Yle Eunlich (Island Eillich), Argyll & Bute, Scotland

Data Structure Report Report No 07 Project ID: CA007



Calluna Archaeology

Calluna Archaeology

tel: 0771 252 6034

email: calluna.archaeology@gmail.com

Yle Eunlich (Island Eillich), Loch Lomond, Argyll & Bute, Scotland NGR: NN3218 1579 Canmore ID: 126961

Data Structure Report

on behalf of

Clan MacFarlane Worldwide

Cover plate: View of Structure 1 (© Mitchell Fotheringham)

Report by: Heather F James
Illustrations by: Heather James & Clare Ellis
Excavation supervisors: Heather James & Clare Ellis

Date:24/04/2019

This Report has been prepared solely for the person/party which commissioned it and for the specifically titled project or named part thereof referred to in the Report. The Report should not be relied upon or used for any other project by the commissioning person/party without first obtaining independent verification as to its suitability for such other project, and obtaining the prior written approval of Calluna Archaeology. Calluna Archaeology accepts no responsibility or liability for the consequences of this Report being relied upon or used for any purpose other than the purpose for which it was specifically commissioned. Nobody is entitled to rely upon this Report other than the person/party that commissioned it. Calluna Archaeology accepts no responsibility or liability for any use of or reliance upon this Report by anybody other than the commissioning person/party.

CONTENTS		,					
_	Abstract	5					
1	Introduction	7					
2	Location, Geology and Topography 7						
3	Archaeological Background	7					
4	Summary Aims and Objectives	9					
5	Methodology	10					
6	Results	10					
6.1	Trench 1	10					
6.2	Trench 2	21					
6.3	Trench 3	24					
6.4	Trench 4	26					
6.5	Trench 5	27					
7	Discussion	29					
8	Recommendations						
9	List of Sources						
10	Acknowledgements						
11	Appendix 1: Tables / Concordances						
	Appendix 2: Island Eillich, Argyll, Assessment of the lithic assemblage, Torben Bjarke Ballin	by					
	Appendix 3: Catalogue of metalwork, by Gemma Cruikshank						
	Appendix 4: Yle Eunlich (Island Eillich), Loch Lomond: archaeobotanical analysis, by Susan Ramsay						

ILLUSTRATIONS						
Cover	View of Structure 1 (© Mitchell Fotheringham)					
1	Island Eillich location plan (© Clare Ellis)	6				
2	Pont's manuscript map of the top of Loch Lomond dated to the late 16 th century					
3	Promontory at the top of Loch Lomond called 'Island Eillich'. Roy's Military Survey 1747-52					
4	1st edition OS 6 inch to the mile dated 1865-7	8				
5	Areas of exposed and truncated bedrock (053) in the NW quadrant	11				
6	Structure 1, walls (002) and surface of (035) & (022). Large oak tree with roots in the SW and SE quadrants	11				
7	Trench 1 plan	12				
8	Trench 1 E-facing section	13				
9	Inside view of N wall (002) of Structure 1	14				
10	External view of wall (002) immediately over bedrock (012)	14				
11	Wall 002 and entrance (013), stony surface (037) and post-hole (036)	15				
12	Stones (052), possible post setting	16				
13	Stones infilling bedrock (029)	16				
14	Possible post-hole (038)	17				
15	Layer (016) up against the wall (002) with a darker soil (017) inside the NW quadrant	17				
16	Layers (016) and (017) in the NE quadrant	17				
17	Trench 1, Structure 1, turf and moss removed revealing the walls (002) and	18				

	tumble (003)	
18	Socketed metal tool from layer (017) SF 21	19
19	Metal nails and corroded fragments from layer (017)	19
20	Hipped, cruck-framed building of Skye-type (undated), (Sinclair 1953)	21
21	Trench 2, features (027), (028) & (030) pre-excavation	22
22	Trench 2, features (027), (028) & (030) post-excavation	22
23	Trench 2, N-facing section and plan	23
24	Trench 3, from the S	24
25	Trench 3, plan and section	25
26	Trench 3, fired lead ball	25
27	Trench 4, turf (019) removed onto stones (021)	26
28	Trench 4, surface of layer (024) beneath stones (021)	27
29	Trench 5, SE-facing section with fallen slates below	28
30	Trench 5, SE-facing section	28

TABLES	
1	Context Information
2	Finds
3	Samples
4	Drawings
5	Digital photographs
6	Results of soil sample flotation & sorting
7	General artefact list by context and artefact category (quartz & flint)
8	General artefact list - summary (quartz & flint)
9	Catalogue of metalwork, by Gemma Cruikshank

Abstract

An excavation was carried out on *Yle Eunlich (Island Eillich*), Loch Lomond, Argyll & Bute, Scotland, for 3 weeks in September 2018, on behalf of Clan Macfarlane Worldwide. The low remains of two rectangular structures had been identified on the summit of a tree-covered knoll on a narrow promontory at the north end of the loch. One trench investigated one of these two structures and four other smaller trenches examined deposits in the vicinity.

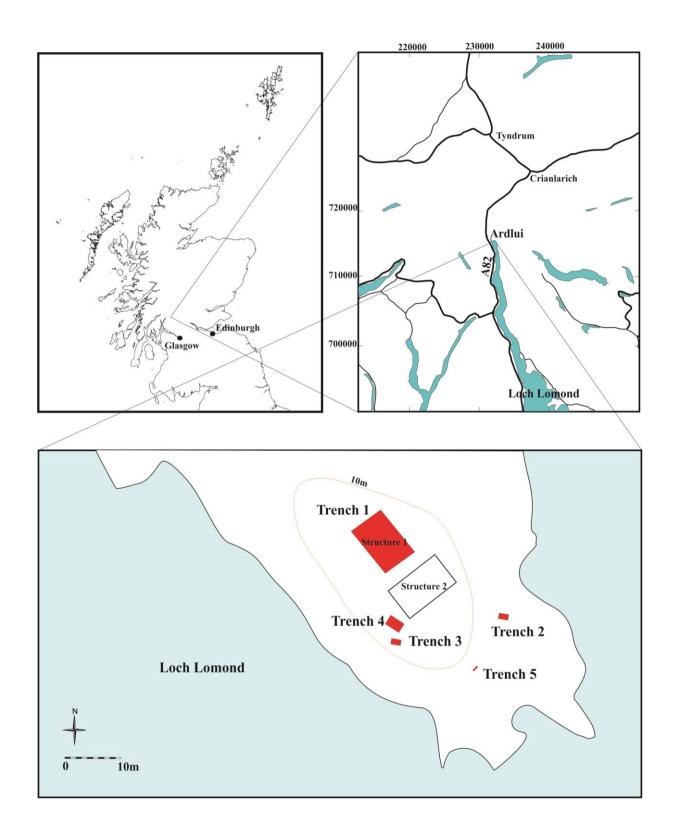
In Trench 1, Structure 1 had walls up to 1.0m thick constructed of earth and stone, with slightly rounded external corners and an off-centre entrance to the NE. The remains suggested that the roof had been supported on internal timber crucks sitting on bedrock or in stone settings. A possible floor layer contained medieval pottery dating to between the 14th and 16th centuries, fire-flints, iron nails and slate fragments. There was a spread of ashy material towards one end of the building and two possible post-holes were recorded, but there was no formal hearth or evidence for internal divisions. Only two courses of stone wall survived, and there was significant tumble in the vicinity. The building is thought to have been hip-roofed rather than to have had high gable ends. There was no evidence for any earlier structures.

Trench 2 was located on a flat area to the SE of Trench 1, next to an ancient yew tree. There were three features cut into the subsoil, the shapes and full extents of which were not ascertained. The features were devoid of datable finds, apart from two small fragments of slate. These features were sealed by a deposit that contained medieval pottery, a possible fire-flint and a number of rounded white quartz pebbles.

Other significant finds included a flattened lead ball and a fragment of unmarked clay pipe stem from Trench 3. There was tumble from Structure 2 and a medieval pot sherd in Trench 4, and large roof slates from Structure 2 in Trench 5. There were some modern finds that probably date to the 20th and 21st centuries, but there was no evidence that the site was occupied between the 17th and 19th centuries.

Significant amounts of quartz fragments were found in all the trenches, many of which showed signs of having been worked. There were quartz outcrops on the knoll that could have been the source of the quartz, but it is uncertain if the quartz had been worked in the prehistoric era or later.

The place-name evidence is not conclusive, but it has been suggested that 'Island Eillich' was an earlier form of 'Ardleish' and a precursor to the 18th century farm of that name. Documentary evidence indicates that Ardleish was occupied in the early 16th century by Walter of Ardleish, a close relative of Duncan Macfarlane of Arrochar, the 13th clan chief. It is said that Duncan and Walter both perished at the Battle of Pinkie in 1547. The possible 14th–16th century date for the occupation of Island Eillich would therefore be consistent with the site being abandoned after 1547 and a new, more accessible farm being built on the mainland slightly further east.



Illus 1: Island Eillich location plan (© Clare Ellis)

1. Introduction

Calluna Archaeology was commissioned by Clan Macfarlane Worldwide to carry out an excavation on Island Eillich, Loch Lomond, Argyll & Bute, Scotland. The remains of two rectangular, stone-built structures were visible on the surface and it was thought that they might have been a stronghold occupied by the Macfarlanes during the medieval period. The excavation took place over 15 days between September 3rd and October 14th 2018.

2. Location, Geology and Topography

The site is located on a small knoll at the southern end of a low-lying promontory at the north end of Loch Lomond, opposite Ardlui (NGR: NN 3218 1579; Canmore ID: 126961; NMRS No.: NN 31NW 27). The knoll consists of outcropping bedrock which occasionally becomes an island when the water in Loch Lomond is high. The geology consists of the metamorphic Beinn Bheula Schist Formation (Psammite and Pelite) and the superficial deposits are river terrace deposits consisting of gravel, sand and silt (British Geological Survey (http://mapapps.bgs.ac.uk/geologyofbritain/home.html).

3. Archaeological Background

Peter Macfarlane initially suggested more work should be done on this site back in 2014 and a walkover survey of Arrochar parish for Clan MacFarlane Worldwide in 2016 noted two rectangular structures located on a tree-covered knoll on a narrow promontory at the north end of Loch Lomond (James 2016, Site 88). Timothy Pont named 'Yle Eunlich' at this location in the late 16th century (Pont Manuscript map No. 17, see Illus. 2), although no island was specifically shown. His accompanying text regarding 'Ylen Eaunlich' describes the island and states that there was a dwelling there:

'thrie myl above it [Ylen-ow = Island I Vow], hard upon the head of the loch is Ylen Eaunlich of a flight shot long, with a dwelling upon it. it is half a myl distant from Dow-viisk I mean the mouth therof. This Dow-visk in the uthir syd is the head of the water of Glen-fallacht'

(See http://maps.nls.uk/pont/texts/transcripts/ponttext150v-151r.html).'

Glen Falloch is the river valley that runs into Loch Lomond from the north and 'Dow-visk' refers to Strath Dubh-Uisge, which extends in a SW direction from Loch Lomond, between Ardlui and Garabal, to the top of Loch Sloy reservoir.

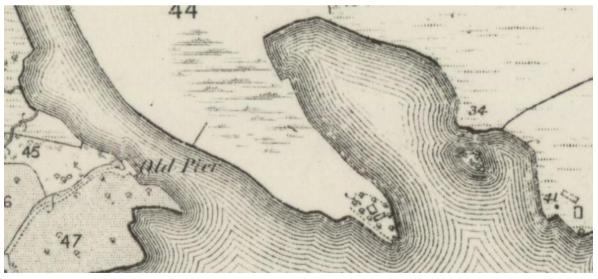


Illus. 2: Pont's manuscript map of the top of Loch Lomond, dated to the late 16th century. (Reproduced with permission from the National Library of Scotland)

Roy's Military Survey of Scotland (1747-52) (see Illus. 3) shows the mouth of the River Falloch. 'Island Eillich' is depicted as a promontory but there are no structures marked on it. Ardlui and Ardleish are shown as joint-tenancy farms in the vicinity, and there is a single structure just north of Ardleish. The 1st edition 6 inch OS map dated to the mid-19th century (Illus. 4) shows two unnamed, unroofed, rectangular structures on the tip of the promontory and two unnamed, unroofed structures corresponding to the single structure north of Ardleish.



Illus. 3: Promontory at the top of Loch Lomond called 'Island Eillich' on Roy's Military Survey 1747-52. (Reproduced with permission from the National Library of Scotland)



Illus. 4: 1st edition OS 6 inch to the mile dated 1865-7 (Reproduced with permission from the National Library of Scotland)

There is evidence that islands and crannogs were used as 'strongholds' by clan chiefs in the west of Scotland well into the 17th century. The strongholds were occupied by the chief's immediate followers and were used as a place of safe storage. A small castle on Eilean Dearg, Loch Riddon, Argyll & Bute, for example, was used by the Campbells in the 17th century as a store for gunpowder and bayonets (Paterson 2001, 121). Islands were also

used for settlement by ordinary clan members well into the 19th century (James 2009, 27-29). There is no suggestion that the site of Island Eillich was a crannog because there are obvious bedrock outcroppings, but it has clearly been referred to as an 'island' during its history (for reasons that became all too clear during the course of this project). Clan MacFarlane Worldwide has an interest in researching the strongholds of their clan, including relevant sites that are smaller than the better known castles and mansions such as those on Island I Vow and Inveruglas Isle. Other smaller structures that have been closely with the clan chiefs include Clattochmore (near Tarbet) and Inverioch (Arrochar). It has been suggested that there was also a principle residence at Ardleish (Whyte 1998, 9).

Clattochmore was said to be occupied by the clan chief during the reign of James VI (1567-1625). It was described as a modest single story thatched house measuring 34 feet (10.3m) long and 13 feet (4m) wide with glass in the windows. It apparently had three rooms, a kitchen, sitting room and pantry. There was a central fire in the kitchen and a fire near the gable in the sitting room. The roof was thatched with bracken and the chimney was made of twigs daubed with clay (Dewar 1964). The house was attacked and burnt by Cromwell's troops in the mid-17th century (Whyte 1988, 9).

The Macfarlanes then built a house at Inverioch in Arrochar in 1697, after the destruction of Clattochmore and Inveruglas Castle by Cromwell's troops. The new house was described as gothic in style with many bedrooms surrounded by a designed landscape (Boswell & Erskine 1763; James 2014, 92).

The Rev. Winchester notes that Ardleish was occupied in 1539 by Walter of Ardleish, the brother of the 13th chief, Duncan Macfarlane of Arrochar, (Winchester 1917). Arrochar, Tarbet and Ardlui Heritage Group provide a family tree that suggests that Walter of Ardleish was Duncan's uncle, and that both Walter and Duncan died at the Battle of Pinkie in 1547 (http://www.arrocharheritage.com/HistoryOfTheMacFarlanes.htm). It therefore seem that the farm of Ardleish was occupied by a close relative of the clan chief. Recent research in Argyll has shown that a place name generally referred to the farm as a whole, as well as to the main township within it. These settlements often shifted site within the bounds of the farm as ownership changed hands or under population pressure.

