
5 Material Culture

5.1 Pottery by Robert Squair

5.1.1 Methodology

The excavation of midden and other archaeological deposits in Glassknapper's Cave, Antler Cave and Wetweather Cave recovered a small ceramic assemblage of approximately 350 sherds.

To facilitate effective analysis, much of the assemblage was washed to reveal more clearly the original vessel surfaces and fracture profiles. Various aspects of manufacture, morphology and decoration were recorded for each vessel identified. The physical condition of the sherds was also recorded to ensure a fuller understanding of depositional practices and post-depositional processes. Sherds from the assemblage, with the exception of minute fragments, were individually bagged to reduce further deterioration through abrasion in storage.

5.1.2 General description of fabrics

The assemblage comprises approximately 350 sherds and fragments, weighing over 500g. The largest sherd (Illus 7), from P6, is 107mm across its maximum dimension. All vessels recognizable in the assemblage, with the exception of P12, which has disintegrated, are represented by a meagre number of sherds, only some of which are conjoinable. The eclectic ceramic styles represented in the assemblage attest to the extensive chronological range and diverse cultural origins of the surviving vessels.

A total of 11 fabrics were distinguished, largely by superficial appearance, frequency, size, degree of sorting and degree of rounding of the constituent mineral and rock inclusions, using a hand lens with 10x magnification and a bright overhead light source. No interpretative significance is necessarily attached to the occurrence of different sherds, evidently from separate vessels, in the same fabric. Unfortunately, due to the small size of the predominantly rock inclusions and the post-depositional concretions on many sherds, it was impossible to identify conclusively the different types of rock in the recognizable fabrics. The overwhelming presence of mineral and rock inclusions, supplemented on occasion by graminaceous inclusions in Fabrics 2 and 5, suggests an original prejudice of raw material selection during production.

It is unclear whether the vessels represented in the assemblage were manufactured locally or imported into the region from elsewhere. It is tempting to envisage a local production source for P2 and P5, manifest in Fabrics 2 and 5, respectively, each

containing graminaceous inclusion voids, but it is preferable to interpret P9, manifest in Fabric 8, as imported. The fabrics of P6, the possible Norse style, and P12, the late Neolithic impressed ware, differ substantially in terms of superficial appearance, if not formal description, from the remaining ceramics.

5.1.3 Vessel catalogue

The following vessel catalogue provides a formal description of each vessel represented in the assemblage.

P1

Manufacture: The vessel is manifest in Fabric 1. Diagonal striations on the interior surface, typical of lifting, indicate that the vessel was probably wheel-thrown. The interior and exterior surfaces were both smoothed and slipped.

Morphology: The vessel, probably a moderately sized jar, is represented by a substantial body sherd (015/1) and a possible shoulder sherd (016/1). The vessel evidently incorporated a subtle shoulder into a neutral profile.

Function: Heavy sooting or macroscopic food residues are discernible on the vessel exterior.

P2

Manufacture: The vessel is manifest in Fabric 2. The manufacturing method, surface treatments and firing profile remain indeterminate.

Morphology: The vessel is represented by a solitary diminutive sherd. The size and shape of the vessel remain indeterminate.

Function: No use-related traces are identifiable on the surviving sherd.

