

3.2 Excavation at Sand, rockshelter | Karen Hardy

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3.2.1 Introduction

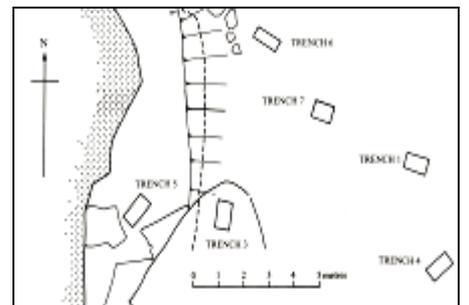
Two seasons of excavation took place at Sand rockshelter (SFS 4), in 1999 and 2000 (see [Illustration 325](#), right). The site was initially identified by the recovery of a microlith and shell midden material within a molehill in front of the rockshelter. Eleven test pits were placed in and around the rockshelter in 1999 in order to sample the midden, locate its extent and determine whether there was any evidence for activity beyond the midden limits. In 2000, two L-shaped trenches were opened in front of the rockshelter to examine in detail the shell midden, locate its limits more clearly and examine the area beyond the midden.



Illus 325: Sand rockshelter

3.2.2 1999

Small numbers of shells were visible across the limited areas of bare soil within the overhang, while the terrace was entirely obscured by bracken and grass. The molehill containing the shells and lithics lay in the terrace area. The molehill disturbance was still visible, as were two distinct areas: one of nettles and one of yellowed bracken. A series of test pits was designed to locate and sample the midden across the terrace and to determine whether there was any evidence for prehistoric activity beyond the midden. A small number of additional test pits were excavated in front of a nearby shallow rockshelter (SFS 5: NG 6837 4936) and between the two shelters. All test pits measured 1m x 0.5m. Further details of the lithics are contained in [Section 3.3.1](#).

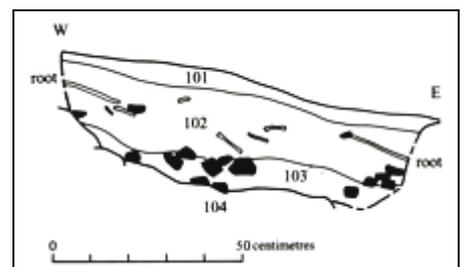


Illus 326: Plan of Sand rockshelter with 1999 test pits



Test Pit 1 was placed halfway down the gentle slope of the terrace to assess the extent of the midden. Little shell or bone was encountered, but lithics were common. A layer of what appeared to be fire-cracked rock was also encountered (Context 103; see [Illustrations 327](#), bottom right & [328](#), left).

Test Pit 2 was placed beside the



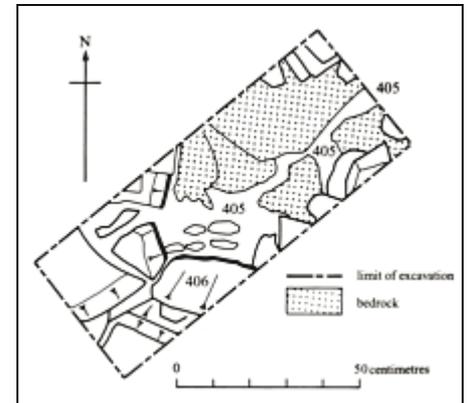
Illus 327: Test Pit 1, south-facing section

Illus 328: Test Pit 1, layer of fire-cracked stone

molehill in order to examine the midden. Not surprisingly, the area was badly disturbed by moles, but some shell was found, together with a few lithics. The bottom of the trench comprised a sterile layer of rock.

Test Pit 3 was placed under an area of collapsed overhang to examine what was hoped might be an area with good preservation. There was, however, little archaeological material and bedrock was reached rapidly.

Test Pit 4 was placed near the edge of the terrace to determine the extent of the artefact spread located in Test Pit 1. Some artefactual material was recovered, along with a few fire cracked stones, but the density of material was considerably lower than in Test Pit 1 (see [Illustration 329](#), right).

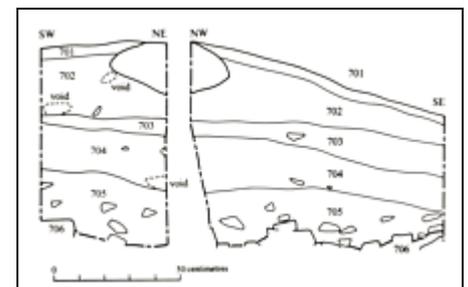


Illus 329: Plan of Test Pit 4

Test Pit 5 was excavated under the main rockshelter to assess the depth of deposits. There was little archaeological material and bedrock was reached rapidly.

