SCOTLAND'S FIRST SETTLERS

APPENDICIES



Appendix 9 - Catalogue of metal, slag and glass | Andrew Heald & Fraser Hunter (with contributions by David Caldwell & Stuart Campbell)

The data on this page can be obtained from the project archive on the Archaeology Data Service (ADS) website, after agreeing to their terms and conditions: ads.ahds.ac.uk/catalogue/resources.html?sfs_ba_2007 > Downloads > Documents >. From here you can download the files:

- Final reports > Heald_&_Hunter,_Metal_report.pdf
- Specialists reports > metal_report,_Heald_and_Hunter.pdf

In this catalogue the following abbreviations are used: L = length, W = width, T = thickness, D = diameter, H = height, M = mass.

In some cases pieces were catalogued on site and the original N numbers have also been recorded. For non-ferrous metals, the alloy type was determined by non-destructive energy-dispersive X-ray fluorescence (XRF) analysis. The results are from surface analysis only, and thus are affected by corrosion. Stuart Campbell and David Caldwell kindly commented on some of the medieval and later non-ferrous material. Iron work identifications and measurements were supplemented from X-rays. A full catalogue of nails and slag is in Appendix 10; only basic details are noted here. Square-sectioned rod fragments with no other distinguishing features were assumed to be nail fragments.

SFS 4 Sand

Copper alloy

Casting waste - irregular droplet, 5×3×3mm, m 0.1g. Leaded bronze. A2B NE. Spit 6, Context 17

Casting waste - irregular droplet, 9×7×5 mm, m 0.7g. Leaded bronze. A1B SE. Spit 2, Context 1/2.

Iron

Knife tip? Straight edge, shallow curving back. L26mm, H10mm, T4mm. A6B NE. Spit 1, Context 1.

Nails four fragments A2B. Spit 3, Context 29; A6B.SW. Spit 2, Context 17; B1B SW. Spit 4, Context 24; B4B. Spit 1.

Flake 7.5×6×2mm. B24B SW. Spit 6, Context 13.

Lump undiagnostic. 19×11×7mm. B5B NE. Spit 3, Context 1.

Fragment undiagnostic. 11×7×4mm. B21B NE. Spit 1, Context 1.

Glass Beads (with Dawn McLaren)

Turquoise glass bead globular, slightly flattened at one end. The surface shows that the bead was formed by winding a glass rod around a core. Its iridescent surface suggests a potash glass and a late medieval – early post-medieval date (?15th-18th century). D4.5mm, H4mm, hole D2mm. B25A SE. Spit 3, Context 13.

Deep blue translucent glass bead cylindrical, short. Slightly uneven with a D-shaped section. D4.2mm, H2.6mm, central perforation D2.2mm. A4B NW Spit 2, Context 17.

Deep blue translucent glass bead globular, D-shaped section. The surface of the bead is very eroded. D2.8mm, H1.5mm, central perforation Dc0.8mm. B5B NE Spit 4, Context 1/2.

Deep blue translucent glass bead globular, slightly uneven D-shaped section. D1.3mm, H0.8mm, central perforation Dc0.3mm. B8B Spit 2, Context 1.

These beads generally conform to Guido's group 7 (iv) (Guido 1978:70); the short cylindrical form of A4B NW Spit 2 is a variant. The type is a common one with a broad date range from the early Iron Age to the post-Roman period, and cannot be more closely dated. Similar globular beads are known locally from Dun Ardtreck (MacKie 2000:383,384&391) and Dun Beag on Skye (Callander 1921:130).

The recovery of the particularly small example (B8B Spit 2) during sieving is a valuable indicator of the tiny beads which are rarely found on excavations; without wet sieving it is unlikely that this minute object would have been detected, emphasising the bias in our knowledge of beads. Its tiny size suggests that it was probably a decorative item on a tassel or part of a beadwork pattern rather than from a necklace.

Other Glass

Post-medieval vessel glass olive green: 2 sherds from A5B. Spit 1, Context 1; 1 from A6B. Spit 1, Context 1; 3 from A6B.SE. Spit 2, Context 17; 1 (N22) from Test Pit 1 (1999 excavations), Spit 5.

