

ROUSAY, ORKNEY: NABO FIELDSCHOOL

Orkney Gateway to the Atlantic (2011)

Dates: Arrive on Rousay June 22rd,
Depart Rousay July 21st

No. of Students: 10 probably 5 CUNY / 5 AGES, Bradford places dependant on application and gender mix for the accommodation.

Location: Rousay, Orkney

Cost: Your Travel to Rousay plus fee £1,280 for the four weeks on the island (£320 per week)

Inclusive of:

- Accommodation (on Rousay only).
- Food
- Transport
- Equipment
- Supervision
- Visits.



View of South Howe and Mid Howe Chambered Cairn Rousay.

Please note, you will be responsible for transport costs to Orkney and any accommodation required on Mainland, Orkney.

TRAINING PROGRAMME

Learning Aims

- the development of the students practical skills in excavation/survey techniques and methodologies.
- to enable the student to assess, at first hand, the nature of archaeological deposits and field monuments.
- to give the student experience in viewing the archaeological record at intra site, site, and inter site level.
- The field training will be supported by a programme of field trips and lectures.

Learning Objectives

Excavation (These *ARE* dependant on the available archaeology)

- The use of tools and surveying equipment, and their appropriate application.
- Experience of working effectively in a team.

- The identification of, and discrimination between archaeological deposits.
- An understanding of stratigraphic sequences.
- The recovery and on site recording of artefacts and environmental evidence.
- Archaeological recording.
- The interpretation of archaeological features and deposits.
- The ability to view the archaeological record at a wider level than the excavated context (intra site, site and inter site).



Definition of the Mid Howe Ditch

Field Survey (There *may* be a possibility of participating in survey work. This cannot be a guaranteed experience)

- The identification of archaeological monuments/landscape features.
- The recording of archaeological features.
- Landscape surveying methodologies.
- Detailed monument surveying methodologies.

LIVING CONDITIONS

The accommodation is near the pier. It is **basic** but adequate. The kitchen is small but reasonably well equipped. You will need to organise yourselves into a sandwich /lunch rota as the facilities **will not readily support individuals**. Both vegetarian and carnivore needs can be catered for, but remember that you will be living on an island, in a rural community, and that the range of foodstuffs available will be limited.

You will need to bring:

- Sleeping bag
- Warm clothes (many layers)
- Waterproofs
- 4 inch WHS pointing trowel (see Stuart)
- Work/gardening gloves
- Working boots, preferably steel toe-capped
- Sun block
- Mug with your name on it!
- Special medicines/toiletries

- A sense of humour
- Spending money

The Research Framework

This project combines targeted archaeological recording and sampling within a research led student-training programme. Coastal erosion sites together with landscape survey and selected excavation on Rousay, Wyre and Egilsay provide a resource to investigate long-term change from the Neolithic to the present. The long term aims of the project are to inform on human adaptation to changes in climate and environment influencing settlement sustainability and resilience over a long time period Neolithic to Late Norse, as well as cultural change due to contact and migration (such as the appearance in the archaeological record of Scandinavian culture in the Pictish / Norse transition).

The research objectives include the following:

- The extent and duration of settlement (South Howe for example appears to be a multiperiod settlement mound similar to that at Old Scatness excavated by the applicant 1995-2006).
- Targeted environmental and chronological sampling informing on changing or differences in resource exploitation and agricultural strategies.
- The identification of past land use; in particular the presence of buried or deep arable soils with signs of early soils with anthropogenic modification. (Such soils have been investigated by the applicant at Tofts Ness, Sanday; Old Scatness, Shetland and their presence was identified in 2009 in the adjacent field to Midhowe).
- The development of the landscape prior and post Broch settlement (the presence of long-lived settlements and the management of arable soils and other resources from the Neolithic onwards provides a concept of the inherited landscape).
- Targeted sampling of exposed deposits and test trenching of deposits from the Neolithic to the Medieval period. This will further our understanding of the social-economic development together with changes in contact, trade and migration influencing cultural change.

Research Context

Past work in the earlier half of the twentieth century at Rinyo, the excavation of chambered cairns including Midhowe, the excavation of Midhowe Broch and latterly the modeling of the Neolithic landscape by Renfrew together with the excavations at Westness demonstrate the archaeological wealth associated with the study area of Rousay, Egilsay and Wyre. This project provides the potential to build upon this earlier work in order to develop a greater understanding of the development of an island landscape from Neolithic colonisation and adaptation through to issues of the inherited landscape of the Broch builders of the Middle Iron Age and the settlement of Scandinavian peoples. This work will provide an island-based contrast to the research currently ongoing in the Neolithic World Heritage zone.