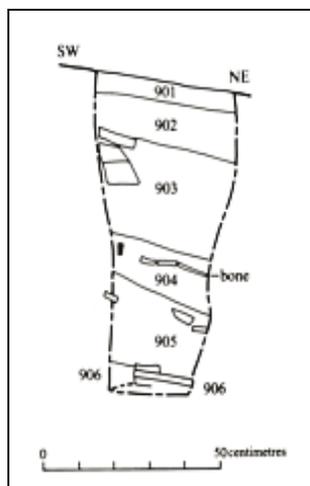
Test Pit 6 was excavated in front of the rockshelter. A thick layer of peat overlay a mineral soil. No artefacts were recovered.

Test Pit 7 was placed in an area of yellow bracken on the terrace. Shell material was encountered immediately. There was limited evidence of stratigraphic complexity (see [Illustration 330](#), right), and excavation was stopped on reaching a sterile layer of rocks.



Illus 330: Test Pit 7, south-east- and south-west-facing sections

Test Pit 8 was excavated on the talus in front of the rockshelter. It revealed a shallow soil profile with no artefactual material.



Illus 331: Test Pit 9, south-east-facing section

Test Pit 9 was excavated in the nettle patch above Trenches 2 and 7 (see [Illustrations 331 & 332](#), left). A very rich midden deposit was encountered. The shells included limpets and mussels; fishbones and crustacea were also identified. Other bone material included large fragments of antler and mammal bone, and there were small quantities of flaked lithics. At least one discontinuous layer of shattered rock was located within the midden. Excavation stopped at a layer that comprised fragments of rockfall with apparently no artefacts or ecofacts, though it was still dark and organic.

The shells included limpets and mussels; fishbones and crustacea were also identified. Other bone material included large fragments of antler and mammal bone, and there were small quantities of flaked lithics. At least one discontinuous layer of shattered rock was located within the midden. Excavation stopped at a layer that comprised fragments of rockfall with apparently no artefacts or ecofacts, though it was still dark and organic.

A second rockshelter nearby (SFS 5, Sand 2) was also test pitted (Test Pits 10 & 11), but contained no archaeological deposits.

Test Pit 10 was opened in front of the second rockshelter to reveal bedrock.

Test Pit 11 was excavated within the second rockshelter. Two pieces of quartz and one piece of modern china were recovered from a shallow soil profile.

A series of radiocarbon determinations taken on bone tools from the test pits relate to activity in the mid 6th millennium BC ([Section 4](#)), confirming the Mesolithic date of the site. Because of the spatial differentiation of the test pits and given the possibility of further excavation, no attempt was made to relate the stratigraphy one to



Illus 332: Test Pit 9, detail of east-facing section

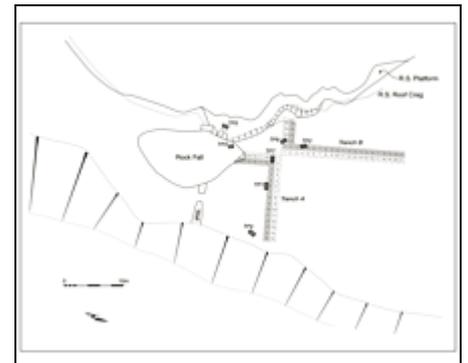
another, apart from to provide a general idea of the location and depth of midden material. This was used to inform the placing of excavation trenches in 2000.

3.2.3 2000

In April and May 2000 an extensive excavation was carried out at Sand I (SFS 4) over a period of four weeks.

3.2.3.1 Introduction

Excavation comprised the trenching of an open area in front (east) of the rockshelter at Sand 1, a shallow but wide overhang with a large terrace in front (see [Illustration 333](#), below left). The excavation covered not only the midden but also an adjacent area of terrace to the north and east. Two conjoining L-shaped trenches (Trench A and Trench B) were laid out in order to give complete sections in two directions (north and east) across the site (see [Illustration 334](#), right). The trenches ran out from the presumed location of the midden to provide a total coverage of c 90m² (see [Illustration 335](#), below right).



Illus 334: Sand - the layout and numbering of the excavation trenches in front of rockshelter; B1 | B2



Illus 333: Sand - view of the interior of rockshelter



Illus 335: Sand - excavation work taking place in front of the rockshelter

3.2.3.2 Method

All work was conducted with regard to the [Code of Conduct and Standards](#) established by the Institute of Field Archaeologists.

