9780903903325.

http://repository.nms.ac.uk/883

Deposited on: 17 October 2014
http://repository.nms.ac.uk/
95mm × 60mm × 60mm, consists of the posterior part of the right parietal bone with a small part of the adjoining occipital bone. The section of lambdoidal suture (which joins the parietals and occipital bone) is almost completely obliterated internally but still clearly visible externally. The edges all appear to have been broken naturally, that is, they had not been cut. The degree of sutural fusion suggests that this bone was from an adult, probably of middle age. There is no indication of sex. A traumatic lesion in the form of a cut mark is visible on the external surface of the parietal part of the fragment. The cut, about 12mm long, was superficial, only penetrating the uppermost part of the outer surface of the bone. Some bone repair of this minor injury can be seen, confirming that it occurred during life. A series of striations along one edge on the external surface may be gnaw marks, but the lack of corresponding tooth marks on the underside of the fragment suggests that, if so, they were inflicted before the bone was fragmented.

Evidence of drilling can be seen on the longest edge, forming an ‘hourglass-shaped’ perforation. This appears to have been formed by drilling both from the external surface and at the same point from an internal direction, to approximately half-way through the thickness of the bone until both perforations met. The drill hole on the external surface is wider and deeper than that on the internal side. Another attempt at drilling can be seen on the internal surface very close to the first. It is quite possible that the fragment split upon drilling, either on the first or second attempt.

The purpose of the drill holes is not clear. One method of trepanation was to drill similar small holes in the skull and cut through the narrow connecting bars between them (Brothwell 1981, 123). However, the drilling on this fragment was partly carried out from the internal surface, ruling out trepanation as a possible cause. For whatever purpose, the bone must have been modified some time after death. Context 171, Block 8b, Phase 2 (deposits formed within entrance area to Structure 4) (see Section 2.4.3.4).

HB04 (not illustrated)
Tibia fragment. Section of distal half of right tibia, broken at each end. The distal end has fractured just above the distal articulation and, at the proximal end, about midshaft. Both breaks appear recent, possibly resulting from machine damage during the initial clearance of the site (as the context from which the fragment derives was the uppermost archaeological horizon in this part of the site). The external surface of the bone is somewhat eroded, in keeping with deposition in a midden but there is no evidence of gnawing. Size suggests that this belongs to an adult, although it could also be from an adolescent. There is no indication of sex, or evidence of trauma or disease. Context 018, Block 18, Phase 3 (midden accumulated over the abandoned Structure 4).

3.5 BONE AND ANTLER

Fraser Hunter

(with species identifications by Andrew Kitchener)

3.5.1 GENERAL

The great value of the CNIP assemblage is its close contextual dating. This gives it considerable importance in the wider study of bone and antler artefacts: so much of the wealth of bone from the Western and Northern Isles comes from early excavations where the stratification is unreliable, and the dating of individual types and working techniques is resultingly vague. While some types are undeniably long-lived, with others we may expect more chronological change, and the CNIP material will be of value for future studies in providing some fixed points. Many of the types represented here are common on wheelhouse sites, and frequent reference will be made to the important survey by Hallén (1994) of the large assemblages from the long-lived wheelhouse sites at Fosshigarry and Bac Mhic Connain, North Uist, as her work summarizes much of the available literature. Only with more unusual items are wider parallels sought.

In total there are 81 bone and antler finds (55 objects or roughouts and 26 fragments of working debris). The catalogue attempts to classify the finds in functional terms using the following categories: manufacturing evidence; tools; ornaments; leisure; fittings; and uncertain (Table 3.21). This has the advantage of interpreting the data in more human terms, but there are some problems. In particular, it risks creating a certainty over use which is often lacking. Interpretation is hindered by a modern unfamiliarity with the uses of bone tools, and for many artefact types the suggested functions are little more than guesses or span a range of possibilities. This greatly inhibits any reconstructions of lifestyle, and is an area which deserves more thorough appraisal: Clarke (1971, 33–8) has highlighted the value of ethnographic analogy, but this has been little pursued.

The utilized whale bone suffers from particular difficulties. While it was clearly extensively used as
Material Culture

TABLE 3.21
Composition of the bone and antler assemblage; there appear to be no significant differences between phases.

<table>
<thead>
<tr>
<th>Category</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Later /</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antler-working debris</td>
<td>2</td>
<td>10</td>
<td>10</td>
<td>1</td>
<td>23</td>
</tr>
<tr>
<td>Bone-working debris</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Roughouts</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Tools</td>
<td>4</td>
<td>10</td>
<td>8</td>
<td>1</td>
<td>23</td>
</tr>
<tr>
<td>Ornaments</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Leisure</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Fittings</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Miniatures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Unidentified</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Missing</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>42</td>
<td>25</td>
<td>2</td>
<td>81</td>
</tr>
</tbody>
</table>

TABLE 3.22
Raw material by phase. wd = working debris.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Antler + wd</th>
<th>Bone + wd</th>
<th>Cetacean</th>
<th>Uncertain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5 + 2</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>8 + 10</td>
<td>2 + 3</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>1 + 10</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Later /</td>
<td>0 + 1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>uncertain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14 + 23</td>
<td>6 + 3</td>
<td>23</td>
<td>12</td>
</tr>
</tbody>
</table>

a resource, the surviving fragments are often insufficient to identify with certainty, and even with relatively intact pieces functions can be quite obscure (MacGregor 1974, 86). Some categories of whale bone artefact are well-defined and widespread (ibid, 86, 106), but many smack of expediency in the use of an occasional resource (cf Hallén 1994, 199). The species exploited at Cnip comprise sperm whale and baleen whales, including a definite minke whale. In most cases vertebrae, ribs and parts of the skull were used. All of these species commonly strand, offering resources of meat, blubber and bone.

The finds give us a number of insights into life at Cnip. Antler, land mammal and cetacean bone were all being worked on the site. The surviving products are everyday rather than specialist, and are dominated by a wide range of tools (see Section 3.5.3), with evidence of agriculture (see Section 3.5.3.1) and the working of hides (see Section 3.5.3.2), textiles (see Section 3.5.3.3), and either pottery manufacture or bronze casting (see Section 3.5.3.4). Two different forms of composite tools are also present (SF101, SF181, SF299, Ill 3.21h–j, see Section 3.5.3.6), where a bone or antler sleeve acted as a holder for an inserted tool tip. This has rarely been noted before, but a survey of NMS collections revealed similar examples to SF181 from Midhowe, Orkney; A’ Cheardach Mhor, South Uist; and Bellochban, North Uist (Callander & Grant 1934, 493, fig 36:1–2; Young & Richardson 1960, 163, fig 7:15; Beveridge 1911, 230–1). Ornaments (see Section 3.5.4) are represented by simple pins (see Section 3.5.4.1), while a range of domestic fixtures and fittings were also being produced.