The identification of Neolithic and Bronze Age settlement and evidence for arable cultivation is seen as a major research strand. Renfrew's work suggested the

association of territories of good land parcels with each of the chambered cairns in the coastal zone extending from the pier on Rousay to Midhowe. Work at Tofts Ness, Sanday and elsewhere by the applicant has identified enhanced arable plots that surround Neolithic settlements. The identification of these plots is seen as being crucial in order to identify Neolithic settlement. In the same geographic zone the situation of brochs provides an Iron Age distribution of what may be regarded as elite settlements, however questions arise surrounding the density of this distribution and the resources that each of these sites were able to command. The nature of Scandinavian settlement in the later ninth and tenth centuries forms another research strand. The strength of such a landscape-based project is in being able to view the long term perspective through from the Neolithic to the Norse period to understand the adaptability and resilience of island societies and to produce an intelligible academic narrative that can also inform at a wider level the interested resident, schoolchild or visitor.

Summary of the Work Carried out in 2010

A team from the University of Bradford, Orkney College (UHI) and City University New York cleaned, recorded and sampled three sites as part of the *Orkney Gateway to the Atlantic Project*. The team included students in training as part of a NABO Field School, freelance archaeologists and academics from the University of Bradford and Orkney College (UHI). The project aims to investigate and record coastal sites in Rousay, Egilsay and Wyre which are threatened by rising sea levels and coastal erosion.

The Mound of Brough, or South Howe

The man-made mound at 'Brough', also known as South Howe, on the south west shore of Rousay contains an eroding Iron Age broch and houses. These structures seem to be overlain by late Norse buildings which in turn are overlain by 19th century middens. This broch is only a few hundred metres away from the broch of Midhowe (HY 33 SE2).

Coastal erosion has exposed the archaeological remains of a settlement mound that is surmounted by the ruins of the farm of Brough. The active area of erosion clearly extends for some seventy metres along the low cliff face and may extend even further. In the centre of the eroding area are the remains of walling which appears from its size and construction to be the outer wall and entrance passage of a broch. This wall survives to a height of 2.5m and varies in width from 4.2m at its base to just under 3m at its highest point. Erosion to the west of this structure appears to be recent, with a cove-like zone extending 2m inland. This zone contained orthostats and flagging. A second zone of active erosion appears some 20m to the east. Examination of this area of the cliff revealed a number of walls; their construction strongly suggests that these remains represent a later phase of settlement, probably dating to the later medieval or early post-medieval period.

The specific aim of the 2010 season at South Howe was the characterisation and examination of the potential of the surviving archaeology by tapestry excavation of the cliff exposure. This will provide an understanding of the sequence within an absolute chronological framework established by an AMS radiocarbon dating programme. Samples from the deposits will provide a palaeoeconomic dataset for the main settlement sequences.

The large expanse of exposed wall core that forms the apex of the visible mound was not cleaned and was left *in situ* in order to maintain the stability of the wall. Turf and slippage was removed to reveal the outer wall face and the exposed wall core. To the east of this truncated wall a wall face ran northwards; this wall face turned at right angles into a second wall that appeared to run westward into the mound and form the inner wall of a broch-like roundhouse. The north-oriented face is interpreted as the west side

of an entrance passage. The *in situ* remains of a broken lintel stub projected from this wall.

Midden containing 19th century pottery, probably originating from the farm of Brough at



Iron Age settlement exposed by coastal erosion at South Howe.

the summit of the mound, appeared to seal the interior of the broch. The broch seems to have suffered from one or more severe erosion events in the past and this material may represent re-deposition from *in situ* deposits at the top of the mound as a result of natural collapse, or midden tipped into earlier erosion events in the 19th century. This area was not excavated and requires further

investigation to resolve the depositional sequence.

The elevations of the eroding cliff sections were recorded in both colour and black and white, using a photogrammetric method. A series of overlapping photographs was taken, with geo-referenced markers placed within each frame. Each photograph was taken with a 50mm standard lens at a set height and distance from the section.

This season formed Stage 1 of several years projected work on these exposed remains. Data from this investigation will contribute to the wider research agenda of the *Orkney Gateway to the Atlantic Project*.

The ditch north-east of Midhowe

A Fluxgate Gradiometry survey of the area northeast of the guardianship boundary of the Midhowe Broch by staff and students of Orkney College (UHI) demonstrated a clear magnetic anomaly running northeast for some 50m and then turning in a south-southeast direction. The strength of the anomaly was high, although the data suggested that this was a ditch-like feature of anthropogenic origin.