P3

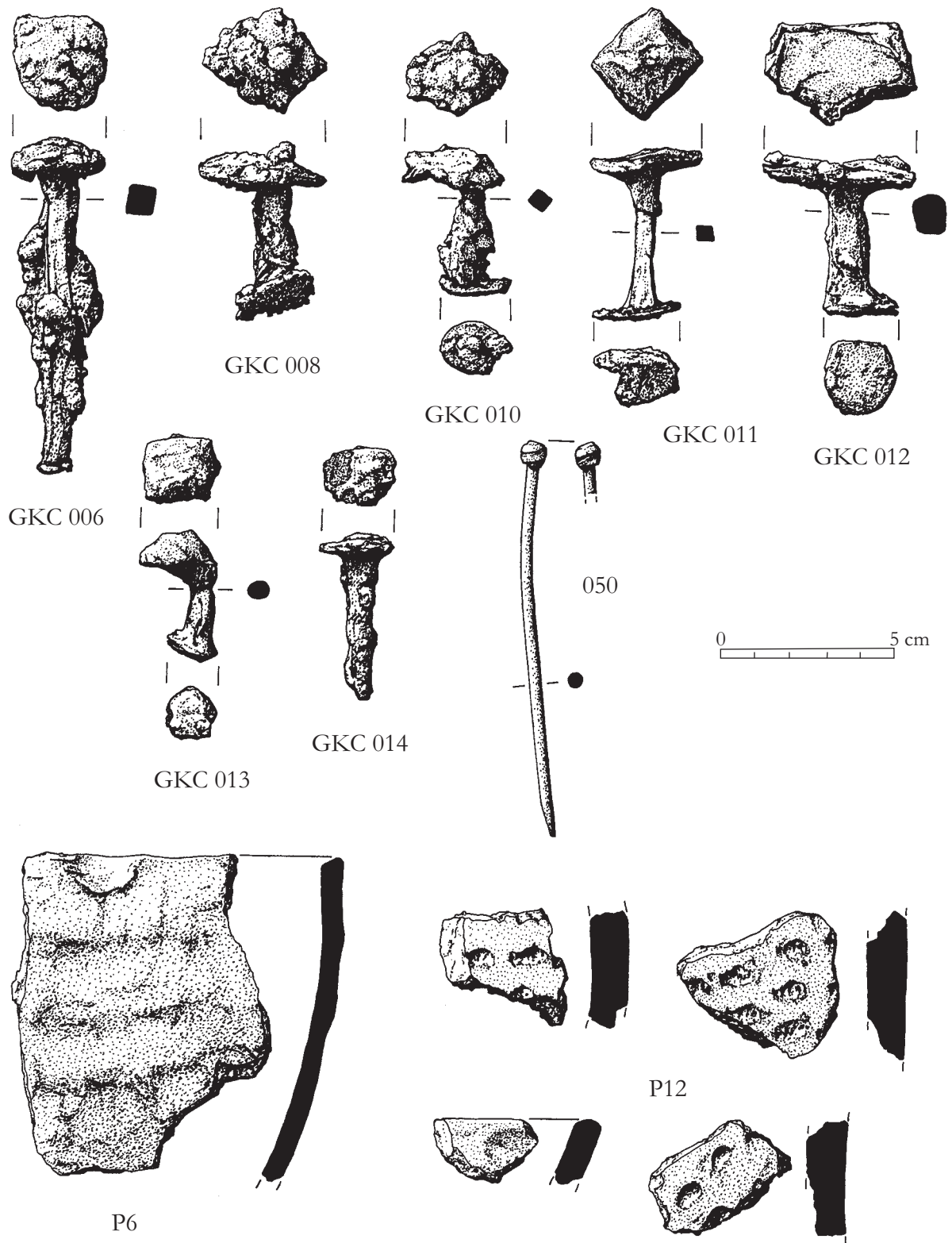
Manufacture: The vessel is manifest in Fabric 3. The manufacturing method is indeterminate. The exterior surface was smoothed and probably slipped.

Morphology: The vessel is represented by three base sherds (014/1, 017/1, 022/1), none of which are conjoinable, despite the presence of fresh fracture profiles on two of these sherds (014/1, 017/1).

Function: A glossy soot is discernible on the exterior basal surface of the vessel. Abrasion on the interior basal surface of the vessel is readily interpreted as a consequence of attrition incurred during use.

P4

Manufacture: The vessel is manifest in Fabric 4. The manufacturing method remains indeterminate.



Illus 7 Metal and pottery artefacts

The interior and exterior surfaces were both smoothed and probably slipped.

Morphology: The vessel, a relatively fine ware, is represented by two body sherds (023/1, 025/1). The size and shape of the vessel remain indeterminate.

Function: Possible sooting characterizes the exterior surface of the surviving sherds.

P5

Manufacture: The vessel is manifest in Fabric 5. The vessel was probably manufactured by coiling. The interior and exterior surfaces were both smoothed and slipped.