Trench A measured 21m×2m, while Trench B measured 25m×2m. A metre grid was laid out over both trenches and each grid square was given a unique identifier comprising a combination of trench and square numbers: A1A, B16B, B8A etc. The first A or B corresponds to the trench, the number refers to the longitudinal location of the square in the trench and the second A or B refers to the lateral location of the square. From Spit 3, each square was divided into quadrants during excavation in order to locate sieved material more accurately (NW, NE, SW, SE) (see [Illustration 336](#), right).



Illus 336: Sand - excavation taking place in front of the



Illus 337: Sand - overhead shot of the trenches at the end of excavation, showing those areas which had been subject to more detailed excavation

All finds and samples were recorded by grid square, quadrant and spit or, more rarely, Context (where obvious). Registers of all finds, drawings, samples and photographs were made. Turf was stripped right across the trenches to uncover the midden area and beyond. This allowed determination of the full extent and form of the midden. After removal of turf and the upper layers of topsoil over the entire trench areas, four specific areas of grid squares were selected for further investigation (Areas A, B1, B2, B3; Illustration 337, left; Area A1 runs away from the shelter to the right of the picture, Area B1 lies invisible below the overhanging rock; Area B2 comprises the central sector of midden, and Area B3 runs up to the left of the image).

rockshelter, view from the top of the shelter

The loose, shelly nature of the midden meant that contexts were difficult to discern in the trench so that excavation proceeded with the removal of arbitrary spits 50mm deep (see Illustration 338, right). The spits could then be tied into contexts using the information from the sections. The quadrant system allowed flexibility for contexts to change across the area of a metre square grid unit. In area B3 the clarity between some contexts was such that stratigraphic excavation could temporarily be adopted.



Illus 338: Sand - close up of the midden deposits. The loose nature of the midden meant that it was impossible to dig by context



Illus 339: Sand - the process of flotation

In area B1 an error was made when laying out the grid and the number B22 was omitted, this means that recording consistently labelled the grid squares one down so that B24 was labelled as B23 and so on. This error affected three grid numbers: B24, B25 and B26. It has been rectified in this text, in the catalogues and a memo to this effect put into all finds boxes ([Appendix 3](#)).

A 100% sieving strategy was adopted for all deposits below Spit 1. All residues were sieved through a flotation tank (see Illustrations 339, left & 340, right). The flot was caught by 1.0mm and 0.3mm sieves and the residue was retained by a 1mm mesh



Illus 340: Sand - bags waiting to go into flotation tank. The speed of flotation determined the amount of on-site finds processing that could be done

except for the first day when a 2mm mesh was used in the absence of the correct mesh. Individual samples were taken for specialist examination (soils and on site pollen). All sections were drawn and photographed and plans made of significant contexts as well as at the termination of excavation.

On completion of excavation, the trenches were lined with heavy duty plastic, backfilled and returfed in order to stabilise the remaining deposits.

3.2.3.3 Results

In places, the midden reached to the surface turf layer. Consequently, as deturfing proceeded, all turf undersides were checked for artefacts and recorded to location, as far as possible. Eventually this proved too time-consuming and, as considerable disturbance was evident (for example in the

form of bracken roots), the recording of artefacts from this deturfing layer (Spit 1) was abandoned (see [Illustration 319](#), right).



Illus 319: Deturfing at Sand, removing bracken roots

A total of 29 contexts was identified. In order to clarify and simplify these and the relationships between them, they have been resolved into a table (see [Table 97](#), below) that identifies their relationships to one another and their location in the excavated areas.

Table 97

Sand Context Description	Context Numbers	Area
Topsoil and turf in Trench A (incomplete)	1, 1/2, 1/3	ALL
Topsoil and Turf in Trench B, row B	1, 1 /2, 1/3	B2, B3 & to N
Main shell midden	13, 11, 12, 13/23, 13/24, 13/23/24, 24	B1, B2, B3
Shell midden	28	A
Slumped stony deposit between midden and sandy soil	27	A
Sandy soil with heat cracked stone	17, 18, 29, 17/27	A
Palaeo-channel and below	5, 14, 14/21	B3
Slopewash over palaeo-channel	7/8	B3
Lower organic rich silt (below midden)	22	A & B3
Natural	21, 26, 25	ALL

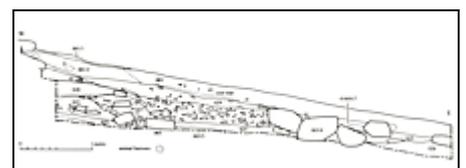
Table 97: Sand, Resolution of Contexts

Trench A consisted of 41 grid squares (A1A–A21A, A1B–A20B) and extended southwards along the terrace to terminate in the south at a substantial rockfall, and east down to the edge of the sloping apron in front of the rockshelter. Bedrock was encountered at the eastern end of the trench at a depth of 0.3–0.4m, while subsoil was encountered at the southern end of the trench at a depth of 0.3–0.4m. The topsoil in the western half of the trench contained large quantities of fragmented shell. Animal burrows were noted throughout the topsoil.

