



Editors:  
Elizabeth Wright & Matt Law

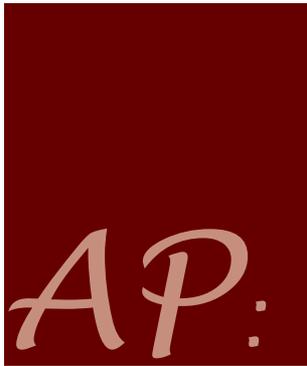
AP:

*Online Journal in Public Archaeology*

*The How and Why of  
Archaeology Outreach*



Editors:  
Elizabeth Wright and Matt Law



[www.arqueologiapublica.es](http://www.arqueologiapublica.es)

*Online Journal in Public Archaeology*

*The How and Why of  
Archaeology Outreach*

AP: Online Journal in Public Archaeology is edited by JAS Arqueología S.L.U.

# INDEX

<b>INTRODUCTION</b>	1
Elizabeth Wright and Matt Law	
<b>Community Rescue: <i>Saving sites from the sea</i></b>	5
Tom Dawson	
<b>Public Archaeology and Memory at The Hive, Worcester 2008 to 2012: <i>A case study of reflexive approaches to community engagement</i></b>	43
Justin Hughes	
<b>Back to the Future? <i>Presenting archaeology at the Green Man Festival</i></b>	57
Matt Law, Ffyon Reynolds & Jacqui Mulville	
<b>Can 3000 schoolchildren make history? <i>How to involve a community in exploring its late medieval roots; field report from an ongoing slow archaeology project</i></b>	69
Anne Traaholt & B. Kjartan Fønsteilen	

**Community Rescue:  
Saving sites from the sea**

Tom DAWSON  
*University of St Andrews and the SCAPE Trust*

**Abstract**

*Erosion threatens coastal sites around the globe and Scotland has been pioneering a methodology of community action that brings local groups and professional together to work at sites before they are destroyed. This builds upon the Historic Scotland rapid coastal surveys and the follow-up analysis of collected data to prioritise action. Projects such as Shorewatch and the Scotland's Coastal Heritage at Risk Project (SCHARP) have seen communities update records and participate in practical work. This paper presents the background to these community initiatives, giving details of two projects; the excavation of an Iron Age Wheelhouse in the Hebrides and the relocation of Bronze Age structures in Shetland.*

**Keywords**

*SCAPE, Coastal Heritage, Community Monitoring, Archaeology*

**Introduction**

Members of local communities can play a crucial role in the management and rescue of information from sites that are threatened with destruction. Using examples from pioneering work in Scotland, this paper discusses a very real and necessary contribution, without which much archaeological evidence would have been lost, unrecorded. Through such projects as Shorewatch and SCHARP (Scotland's Coastal Heritage at Risk Project), individuals and community groups have located and recorded sites; selected locally-valued places for further work; undertaken community rescue excavations; and worked on interpretive material to inform a wider audience. In some cases, groups have even moved sites in order to save them from the sea.

## **The problem: coastal erosion**

Hundreds of unrecorded archaeological sites are being damaged or destroyed each year. Thousands more are gravely threatened; yet legal protection will not save them and they are not covered by planning guidance. These sites are on the coast, and many are in a remarkable state of preservation due to the way they were abandoned and buried. This is particularly true in areas where sand has inundated structures, leaving walls standing to almost full height. The sand has protected the remains from the elements and prevented stone robbing. However, recent sediment loss along soft coastlines means that this protective cover is being eroded, and sites that have remained hidden for hundreds or even thousands of years are being exposed. Once uncovered, they are vulnerable to damage or complete destruction.

This is a problem that affects sites around the entire world. Although climate scientists predict accelerated change at the coast due to rising sea levels and other factors (IPCC 2007), coastal erosion and accretion are natural processes, and evidence shows that there is a long history of coastal change. Famous examples of sites revealed at the coast edge include Skara Brae in Orkney, uncovered in 1850 during a storm; and Jarlshof in Shetland, exposed at the end of the 19th century.

Erosion threatens more than just archaeological sites: legions of coastal planners have devised strategies for dealing with a problem that is expected to increase as sea levels rise and storms intensify. They have prepared Shoreline Management Plans, recommending actions which range from building coastal defences to an approach of no active intervention or even managed retreat. Options are usually based on economic considerations and it is less common for a cultural heritage asset to be protected unless the site itself is a significant driver within the economy. The lack of action has left thousands of archaeological sites vulnerable, the large majority of which have unknown and untapped potential.

