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Coleraine

Data Structure Report No. 033

Oweydoe Cave, Rathlin Island

Rathlin Island Research Project

AE/04/93



**Oweydoe Cave
Rathlin Island**

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CAF DSR 033

AE/04/93

Grid Ref: D 1450 4844

1. Summary

1.1 Background

1.1.1 An archaeological excavation was undertaken within Oweydoo Cave (Figure One) as part of the Rathlin Island Research Project from the 24th May to 18th June 2004. The project was undertaken by the Centre for Archaeological Fieldwork (Queen's University Belfast), in partnership with the Centre for Maritime Archaeology (University of Ulster Coleraine) on behalf of the Environment and Heritage Service: Built Heritage.

1.1.2 Two field seasons of coastal survey work undertaken by the Centre for Maritime Archaeology (UUC) had mapped and documented approximately 200 sites around the island shore. The excavation at the Oweydoo Cave (MRA 3:154) represented part of the second phase of work, with the investigation designed to increase knowledge of a type of archaeological site on the island that has seen little previous investigation.

1.2 Excavation

1.2.1 There was little evidence of occupation within the cave previous to opening the trench, except for two walls; one situated near the entrance appearing to act as a revetment against further slump into the interior, the second further inside the cave. This second, low wall was investigated during the work (see Section 3.4).

1.2.2 A single trench measuring 4 x 1m was opened within the main cave chamber. The upper layers were stony and loose and contained some evidence of very recent burning (C.102). The material became steadily more plastic due to the damp conditions in the cave until a darker layer (C.105) was reached. This featured charcoal and shells (predominantly limpet). At least one burning incident was associated with this context (C.106-8), although several nails recovered towards the base would indicate that the layer was modern. The boulders (C.103) continued down at the north-east end of the trench, and then spread south-west at the base of C.105. Below C.105 was a dark layer (C.109) with more evidence

of burning (charcoal and bone) and ashy material (C.110). This was followed by a brown layer (C.111) in which the base of the boulder 'wall' (C.103) appeared to be bedded. This layer produced a fragment of denuded wood, bone and charcoal. Below this was a distinct orange layer (C.113) containing bone, limpet shell and limestone and an ashy lens (C.115). This was followed by a mid-dark brown layer (C.114) likely to represent the period between seasonal burning episodes in the cave (although charcoal and limpets were present). Below this was a brown layer (C.116) rich in charcoal and containing natural flint, bone and a spread of burnt clay (C.117). Finally the lowest context reached (at 1.23m depth) was a stony compact layer (C.118) featuring limpet shell. None of the flints recovered during the excavation appeared to be worked. The burning incidents uncovered are probably all modern and possibly associated with kelp-making activity on the nearby shoreline in the 18th and 19th centuries.

