

The Rubha Port an t-Seilich Project

2017 report





“The archaeological significance of Rubha Port an t-Seilich is matched by its spectacular setting on the east coast of Islay. Having the opportunity to excavate the site is both a privilege and a responsibility. By this we can address key research questions about the human past while also giving University of Reading students an outstanding archaeological experience, one that expands their knowledge, develops their skills and builds their abilities for teamwork.”

Steven Mithen

*Professor of Early Prehistory and
Deputy Vice Chancellor, University of Reading,
and Chair of Islay Heritage (SC046938)*

s.j.mithen@reading.ac.uk

www.islayheritage.org

The project works closely with Islay Heritage, a Scottish Charity (SC046938) devoted to furthering knowledge about Islay's past, and the many ways in which it can be explored and enjoyed by everyone

www.islayheritage.org



The straits passing between Islay and Jura provide a major seaway used throughout history and today by sailing boats, kayaks, fishing boats and ferries. Rubha Port an t-Seilich, located close to the present day ferry terminal of Port Askaig, shows that this history of sea travel reaches far back into prehistory.



The Rubha Port an t-Seilich Project

Rubha Port an t-Seilich is located on the east coast of the Isle of Islay in western Scotland.

A small terrace overlooks the Sound of Islay and is known to be the past camping site of prehistoric hunter-gatherers between 12,000 and 7000 years ago.

It is the only site in Scotland where evidence of ice age hunter-gatherers is known to remain largely undisturbed, sealed below the debris from later settlement.



**“THE FIRST GLIMPSE OF
WHERE WE WOULD BE
SPENDING TWO WEEKS
DIGGING WAS
BREATHTAKING”**



Following a site evaluation undertaken in 2010 and 2013, the University of Reading began to excavate Rubha Port an t-Seilich in April 2017.

This marked the start of a multi-year research project that will utilize a range of scientific techniques to explore Rubha Port an t-Seilich and its significance for the prehistory of Scotland and northwest Europe in general.

The aim is to recover, analyse and interpret data pertaining to the entire history of activity at the site and its relevance to issues of colonization, economic and cultural change in Scotland and northwest Europe.

The project is designed to provide University of Reading students with an opportunity to gain fieldwork experience.

In addition to addressing key research questions, the project is designed to provide University of Reading students with a chance to gain fieldwork experience on a research excavation and acquire new skills. The opportunities for students to excavate prehistoric hunter-gatherer settlements are very sparse. Rubha Port a t-Seilich

enables them to undertake this in a remote rural setting and to explore the role of heritage within island communities.

At this stage it is anticipated that five seasons of excavation will be required between 2017 and 2022, with a further three years of post-excavation analysis.

The first people in Scotland?

20,000 years ago, at the height of the last ice age, Scotland was buried below the North West European ice sheet.

A dramatic period of global warming at 14,500 years ago reduced the ice and brought the first known people to Scotland. These were Palaeolithic hunter-gatherers exploring the NW frontier of the ice age world who lost or discarded some of their stone tools at a location now called Howburn in South Lanarkshire.

Those tools were discovered in 2010, scattered in a ploughed field. That was a sensational find because most archaeologists believed that the first people in Scotland had arrived after the end of the ice age at 11,500 years ago during the Mesolithic

period. The only other evidence for ice age people in Scotland had been chance discoveries of isolated stone points on Tìree, Orkney and at Shìeldaig that many archaeologists had dismissed as being later prehistoric in date.

That was a sensational find...most archaeologists believed that the first people in Scotland had arrived after the end of the ice age.

The Howburn stone tools were made in the distinctive style of the Hamburgian Culture, known from the continent and dated to c. 14,500 years ago.

While the Howburn discovery was exciting, it was also frustrating. The stone tools were found in plough soil and mixed up with not only those of the Mesolithic but also the later Neolithic and Bronze Age periods. There were no associated settlement remains, and hence no way to discover anything more about what must have been intrepid ice-age explorers.