The site of Island Eillich was therefore considered to have the potential to be a significant medieval site, surrounded as it is by boggy ground, lying in a strategic position at the head of the loch and occupied by a documented 16th century 'dwelling'. The Rev. Winchester suggested at the beginning of the 20th century that 'the ruins of one of these [places of Macfarlane residence] may still be seen on the wooded knoll which stands at the head of Loch Lomond, and which is an island when the loch is high' (Winchester 1917). Although he does not refer to it by name, his description would fit this site. A settlement named Ardleish is marked on Roy's Military Survey on the east side of the loch, indicating that the site on the island/promontory had been abandoned by the early 18th century.

It is worthwhile noting that a site called 'Ardleish' by DJ Johnson Smith in his master's thesis for Glasgow University (Johnson-Smith, Fig. 9,) located at NN 324 158, is probably one of several structures identified during the spring survey of 2016 (James 2016, Sites 58, 59 & 60). This site can be identified as 'Tighfurl', which is marked on a map by Charles Ross dated 1777 (James 2016, 47).

4. Summary Aims and Objectives

The aim of the project was:

to investigate the character and date of the site at the head of the promontory.

The objectives were:

- to excavate a series of trenches across the site and retrieve datable material.
- to reveal the floor layout of one of the two buildings.

5. Methodology

All excavation was carried out by hand and all trenches were backfilled to pre-excavation levels at the end of the excavation. All archaeological features were planned, photographed and recorded using *pro-forma* recording sheets and digital photography. Plans and sections were drawn at a scale of 1:10 and 1:20, as appropriate. Bulk samples were taken of archaeological deposits that had the potential to contain artefacts or macroplant remains. The trenches were located using a handheld GPS.

Of the two visible structures, Structure 1, was aligned N-S with a door on the E side. It occupied the highest part of the hillock and was therefore considered likely to be the more important. Structure 2 was aligned E-W and lay to the S of Structure 1, separated by a gap of 2.2m. No clear doorway could be seen amongst the rubble in Structure 2.

Trench 1 was located over Structure 1 and measured 10.2m by 6.6m (maximum extent). It was excavated to a maximum depth of 0.5m in four quadrants. The presence of a mature oak tree in the SW corner and the need to preserve its roots prevented full excavation of the SW quadrant to floor level. Trench 2, measuring 2m by 1m and dug to a maximum depth of 0.40m, was located on a lower, flat area to the SE of Structure 2. Trench 3, measuring 1m by 2m was dug to a maximum depth of 0.65m, and was located across a possible wall line to the SW of Structure 2. Trench 4 measured 2m by 3m and was dug to a maximum depth of about 0.3m, and was located to the SE of Structure 2. Trench 5 was located to the S of Structure 2, and consisted of straightening an existing exposed section face and removing vegetation from a number of slates that lay at the foot of the exposed section.

Quartz occurred naturally on the site and had therefore not necessarily been brought in for use as a tool. Some of fragments were thought to possibly have been worked, and all the fragments within the excavated contexts were therefore retained for analysis by a specialist. Pottery, flint, clay pipe, and some of the metal nails were recorded in 3D as 'small finds', while modern glass, quartz and other materials were generally collected according to context.

6. Results

The results of the excavation are presented stratigraphically, from the bottom of each trenches to the top.

6.1 Trench 1

The excavation of Trench was concentrated within the walls of Structure 1. Bedrock (012) was not revealed consistently across the whole trench, but where it could be seen, it generally formed an irregular surface with hollows, fissures and occasional flat areas (053) that looked as if they had been deliberately levelled off (see Illus. 5, 6 & 7). Just south of the entrance (013) there was a small patch of possibly fire-reddened bedrock (050), (not illustrated), but this was an extremely ephemeral feature with no great depth or structure. The deepest deposit reached at the south end was dark brown clay silt (051) located immediately beneath the wall (002) (see Illus. 8). There was an irregular-shaped area of shattered stones (049 and 046) towards the centre of the structure with a more consistent surface than the bedrock, but it was not fully exposed.

The walls of Structure 1 (002) were generally 0.9m to 1.0m wide and up two courses (c 0.7m) high. Locally

quarried boulders formed rough faces with smaller fist-sized stones and earth in the core. These walls formed the basal courses of a structure that measured 9.5m (31 ft 3 inches) long and 5.5m (18 feet) wide externally.

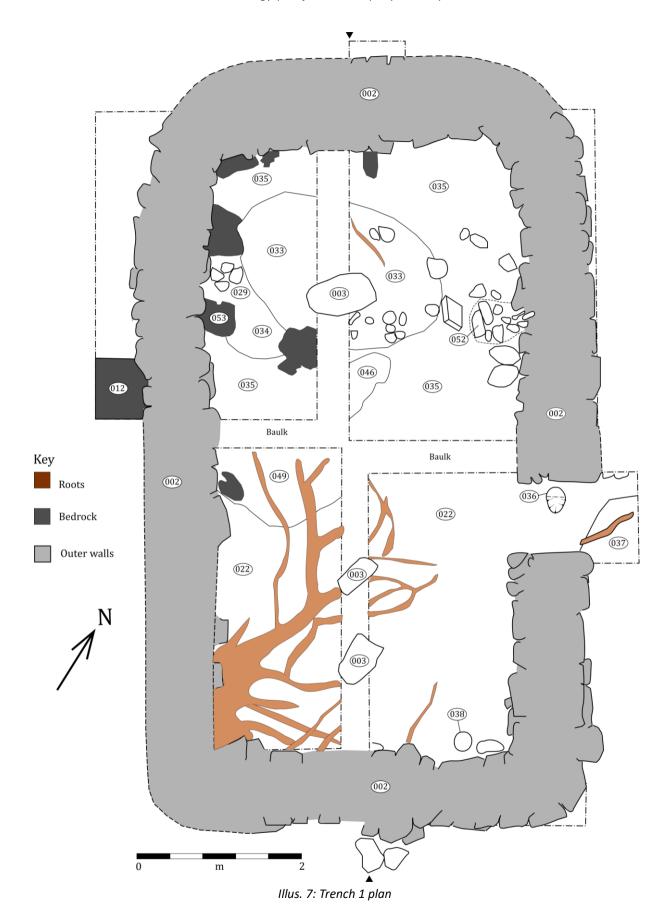


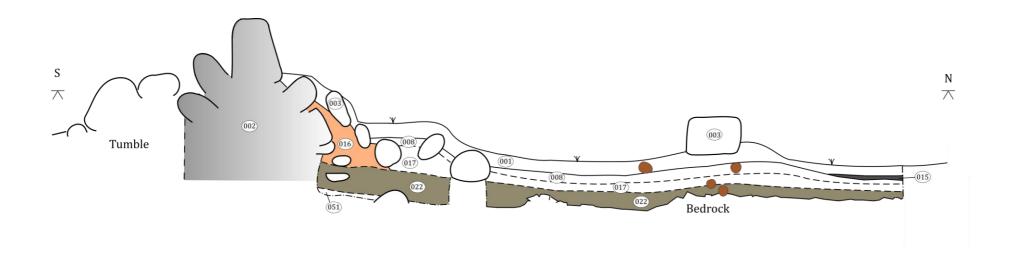
Illus. 5: Areas of exposed and truncated bedrock (053) in the NW quadrant

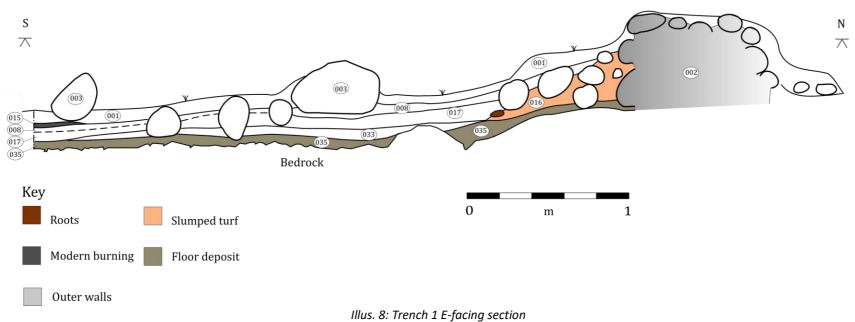


Illus. 6: Structure 1, walls (002) and surface of (035) & (022).

Large oak tree with roots in the SW and SE quadrants









Illus. 9: Inside view of N wall (002) of Structure 1



Illus. 10: External view of wall (002) immediately over bedrock (012)



Illus. 11: Wall 002 and entrance (013), stony surface (037) and possible post-hole (036).

An entrance (013), measuring 0.80m (2 feet 6 inches) wide, was located in the east wall, slightly to the south of the centre. A surface of small angular stones (037) and an oval-shaped feature (036) were noted within the entrance (see Illus. 7 & 11). Feature (036) filled with grey-brown gravelly silt and measuring 0.20m by 0.30m and 0.20m deep, may have been a small post-hole within the entrance. It was.

A deposit of light brown clay silt 0.05m deep lay within the walls (002), sealing bedrock and infilling hollows. This deposit was numbered (022) in the two southern quadrants and (035) in the two northern quadrants.

Several medium-sized stones (052) were deeply embedded within layer (035) against the inner face of the east wall (002). The stones (052) were smaller than the tumble (003 see below). These stones were not fully investigated, but may have formed a post-setting. Immediately opposite the stones (052) there was a flat area of bedrock (053) (see Illus. 7). Further stones (029) infilled crevices in the bedrock to the north of (053).



Illus 12: Stones (052), possible post setting



Illus. 13: Stones infilling bedrock (029)



Illus. 14: Possible post-hole (038)

Two dark patches were seen near the SE corner of Structure 1, cut into the surface of (022). One of these (038) was half-sectioned and was filled with dark brown gravelly-silty clay (041). Feature (038) was circular in shape and 0.15m deep (see Illus. 7 & 14).

A roughly oval-shaped spread of dark brown silty ash with charcoal flecks (033) sat over layer (035) in the northern half of the structure. This ashy spread extended for 1.30m by 0.90m and was up to 0.05m thick in the centre and tapered away towards the edges (see Illus. 7 and 8).

A wedge-shaped deposit of orange brown clay-silt (016/034) lay up against the interior walls of the structure to a depth of 0.3m (see Illus. 8). The orange clay tapered steeply away from the walls over a distance of 0.30m to 0.8m and was interspersed with large stones and boulders (see Illus. 15 & 16). The orange clay (016) overlaid layers (022) and (035) (see Illus. 8).



Illus. 15: Layer (016) up against the wall (002) with a darker soil (017) inside, in the NW quadrant



Illus. 16: Layers (016) and (017) in the NE quadrant

An extensive deposit of mid/dark brown clay silt (017) infilled the dished surface of (035/022) and (016/034). Layer (017) was up to 0.10m deep and extended throughout Structure 1 forming an oval-shaped, fairly flat area in the centre of the structure (see Illus. 8). This deposit was also interspersed with large stones and boulders.

All the above layers were sealed by a deposit consisting predominantly of large stones and boulders (003) within dark brown clay silt (008). These stones were thought to have tumbled from the walls, and together with stones tumbled to the outside, could have been enough to add a further one or two courses to the wall height. The stones within the entrance (013) were numbered (018) and may have been used to block the doorway deliberately.



Illus. 17: Trench 1, Structure 1, turf and moss removed revealing the walls (002) and tumble (003)

In the centre of the structure within the tumble (003) was a thin, roughly oval-shaped area of burning (015) consisting of charcoal, burnt plastic, rags and modern glass. All the above layers were sealed by turf and moss (001) up to 0.1m deep. Some stones formed a line around the northern end of the structure, but these were not investigated.

6.1.1 Finds

Almost all the deposits contained numerous quartz fragments and over half of these were worked, possibly in prehistory (see Torben Bjarke Ballin, Appendix 2), although a later date is not impossible. All the pottery is medieval and has been dated to the 14th–16th centuries (pers. comm. George Haggarty).

In the southern two quadrants, layer (022) contained five sherds of medieval pottery (SFs 13, 17, 18, 19 & 20), one large iron nail (SF 22), one quartz core and 32 slate fragments. The majority of the slate fragments are thin slivers less than 0.05m long. However, three pieces were parts of shaped roof slates over 0.10m long and two had nail holes. The equivalent layer to (022) in the two northern quadrants, context (035), contained four nails (SFs 24, 25, 26, & 27) and a fire-flint (SF 23). There was some spatial differentiation in that the pottery came from the south east quadrant and the nails and flint all came from the north-east quadrant. The ashy layer (033) above (022/035) contained three worked quartz flakes (see Appendix 2) and small amounts of burnt bone (see Table 6). The orange brown clay silt (016) contained one piece of concreted organic matter (a coprolite?), two pieces of coal, five pieces of charcoal, seven metal nails, 20 pieces of slate and 81 fragments of worked quartz.

Layer (034) contained three fragments of worked quartz.

The extensive dark layer in the centre of the structure (017) contained five medieval pot sherds (SFs 3, 10, 12, 14 & 16), four fire-flints (SFs 04, 05, 07 & 11), a possible quartz scraper (SF 05), a socketed metal tool (SF 21) (see Illus 18), plus one piece of glass (a modern screw bottle top), one round stone, two pieces of charcoal, five metal nails (see Illus 19), 20 small fragments of burnt bone, 72 fragments of slate (one with a nail hole) and 132 pieces of worked quartz, some slag (see Table 6). Apart from the glass (which is probably intrusive) and the quartz (residual?) all this material could be medieval.



Illus 19: Metal nails and corroded fragments from layer (017)

Illus 18: Socketed metal tool, from layer (017) SF 21

Layer (008) contained one Buckfast (20th/21st century fortified wine) bottle cap lid, one unburnt bone, two sherds of medieval pottery, two pieces of burnt wood, 14 pieces of metal, 18 pieces of slate, 23 sherds of modern glass and 13 pieces of worked quartz.

Layer (015) contained one piece of burnt wood, one piece of worked quartz, one piece of slate, two pieces of modern glass, two pieces of burnt plastic and nine nails. The uppermost turf and topsoil (001) contained one sherd of medieval pottery (SF1), 11 pieces of worked quartz, 17 sherds of modern glass, six mixed metal objects, three pieces of unburnt bone, nine pieces of slate and one piece of plastic. Apart from the pottery, slate and quartz, all this material is modern (20th/21st century).

6.1.2 Interpretation

Building platform

Structure 1 was built directly onto bedrock and there was no evidence for any earlier structures. The originally uneven surface of bedrock had been deliberately levelled off to create a building platform leaving some areas of bedrock exposed and the crevices had been filled with weathered bedrock and a rough stony surface (049 and 046). The surface (049) was not excavated and no datable material was therefore retrieved.