Modern clear glass 2 sherds (N 30) from B1 turf, Context 1; 1 (N36) from B26B. Spit 1, Context 1.

Vitrified material

Amorphous slag fragment L14mm, W12mm, T10mm. 1.2g. A2B NW Spit 3, Context 29.

Small amorphous slag fragment L3mm, T2.5mm. B2A SW Spit 4, Context 13.

Slag sphere L3.2mm, T2.8mm. B5B NW Spit 3, Context 1.

Fuel ash slag fragments 9.9g. B21A NW Spit 2, Context 1.

Slag 494g, primarily unclassified ironworking (125g) and a plano-convex smithing hearth base (343g), plus a small quantity of

hammerscale and slag spheres (catalogue, Appendix 10). The distribution focuses strongly on the squares around the junction of trenches A and B, with limited scatter beyond. Most of this material comes from higher spits, Spit 3 and above and it is presumably more recent than the Mesolithic activity in the rockshelter. It indicates a limited episode of blacksmithing, and the presence of two melted copper alloy fragments in the same area suggests that bronze working also took place here.

SFS 2 Crowlin 1

Non-ferrous

Irregular sub-square lead sheet one edge broken. The slightly undulating surface suggests it may have been a patch shaped to fit an underlying object. L33mm, W33mm, T3mm. Trench 1 Spit 6, N10. The object is undiagnostic, although lead is uncommon before the medieval period.

Iron

Nails a single shank fragment (N12) from Test Pit 1, Spit 3.

SFS 6 Ashaig 1

Slag 15.9g unclassified ironworking,

SFS 17 Church Cave

Copper alloy

Lace end strip of sheet rolled into a tight cylinder, probably for use as a rivet. L30mm, D3mm. Alloy: gunmetal. Test Pit 2, Context 3.

These are common finds from the 15th-17th century contexts elsewhere in Scotland.

SFS 19 Toscaig 1

Iron

Nails two fragments from Test Pit 1, Context 1004 (midden), S1001.

SFS 20 Toscaig 2

Glass

Post-medieval neck of an olive-green bottle from Test Pit 2, Spit 2.

SFS 22 Crowlin 3

Non-ferrous

Lead shotgun pellet Small broken sphere, D5mm. Test Pit 1, Context 3002.

Lead pistol ball consistent with a smooth-bored and muzzle loading weapon of the post-medieval period. The surface damage is a mixture of impact deformation and post-depositional damage and corrosion. D13.5-14mm, 13g. Test Pit 1, Context 3003. (Stuart Campbell)

Iron

Circular button flat, with separate loop. Details obscured by corrosion. Post-medieval. D18mm, T5mm. Test Pit 1, Context 3003.

Nails three nails with roves, and a separate rove possibly used in boat construction(L 17mm, W17mm, T4mm). The nails are 38, 41 and 46mm L, with flat sub-square heads (11-13mm) and square shanks (4.5-6mm); lozenge shaped roves and two parallelogram shaped ones (17×17 mm, 26×22 mm, 26×15 mm, 42×30 mm). Test Pit 1, Context 3003.

Tacks three small tacks (11–19mm L) with sub-square or rectangular heads, from contexts Test Pit 1, Contexts 3002 and 3003, and Test Pit 2, Spit 2.

Nails 44 fragments (Test Pit 1, Context 3002×20, Context 3003×24), all fragmentary but with a few larger examples (based on head and shank dimensions).

Fragment undiagnostic. 11×5.5×5mm. Test Pit 1, Context 3002.

Fragment undiagnostic. 19×19×6.5mm. Test Pit 1, Context 3003.

Flakes $\times 7$ Test Pit 1, Context 3003.

Slag

Unclassified ironworking slag 9g Test Pit 1, Context 3002.

Slag spheres 0.1g Test Pit 1, Context 3003.

Glass

Post-medieval 2 sherds, 1 green, 1 iridescent, ?18th century, Test Pit 1, Context 3002; 5 sherds, 1 green, 2 iridescent, 2 iridescent & ?melted?, Test Pit 1, Context 3003.