All the above are what would be expected in a wheelhouse. The most interesting aspect of the assemblage is a small number of unusual finds. Their identification is not straightforward, with detailed arguments rehearsed below. Two of the finds give some insight into leisure activities at the site. The gaming piece (SF145, Ill 3.24b, see Section 3.5.5) is an unusual find, although there is other evidence for board games at this time both in the Western Isles and elsewhere in Scotland. Its relatively elaborate shape suggests it may have been the equivalent of a king piece in a game of strategy. Burial evidence from
elsewhere suggests board games were a pursuit of the wealthy, and this may be relevant to the occupiers of CNIP, although a wider study of games in the Scottish Iron Age is required. The lyre tuning peg (SF50, Ill 3.24a, see Section 3.5.5) is another unusual find which hints at occupants of some status. The putative sword model (SF20, Ill 3.24d, see Section 3.5.7), while more tentative, is another unusual but not unparalleled find, most likely to represent a votive miniature.

The osteological identifications are the work of Dr Andrew Kitchener (NMS, Natural Sciences Dept). His full report is in the site archive; Table 3.22 summarizes the results. It is notoriously hard to identify finely worked pieces, especially items such as pins where the original surfaces and features have been worked away, but it is likely that many of these are of bone: the natural form of bones such as ulnae and fibulae is well-suited to pin manufacture, while such ornaments do not require the structural strength of antler and cetacean bone. With this marked caveat, the assemblage is dominated by antler and cetacean bone, both noted for their structural properties (MacGregor 1985, 23–29). They are thus good choices for the tools which dominate the assemblage. There are patterns within this: anvils and working surfaces are all of cetacean bone, as these combine resilience with large bones offering flat surfaces; while all the identifiable handles are of antler, which again combines a convenient shape with good physical properties of strength and toughness. There are no clear patterns of raw material use by phase, although it is noteworthy that cetacean bone was available throughout the site’s use.

3.5.2 MANUFACTURING EVIDENCE

3.5.2.1 Antler-working debris

The antler-working debris illustrates a typical production sequence, with removal of the base, tines and terminal points to create segments of beam for working into artefacts (Hallén 1994, 196). The surviving bases are all (bar one) from cast antlers, and all appear to be from young animals or deer with poorly developed antlers, typical of free-ranging Scottish red deer today. Some tines were subsequently used for artefacts such as handles (SF250, Ill 3.21g, see Section 3.5.3.5), but most were discarded. The main technique used in dismembering the antler was by circumferential sawing through the cortex and then snapping, a typical approach (Hallén, op cit; MacGregor 1985, fig 32), but circumferential knife-cutting is also represented (SF66, SF143), as is chopping by knife (for small tines eg SF20) and axe (SF52). In one instance there are crush-marks from (ineffective) use of a small hammer (SF292). There is no chronological patterning to the different techniques.

Some of the offsets saw expedient use. There are examples used as working surfaces (SF170, Ill 3.22c, see Section 3.5.3.7 and SF69f), while on SF288 the fracture surface was hollowed, suggesting use as a convenient support or temporary handle.

Only pieces of antler with working evidence were studied; unworked antlers or fragmentary pieces with no surviving tool traces were not considered. The working debris is found throughout Phases 1–3.

BASES (N=7)

SF66 (not illustrated)

Proximal end of cast antler, broken at both ends. Bezel tine removed by knife-cutting and snipping. Other working traces destroyed. L 160mm. Context 113, Block 1, Phase 3 (occupation deposits within Structure 8) (see Section 2.5.1.2).

SF69B (not illustrated)

Shed base and brow tine, detached by sawing and snipping. L 205mm. Context 113, Block 1, Phase 3 (occupation deposits within Structure 8) (see Section 2.5.1.2).

SF69F (not illustrated)

Shed base, detached above bez tine by sawing and snipping; tines removed by chopping. Scattered knife cuts over one surface suggest expedient use as working surface. 85 × 72 × 45mm. Context 113, Block 1, Phase 3 (occupation deposits within Structure 8) (see Section 2.5.1.2).

SF143 (not illustrated)

Cast antler base, detached from rest of antler by circumferential knife-cutting and snipping. 42 × 36 × 35mm. Context 196, Block 5b, Phase 2 (Bay 1 of Wheelhouse 1).

SF286 (not illustrated)

Shed base and lower beam, the brow tine cut off, bez tine intact. Punch marks at beam–brow tine junction from expedient use as a working surface. Worn. L c 85mm. Context 204, Block 5b, Phase 2 (central area of Wheelhouse 1).
SF287 (not illustrated)
Shed antler base, broken, detached above the bez tine by chopping and snapping; the tines were left intact. 86 × 114mm. Context 109, Block 1, Phase 3 (Structure 8 walling).

SF288 (not illustrated)
Discarded base of a butchered antler, chopped and snapped below the tines. The fracture surface was partly hollowed out, perhaps to serve as an expedient handle or support. L 87mm, W 53mm, T 40mm. Context 048, Block 7, Later Activity (upper fill over Structure 2 entrance extension) (see Section 2.4.5.3).

BEAM SEGMENTS (N=3)

SF132 (not illustrated)
Beam segment, unused, with chop marks at one end from detachment; other end broken. L 113mm, W 29mm, T 26mm. Context 204, Block 5b, Phase 2 (central area of Wheelhouse 1).

SF202 (not illustrated)
Beam segment, worn. Ends damaged; possible saw-cut at one end. Trez tine removed by knife-cutting. L 83mm. Context 204, Block 5b, Phase 2 (central area of Wheelhouse 1).

SF289 (not illustrated)
Beam portion, ends broken, trez tine removed by knife-cutting. Differentiated from the other find from ℰ 204 on the grounds of its less worn condition. L 180mm. Context 204, Block 5b, Phase 2 (central area of Wheelhouse 1).

DETACHED TINES (N=7)

SF37 (not illustrated)
Brow tine, detached by circumferential sawing and snapping. L 180mm. Context 106, Block 6, Phase 1 (wall packing in Wheelhouse 1) (see Section 2.3.1.1).

