested further in the shell laboratory, University of York. The same method is used for cockles, and the ageing of cockles has been verified through testing of modern species (Laurie 2006).

One method that has not been attempted here is the study of seasonality. This could tell us more about when the shellfish were being gathered, which might even be related to feasts and religious festivals when there was abstention from eating meat. However, these methods can only be applied successfully with some species of mollusc, for example oysters (Milner 2002) and cockles (Laurie 2006), and require large sample sizes, which is why they were not undertaken here. Work on limpet seasonality has so far proved unsuccessful.

All figures were entered into a spreadsheet, a copy of which is lodged in the site archive.

Marine shell

Species present

In all, nine species/genera of marine mollusc were identified: five gastropods and four bivalves. The following section provides brief information about each species/genus, the typical habitat and how it might have been gathered (information from Barrett and Yonge 1958; Brehaut 1982; Gibson *et al* 2001; Preston-Mafham 2004).

The most abundant species present was the limpet, *Patella* sp. There are two species which could be present on these shores: *P. vulgata* and *P. aspera*. It is difficult to distinguish between the two without the animal inside or the colouring inside the shell, which archaeological specimens do not have. In terms of gathering, limpets cling tightly to rocks on the high, middle and low rocky shores in large numbers and they are fairly easy to exploit after a little experience; they simply need to be knocked off the rocks with a stone.

There were two types of periwinkle identified here: the edible periwinkle, *Littorina littorea*, the larger of the two, lives on rocks and weed on the middle shore and below. The flat periwinkle, *Littorina obtusata,* is much smaller and is flat-topped, usually colourful (yellow, red, green, etc), and is more likely to be collected because of its aesthetic qualities or because it is attached to weed, or accidentally when gathering the edible periwinkle, rather than for consumption purposes. It lives on the middle and top shore, especially on *Fucus* weed. Periwinkles are easy to pick off the rocks and they congregate in large numbers. Topshells, *Gibbula* or *Monodonta* sp, are found in similar locations and may also be consumed, or, because they reveal mother-of-pearl layers when worn, they are sometimes collected for decorative purposes. There was one example of the whelk, *Buccinum undatum*. This is a large species of whelk which can reach up to 11cm in length, and which is edible. It is generally found sub-tidally and so is not as easy to find as the other gastropods.

The cockle, *Cerastoderma edule*, is the most abundant bivalve on the site. It burrows superficially in sand or mud and therefore needs to be dug or raked out. It tends to be found on the middle and lower shore in great numbers, forming dense cockle beds. The trough shell, *Spisula* sp, is another bivalve that burrows in the sand and may have been gathered in the same way as the cockles.

The mussel, *Mytilus edulis*, is a very common shore animal found in dense beds on rocky, stony and muddy beaches on the middle shore and below, attaching itself to rocks by means of byssus threads. It can easily be gathered by pulling it off the rock, and many can be collected because they occur in groups.

Species/genera	Valve	Eilean Mór tr no.			Eilean na Comhairle tr no.			*N*
		10	**15**	**17**	**16**	**23**	**24**	
Patella sp. (limpet)		4370	0	1	0	1	0	4372
Littorina littorea (edible periwinkle)		87	0	1	0	X	0	88
Littorina obtusata (flat periwinkle)		5	0	0	0	0	0	5
Monodonta/Gibbula sp. (topshell)		20	0	0	0	0	0	20
Buccinum undatum (whelk)		X	0	0	1	0	0	1
Cerastoderma edule (cockle)	Left Right	215 226	0 0	X	0 0	X	1 0	216 226
Mytilus edulis (mussel)	Left Right	1 1	0 0	0 0	0 0	X	X	1 1
Ostrea edulis (oyster)	Upper Lower	6 8	X	0 0	2 4	13 19	8 0	29 31
Spisula sp. (trough shell)	Left Right	16 14	0 0	0 0	0 0	0 0	0 0	16 14
Totals		**4969**	**X**	**2**	**7**	**33**	**9**	**5020**

Table C10.5
Counts for the marine molluscs, using apices and valves

The oyster, *Ostrea edulis*, is a species which tends to be found at the eulittoral and sublittoral zones, that is, usually underwater. It occurs in large beds, usually cemented to the substrate, and therefore they are usually collected by wading into the sea or by dredging.

Analysis by context

Table C10.5 shows the counts for the marine molluscs, using apices and valves. Where it was not possible to produce an MNI for a context, but shell was present and was weighed, this is indicated with an X. To calculate the MNI for the bivalves the larger number is selected; so for the cockles in trench 10, there is an MNI of 226. Illus C10.1 shows the relative frequency of shells within trench 10 by MNI (the weight data is practically identical to the MNI data for this context).

It can be clearly seen from Table C10.5 that the majority of the shells, in both numbers and species variation, were found in the post-medieval midden [10031] in trench 10. In fact in this context all the species are represented, with limpets being by far predominant.