The problem is particularly grave in Scotland (Barclay 1997:17), which has the second longest coastline in Europe, much of which is threatened by erosion. It is in Scotland that a pioneering approach to working with threatened sites has been developed. The methodology brings community groups together with heritage managers and

archaeologists through projects such as Shorewatch and SCHARP. Local knowledge is used to enhance and update records so that management options are based upon the most recent information and the concept of public value is harnessed to make decisions about where to expend scant resources. Groups are also involved in community rescue projects, working with archaeologists at sites that are considered important locally.

Although still early days, the Scottish approach is starting to be adopted more widely: for example, the various Arfordir projects in Wales have developed from the Scottish Shorewatch model (Graham 2011; Meek 2010).

### **Rates of erosion**

The problem of erosion can be especially severe along 'softer' coastlines, for example, areas of sand or mud. A study, undertaken on behalf of Scottish Natural Heritage, of the sand dunes of Coll and Tiree noted that some beaches, such as Traigh Thodhrasdail, had retreated by 100 metres in 100 years (Dawson 1999:5). This does not equate to a steady one metre loss per year, however, as erosion does not occur at a constant speed. The coast edge may show little change for decades and then be radically altered by a single event that causes the coast to retreat and destroys entire archaeological sites. Storms pose one of the greatest threats: strong winds blowing from a particular direction combined with high spring tides, can lead to a remarkable amount of damage. A storm that hit the Western Isles in January 2005 had a very localised effect, with some areas relatively unchanged while neighbouring stretches of coast edge retreated by up to fifty metres in a single night (as indicated by analysis of aerial photographs and fieldwork conducted by the author).

### **Coastal Zone Assessment Surveys**

To help inform management options, Historic Scotland (HS), an agency of the Scottish Government now called Historic Environment Scotland, has been mapping the threat to cultural heritage from erosion through a programme of rapid coastal surveys. The

Scottish programme of Coastal Zone Assessment Surveys (CZAS) was originally modelled on surveys of the coast of Wales, initiated by Cadw and undertaken by the Welsh Archaeological Trusts between 1993 and 1998 (Davidson 2002). The Scottish surveys gathered data on the sites located, noted their condition and made recommendations for further work. In addition, the geology and geomorphology of the coast and the erosion class as observed on the day of survey was also recorded. The SCAPE Trust (Scottish Coastal Archaeology and the Problem of Erosion) started managing the surveys on behalf of HS in 2000, and suggested changes to survey methodology (Dawson 2008).

Each year, new surveys were completed and a growing body of data collected. The enormous length of the Scottish coast, however, meant that much remained to be recorded. There was recognition that the original surveys could become out-of-date before the survey programme was completed, and in 2010, SCAPE and St Andrews researchers analysed all records. The data from the 28 completed surveys was standardised and the subsequent analysis, using a Geographical Information System, showed that 5,000 km of the Scottish coast that had been explored (Dawson 2013; Dawson 2015). Over 12,000 sites had been plotted, more than 30% of which were previously unrecorded. Over 3,700 of these sites carried a recommendation for further work from the surveyors.

## **Prioritisation**

The analysis showed that the majority of the recommendations presented within the CZAS had not been pursued, partly because the large number of sites outstripped the resources available. As it was not possible to work on all sites, a prioritised list was needed. SCAPE and St Andrews University worked on the prioritisation project with partners that including Historic Scotland and the Local Authority Archaeologists. Analysing each site individually, they whittled down the list so that scant resources could be targeted at the most severely threatened places which also had a high archaeological potential. The project (Dawson 2010) led to the production of a list of 1,115 priority sites, based upon the evidence contained within the original survey.

This last point is important; by definition, the original surveys were rapid. There was recognition that the interpretation of the surveyors may have been mistaken, especially in cases where people were being sent to a remote stretch of coast for the first time. In addition, things can change rapidly at the coast. A way of collecting up-to-date and accurate information was needed and it was recognised that the use of local knowledge to update data would substantially enhance records, allowing mistakes to be corrected and new information added. Another advantage was that local group members are able to visit sites regularly, noting changes to known sites and locating new ones, especially after storms.