SF114 (not illustrated)
Tine, detached by circumferential sawing and snapping. L 55mm. Context 201, Block 5b, Phase 2 (central area of Wheelhouse 1).

SF138 (not illustrated)
Tine, broken. Faint knife-cut near base, otherwise working traces destroyed. L 65mm. Context 045, Block 4, Phase 3 (entrance area walling of Structure 3).

SF219 (not illustrated)
Brow tine, detached by circumferential sawing and snapping. L 100mm. Context 235, Block 5a, Phase 2 (central area of Wheelhouse 1) (see Section 2.4.1.5).

SF221 (not illustrated)
Terminal portion of tine, detached by circumferential sawing and snapping. L 105mm. Context 256, Block 5a, Phase 2 (Bay 2 of Wheelhouse 1) (see Section 2.4.1.5).

SF290 (not illustrated)
Tine detached by sawing and snapping. L 105mm. Context 123, Block 6, Phase 1 (Wheelhouse 1 wallpacking) (see Section 2.3.1.1).

SF291 (not illustrated)
Tine fragment, detached by sawing and snapping, some knife cuts on surface. L 62mm. Block 1, Phase 3 (Structure 8).

TERMINALS (N=4)

SF52 (not illustrated)
Terminal portion of antler, removed by angled chops with an axe. Tips of tines broken. L 165mm. Context 113, Block 1, Phase 3 (occupation deposits within Structure 8) (see Section 2.5.1.2).

SF69C (not illustrated)
Terminal, detached by sawing and snapping, with traces of incipient sawing round one of the branched tines. 59 × 56 × 25mm. Context 113, Block 1, Phase 3 (occupation deposits within Structure 8) (see Section 2.5.1.2).

SF69D (not illustrated)
Terminal with three points removed by sawing and snapping. 134 × 88mm. Context 113, Block 1, Phase 3 (occupation deposits within Structure 8) (see Section 2.5.1.2).

SF111 (not illustrated)
Terminal portion of antler, removed by circumferential sawing and snapping. L 120mm. Context 195, Block 5b, Phase 2 (Bay 1 of Wheelhouse 1).

OTHER (N=2)

SF69A (not illustrated)
Shed antler, unmodified apart from some working of all the tine tips, for uncertain purposes, and removal of the terminal tines. The bow tine has a notch cut into it;
the trez tine has the tip removed in a concave facet; the trez tine has the tip removed, a deeper concave facet, and a shallow marginal groove incised on one side. The end of the beam is slightly hollowed. The purpose of this working is unclear. L 320 mm. Context 113, Block 1, Phase 3 (occupation deposits within Structure 8) (see Section 2.5.1.2).

**SF292** (not illustrated)
Partly worked, poorly developed shed antler, the brow tine partly cut off and part of the crown removed in an angled cut. Upper end broken, but there were attempts to remove the trez tine with chop marks and, unusually, crush marks around its base. L 270 mm, crown D 43 mm. Context 287, Block 5a, Phase 2a (deposits in Bay 7, Wheelhouse 1) (see Section 2.4.1.5).

**3.5.2.2 Bone-working debris**
Animal bone-working debris is sparse and non-diagnostic, but enough to indicate on-site utilization of bone for tools. The few fragments are associated with Structure 5 (Phase 2) and Wheelhouse 1 (Phase 2).

**SF83** (not illustrated)
Split longbone fragment, notch cut at one end, other worn. L 64mm, W 25mm, T 16mm. Context 134, Block 13, Phase 2 (fill of Structure 5) (see Section 2.4.5.3).

**SF84** (not illustrated)
Split longbone fragment. L 67mm, W 15mm, T 5mm. Context 140, Block 13, Phase 2 (fill of Structure 5).

**SF293** (not illustrated)
Proximal end of longbone shaft, with extensive knife-cuts where the rest of the bone was detached. This portion was then discarded, although a series of fine punch-marks at the articular end indicate it saw expedient use as a working surface. Slight charring at articular end. L 149mm, W 56.5mm, T 40mm. Context 173, Block 5b, Phase 2 (Bay 2 of Wheelhouse 1).

**3.5.2.3 Roughouts**

**SF25** (Ill 3.19a)
Whale bone roughout or stopper. Approximately cylindrical block, covered in knife-trimming toolmarks. Could be either a blank for an uncertain object or a stopper for an organic container. L 54 mm, D 30 × 27mm. Context 074, Block 2, Phase 3 (wall packing of Structure 8).

**SF27** (Ill 3.19b)
Whale bone roughout, the plano-convex section suggesting it was a rib. Surfaces trimmed by knife or gouge; one end roughly angled by a gouge (with blade 14mm W); the other sawn and sapped. Knife-trimming at this end after sawing indicates this was a roughout rather than an offcut. 52 × 35 × 20.5mm. Context 084 area D, Block 1, Phase 3 (occupation deposits within Structure 8).

**SF71A** (Ill 3.19c)
Unfinished handle? Antler beam segment, detached by circumferential sawing and snapping at each end; broken tine still attached; cancellous tissue cruelly hollowed in beam and tine, suggesting use as handle. L 95mm. Joins SF71b. Context 031, Block 15, Phase 1 (fill of Wheelhouse 2) (see Section 2.3.3.3).

**SF71B** (Ill 3.19c)
Handle roughout. Antler beam segment, detached by circumferential sawing and snapping at each end. Cancellous tissue part-hollowed at one end to take tang, but abandoned before completion. L 100mm. Joins SF 71a. Context 031, Block 15, Phase 1 (fill of Wheelhouse 2) (see Section 2.3.3.3).

**SF110** (not illustrated)
Unfinished worked whale bone fragment, with one face and both ends broken. Two perpendicular faces and one angled one bear knife-trimming facets. Broken off an unidentified artefact, perhaps unfinished. L 100mm, W 20mm, T 15mm. Context 173, Block 5b, Phase 2 (Bay 2 of Wheelhouse 1).

**SF162** (not illustrated)
Worked length of whale bone, split from larger bone. Wear obscures working traces, and it is unclear if the splitting was deliberate or accidental. Ends worn and probably not original. One face is flat, with extensive knife-trimming facets; the curved cortical face is knife-trimmed flat at one end and bears three single chopmarks 45mm apart along the edge where it meets the cut face. Probably broken off an unidentified larger object, the chopmarks perhaps marking out the blank. L 250mm, W 37mm, T 25mm. Context 195, Block 5b, Phase 2 (Bay 1 of Wheelhouse 1).