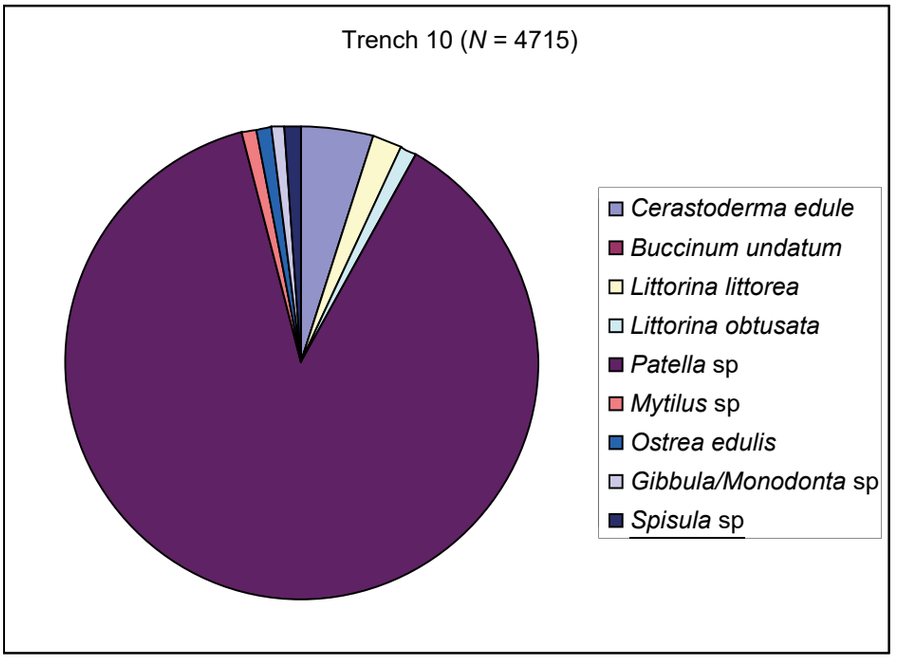


Illustration C10.1
Relative frequency of shells within trench 10

By measuring the predominant species from trench 10, that is, the cockles and the limpets, and comparing their age profiles, it is possible to say something about collection practices. In the case of the cockles, the age data demonstrate that cockles of various sizes were being gathered, with no particular size sorting occurring (Illus C10.2). When this data is compared with modern cockle beds, both wild populations and a commercially exploited population (Laurie 2006), it can be seen that the cockles from Finlaggan fall somewhere in between. There are two possible explanations for this pattern: (1) cockles of a fairly small size were being selected preferentially over the larger cockles; (2) cockles were being gathered fairly frequently from the shore, enough to change the natural population structure from that of a wild one but not to the extent that they look like a population that is exploited commercially. Gathering cockles involves digging into the sand and extracting the shells, and it is therefore quite difficult to be selective in terms of gathering. Therefore, we favour the second explanation, even though relatively few cockles were found at this site. This implies that cockles were also being consumed and dumped elsewhere, perhaps even at the coast.

It is harder to analyse the limpet age data because there are no modern comparative data sets, and limpets are not gathered commercially. What can be seen from the age data gathered, however, is that there is a relatively

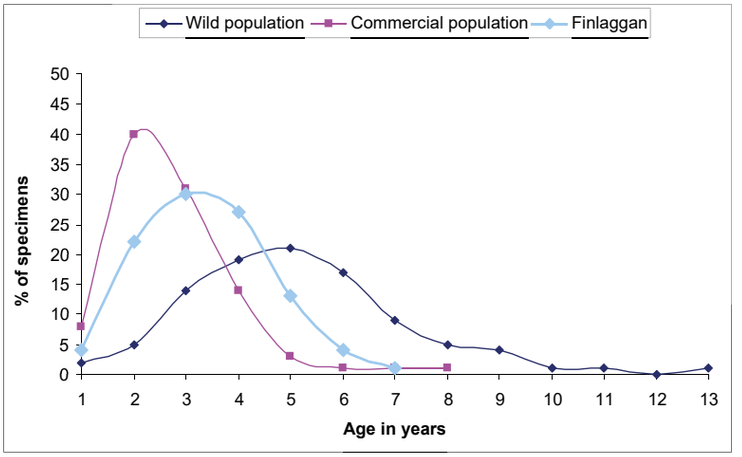


Illustration C10.2
Data for cockle age profiles

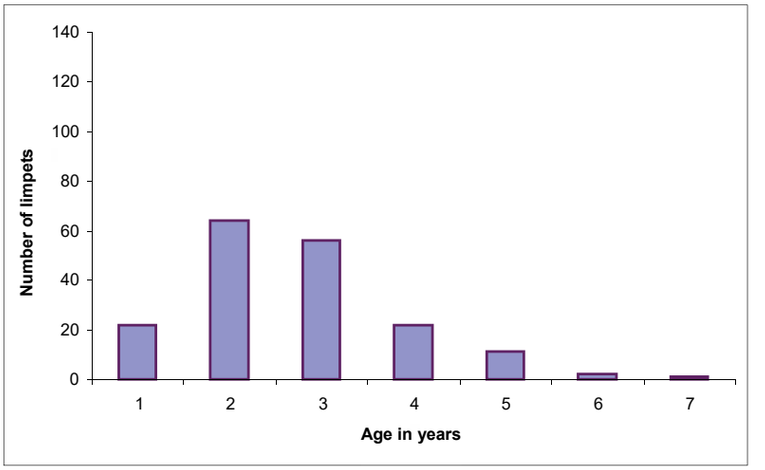


Illustration C10.3
Data for limpet age profiles

large range of sizes and ages present, again suggesting very little selection in gathering, although perhaps skewed more towards the smaller limpets overall (Illus C10.3).

We can take this analysis further by considering where on the shoreline people were gathering limpets from, and how targeted their gathering was. Although they move around while feeding, limpets do not move between zones along the shore, and the shape of the shell is partly determined by the position on the shore. Limpets living near the high tide mark (upper shore) have taller, more conical shells, while those at the low tide mark (lower shore) have much flatter shells. This is related to the force with which the limpet attaches itself to the rock and the amount of time it is out of water. When out of the water the muscles contract, keeping the limpet firmly attached to the rock, which reduces water loss. This pulls in the mantle which secretes the shell, thus affecting shell shape. Therefore by calculating the ratio of length to height of the shell and comparing this with modern shell morphology, the gathering strategy of the shell collectors may be assessed.

In October 2003 a collection of modern limpets was made from the site of Sand, near Applecross, Scotland. The limpets were gathered from both the upper shore and lower shore to examine the well-documented variations in morphology across these zones. The limpets were measured and the ratio of height to length calculated. Illus C10.4 presents a scatter graph of these results overlying the Finlaggan trench 10 limpet measurements. The line roughly separates the upper and lower shore limpets, and demonstrates that the Finlaggan limpets were probably gathered from both zones. Although there are limitations with using modern analogies, there is a significant spread of measurements and the limpets themselves look very much like both upper and lower shore limpets, some being very flat and some being conical in shape.

Discussion and conclusions

The majority of the mollusc finds come from one location, trench 10 on Eilean Mór, which is a 16th-century midden context located in the ruins of a great hall. The other trenches contained small numbers of molluscs, often unstratified or perhaps redeposited, and therefore have not been subject to any further investigation. Those from trench 10 have produced some interesting results and can be discussed further.