Morphology: The vessel, a heavy-necked bipartite bowl, is represented by a large carinated sherd (013/

1), a body sherd (018/1), recently broken into three fragments, and a diminutive fragment (021/1). The vessel incorporated a neck into a bipartite profile.

Function: Striations on the vessel exterior, concentrated above the carination, are preferably interpreted as the vestiges of a use-related attrition pattern.

P6

Manufacture: The vessel is manifest in Fabric 6. Coil corrugations, tangible on both the interior and exterior surfaces, indicate that the vessel was manufactured by coiling. The interior and exterior surfaces were both wiped and slipped. A large finger mark, incurred at the clayware stage of manufacture, occurs on the vessel exterior immediately below the rim. The firing profile is uniformly dark.

Morphology: The vessel is represented by a substantial rim sherd (1001/1) and a body sherd (1000/1). The vessel, slightly inturned at the rim, had a simple, flattened rim moulding, and a barrel-shaped profile. The base, none of which survives, was probably flat, although evidently narrower than the width of the vessel body.

Function: Heavy sooting or macroscopic food residues are discernible on the vessel exterior.

P7

Manufacture: The vessel is manifest in Fabric 7. The manufacturing method remains indeterminate, although the rim moulding was probably formed by lateral joining. The interior and exterior surfaces were smoothed.

Morphology: The vessel, a relatively fine ware, is represented by a rim sherd (1002/1) and a diminutive fragment (1007/1), broken subsequently into two fragments. The rim form combines an external expansion with an internal bevel. The vessel probably had a neutral profile.

Function: Abrasion, concentrated on the vessel interior and not extending onto the internal bevel, is readily interpreted as use-related attrition.

P8

Manufacture: The vessel, a relatively fine ware, is manifest in Fabric 4. The vessel was probably wheel-thrown. The interior and exterior surfaces were smoothed and possibly slipped.

Morphology: The vessel is represented by two body sherds (1003/1, 1008/1). The size and shape of the vessel remain indeterminate.

Function: Possible sooting characterizes the vessel exterior.

P9

Manufacture: The vessel is manifest in Fabric 8. The manufacturing method remains indeterminate. The interior and exterior surfaces were smoothed and glazed, respectively.

Morphology: The vessel is represented by two non-conjoinable fragments of a strap-handle (1004/1, 1004/2). Presumably, the strap-handle was luted on to the vessel exterior. The size and shape of the vessel remain unknown.

Function: No use-related traces are identifiable on the surviving sherds representing this vessel.

P10

Manufacture: The vessel is manifest in Fabric 9. The vessel was wheel-thrown. The interior and exterior surfaces were smoothed and slipped.

Morphology: The vessel, a fine closed bowl, is represented by three shoulder or neck sherds (003/1, 004/1, 1005/1), none of which are conjoinable. The vessel had a closed, globular profile.

Function: Possible sooting occurs on the vessel exterior.

P11

Manufacture: The vessel, manifest in Fabric 10, was probably wheel-thrown. The interior and exterior surfaces, wiped and smoothed respectively, were both slipped. The slip affords the vessel exterior a lustrous appearance.

Morphology: The vessel, a relatively fine ware, is represented by a solitary body sherd (1006/1). The size and shape of the vessel remain indeterminate.

Function: No use-related evidence is discernible on the surviving sherd representing the vessel.

P12

Manufacture: The vessel is manifest in Fabric 11. An exposed internal building coil and lateral fracture along sloping coil joins indicates that the vessel was manufactured by coiling. The interior and exterior surfaces were smoothed and burnished, respectively. The firing profile, incorporating a dark core, is typical of open firings.

Morphology: The vessel is represented by a rim sherd, a neck sherd, several body sherds, fragments from a detached cordon and innumerable diminutive fragments (1010/1, 1011/1, 1012/1, 1013/1, 1014/1, 1014/2, 1015/1, 1015/2, 1015/3). The rim is rolled, with a convex rim surface. The cordon, presumably attached in a horizontal alignment, was evidently luted on to the body of the vessel. The vessel exterior is decorated with whipped cord maggot impressions. The individual maggot motifs, each aligned vertically, are arranged together into horizontal bands around the vessel exterior. Interestingly, each successive row of maggot motifs is offset in relation to the row above, affording the resultant decorative structure an overall uniformity and consistency of design. The vessel, evidently necked, probably had an otherwise neutral profile.