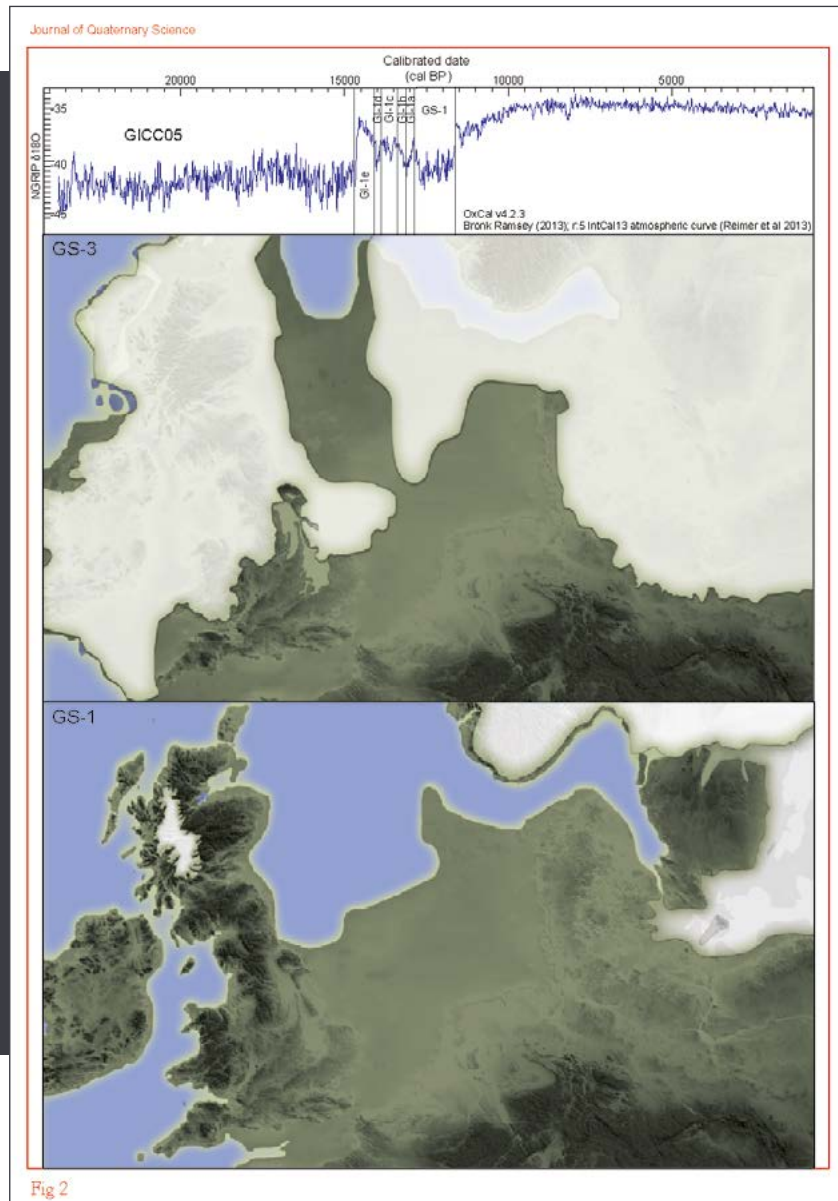
No other traces of the Hamburgian culture have been found in Scotland. By 13,500 years ago, severe ice age conditions had returned. These began to alleviate after 12,000 years ago, after which there was a dramatic period of

global warming that brought the ice age to its close.

In 2013 further evidence for ice age hunter-gatherers was discovered at Rubha Port an t-Seilich on the east coast of Islay.

No other traces of the Hamburgian culture have been found in Scotland.

Unlike that from Howburn, these stone tools were still sealed in sediments, providing an opportunity to make the first excavation of an ice age campsite in Scotland.



The chemical analysis of sediments from Greenland ice cores provides a record of global temperature change, showing dramatic increases at 14,500 and 11,500 years ago, and relative stability during the postglacial.

At 20,000 years ago, Scotland was covered by ice sheets, up to a kilometre thick.

By 12,000 years ago, most of the ice had disappeared while Britain remained joined to the continent by the now drowned landmass of Doggerland.

The discovery of ice age hunter-gatherers at Rubha Port an t-Seilich

In the spring of 2009, the Dunlossit Estate set pigs to forage along its land on the east coast of Islay as a means to constrain the spread of bracken.

The sharp eyes of the gamekeeper noticed that the snuffling of pigs had exposed flint flakes on the terrace of Rubha Port an t-Seilich. These were inspected by Professor Steven Mithen (University of Reading) and identified as being characteristic of the Mesolithic, a period he had been studying in western Scotland for many years.

The snuffling of pigs had exposed flint flakes on the terrace of Rubha Port an t-Seilich.

