

## CHAPTER 5: EXCAVATIONS AT BALESHARE

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### 5.1 INTRODUCTION

The tidal island of Baleshare lies 0.5 km west of the coast of North Uist, to which it is connected by a modern causeway. At low tide it is still possible to walk to Baleshare across the sand.

The site, at NF 776 615, is known locally as Ceardach Ruadh, meaning the ‘Red Smithy’ (Figure 18). It lies on the exposed west coast of Baleshare at the boundary of the townships of Baleshare and Illeray. The bedrock rises to the surface at Ceardach Ruadh forming a slight promontory; the coastline is otherwise gently curving. The machair plain stretches eastwards for 1.5 km, all of it below the 8 m contour. Small inland lochs, pasture and occasional fields are found in this area. Beyond this, on the east side of Baleshare the undulating landscape has very thin soils and many rocky outcrops. To the south are the sand dunes of Eachkamish and to the north, the sand spit of Lang Gorm.

Ceardach Ruadh is a sand mound which stands about 8 m above the surrounding machair and measures about 45 m along the coast extending 26 m back from the sea. Two large deflation hollows have been formed to either side of the mound and these stretch about 120 metres inland. A modern navigation cairn, 2 m high, is situated just to the north of these, 3 m from the dune face (*nb: this cairn was lost to coastal erosion by 1997*). The exposed face measures up to 3.5 m high with slumped sand and beach pebble material beneath.

#### 5.1.1 Archaeological features

The exposed midden stretched for a distance of 48 m along the coast, covered by 1.3 m of clean sand. Pottery and bones were found, prior to excavation, in the midden face and around its base. No stone protruded from the eroded face.

#### 5.1.2 Site history

The name ‘Baleshare’ means ‘East Village’ according to the Rev Earnest Beveridge. ‘Illeray’, which now refers to the northern township, he interpreted as the Norse for ‘bad island’, and may once have been the name for the whole island (Beveridge 1911, 48, 78). He also states that there was once a west village that has become engulfed by the sea. Local legend records that the walls of ruined cottages may still be seen underwater off the western shore. He points to a ‘devastation’ about the year 1540 when lands worth two to three marks per annum were deducted from the rental and he believed this may refer to the events which also drowned the village of Baleshare (*ibid*, vii). In 1859 a high tide with south-westerly gale washed away soil from the island and new channels were formed (*ibid*, 48). The Admiralty Chart of 1909 shows the shallow water below 4 fathoms, off the west coast with a submerged headland off the coast from Ceardach Ruadh to the rocks of Sgeir na Galtun.

The OS Name Book entry refers to the site as a place where kelp is made. The lines of stones used for kelp drying still exist on the summit of the sand mound (Figure 18) and

these have been used within living memory. The area inland is known by locals to have contained burials and at least one was found within a stone slab coffin. These are now covered in sand.

#### 5.1.3 Earlier excavations

Ernest Beveridge recorded finds of slag, ashes, antler, a few hammerstones, flints, fragments of crude pottery and pins of bone and brass from the site which were donated to the NMS (PSAS 1922, 16). He also states that ‘...here cists and bones are sometimes disclosed ...and pins of bone and brass have been found’ (Beveridge 1911, 229). Subsequently, Fairhurst and Ritchie excavated an area of the site in 1963. They found there the remains of what they interpreted as a wheelhouse, exposed by coastal erosion, revealing two distinct floors (Fairhurst & Ritchie 1963). Below this was a deposit of stained sand containing thick sherds. About 40 sherds of thinner undecorated ‘wheelhouse’ pottery was found at the base of the cliff and apparently from this structure. The excavation consisted of a trench cut along the face of the cliff at the top of the beach. They discovered that the stained sand continued about 2 m below the wheelhouse floor onto pure machair sand which was *circa* 0.3 m above the High Water Mark. Professor Ritchie confirms that the site reported upon below is probably that which was examined in 1984.

A skeleton which had become exposed in the eroding face of the site was excavated in September 1964 by Dr T Robberstad. It was about 1 m below the grass surface and *circa* 5 m south of where a stone wall jutted out from the edge of the dune at the same depth. The legs were fully extended and the skeleton had an east–west orientation. Coal was found within the fill of the burial, (Crawford 1964; and letter, Robberstad 1964).

Most recently, severe storms and high tides in early 1993 exposed another cist in the dune face (Armit 1993). The cist, of which only half survived, contained an extended inhumation and two animal teeth which were found in the area of the neck and shoulders of the skeleton. The cist appears to have been cut into the top of midden layers and is, therefore, probably later than the sediments excavated by the CEU.

#### 5.1.4 Adjacent sites

##### *Sloc Sabhaidh (NF 7823 6085)*

About 1 km south of Ceardach Ruadh and about 200 m from the coast is the site of Sloc Sabhaidh, which means ‘saw pit’ (Figure 18). It is not mentioned in the Ordnance Survey Name Book (OSNB) and it does not appear on the OS 1st-edition maps. Beveridge records this site as a sand hill containing middens, ashes, shells, bones, hammerstones, quartz, pottery and possibly a Viking bronze ring (Beveridge 1911, 228). Beveridge also mentions a bone pin recovered from this general area as well as burials found in the southern portion of the site. He further records a circle of small stones enclosing an area of *circa* 1 m in diameter associated with flint flakes, pottery and charred bones (*ibid*, 266). The finds are in the National Museum of Scotland (PSAS 1912, 330; PSAS 1922, 16).

### Baleshare location & site survey

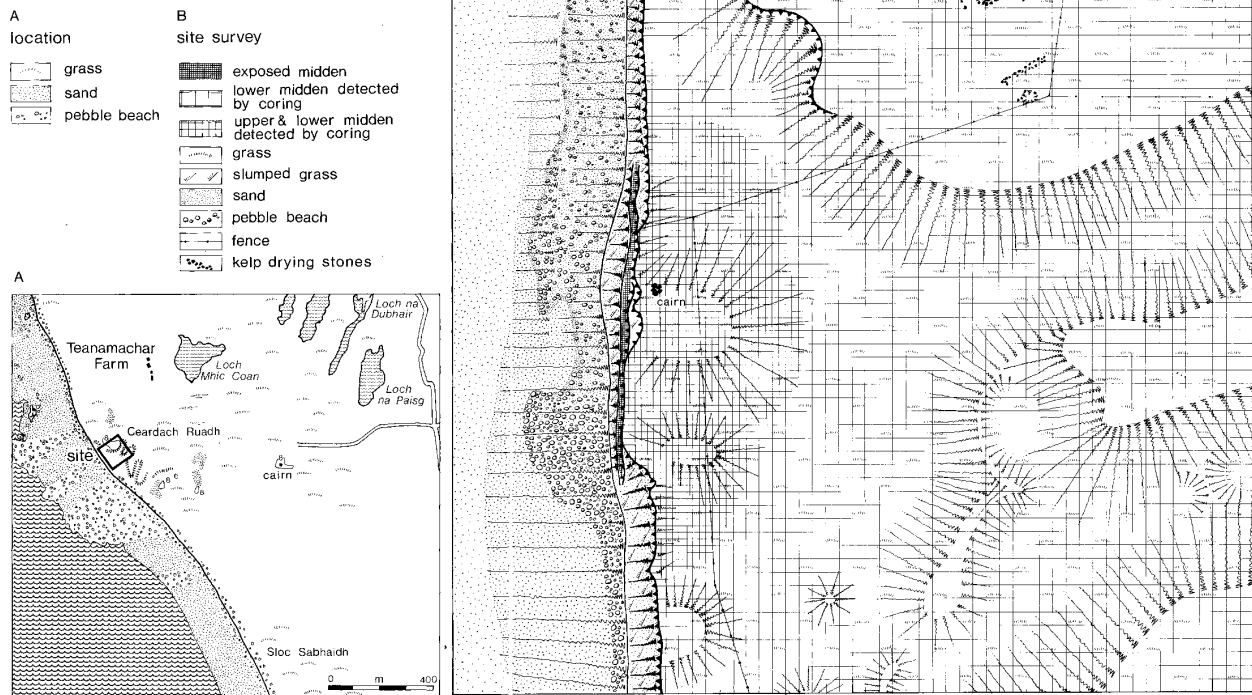


Figure 18. Baleshare: site location and survey

In 1912 Wedderspoon recorded the presence of a mound '200 yards in circumference and 25 ft high ...on the west side of Baleshare island...broken up into a number of semi-detached knolls.... One of these contains, in addition to a number of quite modern grave-mounds, a network of stone-lined enclosures varying in size but with the general appearance of a group of cists with the covers removed. The stones, set on edge, project a few inches above the turf.' (Wedderspoon 1912). The OS Field Inspector thought this referred to the site of Sloc Sabhaidh, which he visited in 1965 and noted shells, bones and ash in rabbit holes in the mound. In 1987 CEU staff revisited this site and recorded the series of mounds thought to be the sites of wheelhouses. Coring in the area indicated sub-surface midden material (Barber 1987).

#### Other sites

There are several duns on Baleshare Island. The Royal Commission recorded four island duns in Loch Mor, near the centre of Baleshare island (RCAHMS 1928, 176). Three of these are located on the OS 1:10,000 map. This map also shows a further possible dun in Loch na Paisg accessible by stepping stones. To the south of this loch is the site of Dun na h-Ola (RCAHMS 1928, 312). Lastly, near the shores of the probably shrunken Loch an Duin Mor are the remains of Dun Mor. This type of site is thought to range in date from the Iron age to the post-medieval period. However the excavations of what was considered an island dun in Loch Olabhat, North Uist, has been shown to be of Neolithic

date (Armit 1987; 1988). There is a chambered cairn in the north-east of Baleshare island, Carnan nan Long, located at NF 7907 6367 (Henshall 1972, 506). The remains of a Medieval church, Teampull Chriosd lie at NF 7835 6133, (RCAHMS 1928, 161).

#### 5.1.5 Summary of Blocks (see Figure 19)

Block No.	Final interpretation
1	Cultivated deposit
2	Midden-site deposit
3	Conflation horizon
4	Grave pit
5	Dumped deposits
6	Windblown sand and erosion products
7	Dumped deposits
8	Structural phase – cut of a ditch, parallel walls and infilling
9	Ditch fill
10	Windblown sand
11	Structural phase – circular structure
12	Structural phase – revetting walls
13	Not used
14	Infilling and collapse of circular structure
15	Midden-site deposit
16	Midden-site deposit
17	Dump of burnt material
18	Cultivated deposit

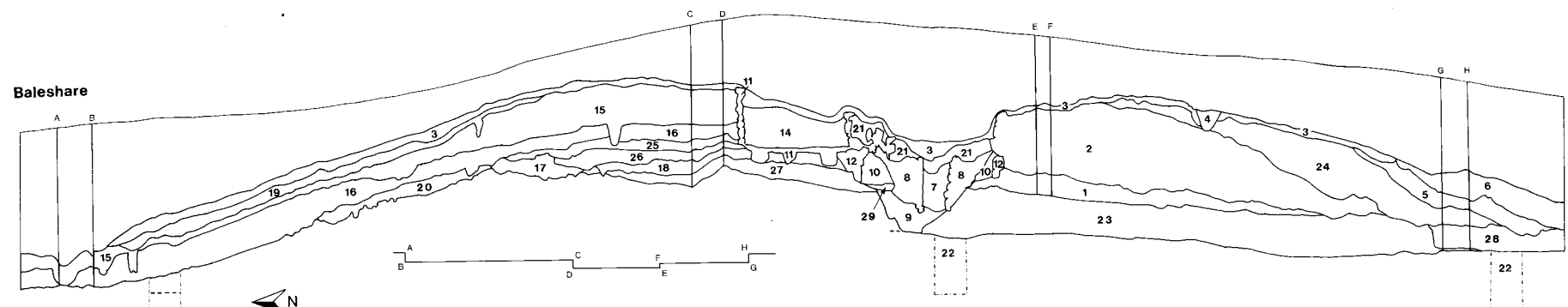
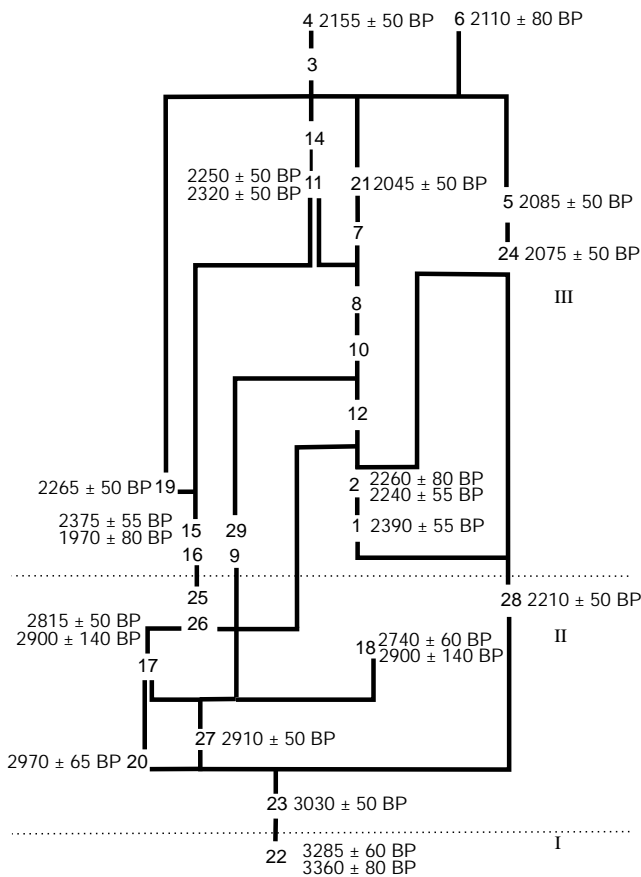


Figure 19. Baleshare: main section showing Blocks



- 19 Midden-site deposit
- 20 Cultivated deposit
- 21 Windblown sand with erosion products
- 22 Cultivated deposit
- 23 Cultivated windblown sand
- 24 Cultivated midden-site deposits
- 25 Cultivated deposit
- 26 Cultivated deposit
- 27 Possibly cultivated sand
- 28 Cultivated deposit
- 29 Occupation layer

## 5.2 BLOCK 1 – CULTIVATED DEPOSIT

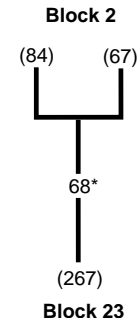
See tables p.280

\* <sup>14</sup>C date 2390 ± 55 bp (GU-1961) from layer [68] (Periwinkle).