**SF218** (Ill 3.19d)
Unfinished whale bone vessel. Fragment, probably of a vertebra, with the epiphyseal surface at one end; the other end is cut at an angle with a heavy bladed tool,
Material Culture

with the centre being hollowed by heavy angular cuts when the object broke. H 133mm, surviving chord length 73mm, surviving radial width 58mm. Context 242, Block 5a, Phase 2 (Bay 2 of Wheelhouse 1) (see Section 2.4.1.5).

**SF294** (III 3.19e)
Antler tine roughout. The end is now broken but shows slight hollowing of the cancellous tissue. There has been an unfinished attempt to cut the tine 17mm from the broken end by saw-cut circumferential grooving, snapped off in one area only. Some 10 mm above this groove are some shallow knife-cut notches, one quite large. It is unclear what the intended product was. L 82.5mm, D 16mm. Context 085, Block 8, Phase 2 (midden accumulation over Structure 4).

**SF295** (not illustrated)
Sub-cylindrical faceted length of cetacean cancellous tissue, broken at one end, flat at the other. Perhaps a peg in course of manufacture. L 56mm, D 14.5mm. Context unknown, Block 15, Phase 2.

**SF296** (III 3.19f)
Broken sub-oval cetacean bone object with natural cortex on one side, the other split through the cancellous tissue. The edge is bevelled by broad knife-cuts on two edges, and more crudely cut and snapped on the others; one corner is missing, apparently accidentally detached by an over-vigorous chop. No evidence of use; this is a roughout broken in course of manufacture. L 123mm, W 103.5mm, T 21mm. (Found with an amorphous lump of cortical tissue, apparently unworke, 120×81×40mm). Context 201, Block 5b, Phase 2 (central area of Wheelhouse 1).

3.5.3 TOOLS

3.5.3.1 Agriculture/construction

**SF72** (Ill 3.20a)
Mattock or similar tool. Wedge of cetacean bone, broken and worn at the butt end with a curved blade edge at the other, asymmetrical through wear. A band of wear polish is visible along the edge on both faces, more developed on the cancellous face. The strength and resilience of whale bone made it appropriate for heavy-duty tools such as ard points (Rees 1979, 40), spades (Crawford 1967, 88–9), mattocks and hoes (Ballin Smith 1994, 181–2). Damage inhibits identification, but the morphology and wear are consistent with use in a chopping motion, suggesting it was a mattock for agricultural or construction purposes. L 150mm, W 60mm, T 28mm. Context 029, Block 18, Phase 3 (midden deposit formed in hollow next to wall, Structure 10).

3.5.3.2 Hide working

**SF40** (Ill 3.20b)
Awl, created by making an angled cut across the shaft of a tibia and abrading the resulting point to shape: the abrasion scars are still clearly visible, although the tip itself shows some wear. A common Iron Age type (Hallén 1994, 205). L 110mm, W 24mm, T 17mm. Unstratified (section collapse above Structure 8, so most likely Phase 3).

**SF297** (Ill 3.20c)
Flensing knife? Elongated thin blade made from split metatarsus. The naturally hollow proximal end, now broken, acted as a handle or handle socket. The blade is highly polished all over from use. Morphologically this is close to dagger beaters, used when weaving on an upright loom to beat the weft into place (MacGregor 1985, 188–9); the high degree of polish is consistent with this. However, this interpretation is unlikely as the sharpness of the edges would have damaged the threads (cf SF172, Section 3.5.3.3). It is better interpreted as a specialized knife, perhaps for flensing as it would have less risk of damaging the hide than an iron blade. There are comparable finds from Dun Mor Vaul (MacKie 1974, 145) and A’Cheardadach Mhor (Young & Richardson 1960, 163 and fig 8, 18; the suggested function for scooping out shellfish seems unlikely). L 155mm, W 22mm, T 15mm. Context 100, Block 1, Phase 3 (deposit within Structure 8).

**SF124** (not illustrated)
Tip of polisher of cetacean bone. Broken rounded tip of an implement, lentoid in section; use-polish on the cortical tissue suggests it functioned as a polisher, perhaps in hide-working (cf Hallén 1994, Ill 7, 1). L 48 mm, W 32 mm, T 11 mm. Context 204, Block 5a, Phase 2 (central area of Wheelhouse 1) (see Section 2.4.1.5).

3.5.3.3 Textile working

**SF42** (Ill 3.21a)
Needle with broken tip. The shaft is ovoid in section, flattening at the squared head; biconical perforation D
ILLUSTRATION 3.19
Roughouts. (a) SF25, (b) SF27, (c) SF71a and SF71b, (d) SF218, (e) SF294, (f) SF296.
2×2.5mm, with no traces of wear. L 55.5mm, head 2×4.5mm, shaft 3×3.5mm. Context 109, Block 1, Phase 3 (Structure 8 walling).

**SF172 (Ill 3.21b)**

Beater tip. Flat rectangular-sectioned shaft tapering to a flat point, highly polished all over and tip rounded. Although its fragmentary nature inhibits interpretation, the polish and lack of sharp edges suggest this was a beater used in weaving (MacGregor 1985, 188–9). L 40mm, shaft 6.5×3mm. Context 220, Block 19, Phase 3 (threshold deposit for Structure 3).

**SF204 (Ill 3.21c)**

Long-handled comb of cetacean bone, undecorated, with an expanded ‘fish-tail’ butt end. The toothed end is expanded and originally bore probably 11 teeth, with the outer one on either side now broken and two more lacking their tips. The surviving teeth lie in the same plane and are an almost constant length. They are rectangular in section, the tips being rounded from use and bearing wear-polish; one also has faint transverse grooves on one face.

There has been an extended and as-yet unresolved debate over the function(s) of long-handled combs, with the main options being hair-combs or a range of possible uses in textile manufacture (Hodder & Hedges 1977; Sellwood 1984, 371–8; Coles 1987, 105–6). No consensus has been reached, and indeed the range of shapes, sizes and wear patterns must imply a range of uses. The type is common in Atlantic Scotland (Hodder & Hedges 1977, 25–6; Hallén 1994, 222–4). L 133mm, W 40mm, T 15mm. Context 242, Block 5a, Phase 2 (Bay 2 of Wheelhouse 1) (see Section 2.4.1.5).

**3.5.3.4 Pottery manufacture or bronze casting**

**SF10 (Ill 3.21d)**

Modelling tool. Bone, highly polished, with one spatulate flattened end, the other terminating in a blunt point. It seems too fine for hide-working, and was probably used in forming wax models for lost-wax bronze casting or shaping and decorating pottery (Hallén 1994, 207). L 115mm, W 10mm, T 5mm. Context 025, Block 18, Phase 3 (within wall, Structure 10).