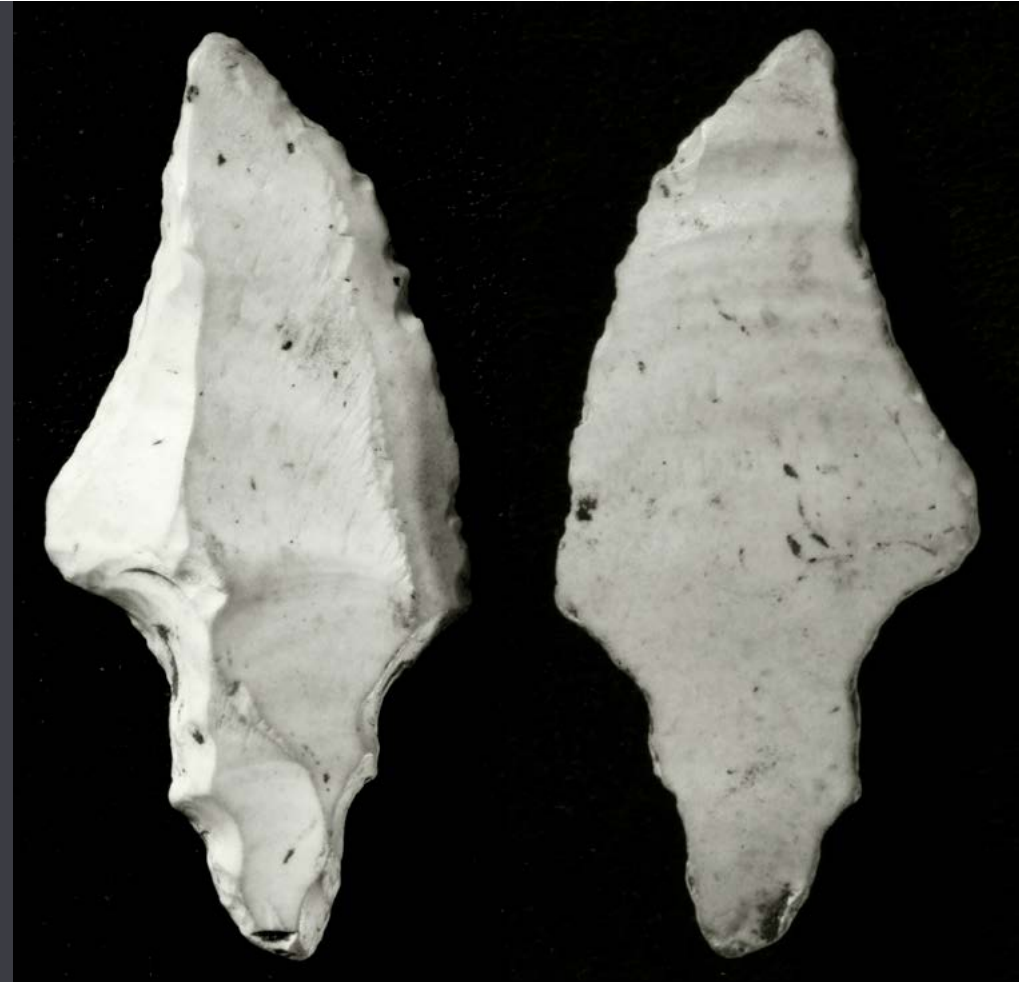


Arhensburgian point from Rubha Port an t-Seilich.

A test-pit survey was undertaken in 2010 and a test-trench excavated in 2013. These revealed the site to be one of the most significant Mesolithic sites ever discovered in Scotland: the deposits had abundant stone tools and the debris from their manufacture, associated with many thousands of fragments of animal bones and charred plant remains. The test-trench had cut through a Mesolithic fireplace, constructed in the shelter of large boulders. Radiocarbon dating indicating the campsite had been repeatedly utilized between 9300 and 7700 years ago.

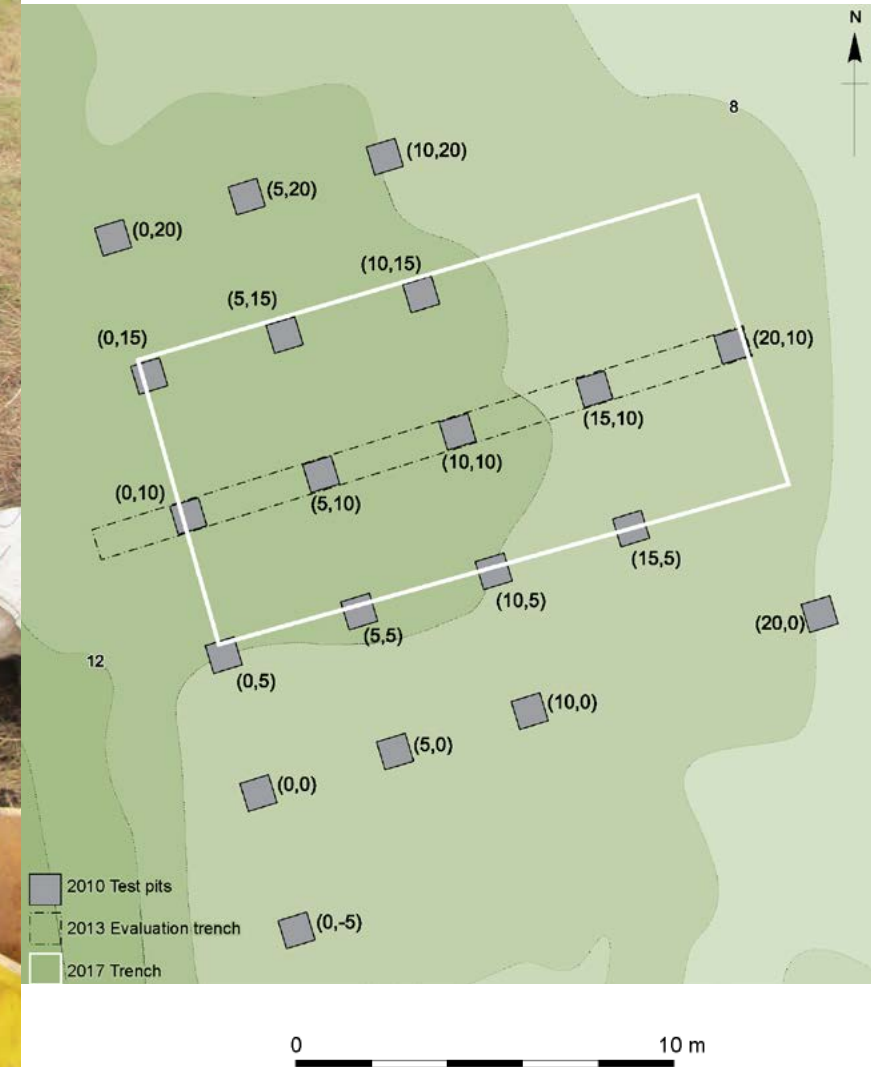
These [finds] revealed the site to be one of the most significant Mesolithic sites ever discovered in Scotland.

Sealed below the Mesolithic deposits at the base of the test-trench was a thin horizon of sediment that – to an expert eye – contained some quite different types of stone tools. These had also been made from flint nodules but the manufacturing technique and the style of the stone points produced was indicative of ice-age rather than Mesolithic hunter-gatherers.