Structure 1

The walls of Structure 1 formed a substantial rectangular structure with slightly rounded corners measuring 9.5m long, 5.5 m wide (externally). The walls were 0.80–1.0m thick with a stone and earth core and survived to

only two or three courses high (up to 0.70m). They may have originally been topped with turf. The doorway was off-centre in the NE wall and there was a small post-hole towards the northern side of the entrance. There was no evidence for integral cruck-slots or stone-built internal walls. It is possible that internal crucks (roof supports) sat internally upon the bedrock (053) or within stone settings (052). There was a series of dark patches at the southern end of the structure, one of which was thought to be a post-hole (038). This may have held a support for an internal timber arrangement located just inside the doorway to the left. There could have been further internal timber divisions within the room to the right.

Floor deposit, layers (022) & (035)

A layer of light-coloured clay silt (022 and 035) sealed the bedrock and the floor surface within Structure 1. This material contained medieval pottery, flints, nails and slate fragments. The light colour of this material suggested that it did not contain much burnt material or organic matter. This layer was provisionally interpreted as a floor deposit, within which a small amount of midden or debris had accumulated. The charcoal consisted of a range of species types consistent with scattered hearth waste (see Appendix 4). The presence of the slate could be the remains of construction debris or may have been intrusive material from the layer above. The nails were not found in the same area as the slates and were therefore not necessarily roof nails, but could have come from an internal timber construction or a working area.

Informal hearth (033) and charcoal layer (051)

The colour, texture and location of layer (033) in the centre of the building, together with the presence of a mix of charcoal species and lack of finds, were indicative of an informal hearth located towards the north end of the structure. There was no evidence for burning against the north gable. A rapid investigation of deposits abutting the south wall revealed a layer containing charcoal (051), which could have been a second informal hearth. This contained a hazelnut shell and a mix of charcoal and numerous cereal grains, including oats and barley, indicating a medieval date.

Collapsed earth and turf wall elements (016/034)

The orange/brown layers (016 and 034) that were piled up against the inside walls of the structure were interpreted as the remains of the earth core and upper turves used to construct the upper parts of the walls, which had washed out of the walls. There was less evidence for this deposit externally (see (011)), presumably because it had been washed away downhill. The finds within (016/034) included small slivers of slate, coal, nails and quartz, which were consistent with this interpretation. Internally, the surface of this deposit, together with the ashy hearth (033), formed a dish-shape, which was lowest in the centre of the building.

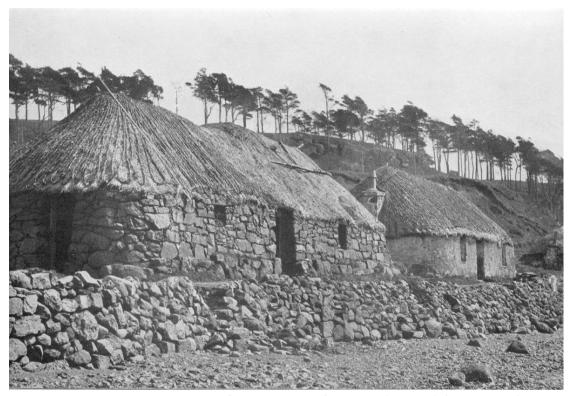
Organic deposit (017)

A layer of mid/dark brown clay silt (017) extended across the whole building, infilling the dish-shaped surface formed by the ashy spread (033) and the slumped turves (016/034). Many stones were embedded within layer (017), which had presumably collapsed from the walls. The dark colour suggested that the layer had a high organic content. Layer (017) contained a significant number of finds, including medieval pottery, fire-flints, a socketed metal tool, slate with nail holes, nails and some small fragments of burnt bone. The charcoal assemblage was a mix of alder, birch, hazel, heather type, ash, oak and willow, and single grains of oats and barley and a few fragments of hazel nutshell were likely to be the remains of scattered hearth waste. The presence of the slates indicated that the roof was of slate, rather than thatch. The modern glass was probably intrusive given that it was the top of a bottle, which could have been inserted into the ground top-first, at a later date.

Wall collapse (003 & 008)

The entire building was filled by another extensive layer of tumble (003) and organic soil (008) above the dark organic layer (017). The finds were very mixed and the unburnt condition of the bone suggested that it was of

modern date, given that it would have been unlikely to survive long under the acid soil conditions. The glass, metal objects and plastic were clearly modern, while the slate and medieval pottery were residual. It is not known if the walls were reduced in height deliberately or if they collapsed naturally over time. There was no more tumble at the gable ends than at the side walls, suggesting that the walls were of the same height all round. Structure 1 was therefore likely to have been a hipped, cruck-framed building, as seen on Skye in more recent times (see Illus. 20). The structure was marked on the 1st edition OS map in the mid-19th century, indicating that the walls were at least 3 feet high at that time, and must therefore have collapsed further since that time.



Illus. 20: Hipped, cruck-framed building of Skye-type (undated), (Sinclair 1953)

Modern bonfire (015)

A roughly circular patch of burning (015) over the tumble (003/008) contained exclusively modern material including plastic and rags, indicating that this was a modern bonfire set within the ruins of Structure 1.

Turf and topsoil (001)

The uppermost layer consisted of thin turf and topsoil. The stones were mostly covered by only a thin layer of vegetation and moss. The finds were again mixed and predominantly modern in date. Surprisingly, however, there was a sherd of medieval pottery and some slate that indicated some disturbance of the earlier deposits, probably in relation to the further collapse of the stone walls.

6.2 Trench 2

Bedrock was seen at a depth of c. 0.5m below the surface at the eastern end in Trench 2, where there was also significant tree root disturbance (see Illus. 1, 21, 22 & 23). The first layer above the bedrock was compact orange/brown gravelly, silty clay (026) with a maximum depth of 0.2m. This deposit was thought to be natural and was not excavated fully. There were three features ((027), (028) and (030)) cut into the surface of layer (026), which were only partially exposed within this small trench. Feature (027) was at least 1.3m long and up to 0.20m deep with steeply sloping sides, and extended for about 0.25 from the trench edge. Feature (028) was up to 0.9m across and 0.15m deep, and feature (030) was about 0.25m across and up to 0.15m deep. All three features were filled with similar dark brown gravelly silty clay. A post-hole (032) had been cut into the base of

feature (027). The post-hole (032) was oval in plan, measuring 0.24m by 0.16m and 0.25m deep with a single large packing stone.

These layers were initially sealed with 0.08–0.12m of dark brown gravelly clay silt (009), followed by 0.05–0.10m of mid-brown clay silt (005), and finally 0.08–0.10m of mid-brown turf and topsoil (004).



Illus. 21: Trench 2, features (027), (028) & (030) pre-excavation



Illus. 22: Trench 2, features (027), (028) & (030) post-excavation

6.2.1 Finds and carbonised material

No finds were retrieved from layer (026). A total of six pieces of worked quartz were retrieved from feature (027), which also contained a mix of charcoal species interpreted as hearth waste (see Appendix 4). Feature (028) produced 19 pieces of worked quartz and two very small fragments of slate. The fill of the post-hole (032) contained a diverse assemblage of charcoal species including alder, birch, hazel, oak, willow and yew, which were interpreted as hearth waste rather than the remains of a burnt post (see Appendix 4). There were no finds from feature (030). Layer (009) contained a single sherd of medieval pottery (SF 15), one piece of flint, 12 fragments of slate, 58 pieces of worked quartz and seven rounded white quartz pebbles. Layer (005) contained one medieval pot sherd (SF 2), three slate fragments, five sherds of clear modern glass and 13 pieces of worked quartz. Layer (004) contained 32 sherds of clear modern glass and a metal tent peg.

6.2.2 Interpretation

Natural subsoil (026)

Layer (026) was interpreted as the natural subsoil.

Three features (026), (027) & (030)

It was difficult to interpret the three features cut into the natural subsoil because their full extent was unknown. There were substantial tree roots at the southern end of the trench, and they were therefore interpreted in the field as possible tree bowls; however, the presence of hearth waste suggested that they were

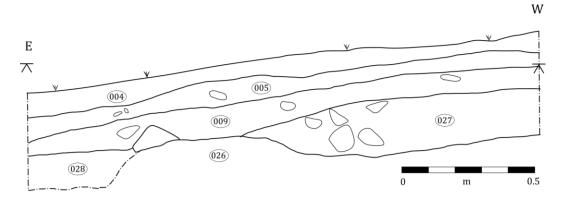
associated with settlement of some kind. Feature (028) contained two small fragments of slate, indicating that the feature was at least medieval in date rather than prehistoric, although it is also possible that the slate was intrusive from a higher layer.

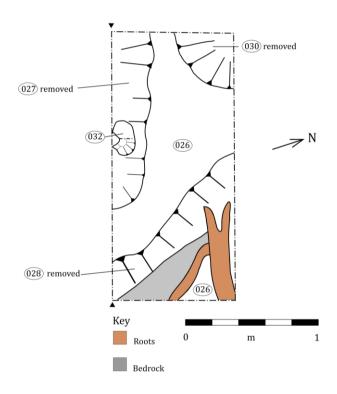
Medieval layer (009)

Deposit (009) sealed the above features and contained a single sherd of medieval pottery and a possible fire-flint, suggesting that it could be medieval in date. It also contained a number of rounded white quartz pebbles, which represent purity and have often been associated with early-Christian burials. The presence of a yew tree may be significant, given that yew trees were also associated with early-Christian burials. However, there was no evidence of any burials, although these wold be unlikely to survive in the wet, acid soils. The white pebbles were interpreted by Torben Bjarke Ballin as natural pebbles, because of their location at the edge of the loch and the presence of a local source, which means they did not need to be brought to the island for a specific purpose (see Appendix 2).

Modern layers (005) & (004)

Layers (005) and (004) were above layer (009) and contained modern material, indicating that the medieval pot sherd and slate found within these layers were residual. These deposits were likely to represent natural build-up of soil since the medieval period, with the incorporation of some organic material and debris.





Illus. 23: Trench 2 N-facing section and plan

6.3 Trench 3

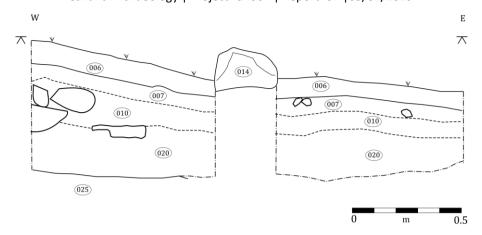
A deposit of compact orange/brown gravelly, silty clay (025) was seen at the bottom of Trench 3 at a depth of 0.55m from the surface (see Illus. 1, 24 & 25). Above this was a layer of compact grey/orange brown clay silt (020) up to 0.15m deep. There was a particularly large boulder in the SW corner of the trench, within layer (020) and on the surface of layer (025) (see Illus. 25 plan). Layer (020) was sealed by a layer of compact orange/brown clay silt (010) up to 0.20m deep, which incorporated a few large boulders in the NW corner. Above this was a layer of mid-brown clay silt (007) up to 0.10m deep, and finally a layer of mid-brown clay silt (006) up to 0.10m deep. A line of large boulders (014) was slightly embedded into the surface of layer (006), aligned N-S. Soil samples were taken from layers (010), (020) and (025).

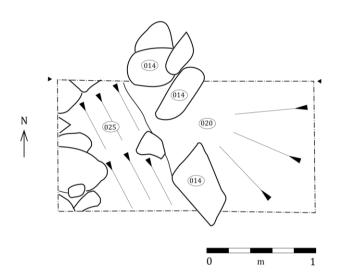


Illus. 24: Trench 3 from the S

6.3.1 Finds

No finds were retrieved from layer (025). Layer (020) contained 10 slate fragments and 25 pieces of worked quartz. Layer (010) contained a flattened lead ball (SF 08, weight 0.23kg) (see Illus. 26), which has been identified as a musket or pistol shot (pers. comm. David Caldwell). Layer (010) also contained a fragment of unmarked clay pipe stem (SF 09), three pieces of charcoal, two rounded stones, 31 slate fragments and 74 worked quartz pieces. Layer (007) contained one metal nail, 12 slate fragments and 12 pieces of worked quartz. The uppermost layer (006) contained two sherds of modern glass and 27 pieces of worked quartz.





Illus. 25: Trench 3, plan and section



Illus. 26: Trench 3, fired lead ball

6.3.2 Interpretation

Natural subsoil (025)

The basal deposit (025) was interpreted as natural, glacially deposited, subsoil.

Late-medieval deposit (020)

Layer (020) accumulated down-slope of Structure 2 and had incorporated roof slate fragments and worked quartz, either during the building's construction or as it decayed. This suggests at least a late-medieval date. There was no evidence for any prehistoric activity in this area.

Post-medieval deposits (010) & (007)

Layer (010) contained large stones and boulders, which could have been tumble from the walls of Structure 2 after it went out of use. Layer (010) also contained a flattened lead ball, which had apparently been fired and hit something hard. This, together with the clay pipe stem fragment, suggested a post-16th century date for the accumulation of the deposit, possibly incorporating material from the decaying structure up-slope.

Turf and topsoil (006) and line of boulders (014)

The uppermost turf deposit contained modern glass. A line of single boulders was sitting on top of the turf (006) and was clearly a modern feature, possibly created by visitors to the island.

There was a significant amount of worked quartz within all the layers in this trench above the subsoil.

6.4 Trench 4

Trench 4 abutted a large rock outcrop that located immediately below Structure 2 (See Illus. 1, 27 & 28). The lowest layer of Trench 4 was a light brown turf deposit (031) at a depth of 0.6m below the surface. Above this was a compact grey/dark brown peaty layer (024) about 0.10m deep. Numerous stones and boulders (021) within a dark brown clay silt matrix (023) were deposited on top of layer (024) up to 0.5m deep, and extended out from the outcropping bedrock for a distance of 2.0m. These stones were sealed by a surface deposit of loose dark brown clay silt (019). No soil samples were taken from Trench 4.

6.4.1 Finds

No finds were retrieved from layer (031). Layer (024) contained one possible medieval pot sherd, a charcoal fragment, 30 fragments of slate and 45 pieces of worked quartz. Layer (023) contained a modern bottle top, 19 fragments of slate, and eight pieces of worked quartz. The surface layer (019) contained five pieces of worked quartz and 96 fragments of slate.



Illus. 27: Trench 4, turf (019) removed onto stones (021)



Illus 28: Trench 4, surface of layer (024) beneath stones (021)

6.4.2 Interpretation

Old ground surface (031)

The lowest layer (031) was not excavated and no finds were retrieved. This layer abutted the outcropping rock face and was sealed by all the other layers. Its composition indicated that it was probably an old ground surface.

Medieval debris spread (024)

The old ground surface was covered by a peaty deposit (024) containing a possible medieval pot sherd and numerous slate fragments, and may thus have been of medieval date. The location of this deposit immediately below Structure 2 suggested that the slates originated from this structure.