**SF91 (not illustrated)**

Modelling tool. Broken, with a thin sub-rectangular shaft expanding into a flat spatulate end. The working edge has slight use-polish and abrasion scars from repair or reworking. Toolmarks of knives and abrasives used in shaping the tool are visible. L 78mm, shaft 8.5×4mm, end W 11.5mm. Context 107, Block 6, Phase 1 (wall packing of Wheelhouse 1) (see Section 2.3.1.1).

**3.5.3.5 Unattributed – handles**

**SF22 (Ill 3.21c)**

Decorated handle, with a longitudinal perforation where the cancellous tissue has been hollowed out.
One end is well-finished and rounded off; the thinner end is more uneven, with saw cuts and ridges from cutting to shape, suggesting it was covered by the capping of the tang when in use. Decoration comprises three diagonal grooves near the thinner end, their shallow round section indicating use of an engraving tool such as a scoper (Maryon 1971, 64, 153). L 81mm, D 21 × 19mm, perforation D 9–9.5mm. Context 010, Block 10, post-abandonment (sand overburden).

**SF250** (not illustrated)
Handle. Curved antler tine with tapering hollow for tang at curved end, 26mm deep and up to 6.5mm D. Cracks radiate from this hollow from stress during use. A slight surface depression at the far end may represent an abandoned hollowing attempt. Pronounced knife-cutting marks on two areas are presumably secondary. L 66mm, D 17mm. Context 069, Block 6, Phase 1 (jammed into pier on north side of entrance in Wheelhouse 1) (see Section 2.3.1.1).

**SF298** (not illustrated)
Handle fragment? Antler beam fragment, sawn square at one end, with the interior hollowed; original form and length unclear. 41 × 18 × 8mm. Context 116, Block 16, Phase 1 (main enclosing wall of Structure 2).

3.5.3.6 *Unattributed – composite tool heads*

**SF101** (Ill 3.21f)
Small pick with hollowed tip. Cast antler base and lower beam, chopped off from rest of antler. Beiz tine removed by cutting and napping. Tip of brow tine removed and a small socket hollowed, perhaps to take a (?metal) tip for use as a fine pick, perhaps for use as a punch. L 200mm. Context 172, Block 5b, Phase 2 (Bay 1 of Wheelhouse 1).

**SF181** (Ill 3.21g)
Socketed tool head? Cylindrical antler beam segment, split longitudinally. It is roughly finished, with knife facets unsmoothed apart from some limited filing, but the ends have been smoothed to remove the rough edges from cutting to size. There is a sub-circular central transverse perforation (D 14mm) and a somewhat irregular longitudinal perforation, varying from 8–10mm D. The ends show slight edge-flaking and burring consistent with a striking function, and (although the round hole is unusual for this) it seems plausible that a handle was inserted in the transverse hole with tool points being fitted into the longitudinal hollows. L 65mm, W 29mm, T 21mm. Found in fragments in two different contexts, 219 and 224, both in Bay 7 of Wheelhouse 1 (Block 5b, Phase 2).

**SF299** (Ill 3.21h)
Small pick with hollowed tip. Lower portion of a shed antler with a small hollow (D 5mm, depth 3.5mm) in the tip of the brow tine, perhaps to function as a delicate punch or to hold a fine tool tip, as with SF101. An angled cut across the shaft exposed the cancellous tissue; this was hollowed out to create space for a lentoid-sectioned handle (c 10 × 20mm in section). It apparently saw little use; surviving cancellous tissue in the interior is undamaged, and a hole below the tine suggests the handle split the socket here. Shaft L 125mm, tine L 132mm. Context 272, Block 5a Phase 2a (brown sand deposit across Bay 1, Wheelhouse 1) (see Section 2.4.1.5).

3.5.3.7 *Unattributed – working surfaces/ anvils*

**SF41** (Ill 3.22a)
Flat cetacean plaque. Split from skull, slightly curved and expanded towards one end where it is broken. Edges and surviving end are trimmed straight; notch cut into intact end. Area of wear at narrow end of cortical face suggests use as a working surface or support of some sort; there are some cut-marks at the opposite end. L 180mm, W 70mm, T 20mm. Context 109, Block 1, Phase 3 (occupation deposits within Structure 8).

**SF149** (Ill 3.22b)
Chopping board. Cetacean left ulna, fragmented at distal end. Unmodified apart from a series of chop-marks at the distal end, typically 10–20mm long, implying use as some form of chopping board. L 380mm. Context 103, Block 8, Phase 2 (dumped material sealing occupation within Structure 4).

**SF170** (Ill 3.22c)
Support for chopping. Cetacean bone, with one end the natural epiphysial surface and the other chopped at an angle. Surface covered in heavy chopmarks, some deep, probably from an axe. The quantity and extensive scatter indicates they are not from butchery, and suggests expedient use as a support for chopping. L 120mm, W 103mm, H 73mm. Context 204, Block 5b, Phase 2 (central area of Wheelhouse 1).

**SF300** (not illustrated)
Chopping board fragment of cetacean bone. Flat slice split from a larger bone, with fine knife-marks across
the surface. The intact edge and triangular tip are knife-cut; other edges lost. The thickness tapers from the point. L 187mm, W 86mm, T 4–14mm. Context 091 Block 1, Phase 3 (layer covering western interior of Structure 8).

SF301 (Ill 3.22d)
Cetacean limb bone used as an anvil or working surface; traces of rectangular slots or broken mortices at either end imply it was firmly held in an anvil or workbench. Knife-cuts are scattered over the surfaces; one surface is damaged (probably from use), while the opposite face has crush-marks from limited but heavy-duty use. L 235mm, W 52mm, T 42mm. Context 218, Block 11, Phase 1 (Wheelhouse 2 entrance) (see Section 2.3.3.3).

3.5.3.8 Unattributed – miscellaneous

SF100 (Ill 3.22e)
Double-ended forked implement, lacking one prong, made from a naturally hollowed bone. The prongs are some 35mm long; those at one end bear slight use-polish. This is a well-known but enigmatic type, with a range of suggested uses from twining threads to removing hooks from fish throats (Hallén 1994, 210). The generic wear on this example offers little help in interpretation. L 115mm, W 37mm, T 18mm. Context 173, Block 5b, Phase 2 (Bay 2 of Wheelhouse 1).