Although limpets predominate in this context, it is interesting to note that at least eight other species of marine mollusc are also present. The periwinkles and topshells come from the same sorts of rocky shores as the limpets, and they were probably collected at the same time. The cockle is also present in fairly large numbers. This can be harder to collect because it entails raking into the sand, and although this means searching in another area of the beach, it may well have been on the same beach as the limpets.

It is perhaps surprising that there is only one mussel shell, as they are very easy to collect and

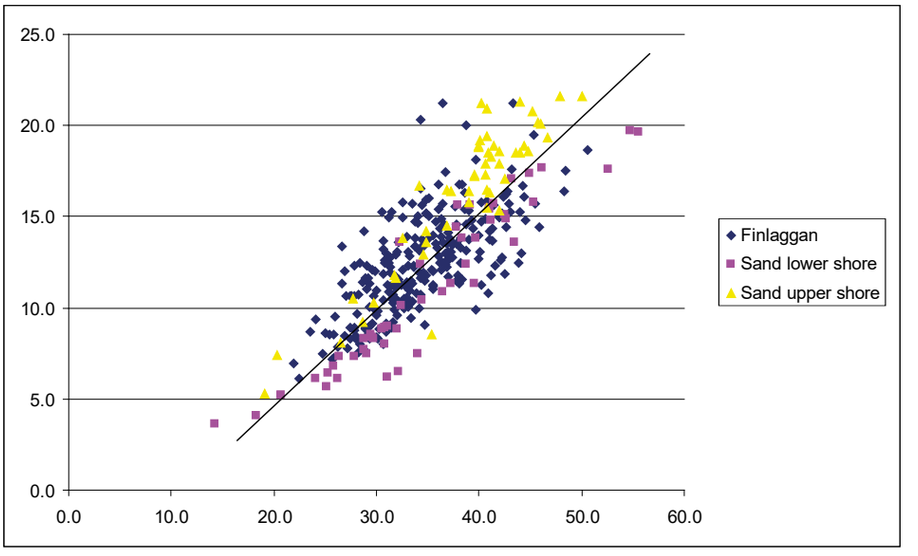


Illustration C10.4
Modern limpet data from the site of Sand compared with the Finlaggan results

good to eat. It is also surprising that there are so few oysters, because they are often considered a delicacy. Periwinkles, which occur in fairly small numbers, were believed to be a cure for yellow jaundice if the shell and animal were ground up together (Fenton 1978: 542), but as they appear complete in the midden it is likely that they were consumed.

Limpets today are often regarded as unpalatable; however, they can be consumed, either roasted on their own or in stews or soups, which helps to bulk out such meals. It is possible that this is how they were being used at Finlaggan. A further possibility is that the limpets were being gathered for fish bait. This has been put forward as an explanation for the Viking site of Quoygrew (Milner *et al* 2007), where large quantities of limpet shell occur alongside fish processing waste. This practice was also written about in Scottish historical accounts (Fenton 1978, 1984), and in the 16th century limpet was the main bait for various types of fishing. One method was to chew half-boiled limpets into an oily pulp and then spit them into the sea: this attracted fish which could then be caught without baiting the hook (Fenton 1978: 528). Although it is hard to understand why the limpets were being taken inland to Finlaggan if they were being used as bait, it may have been necessary in order to parboil and extract them, and taking them home for processing is known from the historical accounts (Fenton 1978, 1984). Certainly, at this time fish was consumed on the numerous fast days when eating meat was forbidden, and fish bones and fishhooks have been found at the site.

It is more difficult to understand what the limpets are doing in a context which contains bones from high-quality joints, because in the recent past they have tended to be considered a food of the poor (Fenton 1978: 542). However, in the report on the Finlaggan animal bones Murray has suggested that they have been reduced to small portions for cooking, probably in stews, so one possibility is that the limpets, and perhaps the other shellfish, were included in some of these recipes. It should also be noted, however, that the remnants of high-status meals and lower-status foods may sometimes have been mixed as they were discarded from kitchens. In fact, McCormick (2002), when considering consumption on Irish crannogs, demonstrates that the bone assemblages may be made up of the poor joints of meat as well as the high-status joints, because a range of people, from nobles to servants, would all be eating at that site.

The age and measurement data has also told us something of the ways in which people were exploiting the coastline for shellfish at this time. Although relatively few shellfish have been found on the site, it is fairly clear that the natural shellfish populations were being exploited fairly substantially at this time, and we can assume that many shellfish were being consumed or used for fish bait but that the shells were discarded elsewhere. If we treat the sample as a single episode, or at least having accumulated over a short period of time, we can even say that the limpets were being gathered from various parts of the beach. However, it may be that the assemblage was not a single episode, and perhaps people moved further down the beach for the limpets through time as they began to over-exploit the upper zones, as evidenced at Quoygrew (Milner *et al* 2007).

Overall the research has provided some insights into mollusc exploitation and consumption at this time, but leaves a number of questions to be explored. In the future it will be interesting to look at other similar sites for comparative data.

Insect remains

An initial assessment of insect remains in samples from the medieval midden in trench 25 and the underlying crannog structure was carried out by Clive Warsop. In a report lodged in the site archive he noted that every sample of the 20 processed included insect remains, predominantly those of Coleoptera (beetles), with a minimum of 20 different species in each sub-sample analysed. Some contexts were particularly rich and contained upwards of 40 species and over 70 individuals within each sub-sample. Preservation in most cases was excellent, though many body parts were fragmentary. The overall impression was, not surprisingly for such a site, one of decay. This varied from indications of a sour, wet, foul habitat, such as dung, to a sweeter, drier one, such as decaying hay or straw, indicated by the presence of a number of mould-feeding species.

The lower medieval layers included a few puparia of Diptera (true flies), suggesting the presence of faecal material or carrion, both a favoured pabulum of many species within this order. A number of wood-boring beetles may have originated from some of the structural wood remains. A tentative identification was made of a number of flea heads from the crannog structure.

CHAPTER C11

Plant remains

Seeds and other plant remains from trench 25

Judy Holmes

Three waterlogged samples from excavation in trench 25 were wet sieved to recover paleoenvironmental material. Plant species were identified by the seeds recovered. The plant species identified provide information on the past environment and economy of the site. Two of the samples related to two different phases of the Iron Age crannog, and the third to the earlier medieval midden.