The 2013 site evaluation





Validating the discovery

Independent experts agreed that the stone tools recovered from the lowermost layer at Rubha Port an t-Seilich had the characteristics of the Ahrensburgian culture.

This had flourished in continental Europe towards the end of the last ice age around 12,000 years ago, with a few traces known in southern England. Although traditionally interpreted as reindeer hunters, recent discoveries in Denmark and Sweden had suggested the Ahrensburgian people might also have been coastal foragers.

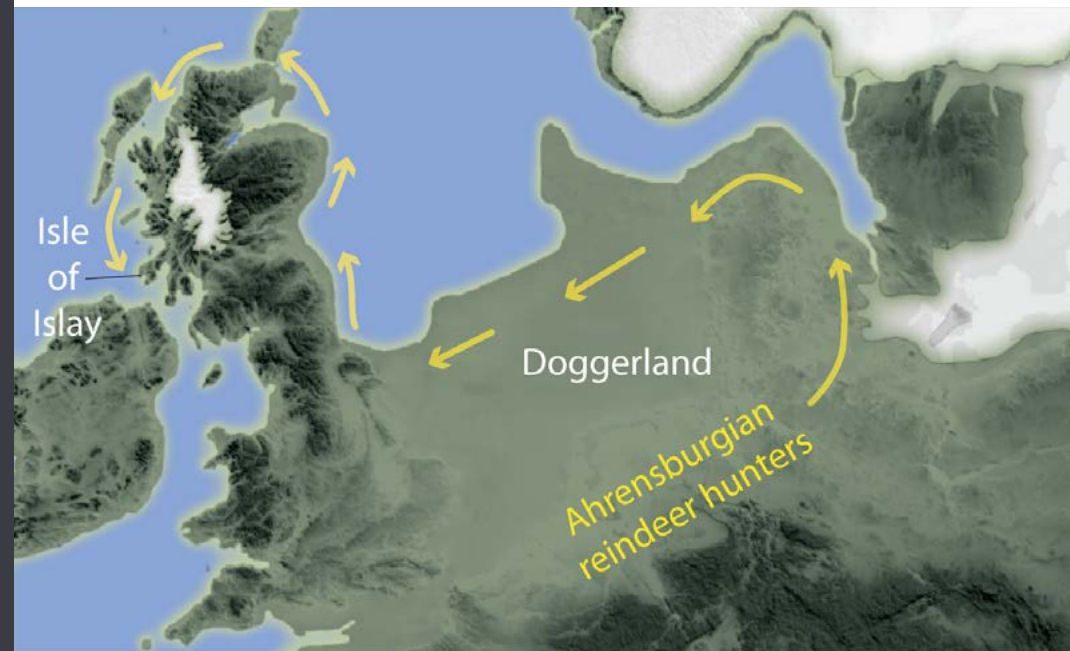
To reach western Scotland, they most likely sailed in skin boats along the rivers and marshes of Doggerland – the now drowned landmass that once connected Britain to Europe – and then around the north of Scotland to arrive at its west coast, where Rubha Port an t-Seilich provided an attractive camp site.

Recent discoveries in Denmark and Sweden had suggested the Ahrensburgian people might also have been coastal foragers.

The 2013 test-trench had only exposed a small quantity of that underlying sediment, which lacked any material that could be radiocarbon dated. Contained within the sediments, however, was tephra – volcanic ash. The end of the ice age and start of the postglacial had been particularly active for volcanic eruptions in Iceland. Tephra fell to earth from the ash clouds that crossed Scotland and became embedded into the accumulating sediments at Rubha Port an t-Seilich.

Each eruption produced tephra with a distinct chemical composition, and several of these have been accurately dated. By this method – tephrochronology – we were able to date the sediments just above the stone points to around 11,000 years ago, confirming their attribution to the Ahrensburgian culture.

We were able to date the sediments just above the stone points to around 11,000 years.



Full details of the recovery, analysis and interpretation of the 2010 and 2013 finds from Rubha Port an t-Seilich have been published:

Mithen, S.J., Wicks, K, et al. 2015. A late glacial archaeological site and tephra sequence in the far northwest of Europe: Ahrensburgian artefacts and geoarchaeology at Rubha Port an t-Seilich, Isle of Islay, western Scotland. *Journal of Quaternary Science* 30, 396-416. DOI: 10.1002/jqs.2781.



The Mesolithic deposits

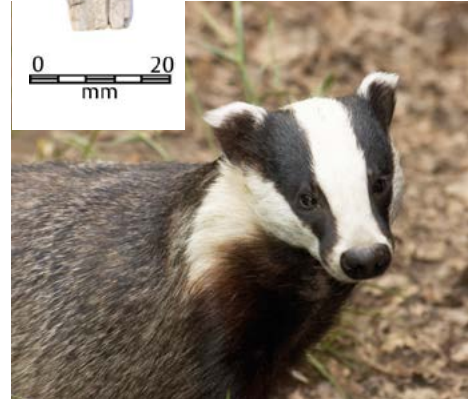
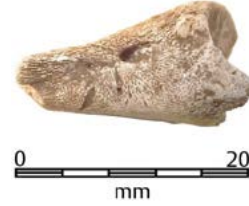
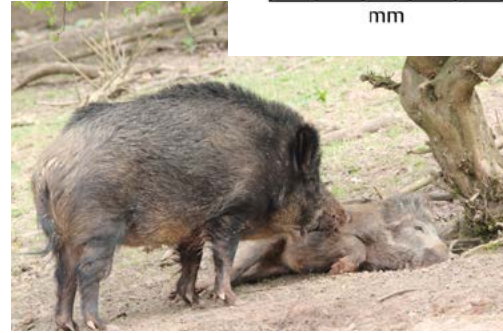
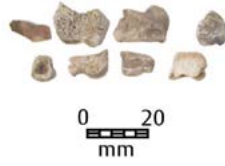


Fragments of animal bone from red deer, roe deer and wild boar, pebble and chipped stone tools from the Mesolithic period 9–7000 years ago.