SFS 23 Crowlin 4

Copper alloy

Belt mount Copper alloy with figure-of-eight piercing for engaging a stud fastening. The mount was secured to a strap or bolt by being bent over the top of it. The mount still has some mineralised leather adhering to its back. 19th–20th century?

SFS 41 Toscaig 9

Iron

Plain annular ring Circular cross section. Welded? (no evidence of butt join). Surface sheet of tin, soldered to iron (XRF detects trace lead). No wear to indicate function, but tinning of iron is a rarity before the Medieval period. N32. Test Pit 1, Spit 1. D31mm, T6mm.

Mount 34 small fragments from a flat, ?rectangular? sheet mount (one corner survives) with stamped decoration, the edges turned over and flattened to form a raised border 5mm wide. Surviving corner has a rivet hole 2mm Dpunched from the front (border) side. Rivets survive in two sheet fragments, both with sub-square heads $c4 \times 4$ mm and short flat shanks; one joined two sheets together. Few fragments join, but the overall length of surviving border is 120mm, typical T1–1.5mm. Found in both Spits 1 and 2 (S1011 and S1013) in Test Pit 2. 19th–20th century date

Sheet Three fragments of an unidentified flat sheet object with part of one straight edge. Max. 10×7.5×2mm. Test Pit 1, Spit 1.

Tack with square head (12×12mm) and short shank (L 5mm). L21mm. Test Pit 1, Spit 2, S1012.

Nails five fragments, all from Test Pit 1 (Spit 1, S1010,×4, Spit 3, S1015,×1)

Fragment unidentified, no original edges. 15×12.5×3mm. Test Pit 1 Spit 2, S1012.

Glass

Post-medieval one sherd clear iridescent glass; Test Pit 1, Spit 1, S1010.

SFS 49 Creag Na-H-Uamha

Iron

Nail one fragment N83 Spit 1

SFS 57 Rubha a Ghair

Iron

Knife tip fragment with remains of organic scabbard (?leather). Convex curving back with concave upturned tip. Blade concave from resharpening. Early Historic or Medieval. Test Pit 1, Context 572, S1047. L49mm, H18mm, T5mm.

SFS 58 Rubha Chuaig

Iron

Nails two shank fragments (L 23 & 29mm), one slightly bent from removal. Undiagnostic fragment, 19×16×5mm. Test Pit 7, Spit 3.

SFS 66 Ard Clais Salacher 2

Glass

Post-medieval two sherds of olive-green glass from Test Pit 1, Context 6611

SFS 68 Allt Na Criche

Copper alloy

Buckle or brooch pin(?), broken at both ends and bent, rectangular in section and tapering along its length, with four V-shaped notches on one edge at the articulating end; this has solder on the reverse from fastening the return of the pin round a bar. Burnishing and filemarks on both faces. Post-medieval, although it cannot be assigned to a more specific typological class. L23mm, B 3.5mm, T1mm. Alloy: leaded gunmetal (trace silver). Test Pit 2, Context 6821 (turf). (Stuart Campbell)

Circular link Circular-sectioned fine rod bent into a circle, the ends slightly overlapping. Alloy: brass. D: 7mm; T: 1mm. It appears to have been tinned or silvered (this could not be confirmed analytically given the small areas involved), which points to a post-Iron Age date, but it is otherwise undiagnostic and can only be dated as Early Historic - post-medieval. Test Pit 2, context 6823, S1066.

Iron

Knife fragment (two pieces) with remains of wooden handle. Small knife with stepped tang (tang H8.5mm, W4.5mm); the blade tip and tang end are lost. Surviving blade L20mm, with a straight back; its height varies from 11.5 to 6mm. The edge shape is unclear but the rapid taper suggests it is heavily resharpened. L44mm. Test Pit 1 Context 6812.

SFS 69 Sand 3

Strap buckle made by winding and hammering together a strip of sheet metal. The two ends have been joined at the pivot bar by 'key holing' one end into an aperture in the other and it is at this point that the buckle has broken. The pivot bar has iron staining from the pin. Similar decoration of three pairs of twin V-shaped indentations at 90° intervals is known in Scotland on both brooches and buckles; this example dates from the late medieval period. D21–22mm, T2–4mm. Alloy: brass (Stuart Campbell). Surface Find.