SF302 (Ill 3.22f)
Peg or punch? Tine with the end squared and the surfaces knife-trimmed and smoothed, creating an irregular cylinder with a broken tip. The squared end is flattened and compacted, suggesting use as a peg or a punch. L 81mm, D 16 × 18.5mm. Context 272, Block 5a, Phase 2a (sand deposit across Bay 1, Wheelhouse 1) (see Section 2.4.1.5).

SF303 (Ill 3.22g)
Peg or point? Tine, the end squared and the surface lightly trimmed in places. The tip has been sharpened by two cut facets, suggesting use as a peg or a point; there are no visible use-traces to support the latter function. L 75mm, D 14.5 × 16mm. Context 272, Block 5a, Phase 2a (sand deposit across Bay 1, Wheelhouse 1) (see Section 2.4.1.5).

See Roughouts (Section 3.5.2.3) for SF25, a possible stopper.

3.5.4 ORNAMENTS

3.5.4.1 Pins
The only ornaments in the assemblage are fasteners in the form of pins and point/pins. The latter term is used for points which are well-finished all over but lack the fine finish of pins (Foxon 1991, 194, 224; Hallén 1994, 215). The fineness of the examples below suggests they were used as pins. Typically for the Middle Iron Age,
Tools continued. (a) SF41, (b) SF149, (c) SF170, (d) SF301, (e) SF100, (f) SF302, (g) SF303.
none of the pins are decorated. While the perforated example was undoubtedly a clothes fastener, the rest could function either in clothing or hair.

**SF53 (Ill 3.23a)**
Broken point/pin, lacking head. The shaft is sub-rectangular in section, tapering gradually to the tip. The finish is poor, with knife cuts and extensive abrasion scars from manufacture not polished away. However it is not unfinished, as the extreme end of the tip bears very slight use-polish, implying it was a coarse pin or point. L 72mm, shaft 6.5 × 4mm. Context 108, Block 6, Phase 1 (wall packing for Wheelhouse 1) (see Section 2.3.1.1).

**SF73 (Ill 3.23b)**
Pin tip, with ovoid section and slight polish all over. L 34.5mm, D 2.3 × 3.2mm. Context 131, Block 15, Phase 1 (fill of Wheelhouse 2) (see Section 2.3.3.3).

**SF92 (Ill 3.23c)**
Pin shank. Cylindrical rod, broken at both ends, well-finished but not polished – abrasion scars are still visible. Possibly starting to taper at one end. L 85mm, D 5mm. Context 034, Block 1, Phase 3 (wall packing for Structure 8).

**SF96 (Ill 3.23d)**
Pin. Fine, well polished and slightly curved; one end sharp, the other rounded. Made from an unidentified bone. L 95mm, D 4mm. Context 173, Block 5b, Phase 2 (Bay 2 of Wheelhouse 1).

**SF115 (Ill 3.23c)**
Tip of point/pin. Round section, more ovoid near break. Shaft faceted from knife-cutting with no attempt to smooth this off, but rounding and breakage of the tip shows it was not unfinished. L 49.5mm, shaft 4.5 × 3.5mm. Context 204, Block 5b, Phase 2 (central area of Wheelhouse 1).

**SF187 (Ill 3.23f)**
Pin tip. Very regular round section and polished finish. L 51mm, D 3.5mm. Context 223, Block 8, Phase 2 (occupation deposit in Structure 4) (see Section 2.4.3).

**SF207 (Ill 3.23g)**
Pin with perforated head. Broken across the perforation (D 3mm), where the section is flat, the shaft becoming ovoid and then circular towards the point. Well-finished; tip has slight use polish. There are two main types of such perforated points: kite-shaped ones, best seen as needles; and ones with an expanded head, interpreted as pins with the hole for a fastening cord (MacGregor 1974, 71; Hallén 1994, 213). As this example has broken across the perforation it cannot be securely identified, but the thinning of the bone suggests that the perforation was close to the end of the object and was not designed to survive the stresses involved in use as a needle. It is therefore classed as a pin. L 77mm, maximum W 9mm, shaft 6 × 4mm. Context 241, Block 5a, Phase 2 (Bay 1 in Wheelhouse 1) (see Section 2.4.1.5).

**SF251 (Ill 3.23h)**
Pin. The shape is slightly odd due to loss of outer cortical tissue at the point, which makes it look over-sharpened. Circular section, highly polished. The plain head is very slightly rounded at the end. L 101mm, D 4.5–5mm. Context 293, Block 5a, Phase 2 (Bay 7 in Wheelhouse 1) (see Section 2.4.1.5).

### 3.5.5 LEISURE

**SF50 (Ill 3.24a)**
Tuning peg from a lyre? Peg with round-sectioned shaft which expands into a faceted, approximately pentagonal head, tapered at the top. The shaft’s tip is rounded, thinned and ribbed from circumferential abrasion for 4mm from the end, with some much slighter ribbing above this up to 11mm from the end. This implies the faceted head was designed to give a better grip when turning the peg. The obvious function is as a tuning peg for a stringed instrument. Pegs similar in size and shape are known from the Roman period onwards (Homo-Lechner & Vendries 1993, nos 77–81; Lawson 1978, 1996). The difficulty with the identification is the lack of a characteristic hole or slot at the end to take the string (Homo-Lechner 1996, 79–82). However, there seems no particular reason why the string could not simply be wrapped round or tied to the end, as the risk of it slipping off when held under tension is no greater than with a slot; the wooden pegs from the Sutton Hoo lyre, although distorted, also lack holes (Bruce-Mitford & Bruce-Mitford 1983, 636–7, 689–93; the argument that they were in damaged portions is incapable of proof). The wear marks are similar to other lyre pegs (Homo-Lechner & Vendries 1993, nos 79–81).

Assuming it derives from a stringed instrument, this is likely to have been a lyre, as the earliest evidence for harps is on ninth century AD sculptures (Ross 1998; MacGregor 1985, 146). In non-Mediterranean Europe, evidence for lyres is first found in the Hallstatt
C period in central Europe, and mid-late La Tène in northern Europe (Megaw 1968, 351–2; Vendries 1993, 30–1). The second-century BC statue from Paule, Brittany, provides the strongest evidence for the use of the lyre in the European later Iron Age, and tallies with the testimony of Classical authors (Vendries 1993, 30–1, 38; Ménez 1999). Surviving fragments are sparse: from Britain there is the third century BC lyre wrest plank from Dinorben (Savory 1964, 169–70) and a more dubious example from Dùn an Fheurain, Argyll (Megaw 1971), dated broadly to the first half of the first millennium AD; there is also a wrest plank of second century AD date from a Germanic settlement at Bremen–Habenhausen (Bishop 2002).