Ice age deposits

Ice age tools form the base of the deposits in the 2013 evaluation trench.

These tools are characteristic of the Late Glacial Ahrensburgian culture, c. 12,000 years ago.



The Mesolithic deposits



Ice Age deposits

The 2017 excavation and survey

*The first field season of the
RPAS Project took place
between 1–14 April 2017.
The field team consisted
of staff and students from
the University of Reading
and local volunteers.*

The aims

- Undertake a topographic survey of the locality
- Document all surface archaeology
- Establish a trench centered on the likely focus of the Mesolithic and Late Glacial deposits
- Remove surface deposits to expose the Mesolithic occupation horizon
- Secure samples of finds for post-excavation study

Staff

Professor Steven Mithen,
Project Director

Dr Karen Wicks, Field Director

Dr Rob Fry, surveyor

Nick Pankhurst,
Excavation supervisor

Tom Lyons,
Excavation supervisor

Sarah Lambert-Gates,
Photography and planning

Student volunteers

George Biddulph

Kayce Herrick

Rosie Hoggard

Rosie-May Howard

Thomas King

Leanne Waring

Emma Warner

Islay volunteers

Kerry Baker

Niall Colthart

**“WORKING ON THE PROJECT
TEAM WAS A UNIQUE
OPPORTUNITY”**







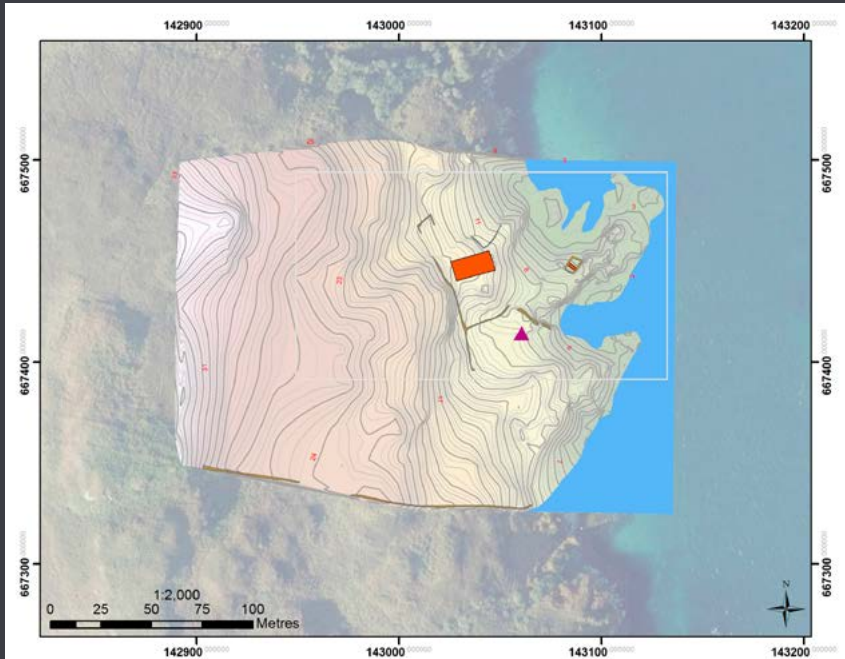
The topographic and archaeological survey

As well as fixing the location of the new trench on the terrace, the survey also located a disused structure close to the shoreline which was called the 'Fisherman's hut'.

The surface of the terrace was strikingly flat, suggesting it had been levelled during the course of cultivation.

A series of stone and turf walls were also located and mapped, as was a standing stone that seems likely to have been artificially positioned.

The surface of the terrace was strikingly flat, suggesting it had been levelled during the course of cultivation. This was validated during excavation by the observation of furrows – most likely for potatoes – within the subsoil and scratches on stones most likely from spades and hoes.



*Right: Fisherman's hut prior to excavation
Far right: Turf and stone wall*





The topographic survey of Rubha Port an t-Seilich was conducted using a Leica GS09/CS09 GNSS SmartNet system, which is able to record location (X & Y) and height (Z) data to within 2cm accuracy.

The survey included the shoreline, beaches, and steeply undulating headland which surround the excavation trench.

The system collects satellite data which is corrected in real-time, from a known base station on the mainland via an internet link. The surveys took four days, over which 2000 data points were collected within the local environs and across the excavation trench itself.

The landscape survey covered an area of 3.6ha.

A broad landscape survey was first conducted to record the topography of the environs and the position of any upstanding archaeology. This covered an area of 3.6ha at a spatial resolution between 1–10m (dependent on changes in topography).

The survey included the shoreline, beaches, and the steeply undulating headland that surrounds the terrace. Archaeological features identified and mapped during this survey included the location of a standing stone to the south-east of the excavation trench, and surviving traces of boundary walls.

The surveys took four days, over which 2000 data points were collected.

The extent of the Fisherman's hut near the coastline was also recorded during this survey.