Area A



Six grid squares (A1B–A6B) positioned close to the edge of the shell midden, and stretching for six metres downhill (E) away from the midden, were fully excavated to natural or bedrock. Mesolithic deposits (mainly shell midden Contexts 6 & 28) were visible to a depth of almost one metre throughout the area. In squares A1–A4, a natural paleosol (Context 25) lay below more presumed Mesolithic material (Context 22) that did not comprise midden (see below). Context 25 lay over the bedrock (Context 3), while in



Illus 342: Sand - Trench A, south-facing section

Illus 341: Sand - squares A5 and A6 rockfall (Contexts 3/4) interspersed with sandy silt containing 30–40% mostly fire-cracked stone (Context 17), and darker coloured silt with no stones or artefacts (Context 18), was encountered below the Mesolithic deposits.

The surface layers, Contexts 1/1 (a thin band of turf and dense root matter) and 1/2 (shell-mixed topsoil), covered the whole excavated area to a depth of between 50mm and 150mm.



Illus 343: Sand - Trench A, east-facing section

In the highest squares (A1B, and A2B quadrants NW, SW), adjacent to Trench B in front of the rockshelter, midden deposits were quickly uncovered below the turf. Initially the material was stony and loose (Context 27), but this gave on to dark shelly material (Context 28). Context 28 appeared to represent slump from the sloping front edge of the midden. The shell deposits extended for over one metre into the trench and had a maximum depth of 0.4m. Two different episodes of slumping (Contexts 28/1 & 28/5) could be discerned within the slumped

midden deposits (Context 28) (they are not differentiated on the section). Context numbers 28/2 and 28/3 are thin layers of degraded shell overlying and underlying Context 28/1 while Context 28/4 is a layer of crushed shell overlying Context 28/5 (see [Illustration 343](#), left). It is possible that these layers represent a time when the slump lay open for a brief period. One of these episodes was clearly related to a single large stone slab which had fallen from the rockshelter area onto the top of the midden (see [Illustrations 344 & 345](#), both right), though the mechanics of the movement of this slab remain unclear.



Illus 344: Sand - Trench A, east-facing section showing a fallen slab towards the top of the section



Illus 345: Sand - Trench A, north-facing section showing slab in place to right of picture

The shell midden deposits (Context 28) overlay organic-rich, silty deposits (Context 22), but were also both overlain (uphill) and underlain (downhill) by a slumped stony deposit (Context 27). Context 27 sloped down to the east and at its lower end it was overlain in turn by a layer of sandy soil with heat-cracked stone (Contexts 17/29). Below the shell midden (Context 28), the organic-rich deposit (Context 22) lay directly over a sterile palaeosol (Context 25) and had a length within the trench of 1.35m and a maximum depth of 0.25m. During excavation, it was thought that Context 22, a substantial shell-free midden-like deposit of dark silt with large quantities of mammal bone and antler, and Context 27, a slumped stony shell-free deposit, must pre-date the shell midden (Contexts 6 & 28) because of their position downslope and partially underneath it. In this respect, the presence of a polished stone axe, of generally Neolithic type, at the juncture of Contexts 27 and 22 was not well understood (see [Illustration 346](#), right). During post-excavation, the determination of two radiocarbon dates from mammal bones within Context 22 has served to clarify the situation. Both dates relate to the mid 6th millennium BC and are thus considerably younger than dates obtained from the shell midden ([Section 4](#)), so that the shell midden is now understood to have slumped over Context 22 at some point soon after the deposition of Context 22.



Illus 346: Sand - polished stone axe

Overlying the midden deposits in A2–A4 were two layers of sandy soils (Contexts 29 & 17) and a slumped stony deposit lay between



Illus 347: Sand - Trench A, showing slabs downslope

the midden (Context 28) and the sandy soil (Context 27). Both Contexts 29 and 17 contained a high percentage of small and fragmented stones, many of which were fractured from exposure to extreme heat. These sandy soils with heat-fractured stones (Contexts 29 & 17) are interpreted as slopewash and they extended for c2.5m downslope to the east where the heat-fractured stones built up against a number of large fallen boulders (Contexts 19 & 3/4) which had acted as a dam to further downslope movement (see [Illustration 347](#), left). Context 27 was hard to interpret and is best understood as representing the disturbed separation between the midden (Context 28) and the mobile slopewash layers above (Contexts 29/17).