Block 1 lay at the base of the south part of the site (Figure 19). It tapered out at its southern end below the midden-site layers of Block 2, and in the north it had been truncated by Block 12. It consisted of a single layer of brown/dark brown, silty, loamy sand, 0.1 m to 0.3 m in depth and 10.7 m in length, with a clear, undefined boundary. Several ard marks were noted at the bottom of layer [68].

## Field interpretation

This Block was thought to be a cultivated deposit because of its extent, colour, texture and the ard marks in its base. The Block mean IHI has been calculated at 5,000, which represents a wide range, but a small number of material finds. Some ten of the thirty-seven potsherds from this Block were examined. These were small to medium in size, in the 2 to 6 range. The soil pH value was 7.5 and the phosphate value was 3 (on the 0 to 5 scale).



## Archaeological interpretation

The presence of ard marks within the Block make its interpretation unequivocal. The IHI values, general anthropogenic content and the soil characteristics are all consistent with the field interpretation of Block 1 as a cultivated deposit.

## Specialist contribution

Sheep, cattle and red deer were identified as well as bones from cod and hake.

## 5.3 BLOCK 2 – MIDDEN-SITE DEPOSIT

See tables p.281, 282

\* <sup>14</sup>C date 2240 ± 55 bp (GU-1960) from layer [42] (Periwinkle).

\* <sup>14</sup>C date 2260 ± 80 bp (GU-2555) from layer [42] (Animal bone).

This Block lay in the south part of the site, abutting wall [192] (Block 12) (Figure 19). It formed a dome extending over 11 m before tapering away beneath Block 24. It had a maximum depth of 1.4 m and consisted of several extensive layers up to 0.5 m in depth, between which were smaller lenses of material 0.05–0.15 m deep (Figure 20). The soil colours ranged from light greyish brown to very dark brown and in texture from silty sandy loam to sand.

## Field interpretation

This Block was interpreted as midden-site deposits because of its shape, the humus enrichment of the deposits and the relative abundance of their anthropic contents. The Block mean IHI was calculated at 21,000, representing a range of between

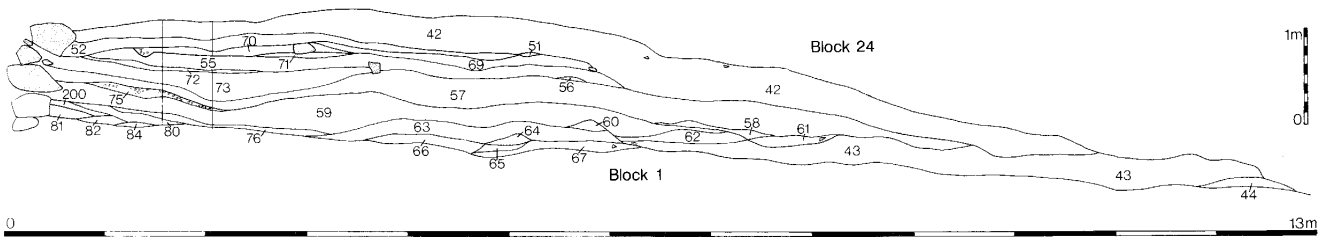


Figure 20. Block 2

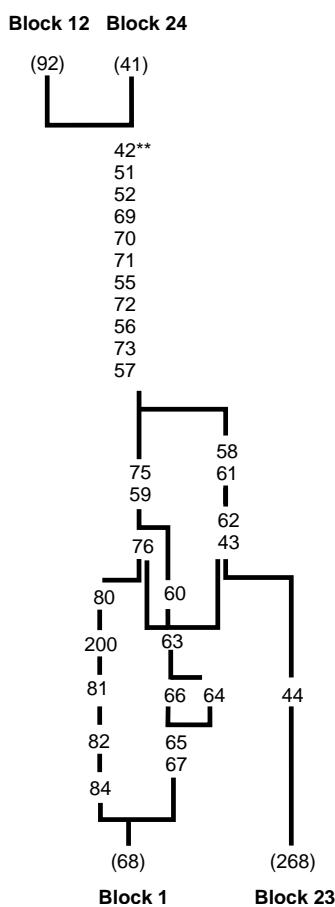
2,000 and 80,000. The extreme values are caused by [61] which has a large amount of sea-shell, bone and stone relative to its volume, and [82] and [81] which produced extremely small amounts of material. The IHI represents a wide range of materials. One piece of carved pumice was retrieved from [73] (Figure 77b) and unmodified fragments were retrieved from [62] and [65]. Of the 495 potsherds in this Block, the sizes of 116 were measured and their distribution is markedly Poisson. They ranged in size-class from 1 to 13 and almost one third of the sherds are above average in size. The pH values recorded for this Block range from 7.1 to 7.6 with a modal value of 7.3. Phosphate values most commonly ranged from 1 to 5.2. The soil colours were brown, with a wide range of shades. The soil textures ranged through sands, loamy sands and loams and all of the layer boundaries were clear.

**Archaeological interpretation**

The IHI supports the field interpretation. Variability of the anthropogenic component throughout the Block is consistent with the idea of uncontrolled, or rather, unlocalised deposition of refuse. The large numbers of smaller potsherds maybe indicative of disturbance by human and animal forces as there is no evidence for the cultivation of these layers and all of the layer boundaries are clear. The soil colours and textures are indicative of the addition of organic material and together with the variability in the phosphate content, all testify to the heterogeneity of the deposits.

**Specialist contribution**

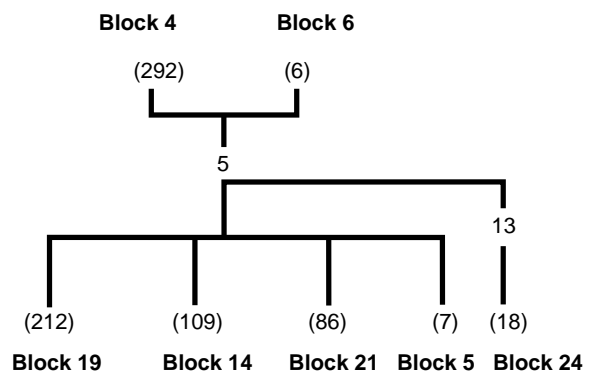
Bones from the following species were identified: sheep, cattle, pig, seal and red deer. Bones of puffin, guillimot, great auk and *Turdus* sp. were also recovered as well as five un-identifiable bird bones.



**5.4 BLOCK 3 – CONFLATION HORIZON**

See tables p.282, 283

Block 3 consisted of a single layer of dark brown, clayey sand, [5], circa 0.1 m thick, and the fill of a pit, [13] (Figure 19). Layer [5] ran almost the entire length of the site above the domed midden-site deposits and the central stone structure. It lay beneath 1.3 m of windblown sand. The grave [292] (Block 4) cut into the surface of [5] and the pit fill, [13], appeared on the north side of this feature. Because of its large extent 80 kg were taken as a bulk sample from four different locations along its length.



### Field interpretation

This Block was interpreted as windblown sand with some humic input. This interpretation was based on the extensive nature of layer [5] and its apparent lack of organic matter. The Block mean IHI is 77,000, but is unrepresentative as it is based on the IHI of 150,000 from the extensive layer and 4,000 from the pit. The high value is based on a total sample of 80 kg, but it reflects the exceptional richness of this Block. Some 25% of the stone in [5] was burnt and fragments of pumice were retrieved from it. Of the ninety-three potsherds recovered, twenty-five were examined and they range in size-class from 2 to 4, with twenty sherds in class 2. The pH values recorded range from 7.2 to 7.7. Phosphate values ranged from 2 to 4.

### Archaeological interpretation

The exceptional quantities of anthropogenic materials retrieved from Block 3 precludes the possibility that this is a windblown sand deposit. This Block consists essentially of a single layer which covers the entire site, lying on deposits of earlier and differing dates. The process of its formation may be hypothesised as follows:

- i) The uppermost layers of the site are removed by aeolian erosion and their anthropogenic component deflated onto the surviving surface.
- ii) This surface develops as an A Horizon creating an apparent 'deposit' on the surfaces of the surviving, asynchronous deposits.
- iii) With the development of the A horizon, increased biological activity facilitates the incorporation of the deflated material into the 'deposit'. This hypothesis is the archaeological interpretation of Block 3. It is proposed to refer to deposits of this apparent formation as conflation horizons.

### Specialist contribution

Identifiable bones of sheep, cattle, pig and red deer were recovered. Three great auk bones and a single pollock vertebrae were also recovered.

### 5.5 BLOCK 4 – GRAVE PIT

See tables p.283

\*  $^{14}\text{C}$  date  $2155 \pm 50$  bp (GU-1962) from Grave pit fill [46] (Periwinkle).

This Block consisted of a grave pit, [292], which was dug into the top of layer [5] (Block 3) (Figure 19). It was discovered midway along the south midden and excavated horizontally. It contained a complete articulated skeleton ([220] see Chapter 11.1.1) aligned east-west, with its head to the west (Figure 21). The grave fill was of grey sand, [46], similar to the overlying deposits. A small pit, [290], was cut into the

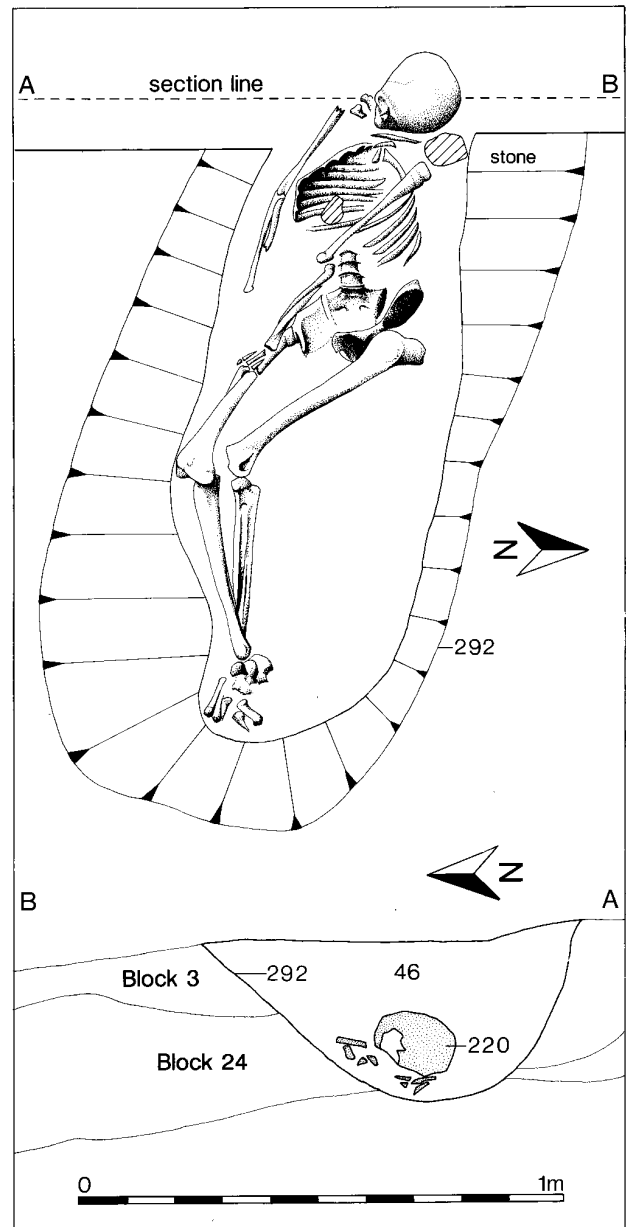


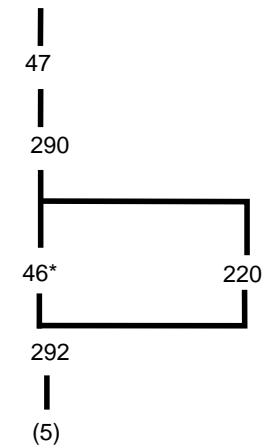
Figure 21. Block 4

top of the grave, and was also filled with grey sand, [47]. There was no evidence of a coffin.

### Field interpretation

This Block consisted of an articulated inhumation within a pit cut into layer [5] from an unknown level. A later pit was cut into the fill of the grave. An IHI value was calculated for the grave fill, at 13,000. This value was based on the presence of bone and sea-shell in moderate quantities. One potsherd was retrieved from layer [47]. This was not examined. The two pH values recorded for this Block were 6.7 and 7.6. Both phosphate values were 5.

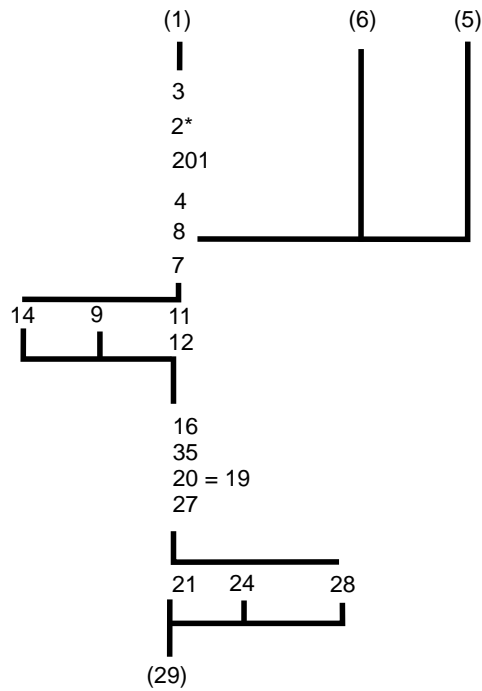
**(Windblown sand)**



**Block 3**

**Block 6**

**Block 3**



**Block 24**

**Archaeological interpretation**

The field interpretation is clearly correct. It is interesting to note the high phosphate values from both the grave fill and the later pit. The radiocarbon date from this pit is misleading. It does not date the burial but merely some shell, which in all probability is derived from the layers of Blocks 3 and 24, into which the grave pit was cut. The fill of the grave pit is primarily clean shell sand. This implies that the pit was cut through clean sand from a level above the top of Block 3. The burial is therefore later than the site, but its actual date is unknown.

**Specialist contribution**

Identifiable bones of sheep and pig were recovered.

**Conclusion**

This is, clearly, a grave-pit.

**5.6 BLOCK 5 – DUMPED DEPOSITS**

See tables p.284

\* <sup>14</sup>C date 2085 ± 50 bp (GU-1972) from layer [2] (Periwinkle).

This Block lay at the south end of the site, sloping gently above the layers of Block 24 (Figure 19). It was between 0.1 m and 0.3 m in depth and extended for 5.6 m. The layers and lenses which constitute the Block were generally 0.05 m to 0.2 m in depth (Figure 22). They were light yellowish brown to very dark greyish brown in colour and ranged in texture from sandy loam to sand. All the deposits contained charcoal.