The survey data was and downloaded into a GIS package where the data points were converted into surface layers (via a Natural Neighbour interpolation algorithm) and height contours. The data was also be imported and manipulated within a 3D workspace for further analysis and visualisation.

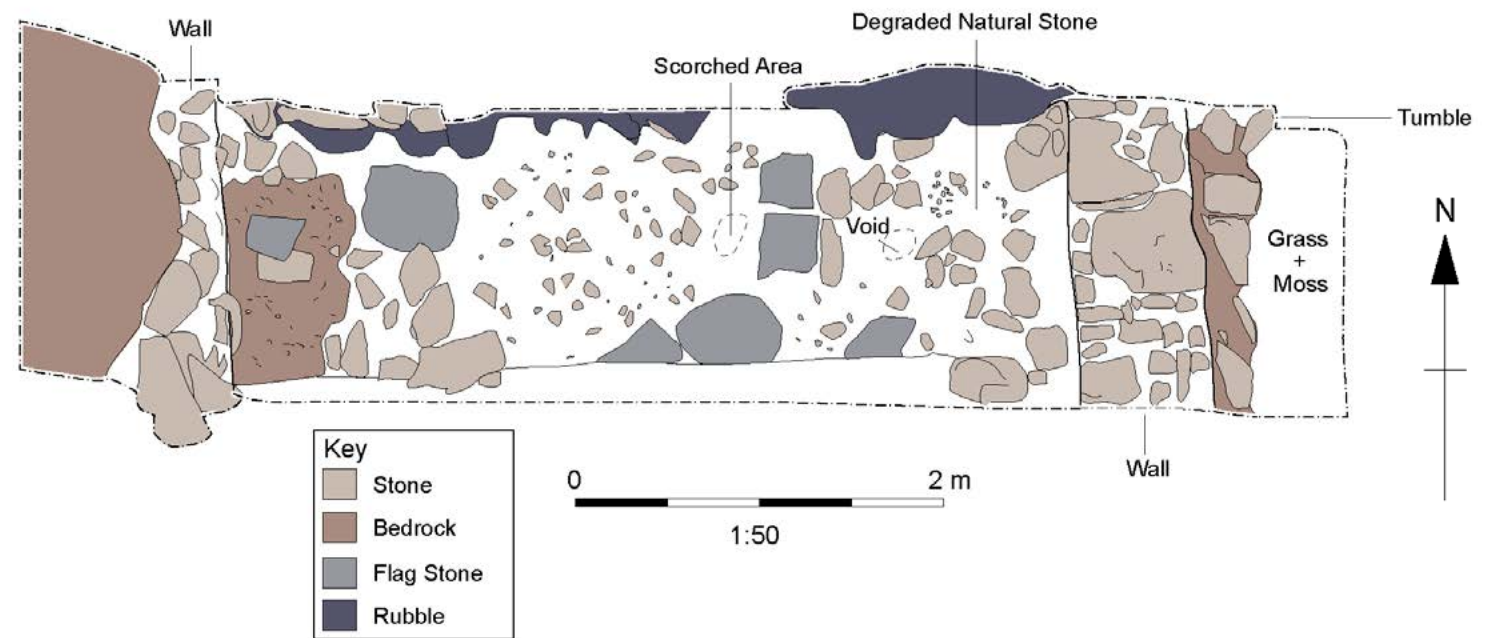
Excavation of the Fisherman's hut

*An evaluation trench was
excavated to expose the
foundations of a Fisherman's
hut surviving on the foreshore,
overlooking the sheltered bay.*

Preservation was poor and structural remains were limited beyond that of a dry stone wall at the western end of the structure.

A collection of glazed and earthenware ceramics was recovered from within the structure, the identification of which will date when the hut had been used.





De-turfing and exposing the Mesolithic horizon

Once the turfs were removed, the trench was gridded into square meters to control the recovery of finds.

The underlying topsoil was removed by trowel to expose the surface of the Mesolithic deposits and to locate the backfill from the 2013 evaluation trench.

The topsoil contained glazed pottery similar to that coming from the Fisherman's hut and signs of recent cultivation. It also contained considerable amounts of chipped flint and quartz artefacts, that had evidently been churned up from the underlying horizons.







“I’ve worked with Steve in the Hebrides for many years and share his passion for early prehistoric settlement. While having my own special interests of environmental history and the chronology of human settlement.

Planning and directing the 2017 excavation at Rubha Port an t-Seilich enabled me to pursue those interests while leading an outstanding team of professional archaeologists – Nick, Rob, Sarah and Tom – and hardworking, talented students. The 2018 excavation will be really exciting as the dig reaches the layers of the ice age hunter-gatherer campsite.”

Dr Karen Wicks,
Field Director of the 2017 excavation



**“HARDWORKING,
TALENTED
STUDENTS”**

During the removal of the topsoil a decorated sherd of pottery was discovered in the NE corner of the trench. Although yet to be formally identified, the character of the sherd and incised geometric pattern suggests it is most likely from the Bronze Age – emphasizing the enduring significance of Rubha Port an t-Seilich throughout prehistory.

The character of the sherd and incised geometric pattern suggests it is most likely from the Bronze Age.