SFS 76 Camusteel 1

Iron

Rim and body fragment of a cast iron vessel probably a three legged cooking pot with everted rim, originally c210mm in diameter. Broken just above the shoulder. Test Pit 1, Context 7611, S1105. L65mm, H: 34mm, T4mm. Post-medieval.

Glass

Modern nine clear glass sherds, some decorated. Late 19th-20th century. Test Pit 1, Context 7611, S1105.

SFS 77 Camusteel 2

Copper alloy

Eyelets two small lentoid-sectioned discs flanking organic remains; probably eyelets around a perforation in cloth or leather.

Post-medieval or modern. D6.5mm, H2.5mm, washer T0.5mm, perf D2mm. Alloy: brass. Test Pit 1, Context 7711, S1098.

Iron

Staple? Thin bar, the ends bent back to touch its underside. $17 \times 6 \times 3.5$ mm. Test Pit 1, Context 7711, S1098.

Nails two small fragments from Test Pit 1, Context 7711, S1098 & S1099.

Glass

Modern 15 clear glass sherds (including base), some decorated. Late 19th-20th century. Test Pit 1, Context 7711.

SFS 90 Coire Sgamhadail 3-6

Copper alloy

Pin tip? Flat bar fragment, broken at one end, tapering to a point. Probably the tip of a Medieval or post-medieval buckle or brooch pin. Alloy: leaded gunmetal. L15mm, W4.5mm, T1.5 mm. Test Pit 2, S1073.

Stud hollow dome fastened by rolled sheet rivet. The gap between the stud and the flattened end of the rivet is very small (c1mm), implying it ornamented a thin organic medium such as leather. The type is not chronologically diagnostic, although the zinc levels indicate a post-Iron Age date. D7mm, stud H3.5mm, rivet L4.5mm. Stud alloy: high-zinc gunmetal (trace lead). Test Pit 2, S1073

Lace end rolled sheet rod, lacking part of its length. L15mm, D2mm. Alloy: copper (minor zinc and lead). Test Pit 2, S1073. Medieval or post-medieval.

Iron

Collar – thin bar rolled into a small circle, the ends slightly overlapped. D9mm, H6.5mm. Test Pit 2, S1073.

Knife? Heavily concreted and highly fragmented iron object. Firm identification impossible without conservation, but where the section is exposed it appears to be fragments of a small knife (blade Hc10mm). Test Pit 2, Context ??, S1073.

Other

Fired clay sub-rectangular object with uneven surfaces, presumably an accidentally fired piece of clay. $11.5 \times 11.5 \times 5$ mm. Test Pit 2, S1073.

Slag 130.9g vitrified hearth/furnace lining with slag. S1057.

SFS 96 Meallabhan

Copper alloy

Stick pin circular cross-section, lacking only the point of the tip. The sides of the head bear four zones of decoration, each with a

ring-and-dot motif at the top and six or seven transverse incised lines below. The lowest lines are joined to form a circumferential border defining the decorated head (which is 7.5mm long). The depth of the dots suggests they were once inlaid, but no trace of this now survives. The top of the head is rounded and plain. The pin tapers evenly to the point, and is slightly bent at its midpoint. L72mm, D4mm. Alloy: leaded gunmetal. Surface find.

This is a Hiberno-Norse stick pin of 'undifferentiated' type (O'Rahilly 1998, Class 7, 27–8), where the head is a continuous part of the shaft; the decoration is of her type A. There are close parallels from Garry Iochdrach, North Uist (Beveridge & Callander 1932:41; NMS GT 489) and from Norse levels at Jarlshof, Shetland, the latter being near identical (Curle 1936:263–4, fig 11.6; NMS HSA 853). Examples from Dublin date from c1100-1225 (*ibid*:28,33).