Function: Unsurprisingly, given the prevalence of limestone concretions, no use-related traces are identifiable on the surviving sherds representing the vessel.

5.1.4 Interpretation

Ceramic styles represented in the assemblage

The assemblage contains a diverse array of ceramic styles. Unfortunately, almost nothing is known

about local ceramic styles, from the Iron Age onward, in northern Scotland. The settlement archaeology, extending from prehistory into the relatively recent past, fails to inform upon contemporary ceramic production and use (see Reid et al 1967). Norse and medieval pottery in northern Scotland derive primarily from excavations in Caithness and the Northern Isles (see McCarthy & Brooks 1988, 208–10). Unfortunately, the nature of the relevant assemblages usually precludes the development of coherent ceramic sequences (eg MacAskill 1982, 405; Batey & Freeman 1986, 338). The meagre assemblage from Geodha Smoo is no exception.

At any rate, despite this unsatisfactory if unavoidable circumstance, P12 is interpreted as a late Neolithic impressed ware; P6 is tentatively identified as a Norse style and came from Glassknapper's Cave; P4, P7, P8, P9, P10 and P11 are immediately recognizable as medieval wares; P1, P3 and P5 are tentatively suggested as post-medieval wares. No stylistic comparisons are offered for P2, a vessel with a distinctive fabric, but represented only by a small, entirely uninformative fragment. Given this dearth of evidence, the following commentary is largely provisional.

The prehistoric pottery P12, a necked vessel with a neutral profile, a rolled rim and presumably a horizontal cordon, is an impressed ware datable to the late Neolithic and comes from Wetweather Cave (see Illus 7). The rolled rim, not unknown on such pottery, is less usual than the thickened, internally bevelled rims more typical of impressed wares from elsewhere in Scotland (see McInnes 1964; Longworth 1967; Cowie, forthcoming). The individual whipped cord 'maggot' motifs combine into a coherent decorative structure. The decoration on impressed wares from elsewhere in Scotland, particularly the south-west, is usually more haphazard (see McInnes 1964, 50). There is a paucity of comparable vessels in northern Scotland. However, the decoration on an impressed ware vessel from Allt Chrisal on Barra in the Western Isles, comprising successive maggot motifs diagonally aligned, has a comparable coherent structure (see Gibson 1995, 110, illus 4.36, no 170:111). The inadequacy of the concept of impressed ware, conveying a misleading impression of categorical homogeneity based on a decorative technique ubiquitous during the late Neolithic and early Bronze Age, requires mention (cf McInnes 1964, 49).

P1, P3 and P5, from Glassknapper's Cave, are tentatively ascribed an Iron Age date. P5, a heavy-necked bipartite bowl probably manufactured by coiling, deserves special mention. These sherds bear some similarity in form and fabric to various Iron Age assemblages from the Northern Isles, including the multi-period site at Howe on Orkney (B Ballin-Smith, pers comm).

The Norse pottery The Norse ceramics from, for example, Freswick Castle and Freswick Links in Caithness bear some affinity, both technological and

stylistic, with some of the vessels from Geodha Smoo (see Batey et al 1984, 105–7, 115–16; Pollard 1996b, 20–1). Indeed, the appearance and form, if not the fabric, of P6 (see Illus 7) explicitly recalls that of Norse pottery from elsewhere in northern Scotland, for example at Jarlshof, Shetland (see Hamilton 1956; cf McCarthy & Brooks 1988, 208). Interestingly, the fabric of P2, probably grass-tempered, recalls vaguely that of Norse or medieval pottery from Freswick Castle and Freswick Links (Batey et al 1984); Kirkwall, Orkney (MacAskill 1982, 405, 412); and Jarlshof (Hamilton 1956; McCarthy & Brooks 1988, 208). Admittedly, grass-tempering is an unreliable cultural or chronological indicator in northern Scotland (eg MacAskill 1982, 405, 412).