**Field interpretation**

This Block was interpreted as a series of dumped deposits because it consisted of small lenses of markedly different mate-

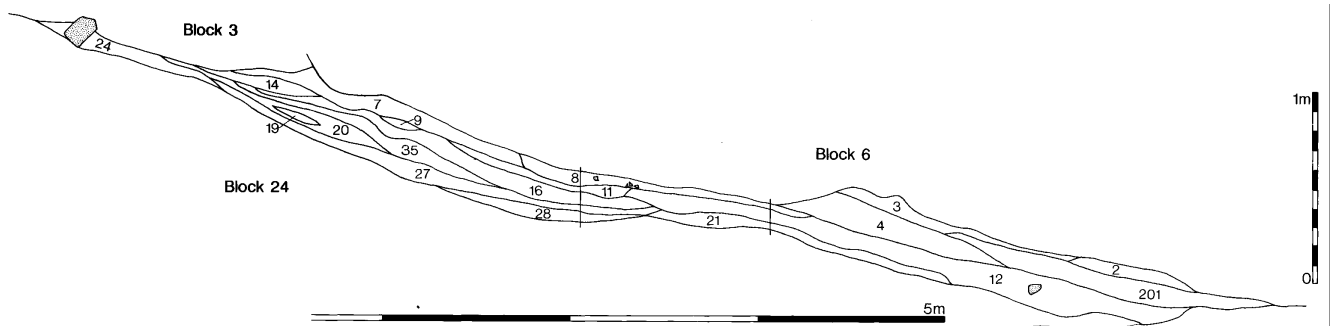


Figure 22. Block 5

rial which had undergone little disturbance since its formation. The Block mean IHI was calculated at 15,000, representing a range of between 800 and 98,000. The extreme values are caused by [8] (IHI of 800) which has very low quantities of material, [24] (IHI of 98,000) which has large amounts of bone relative to its volume, and [2] (76,000) which produced large quantities of sea-shell. This variability is consistent with the interpretation of these strata as individual dumps of refuse with relatively little sand material.

The IHI represents a restricted range of materials present in moderate amounts. Less than 5% of the stone from layer [12] was burnt. Of the thirteen potsherds from this Block, three were examined and all were small, ranging in size-class from 2 to 4. It is difficult to assess the meaning of this distribution, partly because of the small sample size, but also because, as a dumped deposit, the original sources of the materials are unknown.

The pH values recorded for this Block range from 7.1 to 7.8 with a modal value of 7.5. Phosphate values ranged from 2 to 5 with 3 being the most common value. Layer boundaries were predominantly clear, two of them being wavy.

#### Archaeological interpretation

The small but variable sizes of the individual deposits, together with the marked heterogeneity of their anthropogenic components lend strong support to the field interpretation of this Block as being a group of dumped deposits.

#### Specialist contribution

Sheep, cattle, pig and starling bones were identified. Fish species represented were hake, ballan wrasse and plaice.

#### Conclusion

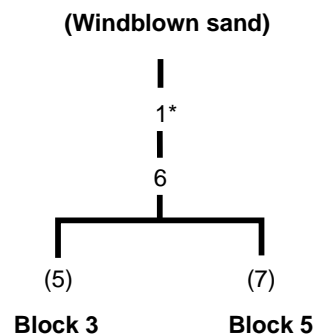
The radiocarbon dates from this Block and from Block 24 suggest an inversion of the Block's strata. On balance it seems from the chronological evidence, that this Block consists of upcast from some adjacent excavation. Thus the chronology is reversed.

### 5.7 BLOCK 6 – WINDBLOWN SAND AND EROSION PRODUCTS

See tables p.285, 285

\*  $^{14}\text{C}$  date  $2110 \pm 80$  bp (GU-1964) from layer [1] (Periwinkle)

This Block lay in the extreme south end of the site (Figure 19). It extended for 5.6 m from the south edge of the excavation, tapering away over Block 5. It had a maximum depth of 0.5 m. It consisted mainly of layer [1], the upper part of which is brown in colour. The lower part had several patches of colour and fragments of charcoal similar to the layers of Block 5. With the exception of layer [6], a small



lens of dark brown sandy loam, no differentiation could be confidently made to subdivide this deposit.

#### Field interpretation

This Block was interpreted as windblown sand that has incorporated within it humic material and products from a settlement. Those finds noted were presumed to derive from the higher parts of the site, probably to the north. The lower part of the Block appears to be transitional between the brown sand of layer [1] and the coloured lenses of Block 5. The Block mean IHI was not a useful indicator in this case as [1] returned a value of 20,500 while [6] was calculated at 1,000. A wide range of material including much charcoal was returned from the dated context [1] and the materials were present in large quantities. The opposite is true of [6] which was almost devoid of anthropogenic material. Of the ninety-seven potsherds recovered from this Block, twenty-two were examined and they range in size-class from 2 to 8. This distribution is largely composed of very small sherds with eighteen of the twenty-two examined being smaller than the site average. The pH values recorded for the two contexts of this Block are 7.6 and 7.8. The phosphate values were 2 and 3. The soil colours are recorded as dark brown with many mottles and the soil textures as loamy sand and sandy loam. Layer boundaries were clear.

#### Archaeological interpretation

It is probable that Block 6 is similar in nature to Block 3 and, is also best interpreted as a conflation horizon (see Block 3, for details).

#### Specialist contribution

Bones of sheep, cow, seal, hake, pollock, mackerel and plaice were identified together with bird bone of the Turdinae family.

#### Conclusion

This Block is essentially, windblown sand. The field interpretation envisaged the inclusion of material eroded from elsewhere on the site. It is not impossible that this is a conflation horizon.



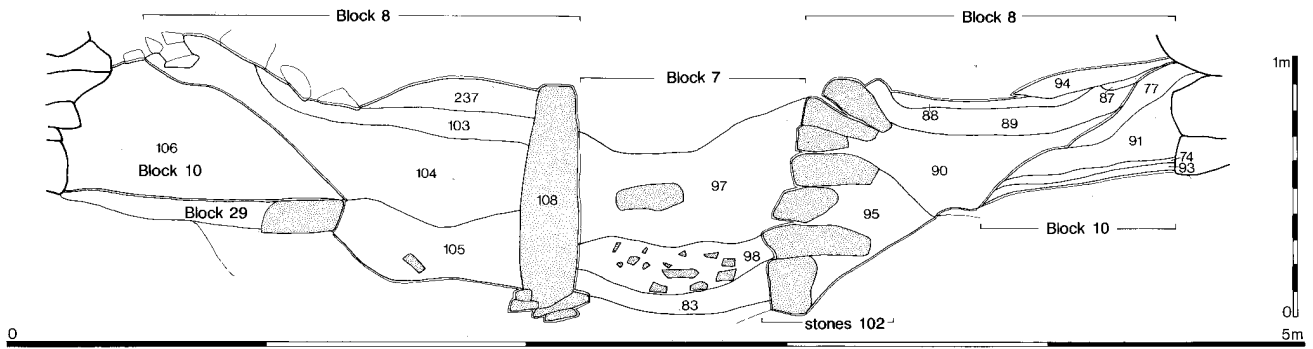


Figure 23. Blocks 7, 8 & 10

5.8 BLOCK 7 – DUMPED DEPOSITS

See tables p.286, 286

This Block lay in the centre of the site between the stone walls of Block 8 (Figure 19). The deposits were 0.6 m to 0.9 m in depth forming a meniscal surface between the walls (Figure 23). Layer [97] was described as a brown/dark brown loamy sand and layer [98] as a brown loamy sand, while layer [83] was undescribed. The boundaries between the layers were indistinct. A large number of potsherds were found within layers [83] and [98]. These included an almost complete pot, sherds of which were found in all three contexts (a total of 208 sherds, not included in the table below). Part of another pot was found lying on its side on the surface of layer [98] (sherds also not quantified in the table below).

Field interpretation

The initial two fills between the walls contained large amounts of conjoining pottery (including the reconstructed vessel illustrated in Plate 15 and Figure 75d) and was interpreted as accumulations of settlement debris between the walls of a disused passageway. The third and deepest fill was probably backfilled during consolidation work prior to the construction of the masonry in Block 11, (see Chapter 10.1.3). The Block mean IHI was calculated at 47,000, representing a range of from 15,500 to 69,000. The IHI represents a wide range of materials present in large quantities, with [98] being particularly rich. Less than 5% of the stone from this context was burnt. Some seventeen of the seventy-two potsherds were examined, size-classes range from 2 to 8 and are generally smaller than the site average. The



Plate 15. Baleshare. Vessel 81/98 from Block 7

sherds from almost complete vessels were not considered in this analysis. The pH values recorded for this Block range from 6.5 to 7.3 with a modal value of 6.9. Phosphate values range from 2 to 4. Layer boundaries from diffuse to clean and wavy were recorded.

Archaeological interpretation

In general the archaeological interpretation agrees with the site interpretation. The situation seems to be one where the lowest context, [83], accumulated between the walls, probably during the final period of use of the passageway. Upon its upper surface the materials comprising [98] were dumped, possibly accidentally but the use of the abandoned passageway for deliberate dumping cannot be rejected. At any rate, the status of the context as a primary dump cannot be disputed as this is

<b>Block 21</b>
(86)
97
98
83
(108) (102)
<b>Block 8</b>



Plate 16. The entrance feature, Block 8, consisting of parallel walls running into unexcavated sediments, sits in the basal sediments of a broad, shallow ditch. The revetment walls, Block 12, associated with this feature are visible at the higher level to the left and right

clearly demonstrated by the presence of the large vessel fragments. Finally the passageway seems to have been infilled with the material which constitutes context [97].

**Specialist contributions**

The animal bones from [98] merit some comment. Apart from an assortment of fragments representing parts of at least three juvenile-adult cattle, one juvenile pig and one neo-natal lamb, most of the bones in this feature were apparently derived from one neo-natal calf (Chapter 9.3.3). The following body parts were represented:

- Head: including both mandibles,
- Trunk: axis, atlas, 5 other cervical, 3 thoracic, 1 sacral and 3 caudal vertebrae, 12 ribs.
- Left forelimb: including scapula, humerus, radius and ulna.
- Right forelimb: including radius and metacarpal; Left hindlimb: including tibia and calcaneus. Right hindlimb: including femur and tibia.

There are no indications that the carcass was butchered in any way before being discarded, or subsequently gnawed by carnivores or rodents, so the calf was presumably buried soon after death.

Substantial parts of the skeleton of a fulmar were also found in this deposit (Chapter 11.4.1) and sheep, pig and seal bones were also retrieved from contexts in this Block.

**Conclusion**

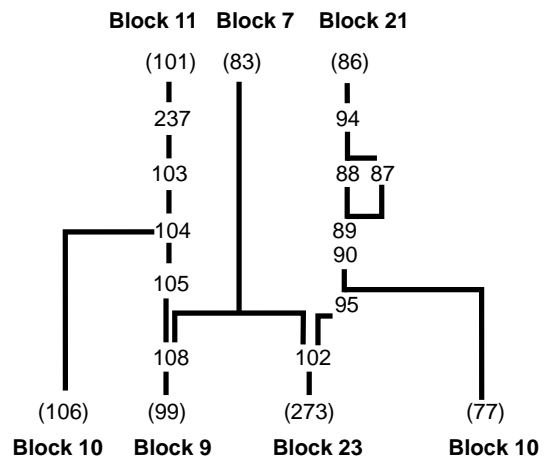
The middle and upper layers of this Block contain substantial quantities of dumped debris including broken vessels and a

dead calf. All the evidence indicates that the Block is a primary dump.

**5.9 BLOCK 8 – STRUCTURAL PHASE – CUT OF A DITCH, PARALLEL WALLS AND INFILLING**

See tables p.287, 287

This Block lay in the centre of the site to the south of the circular structure (Block 11) (Figure 19). It consisted of the cut of a ditch, the insertion of two stone walls, [108] and [102] and the infilling behind the walls (Figure 23). The ditch was cut from the top of Block 10. It was a wide, flat-bottomed feature, with gently sloping sides measuring *circa* 4 m in width at the top and 1 m deep. Into this had been inserted two walls 0.7 m apart and aligned east–west (Plate 16). The





*Plate 17. The quern, Block 8*



*Plate 18. Baleshare (Block 8). Entrance passageway running into unexcavated sediments. Note the pillar stone demarcating the end of the left-hand wall, the dark sediments rich in anthropic materials between the walls and the worn, and now badly decayed, rotary quernstone used in the construction of the right-hand wall. The tip lines in the infilling behind the left wall are clearly visible*

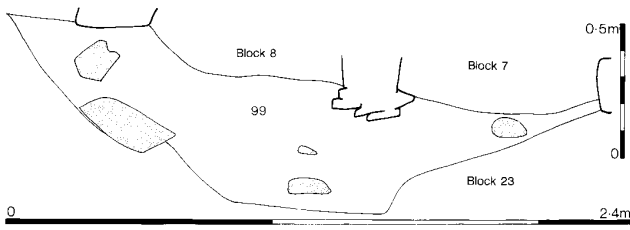


Figure 24. Block 9

south wall, [102], was 0.95 m high, constructed of seven courses of alternately large slabs and smaller rounded boulders, forming a tusking effect. It included a quern stone in its uppermost course (Plates 17 & 18). The front, seaward end of this wall was almost vertical and set back about 0.2 m from the front face of wall [108] which stood to the north. Wall [108] was constructed of more angular stones fronted by a relatively massive orthostat (Plate 18). This orthostat was sitting within a foundation slot cut into layer [99] (Block 9) and was packed with small stones. The sand layers on either side of these walls were a mass of lenses and irregular layers in which several tip lines could be observed. These were divided for convenience into a few contexts, [87], [88], [89], [90], [94] and [95] in the south and [103], [104], [105] and [237] in the north. These were described as light brown and grey sand or loamy sand layers.

#### Field interpretation

This Block was interpreted as a structural phase in which a ditch was cut through the layers of Block 10 immediately after which two parallel drystone walls were inserted. The vertical end of wall [102] suggests that there was once a second orthostat fronting this stone wall, as with wall [108]. The space to either side of the walls was then backfilled with sand, possibly derived from Block 10, to act as support for the walls while the central area was left open. This may have acted as a passageway or entrance for a structure. The Block mean IHI was calculated at 5,000, representing a range of between 200 and 18,000. The extremes are [89] (200) having only a small amount of macroplant material, and [105] (18,000) which contains a large quantity of bone and a moderate quantities of other material relative to its volume. The IHI represents a wide range of materials present in small quantities. Only one of the six potsherds was examined and this was attributed to size class 2. The pH values recorded for this Block range from 6.6 to 7.2 with a modal value of 6.8. Phosphate values ranged from 1 to 4. The layer boundaries were abrupt to diffuse.