### **Shorewatch recording**

The use of community groups to help gather information about coastal archaeology was already being piloted in Scotland through the Shorewatch Project. Initiated by Historic Scotland, it was originally run by the Council for Scottish Archaeology and has been coordinated by SCAPE since 2001 (Fraser, Gilmour and Dawson 2003). Shorewatch encourages communities around the Scottish coast to locate, monitor and record archaeological sites. The project is open to all, and recording forms are available from the project website, together with details of how to record sites. Local groups are asked to send in their sketch drawings and written records, but it was found that their photographs were especially useful, as these highlighted changes, especially when a series had been taken over a period of time from the same spot.

The Shorewatch project was successful in engaging communities, but one lesson learned was that groups became frustrated if simply asked to monitor a site as it decayed over the years. In some cases, there would be no difference between visits, but if there had been a change, it could be devastating, with large parts of the site damaged or destroyed. The groups would photograph the remains, draw sections and plot the position of the coast edge, but in many cases, they were basically recording the demise of the site. Some groups wanted to become more actively involved in rescuing information before it was too late.

## **Shorewatch practical projects**

The desire to do more at severely threatened sites led to the initiation of several Shorewatch community rescue projects. In each case, it was the local group that expressed the desire to undertake a more detailed project. Although SCAPE took the lead in managing the projects, particularly the finances, the work was collaborative and inclusive and could not have started without the involvement of the local groups. If the projects had not been undertaken, the sites would have remained vulnerable to damage. This is graphically demonstrated by the destruction of one site excavated through a Shorewatch project. Before the excavation, nothing was known about the site as it was buried within a dune. Thanks to the community dig (Figure 1), the oldest surviving building in Brora was revealed, albeit briefly, and recorded before being destroyed during storms in the winter of 2012/13 (Figure 2).



Figure 1: The salt pans at Brora, revealed during a community excavation involving the Clyne Heritage Society.



Figure 2: The salt pans one year later; undercut during a storm which caused the building to collapse onto the beach.

A range of community projects have been undertaken, all involving some archaeological excavation. In order to highlight the different ambitions and desires of the groups, examples of two very different projects undertaken as part of Shorewatch are presented here.

### **Baile Sear, North Uist**

#### *The storm*

On the night of the 11<sup>th</sup> January 2005, a severe storm associated with a deep depression passed to the north of Scotland (Wolf 2007). Winds gusting to hurricane force hit the Western Isles, claiming the lives of five people from one South Uist family. The sea was pushed far inland, damaging many roads and buildings and eroding much of the coastline. In some places, the coast edge retreated by up to

fifty metres, as happened along parts of the coast of the tidal island of Baile Sear, west of North Uist.

For weeks afterwards, the beaches were littered with prehistoric pottery and animal bone, and piles of stone indicated where prehistoric buildings had collapsed from the coast edge. A newly established heritage group in North Uist, Access Archaeology, became concerned about eroding structures at two places along Baile Sear's beaches. One site, A' Cheardach Ruadh (NF 7763 6157), had seen limited excavation in the past, although the storm had completely destroyed the structures recorded by Barber in 1984 (Barber 2003) and the site of the burials excavated subsequently (Armit 1993; MacLeod 2001).

The other site, Sloc Sàbhaidh (NF 7823 6085), had been described by the antiquarian Erskine Beveridge (1911) as a sand hill containing shells, bones, a saddle quern and pottery. In 1987, the Scottish Central Excavation Unit surveyed the area and noted midden material (Barber 2003). However, the first report of any structures was made by the members of Access Archaeology after their post-storm visit in 2005. They contacted SCAPE, sending in photographs of collapsed masonry and upright stones protruding from the beach cobbles and sand (Figure 3).

### *Evaluation at Baile Sear*

An initial survey was carried out in January 2005 by members of the local group and the SCAPE Trust, and several follow-up surveys were conducted throughout the year. Local volunteers were taught how to draw detailed plans and sections at various scales, and used a Total Station Theodolite to plot the position of the coast edge and exposed masonry. Access Archaeology members continued to monitor and record the site after completion of the fieldwork, and photographed the site on a regular basis. They sent their records and images to St Andrews to allow assessments of change to the coast edge and archaeological remains. The photographs and recurrent surveys indicated that the site was eroding rapidly, and between August and December 2005, a four metre-wide strip of the site was lost as the coastline receded (Stentoft et al 2007).