Without further clear examples of tuning pegs without string holes, the interpretation of this find must remain a little tentative: the literature is already clogged up with false flutes, whistles and other musical miscreants. However, the interpretation fits the observed morphology and wear of the object, and the parallels quoted above indicate there is contemporary evidence of such instruments. L 45.5mm, head W 6.5×5mm, shaft D 4.5–1.5mm (tip). Context 114, Block 18, Phase 3 (midden deposit sealed by Structure 10 wall).

SF145 (Ill 3.24b, colour plate 8)
Gaming piece. Antler beam segment, the base sawn flat to remove working marks. The beam has been tapered and worked into two thin prongs of cortical tissue, with the cancellous tissue hollowed between. Wear is limited and non-specific, the tips of the prongs are evenly worn and polished, but the cancellous tissue is unworn. The circumference of the base has very slight rounding and polish from wear, restricted to its very edge.

There would seem to be two main possibilities for this item’s function, as a tool or a gaming piece. Two-pronged implements are well attested, and have a wide variety of possible functions (Hallén 1994, 210), but they generally have a handle or shaft. This example could be held between the fingers, but the restricted extent of the wear implies very delicate use; there is no obvious need to cut the base flat if it were hand-held. The shape is appropriate for a gaming piece, although one might expect the base to be more regular in plan. The wear restricted to the prongs could then arise from handling. This identification is proposed here.

Iron Age gaming pieces have not been well studied. From around the sixth century AD onwards relatively ornate gaming pieces are known, including anthropomorphic examples (eg Scalloway and Mail, Shetland: Sharples 1998, 172–80), phalanges with Pictish symbols (Burrian, Orkney; MacGregor 1974, nos 210–11), conical pieces (eg Dun Cuier, Barra: Young 1956, 319–20), and pieces similar to modern pawns (Gurness and Birsay, Orkney: Hedges 1987b, no 193; Curle 1982, no 275). The stone discs with Pictish symbols and other ornament (Thomas 1963, 45–7) may also be gaming pieces. Both pegged and incised gaming boards are known from Late Iron Age and Norse contexts (Curle 1982, no 274; Ritchie 1987, 60–3). However, board games are also attested earlier in the Iron Age, although the evidence awaits detailed study and many examples are poorly dated. There are counters, pegged pieces and a range of other, largely geometric, shapes. Simple circular stone and pottery counters are known from many sites (eg Dun Mor Vaul: MacKie 1974, 135, 151; Traprain Law: Cree 1923, figs 19.33–40; Howe: Ballin Smith 1994, 188–9), and there are a few rare cases of Roman glass gaming counters (see Hunter 1998; the glass counter from Dun Mor Vaul is a further example: MacKie 1974, 148). More ornate pieces are also
known: there is a pegged piece from Sollas, North Uist (Campbell 1991, 158, and Ill 21, 653), while Close-Brooks (1986, 166) has plausibly reinterpreted a widespread group of domed ‘pin-heads’ in both bone and jet-like material as gaming pieces, based on Irish sets of similar domed bone pegs (eg Knowth: Raftery 1983, 231). Other material is more diverse. Gurness has produced part of a truncated-cone gaming piece from broch levels (Hedges 1987b, no 194). Burrian has a range of pieces in addition to the Pictish decorated phalanges, although they are not well-dated (MacGregor 1974, 87–8, nos 207–9; 207 has traces of deliberate colouring). A shaped phalange from Midhowe, Orkney is another likely candidate (Callander & Grant 1934, 489); again the dating is poor, but there is no diagnostically Late Iron Age (Pictish) material from the site. From southern Scotland, certain Roman or pre-Roman Iron Age
Examples (equivalent to Atlantic Middle Iron Age) are the domed bone pieces from Borness Cave, Kirkcudbrightshire and Broxmouth, East Lothian, the former with ring-and-dot ornament on the centre, the latter stained dark (Corrie et al 1874, 497, no 114; unpublished).

The detailed use of such pieces is uncertain. Clarke (1970, 226) has highlighted the possible role of counters in dice-based games, while the traces in a few instances of colour differentiation suggest a game of opposing sides; burial evidence from the pre-Roman and early Roman Iron Age in southern Britain confirms the existence of such games (eg Stead 1967, 14–19; Crummy 1997). The morphology of the Cnip piece suggests it was intended as a king-piece or similar. These rich southern graves imply that board games were perceived as a status activity, a perception which persists into later centuries (Stratford 1997, 31–8) and in a Scottish context is supported by finds such as the rich Roman Iron Age burial from Waulkmill, Aberdeenshire, with its Roman gaming set (Callander 1915). However, a more detailed study of the wider Scottish evidence for games, including both dice and stone balls, is required to tease out conclusions as to their social standing. H 41.5mm, D 36 x 26mm, Context 204, Block 5a, Phase 2 (central area of Wheelhouse 1) (see Section 2.4.1.5).

See also long-handled comb SF204 classified under textile working; such objects have been interpreted as hair ornaments.

3.5.6 FITTINGS

**SF60** (Ill 3.24c)

Handle or attachment. Tine, broken at base and tip, with a tapering irregular perforation (minimum D 5 mm) at the broad end, thinned with knife-cut facets. Damage inhibits interpretation: it may have been tapered to mount against item of furniture to act as a handle. L 105mm, W 27mm, T 19mm. Context 069, Block 6, Phase 1 ( jammed into pier on north side of entrance in Wheelhouse 1) (see Section 2.3.1.1).

3.5.7 MINIATURE OBJECTS

**SF20** (Ill 3.24d, colour plate 7)

Sword model? Round-ended spatulate blade with decorative end. It is straight edged, sub-rectangular in section, rounding and tapering to an edge at one end which bears minimal use-polish. The other end is damaged but was carved ornamentally with the blade tapering into a waist and then expanding into a double-lobed end, with one lobe now lost. The channel on the reverse is the natural medullary cavity of the bone, and bears traces of a red pigment. The shape of the blade relates it to spatulate polishers. However two factors argue against this: the lack of visible wear at the end and the ornamental terminal. This latter resembles a handle, although too small to be functional, and suggests it may be a model of a sword. While unusual, this is not without parallel – the top part of a rather larger sword model is known from Howm air, Orkney (Trail 1890, 460, no 31; NMS GO 186). Neither the Howm air nor Cnip example closely resemble known Iron Age sword types in blade shape or handle arrangement, but our knowledge is largely based on southern parallels and we know little or nothing of Atlantic Iron Age sword forms. It may of course be depicted in its scabbard: there are parallels on later Pictish sculpture for short, relatively wide swords in round-ended scabbards (see Wilson 1973, 121). The surviving evidence for colouring suggests details could have been provided by colour.