#### Archaeological interpretation

The archaeological interpretation is consistent with the field interpretation. The IHI values do not rule out the possibility that the backfilling material was derived from Block 10. This structural phase is interpreted as an entrance passageway leading to a structure which may lie beneath the unexcavated midden-site or may have been on the seaward side of the section and therefore already destroyed by erosion.

#### Specialist contribution

Bones of sheep, cattle, pig and unidentifiable bird bones were recovered.

#### Conclusion

This is a structural phase that includes redeposited material chronologically unrelated to either the construction or use of the stone-walled passage.

#### 5.10 BLOCK 9 – DITCH FILL

See tables p.287

This Block consisted of a ditch cut and its fill. The ditch lay in the middle of the site and was cut into the layers of Blocks 27 and 1 (Figure 19). It was 2.2 m wide and 0.7 m deep, with gently sloping sides and a flat bottom. The fill was an homogeneous dark brown, loamy sand, [99], with large stones lying on the northern slope of the ditch cut (Figure 24).

#### Field interpretation

This Block was interpreted as a ditch possibly contemporaneous with the walling at the base of Block 12. The ditch may have been a boundary or drainage ditch dug between the re-vetted midden deposits to either side. The homogenous fill indicated that it was deliberately backfilled, incorporating some tumbled stones from the wall to the north. The uppermost levels filled naturally with windblown sand (Block 10). The Block mean IHI was calculated at 1,000, representing a single value. The IHI represents a narrow range of materials present in small quantities. Some 10% of the stone present was burnt. Of the twenty-five potsherds from this Block only two were examined and both were in size-class 2. The pH value was 6.7, the phosphate value 3.

#### Archaeological interpretation

The field interpretation is not contradicted by the post-excavation analysis. The low IHI value suggests that this deposit is almost sterile. The soil colour indicates the presence of some soil organic matter but the texture indicates that this is limited.

#### Block 29

(234)

|

99

|

(133)

#### Block 18

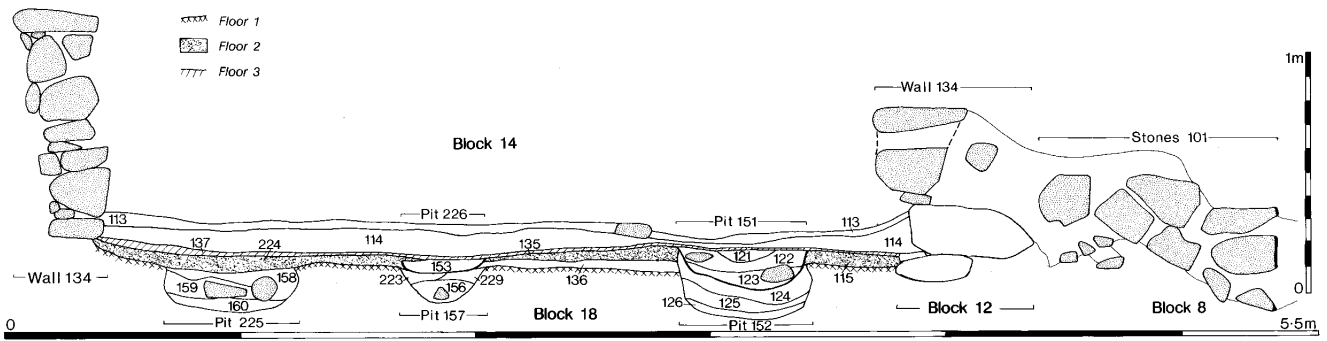


Figure 25. Block 11: section

**Specialist contribution**

Bones of sheep, cattle, pig, seal and gannet were identified as well as hake, cod and saithe.

**Conclusion**

The material within this ditch appears to have been deliberately introduced as backfill. The secondary derivative nature of the material in this Block prohibits its further meaningful interpretation.

part of the ditch had been backfilled (Block 9). They probably once extended right across the ditch but have been cut in two by the insertion of the structure in Block 8. The Block mean IHI was calculated at 3,500, based on data from only two contexts. The IHI represents a wide range of infrequently occurring materials. Of the four potsherds recovered, only one was examined and it was of average size for the site, falling into size-group 3. The pH values recorded for this Block range from 6.3 to 7.8 which is the greatest range for any Block on the site. The modal value was 6.7. Phosphate values ranged from 2 to 5, 2 being the commonest value. The layer boundaries were predominantly clear and sharp.

**5.11 BLOCK 10 – WINDBLOWN SAND**

See table p.287, 288

This Block lay in the centre of the site and consisted of two parts, one on either side of Block 8 (Figures 19 & 23). On the south, the layers [93], [74], [91] and [77] lay against wall [92] to a maximum depth of 0.4 m and extended 0.7 m from the wall base. On the north several minor, brown-coloured layers could not be conveniently differentiated and so were grouped as the single context, [106]. These lay against the basal stones of the northern wall (Block 12) to a maximum depth of 0.5 m and extended 1.1 m from the wall base, over layer [68] of Block 1. Where described, these layers were light brownish-grey to brown/ dark-brown loamy sands.

**Archaeological interpretation**

There is no conflict between the archaeological and the field interpretations. What is worthy of comment, however, is that though these are windblown sands they are not 'sterile' in the accepted archaeological sense. Slag is the only material found on this site which was not found in these sand layers.

**Field interpretation**

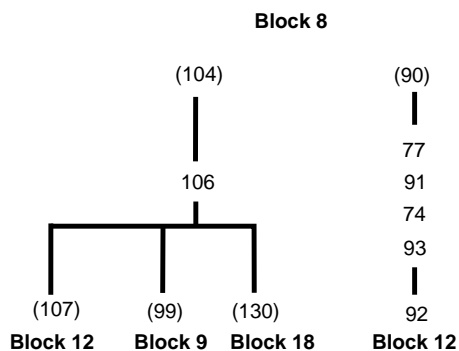
These windblown sand deposits had accumulated in the space between the two walls of Block 12 some time after the main

**Specialist contribution**

Bones of sheep, cow and pig were retrieved.

**Conclusion**

These are, essentially, windblown sands which incorporate small amounts of site debris, accidentally included rather than deliberately dumped.



**5.12 BLOCK 11 – STRUCTURAL PHASE – CIRCULAR STRUCTURE**

See tables p.288, 289, 290

\* <sup>14</sup>C date 2320 ± 50 bp (GU-2165) from [113] (Periwinkle).

\* <sup>14</sup>C date 2250 ± 50 bp (GU-2166) from [265] (Periwinkle).

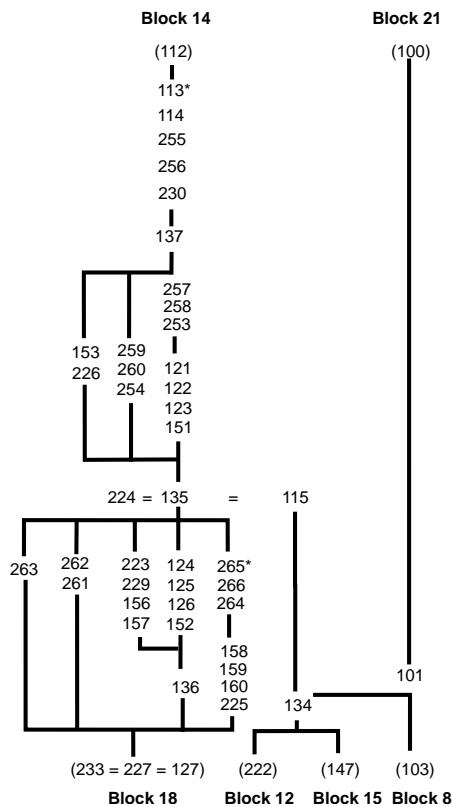
The wall and floor levels of a small circular structure in the centre of the site were included in this Block ((Figure 19 & Plate 19). The drystone wall, [134], was constructed of up



Plate 19. Baleshare. Circular structure, Block 11, excavated to Floor Level 2. The revetment wall, Block 12, is visible to the right of the structure

to eight courses of irregularly sized stones (Figure 25). It measured 1 m high in the north but decreased in height to the south. The feature formed a third of the circumference of

a circular structure which measured 3.3 m along the section line but would have formed a building with, if circular, an internal diameter of *circa* 4 m. The wall on the north side was one to two stones in thickness and abutted the deep midden layers of Block 15 and 16. There was no visible cut line through the midden deposit. On the south side, the internal face of the wall was constructed on top of the earlier wall in Block 12. Uncoursed masonry, [101], emerged from the profile to the south of wall [134]. This was faced on its south side and had an east–west alignment. It was parallel to wall [108] (Block 8) and would seem to have originally converged with wall [134]. The masonry was 1 m wide and infilled with sand ([100], Block 21).



**Floor Level I (Figures 25 & 26)**

The earliest surface was formed of the layer represented by the feature numbers [223], [227] and [127] which made up Block 18. A thin layer of white sand, [136], appeared in the section immediately above the floor level but did not extend back more than 0.3 m from the exposed face. Cutting these layers were three large circular pits, one small pit and three spreads of burnt material. Pit [264] had cut the top fill of pit [225].

There were two thin spreads of burnt material, [262] and [261], in irregular patches immediately to the south of the pit [264], and one spread of burnt material, [263], against the inside face of the wall. The latter layer extended a distance of 2 m.

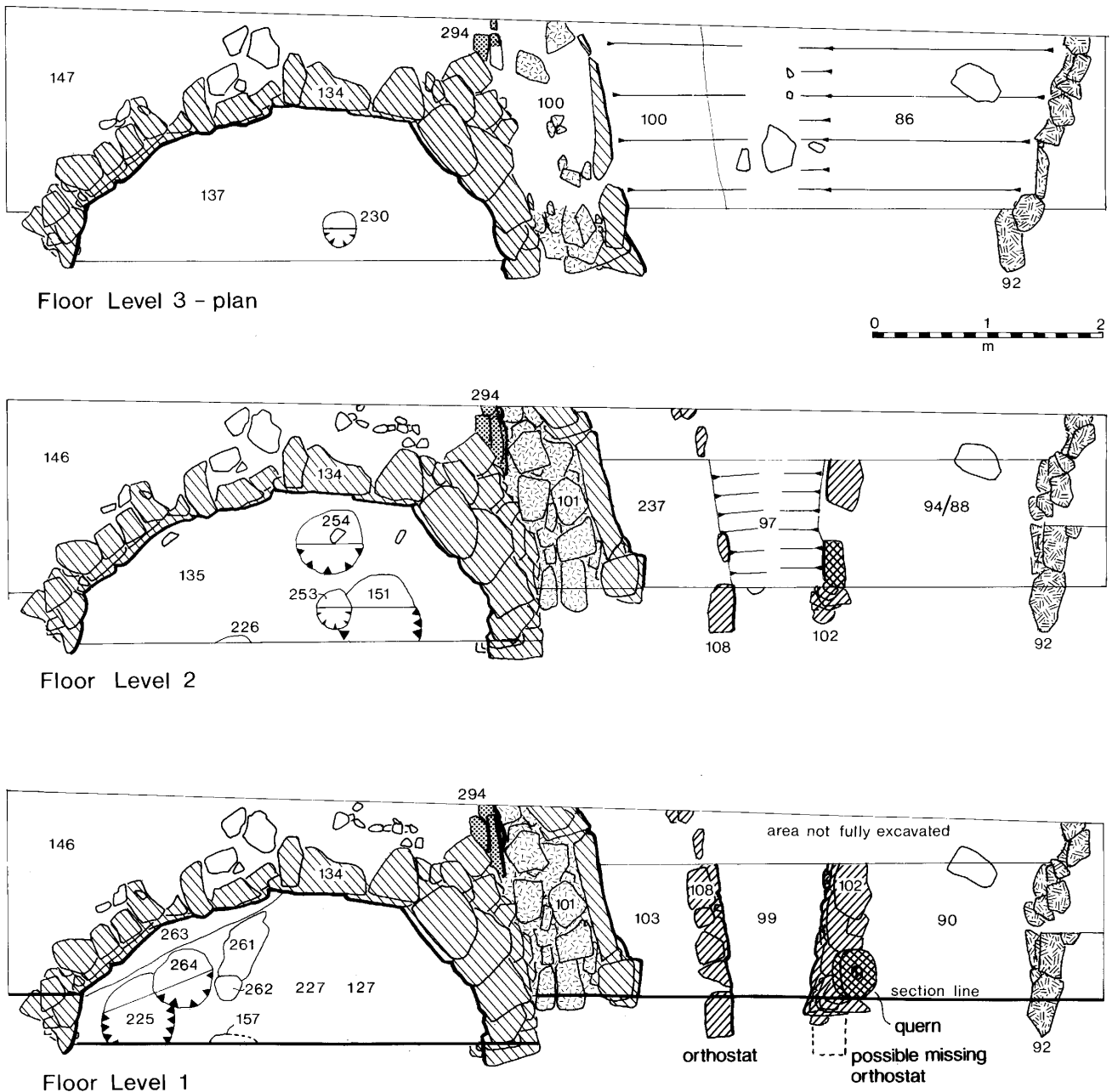


Figure 26. Block 11: plans of Floor Levels 1, 2 and 3

#### Floor Level 2 (Figures 25 & 26)

The second floor level was of white sand, [224], [135] and [115]. It measured up to 0.06 m thick and extended across the whole structure. Two large circular pits and two smaller pits were cut into the floor from this level. Pit [151] had been cut almost directly above the earlier pit, [152] and feature [226] lay directly above pit [157].

#### Floor Level 3 (Figures 25 & 26)

The third floor level consisted of layer [137], a white sand which had a maximum depth of 0.3 m. Cut into this was a

small pit, [230]. These layers and features were sealed by the layers of Block 14.

#### Floor Level 4 (Figure 25)

This consisted of a layer of white sand, [114], which extended across the whole width of the structure to a depth of between 0.04–0.15 m. This layer was not sampled so no finds were recorded. Above this was layer [113], a dark brown sand.