Figure 3: Some members of Access Archaeology visiting Baile Sear after the storm.

The local group members were concerned that the site was being destroyed, and expressed the view that simply recording this process was not an adequate response. They wanted to rescue information about the site itself, not plot how much had been lost between surveys.

A project design was prepared and funding obtained to undertake an evaluation excavation. In early autumn 2006, local volunteers worked alongside professional archaeologists to characterise the eroding remains. Four evaluation trenches revealed dry stone structures buried below the beach deposits, together with extensive areas of midden containing Iron Age material. The southernmost of the four trenches was positioned adjacent to the upright stones exposed on the beach, revealing a number of walls. Excavation of a trench c. 100m to the north exposed an arc of curving dry stone wall, over one metre wide. At the end of the evaluation, the walls were protected with sandbags and the trenches backfilled, but group members reported further storm damage during the winter. The upright stones were washed away and further stretches of wall were exposed nearby.

Based on the results of the evaluation, the local group worked with SCAPE to develop plans for a larger-scale project. Over and above the specific research aims of the excavation, the project aimed to:

- rescue as much archaeological information from the most severely eroding parts of the site as possible before its destruction.
- involve local volunteers in a practical project in order to provide training and raise awareness of coastal archaeology and the problem of erosion.

A successful funding application was made to Historic Scotland to undertake the community rescue excavation and the first season of work was undertaken in 2007. This was followed by two more seasons (2008 and 2010), again with the support of Historic Scotland. An experimental model of community rescue was developed, with local group members and professional archaeologists working together to save information from the rapidly eroding site.

*General considerations when excavating coastal sites*

A prime consideration when planning an excavation at an eroding site is to avoid exacerbating the problem. In the Western Isles, it is not only the sea that causes damage, but the wind (Angus and Elliot 1992). Aeolian erosion, often caused by the movement of dry sand after the vegetation cover has been removed, can lead to large holes, or blowouts, being created in the dunes (Barber 2011). The west coast of much of the Outer Hebrides is formed of machair, one of the rarest habitats in Europe and found only in the north and west of Britain and Ireland. It consists of thick deposits of windblown sand covered by a rich, cultivated dune pasture (Ritchie 1976). The sand has a high shell content, allowing it to support a variety of plants and making it a favoured place for small-scale farming. From the point of view of an archaeologist, machair sands allow organic material, such as bone, to be preserved in remarkable condition.

Almost half of Scotland's machair landscapes are found in the Outer Hebrides, and on Baile Sear, crofters were growing crops on some parts and using other parts for grazing. There was a justifiable fear amongst crofters that disturbing the vegetation could lead to the formation of craters. They were also worried that excavation could destabilise the coast edge, causing an increased rate of erosion. Before the excavation started, there were discussions with the crofters (who often work together in local committees) on how best to prevent the loss of land in the vicinity of the site. It was agreed that excavation would avoid any vegetated areas and would be limited to the actively eroding foreshore.

Limiting the excavation area to the beach presented logistical problems. In Scotland, the tide not only comes in and out during the day, but the influence of the moon makes its height vary over the month. The two trenches were positioned over archaeological structures located during the evaluation that survived in the area between the Mean High Water Mark and the coast edge. This meant that the dig was beyond the reach of the sea for most of the fieldwork season. The overburden (which was several metres thick closer to the coast edge due to the steep profile of the beach) was removed by a mechanical digger and the spoil used to construct a barrier around the site to protect it from high tides.

To ensure that our excavation did not increase the risk of erosion, we sought advice from the Integrated Coastal Zone Management Co-ordinator for the Western Isles Council. We had a second aim of preserving the archaeological remains, and at the end of the season, excavated surfaces and structures were covered with a geotextile membrane and protected with sandbags. A layer of sand was then deposited over the membrane by hand, after which the beach cobbles were replaced by mechanical excavator. We attempted, as far as possible, to restore the original profile of the cobble foreshore in order to eliminate weak spots in the coast edge that could be vulnerable to the sea.