Vessel fragment with iron handle rivet Two fragmentary sheets of copper alloy held by a broken rivet. One sheet has two stab marks, perhaps from an earlier patch (held by paper clip rivets) removed when this second sheet was added. The rivet is domed and sub-square (head D19mm×H9mm) with a rectangular shank (7.5×6mm), overall L24mm. As it is not clenched against the sheet it must originally have held the handle attachment, now lost. The edges of the sheet are curled and ragged, suggesting the fragment ripped out of the vessel in use. Sheet $39\times25.5\times0.2-0.3$ mm. Alloy: gunmetal (primarily $_{\text{Cu}}$ with low levels $_{\text{Zn}}$, $_{\text{Sn}}$, $_{\text{Pb}}$). Surface Find.

This comes from a copper alloy vessel, probably a small bowl or dish with iron suspension handles. The alloy composition (with its zinc content) indicates a Roman or later date, and such vessels are known from the Early Historic and Medieval periods (for example Hunter 1994:57–62).

Iron

Thin strip or bar one original straight edge surviving; punched hole, diameter 4mm. L65mm; H28mm; T1mm. Condition implies post-medieval date.

Bar/knife fragment heavy corrosion obscuring details. 14.5×11mm.

Button circular with separate loop. Details obscured by corrosion. Post-medieval. D18mm, H14mm.

Nails four, of which one is intact (L64mm) and two are among the largest from the SFS project, based on head size (21mm).

Fragment Disintegrated object, perhaps a nail. Max L27mm.

Flake undiagnostic. 25×16.5×8mm.

Slag 32g unclassified ironworking slag

SFS 99 Clachan Church

Glass

Post-medieval two sherds olive-green glass (one a rim) and a clear modern sherd. Test Pit 1, Context 9911.

SFS 104 Fearnmore 1

Glass

Post-medieval olive-green sherd from Test Pit 3, Context 10431.

Modern clear sherds (2) from Test Pit 4, Context 10461.

SFS 114 Fergus's shelter

Iron

Rove rectangular with tip of clenched nail surviving. L26mm, W23mm, T5mm. Test Pit 1, Context 11411, (surface layer), S1077.

Bar, tapering, rectangular-sectioned; perhaps a tang. 24.5×5×3mm. Test Pit 1, Context 11411, (surface layer), S1077.

Nails five modern nails and a possible horseshoe nail from Test Pit 1, Context 11411, (S1077).

Glass

Post-medieval olive-green sherd from Test Pit 1, Context 11412, S1078.

Table														
Site	Ornament	Knife	Nail	Tack	Boat nail	Fitting &c	Fe frags	Lace ends	Vessel	Glass	Metal- working	Other	No.	Datable objects
SFS 96	2		4			2	2		1		32g		11	Hib- Norse; PM
Sand	1	1	5				3			9	495g; +Cu		19	PM
SFS 2			1			1							2	M+
SFS 4										1			1	PM
SFS 6											16g			
SFS 17								1					1	PM
SFS 19			2										2	
SFS 20										1			1	PM
SFS 22	1		44	3	4		3			7	9.1g	2 Pb shot	64	PM
SFS 23						1							1	PM
SFS 41			5	1		3	1			1			11	PM

SFS 49			1											
SFS 57		1											1	EH-M
SFS 58			2				1						3	
SFS 66										2				PM
SFS 68	2	1											3	EH-M; M-PM
SFS 69	1												1	Late M
SFS 76									1				1	PM
SFS 77			2			2				15			19	Mod
SFS 90	2	1				1		1			131g		5	
SFS 96	1	1	1			1	3		1		32g		8	EH-M- PM
SFS 99										3			3	PM
SFS 104										3			3	PM-Mod
SFS 114			6		1	1				1			9	PM-Mod
Total	10	5	73	4	5	12	13	2	2	43		2	173	

The Table can be found on pp9-10 of PDF report, and its own page for printing in Landscape format; Abbreviations: EH = Early Historic; M = Medieval, PM = post-medieval, Mod = modern.

Metal, glass and slag from SFS sites. Note that the ornament category includes different materials; slag fragments are not included in site totals. Information about each find is included by site in Section 2.2 the Active Sites Report.

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