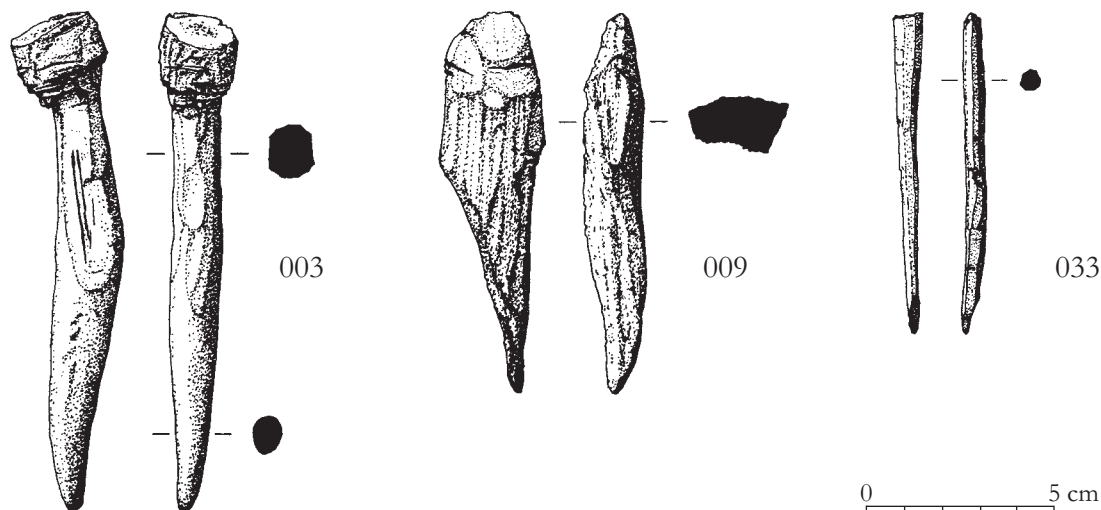
The medieval pottery P4 and P8, each represented only by uninformative body sherds, are broadly recognizable as medieval. P7, with an externally expanded, internally bevelled rim, is comparable, in stylistic rather than technological terms, with medieval vessels from Kirkwall, Orkney (see MacAskill 1982; McCarthy & Brooks 1988, 208, nos 523–4, figure 114:210). Similarly, P9, represented by two non-conjoinable fragments of a strap-handle, is presumably a Scottish White Gritty Ware jug and, as such, is broadly paralleled at Kirkwall (MacAskill 1982, 407).

5.1.5 *Depositional practices and post-depositional processes*

The nature of the assemblage from Geodha Smoo, comprising only a few vessels sparsely represented by diminutive and abraded sherds, suggests that the pottery was casually discarded and subsequently disturbed, prior to eventual incorporation into archaeological deposits. The diversity of styles and breadth of chronology exhibited by the assemblage lend support to this interpretation.

The degree of sherd dispersal across contexts suggest some degree of disturbance of the various pottery-bearing deposits in Glassknapper's Cave, a factor which also appears to have played a part at An Corran, Skye (A Saville, pers comm). Sherds representing P1, P3, P4 and P5 derive exclusively from the lower midden deposit (context 019) in Glassknapper's Cave. P2 and P11, each orphan sherds, derive from a stony deposit within the midden (021) and the lower layer of collapse (006), respectively, again in Glassknapper's Cave. P9 derives exclusively from tumble within Glassknapper's Cave. P12, represented by several sherds and many fragments, derives exclusively from the degraded limestone (1/008) in Wetweather Cave.

Interestingly, the two sherds representing P6 derive from both the upper and lower midden deposits (008 and 019, respectively) in Glassknapper's Cave. The two sherds representing P8 derive from the upper layer of loose collapse and the upper midden deposit (005 and 008, respectively) in



Illus 8 Bone artefacts

Glassknapper's Cave. The three sherds representing P10 derive separately from a black humic layer, a silt matrix with limestone fragments and a stone deposit (contexts 003, 004 and 038, respectively, in Glassknapper's Cave). Medieval sherd P7 came from collapse (context 004).

