The archive version of the text 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 > Final Reports. From here you can download the file 'Clarke_Coarse_Stone_Report.pdf'.

A total of 40 coarse stone tools was recovered from the excavations at Sand and from the test pit sites around the Inner Sound, (see Table 131, below). They are all cobble tools of some form and, with two exceptions which have been ground to shape, they were unmodified before use. This report covers those coarse stone tools from the excavated site at Sand. Tools from the test pitted sites are referred to in the individual site entries in Section 2.2 (Active Sites Report). In the discussion below ST numbers refer to the catalogue of coarse stone tools (Appendix 5). Also collected from Sand was a quantity of fractured rock that was non-artefactual and this is discussed below.

Table 131

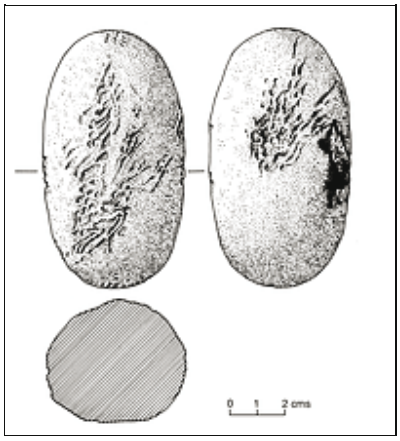
Site	Facially pecked cobble	Facially pecked /dished cobbles	Plain hammer-stone	Ground stone	Beveled pebbles	Faceted cobbles	Whetstone /rubber?
Sand	14	9	4	1			
SFS 2 Crowlin 1			1	1	1		
SFS 30 An Corran C	1						
SFS 20 Toscaig 2					1		1
SFS 42 Toscaig 10			1				
SFS 57 Rubha a Ghair					1		
SFS 68 Allt na Criche						1	
SFS 89 Coire Sgamhadail 1					1	1	
SFS 104 Fearnmore 1	1						

Table 131: The coarse stone tools from Sand in context, tool types by site around the Inner Sound

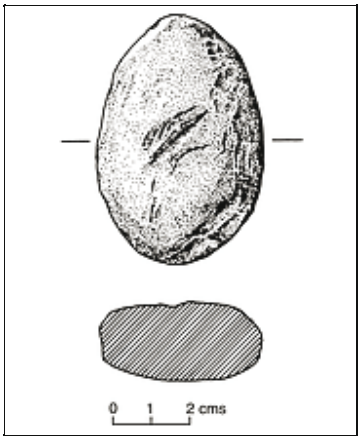
3.6.1 The artefacts from Sand

3.6.1.1 Facially pecked cobbles (T=14) and facially pecked/dished cobbles (T=9)

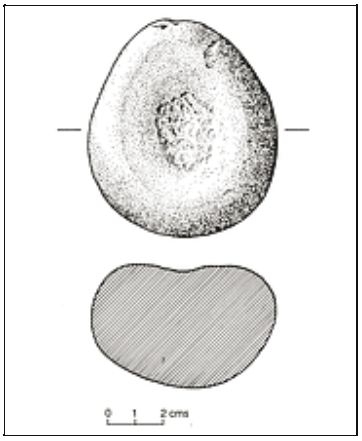
Facially pecked cobbles are the most numerous tool type. They are characterised by a spread of pecking on one or both faces. They are all made on rounded cobbles of sandstone with a sise range of 50–120mm in length. The pecking is generally very light and placed on one face only, either as a spread or as a circular patch (ST1, ST12, SF2, ST10; see Illustration 467), on two cobbles, however, there are linear patterns of pecking (ST9 and ST28, see Illustration 468). In contrast, the facially pecked/dished cobbles have more developed use-wear with a central depression formed on one (ST 5, ST31; see Illustration 469) or both faces (ST6, ST7, ST4; see Illustrations 470 & 471). This dished face is about 20mm in diameter and 2mm–3mm deep and is usually quite smooth. Coarser grained sandstones are preferred for these tools and their sise range is more limited than the facially pecked cobbles with a significant cluster 60–80mm long and 50–70mm wide. A cluster of facially pecked cobbles within these dimensions suggests that many simple facially pecked tools may in fact be underdeveloped forms of the dished cobbles.



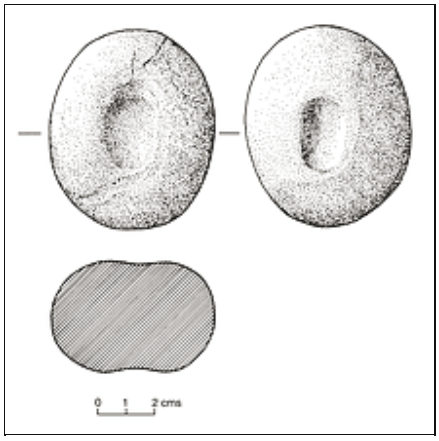
Illus 467: Sand – facially pecked cobble, ST10