Tumble (021 and 023)

A layer of large boulders (021) within a soil matrix (023) abutted the rock outcrop and was interpreted as tumble from the walls of Structure 2. This deposit contained more slate and an intrusive modern bottle top.

Turf and topsoil (019)

The tumble was sealed by turf and topsoil containing several large fragments of slate.

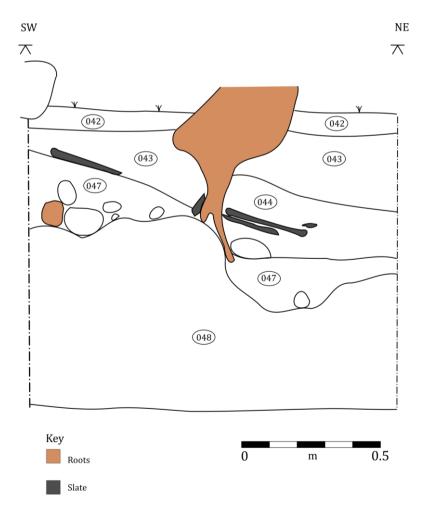
All the deposits within this trench were at least medieval in date and consisted mainly of collapsed debris on top of an old ground surface. Unfortunately, there was no time to investigate these deposits further.

6.5 Trench 5

Trench 5 consisted of an exposed section face near the SE edge of the promontory (see Illus. 1, 29 & 30). The section was 0.9m high and had a number of roof slates lying at its base. Several of the roof slates (040) were complete and included nail holes. The basal layer in the section was compact grey brown gravelly silty clay (048), which lay over natural subsoil and was up to 0.7m deep with an irregular surface. Layer (048) was overlaid by a moderate pale brown loam (047) up to 0.15m deep. The surface of layer (047) sloped down from the W to the E. Several roof slates were deposited on top of layer (047) and were sealed by a layer of loose dark brown silty loam (044), which was then sealed by dark brown clay silt (043) and finally by dark brown clay silt (042) on the surface. The upper deposits were relatively stone-free, but were disturbed by the root system of a large shrub. No soil samples were taken from Trench 5.



Illus. 29: Trench 5, SE-facing section with fallen slates below



Illus. 30: Trench 5 SE-facing section

6.5.1 Finds

There were no finds apart from three complete roof slates retrieved from layer (040).

6.5.2 Interpretation

The basal deposits (048) and (047) were interpreted as natural boulder clay. The roof slates found at the base of the section and within the section (044) indicated that these layers and the deposits above were at least medieval in date. Although located >10m from Structure 2, it seems likely that these slates were derived from the roof of Structure 2, and had either collapsed naturally or been deliberately pushed down the slope sometime after its abandonment. The density of slates in front of the section face suggested they had been stacked for collection and re-use but had not all been taken away. The deposits above this may comprise the remains of clay walls sealed by a natural accumulation of soil. The survival of this vertical section may have been the result of erosion caused by the force of water and wind coming up the loch from the south. The loch level had risen by nearly 1m by the end of the excavation, and it was noted that the water had almost reached the base of this section.

7. Discussion

The excavations on the promontory/island of Yle Eunlich revealed a semi-rectangular, stone-built structure that was occupied in the medieval period (14th–16th centuries) and which is likely to be the 'dwelling' described by Pont. Structure 1 measured 9.5m long (31 ft 3 inches) and 5.5m wide (18 feet), which is slightly shorter and wider than the description of the Macfarlane dwelling at Clattochmore, which was apparently 34 feet (10.3m) long and 13 feet (4m) wide (Dewar 1964). The walls of Structure 1 were constructed of rubble with an earth and stone core and were about 1m wide and survived to a height of 0.7m. The amount of rubble debris within the structure indicated that the walls were once at least 1m high and may possibly have been topped with turf. The corners of the building were slightly curved and there was no evidence of cruck slots within the walls for roof-supporting 'couples'. It is possible that the supporting posts were laid directly on the ground inside the line of the walls, dividing the room into three areas. There was little other evidence for internal divisions, apart from a few possible post-holes at the southern end. The building had a slate roof, which was unusual for the period, given that most rural dwellings were thatched. This suggests that the owners of the site were of a relatively high status and had access to a slate quarry, possibly at Luss.

The earth floor (022, 035 & 017) contained a limited assemblage of finds including 14th–16th century pottery, fire-flints, nails, the remains of a single socketed metal tool and quartz fragments. The wheel-thrown, green-glazed pottery has been retained by the specialist for further analysis. The fire-flints were characteristic of flints that had been struck by a steel implement and were therefore consistent with a medieval rather than a prehistoric date (see Appendix 2). The socketed implement, which would have had a wooden shaft, was the only metal artefact that could be interpreted as a tool. However, it was broken and it was therefore not possible to determine if it had been a spade or perhaps a weapon. The nails could have been roof nails used to attach the slates, or part of the timber wall divisions. There were two informal areas of ash suggesting hearths; a small one immediately to the left of the doorway and a larger one towards the northern end of the building. These deposits contained the remains of wood from a wide variety of species, all of which would have been available locally around Loch Lomond in the medieval period. The presence of carbonised cereal grains (oats and barley) and a hazelnut shell to the left of the doorway suggests that cereals were being dried within the building. It is possible that the area to the left of the doorway was a domestic, food-preparation area while the area to the right was a more formal living space. There was no evidence of a paved floor, formal stone hearth or window glass within Structure 1, indicating that it was a fairly simple structure, albeit with a slate roof.

The orange-coloured deposit up against the inside walls of the structure was thought to be the remains of the earth core from the wall, which had eroded out as the walls collapsed. It lay over the lower floor layer but appeared to lie beneath the organic layer (017), which was also interpreted as a floor. It is difficult to explain

how floor deposits had accumulated over the remains of the walls, unless the structure was re-occupied as a roofless structure, possibly in the immediate post-medieval period, perhaps as a stock enclosure.

Structure 1 was one of two stone structures on the island/promontory. It was the more elevated of the two structures and was aligned N-S, while Structure 2 was aligned E-W and would have had a better view down the loch. In later rural farms, two structures with different alignments such as Structures 1 and 2 here usually had different functions, with one serving as a farm house and the other as a byre/barn. However, no doorway was detected for Structure 2, and it was therefore not possible to speculate on its function and status in relation to Structure 1 without excavation.

There was generally a lack of pottery at the site from later than the medieval period, suggesting that the site was not re-occupied in the post-medieval period. The buildings were apparently abandoned in the 16th century and left to collapse, perhaps with some re-occupation as stock enclosures. In more modern times, the remains of camping trips and picnics have left their mark.

Trench 2 was located on a fairly flat terrace below Structure 1. It was difficult to interpret the features that were cut into the natural subsoil and which contained hearth waste, because very little of them was revealed. A small circular feature at the base of one of the features was interpreted as a post-hole; however the charcoal within the feature was also interpreted as hearth waste and therefore does not provide evidence for a wooden post. It is likely that a post was either removed or rotted away, allowing hearth waste from the vicinity to enter the post-hole. Only two tiny fragments of slate were found from one of these features, and these could have been intrusive rather than necessarily indicating a medieval date. These features could thus have been either prehistoric or medieval. They were sealed by a layer containing one sherd of medieval pottery, a flint and white quartz pebbles, which could relate to the spread of debris from Structure 2, incorporating locally water-worn quartz pebbles. The surface deposits contained a mixture of modern and medieval materials, indicating that the site had been used intermittently for camping in recent times.

Trench 3 was originally located over a line of stones that turned out to be a single course of stones sitting directly on top of the modern surface. The layers beneath contained slate, a lead ball shot from a musket or pistol and a fragment of clay pipe, and were therefore dated to the medieval or later period. There were no features within this trench. These deposits were therefore interpreted as medieval and later debris from Structure 2.

Trench 4 was located immediately below Structure 2 and the deposits here consisted of tumbled stones, probably from the walls of Structure 2, and peaty layers over an old ground surface. The finds indicated at least a medieval date for these layers, but no features were seen. The presence of numerous fragments of slate were a strong indicator that Structure 2 also had a slate roof.

Trench 5 revealed a deposit of complete roof slates, presumably derived from Structure 2. The density of slates suggested that they had been stacked together, probably for collection and re-use, but that some had been left behind.

Documentary research has indicated that a settlement at 'Ardleish' was occupied by Walter of Ardleish, the brother of Duncan Macfarlane of Arrochar, the 13th chief (Winchester 1917), who accompanied the chief to the Battle of Pinkie in 1547 and did not return. The contemporary site of Ardleish lies further round the loch about 0.5km to the SE, and there is no evidence to date to suggest that this site pre-dates the 18th century. It is therefore possible that the original site 'Ardleish' was on Yle Eunlich and that this island site was abandoned for a more convenient mainland site after the 16th century.

The only evidence so far for prehistoric activity on the site was the 545 pieces of worked quartz, which included three scrapers, two pieces with retouched edges, 69 cores and 375 flakes (see Appendix 2). There are outcropping quartz veins on the island and the material is therefore likely to be local. Ballin suggested that this is assemblage was characteristic of a prehistoric tool-producing industry, possibly during the Bronze Age/Iron Age transition. Although quartz pebbles are often associated with prehistoric or early medieval burials, the 25 rounded quartz pebbles from Trench 2 were interpreted as naturally occurring pebbles formed on the lower plateau beside the edge of the loch.

8. Recommendations

The site has been backfilled and does not require any immediate attention. Further excavations of Structure 2 could be undertaken to ascertain its function, date and relationship to Structure 1. Structure 2 has a good view down the loch, suggesting that it could have been the main house, while Structure 1 served a more domestic function.

The metalwork has been catalogued and the nails have been X-rayed by Gemma Cruikshank from National Museums Scotland. This level of analysis was thought to be appropriate for the metalwork at this stage.

The pottery has been put forward for inductively coupled plasma mass spectrometry analysis, which will contribute to a basic database of medieval pottery in Scotland.

No further work on the finds is recommended.

9. List of Sources

Maps and Online Sources

British Geological Survey (http://mapapps.bgs.ac.uk/geologyofbritain/home.html)

Charles Ross, 1777 A map of the Shire of Dumbarton (National Library of Scotland).

OS 6 inch to one mile 1st edition, 1865-7, Sheet IV Dumbarton.

Timothy Pont, (No. 17) Loch Lomond (National Library of Scotland). For accompanying transcripts see http://maps.nls.uk/pont/texts/transcripts/ponttext150v-151r.html.

William Roy, Military Survey of Scotland 1747-52 (National Library of Scotland).

Documentary Sources

Boswell, J and Erskine, A. 1763 Letters between the Honourable Andrew Erskine and James Boswell Esq. 23.

Dewar, J. 1964 The Dewar Manuscripts Vol 1: Scottish West Highland Folk Tales. Mackechie J (ed). Glasgow.

James, H. 2009 Medieval Rural Settlement: A Study of Mid-Argyll, Scotland. Unpublished PhD Thesis, University of Glasgow.

James, H F. 2014 *Hidden Heritage of a Landscape: Vengeful Vikings and Reckless Rustlers*. Northlight Heritage report No 79.

https://hiddenheritage.org.uk/docs/060 308 hiddenheritageprojectdatastructurereport 140287135 7.pdf. Accessed 7/5/2019.

James, H F. 2016 Walkover survey of Arrochar parish. Northlight Heritage Report No 175. https://hiddenheritage.org.uk/docs/060 308 macfarlanesurveydsr 1509972709.pdf. Accessed 7/5/2019.

Paterson, R C. 2001 No Tragic Story: The fall of the House of Campbell. John Donald.

Sinclair, C 1953 Thatched Houses of the Old Highlands. Oliver & Boyd, Edinburgh.

Whyte, D. 1988 Walter MacFarlane Clan Chief and Antiquary. Aberdeen and North East Scotland Family History Society, Aberdeen.

Winchester, Rev HS. 1917 Traditions of Arrochar and Tarbet and the Macfarlanes (privately published). www.arrocharheritage.com/HSWinchester.htm. Accessed 12/10/2018.

10. Acknowledgements

The author would like to thank the Lowes family (landowners), Alex Caraffi (land agent), Craig Jardine (Loch Lomond and The Trossachs National Park) and Ruari Dunsmuir (Scottish Natural Heritage) for their permission to excavate and the Clan Macfarlane Worldwide for their generous financial support and encouragement. The dig was directed by the author and supervision was provided by Clare Ellis and Nicola Reid.

The wonderful volunteers were Ian Marshall, Libby King, Margaret Gardiner, Ailsa and Ed Smith, Katherine Scott, Fiona Jackson, Sue Furness, Kieran Kenny, Alison Blackwood, Carla Glaser, Dugie MacInnes, Dylan Millar, Katherine Price, Irene Wotherspoon and Christine McDiarmaid. Mitchell Fotheringham undertook the drone photography. We are all very grateful to Lyndon Emery and Glen Squires of the Ardlui ferry, which provided reliable transport to the promontory, and to the staff of Loch Lomond Wakeboard who came to our aid and provided alternative transport when the site became an island.

