Loch nan Deala Crannog - Archaeological Evaluation, October 2019

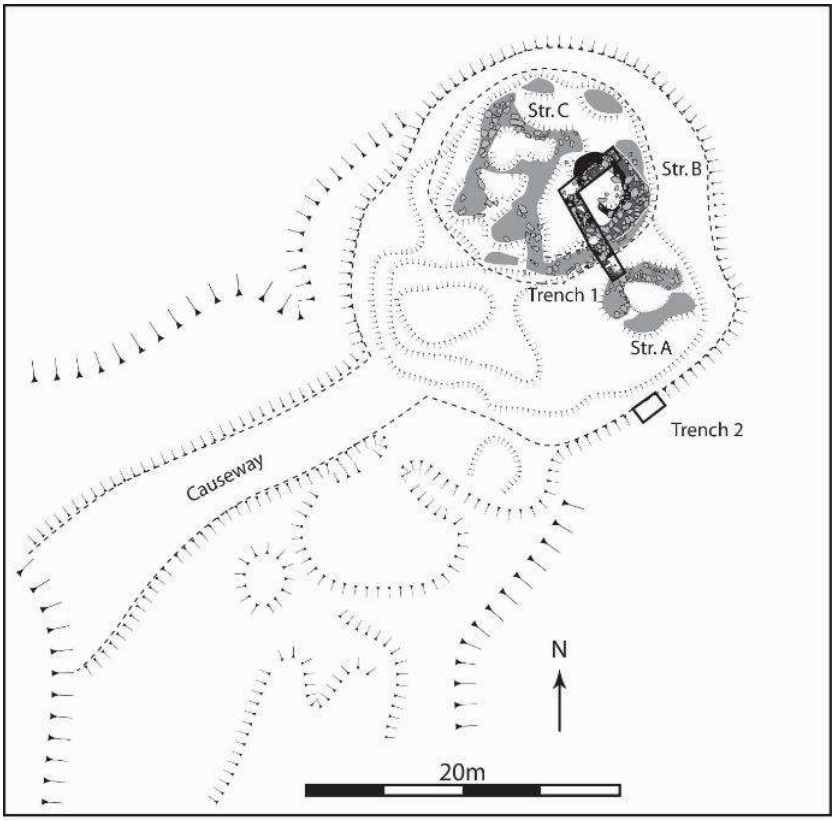
Crannogs are artificial islets constructed from timber, stone or a combination of materials. The earliest artificial stone islets we know of were constructed by the Early Neolithic settlers in the Western Isles almost 6000 years ago. In the Bronze Age raised timber structures and roundhouses were built on lochs in mainland Scotland and Ireland. In the Iron Age, some Hebridean crannogs become occupied by dry stone roundhouses of great complexity, including brochs and galleried duns. The ruins of these imposing structures were often reused in the later Iron Age and the Early Medieval period, although new crannogs may have also been built. In the Later Medieval times the islets become sites of castles, such as the one on Loch Gorm. At Finlaggan, a natural island of Eilean Mor and the adjacent artificial islet Eilean na Comhairle, occupied since the Iron Age, were developed into a unique political and spiritual centre of the Lords of the Isles. Several other known islet dwellings and crannogs on Islay are less well understood and their dating is either unsecure or completely unknown.

Loch nan Deala crannog from the air during the excavation. (Drone photo by Mr Billy Stitchell)

In early October Islay Heritage carried out archaeological evaluation at the site of a crannog in partly drained Loch nan Deala near Keills. This is the second time we come to this intriguing site having conducted detailed topographic and geophysical surveys in 2017 with the help of pupils and teachers from Keills and Small Isles Primary Schools as part of the Islay and Jura Primary School Project. We wanted to improve our understanding of this site following on from the surveys by the Royal Commission (RCAHMS) in the 1970s and archaeologist Mark W. Holley in the 1990s.