Sampling

During the excavation of trench 25, a thorough sampling programme was carried out for environmental study. The midden appeared to have an organic sandy fibrous matrix containing quantities of nut shells, animal bone, pottery sherds, worked and cut wood, roundwood, leather fragments and various categories of preserved plant material. It was thought likely that the preservation of organic remains would also be good on the smaller scale, with the possibility of the recovery of seeds, pollen, insects and animal bone. A proportion of the deposits were flotation sieved so that the smaller environmental evidence could be studied.

Samples of waterlogged midden material were flotation sieved from only two of the metre squares of the midden area, C8 and G4, due to constraints on time and people available. A Siraf-type flotation drum was used. Ten litres per midden layer were flotation sieved from C8 at Finlaggan during the excavation. Ten litres per midden context from square G4 were bulk sampled for flotation sieving at a later date. This was carried out at the field centre at Biggar.

Processing of flots

When thoroughly dried only, a small proportion of each sample was examined in detail. The material derived from 2 litres of soil from each 1.00mm subsample was examined under the microscope at ×10 and ×40 magnification, though it is possible that each sample was not derived from 2 litres of soil as the water content in the soil varied, causing the actual soil volume suspended in each sample to differ.

Under the microscope it was evident that many of the samples contained seeds, charcoal, insect parts, nut fragments, leather fragments,

Species	Habitat[a]	G4022A	C8019A	C8008B
Arctostaphylos alpinus L	M	0	2	0
Barbarea vulgaris R Br	Wa (Nu)	0	0	1
Carex binervis sm	H, M	4	4	22
Carex nigra	W	4	6	22
Carex recta	E	1	0	1
Cerastium arcticum	Mo	0	3	1
Chaerophyllum temultenum L	G (Wd)	0	1	0
Chenopodium album	C, Wa (Nu)	2	1	9
Falcaria vulgaris Bernh	G, Wa	0	1	0
Galium verum	G (Wd)	0	0	1
Genista anglica	H, M	0	2	3
Gramineae	G	0	4	0
Helianthemum canum L	St (NN)	0	0	2
Humulus lupulus	HB (NN)	1	0	0
Medicago spp.	(Wd)	0	11	0
Oenanthe aquatica L	W	0	3	0
Oenanthe crocata L	W	0	0	3
Oenanthe lachenalii	W	0	8	88
Potentilla argentea L	G, Wa	0	4	3
Potentilla erecta L Hampe	H, G	1	2	5
Prunus domestica L / *Prunus spinosa* L	Wo (NN)	2	0	0
Ranunculus bulbosus L	Co (Wd)	0	0	3
Ranunculus hederaceus L	W	0	11	0
Rubus carpinifolius / Rubus lindleyanus	(HR)	2	0	2
Rubus fruticosus agg	(HR)	0	2	0
Rumex acetosa L	G, Wa, H	2	0	0
Rumex pulcher	Co (NN), Med	0	0	2
Secale cereale	Cr	1	0	0
Stellaria media	C (Nu)	28	3	0
Triticum dicoccum	Cr	1	0	0
Urtica dioica L	D (Nu)	0	1	0
Vicia spp	G	2	0	0
Total		51	69	169

[a] Key: C: cultivated land; Co: Coastal; Cr: cultivated crop; D: disturbed ground; E: estuaries; G: grassland; H: heaths; HB: hedge banks; HR: hedgerows; M: moors; Med: Mediterranean; Mo: mountains/high ground; (NN): non-native; (Nu): requires high nutrient levels; St: steppe; W: wet places; Wa: wasteland; (Wd): well-drained soil; Wo: woods.

Table C11.1
Seed numbers and species from three palaeobotanical samples from trench 25

grass, moss, wood fragments and small plant parts. All were sorted into their different categories.

Three samples, G4022A, C8019A and C8008B, were chosen for more detailed examination and study (Table C11.1) . They were purposefully chosen to show changes in the crannog and medieval midden deposits, and perhaps to reflect local environmental change through time.

Interpretation of the past environment

With the interpretation of the type of environment each species prefers, it is possible to build a picture of how Finlaggan would have appeared in the past. It is best not to rely on the numbers of seeds present representing each species to prove that a single species was more or less abundant than any other. Plant species may produce more or fewer numbers of seeds depending upon reproductive strategy. For instance, those which rely upon wind for dispersal or those ingested in fruit and dispersed by animals will produce larger numbers of small seeds. Species which opt for dispersal by catching on animal fur will put their energy into producing fewer but larger seeds, with adaptations such as barbs or tiny hairs for clinging on to passing fauna. As the numbers of seeds recovered were quite small, the sample size is not adequate to comment on relative numbers of plant species. The presence of the species alone will be used to reconstruct the type of environment evident at Finlaggan in the past.

G4022A (square G4, spit A of Context 25022: organic, wood-rich crannog structure)

All of the native plants represented in this Iron Age context flourish in open and light environments, giving the impression that the area was not wooded. Two of the species prefer wet ground, *Carex nigra* and *Carex recta,* indicating the presence of a loch or stream for the former and estuarine conditions for the latter. The presence of moorland close by is represented in this assemblage by *Carex binervis* and *Potentilla erecta L Hampe* . Species which thrive on disturbed or waste ground may indicate the presence of human activity, such as *Stellaria media* and *Chenopodium album*. Both of these prefer soil high in nutrients, particularly phosphates, indicating the presence of waste material such as animal dung or middens. *Rubus carpinifolius/Rubus lindleyanus* is an indication of hedgerows or scrubland in the locality. However, as these seeds are distributed mainly by the ingestion of the fruits by birds or animals (or people), these may have been brought in from further afield.

The Prunus domestica stones probably indicate human presence and were probably brought in as a food source, possibly gathered locally. *Prunus domestica* is not native to Scotland but has been reported from Iron Age contexts elsewhere in Britain (Wilson 1978: 144). According to Zohary and Hopf (1988: 129) it was not until Roman times that fruit culture became firmly established in Europe . 'The culture of most domestic fruit trees of temperate Europe, that is to say, the propagation of the cultivars, depends on grafting, a technique with which the Greeks and Romans were acquainted.' The *Prunus domestica* evident at Finlaggan would not have been grown as a fruit crop but would have been gathered from the wild, from trees perhaps introduced. The trees may have been protected as a valuable food source but not managed as a fruit crop.