11. Appendices

Appendix 1: Tables / Concordances

Table 1: Context information

Context no.	Trench	Туре	Compaction	Colour	Texture	Depth (m)	Description/interpretation	Stratigraphy and/or phasing info
001	1	Layer	Loose	Mid-brown	Turf	0.10	Roots, turf & topsoil	Over 002, 003 & 008
002	1	Structure					Rubble walls of Structure 1. Roughly faced to the outside and inside with an earth and stone core. Earth orange brown clay silt similar to 016	Under 001. Over bedrock
003	1	Layer					Large angular boulders. Demolished wall of Structure 1	Under 001, Equal to 008, Over 016 & 017
004	2	Layer	Loose	Mid-brown	Turf	0.10	Roots, turf & topsoil	Over 005
005	2	Layer	Moderate	Mid-brown	Clay silt	0.05	With occasional small angular stones and frequent quartz fragments and white quartz pebbles	Under 004. Over 026, 028, 029 & 030
006	3	Layer	Loose	Mid-brown	Clay silt	0.10	Roots & topsoil	Under 014, over 007
007	3	Layer	Moderate	Mid-brown	Clay silt	0.10	With slate and quartz	Under 006. Over 010
008	1	Layer	Loose	Dark brown	Clay silt		Soil around the stones 003	Under 001, Equal to 003. Over 016 & 017
009	2	Layer	Moderate	Dark brown	Gravelly clay silt	0.10- 0.15	Possible cultivated deposit	Under 005, over 026, 027, 028 & 030
010	3	Layer	Compact	Orange brown	Clay silt	0.20	Redeposited cultivation deposit	Under 007, over 020
011	1	Layer	Loose	Orange brown	Clay silt	0.20	Old turf layer	Under 001, over 002, 012
012	1	Layer					Bedrock (schist)	Under 011, 008 & 035
013	1	Structure					Doorway for Structure 1. Measures 0.8m wide (2 ft 6 inches). Formed of large squared slabs laid E-W. Off centre in the E wall	Under 001, Equal to 002
014	3	Structure					Line of large stones and boulders aligned N-S. Lying on the surface, so not of any antiquity	Over 006

Context no.	Trench	Туре	Compaction	Colour	Texture	Depth (m)	Description/interpretation	Stratigraphy and/or phasing info
015	1	Layer	Loose	Dark brown/black	Turf and charcoal	0.05	Not as extensive as 017 in the centre of Structure 1. Modern bonfire. Contains plastic, rags and glass	Under 001. Over 008
016	1	Layer	Moderate	Orange brown	Clay silt	Up to 0.30	Around the interior edges of Structure 1. Abuts the base of the wall. Collapsed turf walling? Or a turf bench?	Under 017, over 022 & 002 & 035
017	1	Layer	Moderate	Mid/dark brown	Clay silt	c. 0.20	In the centre of the structure. Similar to 015, but does not contain modern finds	Under 008, 015. Over 016
018	1	Layer					Large boulders within the entrance to Structure 1. Deliberate blocking?	Under 001. Equal to 003. Over 022
019	4	Layer	Loose	Dark brown	Clay silt		Turf and topsoil	Over 021, 023 & 024
020	3	Layer	Compact	Grey/orange/ brown	Clay silt	0.25	Similar to 010 but with no visible charcoal. Possibly some charcoal flecks	Under 010, over 045
021	4	Layer				0.50	Large stones and boulders. Tumbled stones from Structure 2	Under 019, over 024
022	1	Layer	Moderate	Light brown	Clay silt		Turf-like soil below 016 in the SE quadrant	Under 016 & 017. Over 037 & 012
023	4	Layer	Compact	Dark brown	Clay silt	0.50	Soil amongst the stones 021. Modern	Under 019, Equal to 021. Over 024
024	4	Layer	Compact	Grey/dark brown	Peaty	0.10	Old ground surface	Under 021 & 023. Over 031
025	3	Layer	Compact	Orange brown	Gravelly, silty clay		Natural boulder clay	Under 020
026	2	Layer	Moderate	Orange brown	Gravelly, silty clay	0.20	Natural boulder clay	Under 027, 028, 030. Over bedrock
027	2	Layer	Moderate	Dark brown	Gravelly, silty clay	0.20	Fill of a hollow. Linear against side of baulk	Under 009. Over 026
028	2	Layer	Moderate	Dark brown	Gravelly, silty clay	0.20	Fill of a hollow, down to bedrock	Under 009. Over 026
029	1	Layer					Group of small stones. Perhaps infilling a hollow between bedrock in floor of Structure 1	Under 016. Over 035
030	2	Layer	moderate	Dark brown	Gravelly, silty clay	0.20	Fill of a hollow against section edge.	Under 009. Over 026

Context no.	Trench	Туре	Compaction	Colour	Texture	Depth (m)	Description/interpretation	Stratigraphy and/or phasing info
031	4	Layer	Moderate	Light brown	Turf		Part of old ground surface	Under 024
032	2	Layer	Moderate	Dark brown	Gravelly, silty clay	0.25	Fill of a possible post-hole. One large packing stone	Under 027. Over 026
033	1	Layer	Compact	Dark brown	Silty ash		Charcoal flecks. Mottled. Forms a roughly circular area in the northern half of the Structure	Under 017, 034. Over 035 & 039
034	1	Layer	Compact	Orange brown	Clay silt		Similar to 016	Under 016. Over 033
035	1	Layer	Compact	Yellow brown	Clay silt		At roughly the same level as the outcropping bedrock. Infilling hollows? Floor deposit?	Under 033 & 034. Equal to 022?
036	1	Layer	Loose	Grey/brown	Gravelly silt	0.20	Fill of a possible oval-shaped post-hole (037)	Under 022, over 037
037	1	Layer	Compact				Small angular stones within the entrance 013 to Structure 1	Under 016, 022. Over bedrock
038	1	Layer				0.20	Cut of oval-shaped (?) post-hole	Under 016, filled with 041, over 022
039	1	Layer	Moderate	Dark brown	Clay silt		Same as 033. Floor deposit	Equal to 033
040	5	Layer					Roof slates found in front of vertical bluff below Structure 2	
041	1	Layer	Moderate	Dark brown	Gravelly, silty clay		Fill of (?) post-hole 038. Seen in the SE quadrant close to the southern wall. Other patches of dark soil nearby	Over 038
042	5	Layer	Loose	Dark brown	Clay silt	0.10	Topsoil and vegetation. Modern	Over 043
043	5	Layer	Loose	Dark brown	Clay silt	0.10-0.25	Surface slopes down towards the east	Under 042. Over 044
044	5	Layer	Loose	Dark brown	Silty loam	0.10-0.20	Sloping surface. Contains roof slates	Under 043. Over 047
045	3	Layer	Compact	Orange brown	Gravelly, silty clay		Natural boulder clay	Equal to 025, Under 020
046	1	Layer	Compact	Yellow brown	Schist		Broken surface of subsoil	Under 035, 017
047	5	Layer	Moderate	Pale brown	Loam	0.15	Natural subsoil	Under 044. Over 048
048	5	Layer	Compact	Grey brown	Gravelly, silty clay	0.50	Boulder clay	Under 047

Context no.	Trench	Туре	Compaction	Colour	Texture	Depth (m)	Description/interpretation	Stratigraphy and/or phasing info
049	1	Layer	Compact	Yellow brown	Schist		Broken surface of subsoil	Under 022, 017
050	1		Compact	Orange /red	Schist		Fire-reddened surface of bedrock?	Under 022
051	1	Layer	Loose	Dark brown	Clay silt		Charcoal layer seen at base of wall 002	Under 022, & (?) under 002
052	1	Structure					Group of stones against east wall filled with smaller stones. Possible setting for roof support	Under 016, over 002
053	1	Structure					Truncated bedrock, possible post-pad	Under 035

Table 2: Finds

N.B. Number of quartz pieces refers to pre-sorting by Torben Bjarke Ballin

Find no.	Context no.	Trench	No. of pieces	Material	Description
01	001	1	1	Pot	Medieval
02	005	2	1	Pot	Medieval
03	017	1	1	Pot	Medieval
04	017	1	1	Flint	
05	017	1	1	Flint	
06	017	1	1	Quartz	?Scraper
07	017	1	1	Flint	
08	010	3	1	Lead	?Lead ball, flattened
09	010	3	1	Clay pipe	Stem fragment, no markings
10	017	1	1	Pot	Medieval
11	017	1	1	Flint	
12	017	1	1	Pot	Medieval
13	022	1	1	Pot	Medieval
14	017	1	1	Pot	Medieval
15	009	2	1	Pot	Medieval
16	017	1	1	Pot	Medieval
17	022	1	1	Pot	Medieval
18	022	1	1	Pot	Medieval
19	022	1	1	Pot	Medieval
20	022	1	1	Pot	Medieval
21	017	1	1	Iron	Socketed tool
22	022	1	1	Iron	Large nail
23	035	1	1	Flint	Flake
24	035	1	1	Iron	Nail
25	035	1	1	Iron	Nail
26	035	1	1	Iron	Nail
27	035	1	1	Iron	Nail
21	001	1	3	Bone	Unburnt
	001	1	17	Glass	Olibulit
	001	1	6	Metal	Mixed
	001	1	1	Plastic	Ivilxeu
	001	1	9	Slate	
	001	2	18 32	Quartz	
	004			Glass	Tout our
	004	2	1 5	Metal	Tent peg
	005	2		Glass	
	005	2	3	Slate	
	005	2	28	Quartz	
	006	3	2	Glass	
	006	3	21	Quartz	No. 1
	007	3	1	Metal	Nail
	007	3	12	Slate	
	007	3	18	Quartz	
	800	1	1	Clay pipe	Stem fragment, no markings
	008	1	1	Bone	Unburnt
	800	1	1	Bottle cap lid	Buckfast
	800	1	23	Glass	
	800	1	14	Metal	1 x Copper alloy plate
	800	1	2	Pottery	Medieval
	800	1	18	Slate	

Calluna Archaeology | Project: CA007 | Report: 07 | 05/01/2019

Find No	Context no.	Trench	No. of pieces	Material	Description
	008	1	25	Quartz	
	800	1	2	Wood	Burnt
	009	2	1	Flint	
	009	2	12	Slate	
	009	2	164	Quartz	7 Round pebbles
	010	3	3	Charcoal	
	010	3	31	Slate	
	010	3	2	Stones	One rounded stone, one possible whetstone
	010	3	102	Quartz	
	015	1	2	Glass	
	015	1	9	Metal	Nails
	015	1	2	Plastic	Burnt fragments
	015	1	1	Slate	
	015	1	1	Quartz	
	015	1	1	Wood	Burnt
	016	1	5	Charcoal	
	016	1	2	Coal	
	016	1	7	Metal	Nails
	016	1	1	Organic	Peat/turd?
	016	1	127	Quartz	
	016	1	20	Slate	
	017	1	20	Bone	Burnt
	017	1	2	Charcoal	
	017	1	1	Glass	
	017	1	5	Metal	Nails, plus fragments
	017	1	72	Slate	
	017	1	1	Stone	Round stone
	017	1	176	Quartz	
	019	4	96	Slate	
	019	4	10	Quartz	
	020	3	10	Slate	
	020	3	30	Quartz	
	022	1	32	Slate	
	022	1	3	Quartz	
	023	4	1	Bottle top	
	023	4	19	Slate	
	023	4	13	Quartz	
	024	4	1	Charcoal	
	024	4	1	Pottery	
	024	4	30	Slate	
	024	4	72	Quartz	
	027	2	12	Quartz	
	028	2	2	Slate	
	028	2	35	Quartz	
	033	1	4	Quartz	
	034	1	4	Quartz	
	040	5	3	Slate	Complete roof slates with nail holes
	u/s		1	Ironstone	Lump

Table 3: Samples

Sample no.	Context no.	Trench	No./size bag/	Process		Reason for sampling		Application/comments	
			bucket	Yes/No	Pot	Lithic	Bone	Botanicals	
001	015	1	S	No				Х	Modern
002	010	3	S	No				Х	Slumped earth walls?
003	016	1	S	No				Х	Slumped earth walls?
004	017	1	L	Yes				Х	Roofing material?
005	020	3	М	Yes				Х	Remains of building construction?
006	009	2	М	No				Х	Possibly medieval, mixed finds
007	025	3	S	No				Х	Natural subsoil
008	017	1	М	No				Х	Roofing?
009	027	2	М	Yes				Х	Negative feature
010	028	2	S	No				Х	Negative feature
011	025	3	S	No				Х	Natural subsoil
012	030	2	М	No				Х	Negative feature
013	032	2	М	Yes				Х	Post-hole
014	033	1	М	Yes				Х	Informal hearth?
015	034	1	М	No				Х	= 016
016	033	1	М	No				Х	Informal hearth?
017	033	1	М	Yes; combine with sample 014	х		Х	Х	Informal hearth?
018	035	1	М	Yes				Х	Floor deposit
019	036	1	М	No				Х	Possible post-hole
020	035	1	М	No				Х	Floor deposit
021	041	1	М	No				Х	Fill of 038. Post-hole?
022	051	1	М	Yes	Х			Х	Burning(?) below wall 002

Table 4: Drawings

Drawing	Sheet	Context	Subject	Scale
no.	no.			
01	1	002, 003, 008	Plan of Structure 1, NE quadrant	1:20
02	2	002, 003, 008, 011	Plan of Structure 1, NW quadrant	1:20
03	3	002, 003, 008, 013	Plan of Structure 1, SE quadrant	1:20
04	4	002, 003, 008	Plan of Structure 1, SW quadrant	1:20
05	5	021, 023, 024	Plan of Trench 4, 019 removed	1:20
06	6	002, 003, 013, 017	Plan of SF numbers in context 017. Structure 1, SE quadrant	1:20
07	7	002, 016, 017, 046	Plan of Structure 1, NE quadrant	1:20
08	5	006, 007, 010, 014, 020, 025.	SE- & SW-facing sections of Trench 3	1:10
09	5	026, 027, 028, 030	Plan of Trench 2, 009 removed	1:20
10	8	026, 032, 030, 028	Plan of Trench 2	1:20
11	8	026, 032	Section of (?)post-hole 032 in Trench 2	1:10
12	9	002, 012, 029, 033, 034, 035	Plan of Structure 1, NW quadrant, overlay of drawing No. 2	1:20
13	10		Sketch plan of trench locations with GPS readings	N/a
14	11	042, 043, 044, 047, 048	Section of Trench 5, S-facing	1:10
15	12	002, 003, 033, 035, 052	Plan of Structure 1, NE quadrant, overlay of drawing 7	1:20
16	13	002, 003, 022, 036, 037, 038	Plan of Structure 1, SE quadrant, overlay of drawing 6	1:20
17	14	004, 005, 009, 026, 027, 028, 030	Section of Trench 2. NE- and SE-facing sections	1:10
18	14	014, 045, 020	Plan of Trench 3	1:20
19	15	002, 003, 022, 049	Plan of Structure 1, SW quadrant, overlay of drawing	1:20

Table 5: Digital photographs

Photo no.	Context no.	Description	From (sompass)
SERIES 1			(compass)
SERIES 1			
CA007-001	001	Pre-excavation of Structure 1	N
CA007-002	001, 002, 003	Turf removed over Structure 1	S
CA007-003	001, 002, 003	Turf removed over Structure 1	S
CA007-004	001, 002, 003	Turf removed over Structure 1, NE quadrant	N
CA007-005	001, 002, 003	Turf removed over Structure 1, NE quadrant	S
CA007-006	001, 002, 003	Turf removed over Structure 1, SE quadrant	S
CA007-007	001, 002, 003	Turf removed over Structure 1, NW quadrant	N
CA007-008		View up River Falloch to the north	S
CA007-009	001, 002, 003	Turf removed over Structure 1, NW quadrant	S
CA007-010	001, 002, 003	Turf removed over Structure 1, NW quadrant	N
CA007-011	005	Trench 2, topsoil removed	SE
CA007-012	006	Trench 3, topsoil removed	SW
CA007-013	006	Trench 3, topsoil removed	SW
CA007-014	001, 002, 003	Turf removed over Structure 1, SE quadrant	S
CA007-015	001, 002, 003	Turf removed over Structure 1, SE quadrant	N