5.1.6 Conclusion

The variety of ceramic styles represented in the assemblage, encompassing vessels of late Neolithic to medieval date, indicate that the caves in the Geodha Smoo were a focus for sporadic activity, if not continuous occupation, over several successive periods in the past.

5.2 Bone and antler artefacts

by Tony Pollard (with species identifications by Catherine Smith)

One of the most striking results of the Smoo excavations, and the investigation of Glassknapper's Cave in particular, has been the recovery of worked bone and antler. The recovery of organic artefacts in immaculate condition is largely due to a fortuitous combination of damp and alkaline conditions, the latter promoted by both the limestone geology and the presence of concentrated marine shells.

These finds included a carved peg of red deer antler (SF 003, *Illus 8*), with cut marks clearly visible on its surface. This artefact was made on an antler tang, with a carved cylindrical head topping a curved and pointed shaft. Its function is uncertain but, in keeping with other elements of the material culture recovered from the site, may represent a piece of ship's furniture, perhaps an alternative form of timber fastening to the iron nails discussed below and sometimes referred to as tree nails. Alternatively,

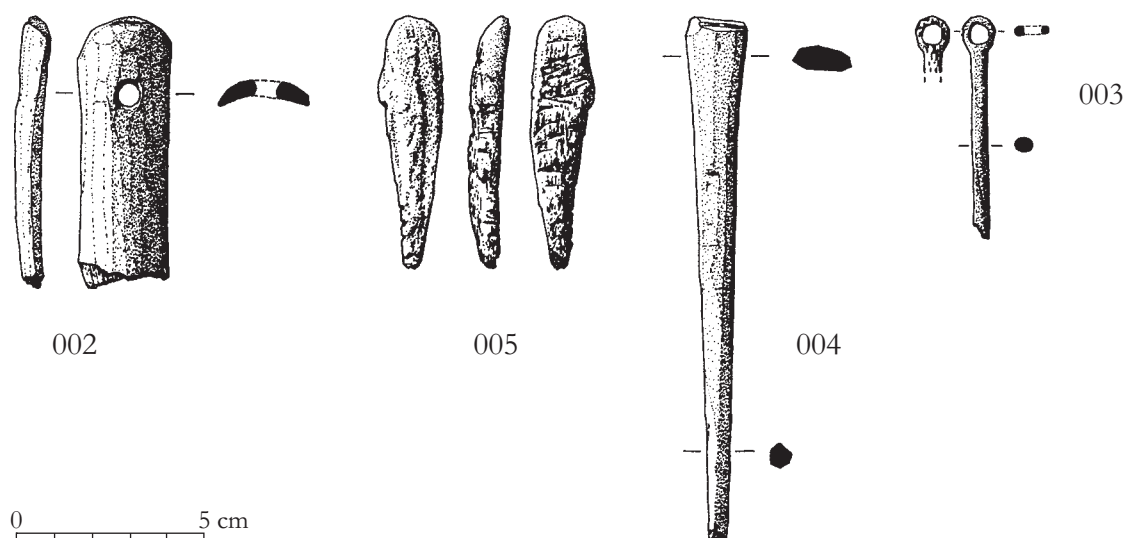
the piece may be a shroud-pin, having the same general form as wooden examples recovered from Hedeby Harbour in Denmark (*Crumlin-Pedersen 1997*, 134). These are devices used for tightening rigging, stays and shrouds, in order to fasten or quickly release them to the side of the ship's hull. However, the Danish examples are considerably larger than the piece from Smoo, and it seems unlikely that the shaft would be anywhere near long enough to perform this function adequately.

Other pieces of worked antler and bone took the form of spatulate or pointed blades (SF 004, SF 005, *Illus 9*; SF 009, *Illus 8*). The first of these (SF 004) is a heavily worked piece of bone which has been cut and shaped along its length to create several facets and a multi-sided profile (six-sided at the narrow end and seven-sided at the broad end). The function of this piece is uncertain, although a bevel-ended piece of antler (SF 005) bears some similarity to the bevel-ended pieces common to western Scottish coastal sites and may have been used for rubbing hides (*Pollard 1994*).