Humulus lupulus is not native to Scotland today, as the climate is too cold. As early as 1070 in Germany there is evidence of hops being gathered from the wild for use to flavour beers. The use of hops in brewing was introduced in the 13th century in Germany, from whence the idea spread. Hops were traded in bulk by the 10th century in Britain. According to Wilson (1975), among the plant remains from the Graveney boat, Kent, dated to the 10th century AD, fruits, bracts and bracteoles of hop were by far the most numerous. Hops have been recovered from Viking age graves in Finland. Previous to the introduction of hops as a flavouring, beers were flavoured by gruit, a mixture of herbs containing bog myrtle, rosemary and yarrow. During the Iron Age there was a climatic deterioration that resulted in a colder and wetter climate. It would not have been possible to grow hops in Scotland at this time, even if they had been introduced to Britain. There is no evidence of hops in Iron Age midden material in Scotland, although there is a paucity of plant material recovered from Scottish contexts of the time .

The *Secale cereale* grain is an indication of either the cultivation or importation of the cereal rye, which could have been grown here at this time, for use in bread making or brewing. Today, barley is the most popular grain for brewing, but other cereals can be used, such as rye, wheat, oats and millet. Although there is no evidence that the grain was germinating, it may have been intended for malting, particularly as hops are also evident. Rye was possibly evident in Iron Age material recovered from Dun Vulan in South Uist. Initial reports suggest that hulled barley was the dominant crop, with some wheat, oats and possibly rye (Armit 1996). Other evidence in G4022A at Finlaggan of cereal production is a *Triticum monococcum* einkorn glume base. The presence of the glume base indicates that it would have been cultivated locally, as cereals would have been processed and the glume bases would not be present had the cereal been transported from outwith the local area. Einkorn would be used to make bread.

The wood recovered from this sample includes rods, probably of hazel, which indicate coppicing in the area, further proven by the recovery of hazelnut shells. These were broken open, indicating they were utilised as a food source.

There is evidence of grassland in the locality, as short fragments of grasses were recovered. Studied under the microscope, the ends were broken the same way as when chewed by sheep, cattle, goats or horses (it is impossible to identify exactly which species was responsible).

C8019A (square C8, spit A of Context 25019: organic, wood-rich crannog structure)

All of the species here are indicative of an open, light environment. There are four species which signal the presence of wetlands: *Carex nigra*, *Oenanthe lachenalii*, *Oenanthe aquatica* and *Ranunculus hederaceus L.*

Species are evident which grow in open wasteland such as *Falcaria vulgaris* Bernh, *Chenopodium album*, *Potentilla erecta* L Hampe, *Stellaria media*, *Chaerophyllum temultenum* L and *Urtica dioica* L. *Stellaria media*, *Urtica dioica* and *Chenopodium album* would show the presence of midden material or animal dung on this site. A selection of the species would have grown on local moors with acid soils, for example *Carex binervis*, *Potentilla erecta* or *Genista anglica*. Two plants are represented from higher ground. *Arctostaphylos alpinus* grows on high moors up to 1,000m in Britain, and *Cerastium arcticum* grows on mountains. Possibly the latter arrived from Jura or other close by mountainous regions. This sample also contains grass fragments, again evidence of dung from animals such as cattle, sheep or horses. Also evident are charcoal (evidence of human habitation), hazel rods, bark, moss, insect remains, leaf fragments, plant stems and hazelnut shells.

C8008B (square C8, spit B of C25008: organic-rich medieval midden)

Each of the species in the sample shows that the landscape represented was open and light. Species here such as *Carex nigra*, *Carex recta* and *Barbarea vulgaris* show the presence of wetland. There were areas of wasteland, shown by *Potentilla argentea L*, *Chenopodium album* and *Barbarea vulgaris,* which inhabit wet, nutrient-rich wasteland. *Ranunculus bulbosus L* and *Galium verum* indicate links with the coast. The seeds from these species may have been carried over by birds or by people arriving on the island by boat. Moorland terrain is again represented by *Carex binervis* and *Potentilla erecta*. In this sample there are non-native species represented. *Rumex pulcher* is a species from the Mediterranean which may also be

found today around ports, transported by ship. This is present today in parts of Ireland but arrived as a result of human transportation. *Rumex pulcher* was absent from 10th-century AD and post 10th-century strata from Fishamble Street, Dublin, as was *Helianthemum canum*. These two species were also absent from AD 950–1139 palaeobotanical samples from Trowbridge, Wiltshire. *Helianthemum canum* is a species which inhabits the Bohemian Karst of the Czech Republic, a steppe environment. How it arrived at Finlaggan has many possibilities – perhaps transported by migratory birds, or carried in provisions supplied from abroad. Its presence may indicate trading links with eastern Europe.

Conspicuous absentees

G4022A

There are only two species of cereal, *Secale cereale* and *Triticum monococcum,* represented. If this was a domestic site, the presence of barley, *Hordeum spp,* might have been expected, as this cereal crop would tolerate the wet, cold climate. Barley would not be suitable for making bread, but could be made into a porridge or used in brewing or as an animal feed. It is unusual to find *Triticum monococcum* in an Iron Age context. *Triticum aestivum*, a bread wheat, was more commonly grown in that period.

C8019A and C8008B

The most conspicuous absentees are spices, which would certainly be expected in medieval material. In a ground, powdered state, however, they would be invisible in the archaeological record.

It is unusual that no cereals were represented. This could be due to the small number of seeds recovered or to the site not being linked to cereal production or processing. As it was a high-status site, the bread may have arrived ready-made.

The plants

The plants identified from the seeds recovered at Finlaggan are discussed below . The environments and ecological groupings described are those that the species are to be found in today. Interpretation of the habitats of the plants recovered from ancient seed assemblages must be implemented with caution. This is primarily due to changing environmental conditions through time, such as climatic change and changes in the local environment such as land management and farming practices.

Carex nigra (L): Common sedge

In damp grassy places and beside water, common throughout the British Isles. Very variable.

Carex recta: Estuarine sedge

Muddy estuaries in north-east Scotland. Probably a partially fertile hybrid of northern estuarine and water sedges.