Despite our efforts, we observed that the sea often drastically altered the profile of the beach, causing damage to the archaeological deposits. For example, the outer wall stood over one metre high when initially uncovered in 2006, but was reduced to foundation level by the start of the 2007 excavation, and was totally destroyed by 2008. Of greater concern was that the sandbags and geotextile were occasionally exposed and in some cases, washed away. As we did not wish to contribute to pollution or make the beach unsightly, we decided that protecting the archaeological site with man-made material was not beneficial and the structures were not covered with geotextile membrane or sandbags after the final season of excavation in 2010.

### *Archaeological results of the excavation*

The community rescue project revealed a site with huge archaeological value and it must be remembered that without the effort of Access Archaeology, this site would not have been excavated, but would have been destroyed unrecorded.

The two excavation areas revealed wheelhouses, large Iron Age structures found in the Western Isles and Shetland (Armit 2006). In order to overcome the problem of creating a roof in areas without much timber, a series of stone beehive roofs were supported on piers and the circular outer wall, creating a ring of corbelled cells radiating from a central space.

The excavation in Area 1 revealed part of the outer wall and five piers (MacDonald and McHardy 2008; McHardy and Rennell 2009;

Dawson 2011) and the prehistoric masonry survived to a height of 1.5m. The central area and outer cells had floor deposits consisting of layers of sand mixed with red peat ash. Below these layers were a number of pits, many containing huge amounts of animal bone, both burnt and unburned, and more pottery. At a later date, a change in the design of the structure was associated with the deposition of a rotary quern covered with cremated animal bone and a human mandible (Armit 2012). Subsequent to this, three successive hearths were built on top of each other, one of which was formed of baked clay with a cross inscribed into it. A second wheelhouse was revealed in Area 2 (MacDonald and McHardy 2008; McHardy and Rennell 2009), and although much of the structure had been damaged by erosion, evidence for piers, the outer wall, an entrance passageway and a 'guard cell' survived.

The excavation of the two areas produced over 5,000 sherds (60kg) of pottery, all dated stylistically to the Middle Iron Age (Johnson 2012) and 10,000 fragments of bone. Numerous artefacts, including bone combs, batons, pins and toggles were recovered and the assemblage was similar to that recovered from the wheelhouses of Cnip (Armit 2006) and Sollas (Campbell 1991).

### *Volunteer involvement*

The second, and arguably more important, aim of the project of providing training and raising awareness of coastal archaeology, was met through the programme of volunteer activity. The excavation was advertised locally and was open to all, attracting a large number of volunteers. In order to provide opportunities for people who worked during the week, the site was open at weekends. Some people were only able to attend irregularly, while others came every day that the excavation was in progress. Training was given to accommodate the varying levels of archaeological expertise and the availability of the volunteers, enabling people to build upon their skills.

Although this was a community rescue excavation, the highest possible archaeological excavation and recording standards were adhered to. The local group worked with specialist scientists and conservators, giving the volunteers exposure to archaeological specialists from a range of disciplines. For example, volunteers

helped with the lifting of the clay hearth (Figure 4) and the collection and recording of samples for optically stimulated luminescence (OSL) dating, obtained and analysed by Scottish Universities Environmental Research Centre (SUERC, Kinnaird et al 2012; Sanderson and Kinnaird 2011).



Figure 4: Local volunteer Kirsty helps the conservator lift the clay hearth.

All new volunteers were provided with a Health and Safety induction, followed by a tour of the site. The archaeological context of the site was explained and volunteers were briefed on the principles of stratigraphic excavation. They were then put to work alongside an existing team member and were taught the basics of archaeological investigation. Volunteers were introduced to a variety of techniques, depending upon the length of time that they stayed on the site. These included trowelling, finds recovery and the identification of archaeological features. Those who were able to participate in the excavation on a regular basis were also given instruction on drawing plans and sections and the completion of context sheets. Training was combined with regular briefings on the progress of the excavation to give volunteers an overview of what was happening elsewhere.

In order to increase skills and confidence, new and inexperienced volunteers were asked either to work on discrete features with clear edges or to excavate within one meter grid squares. Grid square excavation was employed for the 'floor' layers, as these were comprised of thousands of micro layers of mixed sand and peat which were impossible to excavate individually. Areas of midden were excavated in a similar way. 50 millimetre (mm) deep spits were excavated from each square unless an identifiable change of context was observed, thus providing a level of control for inexperienced excavators. The volunteers were continually supervised and in cases where the stratigraphic relationship between features was not clear, experienced excavators would work with the volunteers to resolve issues.