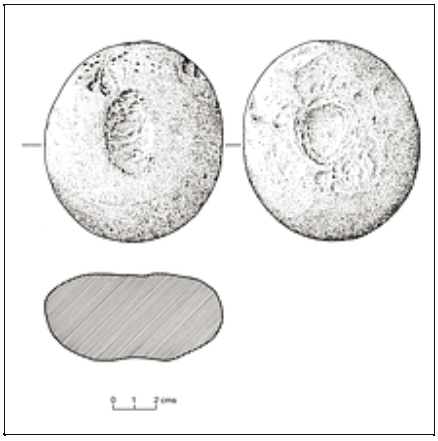
Illus 468: Sand – facially pecked cobble with linear pecking, ST28



Illus 469: Sand – facially pecked cobble, ST5



Illus 470: Sand – facially pecked/dished cobble, ST6



Illus 471: Sand – facially pecked/dished cobble, ST7

The function of these tools is not known. The location and amount of pecking on most of them makes it unlikely that they were used for flint knapping, though some cobbles such as the two with linear pecking may have been used for knapping with bipolar lithic reduction (see the discussion of lithic technology, Section 3.3). The rest of the facially pecked cobbles have much lighter wear patterns and the similarity of the wear patterns on individual tools suggests that they were probably all used for a similar purpose. The facially pecked cobbles with dished faces are likely to be more heavily used forms of the simple pecked tools. The

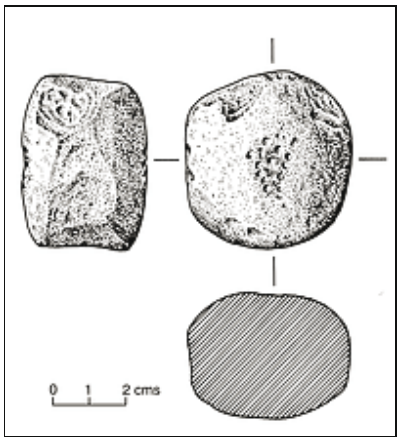
small sise of these cobbles suggests that they were hand held and perhaps used as hammer stones rather than as anvils, and, given the relatively light wear patterns, they may have been used in tasks such as cracking nuts or shells, providing percussion for bone or wood piercers in leather working, or any repetitive job involving percussion of a small object. The dishing of the working surface on some pieces may well be due to the hardness of the stone since many of the dished cobbles are of coarse grained sandstone whilst those that are less worn are of a finer grain. Continuous hammering will form a hollowed area more quickly on the coarse grained stones which are of softer material and thus wear more rapidly.

3.6.1.2 Plain hammerstones (T=4)

These are simple cobble tools with wear in the form of pecking or flaking on the ends or sides. This wear is generally light, with no repetitive patterning to suggest specific actions. There are obviously many tasks requiring percussion to which tools like these might have been put.

3.6.1.3 Ground stone (T=1)

There is one ground stone tool from Sand, a sandstone pebble (ST13; see Illustration 472, right) that has been ground around the perimeter to form two broad, smooth facets at either end that do not quite meet at the sides. The facets appear to have been deliberately ground to a slightly concave profile at the ends. On each face there is a small circular patch of pecking. It is impossible to tell whether the form of this piece results from use or whether it has been ground to a deliberate shape.



Illus 472: Sand – ground stone tool, ST13

3.6.2 Discussion: coarse stone tools from Sand

The cobble tools from Sand comprise mainly facially pecked cobbles and dished cobbles with a few plain hammerstones and a single ground stone tool (see Table 132, below).

Table 132

Sand Context	Type	Facially pecked cobble	Facially pecked / dished cobble	Plain hammer-stone	Ground stone
1	Topsoil	3	1	1	1
13; 13/23/24	Shell Midden, Trench B	2	2		
7 & 7/8	Slopewash, Area B3	2	1		
14	Palaeo-channel, Area B3	1	1		
17	Sandy soil, Trench A	2	2	1	
22	Lower organic rich silt, Trench A	2	2		
27	Slumping, Trench A	2		1	
unstratified				1	

Table 132: Sand coarse stone tools by context

This is a narrow range of tool types and suggests a concentration on limited activities requiring coarse stone tools. It is interesting that bevelled tools were absent from Sand, though they are common elements of Mesolithic assemblages elsewhere (Clarke 1990). Recent research on bevelled stone tools indicates that there are different forms of wear at different sites, though the wider significance of this is still uncertain (Clarke *pers comm*).

Also discussions of bevelled tools do not often distinguish between bone and stone though it is important to keep this distinction clear. The narrow range of coarse stone tools at Sand contrasts with the wider range at Kinloch, Rùm (Clarke 1990). At Kinloch anvils, bevelled pebbles, knapping hammerstones and cobbles with modified sides were all present and, though one or two have circular patches of pecking like that found on the facially pecked cobbles from Sand (*ibid* Illus 78.2, Illus 80.2), it is likely that a wider range of tasks was represented. The evidence of the coarse stone tools from Sand suggests a more specialised site.