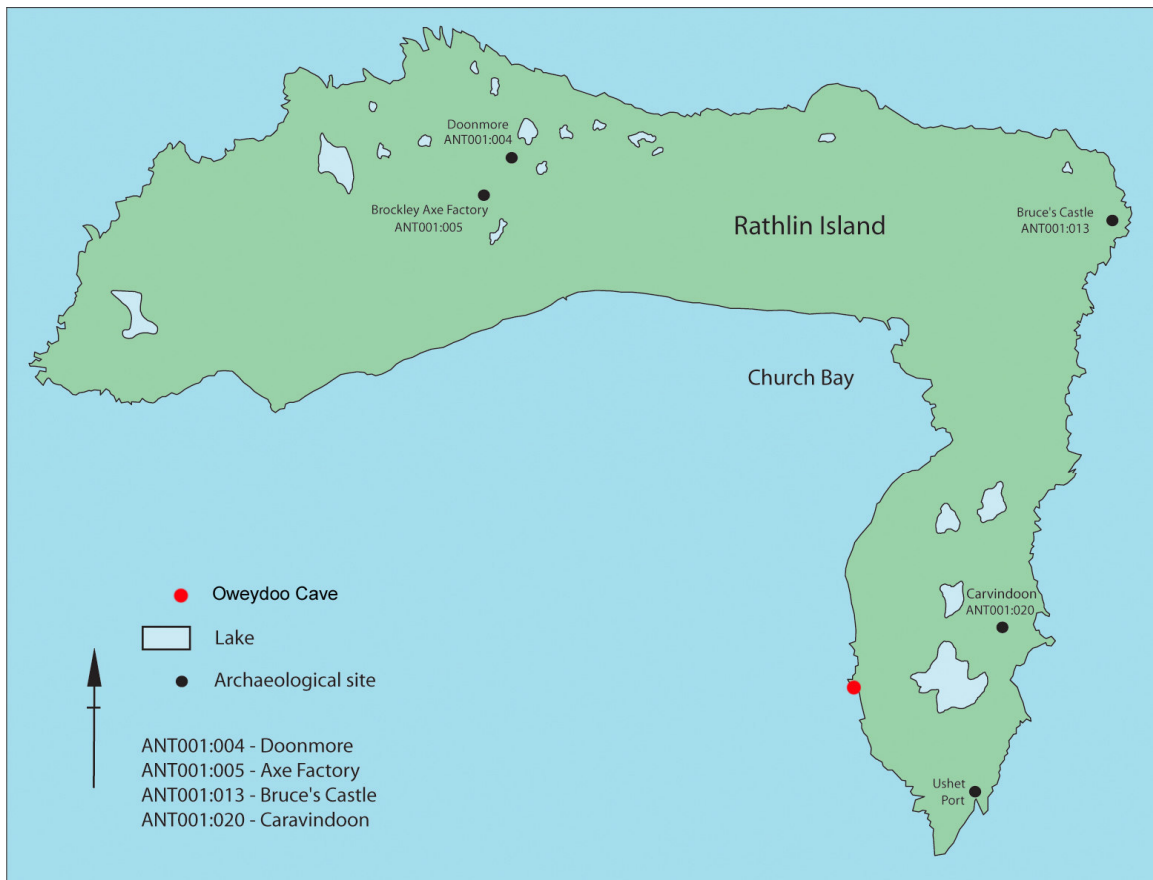


Figure One: Rathlin Island location map

2. Background

2.1 General

2.1.1 The Rathlin Island archaeological survey is a maritime project, involving the recording of all sites on the shore. A number of cave sites on the opposing mainland Antrim coast have proved archaeologically productive in the past (e.g. Ballintoy, Portbradden). To this end, all cave sites on Rathlin were recorded and assessed as to their likely archaeological potential. However, as only one Rathlin cave has been excavated in the past (Andrews, 1834, in Kinkeel) a number of sites were targeted for investigation. These included the Oweyberne Cave Complex (AE/04/96: CAF DSR 026), and the cave at Oweydoo (AE/04/93).

2.2.2 Sea-level change over millennia has resulted in both the formation of a number of caves and late glacial shorelines around Rathlin Island. There are two main areas for caves on the island; in the limestone cliffs of the south facing shoreline, and the basalt cliffs of the west facing shoreline. The former are inclined to be nearer the High Water Mark and are probably more recent than the latter, which are typically c. 5 metres higher than the present shoreline and seem to represent the Maximum Transgression Episode.

2.2.3 The large natural cave at Oweydoo [Black's Cave] is situated in the side of a steep basalt scarp (Figure Two). A scree slope has accumulated below the cave on the outside, with some soil and scree slippage also lying in the sloping entrance which descends into the main cavern. The entrance is wide and low, measuring 7.0m wide and 1.6m high (at lowest: Plate One). Situated 3.2m inside the entrance, and across part of the passage, are two portions of wall or revetment formed by vertically set boulders. That at the south-east is 3.7m long and 1.1m (6 courses) high; the wall on the north-west is 2.0m long and 1.0m high. The wall is broken down towards the middle of the passage, between the two stretches. At a distance of 9.7m further in from the wall is a reasonably linear formation of boulders across the cave floor, beyond this there appears to be a decrease in the amount of stone scatter. The entrance passage into the cave

slopes down for 13m, then levels out. The main cavern measures 22.2m in total length, 7.3m in width, and about 4.0m in height.

2.3 *Other Sites in the vicinity*

2.3.1 Situated to the north and south of Oweydoo are a number of kilns and walls associated with the 18th and 19th century kelp-making activity on the island (MRA 3:151-156). There are also boat shelters (MRA 3:161) to the north, probably associated with the need to remove kelp to the island store house located in Church Bay. A survey in front of the cave along the edge of the stony beach resulted in the recovery of a number of water-rolled flints (McCartan, *pers comm.*) which further suggested that early human activity could be associated with the cave.

2.4 *Research Objectives*

2.4.1 The aim of the excavation at the Oweydoo Cave was to ascertain the presence and character of any archaeological deposits within the cave. In particular the excavation hoped to recover material analogous to the flints recovered from the beach outside the chamber.

2.5 *Archiving*

2.5.1 Copies of this report have been deposited with the Environment and Heritage Service: Built Heritage. All site records and finds are temporarily archived within the School of Archaeology and Palaeoecology (Queen's University Belfast), and the Centre for Maritime Archaeology (University of Ulster Coleraine).

2.6 *Credits and Acknowledgments*

2.6.1 The excavation was directed by Peter Moore and Wes Forsythe. The excavation team consisted of Brian Sloan, Eamon Donaghy and Naomi Carver.