Carex binervis: Ribbed sedge

Heaths, moors, etc, and on acid soils, common in suitable habitats.

Prunus domestica L spp/Prunus spinosa L: Plum

On well-drained soils. Not one of the 33 native British tree species.

Potentilla erecta (L): Common tormentil

Grassland, heaths, wood clearings, mainly on acid soils. Common on heaths and other grassy places. Perennial. Common on the lime-poor soils of bogs, damp grassland, open birch woods, commons, heaths and moors, especially in hilly and western districts and in the mountains, throughout Britain and Ireland.

The dried roots of this plant have many uses, including the treatment of mouth infections, pain, looseness of the bowel and sunburn. The woody roots are a source of red dye. In Scotland and elsewhere the roots were used in tanning as a substitute for oak bark.

Humulus lupulus L: Hop

Probably native to damp woods in southern England and East Anglia. Climbing perennial. In hedges and thickets, widely distributed. Common in England and Wales, introduced in Scotland and Ireland. In the archaeological record, hops were evident in urban deposits in Haithabu in Schleswig, dating from AD 800 to 1000. There is evidence that bog myrtle was also collected for flavouring in brewing. Young spring shoots can be used as a vegetable. The tips of young shoots are edible and can be used fresh in salads or cooked like asparagus; the latter method was preferred by the Romans. Hops are used as a flavouring and preservative of beer. They began to be used for this in Britain during the Middle Ages. Previously other herbs such as ground ivy had been used for this purpose. Hop pillows are said to aid sleep. Extracts from the female flowers have a mild sedative action and have been used for insomnia and nervous ailments.

Chenopodium album: Fat-hen

Waste places and cultivated land, common throughout the British Isles, especially on richer soils, for example around farm buildings, dung heaps and edges of salt marshes. Fat-hen was once a valued substitute for spinach, and the seeds were eaten as a grain. It has been used as a vegetable and grain since the Stone Age, although has largely been abandoned in recent times. It is a plant which apparently has no natural habitat and probably evolved, like the dog, alongside human habitation.

Vicia spp: Vetch species

Grows in temperate climates. Vetches are a useful food source for grazing cattle. Cattle grazing pure stands of *Vicia villosa* (hairy vetch) can develop dermatitis. Cattle may develop muscular problems when grazing vetch, especially when the seeds are forming.

Rumex acetosa L: Sheep's sorrel

Waste ground, heaths, acid soils. Common in grassland and open woods, and on road verges, sand dunes and rocky ground. Throughout the British Isles. The whole plant tastes of acid and the leaves can be used in salads or to flavour sauces and soups.

Rubus carpinifolius/Rubus lindleyanus: Bramble/blackberry

Common in hedges and scrub and alongside woodland margins throughout Britain and Ireland, but scarcer in areas of intensive agriculture where hedges have been removed. There are more than 400 microspecies of blackberry. Blackberries are a food source. The roots are a source of orange dye; the fruits, a purple dye. The leaves have been used to treat wounds and are used today as an ingredient of herbal tea.

Stellaria media: Chickweed

An abundant and ubiquitous weed of cultivated land and waste ground, especially on light but rich soils, and also on river shingle and coastal cliffs and islets where seabirds nest. It is one of the first flowers of the year. It can be a serious weed of vegetable crops since it requires and tolerates high nutrient levels, growing even on the periphery of dung heaps.

Cerastium arcticum: Arctic mouse-ear/ Highland chickweed

The preferred habitat of this plant is mountain ledges. Found in north-west Wales and Scotland.

Oenanthe lachenalii: Parsley water-dropwort

Wet places and brackish seaside marshes. Poisonous.

Ranunculus bulbosus L: Bulbous buttercup/ crowfoot

Found throughout the British Isles. In northern Scotland and Ireland it is local and generally found only on the coast. It is widespread on

well-drained soils, especially those rich in lime, in dry, mostly lime-rich grassland and on sand dunes. It always grows on well-drained soils and does not tolerate flooding. The whole plant is poisonous with acid sap which can blister the skin.

Potentilla argentea L: Silvery cinquefoil

Found on grassland and wasteland. Distributed throughout Scotland, England, Wales and Ireland.

Galium verum L: Yellow bedstraw/cheese rennet

Distributed throughout Britain and Ireland. Common in dry and well-drained grassland, and on sunny banks, sand dunes and shingle beaches, especially on lime-rich soils. Hay made from this was popular for stuffing mattresses, as it is sweet-scented and a natural deterrent to fleas and other vermin. This plant could also be used as a substitute for rennet to curdle cheese, and a red dye can be extracted from the underground stems.

Urtica dioica L: Stinging nettle

Distributed throughout Britain. Stinging nettles grow on rich soils, especially those manured by animals and rich in nitrogen and phosphorus. Their presence in large clumps away from buildings in woods or fields may indicate former human habitation. Nettle stems are an ancient source of fibre for fabric and clothes, and the shoots can be cooked as spring vegetables.

Barbarea vulgaris R Br: Yellow rocket/ winter-cress

Typically found in weedy areas along pathways and riverbanks, on gravel banks and sand banks, and in waste areas and in clearings. This species prefers well-moistened, stony ground rich in nutrients. It is common in Britain but less so in the north.

Helianthemum canum L: Hoary rock rose

A species of continental origin, a typical flora of steppe-like communities primarily occurring on the most exposed southern slopes. For example this can be found on the Bohemian Karst.

Genista anglica: Needle furze/petty whin

Found throughout Britain on heaths and moors, on acid soils.

Rumex pulcher: Fiddle dock

A mainly Mediterranean plant which is probably native by and near the sea. Found in southern England, especially near coasts, but locally extending as far north as Anglesey. In Ireland it is only found near the sea in Co Wexford and West Cork. It is a classic plant of unmanicured greens and waysides across southern England, to where it may have spread through human activity. It is a weed in southern Europe and frequently turns up around ports and docklands.

Oenanthe crocata L: Hemlock water-dropwort

Distributed throughout Britain but absent from large parts of eastern England, northern Scotland and central Ireland. Locally common by streams and rivers, and in marshes and on damp waste ground, mostly on lime-poor soils.