An assessment trench measuring 9.55m by 2.8m, was machine-cut across the anomaly. When excavated, the ditch contained little in the way of cultural evidence, with no artefacts to suggest an infill date. Its direction and orientation within the initial survey suggested a possible association with the Midhowe Chambered Cairn. Further geophysical survey after the excavation indicated that the ditch did not continue, but suggested that it turned to form a small enclosure. The infill sequence suggests material being deposited from the northwest. The near uniform nature of the stone within the greater part of the ditch fill is significant. In size it corresponds to the type of stone seen in prehistoric clearance cairns. One possibility is that this ditch represents a field division associated with the broch, possibly designed to contain cattle. The presence of deeper arable soils recorded to the north-west might add weight to this interpretation.

The Knowe of Swandro

The Knowe of Swandro was also thought to be Iron Age in date. The site consists of a mound with obvious stone inclusions which is situated immediately behind a boulder beach on the Bay of Swandro, close to the Norse house site known as Westness (HY32 NE17). It was described by RCAHMS in 1946 as 'the much disturbed remains of a stony mound.' Visual examination prior to this season's excavations suggested that the mound is subject to coastal erosion.

The objectives for the 2010 season's work at the Knowe of Swandro were firstly to locate a reported earlier excavation trench and secondly to attempt to characterise the mound, which has been variously described as a broch, a 'mutilated turf-covered mound' (OS 1967) and a 'stony mound'. Evidence of erosion along the back of the boulder beach dictated investigation of this area also, to characterise the extent of the site and the seriousness of the threat. In the event, the planned investigation extended further onto the beach rather than along the coastline as it became obvious that the site itself extended under the storm beach towards the tide line.

A small trench, 2.5m x 8m, was opened across the SE end of the curving bank and hollow on the top of the mound. After cleaning, a complex series of features was revealed. The hollow centre of the mound, which had appeared to be the result of earlier



A prehistoric structure emerges from the beach at Swandro.

investigations, seems not to have been disturbed; there was a fine and even layer of shillet sealing this area which appeared to be a weathering deposit. A tumble of rocks sealed the shillet and butted a stone feature which appeared to be structural and may be a partially destroyed length of wall. Two other small stone features may also be fragments of walling but this cannot be determined without more extensive excavation. There was an area of paving composed of large, flat worn stones in the east of the trench. This was sealed by a small patch of limpet midden in the NE corner. The very top of an

orthostat was visible in the SE corner of the trench.

As it was clear that these contexts formed part of larger features which would not be comprehensible unless a much greater proportion was visible, none of these contexts were excavated further. The area was cleaned, planned and photographed and the contexts recorded. However, some conclusions can be drawn. There are a number of phases to this part of the mound and the presence of worn paving at the very top of the sequence, sealing or butting an earlier wall, suggests that the site is composed of more than a single structure. The presence of the undisturbed shillet suggests that wherever the earlier investigations were located, the hollow area is not the result of this but rather represents a weathering layer over undisturbed contexts.

The tops of a series of orthostats had been noted among the boulders and shingle of the storm beach and appeared to be a hitherto unrecognised part of the site. Investigation of these features completely changed the interpretation of the mound. An area approximately 5 x 6m stretching from the erosion bank at the top of the storm beach

down towards the sea was cleared of boulders, shingle and sand. The orthostats, which had appeared level with the boulders and shingle, proved to survive to a height of at least 50cm and appeared to form the backs and sides of three cells of a curving dry stone structure, whose projected centre was somewhere below the current high tide mark. The largest cell, to the east of the feature, contained several phases of paving and to have paving laid in front of a long dressed kerb stone which formed the front of the cell. The two smaller cells to the west also retained areas of paving and patches of ash rich midden survived between and on top of the stones, even though the tops of the orthostats were worn and battered by the action of the boulders. This midden produced well preserved bone and pottery which on initial examination appears to be of late Bronze Age or early Iron Age date. The structure appears to continue towards the high tide mark and indeed lies well within the area of the spring tides and of storm events, as the presence of the boulder beach demonstrates. The back of the structure was sealed by more midden of a later date, which appeared to be earlier than the features investigated at the top of the mound, although this cannot be confirmed without further investigation.

Bulk samples were taken from the midden contexts within the structure and are being processed. The charred plant remains and animal bones will provide palaeoeconomic information and also radiocarbon dates.

After recording, the excavated beach area was consolidated with geotextile, sandbags and boulders, whilst the area at the top of the mound was backfilled and returned.