2.6.2 Assistance during the course of the excavation and the preparation of this report was kindly provided by: Dr Colm Donnelly, Mr Keith Adams and Ms Ruth Logue (CAF), Ms Sinéad McCartan (UM), Dr Brian Williams (EHS) and Mr James Black (landowner).



Plate One: The entrance to Oweydoe Cave.

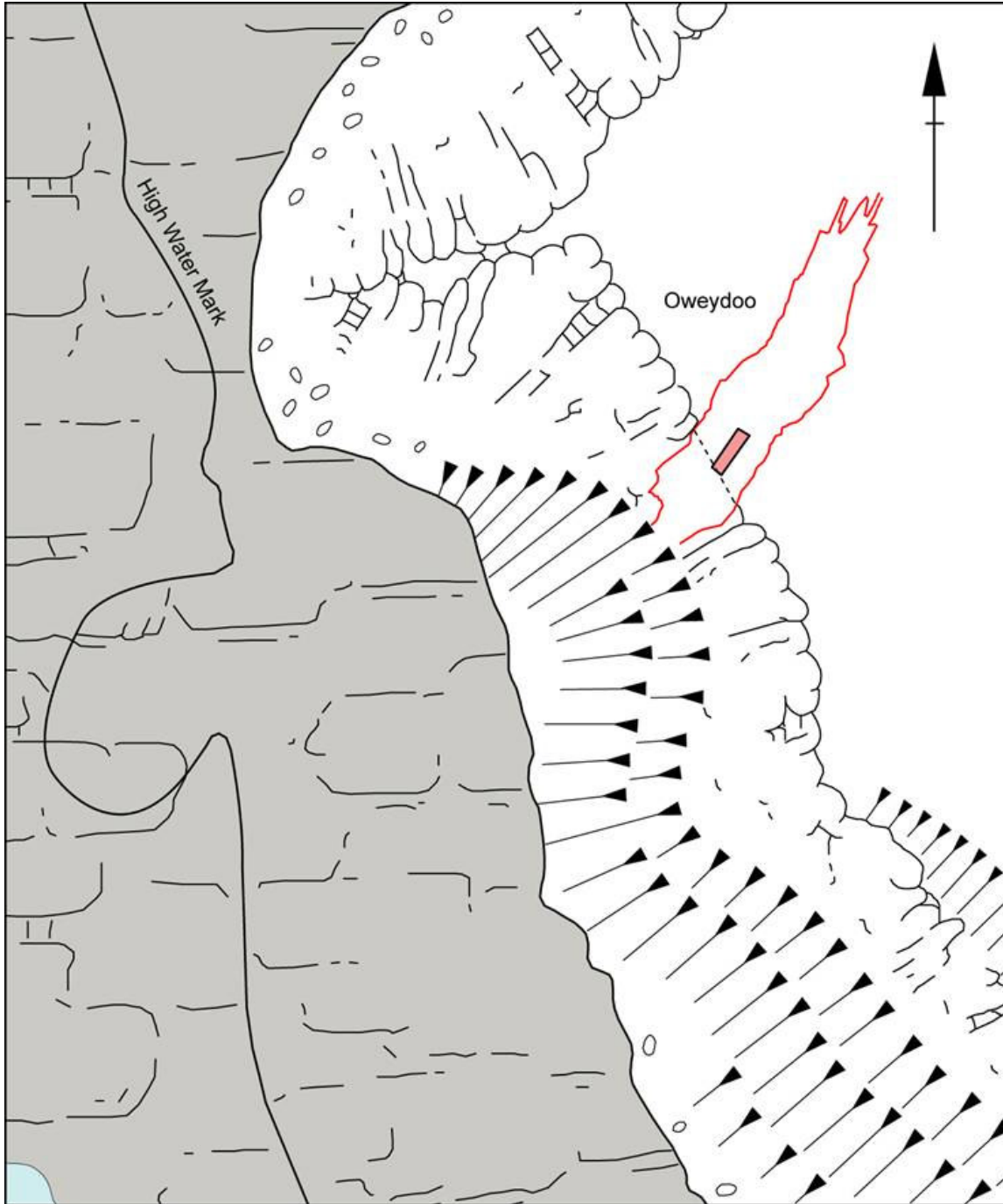
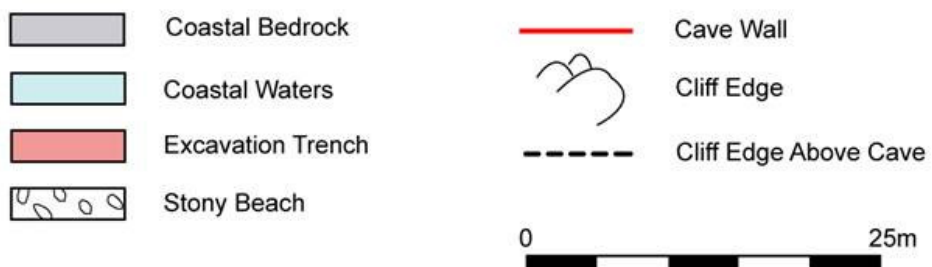