Although many of the volunteers had been involved in the project since it started in 2005, there were also a number of new volunteers each year. Articles in the local press meant that people learned more about discoveries with each passing season. In addition, the site's location on a beach that was popular with both locals and tourists meant that many people visited the excavation while out for a walk. Site tours were provided for visitors, some of whom returned to participate in the work alongside the regular volunteers (Figure 5).



Figure 5: Local group members excavating at Baile Sear; only one person in this image is a professional archaeologist.

Children were actively encouraged to take part in the project and a number of families worked together in the trenches. Some of the children were inspired to extend their involvement and continued to participate in the excavation without their parents. In such cases, they worked under continual adult supervision and some of the younger excavators were assigned to areas of eroding midden adjacent to the wheelhouse, partly due to Health and Safety considerations, as it kept them away from standing masonry. Working on the midden gave them the opportunity to find pottery and bone from less-sensitive archaeological deposits, and, as they were always working with a professional archaeologist and were counted as part of the team, they did not feel excluded.

Visits were arranged for children from the two local schools at Carinish and Paible and, each season, the classes were given a tour of the site. This included an explanation of the latest discoveries, artefact handling, discussions on how life in the Iron Age compared to their modern lives and demonstrations of archaeological techniques and the equipment used.

Some members of the community did not get directly involved in the excavation, but helped in other ways. Aerial photographs of the sites were taken by Annie MacDonald using a pole-mounted camera (Figure 6) and by Jac Volbeda from a kite camera. The resulting photographs were of high quality and were very useful during post excavation work.

A large number of art students from Taigh Chearsabhaigh Museum and Arts Centre in Lochmaddy also visited, gathering inspiration from the site and recording what they saw in unique and interesting ways. Some of the students returned for follow up visits (Figure 7). Video was also taken of the site, which included interviews with participants, and this was edited by some students to make short features.

After the dig was completed, local group members worked with locally-based archaeologists to process all of the samples, including flotation sieving and the sorting of residues. The Baile Sear project combined a high level of community involvement in a conventional rescue excavation, which was carried out to high scientific standards. Assemblages from the dig have been used by a number of researchers around the country and the results are

giving new insights into wheelhouse construction, chronology and the Middle Iron Age of the Western Isles in general.



Figure 6: Local volunteer Annie taking aerial photographs of the Baile Sear excavation with her pole camera.



Figure 7: Art students and archaeologists recording the site Baile Sear.

### **Bronze Age Bressay**

By comparison, a second Shorewatch community project had very different aims and objectives to the conventional excavation undertaken at Baile Sear. Again initiated by the local community, the Bronze Age Bressay project in Shetland looked to preserve a site rather than excavate it.

The island of Bressay is a short ferry trip across from Shetland's capital, Lerwick. On the coast edge below the Hill of Cruester, there was a large heap of fire-damaged stones, the eroding remnants of a Bronze Age burnt mound. Although such sites are relatively common throughout Britain and Ireland, the activities carried out at burnt mounds are uncertain. The mounds are often associated with a tank or trough and it is thought that stones were deliberately heated and then plunged into the water-filled tank. Theories for their use range from feasting sites, where large pieces of meat were boiled, to saunas, to places of industrial activity.

### *The Cruester burnt mound*

The eroding mound at Cruester (HU 4815 4232) was first recorded in 1933 (RCAHMS 1946) and the surveyors noted a beehive cell associated with the mound. When the Ordnance Survey revisited the site in 1964, the cell could not be found and it had perhaps fallen victim to erosion.

The site was again revisited as part of a project to identify vulnerable burnt mounds in Shetland (Moore and Wilson 1999). This led to a rescue excavation of parts of the Cruester Burnt Mound in 2000 (Moore and Wilson 2001; 2014). The excavation revealed that the Cruester mound was part of an elite group of monuments that contained rooms in addition to a tank. A series of cells were located, connected by two corridors arranged in an 'L' shape. At the end of one of the corridors was a sunken, stone-lined tank almost two metres long (Figure 8). At the other end was a 'kiln-like' cellular structure, thought to have been used for heating stones. The passageway that connected the two was inclined downwards from hearth to tank, perhaps to aid the movement of the hot stones to the water.



Figure 8: The stone-lined tank at Cruester, on the island of Bressay in Shetland.