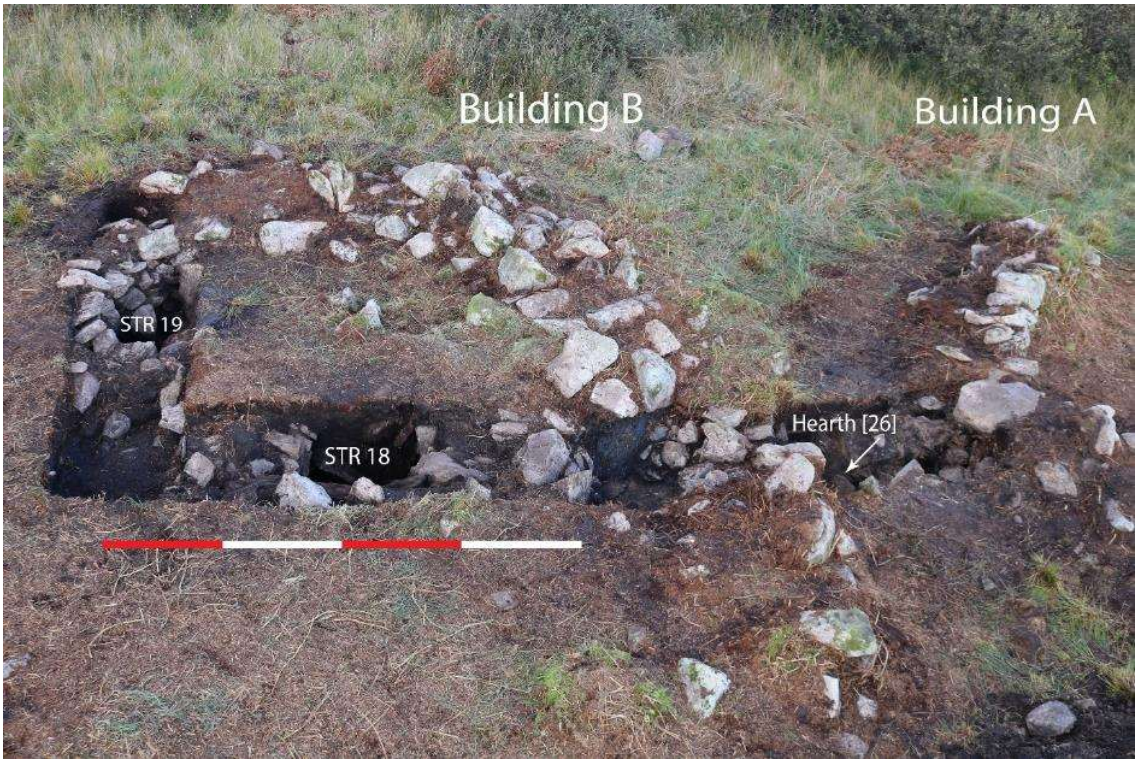
RCAHMS planned the remains of three stone buildings (A, B and C), which they thought were probably Later Medieval in date. Holley re-surveyed the islet confirming its artificial origin and obtained a radiocarbon date from an oak timber protruding from the causeway that originally connected the crannog to the shore. This oak timber produced a surprisingly early date in the late 6th/early 5th millennium BC, i.e. in the Mesolithic, when the structures like this are not known to have been made. He concluded that the timber is probably bog oak that was found and used by the crannog builders in later times. By the 1990s archaeologists were becoming aware of the Early Neolithic origins of crannogs in the Western Isles after the excavations at Loch Olabhat on North Uist by Ian Armit. Holley compared Loch nan Deala structures with those at Eilean Domhnuill crannog on Loch Olabhat and suggested that they could also be Early Neolithic in date. The exact date of the crannog and what it was used for, however, remained a mystery.

Our investigation this year, funded by the Society of Antiquaries of Scotland, was aimed at establishing: the dates of the construction and the occupation of the site; stratigraphic relationships between the structures; and the level of preservation of the remains of the crannog. Considering the Mesolithic date from the causeway was probably from reused bog oak, we needed secure samples from the actual occupation horizons and the deposits predating and contemporary with the construction of the crannog and the structures that were built on it. This, we could only obtain by excavation. In addition, we have teamed up with the archaeological scientists from the Universities of Reading and Southampton, who have been coring peat deposits at Loch nan Deala and other lochs on Islay in order to reconstruct environmental history of the island during various times since the last Ice Age by looking at varied types of evidence preserved in the peat, such as pollen, tephra and ancient DNA.