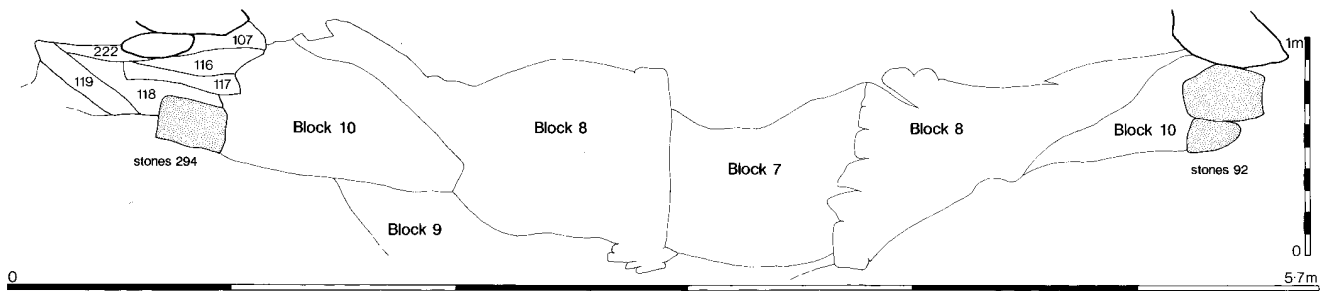


Figure 27. Block 12

### Field interpretation

This Block consisted of the remains of a circular drystone structure with an internal diameter of *circa* 4 m. Its north and east sides had been set into midden-site layers presumably for support as this wall could not have been freestanding. No cut line resulting from its insertion was visible within the midden material, but this may have been destroyed by the thrusting of stones into a vertically cut face. In the south, where the midden was absent, the masonry, [100] and [101], may have provided the necessary support for the circular walling. The fact that the masonry, [101], continued into the section suggested that it served a further function, which only further excavation could reveal. A small quantity of rubble was found within Block 14 which suggests that the walls did not stand much higher than their present level.

The large pits, [151], [152], [225], [264] and [254], within the structure were all cleanly cut and formed almost perfect circles. They contained large quantities of charcoal, especially in their primary fills.

The Block mean IHI was calculated at 87,000, representing a range of from 5,500 to 486,000. The higher values for [258], [260] and [160], are produced by contexts within pits which are both rich in materials and restricted in volume. The IHI represents a wide but variable range of materials present in variable, but generally significant quantities. Burnt stone was found in some six contexts, with values ranging from <10% to 20%. The pH values recorded for this Block range from 6.1 to 7.7 with a modal value of 6.9. Phosphate values ranged from 1 to 5, the most common value being 2.

### Archaeological interpretation

The field interpretation remains unchanged after the post-excavation analysis.

### Specialist contributions

The animal bones from [126], the lowest fill of pit [152], floor 1 merit some comment in that they consisted of numerous neo-natal lamb bones (Chapter 9.3.3). The following body parts were represented:

Head: including 1 pair of maxillae and 1 pair of mandibulae.  
Trunk: 19 cervical, thoracic and lumbar vertebrae, 1 sacrum, a caudal vertebra, 23 ribs.

Left forelimb: including humerus, radius, ulna and metacarpal – all matching pairs with right forelimb (also 1 distal

metacarpal of indeterminate side, representing a second individual).

Right forelimb: including scapula, humerus, radius, ulna and metacarpal.

Left hindlimb: including 2 pelves, 2 femora, 2 tibiae, 1 calcaneus, 1 astragalus and 1 metatarsal.

Right hindlimb: including 2 pelves, 1 femur, 1 tibia, 1 calcaneus, 1 astragalus and 1 metatarsal – all matching pairs with left hindlimb.

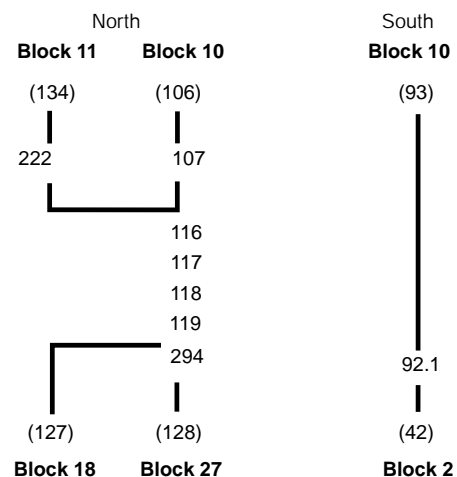
Toes: 7 first, 8 second and 4 third phalanges.

The jaws, trunk, forelimbs (except the metacarpal of indeterminate side) and toes could all be derived from a single carcass. In the case of the hindlimbs, particularly the left hindlimb, at least two (and probably only two) individuals are represented. There are no indications that the carcass was butchered in any way before its deposition. There was no evidence for gnawing by carnivores or rodents.

Bones of pig, red deer and hake were also identified from this Block together with unidentifiable bird bones.

### Conclusion

That Block 11 constitutes a building with associated strata is beyond doubt. The function of the building, however, remains unclear. The superimposition of succeeding pits suggests that some specific function was undertaken in the structure and that it, or rather, its physical manifestations, remained constant throughout several episodes of 'reflooring'. It is not impossible that it was a domestic structure, albeit lacking both the central hearth and the radial segmentation of the wheelhouse, and while the former may have disap-





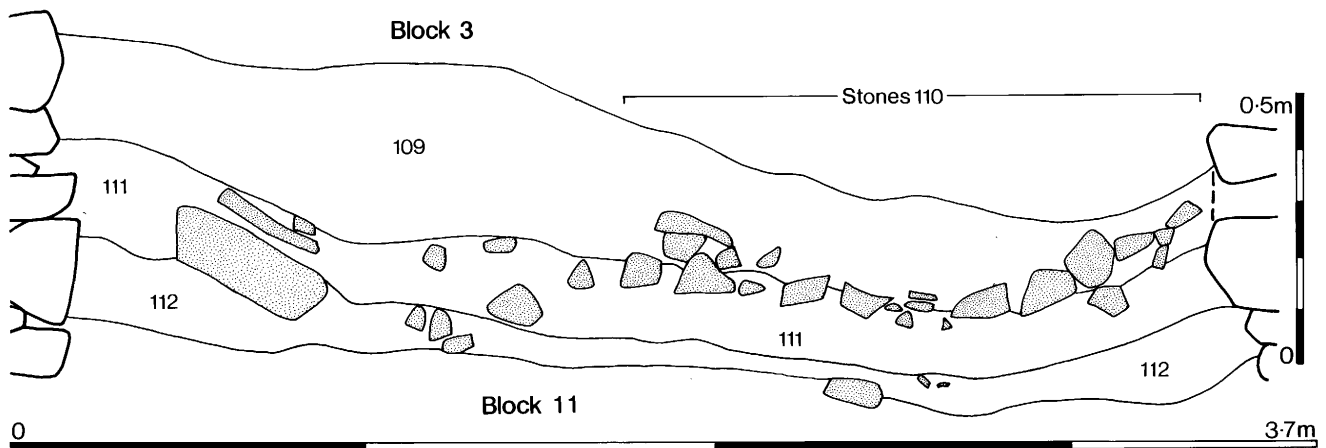


Figure 28. Block 14

peared due to erosion it is very unlikely that evidence for the latter could have completely disappeared. The presence of the neo-natal remains of two lambs prompts the speculation that it may have been an unroofed lambing pen.

### 5.13 BLOCK 12 – STRUCTURAL PHASE – REVETTING WALLS

This Block consisted of two drystone walls lying in the centre of the site (Figure 19; Plates 16 & 19). As both walls were abutted by the windblown sand of Block 10, they were included in the same Block. In the north a single stone in the section, [294], represented the basal stone of a wall (Figure 27). After the section was drawn, further stones were observed above [294], up to the base of wall [134] (Block 11), a height of at least 0.5 m. When the stones [101] were removed from behind wall [134], a section of walling thought to be a continuation of [294], was seen emerging from beneath [134] with an east–west alignment (fig 00). This could not be excavated because it was too close to the edge of the sampled area. Layers [107], [116], [117], [118] and [119] infilled the wall stones. Only layer [119] was described and this was a brown loamy sand. In the south the two basal stones of [92] were included in this Block (subsequently named [92.1]). These were 0.4 m high, set into layer [68] of Block 1 and faced to the south. The lowest layers of Block 2 abutted this wall on its south side. The distance between the two walls was 4.3 m. A berm of 0.5 m lay between each wall and the cut of the ditch.

#### Field interpretation

This Block was interpreted as two drystone walls which revetted midden-site deposits to either side. Their construction may have been contemporaneous with the digging of the ditch in Block 9. One context provided an IHI value of 12,000. It represents a wide range of infrequently occurring materials. Fragments of pumice were retrieved from [119]. Only three potsherds were recovered, none of which were examined. Both of the pH values were 6.5. The two available phosphate values were 4.

#### Archaeological interpretation

The field interpretation of this structural Block takes precedence over the archaeological interpretation. The layers lying north of wall [294] may have been cut for the insertion of this wall, but the balance of the probabilities lies with their accumulation against the standing wall. Layer [119] may be a remnant of a more extensive layer cut for the insertion of the wall. Layers [118], [117] and [116] were seen between the stones above [294], which collapsed before the section was drawn, and seem to have accumulated after the wall's construction.

#### Specialist contribution

Bones of sheep, cattle and pig were identified.

#### Conclusion

This Block consists of two structural elements with which only redeposited material, apparently used in their construction, seem to be associated. Only horizontal excavation could reveal if these walls are the single wall of a dug-in house like that in Block 11. As revealed in section their function appears to be that of revetting the deposits of Blocks 1 and 2, on the south and, possibly, the southern extensions of Blocks 18, 26 and 25, subsequently removed by the insertion of Block 11. Both walls in Block 12 were later used as foundations for Block 11 on the north and the revetment of Block 2 on the south.

### 5.14 BLOCK 14 – INFILLING AND COLLAPSE OF CIRCULAR STRUCTURE

See tables p.291

Block 14 lay in the centre of the site within the drystone circular structure, Block 11 (Figure 19). It consisted of several layers which spread across the entire width of the structure, a distance of 3.3 m in section (Figure 28). They varied from 0.3–0.7 m in depth. These layers consisted of light to grey

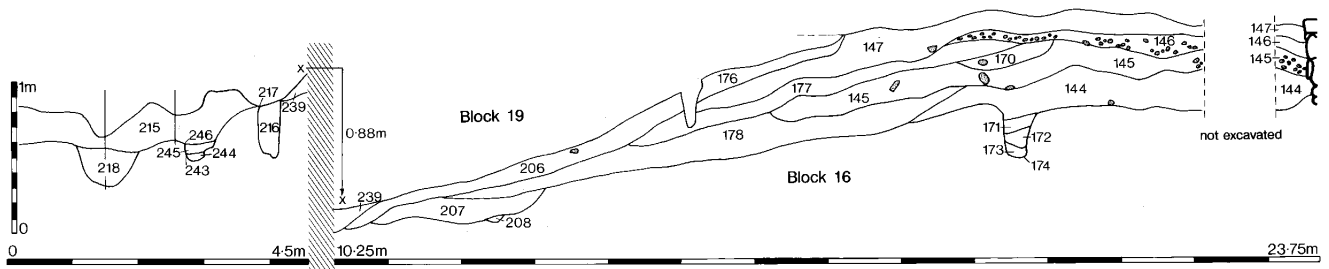


Figure 29. Block 15

**Block 3**

(5)

109

110

111

112

(113)

**Block 11**

brown sands and a layer of stones, [110], which extended from the south wall. Towards the north side a large stone, 0.45 m long in section, lay with its base embedded into the top of layer [112].

**Field interpretation**

This Block was interpreted as the post-abandonment fills of the circular structure in Block 11, the south wall collapsing to form the layer of stones [110]. The slightly dished nature of the fills suggested that they were the result of silting rather than backfilling. The colour of the sand layers indicates a moderate humic content which would suggest that this material incorporated some deposits from midden-site layers in the vicinity. The Block mean IHI was calculated at 7,000, representing a range of from 4,500 to 10,000. The IHI represents a wide range of materials present in moderate quantities. Of the fifty-six potsherds from this Block eleven were examined and they range in size-class from 1 to 7, three sherds being larger than average. The pH values recorded for this Block range from 7.2 to 7.4 with a modal value of 7.3. Phosphate values ranged from 3 to 4, the most common value being 4. The soil ranged in colour from light to dark brown and their textures were all sand.

**Archaeological interpretation**

The deposits are similar in appearance, have low IHI values and contain increasingly more sea-shell up the profile. The archaeological interpretation is that these deposits constitute the infilling and collapse of the structure. The layers [113] and [114] were initially included in this Block but have been re-interpreted as floor layers associated with Block 11.

**Specialist contribution**

Bones of sheep, cow, pig and thrush were recovered, together with single bones of flatfish and a gadoid.

**Conclusion**

The post-excavation analyses concur in seeing these deposits as the slow infilling of a deserted structure.

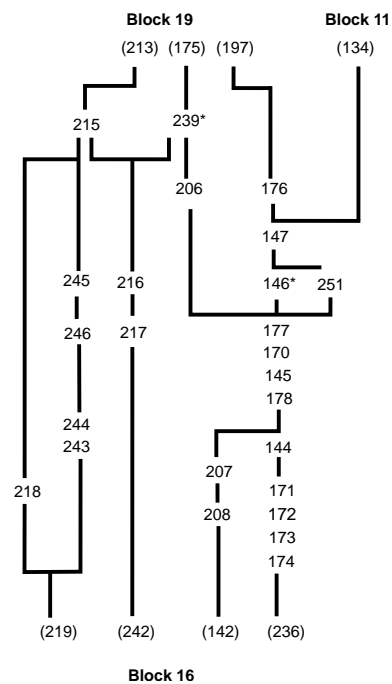
**5.15 BLOCK 15 – MIDDEN-SITE DEPOSIT**

See tables p.293, 292, 293

\* <sup>14</sup>C date 2375 ± 55 bp (GU-1963) from layer [239] (Periwinkle)

\* <sup>14</sup>C date 1970 ± 80 bp (GU-2554) from layer [146] (carbonised seed)

Block 15 formed a dome-shaped mass to the north of the circular structure, extending to the north end of the excavation, a distance of 18.8 m (Figure 19). Its depth varied from 0.65 m at the south to about 0.01 m at the north. Its south end had been cut by the insertion of the central structure. To the east of the section face, the layers of this Block were seen



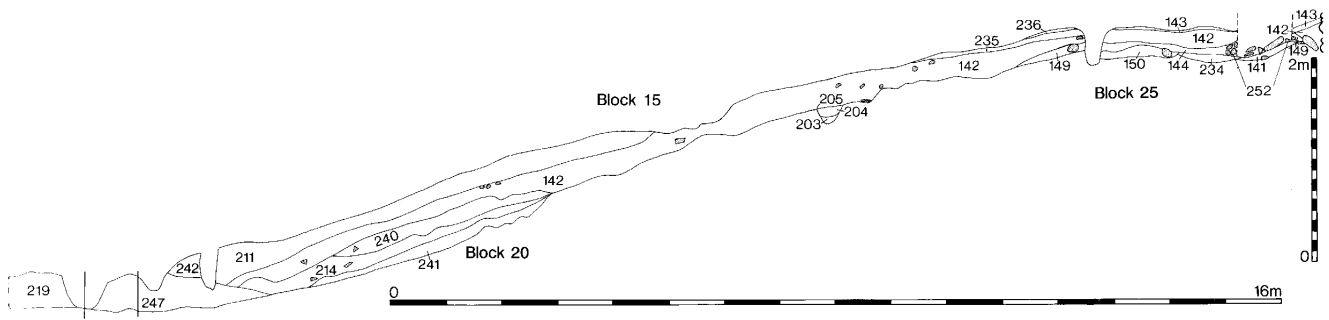


Figure 30. Block 16

to continue south and to abut the wall in Block 12 (see layers [146] and [147], Figure 28). Block 15 consisted of fourteen layers, none of which extended the full length of the Block (Figure 29). Most were concentrated in the south where the Block was deepest. They ranged in colour from very dark greyish brown to brown and in texture from silty sandy loam to a loamy sand. The boundaries were generally smooth and clear. Layer [146] had an especially high concentration of shell and carbonised seeds. Layer [215], a black loamy sand, was revealed during the sampling process and was stratigraphically level with layer [146]. Five ditch features were seen in section within this Block. Before sampling, the ditch [174] was thought to have been cut from the top of layer [144]. After 0.5 m was removed, evidence suggested that this ditch was much larger and cut from within the body of Block 15. The others were cut from the top of layers [247] and [211] (Block 16).