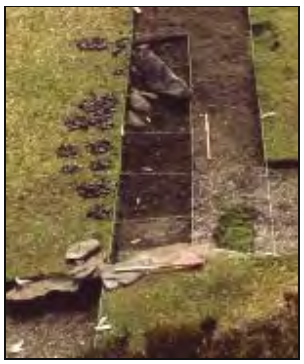
Ground stone tools are known from Mesolithic sites in Scotland, though they are very rare (Clarke 1990; Saville 1994). The ground stone tool from Sand (ST13; see Illustration 472) is sub-circular in shape and does not resemble any existing pieces. It was found away from the midden in the topsoil so that it is possible that it does not relate to Mesolithic activity at all.

There are no other illustrated examples of facially pecked/dished cobbles from published Mesolithic sites, though a counter-sunk hollowed stone with rather deeper hollows than those from Sand is illustrated from the Tweed Valley (Lacaille 1954:fig 61.2).

Although they are few in number, the coarse stone tools are spread evenly across the site at Sand and throughout the contexts. There is no difference in tool type between the midden deposits and those deposits away from the midden and no specific activity areas can be identified. This uniformity of stone tool types suggests that the deposits may have built up rapidly.

3.6.3 Fractured stone

Fractured stone was not collected uniformly across the site at Sand. In most areas, where it was rare, all pieces of apparently heat-fractured stone were recovered, though it was sometimes difficult to distinguish on site between this and natural shillet from the decomposition of the rockshelter so that heat-fractured stones may be under-represented. In Area A, however, heat-fractured stones were so abundant that they comprised the body of Contexts 17, 29 and 17/27. It was not practical to recover all fractured stone from this area so that it was laid out alongside the excavated quadrants and photographed in order to give a visual impression of quantity (see Illustration 362, right).



Illus 362: Sand – view of heat fractured stone recovered from one spit (Spit 3) laid out by the side of Trench A during excavation

For analysis, the fractured stone that had been recovered was divided according to whether it was a fractured cobble (defined by the presence of cortex) or whether there was no cortex, and then individual fragments were counted. The fractured cobbles were clearly broken by heat damage and it is most likely that they had been used in cooking. Though cobbles such as these are commonly termed pot boilers, whereby they are heated in a fire then plunged into a vessel of water in order to heat the water and/or contents of the pot, it must be remembered that clay vessels were not in use during the Mesolithic so that other containers such as troughs made out of wood, bark or even hides must have been used instead. Alternatively, a hole dug in the ground into which the wrapped food and hot stones were placed is another way to cook food without the direct heat of the fire (Wickham-Jones *et al* 1986). Whether it is possible to determine cooking method according to the way the stone has fractured remains a problem for experimental archaeology.

The fragments of non-cortical stone are mostly red sandstone and it is likely that these fell naturally from the rock mass of the rockshelter roof as it weathered.

Table 133 (below) indicates the quantities of fractured rock from Sand. Though not measured by volume, the total amount of fractured rock would fit into two wheelbarrows; it is not a huge amount. Contexts 1 and 2, topsoil, and 17 and 29 have the greatest quantity of fractured rock and the excavators interpreted the latter two contexts as slope wash. The precise derivation of the fragments is thus unclear, but it is likely that the use of the heat-fractured material occurred somewhere up-slope, towards, or perhaps into, the rockshelter. No putative related features were recovered during excavation. It is clear that the slope was

unstable throughout this period because fractured rock, both heat-cracked and weathered occurs in small quantity throughout the Mesolithic midden deposits as well.

Table 133

Sand 2000 Context	Area	Burnt cobble fragments	Fractured rock – no cortex
1/2	Site	433	242
5	B3	2	
7/8	B3	17	23
11/12/13	B1	15	91
13	B2	57	32
13/23/24	B2	29	72
14	B3		23
17	A	427	294
17/27	A	8	5
21	A		7
22	A	19	81
24	A	19	10
25	A	17	43
26	A	1	6
27	A	16	18
28	A	75	94
29	A	265	110

Table 133: Fractured rock from Sand

Away from Sand, heat-fractured cobbles were also recovered from 17 of the test pitted sites including the sites with coarse stone tools (catalogue, Appendix 5).

Published by The Society of Antiquaries of Scotland, in association with the Council for British Archaeology and Historic Scotland.
Available free of charge in HTML format (see Terms & Conditions of Use).

Use http://www.sair.org.uk/sair31 to cite this page.
ISSN 1473-3803; ISBN 978 090390361 5

Files cited in the text

All files start from ads.ahds.ac.uk/catalogue/resources.html?sfs_ba_2007 > Downloads > …

… > Documents > Final Reports > Clarke_Coarse_Stone_Report.pdf
… > Images > Artefacts > Coarse and ground stone tools > SFS_ST10.jpg [Illustration 467]
… > Images > Artefacts > Coarse and ground stone tools > SFS_ST28.jpg [Illustration 468]
… > Images > Artefacts > Coarse and ground stone tools > SFS_ST5.jpg [Illustration 469]
… > Images > Artefacts > Coarse and ground stone tools > SFS_ST6.jpg [Illustration 470]
… > Images > Artefacts > Coarse and ground stone tools > SFS_ST7.jpg [Illustration 471]
… > Images > Artefacts > Coarse and ground stone tools > SFS_ST13.jpg [Illustration 472]