To the east of the fallen boulders, no archaeological deposits were identified; Contexts 25 and 26 are both natural deposits.

Trench B: Trench B consisted of 51 grid squares (B1A-B25A, B1B-B26B) and extended from the rockshelter platform eastwards down the steeply sloping talus and northwards across the width of the bracken-free terrace. Although the whole of Trench B was deturfed, only three blocks of grid squares (Areas B1-3) were excavated in detail. Fragmented shells were prevalent throughout the topsoil in the southern part of the trench overlying the midden area. Molehills had been noted within and immediately adjacent to the trench and excavation was hampered by severe animal disturbance within the shell midden deposits.

Area B1

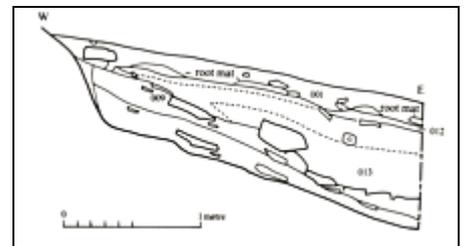
Area B1 consisted of seven grid squares (B24B-B27B, B24A-B26A) forming the west arm of Trench B and extending west to the edge of the rockshelter platform (see [Illustration 334](#), above)



Illus 348: Sand - Trench B, Area B1, shell midden (O13) showing the build up of angular slabs (O09) between it and bedrock

At the west edge of the rock platform, bedrock lay at a depth of 0.6m below current ground level and it then sloped steeply to the east to a depth of almost 1m below ground level. A series of sterile natural sand and silt layers (Contexts 20 & 21) lay above bedrock, and above these was a considerable natural deposit of angular stone slabs (Context 9) which had eroded from the roof of the rockshelter and lay within a layer of rock and sand (Context 10) 0.25m deep (see [Illustration 348](#), left). The voiding between many of the stones suggests that this layer was formed relatively quickly.

The shell midden deposits (Contexts 6/13) had accumulated directly on top of the fallen rock. Excavation exposed the western edge of the midden where it had formed just below the rockshelter (see [Illustration 349](#), right). The midden deposits had a maximum depth of c0.6m and there was little stratigraphical variation (see [Illustration 350](#), lower left; the midden deposits had little obvious stratigraphical variation, but a layer of crushed shell is visible at top to the east). Above a bottom layer of mixed rockfall and sand (Context 9/10), the bulk of the midden deposits



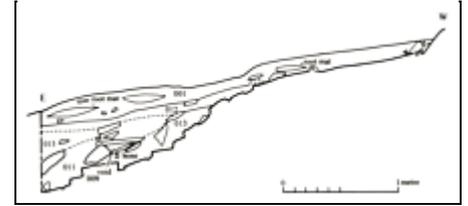
Illus 349: Sand - Trench B, Area B1, south-facing section, showing bedrock to the west



Illus 350: Sand - Trench B, Area B1, from the south-west

comprised a dense mass of unconsolidated shell (Context 13), which appeared to consist mainly of intact limpet shells.

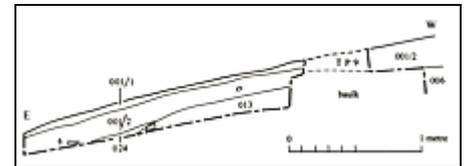
Large fragments of mammal bone and antler lay near the base of this deposit, and a child's molar was recovered from higher up in this area (B25A NE, Spit 4, Context 13). Three radiocarbon determinations were made on bone tools from Context 13 in this area and all relate to the mid 6th millennium BC (Section 4). The shells became more degraded towards the top of the midden where a clear band of crushed shell (Context 12) 0.05m deep, was visible in section running along the top of the midden deposits, in particular at the extreme western (uphill) edge of the midden under the rockshelter. This Context is interpreted as a deposit affected by post-depositional pressures such as might result from its use as a path through the rock-shelter. Towards the south-eastern part of the area a darker grey and ashy layer of shells (Context 11), sloped in an east-west direction within Context 13, and provided the only stratigraphical variation visible within this part of the shell midden (see Illustration 351, right). Occasional rock slabs (Context 9) were visible within the shell midden but there was no pattern to these and they are likely to relate to natural roof fall. All of these deposits were overlain by a layer of shell-rich topsoil (Context 1/2) of 0.15–0.2m depth and substantial bracken root mat.