**Field interpretation**

This Block was interpreted as a midden-site deposit in an area of habitation. This was because of its morphology, horizontal extent, colour and anthropogenic inclusions. The Block mean IHI has been calculated at 44,000. If however the ditch deposits are removed from the calculation this value rises to 55,000, which is more representative of the midden-site deposits, while a value of 19,500 represents the ditch fills. The value, 55,000, is representative of a wide range of materials present in large amounts. Burnt stone is present in twelve contexts and pumice in three ([176], [177] and [216]). Of the 345 potsherds from this Block, seventy-nine were examined and while the majority of these were small a number of larger sherds also survived. Soil pH values range from 6.4 to 7.8 with a modal value of 7.3, and they cover the full range exhibited in the entire site. Phosphate values are similarly variable, 1–4 on the 0–5 scale. The soils were brown to very dark brown and the textures were mainly loamy sands although three were sandy loams. They had smooth to diffuse boundaries, all of them clear.

**Archaeological interpretation**

The heterogeneity of the deposits and the variability of almost every recorded characteristic over the separate layers within the Block, together with the absence of ard, or other cultivation marks, suggest that this Block consists of an accu-

mulation of midden-site deposits. The presence of a number of ditches and gullies also supports this interpretation since, in general one would expect a greater number of discrete archaeological features to occur nearer to a settlement than one might expect at some distance from it, as for example in the middle of a cultivated area.

**Specialist contribution**

Bones of sheep, cattle, pig, red deer, dog were recovered. Bird species identified were whooper swan, gull and possibly wigeon. Fish species identified were tope, cod and flatfish.

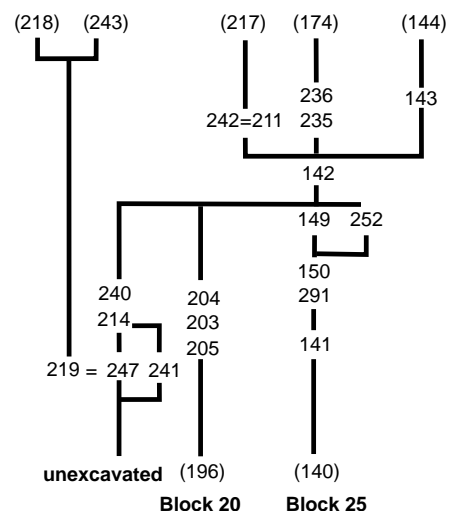
**Conclusion**

The post-excavation analyses support the original site interpretation of this Block as comprising midden-site deposits.

**5.16 BLOCK 16 – MIDDEN-SITE DEPOSIT**

See tables p.294

Block 16 lay in the north part of the site beneath Block 15 (Figure 19). It stretched from the circular structure, to the north edge of the excavation, a distance of 21 m. The Block was generally deeper towards the north and measured between 0.3–0.6 m in depth. It consisted of fourteen layers



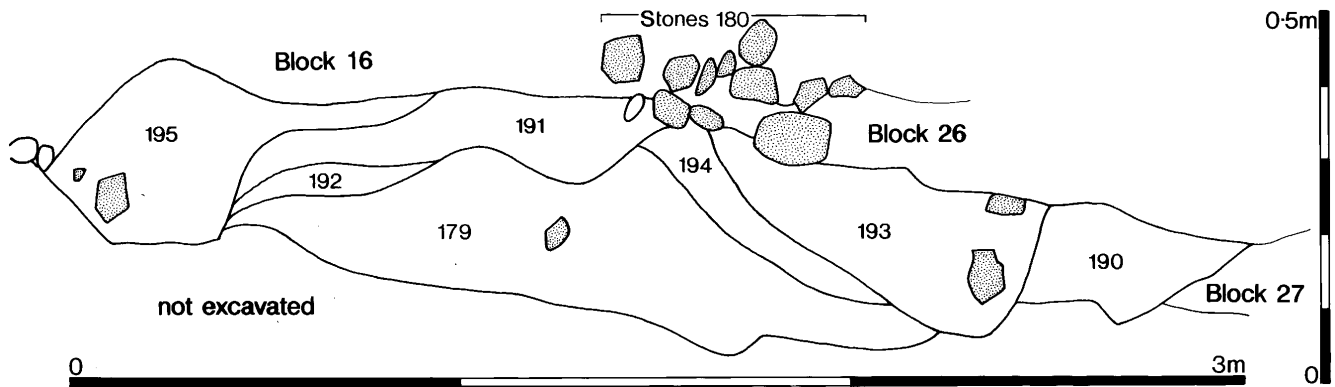


Figure 31. Block 17

which ranged in colour from very dark, grey-brown to pale brown and in texture from silty, sandy loam to pure sand (Figure 30). [252] consisted of a spread of plate-like stones 0.1–0.35 m long. The bases of layers [142], [143], [149] and [140] were described as wavy but no ard marks were observed. [205] is a shallow feature, 0.14 m deep and 0.04 m wide, cut from the top of layer [196] (Block 20). It was filled with [203] and [204].

#### Field interpretation

This Block was interpreted as a series of midden-site layers because of their dark colour, loamy texture and abundance of finds, especially carbonised seed. The stones [252] which lay on top of layer [291] may indicate the previous existence of a structure, removed by the insertion of Block 11. The presence of the wavy boundaries may indicate cultivation of the layers to the north of the structure. This Block consists of eighteen contexts and was interpreted in the field as a set of midden-site deposits. The Block mean IHI was 29,000 and this high value represents a full range of material types and an abundance of almost every type. Pumice was retrieved from six contexts and one piece, from [150], was carved (Figure 77a). Almost every context contained burnt stone in quantities ranging from 10% to 70% of the stone present. Of the 901 potsherds from this Block, 211 were examined and their distribution is markedly Poisson. Sherds up to size class 12 were recorded and almost one third of the sherds were above average in size. The pH values ranged from 6.8 to 7.4, with a modal value of 7.2. These are low to average values for the site. The phosphate values vary greatly between contexts, ranging from 1 to 4. The soils are pale to very dark brown sands to sandy loams with clear to wavy boundaries. One context, [252], consists largely of a spread of stone which may be derived from the construction phase of a building which does not appear in the profile.

#### Archaeological interpretation

The archaeological interpretation does not refute the field interpretation of these layers as midden-site deposits, although the south end of their distribution, now truncated by the insertion of the circular building of Block 11, contains layers like [252] which may, themselves have related to an adjacent

building or buildings. Block 16 may have been created as midden-site deposits with the wavy layer boundaries suggesting perhaps that they were subsequently cultivated.

#### Specialist contribution

Bones of sheep, cattle, pig, red deer and seal were recovered. Bird species include greylag goose, manx shearwater and possibly redshank. Fish species identified were tope, hake, ling and cod.

#### Conclusion

The post-excitation analyses indicate that these deposits were heterogeneous, may have been intermittently and briefly cultivated, contained refuse (albeit not necessarily rich in decaying organic matter), exhibit variable depositional rates, were laid down near upstanding structures and may have been, intermittently, grazed. This confirms their identification as midden-site deposits.

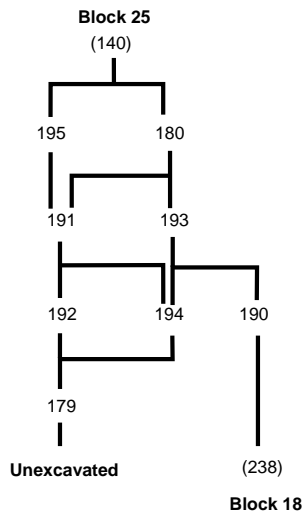
#### 5.17 BLOCK 17 – DUMP OF BURNT MATERIAL

See tables p.294

Block 17 lay in the north part of the site, within a slight hollow in the surface of the cultivated deposits of Blocks 18 and 20 (Figure 19). It extended for a total of 3 m and was up to 0.3 m deep (Figure 31). The seven layers in this Block contained a high proportion of burnt material. Layer [195] was a dark brown, silty, sandy loam.

#### Field interpretation

This group of layers is a dump of burnt deposits probably from a hearth, although no associated hearth structure was observed. The Block mean IHI was calculated at 36,500. All contexts, save [193], returned a wide range of anthropogenic materials in large, but variable, quantities. Burnt stone was common in all contexts, for the most part consisting of between 10% and 50% of the stone present. Some 90% of the stone in [193] were burnt. This context



consisted of a single deposition of burnt material. Of the 110 potsherds from this Block, sixteen were examined and while the majority was small a few large sherds were recorded. Phosphate levels were variable, between 1 and 4 and most at level 2. The pH values were average to high for the site, at 6.1 to 7.7, with a modal value of 7.4. Only one of the soil layers, [195], was adequately described and this was a dark brown silty sandy loam.

#### Archaeological interpretation

The wide range and variability in the materials present along with variability in the potsherd size ranges, the presence of large quantities of burnt stone and the variable soil characteristics, are all factors consistent with the field interpretation of a dump of burnt material.

#### Specialist contribution

Bones of sheep, cattle, pig, red deer and possibly greenshank were recovered, together with unidentifiable bird bones and flatfish.

#### Conclusion

The anthropogenic component and the other examined characteristics confirm the field observation that this is a primary dump of hearth refuse from within a nearby structure.

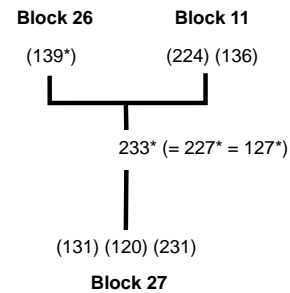
#### 5.18 BLOCK 18 – CULTIVATED DEPOSIT

See tables p.295, 295

\* <sup>14</sup>C date 2740 ± 60 bp (GU-1965) from layer [127] (Periwinkle & Limpet).

\* <sup>14</sup>C date 2900 ± 140 bp (GU-2558) from layers [233], [227] (this Block) and layer [139] (Block 26) (Animal bone).

Block 18 extended for 7.6 m in the middle of the site, and was 0.25 m deep. It consisted of one layer divided in the section into three components by the pits cut from within the



circular structure (Figure 19). The soil textures ranged from loamy sand to sandy loam and the colour from dark brown to brown/dark brown. There were ard marks at the top of the Block, immediately beneath Block 27.

#### Field interpretation

This Block was interpreted as a cultivated deposit because of its dark colour, its extent and its level nature. The presence of ard marks within the block and in its surface suggests that the Block above was cultivated, albeit that the latter refer to cultivation from a higher level. The Block mean IHI is 28,000 and this is derived from a wide range of anthropogenic materials present in reasonably large quantities. Two of the three contexts contained burnt stone, present in amounts less than 5% of the total stone component, and layer [233] contained pumice. Some fourteen of the eighty-eight potsherds were examined and these are all small in size, class 3 or smaller. Phosphate values are low at 2 and the soil pH is also somewhat low for the site at 6.5. The soils are loamy sands or sandy loams, with clear boundaries which are irregular (where ard marks occur) to smooth. The deposit is dark brown in colour.

#### Archaeological interpretation

The archaeological interpretation is consistent with the field interpretation. The range and quantity of anthropogenic inclusions and the comminution of the potsherds, are all consistent with the manuring of this soil with material from a farmyard midden. The dark soil colour, medium levels of phosphate and low pH are consistent with this hypothesis.

#### Specialist contribution

Bones of sheep, cattle, pig, red deer, thrush, ling, tope and cod were recovered.

#### Conclusion

The full range of post-excavation analyses support the field and archaeological interpretation of this deposit as a cultivated deposit.

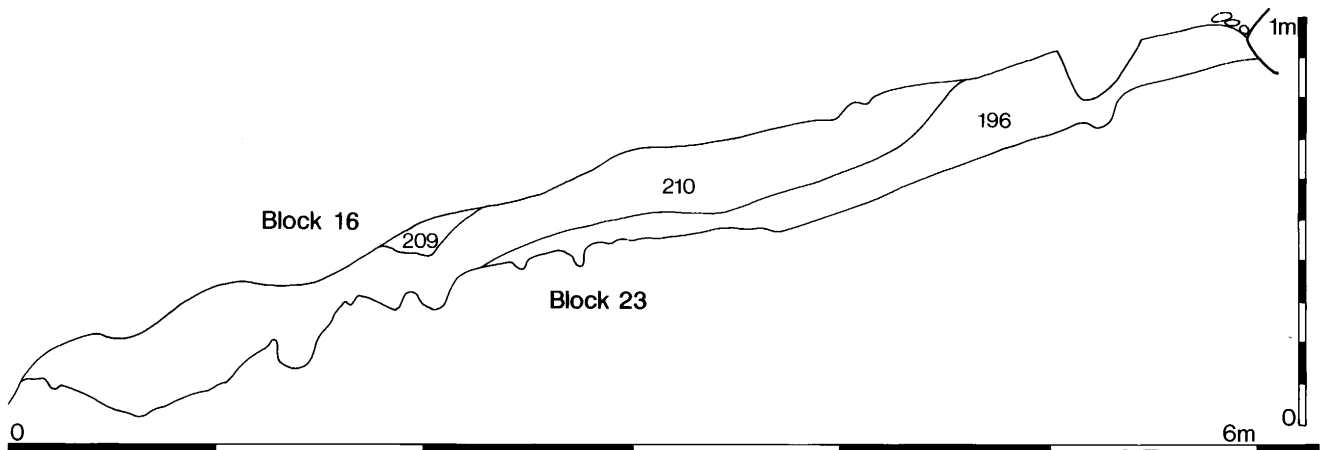


Figure 32. Block 20

### 5.19 BLOCK 19 – MIDDEN-SITE DEPOSIT

See tables p.295

\*  $^{14}\text{C}$  date  $2265 \pm 50$  bp (GU-1970) from layer [212] (Periwinkle).