Another spatulate piece of bone was perforated (SF 002, *Illus 9*) toward one end, which has been curved through a series of small knife cuts. This may represent either the handle of a knife or a netting needle, but as the piece is snapped it is not possible to say which is the most likely. The object bears some similarity to a piece, though in antler rather than bone, recovered from the Birsay Bay excavations (*Morris 1989*, 196), although the long sides taper rather than being parallel as they are on the shorter piece from Glassknapper's Cave.

Also recovered, from context 013, was a small, finely worked bone pin (SF 003, *Illus 8*) with a round, perforated head; this may be made of a pig bone.

The function of the majority of the antler and bone artefacts is uncertain with direct parallels being scarce. It has been noted elsewhere (*Batey 1996*) that small organic assemblages do not necessarily



Illus 9 Bone artefacts

display culturally specific traits. In general, however, the assemblage is not out of place with other collections of bone and antler artefacts from coastal sites in northern Scotland, many of which contain Norse elements.

It is apparent that many early (19th-century) descriptions of bones recovered from coastal midden deposits as split or cut to remove the marrow may in reality have referred to artefacts, or the waste produced by their manufacture, rather than food waste.

No antler or bone artefacts were identified during the excavation of Antler Cave. A number of intact antler tines were recovered from the lower deposits, but their relationship to the finished antler artefacts recovered from the neighbouring cave is unclear, although it is tempting to suggest that the cave was used for the storage of this raw material.

5.3 Metal objects

5.3.1 Iron nails

Iron nails were recovered from Smoo Cave and Glassknapper's Cave.

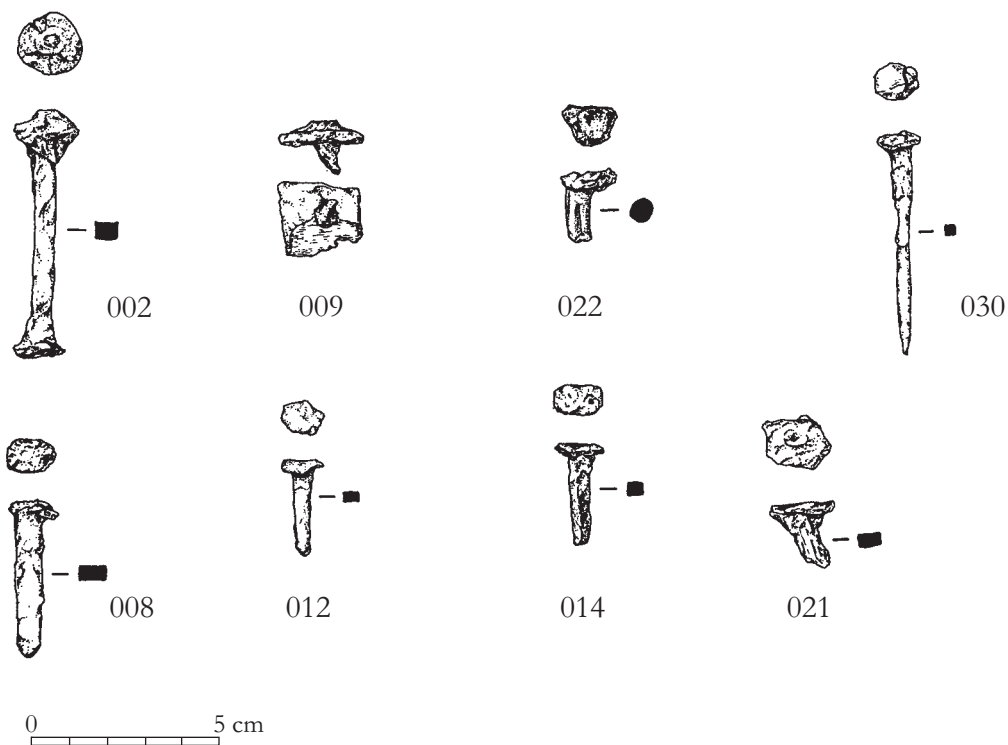
Smoo Cave Four nails (SC SF 009, 012, 014, 022) were recovered from the shell midden deposit (006b) in Smoo Cave, one (SC SF 030) came from context 020 and a further three (SC SF 002, SF 008, SF 021) came from the tumble at the base of the section (see [Illus 10](#)). One of these pieces, SC SF 009, had a flattened, square head, but was snapped just below the head. The majority had round or semi-rectangular heads and appeared to be standard handmade nails. However, one piece (SC SF 002) had opposing sub-circular heads on either end of the square-sectioned shank. Closer inspection revealed that the larger of the two heads was a separate plate, known