Illus 351: Sand - Trench B, Area B1, north-facing section, showing the position of context 11

Area B2

Area B2 was made up of four squares at the centre of the excavated area (B1B, B2B, B1A, B2A), where the trench was presumed to overlie the midden (see Illustration 334, above). Due to pressures of time the area was excavated to a depth of only 0.35m, in a series of four spits, after initial cleaning of topsoil (see Illustration 352, right).

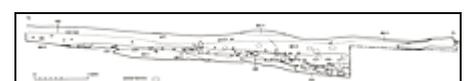


Illus 352: Sand - Trench B, Area B2, north-facing section

The excavation revealed the surface of the main midden deposit (Context 13) which sloped gently down to the east. Overlying this was a layer of mixed fragmented and intact shell (Context 24) which had tipped or washed down the front face of the midden. A human tooth (adult incisor) was recovered from B1A Spit 3 (the top of Context 13) and this has been dated to 2040–1880BC (AA-50698, Section 4) while some traces from metalworking including slag (Section 3.9) were also found here. Given the loose matrix of the midden, it is not surprising to discover that some material has percolated down and this is discussed further below. The midden deposits in Area B2 were overlain by shell-rich topsoil (Context 1/2) and a thin layer of cropped grass turf (Context 1).

Area B3

Area B3 consisted of seven grid squares (B3B–B8B, B8A; see Illustrations 353 & 354, right). These began at the northern extremity of the midden and continued along the terrace, roughly parallel with the line of overhang. The current ground surface is almost level; bedrock was identified at a depth of c0.2m to the north and c0.7m to the south.



Illus 353: Sand - Trench B, Area B3, west-facing section

Much of this trench (B3B–B4B)





Illus 355: Sand - Trench B, area B3, north-facing section showing the loose nature of the midden and animal disturbance

had been disturbed by mole activity (Context 23) to a depth of 0.4–0.5m below current ground surface (see [Illustration 355](#), left). Shell midden (Context 13) was only identified in the south-western corner of the area beneath the animal disturbance (B3 NW, SW) and this sloped gently down to the south in a layer of 0.35m maximum depth. Above the midden a shell-rich mixed topsoil (Contexts 1/2 & 1/3) extended to B5B. A layer of tipped shells (Context 24) was visible to the east of Context 13 though the relationship between the two had been obscured by animal disturbance (B3 NE, SE, B4 NE).

Illus 354: Sand - Trench B, Area B3, east-facing section



Illus 356: Sand - Trench B, Area B3 from the south, showing the stony deposit of slopewash 7/8

The shell midden and related deposits (Context 13) in the SW of Area B3 partially overlay a thin layer of brown sandy-silt (Context 8) which contained numerous small stones of varying geological origin (Context 7) and has been interpreted as slopewash. This stony slopewash deposit (Context 7/8) stretched for over 4m towards the north (see [Illustration 356](#), left). It thus continued away from the midden, and overlay Context 5, a palaeochannel. It had a maximum depth of 0.22m and contained many small stones, some angular and some smoothed beach pebbles. Significant quantities of degraded bone survived within the soil matrix of Context 7/8 despite the fact that there was no shell present within this layer.



Illus 357: Sand - Trench B, Area B3 from the north, showing the slopewash deposit 7/8, overlying 5 the palaeochannel in the foreground

An organic-rich palaeochannel (Context 5) was identified at the base of the trench from B5B-B7B, immediately below the slopewash Context 7/8 (see above), it ran from north-west to south-east across the bedrock (see [Illustration 357](#), left). Beneath the palaeochannel deposits, bedrock was much degraded and fragments of stone were found within the overlying deposits (Context 3/2). In some places (B7B) wash from the bedrock had formed pockets of compacted fine sand (Context 14), the surface of which contained many tiny chips of worked stone.



Illus 358: Sand - Trench B, base of Area B3 after removal of 7/8 and

Underlying all of the deposits in the southern metre square of the area (B3B) was a layer of dark silt containing large quantities of mammal bone and antler fragments, and stones (see [Illustration 361](#), left). This seems to equate with the organic-rich deposits Context 22 that lay below the shell midden deposit Context 28 in Area A. Context 22 here lay directly on bedrock which dipped sharply to the south. Several angular rockfall slabs (Context 9) were also located here.