Photo no.	Context no.	Description	From (compass)
CA007-016	002, 003, 013	Blocking in entrance	Е
CA007-017	007	Trench 3, topsoil removed	SW
CA007-018	009	Trench 2, topsoil removed	SE
CA007-019	010	Trench 3, 007 removed	SW
CA007-020	002, 003	Structure 1 dug in four quadrants	NW
CA007-021	002, 012	Foundations on bedrock	W
CA007-022	002, 012	Foundations on bedrock, detail	W
CA007-023	002, 012	Foundations on bedrock	N
CA007-024	002, 003, 008	Tumble being removed	N
CA007-025	015	Central area of burning	W
CA007-026	003, 008	Tumble in the SE quadrant	W
CA007-027	040, 042, 043, 044	Trench 5 pre-excavation	E
CA007-028	040, 042, 043, 044	Trench 5 pre-excavation	S
CA007-029	040	Trench 5, slates at base of cliff	W
CA007-030	010	Trench 3, 010 being dug	SW
CA007-031	019	Trench 4	N
CA007-032	002, 003, 008, 015	North end of structure	SW
CA007-033	003, 008	Oak tree roots in the SW quadrant	NE
CA007-034	002, 003, 00, 015, 016, 017	Four quadrants	S
CA007-035	002, 016, 017	NW quadrant	S
CA007-036	002, 003, 017	SW quadrant	S
CA007-037	002, 016, 017	NW quadrant	N
CA007-038	002, 016, 017	NE quadrant	N
CA007-039	002, 016, 017	NE quadrant	N
CA007-040	003, 013	Tumble in entrance	E
CA007-041	019	Trench 4	N
CA007-042	016, 017	NW quadrant	S
CA007-043	016, 017, 002	NW quadrant	N
CA007-044	016, 017, 002	NW quadrant	N
CA007-045	013	Entrance, some of 004 removed	E
CA007-046	013	Pottery from 017	
CA007-047	021	Trench 4, rubble at base of rock face	N
CA007-047	016	Bedrock appearing in NW quadrant	IN .
CA007-048	017, 016	Quadrants from the N	N
CA007-050	017,016	Quadrants from the NE	NE NE
CA007-051	017, 016	Quadrants from the N	N
CA007-052	017, 016	Quadrants from the NW	NW
CA007-053	024 022 024	Structure 2	E
CA007-054	021, 023, 024	Trench 4	N
CA007-055	021, 023, 024	Trench 4	S
CA007-056	021, 023, 024	Trench 4	N
CA007-057		Island Eillich from Ardlui (detail)	W
CA007-058		Island Eillich from Ardlui	W
CA007-059		Quadrants from the S (with rainbow)	S
CA007-060	020	Trench 3	SW
CA007-061	020	Trench 3	SW
CA007-062	022, 013	Entrance with tumble removed	E
CA007-063	020, 045	Trench 3, natural at base	SW
CA007-064	020, 045	Trench 3, natural at base	W
CA007-065	020, 045	Trench 3, natural at base	W
CA007-066	016, 017	NE quadrant	S
CA007-067	016, 017	NE quadrant	S

Photo no.	Context no.	Description	From (compass)
CA007-068	033, 035, 046	NE quadrant, small stones	S
CA007-069	033, 035	NE quadrant, small stones	S
CA007-070	033, 035, 046	NE quadrant, small stones	S
CA007-071	033, 035, 046	NE quadrant, small stones	S
CA007-072	016, 017	NW quadrant	S
CA007-073	016, 017	NW quadrant	S
CA007-074	021, 023, 024	Trench 4	N
CA007-075	021, 023, 024	Trench 4	W
CA007-076	021, 023, 024	Trench 4	W
CA007-077	021, 023, 024	Trench 4	W
CA007-078	021, 023, 024	Trench 4	W
CA007-079	002, 012, 016, 017	Four quadrants	NE
CA007-080	002, 016, 017	Four quadrants	N
CA007-081		Yew tree by Trench 2	
CA007-082	002, 016, 017	Four quadrants	S
CA007-083	026, 027, 028	Trench 2, 005 removed	S
CA007-084	040, 042, 043, 044	Trench 5 slates in section	W
CA007-085	040, 042, 043, 044	Trench 5 slates in section	S
CA007-086	052	Stones in NE quadrant, possible couple setting	E
CA007-087	052	Stones in NE quadrant, possible couple setting,	E
J. 1007 007	332	view across structure	
CA007-088	002, 016	NE quadrant	Е
CA007-089	029	Possible setting of small stones against W wall in NW quadrant. Tumble	E
CA007-090	031	Trench 4, 024 removed	N
CA007-091	026	Trench 2, 027, 028 & 030 removed	SE
CA007-092	026	Trench 2, 027, 028 & 030 removed	SW
CA007-093	026	Trench 2, 027, 028 & 030 removed	NE
CA007-094	027	Trench 2, detail of 027 in section	NE
CA007-095	026	Trench 2, 027, 028 & 030 removed	NE
CA007-096	027	Trench 2, detail of 027 in section	NE
CA007-097	032	Trench 2, possible post-hole being excavated	E
CA007-098	032	Trench 2, possible post-hole being excavated	NE
CA007-099	021, 023, 024, 031	Trench 4, 023 removed	N
CA007-100	021, 023, 024, 031	Trench 4, 023 removed	N
CA007-101	021, 023, 024, 031	Trench 4, 023 removed	N
CA007-102	035, 033, 039	Four quadrants	N
CA007-103	035, 033, 039	Four quadrants	N
CA007-103	035, 033, 039	Four quadrants	N
CA007-104	052, 035, 033	NE quadrant	N
CA007-105	052, 035, 033	NE quadrant	N N
CA007-107	035, 033	NW quadrant	N
CA007-107	022,017	SW quadrant	N
CA007-108 CA007-109	022, 049, 037, 036	SE quadrant	N N
CA007-110	002, 013, 036, 037 002, 013, 036, 037	Entrance in SE quadrant	N
CA007-111	002, 013, 030, 037	Entrance in SE quadrant	N S
CA007-112	022	Four quadrants and view to the N	
CA007-113	022	SE quadrant	S
CA007-114	022, 049	SW quadrant	S
CA007-115	012 26 027	Four quadrants	S
CA007-116	013, -36, 037	Entrance	SW
CA007-117	033, 034	NW quadrant	S
CA007-118	033, 034	NW quadrant	S

Photo no.	Context no.	Description	From (compass)
CA007-119	033, 035	NE quadrant	S
CA007-120	033, 035	NE quadrant	S
CA007-121	036, 037	Post-hole and rough surface	S
CA007-122	036, 037	Post-hole and rough surface	E
CA007-123	036, 037	Post-hole and rough surface	N
CA007-124	035, 033	Four quadrants	NW
CA007-125		Mitchell Fotheringham & drone	
CA007-126	033, 035	NW quadrant	W
CA007-127	033, 035	N quadrants	W
CA007-128	033, 035	NW quadrant & bedrock	W
CA007-129	033, 035	N quadrants	S
CA007-130	013, 022, 036, 037	Entrance with rough cobbling	Е
CA007-131	013, 022, 036, 037	Entrance with post-hole &rough cobbling	E
CA007-132	013, 022, 036, 037	Entrance with post-hole &rough cobbling	S
CA007-133	035	NE quadrant	E
CA007-134		View to N, becoming an island	S
CA007-135	033, 035	Central baulk and four quadrants	N
CA007-136	038	Dark patch at S end of SE quadrant	N
CA007-137	040	Trench 5, slates revealed	S
CA007-138	040	Trench 5, slates revealed	S
CA007-139	040	Trench 5, slates revealed	S
CA007-140	040	Trench 5, slates revealed	S
CA007-141	042, 043, 044	Trench 5, slate in section	S
CA007-142	042, 043, 044	Trench 5, slate in section	S
CA007-143	038	Post-hole in SE quadrant, half sectioned	N
CA007-144	038	Post-hole in SE quadrant, half sectioned	NE
CA007-145	016, 017, 022	Roots in southern quadrants	E
CA007-146	001, 008, 017, 022, 049	Roots in southern quadrants	SE
CA007-147	049	Four quadrants	E
CA007-148	049	Northern quadrants	E
CA007-149	002, 016, 017, 035, 033	NE quadrant	E
CA007-150	001, 002, 008, 017, 022, 052	Main section S to N	E
CA007-151	001, 008, 017, 022	Main section S to N	Е
CA007-152	001, 008, 017, 022	Main section S to N	E
CA007-153	001, 003, 008, 015, 017, 022	Main section S to N	E
CA007-154	001, 003, 017, 033, 035	Main section S to N	Е
CA007-155	001, 003, 017, 033, 035	Main section S to N	E
CA007-156	001, 003, 008, 017, 033, 035	Main section S to N	E
CA007-157	001, 002, 003, 008, 016, 017, 033, 035	Main section S to N	E
CA007-158	001, 002, 003, 008, 016, 017, 033, 035	Main section S to N	E
CA007-159	001, 002, 016	Main section S to N	E
CA007-160	001, 002, 016	Main section S to N	E
CA007-161	001, 003, 008, 017, 022, 049	S-facing section W to E	S
CA007-162	001, 015, 016, 017, 035, 049	S-facing section W to E	S
CA007-163	001, 002	S-facing section W to E	S
CA007-164	001, 002, 003, 008, 017,	N-facing section E to W	N

Photo no.	Context no.	Description	From (compass)
CA007-165	001, 002, 003, 008, 016, 017, 046	N-facing section E to W	N
CA007-166	001, 002, 037,	N-facing section E to W	N
CA007-167	001, 002, 037,	N-facing section E to W	N
CA007-168	002	Inner face of E wall SE quadrant	W
CA007-169	002	Inner face of E wall SE quadrant	W
CA007-170	002	Inner face of E wall SE quadrant	W
CA007-171	002	Inner face of S wall SE quadrant	N
CA007-172	002	Inner face of S wall SW quadrant	N
CA007-173	002	Inner face of W wall, SW quadrant	E
CA007-174	002	Inner face of W wall, SW quadrant	E
CA007-175	002, 049	Inner face of W wall, SW quadrant	E
CA007-176	002	Inner face of W wall, NW quadrant	E
CA007-177	002	Inner face of W wall, NW quadrant	E
CA007-178	002	Inner face of W wall, NW quadrant	E
CA007-179	002	Inner face of N wall, NW quadrant	S
CA007-180	002	Inner face of N wall, NE quadrant	S
CA007-181	002	Inner face of N wall, NE quadrant	S
CA007-182	002	Inner face of E wall, NE quadrant	W
CA007-183	002	Inner face of E wall, NE quadrant	W
CA007-184	002	Inner face of E wall, NE quadrant	W
CA007-184	002	Inner face of E wall, NE quadrant, slate detail	W
CA007-185	002	Inner face of E wall, NE quadrant, state detail	W
CA007-186	002	Inner face of entrance	S
CA007-187		Inner face of entrance	S
CA007-188	002		S S
CA007-189 CA007-190		Four quadrants SW quadrant	S S
CA007-190		SE quadrant	
	025	•	S
CA007-192	035	NW quadrant	S
CA007-193	035, 039	NE quadrant	S
CA007-194	035, 039	NE quadrant	S
CA007-195	035, 039	NE quadrant	S
CA007-196		Drone – four quadrants	N
CA007-197		Drone – four quadrants	E
CA007-198		Drone – Island Eillich peninsula, Trenches 2 & 3	
CA007-199		Drone – Island Eillich peninsula	S
CA007-200		Drone – Island Eillich peninsula	S
CA007-201		Drone – Island Eillich peninsula	S
CA007-202		PDF Composite of Structure 1	
CA007-203		Lead object SF 8, Context 010	
CA007-204		Lead object SF 8, Context 010	
CA007-205		Lead object SF 8, Context 010	
CA007-206		Nails SFs 24, 25, 26 & 27. Context 035	
CA007-207		Nail SF 22. Context 022	
CA007-208		Nails Context 015	
CA007-209		Nails Context 016	
CA007-210		Nails Context 017	
CA007-211		Socketed iron object SF 21. Context 017	
CA007-212		Socketed iron object SF 21. Context 017	
CA007-213		Nails Context 008	
CA007-214		Copper alloy strip Context 008	
CA007-215		Nail Context 007	
CA007-216		Lead object SF 8, Context 010	

Photo no.	Context no.	Description	From (compass)
CA007-217		Structure 2	E
CA007-218		Structure 1 backfilled	S
CA007-219		Low walls between Structures 1 and 2	W
CA007-220		Structure 2, N wall	W
CA007-221		Structure 1 backfilled	S
CA007-222		Trench 4 backfilled	W
CA007-223		Trench 3 backfilled	W
CA007-224		Flooded ground to N of island	S

Table 6: Results of soil sample flotation & sorting By Clare Ellis (Argyll Archaeology)

						Burnt	Flint	Slag
Context	Sample	Charcoal	Seeds	Slate	Quartz	bone		
35	18	*	?	*	*			
27	9	*2						
33	17	*		*		*	*	
33	14	*						
		*2 (hazelnut	Carbonised	*		*		
51	22	shell)	barley					
32	13	*2			*			
17	4	*		*	*	*		*

Appendix 2: Island Eillich, Argyll, Assessment of the lithic assemblage

Torben Bjarke Ballin LITHIC RESEARCH, Stirlingshire Honorary Research Fellow, University of Bradford

INTRODUCTION

Calluna Archaeology was commissioned by Clan Macfarlane Worldwide to carry out an excavation of a ruined rectangular building on Island Eillich, Loch Lomond, Argyll, Scotland. The excavation took place over 15 days between September 3rd and October 14th 2018. In connection with this work an assemblage of worked quartz and flint was recovered.

The purpose of this brief report is to characterize the lithic artefacts in general terms. From this characterization, it is sought to date and discuss the finds. The evaluation of the lithic material is based upon a summary catalogue (an Excel spreadsheet) of the lithic finds from Island Eillich.

KEY DEFINITIONS

The definitions of the main lithic categories are as follows:

Chips: All flakes and indeterminate pieces the greatest dimension (GD) of which is \leq 10 mm.

Flakes: All lithic artefacts with one identifiable ventral (positive or convex) surface, GD > 10 mm and L < 2W (L = length; W = width).

Indeterminate pieces: Lithic artefacts which cannot be unequivocally identified as either flakes or cores. Generally the problem of identification is due to irregular breaks, frost-shattering or fire-crazing. Chunks are larger indeterminate pieces, and in, for example, the case of quartz, the problem of identification usually originates from a piece flaking along natural planes of weakness rather than flaking in the usual conchoidal way.

Blades and microblades: Flakes where $L \ge 2W$. In the case of blades W > 8 mm, in the case of microblades $W \le 8$ mm.

Cores: Artefacts with only dorsal (negative or concave) surfaces – if three or more flakes have been detached, the piece is a core, if fewer than three flakes have been detached, the piece is a split or flaked pebble.

Tools: Artefacts with secondary retouch (modification).

CHARACTERISATION AND DISCUSSION

During the investigation of Island Eillich, 907 pieces of quartz and six pieces of flint were recovered. Following an initial examination of the collection, 362 pieces of quartz were defined as natural and discarded, whereas 545 pieces of quartz and six pieces of flint were defined as worked and retained. Table 7 and 8 show the composition of the collection.

Table 7 – see end of report

Table 8. General artefact list - summary.