This Block lay at the top of the north midden-site deposits (Figure 19). It was about 0.1–0.2 m in depth, extended for 13.5 m and the constituent layers ranged from a dark brown, silty, sandy loam to a very dark, grey-brown, loamy sand. The boundary with the layers of Block 15 was not distinct. A V-shaped slot, [297], 0.25 m deep and 0.25 m wide, had cut into the top of layers [176] and [206] of Block 15. It had a north-west to south-east alignment.

#### Field interpretation

This Block was interpreted as a midden-site deposit because of its humic content and considerable extent. A drainage gully was cut into the midden-site layers of the Block below and was filled before further midden-site deposits of this Block accumulated. In practice, this Block is a continuation of Block 15 and is divided off from the latter only because the gully indicated that some specific activity, other than the gradual accumulation of deposits, was occurring in this area. The Block mean IHI was calculated at 15,500, representing a

range of from 6,000 to 36,000. The extremes of the range are products of very large and very small volumes, respectively, with little significant difference between the retrieved assemblages. The IHI represents a wide range of materials present in large quantities. The proportions of burnt stone ranged from <5% to 15% of the stone content. Ten of the forty-eight potsherds recovered were examined and they were all small. The pH values range from 6.7 to 7.5 with a modal value of 6.8. Phosphate values ranged from 1 to 5, the most common being 3. The soil colours are browns, ranging from dark to very dark, and the soil textures are silty sandy loams to loamy sands. Layer boundaries were all clear and undefined.

#### Archaeological interpretation

The high anthropogenic component, the soils rich in organic matter and high in phosphates and all of the other indicators suggest that this Block is composed of midden-site deposits, as the field interpretation suggests.

#### Specialist contribution

Sheep, cattle, pig and unidentifiable bird bones were recovered.

#### Conclusion

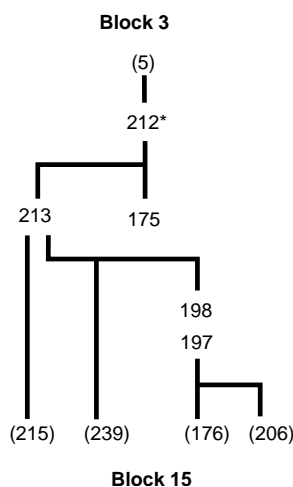
All of the post-excavation studies tend to confirm that these are midden-site deposits.

### 5.20 BLOCK 20 – CULTIVATED DEPOSIT

See tables p.296

\*  $^{14}\text{C}$  date  $2970 \pm 65$  bp (GU-1967) from layer [196] (Periwinkle & Limpet)

This Block lay at the bottom of the north part of the site, between Blocks 16 and 23 (Figure 19). It extended over a distance of 5.8 m and had a depth of 0.25 m. [196] was yel-



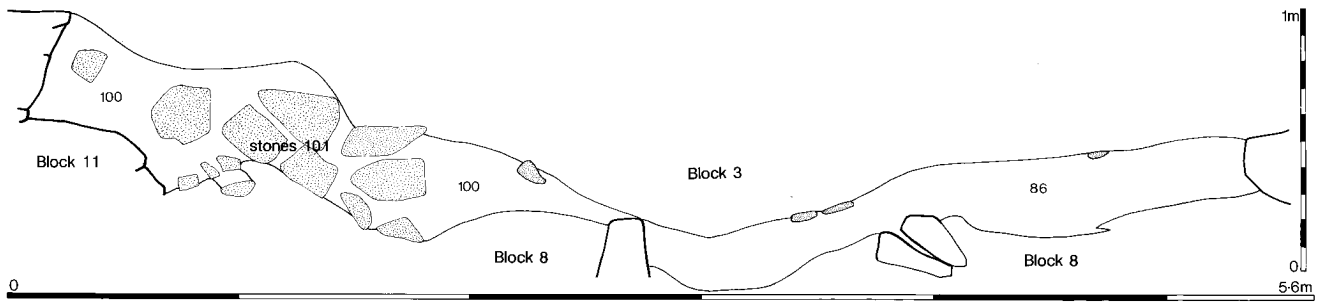
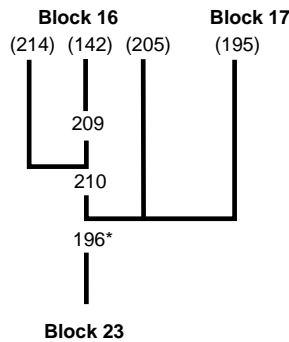


Figure 33. Block 21



lowish brown silty loamy sand while [210] was a brown/dark brown, loamy sand. The boundary with the light sand below (Block 23) had several undulations, 0.05–0.2 m wide and 0.05–0.1 m deep, spaced irregularly in the section, interpreted as spade marks (Figure 32).

#### Field interpretation

This Block was interpreted as a cultivated deposit because of its extent, colour, loamy texture and the presence of furrows or spade-cultivation marks cut into the layer beneath. The Block mean IHI was calculated at 13,000 and represents a moderate range of materials. Stone was retrieved from all contexts and the burnt component varied from <5% to 50%. Thirteen of the sixty-five potsherds from the Block were examined and all were small in size, classes 1 and 2. The phosphate levels were 2, indicative of low to moderate presence of soil phosphates, while the soil pH values of 6.4 to 6.8 are relatively low. The soils are loamy sands, yellow brown to dark brown in colour.

#### Archaeological interpretation

On balance the archaeological interpretation gives clear support to the field interpretation. The range of anthropogenic inclusions and the comminution of the potsherds are consistent with manuring the soil from a farmyard midden with subsequent degradation caused by ploughing. The soil colour and texture both indicate the addition of finer, organic matter to the shell sand, which consequently has slightly depressed the soil pH value.

#### Specialist contributions

The bones of sheep, cattle, pig and cod were recovered, together with gadoid and a shark vertebra.

#### Conclusion

The post-excavation analyses suggest that Blocks 20, 23, and 27 were initially windblown sands which were then cultivated. To these a restricted range and quantity of materials were introduced during manuring.

#### 5.21 BLOCK 21 – WINDBLOWN SAND WITH EROSION PRODUCTS

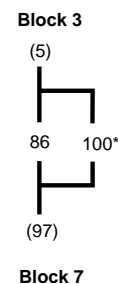
See tables p.296

\*  $^{14}\text{C}$  date  $2045 \pm 50$  bp (GU-1968) from layer [100] (Periwinkle)

Block 21 lay in the centre of the site above Blocks 7 and 8 (Figure 19). It comprised contexts [86] and [100], which had slumped over the backfilled layers between the drystone walls, [102] and [208] (Block 8), and infilled the masonry of [101] (Block 11) (Figure 33). They consisted of a band of dark greyish brown, silty, loamy sand, *circa* 0.2 m to 0.3 m deep.

#### Field interpretation

This Block was interpreted as windblown sand that had incorporated within it material eroding from the midden-site to the north. The Block mean IHI was calculated at 5,000, and represents a wide range of materials present in small quantities. The three potsherds from this Block were not examined. The pH of the contexts were 7.4 and 7.5 while the phosphate levels were recorded at 2 and 4. The soil was a dark grey brown silty loamy sand with clear boundaries.



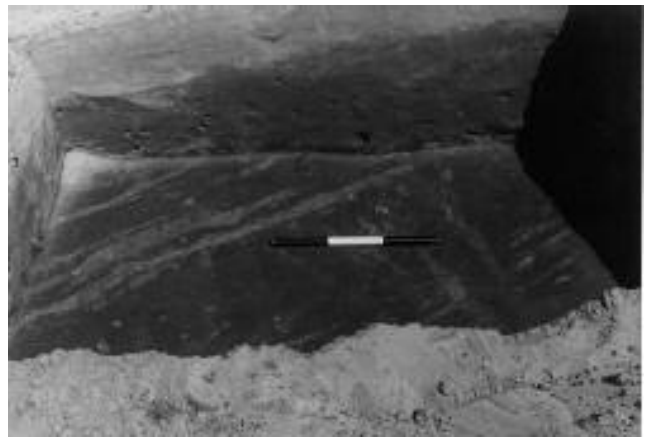
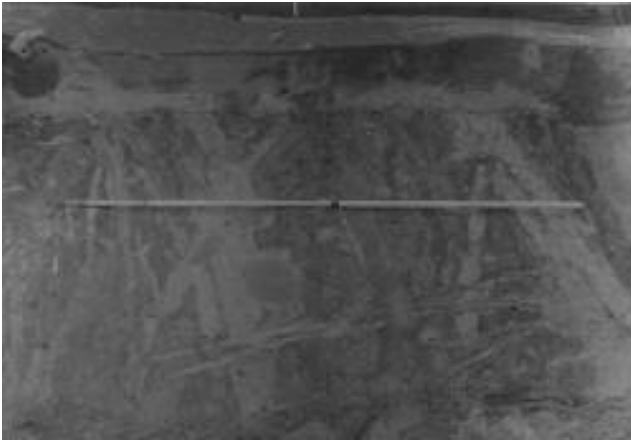


Plate 20. Baleshare. a) & b) ardmarks exposed at different levels within Block 22. In a) later cultivation episodes are visible in the profile

**Archaeological interpretation**

The archaeological interpretation agrees with the field interpretation and suggests that this deposit accumulated naturally, mainly from windblown sands trapped in a hollow. Small quantities of anthropogenic materials were introduced and these may derive from the midden-site deposits to the north. The soil colour and texture indicate some admixture of soil organic material, possibly from the same source. Alternatively, it could constitute a natural deepening humus which developed over a long period of time.

**Specialist contribution**

The bones of sheep, cattle, pig and red deer were recovered.

**Conclusion**

The field interpretation is partially substantiated by the post-excavation analyses. These deposits are essentially windblown sands. The molluscan evidence suggests that the materials may be derived from incidental dumping rather than from the erosion of midden-site deposits, as originally suggested.

**5.22 BLOCK 22 – CULTIVATED DEPOSIT**

See tables p.297, 297

\* <sup>14</sup>C date 3285 ± 60 bp (GU-1966) from layer [280] (Periwinkles, limpet & cockle).

\* <sup>14</sup>C date 3360 ± 80 bp (GU-2556) from layers [277], [278], [279], [280] (Animal bone).

This was the lowest exposed Block (Figure 19). Its presence was first indicated by coring, which suggested that it extended for approximately 300 m by 100 m. Its depth beneath the surface caused safety problems during excavation. Therefore, unlike the rest of the site, it was sampled in three separate locations in 1 m<sup>2</sup> pits on the south, middle and north of the excavated face. Although it consisted of a single deposit, aver-

Windblown sand	Block 23	
no number	(273)	(271)
281	274	277*
	275	278*
	276	279*
		280*
	unexcavated	

aging 1 m in thickness, it was sampled and recorded using a total of eight separate context numbers. These are essentially identical. The feature numbers were as follows; [277], [278], [279], and [280] in the extreme south, [274], [275] and [276] further north beneath wall [102], and [281] at the north end. Upon excavation numerous ard marks were exposed on the surface of the lower midden. Further ard marks were observed within the deposits of this Block (Plate 20).

**Field interpretation**

This was interpreted as a cultivated deposit because of its dark colour, extensive horizontal uniformity and the presence of ard marks, at least some of which were contemporary with this deposit. The mean IHI for the Block was 16,000 and it can be suggested that midden material was introduced during manuring and spread by ploughing. Of the 498 potsherds recovered ninety-seven were examined and the size distribution is also consistent with this interpretation, being markedly skewed, almost Poisson in form. The pH values ranged from 6.6 to 7.7 with a modal value of 7.5. Analysis of the soils reveals moderate to high phosphate levels, between 2 and 4. However the soil organic matter content, as revealed by loss on ignition, is low, ranging from 1% to 2.2%. It may be that the levels of introduced humus were never high.



### Archaeological interpretation

On balance the archaeological interpretation agrees with the field interpretation as identifying this as an area of cultivated shell-sand deepened by repeated manuring with midden material. The latter both stabilised and deepened the cultivated horizon and introduced into it a range of anthropogenic materials which, in turn, at least in the case of the pottery, was progressively degraded by the continuing disturbance of the deposit by ploughing.

### Specialist contribution

Sheep, cattle, pig, red deer, dog, cormorant and angel shark were the species identified.

### Conclusion

The field observation of ard marks contemporaneous with the deposit indicates that it was a cultivated deposit, probably a deepened A-horizon. The post-excavation analyses support this interpretation.

## 5.23 BLOCK 23 – CULTIVATED WINDBLOWN SAND

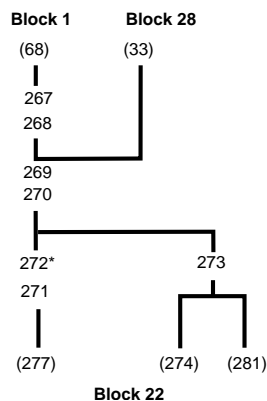
See tables p.297

\*  $^{14}\text{C}$  date  $3030 \pm 50$  bp (GU-1969) from layer [272] (Periwinkle).

This Block lay beneath the cultivated deposits of Block 1 and 28 in the south and Block 27 in the north (Figure 19). Because of its great depth below the surface it was only excavated in the south part of the site for a distance of *circa* 20 m. The seven layers in this Block had a total depth of about 1 m but in the south they tapered to 0.1 m. There were no professional soil-descriptions for these layers, but they were noted by the excavator as light brown-yellow sands and apparently contained little material, although this was subsequently contradicted by the results of the sieving.

### Field interpretation

This Block was interpreted as a windblown sand deposit because of its texture, light colour and apparent absence of



finds. It consisted of seven separate layers which were differentiated from each other on the basis of colour, though the differences were slight. This absence of strong coloration, together with the apparent absence of anthropic materials suggested in the field that these deposits were formed of windblown sand, possibly separated from each other by transitory regeneration horizons (Chapter 6 for details). The mean IHI for the Block is 7,000 which is low for the site. The highest quantities of material are bone, stone and sea-shell. Five contexts contained stone, of which <5% to 10% was burnt. One piece of pumice was retrieved from [270]. Nine of the forty-one potsherds were examined. All of these were small, size-class 2. The soil organic matter content revealed by LOI is low, ranging from 0.8% to 1.2%. Its phosphate levels are a moderate 2 to 3. Soil pH values range from 6.4 to 7.1. None of these are antipathetical to the hypothesis that these are windblown sands.

### Archaeological interpretation

Despite the presence of some anthropic materials, on balance the archaeological interpretation agrees with the field interpretation.