as a clench plate. With this in mind, closer inspection of nail SC SF 009 suggests that this is the clench plate end of a clench nail, as the beaten-down nail tip is visible as a raised area on the surface of the plate. Clench nails have a long tradition. They are a relatively common feature on Norse and later coastal sites in Scotland and are usually associated with ships and boats.

The clench nail is really a precursor of the rivet, and was used to hold a boat's timbers together. The rivet is a single-piece fastener with a head and shank; when in position the tip of the shank is flattened out to create what is in effect a second head, thus holding timbers in place. The clench nail, however, was driven through the timbers and then a pre-holed clench plate placed over the end of the nail and the protruding head beaten flat with a hammer, thus holding the clench plate in place. In this way two timbers were effectively bound together, clenched firmly between the nail head and the plate.

The presence of a nail with the clench plate attached suggests that the piece was removed from a rotten or burned timber, as the clench plate would only be added when the nail was actually used, and removal intact would require destruction of the timber. This may indicate that boat repair was taking place on the site, as old timbers were removed from vessels and then replaced, or alternatively that old ship's timbers provided fuel for fires.

Glassknapper's Cave Seven further pieces were recovered from Glassknapper's Cave and in general were larger and sturdier than the examples from Smoo Cave. These came from a variety of contexts: GKC SF 006, SF 010 and SF 012 came from context 008; GKC SF 008 came from context 021; GKC SF 011 and SF 013 came from context 012; and GKC SF 014 came from context 013. All apart from GKC SF 014 had clench plates, or fragment(s) thereof, attached. On a couple of examples, preservation was



Illus 10 Metal artefacts

good enough to show clearly that the clench plate had at one time been separate and the nail head had been beaten out across its outer face. The nail heads in general appear to have been circular or sub-circular, while the clench plates were square in plan. However, in the majority of cases, it was difficult to distinguish between the nail head and the clench plate.

The association between clench nails and boat construction is a strong one, but not one limited to a specific period. A nail with clench plate attached was recovered along with less well-preserved examples from the excavation of Norse and other deposits in Birsay Bay, Orkney, where the excavator notes that it is difficult to tie this artefact type down to any one period (Morris 1996, 92). Similar nails were also found during excavations at Freswick Links, Caithness, where what are described as rivets are presumably clench nails (Morris et al 1995). Both Birsay and Freswick Links have strong Norse components and some of the nails recovered may relate to the Norse periods of the sites' use.

5.3.2 Copper-alloy pin

A single copper-alloy pin (Illus 7) was recovered from a shell midden deposit in the Wetweather Cave.

The pin has a slightly bent shaft, 26mm long, which was probably straight when new. The shaft is tipped by a spherical head, some 2mm in diameter. The head is decorated by a single incised line that spirals around it.

Numerous examples of copper-alloy pins have been recovered from Norse and later contexts in Scotland, varying in style from the plain to the highly decorated. The pin from Wetweather Cave bears close similarity to two pins recovered during Curle's excavations at Freswick Links in Caithness. The description of these pins (4.8.85-6 in Batey 1987, 117) states that they have heads of twisted metal. Although numerous pins with twisted metal heads were recovered from Freswick (eg 4.8.3 and 4.8.4 in Batey 1987, 466), the writer believes that the photograph of pins 4.8.85-6 (Batey 1987, 467) shows them to have solid cast heads with incised decoration rather than heads of twisted metal. Unfortunately, these objects, once held in a private collection in Thurso, appear to have been lost (Batey 1987, 117) and so are not available for examination.

Although the pin may be Norse, it is equally possible that the object, which was probably used to fasten garments or headdress, dates from a more recent period, with twisted metal-headed pins ranging in date anywhere between the 14th and 18th centuries (Batey 1987, 144).