Plan of the crannog showing the location of the trenches in relation to the structures visible on the surface.

On the crannog itself we have excavated two trenches. Trench 1 was L-shaped and ran from the outer face of the southernmost 'Building A' across the south wall and the interior of 'Building B', with a dog leg towards its eastern wall. This revealed a complex sequence of deposits and structures in which 'Building A' was shown to be earlier than 'Building B'. A hearth was discovered and partially excavated directly under the wall of 'Building B'. The interior of 'Building B' was occupied by at least two cellular subterranean structures (STR13 and STR18), which were the latest of three different phases of construction identified within this building. These contained rubble and timber from the collapsed roofs, but were not bottomed due to tight space and the rising water. 'Building C' was not investigated by excavation, but a rather smart polished stone tool, shaped by use wear all around its edges, was found on top of its wall during the survey. Having studied the digital survey results and the geophysics from 2017, to which we added photogrammetric survey in 2019, we now think that 'Buildings B and C' may not have been two distinct structures. Instead they may represent a series of smaller cellular spaces similar to structures STR13 and STR18, which were all inserted inside one larger earlier building, possibly a roundhouse. Further excavation is needed to test this hypothesis further.



Trench 1 from the east showing structures discussed in the text

Cellular structure STR13 showing collapsed corbelled roof

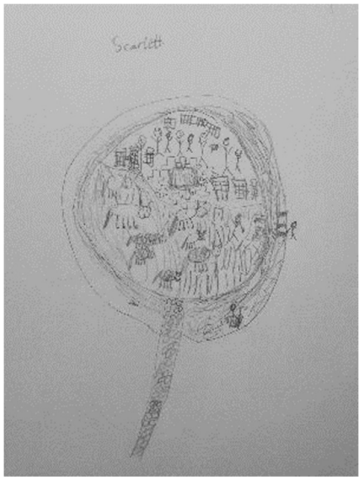
Cellular structure STR18 showing in situ part of the timber roof support

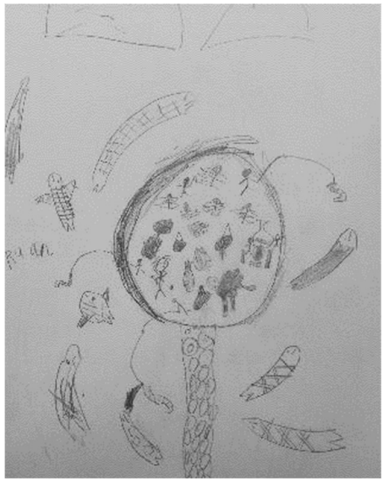
Trench 2 was a smaller rectangular trench positioned against the southern edge of the perimeter wall of the crannog. The wall was constructed in several courses overlying possible earlier structure, a midden layer and the underlying peat. We don't know whether the wall in Trench 2 represents the earliest phase of construction of the crannog or a subsequent enlargement. Nevertheless, with the samples taken from all parts of the stratigraphic sequence we will hopefully be able to finally piece together chronology of the crannog in the forthcoming months. As part of the post-excavation analysis we are processing the soil samples and identifying the most suitable charcoal specimens to submit for the radiocarbon dating. Unlike the oak timber, which may be many hundreds or even thousands of years old by the time it gets used or reused, we are searching for short-lived organic samples such as charred seeds, hazelnut shells or very young twigs, which are more likely to provide the age of the deposits they come from.

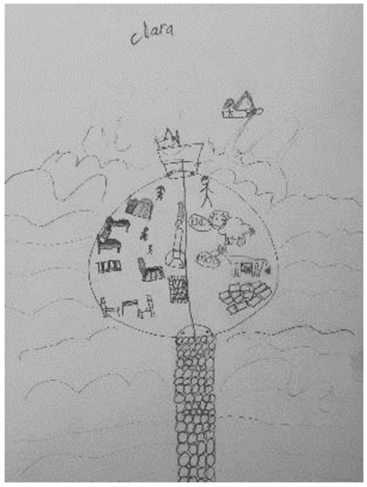
Southern perimeter or retaining wall of the crannog with Trench 1 visible in the background.