### Specialist contribution

Sheep, cattle, seal, otter and cod were identified.

### Conclusion

Only in exceptional circumstances can windblown sand contain particles as large as 1 mm, yet this deposit contains significant amounts of pot-sherds, stone, etc. The homogeneity of the contents of individual contexts and the plurality of contexts rules out deflation as a likely means by which this material can have become incorporated in the deposits. The snail evidence tends to suggest that these deposits represent accumulations of windblown sand, sometimes stable or slowly accreting and sometimes accumulating rapidly. They were cultivated for short periods and occasionally grazed. The anthropic inclusions represent, therefore, sporadic episodes of manuring, the material being subsequently dispersed. This Block should therefore be interpreted as cultivated windblown sand.

## 5.24 BLOCK 24 – CULTIVATED MIDDEN-SITE DEPOSITS

See tables p.298

\*  $^{14}\text{C}$  date  $2057 \pm 50$  bp (GU-1975) from layer [29] (Periwinkle).

This Block lay in the south part of the site with a total length of 12 m and a maximum depth of 0.9 m (Figure 19). It tapered away at both ends, to the north over layer [42] of Block 2 and to the south beneath Block 5. This Block was separated from the midden-site deposits of Block 2 by two initial dumps of material, one consisting of [40], [38] and [39], and the other of [34] and [45] (Figure 34). These ranged from

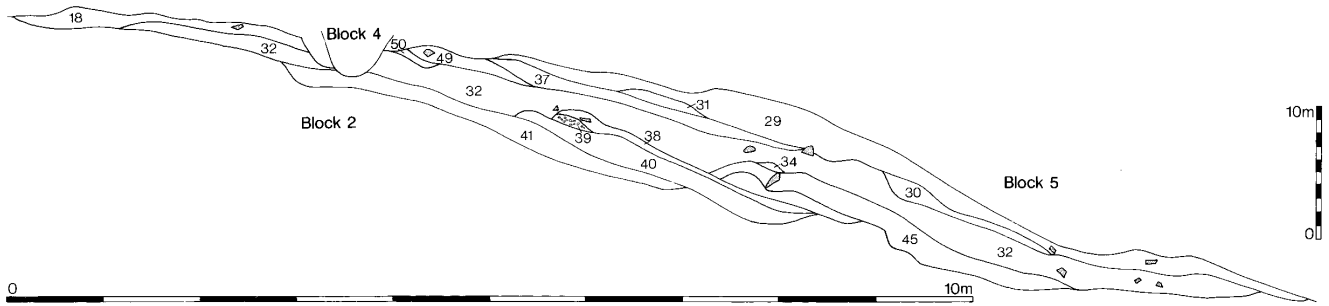


Figure 34. Block 24

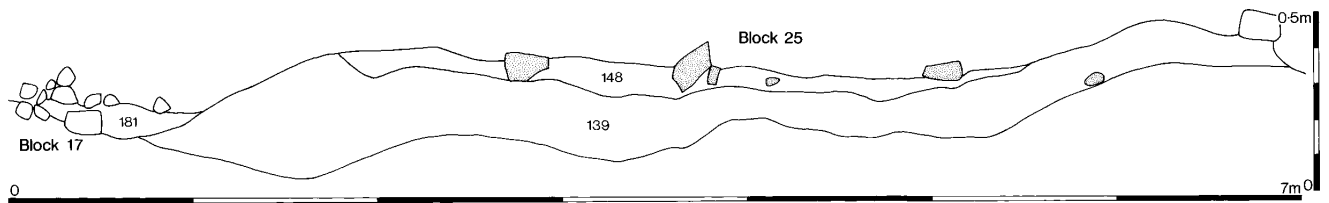
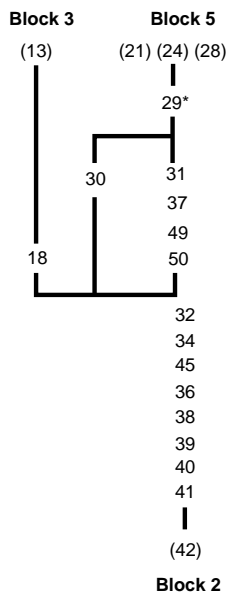


Figure 35. Block 26



brown /dark brown silty, sandy loam to dark brown loamy sands. These were then covered with more extensive deposits of brown loamy sands or sandy loams. There were wavy boundaries at the base of layers [49], [37] and [29].

**Field interpretation**

This Block was interpreted as dumped deposits with midden-site layers above. The wavy boundaries at the base of three of the upper layers suggested the presence of a cultivation horizon within the Block. The Block mean IHI was calculated at 110,500, representing a range of from 5,000 to 1,150,000. The extreme values 5,000 for [49], is caused by very small amounts of all types of material while the value 1,150,000, from context [39], is caused by a large amount of sea-shell relative to its volume. The IHI represents a wide range of materials present in large but very variable quantities. Burnt stone was found in quantities ranging from <5%

to 25% in six contexts. Sixty-two potsherds out of 244 were examined and they range in size-class from 1 to 12. About one quarter of the sherds were larger than the site average. The pH values range from 7.1 to 7.7 with a modal value of 7.4. Phosphate values ranged from 2 to 5, the most common value being 2. The soil colours are all recorded as shades of brown and the soil textures are mainly loams with some loamy sands. Layer boundaries were predominantly clear, some being sharp and wavy.

**Archaeological interpretation**

The archaeological interpretation is in agreement with the field interpretation. The very high IHI values and survival of large potsherds both attest to the dumped nature of the deposits while soil colours and textures indicate that significant quantities of soil organic matter was included.

**Specialist contribution**

The bones of sheep, cattle, pig, dog and cod and plaice were recovered, together with bones of mallard and great auk, the latter with butchery marks (Chapter 11.4.1).

**Conclusion**

The evidence from the snail analysis suggests a five-fold subdivision of this Block. The ranges and quantities of material from the re-grouped contexts may suggest that 24A, C and D were midden-site deposits and 24B and E cultivated deposits. It must be accepted that the field and archaeological interpretation were incorrect and that this Block consisted of a series of midden-site deposits with intermittent cultivation.

## 5.25 BLOCK 25 – CULTIVATED DEPOSIT

See tables p.298, 299

This Block consisted of a single layer, [140], in the north part of the site situated between the Blocks 16 and 26 (Figure 19). It abutted the bottom stone of the circular structure (Block 11) and extended *circa* 6.1 m to the north. It was a brown/dark grey loamy sand with a depth of 0.1–0.2 m.



### Field interpretation

This layer was interpreted as a cultivated deposit because of its texture, colour and extent. The Block IHI is high, at 23,500, and this represents a wide range and large quantity of anthropogenic material. Some 30% of the stone from the Block is burnt. Of the 135 potsherds recovered, thirty-five were examined and of these the size range is very wide (classes 1 to 17, at the extremes), with almost a quarter of the sherds longer than size class 3. The soil pH was estimated at 7.1 and the phosphate value was medium, at 2. The soil was a dark grey loamy sand, with clear boundaries.

### Archaeological interpretation

The archaeological interpretation is consistent with the field interpretation of this Block, ie as a cultivated deposit. The amounts and range of types of materials and the soil characteristics in general are consistent with this interpretation.

### Specialist contribution

The bones of sheep, cattle, pig, gannet, hake, cod, gadoid and possibly a long rough dab, were recovered.

### Conclusion

The evidence supports the field interpretation of this deposit as a cultivated deposit. The materials included within it suggest that it was originally a midden or midden-site deposit and that it was only briefly cultivated.

## 5.26 BLOCK 26 – CULTIVATED DEPOSIT

See tables p.299

\* <sup>14</sup>C date 2815 ± 50 bp (GU-1971) from layer [148] (Periwinkle).

\* <sup>14</sup>C date 2900 ± 140 bp (GU-2558) from layers [139], this Block, [227] and [233], Block 18 (Animal bone).

This Block lay near the bottom of the north part of the site (Figure 19). It extended 5 m from beneath the wall, [134], to where layer [181] had infilled the burnt stones, [180] (Block 17) (Figure 35). It was generally 0.1 m to 0.35 m in depth. The layers ranged from dark brown to dark greyish brown sandy loam. Layer [181] was merely a thin lens to the south of the stones [180]. The boundary at the base of layer [148] was wavy, although this is not apparent in the section drawing.

### Field interpretation

This Block was interpreted as a cultivated deposit because of its horizontal extent and loamy texture. The IHI for Block 26 has been calculated at 23,500 and this high value reflects the occurrence of a wide range of materials, present in large quantities. This is clearly consistent with the field interpretation. Between 50% and 70% of the stone present was burnt and seven pieces of pumice were recovered. Of the 227 potsherds, forty-nine were examined and these varied in size from 2–9. The soil phosphate content was low, with a value of 2 and the soil pH was also low, ranging between 6.2 and 6.9. The deposits were dark brown loams. The lower boundary of [148] was described as wavy.

### Archaeological interpretation

The archaeological interpretation is clearly consistent with the field interpretation. The large range and quantity of anthropogenic materials, the Poisson distribution of the potsherd sizes the low soil pH and dark soil-colour all support the hypothesis that this is a cultivated deposit continually manured from a 'farmyard' midden.

### Specialist contribution

The bones of sheep, cattle, pig, red deer, dog, common scouter, tope and hake were recovered.

### Conclusion

The apparent conflict between the snail evidence and the field interpretation can be resolved if we envisage that Block

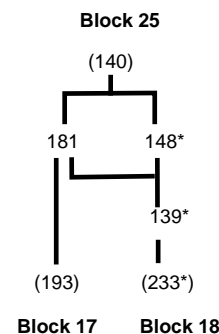




Figure 36. Block 27

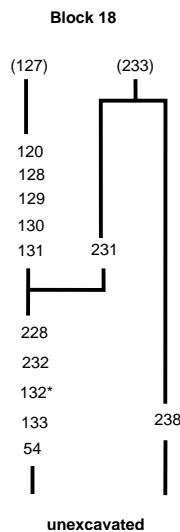
26 is a cultivated midden-site deposit, with the periods of cultivation being very limited.

### 5.27 BLOCK 27 – POSSIBLY CULTIVATED SAND

See tables p.300

\*  $^{14}\text{C}$  date  $2910 \pm 50$  bp (GU-1973) from layer [132] (Periwinkle).

This Block lay in the centre of the site, beneath Block 18 (Figure 19). The layers which constitute this Block can be considered as two separate groups. The stratigraphically lower layers, [54], [133] and [232] were generally more extensive than those above (Figure 36). Layer [54] was 0.04 m deep and 2.5 m in length. Layer [133] was *circa* 0.1 m deep and extended for 7.8 m from the edge of the ditch in Block 9 beneath the circular structure (Block 11). Layer [232] was *circa* 0.1 m deep and extended for 2.7 m in the section but only to the north of the circular structure. Layer [133] was a brown silty loamy sand and [232] was a light yellow brown sand. The group of layers above these, [132] to [120], have a total depth of 0.25 m and individually are *circa* 0.05 m in thickness. They ranged from light brownish grey to dark brown in colour and from silty sandy loam to sand in texture. When freshly exposed this upper group of layers appeared to have reddish patches and lenses of white sand within them. When seen in plan the surface of these layers was marked with ard marks and the upper boundaries of layers [131], [129] and [128] were irregular.



### Field interpretation

The lower group of layers in this Block were thought to consist of windblown sand because of their light colour and texture. At the time of the excavation the upper group was included with the windblown sand even though they differed in extent and coloration. The ard marks on the surface at the uppermost level were caused by cultivation of the overlying Block. This Block consists of twelve contexts, ten of which were sampled for anthropogenic materials. The field interpretation of these deposits was very tentative. They were interpreted as windblown sands, which encapsulated reddened deposits such as [128]. Whether these were fire reddened, or the result of secondary redeposition of iron salts from higher up the profile could not be determined in the field, though the latter was felt to be an improbable occurrence in calcareous sands. It is more likely that the red colour is derived from burnt peat. The top of the Block contained ard marks, which were clearly attributable to the cultivation of the overlying Block (Block 18). The Block mean IHI was 15,000, which seems rather high for a windblown sand, particularly since the range and quantities of materials involved were large. Furthermore, the context IHI values make a distinction between the longer, more homogeneous, layers at the bottom and north end of the Block and the interdigitated layers which overlie them. [232] contained a piece of carved pumice (Figure 77c) while [231] yielded an unmodified piece. Thirteen of the sixty-seven potsherds from the site were examined and these were all in the small size groups 1 and 2. Ten pH estimates range from 6.5 to 7.6, with a modal value of 6.7. Phosphate values range from 1 to 5, six of the ten values being high, i.e. 4 to 5.

### Archaeological interpretation

On balance the archaeological interpretation casts doubt on the field interpretation. These deposits seem to constitute an old ground surface. On the north end of this a series of sand deposits were dumped followed by possible cultivation, or at least disturbance due to the cultivation of the overlying layers.

### Specialist contribution

The bones of sheep, cattle, pig and dulin were recovered.

## 5.28 BLOCK 28 – CULTIVATED DEPOSIT

See table p.300

\*  $^{14}\text{C}$  date  $2210 \pm 50$  bp (GU-1974) from layer [33] (Periwinkle).

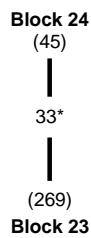
This Block lay at the south end of the site (Figure 19). It consisted of a brown sandy loam, [33], which filled a distinctive hollow in the windblown sand of Block 23. It was 0.4 m deep and extended beyond the south limit of the excavation.

### Field interpretation

This Block was interpreted as a cultivated deposit because of its colour, texture and homogeneity. The Block IHI was calculated at 6,000, and this represents a narrow range of materials present in small quantities. Four of the sixteen potsherds were examined and they range in size-class from 2 to 4. The soil colour was brown and the soil texture a sandy loam.

### Archaeological interpretation

The soil colour and texture and the presence of the, admittedly small, anthropogenic component all support the field interpretation. The depth and homogeneity of the deposit, together with its soil characteristics are consistent with its interpretation as a cultivated deposit.



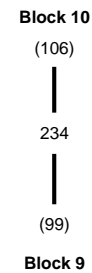
### Specialist contribution

Sheep and pig bones were recovered.

## 5.29 BLOCK 29 – OCCUPATION LAYER

See tables p.300, 301

Block 29 consists of the single layer, [234], which lay beneath the windblown sand of Block 10 and overlay the fill of the ditch in Block 9 (Figure 19). It was a dark brown loamy sand.



### Field interpretation

It is not impossible that this deposit represents a surface associated with the walls of Block 12. However, the extent revealed in section is insufficient to confirm this and horizontal excavation would be required to elucidate its nature.