	Tr. 1	Tr. 2	Tr. 3	Tr. 4	Total
Pebbles (20-70mm)		19	5	1	25
Chips (≤ 10 mm)	2			3	5
Flakes, small (10-40mm)	150	56	70	37	313
Flakes, large (40-80mm)	19	11	27	5	62
Indet. pieces, small (10-40mm)	45	4	6	3	58
Indet. pieces, large (40-80mm)	2	1	4		7
Cores, small (10-40mm)	23	5	18	6	52
Cores, large (40-80mm)	4	6	5	2	17
Scrapers (20-30mm)	1		1	1	3
Pieces w edge-retouch (40-80mm)			2		2
Sandstone palette			1		1
Fire-flints	5	1			6
TOTAL	251	103	139	58	551

In connection with the characterisation of the assemblage, it was chosen to use standard classification principles (e.g. Ballin 2017b; also see key definitions above). The finds are heavily dominated by quartz debitage (470 pieces, or 85%),

supplemented by a large number of quartz cores (69 pieces, or 13%) and some quartz tools (five pieces, or 1%) and fireflints (six pieces, or 1%). A sandstone fragment appears to have smooth surfaces with red deposits adhering to them, and it is suggested that this may be a 'palette' used to grind ochre (Rifkin 2015; Rosso 2016). The quartz assemblage and the flint assemblage are thought to represent different visits to the site at different times, and below they are therefore dealt with separately.

The quartz assemblage

The quartz is exclusively white milky quartz characterised by sheets of mica, and it is thought that this raw material was procured locally from veins on the island (James 2018). The vast majority of the quartz assemblage is production waste (debitage and cores), supplemented by a small proportion of flake tools. As the assemblage was produced in an almost unschematic manner, it was initially considered whether it might represent a late prehistoric or historic industry, the purpose of which was to produce quartz temper for pottery. Industries like this were discovered in connection with the Uig Landscape Project (e.g. Gob Eirer on Lewis: Ballin 2011), where large amounts of quartz shatter was produced.

However, although the operational schema followed to produce the quartz artefacts of the present assemblage is unschematic, the technique applied was not as simplistic as that applied at Gob Eirer. If the guartz had simply been crushed, the resulting artefacts should have been in the form of either angular shatter or simple bipolar flakes (that is produced by crushing pebbles and cobbles on an anvil), but instead the flakes are mostly hard-hammer flakes, and the cores are exclusively small and large multi-directional platform cores.

It is also important that a few small scrapers and retouched pieces were recovered, suggesting that the assemblage does represent a prehistoric tool-producing industry. As so few formal tools were recovered (three scrapers), it is likely that the quartz was reduced primarily to produce flakes which could be used instantly as scrapers, knives, piercers, etc. without secondary modification. This, in conjunction with the unschematic nature of the reduction process, suggests that the industry responsible for the quartz assemblage is fairly late, probably dating to the time around the Bronze Age/Iron Age transition.

As quartz pebbles have been associated with prehistoric and historic ritual and burial sites (Lebour 1914: Ballin 2017a), 25 rounded quartz pebbles were retained. Most were recovered from Trench 2 on the plateau below, and south of, Structure 1, where burials could have been located, but as there was evidence in Trench 5, at roughly the same level, of the loch occasionally rising and eroding this part of the site, it is more likely that these pieces simply represent a form of beach wall of abraded gravel and pebbles.

Most of the quartz was retrieved from Trenches 1-3, indicating that knapping-floors were present on the island's top plateau (Trench 1) as well as on the small plateau below this surface (Trenches 2 and 3). Most of the cores were recovered from Trenches 1 and 3. As the quartz assemblages from these two locations are almost identical, they probably represent at least two visits to the island in the later part of prehistory. Burnt quartz was found in Trenches 1-3, indicating the use of fire.

The flint assemblage

Comparison of the six flints from the island defines them as so-called fire-flints, and below they are characterised in greater detail. In Ballin (2005, 18), dealing with fire-flints from Townparks, Antrim Town, NI, the following terminology relating to fire-flints was suggested:

The most basic part of the fire-flint terminology is the name of the category, the purpose of which is to allow distinction between flints involved in prehistoric (e.g. Stapert & Johansen 1999) and historic fire-making (e.g. Koch 1990). Two different techniques were applied to produce fire, with prehistoric fire-making involving a flint and a piece of pyrite1, whereas historic fire-making involved a flint and a mostly bullhorn-shaped steel implement². It is suggested to limit the use of the term 'strike-a-light' to the implements doing the actual striking (subject), and not the material which is being struck (object). This means that, in prehistoric fire-making, the flint is the strike-a-light (as it strikes the pyrite), whereas, in historic fire-making, it is not (as it is being struck by the steel strike-a-light). The author suggests referring to the struck historic lithics as 'fire-flints'. The fact that the prehistoric and historic fire-making flints are subjects and objects, respectively, results in notably different wear-patterns, with the former developing smooth abraded points, whereas the latter develop chipped and crushed edges, like the pieces collected from the present site.

¹ In a Bronze Age grave from Thyregod in Central Jutland, Denmark, a fire-making 'kit' was found (1906),

comprising a flint strike-a-light, a piece of pyrite, some tinder fungus and a collection of small sticks (Aner & Kersten 1990). ² From the Late Viking Age / Early Medieval house of Tøftom in the Norwegian High Mountains steel strike-a-

lights and fire-flints were recovered (Mikkelsen 1994, 49). Medieval and post-Medieval strike-a-lights and fireflints were also found during the excavation of the Old Town of Oslo (Færden 1990; Mikkelsen 1991).

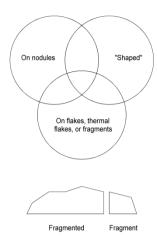


Fig. 1. The main categories of fire-flints, fragmented fire-flints and fragments of fire-flints.

As part of the attempt to characterise fire-flint assemblages, the analyst devised a typology the purpose of which was to present the observed morphological variation. Three main categories were defined, namely 1) fire-flints based on raw nodules, 2) 'shaped' fire-flints, and 3) fire-flints based on flakes, thermal flakes and fragments (Fig. 1). Categories 1 and 3 are self-explanatory, whereas Category 2 is not. The term 'shaped' is meant to describe pieces which had their faces shaped either prior to or during use, where the shaping either represents initial modification or effects of use.

Context 009, Trench 2

CAT 1: Indeterminate flake fragment with strike-marks along one lateral edge; fine-grained mottled grey flint. The struck edge is slightly concave. Greatest dimension 20mm.

Context 017. Trench 1

CAT 2: Distal fragment of flake with strike-marks along one lateral edge; fine-grained mottled grey flint. The struck edge is slightly concave. Greatest dimension 22mm.

CAT 3: Indeterminate flake fragment with strike-marks along one lateral edge; fine-grained mottled grey flint. The struck edge is slightly convex. Greatest dimension 27mm. A short concave retouch along the opposite edge, next to a break facet, suggests that this piece was once larger and broke during use.

CAT 4: Proximal fragment of flake with strike-marks along both lateral edges; fine-grained mottled grey flint. The struck edges are slightly convex. Greatest dimension 15mm.

CAT 5: Large medial fragment of flake with strike-marks along both lateral edges and along both break facets; fine-grained mottled grey flint. The struck edges are straight (the break facets) or slightly concave (the lateral sides). Greatest dimension 22mm. The piece has been heavily used, and the use of a steel strike-a-light is indicated by rust traces along all used edges.

Context 035, Trench 1

CAT 6: Bifacially shaped piece with a break facet at one end, and strike-marks along the entire circumference. Greatest dimension 19mm. Slight rust traces along the edges.

In recent years, fire-flints have been recovered from several Scottish sites, such as Allt Iain near Fort William (Ballin 2014); Goosecroft Road, Stirling (Ballin 2018); Dun Eistean, Isle of Lewis (Ballin 2015b); Baliscate Chapel, Isle of Mull (Ballin 2017a); the Glebe, Iona (Ballin 2015a); Trusty's Hill, Dumfries & Galloway (Ballin 2016); and Knowe of Skea on Orkney (Ballin 2012). Some of these sites (or contexts/structures on these sites) have been dated to the Iron Age (eg, Knowe of Skea), whereas others have been dated to the Pictish period (Trusty's Hill), or the medieval/post-medieval period (Allt Iain and Goosecroft Road). Apart from fire-flints based on datable recycled pieces like gunflints (Skertchley 1879), it is presently very difficult to distinguish between early and late fire-flints.

However, five of the six fire-flints from Island Eillich were recovered from Trench 1 (Structure 1) and it is thought that they may be associated with this building. The pottery from Trench 1/Structure 1 (James 2018) is generally late medieval ($14^{th} - 16^{th}$ century) and the fire-flints may date to this same period. A fairly late date is also suggested by the fact that several of the pieces have rust deposits still adhering to the edges struck by the steel strike-a-light.

In some cases, Scottish fire-flints were made from local pebble flint, but in most cases they were based on mottled grey exotic flint. It is thought that much of this flint was brought into Scotland in the form of ballast flint from south-east England or further afield.

CONCLUSION

The lithic assemblage from Island Eillich includes 545 pieces of worked quartz and six pieces of worked flint. The nature of the quartz suggests that it represents a late prehistoric industry based on the unschematic reduction of quartz, and that this industry probably dates to the period around the later Bronze Age/Early Iron Age transition. Although a small number of modfied tools are present, this industry probably focused on the production of informal tools, that is, flakes which could be

used as tools without further modification. The quartz was recovered from the top of the island, around Structure 1, as well as the small terrace south of this building.

The flint, on the other hand, represents a considerably later, probably late medieval, industry, breaking up pieces of exotic ballast flint into flakes and flake fragments which could be used as fire-flints. Some of the flakes and flake fragments were used for fire-making without any modification, whereas others (e.g. CAT 6) were shaped bifacially and then used for fire-making.

BIBLIOGRAPHY

- Aner, E., & Kersten, K. 1990: Die Funder der älteren Bronzezeit des nordischen Kreises in Dänemark, Schleswig-Holstein und Niedersachsen 9: Veile Amt. Neumünster: Karl Wachholtz Verlag.
- Ballin, T.B. 2005: Lithic artefacts and pottery from Townparks, Antrim Town. Ulster Archaeological Journal 64, 12-25.
- Ballin, T.B. 2011: Lithics. *In* C. Nesbitt, M.J. Church, & S.M.D. Gilmour: Domestic, industrial, (en)closed? Survey and excavation of a Late Bronze Age/Early Iron Age promontory enclosure at Gob Eirer, Lewis, Western Isles, 52-55. *Proceedings of the Society of Antiquaries of Scotland* 141, 31-74.
- Ballin, T.B. 2012: The lithic assemblage from Knowe of Skea, Westray, Orkney. Unpublished report.
- Ballin, T.B. 2014: The lithic assemblage from Allt Iain, Cia-Aig, Loch Arkaig, Kilmallie, Inverness-shire (Highland). Unpublished report.
- Ballin, T.B. 2015a: The lithic assemblage from The Glebe, Iona, Highland. Unpublished report.
- Ballin, T.B. 2015b: Lithics. In R. Barrowman: Dun Eistan, Ness. Stornoway: Achair Books.
- Ballin, T.B. 2016: Lithics. In R. Toolis & C. Bowles: The Lost Dark Age Kingdom of Rheged. The Discovery of a Royal Stronghold at Trusty's Hill, Galloway, 54-56. Oxford: Oxbow Books.
- Ballin, T.B. 2017a: The lithic assemblage. *In C. Ellis: Monks, Priests and Farmers: A Community Research Excavation at Baliscate, Isle of Mull. Scottish Archaeological Internet Reports* 68, 79-86.
 - [https://archaeologydataservice.ac.uk/library/browse/details.xhtml?recordId=1146553&recordType=MonographSeries]
- Ballin, T.B. 2017b: Lithic assemblages. A guide to processing, analysis and interpretation. BAJR Guide 49. Dunbar: BAJR.
- Ballin, T.B. 2018: The lithic assemblage. *In* B. Will: Uncovering the history and archaeology of the house of the Blackfriars, at Goosecroft Road, Stirling. *Archaeology Reports Online* 30, 21-24.
 - [http://www.archaeologyreportsonline.com/reports/2018/ARO30.html]
- Færden, G. 1990: Metallgjenstander. In E. Schia & P.B. Molaug (eds.): De arkeologiske utgravninger i Gamlebyen, Oslo 7. Dagliglivets gjenstander Del I. Øvre Ervik: Alvheim & Eide, Akademisk Forlag.
- James, H. 2018: Island Eillich, Argyll, Scotland. Data Structure Report. Project ID: CA007. Unpublished report. Koch, E. 1990: Fire. Skalk 1990 (5), 16-17.
- Lebour, N. 1914: White Quartz Pebbles and their Archaeological Significance. *Transactions of the Dumfriesshire & Galloway Natural History & Antiquarian Society* 1913-14, 121-134.
- Mikkelsen, E. 1991: Flintmaterialet. *In E. Schia & P.B. Molaug (eds.)*: *De arkeologiske utgravninger i Gamlebyen, Oslo 8. Dagliglivets gjenstander Del II*, 251-271. Øvre Ervik: Alvheim & Eide / Akademisk Forlag.
- Rifkin, R.F. 2015: Ethnographic insight into the prehistoric significance of red ochre. The Diagring Stick 32(2), 7-10.
- Rosso, D.E., Pitarch, M.A.A., d'Errico, F. 2016: Middle Stone Age Ochre Processing and Behavioural Complexity in the Horn of Africa: Evidence from Porc-Epic Cave, Dire Dawa, Ethiopia. *PLoS ONE* 11(11), 1-35.
- Skertchley, S.B.J. 1879: On the Manufacture of Gunflints, the Methods of Excavating for Flint, the Age of Palaeolithic Man, and the Connection (sic) between Neolithic Art and the Gunflint Trade. Memoirs of the Geological Survey of England and Wales. London: HMSO.
- Stapert, D., & Johansen, L. 1999: Flint and pyrite: making fire in the Stone Age. Antiquity 73 (282), 765-777.