Figure Two: Map showing the position of Oweydoe Cave and the 2004 excavation trench

Key



3. Excavation

3.1 Methodology

3.1.1 The programme of work at the Oweydoo Cave involved an archaeological investigation of a single trench. The trench measured 4 metres (approximately north-east to south-west) and 1 metre in width. The north-east end of the trench extended over the linear formation of boulders (the inner revetment wall) to determine at what depth it was set.

3.1.2 Following the removal of loose stone, the excavation of the archaeological strata was undertaken by hand using standard context recording methods. The principal site records consisted of context sheets, field notes and a drawn record. Individual features were planned, both prior to and following excavation. Photographs were problematic due to the low light levels within the cave chamber, this also hampered excavation – some of which had to be carried out by torchlight. A series of overall plans (Scale 1:20) were prepared, with section drawings (Scales 1:10 and 1:20) made on completion of the excavation. For details of site photography see Appendix Three and for details of field illustrations see Appendix Four. In addition, separate registers were kept for small finds (Appendix Five) and samples (Appendix Six). It is recommended that the Harris Matrix for the trench is consulted when reading the account of the excavation (see Appendix Two). The unique site code used to identify the records generated during the excavation was 'OW 04'.

3.2 Account of the excavations

3.2.1 The archaeological layers recorded during the course of the excavation can be sequenced into three phases

- Modern deposits.
- Deposits associated with the period of the revetment wall (C.103).
- Deposits below the revetment wall recorded in the box section.

The trench was excavated to a recorded depth of 1.23m. However, it was obvious that there was much subsidence into the cave from the entrance and the

complete excavation of this deep stratigraphy was beyond the scope of this season's fieldwork.

3.3 *Modern deposits*

3.3.1 The uppermost layer of the trench (C.101) was removed by mattock to 0.3m. The surface featured scattered stone and soil which had eroded in from the cave entrance. Context 101 – a brown loamy silt – was loose on the surface, and became increasingly damper and more plastic as it was excavated, this deposit was recorded to a depth of 0.59m. It comprised pebbles (80%), shell (limpet), and contained a lens of burnt material (C.102). Finds included unworked flint, bone, and modern ceramics. The burnt lens (C.102) was 0.7m long, 0.3m wide. Comprising clay and charcoal, this firm orange coloured feature was irregular in plan and ran into the north side of the trench. It was encountered at a depth of 0.03m and sloped 0.13m down to the south-west. Finds included small fragments of flint and an iron nail. The shallowness of the feature, its position within C.101 and the iron nail would indicate that this was the remains of a modern burning event.

3.3.2 At the south-west end of the trench, under C.101, a brown silt and grit layer (C.104) was recorded containing some stone (10%) and charcoal (Figure Three). Although similar in colour to C.101, this layer was looser and grittier and may represent a slippage event of loose material from the slope above it. A small piece of plastic revealed it to be modern. Upon further excavation the layer became stony and similar to C.101.

3.4 *Deposits associated with the period of the revetment wall (C.103).*

3.4.1 The stone revetment wall (C.103) was visible prior to excavation (1.24m wide), but nearly inundated by material subsiding into the cave from the entrance. Situated at the north-east end of the trench, it comprised sub-angular boulders up to 0.5 x 0.5 x 0.6m, with neither side of the wall particularly well constructed. Excavation to the south-west side of the wall revealed a stone spread (at a depth of c.0.5m) extending out for 1.3m. The spread had been laid in C.105 which was