3.2.4 Discussion

The excavation achieved the aim of obtaining information regarding the composition, complexity and chronology of the Mesolithic deposits at Sand. The excavated areas exposed the edge of a substantial shell midden on three sides (north, west and east) and uncovered enough information to suggest the original shape of the midden. Measuring some 8m×8m and



up to 1m deep, the surviving deposits comprise some 50m³, of which approximately 16% was excavated. Tip lines within the midden deposits indicate that there was a heaped mound of shell which has since been truncated by a variety of processes. On the uphill side, the shell seems to have built up against the edge of the rock platform within the shelter (see [Illustrations 359 & 360](#), right) and 7m downhill (to the east) it comes to rest at a natural angle. There was no evidence for a retaining or revetting wall at the front (downhill) face of the midden. Indeed, the slumped deposits suggest that this may have been an unstable location. Fragmented shell towards the top of the midden reflects various crushing processes but a thin depressed band of crushed shell around the edge of the rock platform seems to represent a path over the shells. This process could have occurred at any time since the deposition of the midden (see below).

The general stratigraphy within the main shell midden is interesting. There was no indication of seasonal soil build up, nor of any vegetation regeneration within the midden despite the great quantity of shell. This would suggest that the main midden built up quickly and continuously and this is supported by the dates.

At the eastern edge of the midden (downslope) an area of shell free deposits lay below the shell midden and this was at first interpreted as an earlier, pre-midden deposit. The find of a polished stone axe and two mid 6th millennium BC radiocarbon dates contradict this ([Section 4](#)). It would seem that the midden has slumped over this deposit after its deposition, thus covering deposits that appear to relate to early Neolithic activity.



Illus 361: Sand - Trench A from the east showing the deposits downslope of the midden

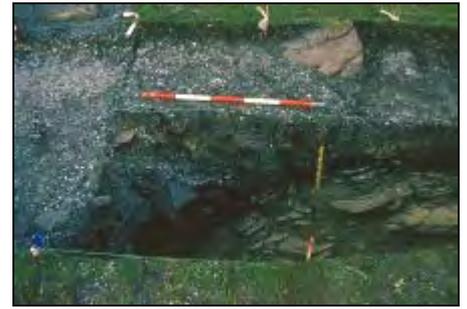
Fallen slabs of rock from the roof of the rockshelter were identified both within the shell midden and below it, between the shell (Context 13) and shell-free (Context 22) middens. It is likely that slabs like these had either slipped, or been pushed (or laid) from the areas of loose slabs around the rockshelter. Not surprisingly, the slabs indicate that material was constantly moving in a downslope direction and this makes the preservation of in situ early remains outside the midden unlikely (see [Illustration 361](#), left). While it is also possible that material may have been buried and sealed as the midden moved downslope, there was no indication of this in the area investigated.

No structural evidence was revealed within the midden as excavated, and nothing survives in the rockshelter. The excavation also examined the areas around the midden to search for related features. Context 7/8 had the superficial appearance of an in situ cobbled layer, but the distribution of small stones throughout the

deposit, and its characteristics seem to indicate that this material comprises slopewash derived from an area upslope, between the trench and the rockshelter. At the midden edge, the relationship between the slopewash and the midden was unclear; there was much disturbance from animals here.

The abundance of fire cracked stones in the area downslope of the midden deposits is noteworthy (see [Illustration 362](#), left). These must relate to human action, perhaps indicating an activity area to the north or east of the excavation trenches on the terrace in front of the rockshelter. This would be in agreement with work on the use of caves and rockshelters elsewhere (see [Pollard 1990](#)). Unfortunately the one (albeit limited) trench that was excavated downslope of the midden found no sign of surviving in situ features.

Illus 359: Sand - Area B1, top of Spit 5 from the E, showing the midden abutting the floor of the rockshelter



Illus 360: Sand - Area B3, east-facing section, showing the loose midden deposits as the bedrock floor drops downhill to the east



There is, however, evidence from the quantity and type of artefacts away from the midden that would support activity both here and elsewhere across the terrace.

Illus 362: Sand - Trench A, the top of Spit 4 from the west, showing the accumulations of fire cracked stone removed from Spit 3

Finally, it is necessary to consider the possible disturbance to the Mesolithic deposits. Not surprisingly there are indications (albeit slight in comparison to the midden deposits) for activity in or around the rockshelter from most major periods of human history and prehistory. Perhaps clearest after the formation of the midden is the pathway of crushed shell (Context 12) which cuts across the surface of the midden just below the rockshelter and which may date to any

time from the Mesolithic onwards. The presence of a polished stone axe in deposits of more recent (6th millennium BC) date attests to activity in the early farming period and the barbed and the tooth from area B2 (dated to the 2nd millennium BC), together with the barbed and tanged arrowhead suggest that people were around in the Bronze Age. Iron Age and later material includes some of the metal and metalworking evidence, as well as the glass beads (Section 3.9). Most recently, there are pot sherds and glass indicative of medieval and post-medieval activity.