Table 7. General artefact list by context and artefact category (quartz & flint)

Context	Trench	Oval pebbles	Chips	Flakes 1	Flakes 2	Indet pieces 1	Indet pieces 2	Cores 1	Cores 2	End- scrapers	Pieces w. retouch	Pieces w. retouch	Sandstone palette	Flint	Total	Burnt
		20-70mm		10-40mm	40-80mm	10-40mm		10-40mm	40-80mm	20-30mm	44mm	80mm				
001	1			10			1								11	3
005	2	1		9	1	1			1						13	2
006	3	1		11	12			3							27	2
007	3			8	1		2		1						12	2
800	1			6	2	4			1						13	1
009	2	7													7	
009	2	4		33	8	3	1	3	5					1	58	9
010	3												1		1	
010	3	3		36	14	4	1	14		1	1				74	2
015	1							1							1	
016	1		2	47	9	11	1	9	2						81	3
017	1									1					1	
017	1			84	8	27		12	1					4	136	7
019	4			4	1										5	1
020	3	1		15		2	1	1	4			1			25	7
022	1							1							1	
023	4			7		1									8	
024	4	1	3	26	4	2		6	2	1					45	
027	2			4				2							6	
028	2	7		10	2										19	
033	1			3											3	
034	1					3									3	
035	1													1	1	
TOTAL		25	5	313	62	58	7	52	17	3	1	1	1	6	551	39

Appendix 3: Catalogue of metalwork by Gemma Cruikshank (National Museums Scotland) Table 9

SF No.	Context No.	Material	ID	Catalogue	X ray
Α	001	Iron	Bottle cap	Crown-cap bottle top. D c.28	-
В	001	Aluminium	Bottle cap	Crown-cap bottle top. Peroni. D c.27	-
С	001	Iron	Nail	Discoidal head, with broken rectangular-sectioned shank. D 14 x 18	20181219-1 and 20181219-3
D	0011	Aluminium	Drinks can tab	Sta-type drinks can tab. 25 x 16 x 2	-
	001			Iron rod with looped terminal which may have had numerous functions, eg	20181219-1 and 20181219-3
E		Iron	Looped terminal	bucket handle, or catch. L 124; rod D 7.5; loop external D 21	
	001	Steel and			-
F		aluminium	Drinks can top	Top of a drinks can (pre 'sta-tab'). D 60.	
				Base of a cylindrical canister, now squashed flat, with thread grooved at the top,	-
Α	008	Aluminium?	Canister	indicating the lid screwed on. D 38, H 88	
В	008	Iron	Nail	Discoidal head, with broken rectangular-sectioned shank. D 19	20181219-5
С	008	Iron	Unclear	Wood-grain visible on X-ray. Possibly an embedded nail shank. 31 x 26 x 25	20181219-5
D	008	Iron	Nail	Sub-square head, with broken rectangular-sectioned shank. 15 x 14	20181219-5
E	800	Iron	Nail	Large discoidal head with shank tip missing. L 35; head D 25	20181219-5
F	800	Iron	Nail	Discoidal head with shank tip missing. L 30; head D c.15	20181219-5
G	008	Iron	Nail	Tapering shank, broken at both ends. L 36, D 7.	20181219-5
Н	008	Iron	Nail	Sub-square head, with broken rectangular-sectioned shank. 13 x 14	20181219-5
1	008	Iron	Nail	Sub-square head, with broken rectangular-sectioned shank. 14 x 12	20181219-5
J	008	Iron	Bottle cap	Crown-cap bottle top. Black top with edge of white writing. D c.29	-
K	008	Iron	Wire	Small fragment. L 26	20181219-5
L	008	Iron	Nail	Discoidal head, with broken rectangular-sectioned shank. D 15	20181219-5
M	008	Aluminium	Bottle top	Buckfast bottle top. D 28, H 18	-
N	008	Copper alloy	Sheet fragment	Triangular, broken edges. 43 x 12 x 2	20181219-6
				Modern iron rod with one end bent at 90° and changing to D-shaped section.	-
				The other end tapers before breaking. Condition indicates this is relatively	
-	004	Iron	Rod	recent. L 180, Rod D 0.6	
-	005	Iron	Wire	Bent, modern wire fragment with looped end. 89 x 72 x 22	-
				Large sub-square rivet/ clench-bolt head with broken rectangular-sectioned	20181219-6
	007	Iron	Stud head	head. Head 29 x 26, shank T 6	
Α	015	Iron	Wire	Wire fragment with mineralised textiles in corrosion. L 51	20181219-1 and 20181219-3
В	015	Iron	Nail	Modern machine-made 3" nail with discoidal head. Clenched.	20181219-1 and 20181219-3
С	015	Iron	Wire	Curved, with mineralised textiles in corrosion. L 48, D 4	20181219-1 and 20181219-3
D	015	Iron	Nail	Shank tip, rectangular-sectioned, curved. L 19	20181219-1 and 20181219-3
E	015	Iron	Nail	Shank fragment?	20181219-1 and 20181219-3
F	015	Iron	Screw	Modern screw. L 35; head D 16.	20181219-1 and 20181219-3
G	015	Iron	Nail?	Very corroded and unclear on X-ray but hints of a nail shank visible. L 35.	20181219-1 and 20181219-3

Н	015	Iron	Nail	Nail tip? Very faint on X-ray. Surrounded by mineralised wood. L 15, D 5.	20181219-1 and 20181219-3
I	015	Iron	Wire	Fragment of wire. L 25, D 4	20181219-1 and 20181219-3
Α	016	Iron	Nail	Sub-oval flat head, slightly curved shank and missing tip. L 49, head D 22	20181219-5
В	016	Iron	Nail	Sub-oval flat head, straight shank and missing tip. L 31, head D 21	20181219-5
С	016	Iron	Wire	Fragment of wire. L 24, D 4	20181219-5
D	016	Iron	Nail	Rectangular-sectioned shank fragment. L 18, D 5	20181219-5
	016			Hollow tube, or completely mineralised rod. Broken at both ends, refits with G. L	20181219-5
E		Iron	Tube	39, T 9	
F	016	Iron	Nail	Discoidal head, curved shank. L 59, D 15	20181219-5
G	016	Iron	Tube	Hollow tube, or completely mineralised rod. Broken at both ends, refits with G. L	20181219-5
				36, T 9	
21	017	Iron	Socket	Part of a rectangular-sectioned ?tang, broken at end, expanding into a broken	20181219-1 and 20181219-3
				rectangular-sectioned socket at the other end, also broken. Most likely part of a	
				tool. L 48, W 14.	
Α	017	Iron	Nail	Discoidal head with curved shank. Head D 11, L 47	20181219-6
В	017	Iron	Nail	Large discoidal head with curved shank. Head D 25, L 31	20181219-6
С	017	Iron	Nail	Large discoidal head with broken shank. Head D 24, L 24	20181219-6
D	017	Iron	Shank	Straight, tapering shank fragment L 30	20181219-6
E	017	Iron	Nail	Discoidal-headed nail with straight shank, missing tip. L 28, head D 17	20181219-6
F	017	Iron	Nail?	Possible nail head. X-ray unclear.	20181219-6
22	022	Iron	Clench bolt	Small, discoidal head at one end, slightly curved shank and large ?sub-square	20181219-6
				rove at the other end. L 45, head W 21, rove W 32; thickness of wood being	
				clenched c.30.	
-	023	Plastic	Bottle cap insert	Discoidal plastic insert from a crown-cap bottle top. Face very corroded,	-
				obscuring logo but hints of red and silver are visible. D 24	
24	035	Iron	Shank/ wire	Small tapering fragment. L 31, D 5	20181219-1 and 20181219-3
25	035	Iron	Nail	Discoidal or sub-square headed nail with straight shank, missing tip. L 53, head	20181219-6
				W 22	
26	035	Iron	Nail?	Rectangular-sectioned shank fragment. L 31, D 6	20181219-1 and 20181219-3
27	035	Iron	Nail	Nail with broken discoidal head and missing tip. Shank curved. L 38, D 5	20181219-5

Appendix 4: Yle Eunlich (Island Eillich), Loch Lomond: archaeobotanical analysis by Susan Ramsay

Introduction

This report details the analysis and interpretation of samples recovered during excavations undertaken by Calluna Archaeology at Yle Eunlich (Island Eillich), located at the northern end of Loch Lomond, on behalf of Clan Macfarlane Worldwide. Trench 1 was located over Structure 1, which was constructed of earth and stone and produced pottery dating to between the 14th and 16th centuries. Trench 2 was located on a flat area to the southeast of Structure 1, next to an old yew tree. Three negative features were located and these were sealed by a deposit containing medieval pottery (see above).

Methodology

Charcoal fragments were examined using a binocular microscope at variable magnifications of x4-x45 and an estimation of the total volume of carbonised material >4mm was made. For each sample, all the charcoal >4mm was identified, along with carbonised cereals, seeds and any other identifiable botanical remains.

The internal anatomical features of all charcoal fragments were further identified at x200 magnification using the reflected light of a metallurgical microscope. Reference was made to Schweingruber (1990) aid identifications and vascular plant nomenclature follows Stace (1997). The results of this analysis are shown in Table 10 at the end of this report.

Results

Trench 1

Context (017) was a layer that extended across most of the interior of Structure 1, with pottery dating it to the late medieval period. The carbonised assemblage comprised charcoal of alder, birch, hazel, heather type, ash, oak and willow, together with single grains of oats and barley and a few fragments of hazel nutshell. There is no evidence that this assemblage is the remains of a thatched roof that had fallen on the floor. The diverse range of charcoal with cereals and nutshell is much more likely to be the remains of scattered hearth waste, possibly built up over time across the floor of the structure.

Context (033) is an ashy layer that formed a circular area in the northern half of the structure. It was interpreted as an informal hearth beneath (017). The carbonised assemblage contained alder, birch, hazel, ash, oak and elm, with a few fragments of hazel nutshell. The assemblage is similar to that from (017) but without any evidence for cereals, and is consistent with general hearth waste.

Context (035) is a possible floor deposit in Structure 1 that infilled a hollow in the bedrock. The carbonised assemblage was almost identical to that recorded from layer (017) with only heather type missing from the assemblage.

Context (051) was a charcoal layer at the base of the wall (002). Again, the carbonised assemblage was very similar to those recovered from (017) and (035) but with a greater number of cereal grains recorded. Both oats and barley were identified from the cereal grain assemblage, indicating that this context is also medieval in date.

Trench 2

Context (032) was the fill of feature [032], which was identified as being a posthole. However, the fill produced a diverse assemblage of alder, birch, hazel, oak, willow and yew but with no evidence for cereals or hazel nutshell. Although alder is the most abundant charcoal type present, there is no indication that this is the remains of a post that was burnt *in situ* and alder would be an unusual type for a post, particularly when oak is readily available. It is more likely to be the remains of hearth waste.

Context (027) was a negative feature that had the potential to be earlier than Structure 1. The carbonised assemblage contained charcoal of alder, birch, hazel, ash, cherry, oak and willow. The charcoal assemblage is very similar to that seen in (017), (035) and (051) in Trench 1, but without the cereals or nutshell, and is probably the remains of hearth waste.

Discussion

The charcoal assemblages from these contexts are all quite similar with a diverse range of types present. The species rich oak woodlands present on the banks of Loch Lomond could have provided all the tree types found on site. One of the most interesting finds was a single fragment of yew charcoal from (032), which is presumably contemporaneous with the occupation of the site in the medieval period but which may have originally come from the ancient yew tree that still stands on the site. There is no indication of particular selection of types for fuel and suggests general collection of readily available wood from the surrounding woodlands or even from wood washed up on the shore.

The cereal grain assemblage contained both oats and barley, together with indeterminate grains that were too poorly preserved to be further identifiable. The combination of oats and barley is indicative of a medieval or later date for these contexts. Barley has been commonly grown in Scotland since the Neolithic but oats only become a significant cereal crop from the early medieval onwards in mainland Scotland.

The only other evidence for food plant remains are fragments of hazel nutshell. The charcoal assemblage indicates that there are hazel trees growing in the area and so hazelnuts could have been collected locally to supplement the diet.

References

James, H 2018 Island Eillich interim report. The Hidden Heritage of a Landscape [Online] https://hiddenheritage.org.uk/explore/ardleish-excavations/ (Accessed 19th Apr 2019)

Schweingruber, F H 1990 Anatomy of European Woods. Haupt, Berne & Stuttgart.

Stace, C 1997 New Flora of the British Isles 2nd Ed. Cambridge University Press.

	Trench		Trei	nch 1		Trench 2		
	Context	017	033	035	051	027	032	
	Sample	4	14, 17	18	22	9	13	
	Description	Layer in	Ashy layer	Possible floor	Charcoal	Fill of	Possible	
		centre of	below (017)	deposit	layer at base	negativ e	posthole fill	
		structure			of wall (002)	feature		
Total volume charcoal >4 mm		10ml	15ml	10ml	30ml	30ml	30ml	
Charcoal								
Alnus cf glutinosa	alder	6 (0.17g)	18 (0.60g)	17 (0.74g)	5 (0.34g)	29 (1.54g)	68 (4.86g)	
Betula spp	birch	6 (0.23g)	14 (0.61g)	2 (0.26g)	6 (0.52g)	34 (2.88g)	22 (1.61g)	
Corylus cf avellana	hazel	5 (0.24g)	1 (0.03g)	1 (0.02g)	20 (1.02g)	2 (0.14g)	3 (0.10g)	
Ericales	heather type	1 (0.02g)	-	-	-	-	-	
Fraxinus spp	ash	5 (0.12g)	10 (0.34g)	2 (0.12g)	18 (1.26g)	1 (0.09g)	-	
Prunoideae	cherry type	-	-	-	-	1 (0.07g)	-	
Quercus spp	oak	8 (0.30g)	4 (0.25g)	1 (0.03g)	6 (0.25g)	3 (0.24g)	6 (0.34g)	
Salix spp	willow	1 (0.04g)	-	3 (0.12g)	3 (0.30g)	1 (0.11g)	7 (0.50g)	
Tax us baccata	yew	-	-	-	-	-	1 (0.07g)	
Ulmus spp	elm	-	1 (0.12g)	-	-	-	-	
Indet charcoal	indet charcoal	5 (0.18g)	-	-	-	-	-	
Cereals								
Avena spp	oats	1	-	1	9	-	-	
cf Av ena spp	cf oats	-	-	-	5	-	-	
Hordeum vulgare sl	barley	1	-	1	10	-	-	
Cereal indet	indet cereal	-	-	-	47	-	-	
Carbonised seeds								
Corylus avellana nutshell frag	hazel nutshell frag	4 (0.10g)	4 (0.15g)	1 (0.03g)	10 (0.28g)	-	-	

Table 10: Carbonised remains from Yle Eunlich (Island Eillich), Loch Lomond.

Calluna Archaeology | Project: CA007 | Report: 07 | 05/01/2019

Context	Sample	AMS
017	4	Corylus cf avellana (roundwood <20 rings) - 0.10g
		Corylus avellana nutshell (single growth season) - 0.02g
027	9	Betula sp (roundwood <20 rings) - 0.15g
		Alnus cf glutinosa (roundwood < 20 rings) - 0.17g
032	13	Betula sp (roundwood <20 rings) - 0.07g
		Alnus cf glutinosa (roundwood < 20 rings) - 0.45g
033	14	Betula sp (roundwood <20 rings) - 0.06g
		Alnus cf glutinosa (roundwood < 20 rings) - 0.04g
033	17	Betula sp (roundwood <20 rings) - 0.12g
		Alnus cf glutinosa (roundwood < 20 rings) - 0.09g
035	18	Betula sp (roundwood <20 rings) - 0.17g
		Alnus cf glutinosa (roundwood < 20 rings) - 0.07g
051	022	Alnus cf glutinosa (roundwood <20 rings) - 0.09g
		Corylus avellana nutshell (single growth season) - 0.07g

Table 11: Charcoal fragments for possible AMS dating from Yle Eunlich (Island Eillich), Loch Lomond.