- evident in the lower part of the wall as darker and more shelly than C.101 (Figure Three). The ash from C.110 appeared to go underneath the stone spread but another large flat stone was underneath it – perhaps part of a hearth. The only finds associated with the wall were modern glass.
- 3.4.2 Underlying C.101 throughout the entire trench was C.105, a sticky dark brown deposit of loam/silt (Figure Three). The occurrence of shell (limpet and periwinkle) increased at this depth (0.6m) notably toward the south-west end of the trench. There was also limestone and small stone and gravel inclusions. The deposit was 0.22m thick and came down onto a spread of stone at the south-west base of the revetment wall. At the base of these (C.109-110) the remains of three iron nails, rectangular in section were found (Figure Four). Features C.106 and C.107 were recorded as lying within this deposit (though appearing at a similar level). Context 106 was a small area of burning to the south-west end of the trench. Orange in colour with sandy / silty texture, it was sub-square (0.15 x 0.14m) in plan and 0.18m thick. Excavation revealed charcoal, some bone and number of angular stones c.0.1 x 0.8m within it. There were also pebbles and fragments of shell. The cut of C.106 (C.108) showed the feature to be larger (0.48 x 0.43m). Sub-rounded in plan it was shallow sided, with a flat base, it was not possible to record the full extent of the feature as it ran into the baulk. Directly abutting C.106 to the south-west was a sticky dark brown / black deposit (C.107), containing animal bone, shell fragments and charcoal. The deposit was shallow (0.04m) and lying against both C.106 and C.105. Limestone fragments were present on the south-west side of the feature. Both C.107 and C.106 appear to be the remains of burning events associated with the consumption of animal and/or shellfish.
- 3.4.3 A dark brown / black sticky deposit (C.109) underlay C.105. It had a clay consistency and was rich in charcoal. It ran to the spread of stones at the south-west and may be associated with the base of the wall. The deposit contained shell, charcoal and bone. A light grey distinctive spread of ashy material (C.110) appeared at the same level as C.109, and was c.1.0m long and 0.02 – 0.06m thick. It included some charcoal and pebbles and was found to lie with C.109. To

the north-east, it ran under the stone spread of the wall (C.103) and on top of a large, flat stone – possibly a hearth stone (Plate Two).

3.4.4 The wall (C.103) appeared to be bedded in a brown gritty loam (C.111: Figure Three) below C.105. Encountered at a depth of 0.78m, it was 0.12m thick and contained charcoal, small rounded stones, angular gravel and bone. A single wooden fragment was also recovered from this context. Within C.111, a semi-circular smear of charcoal rich material (C.112) was recorded. However, this turned out to be a very thin lens.

3.5 *Deposits below the revetment wall in the box section*

3.5.1 Excavation became increasingly hampered by the wet conditions and poor light levels. It was therefore decided to continue the excavation with a box section in the middle of the trench to test for further features. Below C.111 was an orange, friable gritty/sand deposit (C.113: Figure Three). It was 0.06m thick and contained charcoal, limestone, and patches of shell (limpets). This burnt spread contained an ashy lens (C.115). The fine black / grey lens was 0.01m thick and contained only charcoal.

3.5.2 At a depth of 0.94m a mid-dark brown layer of gritty-silt was encountered (C.114). This sticky deposit was 0.09m thick and featured small rounded pebbles, flint, angular stone and fragments of limpet shells. It may represent a period between seasonal burning episodes in the cave. A more charcoal rich deposit of mid-dark brown material (C.116) was encountered at a depth of 1.17m. It was 0.15m thick and contained natural flint and bone. A fine orange-red lens of gritty sand (C.117) was found within it. This thin lens, 0.02m thick contained no inclusions. Both C.116 and C.117 appear to represent more evidence of seasonal burning events. The final context reached (under C.116) was a sticky dark brown deposit (C.118: Figure Three) at a depth of 1.23m. This gritty clay material contained charcoal, stone (0.05 x 0.06m) and limpet shell. Context 118 was a firmer deposit than C.116, due to the stones being packed more tightly. It may represent a base on which the fire (C.116/117) was lit. This deposit was not trowelled through and excavation stopped at this point.