Arctostaphylos alpinus L: Alpine bearberry

In the British Isles this is found only in northern Scotland. This species will regenerate after fire in damp heaths (in Norway, heath was burnt for summer fodder for sheep and the production of cloudberries). It prefers open woods, stony places and moors. In Britain it is found at altitudes up to 1,000m and in Norway up to 1,840m.

Falcaria vulgaris: Sickleweed/longleaf

Distributed locally in the Channel Islands, Scotland and central Britain, especially in East Anglia, and the continent. It prefers grassy and waste places, and scrub.

Oenanthe aquatica: Fine-leaved water-dropwort

Found throughout the British Isles in ditches and pond edges. This species is only found in wetland habitats. It is a perennial herb and is poisonous.

Ranunculus hederaceus L: Ivy-leaved water crowfoot

Distributed throughout Europe. Found on wet ground, typically in marshland, in wet mud or sometimes submerged in shallow water.

Chaerophyllum temultenum L: Rough chervil

Distributed as far north as southern Sweden, but scarce in Ireland. It grows in rough grassy places, woodland margins and hedgerows, on well-drained soils.

Summary

When the earlier crannog layer, represented by G4022A, was deposited, the immediate environment was open and light, not wooded. There was water in the locality (Loch Finlaggan) and moorland close by. There would have been wild plants growing on the island and loch shore. The occupants of the island had access to stands of coppiced hazel. Hedgerows and scrubland were close by. There was waste ground high in nutrients, indicating the presence of animal dung or middens, showing human activity. There were animals present on the island, either sheep, goats, horses or cattle.

The occupants probably grew einkorn and rye crops and gathered locally growing fruits (brambles and plums) and hazelnuts on a small scale. The people may have used the rye for brewing and flavoured it with hops.

The later crannog layer shows that the environment represented by C8019A was open and light, not wooded. Close by was a wetland area and there were moors locally with acid soils. A weedy wasteland is evident, and animals were present on the island, for example cattle, sheep, goats or horses. The occupants of the island occasionally gathered hazelnuts for food and utilised moss as toilet paper.

In the earlier medieval period, represented by the midden sample C8008B, the landscape was open and light. A wet, nutrient-rich wasteland was close by. Evidence suggests the occupants had links with the coast, as seeds are present from coastal species. Seeds are evident from a plant from the Mediterranean and from a plant native to the Bohemian Karst. This indicates travel links, either by trade or travellers from the Mediterranean or eastern Europe.

Of the plant species evident at Finlaggan today (Table C11.1), only four were evident in the palaeobotanical record. Some species which were evident at Finlaggan in the past will have declined as the environment has changed. Some species are opportunist plants which colonise habitats appropriated and modified by human activity. The environment at Finlaggan differs today, as Finlaggan is no longer inhabited by people. Farming and agricultural practices will have altered in the locality. Animals are no longer evident on either of the islands at Finlaggan. Changes in climate will favour some species and cause others to decline. All of these factors will have caused a change in the flora at Finlaggan. Only *Potentilla erecta, Oenanthe aquatica, Rumex acetosa* and *Urtica urens* are the species which have survived from the past.

A note on nut shells and cherry stones

David H Caldwell

Most of the waterlogged deposits in trenches 18 and 25 produced copious quantities of hazelnut shells. Hazel still grows around Loch Finlaggan, especially at its southern end. Several fragments of almond and walnut shell were also recovered from the earlier medieval midden [25008] adjacent to Eilean na Comhairle, along with quantities of cherry stones. Almonds, walnuts and cherries would have been luxury imports from mainland Europe.

One fragment of almond shell is recorded as coming from the crannog structure 25019.

Wet wood

Michael Cressey

A survey of the samples of waterlogged wood recovered from the Finlaggan excavations was undertaken in 2001 and 2002 by Michael Cressey of CFA Archaeology Ltd. This resulted in two reports, copies of which are lodged in the site archive (Cressey 2001, 2002). This section summarises their contents.

Introduction

The assemblage comprised 685 individual bags of material derived from three waterlogged excavation contexts:

- Trench 18, deposits of sediment [18031, 18066, 18093], medieval and later in the ditch [18032] at the tip of Eilean Mór
- Trench 25, earlier medieval midden [25005] in the loch adjacent to Eilean na Comhairle
- Trench 25, Iron Age or early historic crannog material adjacent to Eilean na Comhairle.

The trench 18 material amounted to 17 bags, the trench 25 crannog material to 106 bags, and the remaining 579 to the medieval midden (Table C11.2).

The material was catalogued, and sub-samples across the range of wood categories (eg straight rods, chippings and twigs) were taken in order to identify their species composition.

Individual sub-samples of wood were placed in a freezer at −10° Celsius for 12 hours prior to sectioning, in order to facilitate clean fractures and where necessary to allow thin sections to be taken from the frozen wood. When required, reference to the keys listed in Schweingruber (1990) were made. The majority of the wood was identified using a binocular microscope at ×10–20 magnification on transverse sections. When required, cross-checks using thin sections were obtained and compared to type slides. Observations on the morphology of the material included age and diameter measurements, along with other information such as side-shoot trimming and tool marks. Fragments of wood considered to be carpentry waste were compared to the wood conversion keys provided in Crone and Barber (1982). This method allows comparisons of primary and secondary tooling events, as well as methods used.

Charcoal fragments were air-dried for 48 hours. Identifications were obtained on transverse sections. Samples below 4mm were considered too small for identification. Anatomical keys listed in Schweingruber (1990) were used alongside in-house reference material to aid identification.

Several wooden artefacts were identified and information on them fed into catalogue entries and discussion in the appropriate sections on artefacts.

Trench 18 assemblage

The species of wood represented in the trench 18 assemblage include oak, hazel, alder and pine (with, respectively, 11, 9, 4 and 1 identifications). The sub-samples are too small to make any realistic statements on species dominance other than that, with the exception of pine, the species are well represented in the total waterlogged wood assemblage. There are pieces of tooled wood, chips and hazelnut shells.

Trench 25 crannog material and medieval midden

Corylus avellana (hazel) is the most numerous species within the crannog structure, followed in decreasing frequency by *Alnus glutinosa* (alder), *Betula (*birch*)*, *Quercus* (oak), *Salix* (willow) and *Calluna vulgaris* (heather*)* .