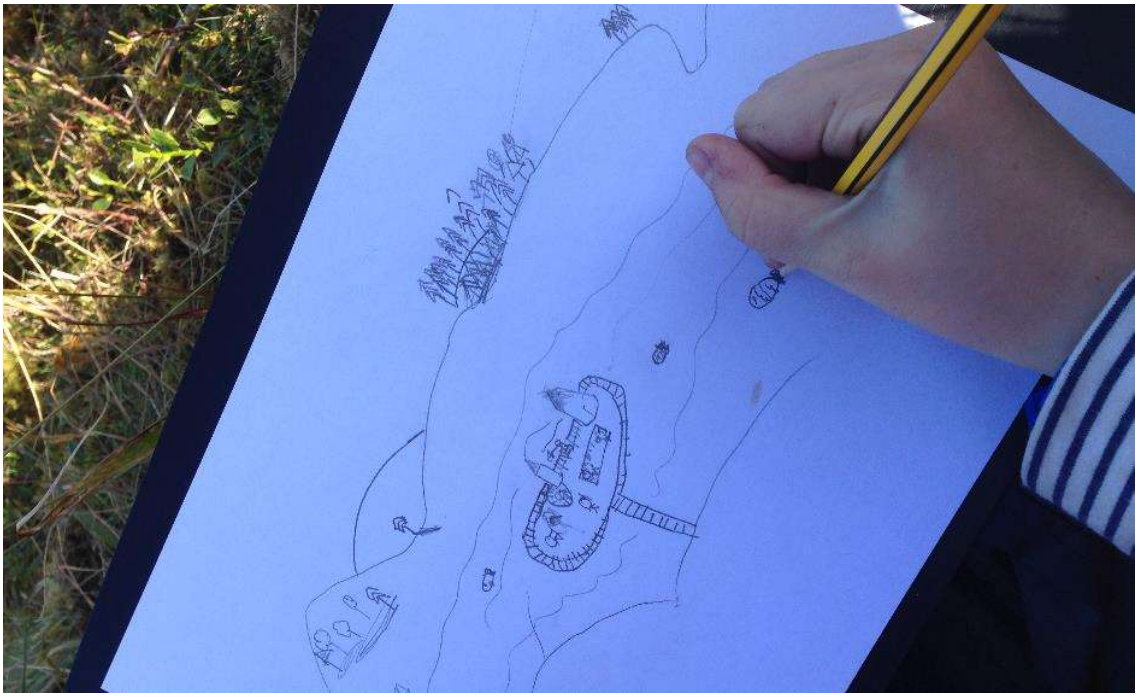
Trench 2 showing crannog perimeter wall on top of earlier stone structure on the left hand side and sedimentary DNA samples being taken from the sequence below the wall.

Once again we were joined on site by the children and teachers from Keills Primary School, who became the archaeologists for a day and took part in digging, survey, drawing and photography. Port Charlotte Primary pupils also visited the site and showed us some amazing crannog models they made.









Keills Primary School children at work on the crannog (top) and some of their fantastic reconstruction drawings (below).

Port Charlotte Primary School visit to the site

We hope that the project will grow and lead to a larger excavation! It is clear that we have only just scratched the surface and that the crannog holds many secrets still to be uncovered. We will be waiting excitingly to find out what sort of dates we get back from the labs. Loch nan Deala is the first islet settlement on Islay other than Finlaggan to be investigated by excavation. The dating of the crannog will be incredibly informative for the archaeology of the island and the wider region whatever the dates turn out to be. There are several exciting possibilities that the dates could unravel and the surprises are certainly possible. Could we have the first Neolithic islet settlement outside the Western Isles or an Iron Age roundhouse perhaps? Was there a medieval settlement on Loch nan Deala, which we could compare to the high status site such as Finlaggan? The evaluation has already shown that there is more than one phase of construction and occupation, so there is a possibility that the crannog spans more than one of these periods, which would perhaps be the most exciting and archaeologically the most valuable outcome.

We are grateful to the Society of Antiquaries of Scotland for the grant, which enabled us to continue this project and to the Dunlossit Estate for the permission and support in carrying out the fieldwork.