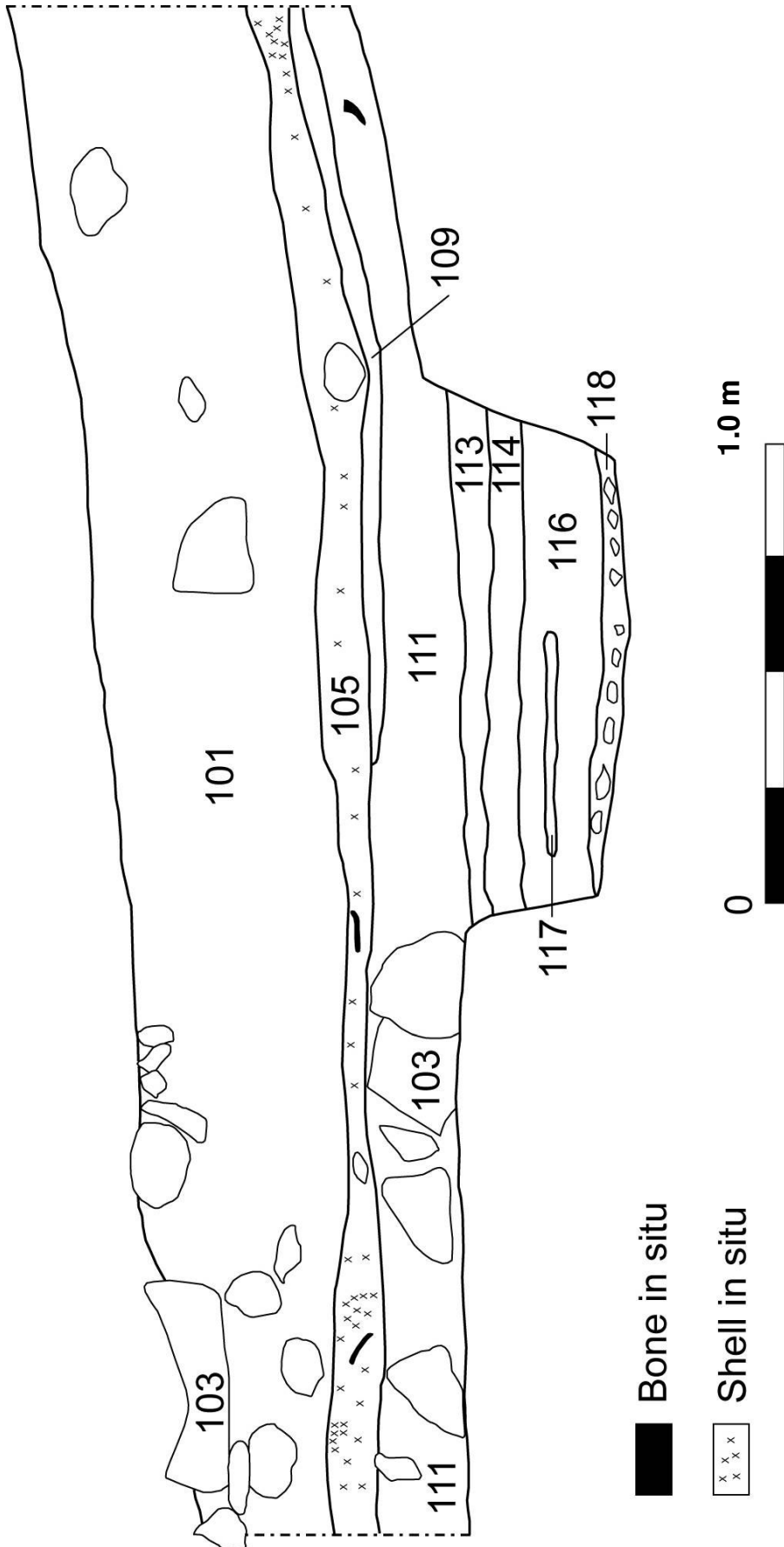


Figure Three: West section of the Oweydoe excavation trench

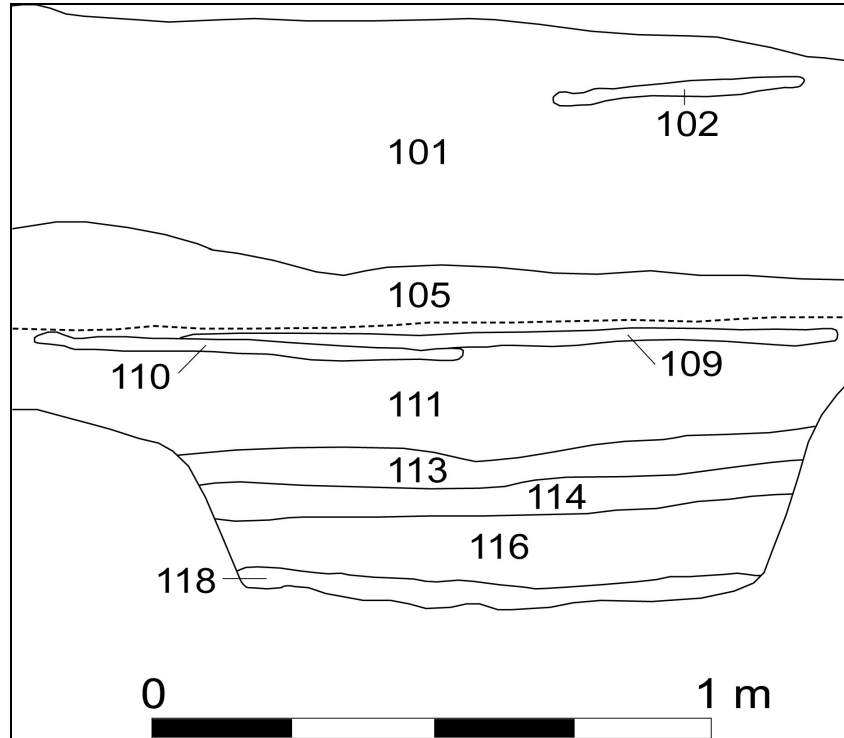


Figure Four: East section of the Oweydoe excavation trench.