Given the amount of later finds it is important to consider the integrity of the Mesolithic material. The summary table (see Table 98, below) suggests that though later material does occur in varied Contexts, the majority lies in the upper spits. It is also notable that there was no major disturbance of the midden surface apart from the crushing which may have taken place shortly after it was deposited. In addition, the later material, though varied in date, comprises only small fragments and single artefacts. Perhaps the most prominent indications of more recent activity comprise those related to an episode of small scale smithing for which the shelter would have been eminently suited. These finds included small pieces of slag and a fragment of hearth bottom as well as droplets of copper alloy. They indicate a single episode of short lived duration that included both iron working and bronzesmithing (see Hunter, Section 3.9), probably in later prehistory. The smith (or smiths) did not, however, leave substantial trace of their passing.

Table 98

Find	Area / square	Spit / Context	Associated Date if present	Period
pathway	B1	Surface Context 12		Post Midden
Polished stone axe	A/A2B	Spit 8 Context 27	5630 to 5470 BC	Early Neolithic?
human upper left incisor	B2/B1A	Spit 3 Context 13	2150–1770 cal BC	Bronze Age
Barbed and tanged arrowhead		Surface		Bronze Age
Casting waste	A/A2B A/A1B	Spit 6 Context 17 Spit 2 Context 1/2		Bronze/Iron Age
Glass beads	A/A4B	Spit 2		Iron Age –

	B3/B5B	Context 17 Spit 4		post Roman
	B3/B8B	Context 1/2 Spit 2 Context 1		
Slag	A/A2B	Spit 3 Context 29		Iron Age?
	B2/B2A	Spit 4 Context 13		
	B3/B5B	Spit 3 Context 1		
	B3/B21A	Spit 2 Context 1		
Coarse pottery	A	Spits 2–6 Contexts		?post-Medieval
	B1	1/17/28/29 Spits 2–4		
	B2	Contexts 11/12/13 Spits 1–4		
	B3	Contexts 1/13/24 Spits 1–7 Contexts 1/7/8		
Glass sherds	A/A5B	Spit 1 Context 1		post-medieval
	A/A6B	Spit 2 Context 17		
	A/A6B	Spit 1 Context 1		
Glass bead	B1/B25A	Spit 3 Context 13		15th–18th century AD
Fragments of metal	B1/B24B	Spit 6 Context 13		?
	B3/B5B & B21B	Spits 3 & 1 Context 1		
Nails	A/A2B & A6B	Spits 3 & 2 Contexts 17/29 Spit 4		?
	B2/B1B	Context 24 Spit 1		
	B3/B4B	Context 1		
Knife tip	A/A6B	Spit 1 Context 1		?

Table 98: Summary of later material from the shell midden at Sand

The shell midden at Sand lies in a prominent and convenient spot and is by nature of a loose matrix. It is not surprising to find that over the years people have been attracted to the rockshelter and that debris has percolated down into the Mesolithic material. Parks and Barrett (see [Section 3.11](#)) discuss the presence of burrowing animals into the midden, but there is no evidence for any great disturbance of the midden apart from the obvious animal burrows noted above in Area B3.

It is interesting to note that all of the dated Mesolithic material relates to early in the Scottish sequence (see [Section 4](#)), though in one area, Area A, the presence of later

deposits and a polished axe dated to the very latest Mesolithic / Early Neolithic (mid 6th millennium BC) provides a tantalising indication of activity relating to a particularly poorly known period.

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the [Council for British Archaeology](#) and [Historic Scotland](#).
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ISSN 1473-3803; ISBN 978 090390361 5

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... > Documents > Final Reports > Hardy,_excavation_report.pdf
... > Images > Artefacts > Coarse and ground stone tools > Axe_photo.jpg [Illustration 346]

The following are all within category ... > Images > Plans and Sections > ...

... > SFS_FD6.jpg [Illustration 326]
... > SFS_FD2.jpg [Illustration 327]
... > SFS_FD1.jpg [Illustration 329]
... > SFS_FD3,_4.jpg [Illustration 330]
... > SFS_FD7.jpg [Illustration 331]
... > Sand_explanatory.jpg [Illustration 334]
... > SFS_FD16.jpg [Illustration 342]
... > SFS_FD18.jpg [Illustration 344]
... > SFS_FD26.jpg [Illustration 349]
... > SFS_FD28.jpg [Illustration 351]
... > SFS_FD22.jpg [Illustration 352]
... > SFS_FD19.jpg [Illustration 353]
... > SFS_FD20.jpg [Illustration 354]