On balance it seems plausible that this is a miniature sword, intended either as a toy or a votive model. Miniatures are generally interpreted as votive models in the Iron Age and Roman periods, and are well attested. They were probably intended as token offerings in place of real objects. It has proved much harder to identify definite toys. Weapons are primarily represented by shields (eg Stead 1991), but a few swords are known from Frilford, Berkshire (Bradford & Goodchild 1939, 13–14); Wood Eaton, Oxfordshire (Smith 1998, 151); Harlow, Essex (ibid, note 23); Castor, Cambridgeshire (Green 1975, 64); Chester, Northumberland (Green 1978, plate 125); and London (Greep 1981); all are Roman except Frilford). Cnip and Howm air are the only possible Scottish examples. Indeed Iron Age votive miniatures in general are poorly attested in Scotland: an axe from Stelloch, Wigtownshire (Maxwell 1885, fig 36; for its Iron Age attribution cf Robinson 1995, especially fig 1, nos 1–3), a cauldron from Waulkmill, Aberdeenshire (Callander 1915), a Roman strainer from Traprain Law, East Lothian (Hunter 1993, 332–3), and a Roman terracotta bale of goods from Dun an Iardhard, Skye (Curle 1932, 395–6; Green 1981, 268). (Thomas’s (1963, 48) identification of a bone miniature shield from Jarlshof is unconvincing.) L 109mm, W 16mm, T 6mm. Context 018, Block 18, Phase 3 (midden deposit formed over Structure 4 during Phase 3) (see Section 2.5.3.2).
3.5.8 UNIDENTIFIED

**SF107** (Ill 3.24e)
Unfinished whale bone object? Split proximal rib portion, with cancellous tissue partly hollowed and two deeper hollows c 30mm in diameter, one in the split face, one at one end. Series of chopmarks on one face of cortical tissue. Function uncertain – may be unfinished. L 220mm, W 55mm, T 60mm. Context 190, Block 20, Phase 3 (fill of Structure 8 sump).

**SF118** (Ill 3.24f)
Shaped fragment. Worked cetacean rib fragment split to reveal the cancellous tissue, which is shaped at the angled end and broken elsewhere. One end has been chopped square, while the other is cut irregularly at an angle, terminating in a blunt point. One edge may be original, but the other is not. There are chopmarks on the cortical tissue, perhaps from abortive earlier shaping attempts or later reuse. Insufficient evidence survives to determine its original form or function, although the lack of any working edge may suggest it derives from furniture or a domestic fitting. L 180mm, W 90mm. Context 204, Block 5b, Phase 2 (central area of Wheelhouse 1).

**SF128** (not illustrated)
Utilized chunk. Large chunk of whale bone and fragments. One end carries chopmarks from detachment, and the surface bears a few other, apparently random, cutting marks. Too little of the original surface survives to indicate its use. L 210mm, W 110mm, T 100mm. Context 131, Block 15, Phase 1 (fill of Wheelhouse 2) (see Section 2.3.3.3).

**SF163** (not illustrated)
Cetacean bone fragment split from a large flat object. The surviving edge is knife-trimmed and the surviving end bevelled by chop-marks; the rather crude shaping suggests expedient use. One surface is the natural cortex, the other cancellous tissue which has been cut flat. No use-wear evidence. L 145mm, W 29.5mm, T 21mm. Context 204, Block 5b, Phase 204 (central area of Wheelhouse 1).

**SF169** (not illustrated)
Utilized fragment, cetacean bone, with cut facet at one end. Unidentifiable. L 60mm, W 20mm, T 20mm. Context 204, Block 5b, Phase 2 (central area of Wheelhouse 1).

**SF304** (not illustrated)
Three fragments (two joining) from an unidentified cetacean bone object. Plano-convex section, with the flat face trimmed and some knife-trimming at the edges. No use-wear. L 85mm, W 12.5mm, T 16.5mm. Context 137, Block 5b, Phase 2b (Bay 7, disturbed deposits below Structure 8 walls).

3.5.9 MISSING ITEMS
Three bone and antler items are currently missing from the assemblage, and are known only from the original brief finds descriptions.

<table>
<thead>
<tr>
<th>SF no</th>
<th>Description</th>
<th>Context</th>
<th>Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>035</td>
<td>Antler point</td>
<td>071, Block 9, Structure 4</td>
<td>2</td>
</tr>
<tr>
<td>156</td>
<td>Cetacean vertebra</td>
<td>204, Block 5b, central area</td>
<td>2</td>
</tr>
<tr>
<td>192</td>
<td>Worked cetacean bone</td>
<td>235, Block 5b, central area</td>
<td>2</td>
</tr>
</tbody>
</table>

3.6 COARSE STONE

Ann Clarke

3.6.1 GENERAL
The coarse stone assemblage consists of two faceted hammerstones (SF206 (not illustrated) and SF188 (Ill 3.25f)), a stone disc (SF087 (Ill 3.25g)), four rotary querns (SF133 (Ill 3.25a), SF116 (Ill 3.25b), SF171 (Ill 3.25c), and SF086 (Ill 3.25e)), and a probable lower grinding stone for a quern (SF189 (Ill 3.25d)). This is a typical Iron Age assemblage, perhaps rather small in size, presumably because only limited external activity areas were excavated. It is in such areas that coarse stone tools, particularly cobble tools, were most commonly used and discarded.

The coarse stone assemblage represents a limited range of functions. The difference between the smaller, bun-shaped rotary querns (SF133 (Ill 3.25a) and SF086 (Ill 3.25c)) and the larger, flatter ones (SF171 (Ill 3.25b) and SF116 (Ill 3.25c)) may point to the processing of different foodstuffs. The smaller rotary querns are of interest and are similar in form to those at Kebister (Clarke 1999). The wear on the hammerstones suggests use in the grinding or reduction of, perhaps, a harder material. The stone disc was most probably used as a lid for some form of container.

All of the querns were recovered from structural contexts: the walls of Wheelhouse 2, Structure 7...