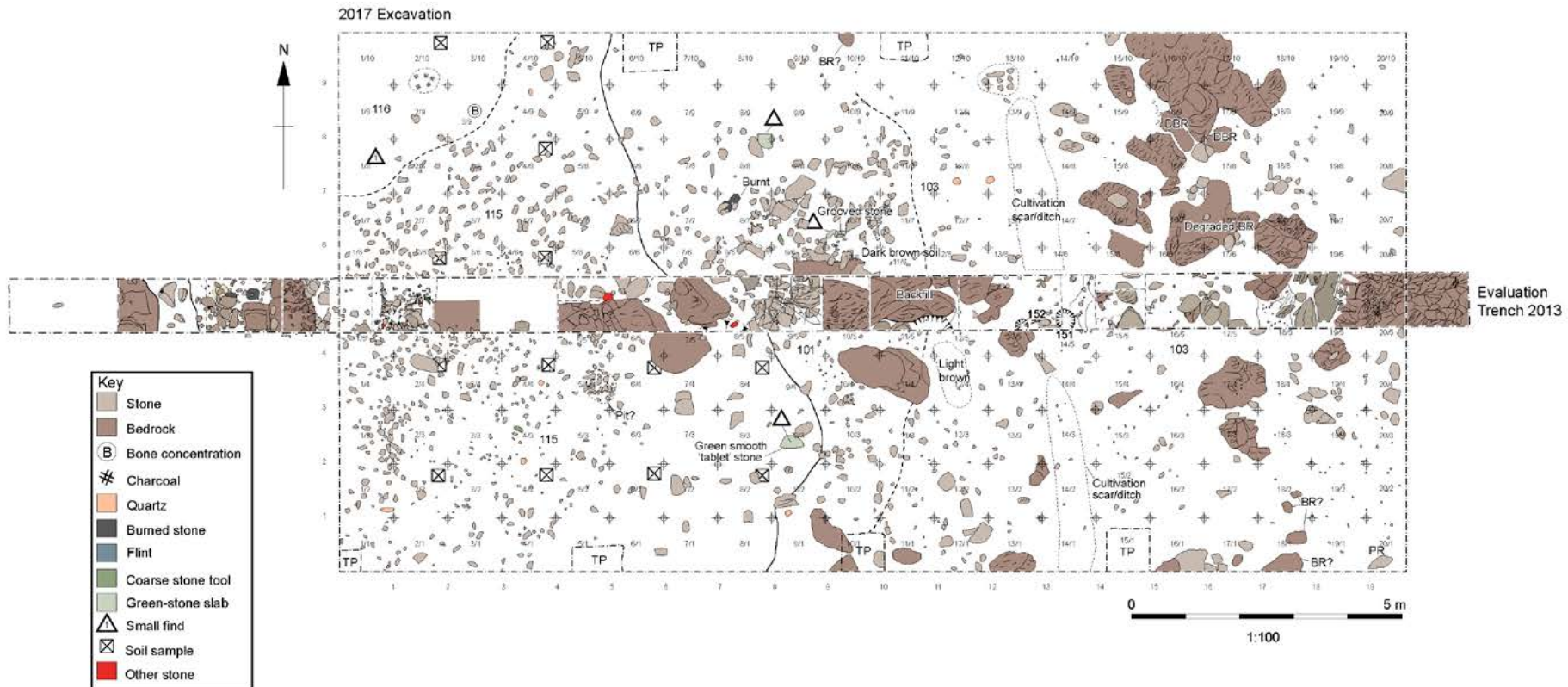


Further trowelling cleaned the surface of the Mesolithic deposits, exposing a number of small pits and flat slabs that had been deliberately positioned, most likely as working surfaces and anvils, along with stone artefacts that had remained undisturbed. Excavation continued by removing the Mesolithic deposit in a 3cm spit, hand collecting all artefacts, bone fragments and charcoal. Sediment samples were collected from each grid square to wash through a 2mm wet sieve, to ensure that a sample of the very smallest archaeological materials were recovered.

Detailed photographic and drawn plans were made of the Mesolithic deposits.

The concentration of flat slabs in the central part of the trench are the uppermost deposits of the Mesolithic hearth that has been located during the 2013 evaluation.





Composite plan
of all contexts
from August 2013
evaluation trench
and April 2017
excavation.



Glazed ceramics and glass, similar to that recovered from the Fisherman's hut were found within the topsoil of the excavation trench.



Approximately 50 coarse stone tools were recovered from both the topsoil and the underlying Mesolithic deposits. Some had been deliberately shaped by grinding, while others had been fractured or worn down through use. Many of these tools are elongated pebbles that have detached flakes from one end, appearing to have arisen from striking objects. All of these are likely to be Mesolithic in date.



Charcoal samples were carefully collected during the excavation, to be used for radiocarbon dating.



Approximately 5000 piece of chipped stone were recovered from the excavation, primarily consisting of flint.

The majority is waste from the manufacturing of blades, some of which were chipped into points, and thick flakes that had been turned into scrapers. Although formal cataloging, analysis and interpretation has yet to be undertaken,

this collection appears to be Mesolithic in character, with the possibility of some Neolithic and Bronze Age material, as well as that from the Late Glacial. Such mixing will have arisen as a consequence of the past cultivation of the terrace and hence churning of the underlying deposits, and by re-use of existing flint flakes by successive occupants of the terrace.





The last day of the dig was spent returning all of the spoil and re-turfing the site, a requirement of the landowner. Next year, much of it will need to be removed again.