Plate Two: C.103 / C. 109 / C. 110 looking south-west.

4. Discussion

4.1 General

4.1.1 The excavation at Oweydoo revealed successive burning episodes that appeared relatively modern. However, the lack of finds in this regard was surprising. The burning episodes revealed by excavation were distinct and well-preserved in the damp conditions of the cave. The finds associated were mainly animal bone and shell-fish remains, suggesting on-site consumption. Any flint recovered appeared natural, there was evidence of the flint having been worked and no deposit could be interpreted as particularly early. Limestone recovered during excavation did not come from the cave itself but occurs naturally on the adjacent beaches.

4.1.2 The stone walls within the cave appear to act as revetments to halt the subsidence of loose material which has accumulated at the cave entrance. There is no need for the walls to provide additional shelter, as is the case in certain other Rathlin caves, because the entrance slump fulfils this function. The wall by the cave entrance appears to be a later structure; it is at a higher level and has been broken through in the middle by recent slump. The smaller wall excavated in this season was probably an earlier attempt, now nearly buried. It was shown to be poorly and loosely built and excavated to a depth of c.0.8m. Burning episodes occurred on the entrance side of the wall right into modern times and some of these predate the wall itself.

4.1.3 That the excavation was dealing with modern events at over a metre depth is not surprising given the extent of slippage into this cave from the entrance. The excavation did not connect any of the flints recovered from the beach in front of the cave with material from the cave interior. There may be evidence of earlier occupation still to be found in Oweydoo, but it was beyond the scope of this field season.

4.1.4 The evidence of burning in the caves is most likely to relate to the 18th and 19th century use of the shore for kelp-making. This summer activity was undertaken by inhabitants of the townland to produce a cash-crop which paid rents. Rathlin

has produced extensive evidence of this practise, with most sites located in the lower end of the island. Islanders at this relatively accessible part of the shore did not need to stay overnight in the caves for much of the process (gathering and drying seaweed). However, burning kelp was a 12-24 hour activity. This was undertaken by a number of individuals attending the same kiln to ensure uniform burning and enough personnel to stir the ashes. We may speculate that shelter from bad weather and meals consumed on a break from burning may have taken place within the cave.

5. Recommendations for further work

5.1 Introduction

5.1.1 The results of the 2004 trial excavation within the Oweydoe Cave do not justify full publication on their own merit but will be discussed within a the wider context of other caves and kelp in the Rathlin Island Monograph which will present all the findings of the survey. Some post-excavation analysis is nevertheless required.

5.2 Specialist study of the bone assemblage

5.2.1 The assemblage of bones recovered during the excavation should be examined for identification, specifically to identify any butcher marks not observed during recovery.

5.3 Programme of radiocarbon dating

5.3.1 Although burning episodes appeared modern, samples should be retained for future dating and comparison should further excavation continue on the site.