Hazel is the most frequent species of wood in the medieval midden, accounting for over 60% of the assemblage, followed by oak, alder, birch, willow and heather.

The same tree species are present within the crannog assemblage as were recorded within the medieval midden. The results show that in both the Iron Age structure and the midden, hazel was the dominant wood species. In all cases the species so far identified are all native to the Inner Hebrides and are likely to have been exploited from within the locality of the site. The dominance of hazel may lie in the fact that it coppices readily and that this low-statured shrub may have been managed deliberately.

Woodland management

The underlying principle behind woodland management is that when most native British broad-leaved trees are felled, new shoots will grow quickly from the stump. These long, fast-growing stems can then be harvested repeatedly according to a chosen cycle, generally of seven to eight years (Rackham 1977, 1980). Such 'coppiced' material was very common in the medieval period (ibid) and there is evidence for it in the prehistoric period (ibid). Coppicing may often result in the formation of a characteristic 'heel' that is formed at the base of the rod. This heel survives best

Species	No. of identifications	Frequency (%)
Iron Age structure		
Alnus glutinosa	16	2.7
Betula	8	1.3
Calluna vulgaris	1	0.1
Corylus avellana	62	10.8
Quercus	5	0.8
Salix	2	0.3
Medieval midden		
Alnus glutinosa	41	7.1
Betula	15	2.6
Calluna vulgaris	1	0.1
Corylus	287	50.1
Quercus	106	18.5
Salix	3	0.5
Trench 18		
Alnus	4	0.6
Corylus	9	1.5
Quercus	11	1.9
Pinus	1	0.1
Total	572	

Table C11.2
Wood identifications and percentage frequency from the Iron Age structure and medieval midden in trench 25 and from trench 18

when a rod has been ripped from the coppice stool. Hurdles or panels that were constructed with uniform lateral straight rods and upright 'sails' have commonly been assessed using age diameter measurements (Cressey 1995b; Brunning 2000). These parameters indicate if the material was collected on the criterion of a preferred diameter and/or age.

'Age frequency' plots were designed to assess whether there was any evidence for coppicing; that is, whether wood was harvested on a seven- or eight-year cycle. 'Diameter frequency' plots were designed to show whether it could be demonstrated that there was a preference for wood of one (or more) particular diameter(s), with implications for what sizes of wood were being selected for a given task. Graphs of 'age versus diameter' were designed to show correlation trends between age and diameter. Local soil, topography and growing conditions clearly have an effect on the health of a tree, and it is clear that two pieces of wood of the same age could have very different diameters. The sample sizes used for this preliminary evaluation were quite small, and thus outliers can skew the true picture. Nonetheless, it has been possible to draw some conclusions from the evidence.

The crannog structure

The age versus diameter plot shows low correlation between age and diameter, and supports the theory that hazel wood of any age and a range of diameters was used within the structure.

However, the age versus frequency plot shows that wood between the age of five and eight years was most common, and that a diameter of between 10 and 17mm was evidently considered the most appropriate for construction purposes.

Medieval midden

The age versus diameter plot shows that the majority of the wood was harvested between four and seven years old. Both three-year-old wood and wood aged between seven and nine years old was exploited, but is less common than the four- to seven-year-old assemblage. The age of the wood exploited within the medieval assemblage is younger and exhibits a narrower diameter range than the crannog material. There is greater uniformity in growth patterning within the medieval midden assemblage, and this may be accounted for by local growing conditions. It may well be the case that the hazel woodland was much more open in contrast to a more closed canopy environment. Although the results do not show positive evidence for plot felling, the age/diameter distribution pattern reflects greater uniformity in these two parameters.

General comment

The age frequency plots for both the crannog and the medieval midden wood have two peaks from overlapping normal distributions (five and eight years for the crannog, and four and seven years for the medieval midden). The two peaks are mirrored less clearly in the diameter frequency plots. Indeed, the crannog data produces several local peaks (10, 12, 15 and 17mm) with a broader normal distribution centred on 10mm. The medieval midden diameter plot has a peak at 10mm and a smaller peak at 16mm.

While the sample size precludes emphatic conclusions being drawn, these observations have implications for the use to which the wood was being put. Two different diameters were the most commonly selected material, the wider possibly forming sails (uprights), while the narrower diameter wood formed rods (cross-members) of a woven hurdle.

Woodworking waste

Much of the material was identified as cut or tooled. A large proportion was identified as 'wood chips', providing primary evidence for woodworking on Eilean na Comhairle. In the case of the smaller roundwood, some of this material has been trimmed by a single oblique blow with an axe or knife.

In general terms the wood varies in size from less than 20 to 150mm in length or width, and is often partially or completely squared from the round. In some cases these fragments are trimmed or incorporate tooling, either as cut marks or oblique axe marks. It can be identified as offcuts from woodworking. Only one piece of oak from the medieval midden was identified as possibly having been obliquely sawn. The crannog assemblage of carpentry waste is dominated by alder, with only one sample of oak recorded. Both the trench 25 medieval midden and the relatively small group from trench 18 are dominated by oak.

Charcoal

The condition of the charcoal was found to be fairly good. However, several of the charcoal fragments were sub-rounded, showing that the charcoal had been abraded during deposition. The species identified as charcoal are present within the wet wood assemblage. The charcoal was predominantly roundwood, with only a single piece of charred carpentry waste found in the medieval midden charcoal assemblage.

The size of the assemblage from both the crannog structure and the medieval midden is too small to make any further judgements. The source of the charcoal is attributed to domestic refuse from hearths. It is assumed that charcoal is likely to be low in frequency within the midden environment, if one considers that charcoal floats and therefore a great deal of rubbish from domestic hearths is likely to have floated away from the edge of the midden, assuming that the midden was inundated.

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Abbreviations

BAR: British Archaeological Report.
NSA: *New Statistical Account*.
Proc Soc Antiq Scot: *Proceedings of the Society of Antiquaries of Scotland*.
RCAHMS: Royal Commission on the Ancient and Historical Monuments of Scotland (now part of Historic Environment Scotland).
TFAC: Tayside and Fife Archaeological Committee

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