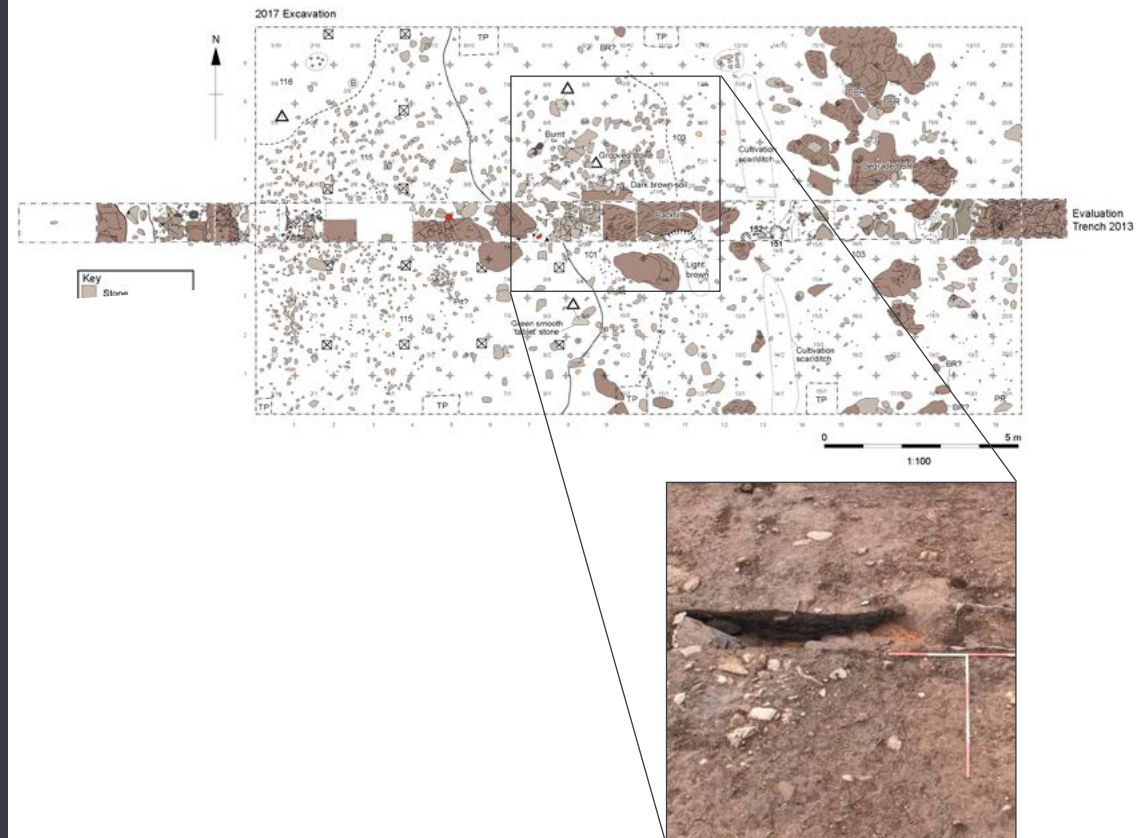
Post excavation

The project is in the process of recruiting archaeological specialists to catalogue, analyze and interpret the collections of ceramics, glass, chipped stone and coarse stone tools.

The charcoal samples are being cleaned and will then be identified as to the tree species. Those that are sufficiently well preserved and come from significant areas of the site will be selected for radiocarbon dating.

The 2018 excavation

The 2017 excavation identified a concentration of artefacts and slabs, close to the Mesolithic fireplace that had been exposed in the section of the 2013 evaluation trench. The 2018 excavation will make a detailed excavation of this area, seeking to remove all of the Mesolithic horizons with the expectation of finding undisturbed ice age settlement remains.







“ Islay was an amazing archaeological experience. The opportunity to dig on such a significant Mesolithic site was really exciting for me.

The first glimpse of where we would be spending two weeks digging was breathtaking. The excavation work was challenging in terms of what we wanted to achieve in the time available but we quickly formed a good team; communicating well, working hard but at the same time ensuring the techniques of excavation and overarching research aims of the project were being achieved. Students had ample opportunity to learn and improve their proficiency in the field.

I would love to have the opportunity to come back to the island and continue work with the project and the team. The University provided me with a wonderful experience to work on Islay and learn about the island. The tour around the island to visit other archaeological sites showed me just how much archaeology there is on such a small island. I'm really excited to see what future.”

*Rosie-May Howard,
University of Reading undergraduate*



*It was not all work.
Visiting Islay's famous
whisky distilleries,
watching otters
and eagles, and
even swimming
were all part of
the experience.*



Acknowledgements

The fieldwork at Rubha Port an t-Seilich was made possible by the kind permission of the Dunlossit Estate and the Schroder family to whom the project is most grateful. Equally, it was made possible by a generous donation to the University of Reading by an alumnus of the Department of Archaeology, Mr David Bailey, keen to support research and its current students. The project is grateful to in-kind support from the Islay Heritage charity and is pleased to contribute towards its mission of furthering knowledge about Islay's past and public engagement with archaeology. Thanks are also due to staff members at the University of Reading who have supported the organization of the fieldwork and production of this report, notably Sue Jones and Rachel Warner. Many Islay residents have generously given their time and advice, and encouraged the project. For 2017 particular thanks are due to Susan Campbell, Les Wilson, Lynn Wilson and Niall Colthart.

www.islayheritage.org | info@islayheritage.org

 /islayheritage  @islayheritage  @islayheritage