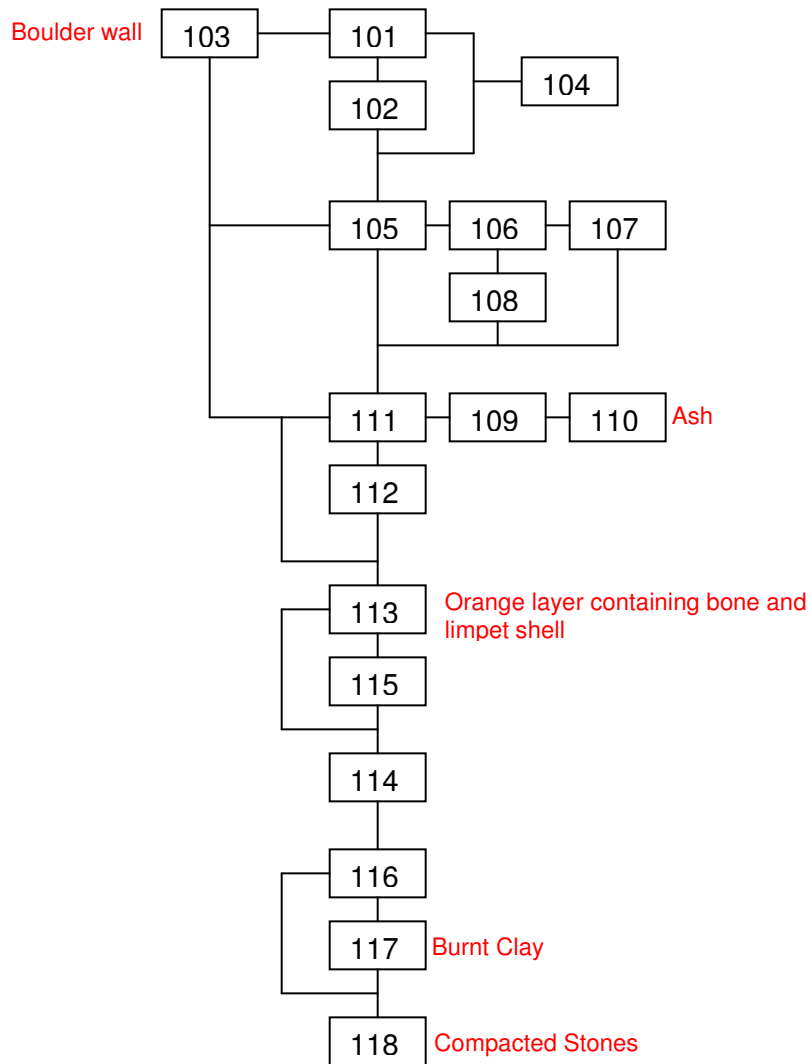
5.4 Future excavation

5.4.1 Test excavation of the cave at Oweydoe recorded a deep stratigraphy, increasing in depth towards the slump at the entrance to the cave. Any future work within the cave would have to take this into consideration and allow for necessary time and safety procedures. Alternatively excavation could move further into the interior particularly to the lowest point on the cave floor. The drawbacks of this option would be the damp and poorly lit conditions combined with the tendency for richer archaeological remains to be sited toward the entrance.

Appendix One: Context Log

<i>Context No.</i>	<i>Description</i>
101	Loose stony layer
102	Orange lens of burnt material
103	Revetment wall
104	Gritty deposit similar to C101
105	Dark brown, sticky loam
106	Burnt orange feature
107	Dark-brown / black burnt feature
108	Cut of C106
109	Charcoal rich sticky deposit
110	Light grey ash spread
111	Brown gritty loam
112	Fine black smear
113	Burnt orange feature
114	Mid-dark brown grit / silt deposit
115	Thin grey lens within C113
116	Mid-dark brown and charcoal deposit
117	Burnt orange lens within C116
118	Dark-brown sticky clay with compact stones

Appendix Two: Harris Matrix



Appendix Three: Photographic Record

<i>Photograph No.</i>	<i>Description</i>
01	The entrance to the cave
02	C.106
03	View to the entrance of the cave from the main chamber
04	C. 103 / C.109 / C. 110

Appendix Four: Field Drawing Register

<i>Drawing No.</i>	<i>Plan / Section</i>	<i>Description</i>
01	Plan (1:20)	Showing C.103 / C.111 and the box section towards the centre of the trench
02	Section (1:20)	East section showing C.101 / C.102 / C.105 / C.109 / C.110 / C.111 / C.113 / C.114 / C.116 / C.118
03	Section (1:20)	West section showing C.101 / C.103 / C.105 / C.109 / C.111 / C.113 / C.114 / C.116 / C.117 / C.118

Appendix Five: Finds Register

<i>Find No.</i>	<i>Context No.</i>	<i>Description</i>
Bag 01	101	Modern ceramics
Bag 02	101	Modern nails
Bag 03	101	Shell fragments (predominately limpet)
Bag 04	101	Animal bone fragments
Bag 05	101	10 flint fragments
Find 01	102	Metal nail
Bag 06	105	Shell fragments
Bag 07	105	Flint fragment
Bag 08	105	Metal nails
Bag 09	105	Animal bone
Bag 10	105	Animal bone
Bag 11	106	Animal bone
Bag 12	106	Shell fragments (predominately limpet)
Bag 13	107	Animal bone
Bag 14	109	Single small flint fragment
Bag 15	109	Unidentified metal object
Bag 16	109	Shell fragments (predominately limpet)
Bag 17	109	Animal bone
Bag 18	113	Animal bone

Appendix Six: Soil Sample Register

<i>Sample No.</i>	<i>Context No.</i>	<i>Description</i>
01	C.102	Burnt clay
02	C.104	Gritty deposit
03	C.105	Dark brown sticky loam
04	C.106	Burnt clay
05	C.107	Charcoal derived from dark brown deposit
06	C.110	Ash
07	C.109	Charcoal rich sticky loam
08	C.105	Shell from dark brown sticky loam
09	C.112	Black loam
10	C.113	Burnt clay
11	C.114	Charcoal from mid brown gritty deposit
12	C.115	Greyish loamy clay
13	C.117	Burnt clay