The excavation attracted local attention and people visited the site to see what was being uncovered. After the completion of the dig, the cells were backfilled, the turf replaced and the site was restored as a grass-covered mound. However, the site was still prone to erosion and its location at the base of a steep hill meant that it was not easily accessible. Some local people thought that more could have been made of the site and a campaign was initiated to re-expose the monument so that it could act as a tourist destination. As local heritage group member Douglas Coutts explained in an interview on BBC Radio Scotland in 2011, 'when the dig was finished, the site was to be backfilled and abandoned to the sea. This upset the Bressay History Group, to think that they should lose this beautiful monument' (BBC Radio Scotland 2011).

#### *The Shorewatch project at Sandwick, Unst*

While discussions on the fate of the Cruester mound continued, another Shorewatch project was underway on Unst, the most northerly of the Shetland Isles. The first of four annual seasons of community excavation at Sandwick started in 2004 (Dawson, Lelong and Shearer 2011). Members of the Unst Archaeology Group worked at the eroding site with SCAPE and a team from GUARD (now Northlight Archaeology) to reveal a number of cellular Pictish structures. In the penultimate year, the Unst group decided that they wanted a legacy for their hard work after the excavation had finished. Desiring more than a simple display at their Heritage Centre, discussions focussed on rebuilding the walls of the excavated building. Inspiration for the group's idea undoubtedly came from work at Scatness in the south of Shetland, where a broch and other monuments were being consolidated and reconstructed (Dockrill et al 2009). However, the Unst group decided upon a novel approach, asking that the Sandwick structures be rebuilt in their original position. Although the local group realised that the structure would eventually be lost to erosion, they wanted the site to act as both a reminder and a warning about the threat to heritage from coastal erosion.

In 2007, the final year of the Unst project, the team was joined by the Adopt-a-Monument Scheme, coordinated by the Council for Scottish Archaeology (now Archaeology Scotland). Additionally, a specialist team of dry stone masons from the Scatness project was

contracted to work with local group members to rebuild the walls. They used the original stones as far as possible and based the reconstruction on the excavation plans and photographs. After the rebuilding had finished, the structures were capped with turf in order to help consolidate and preserve them until such time as the sea washes them away. As well as reconstructing the excavated site, the team members designed and erected interpretation boards while Shetland Islands Council built a parking area and installed way markers to guide visitors to the site and the beach beyond.

### *Project planning on Bressay*

The Unst project had featured on BBC TV's Coast programme and had received widespread local press coverage in the Shetland Times. Drawing inspiration from the project, some Bressay History Group members decided that they wanted to undertake a similar project. A site meeting was arranged between representatives of the group, the Shetland Amenity Trust, the landowner, SCAPE and Adopt-a-Monument. The visit showed that erosion was on-going and that the stone-lined tank and two corbelled cells were exposed on the beach. It was proposed that rather than leave the monument to fall victim to the sea, it should be moved to a site adjacent to the Bressay Heritage Centre, thus saving it from destruction and making it more accessible. There was much debate as to what should be saved. Some members of the local group only wanted to move the tank; others wanted the entire site to be transported. The local group included people with specialist skills, including an architect, and there was support from the local farmers, who would provide machinery. With this in mind, the group decided that the project was feasible and that the entire site should be moved.

The project required funding and a project management team was formed involving the Bressay History Group, SCAPE and Adopt-a-Monument. The SCAPE Trust took the lead on managing the reconstruction elements of the project, together with managing the budget; the Bressay History Group were responsible for organizing local input and the long term future of the site; Adopt-a-Monument managed the Education and Outreach programme.

The group drew up a detailed plan and timetable; project aims included:

- retrieving information from an archaeological site threatened with destruction and presenting the monument for display
- educating people about the importance of Shetland's past and the problem of coastal erosion
- equipping locals and volunteers with heritage and traditional skills
- increasing visitor numbers to Bressay and its Heritage Centre.

### *Funding and land purchase*

Funding applications were made to several sources, including the Heritage Lottery Fund; Shetland Islands Council; Highland and Islands Enterprise (HIE); and the Shetland Amenity Trust. Although most of the financial aspects of the project were managed by SCAPE, some of the locally-raised funding applications had to be submitted by the Bressay History Group, which meant that administration of the project finances fell to two organisations rather than one.

A plot adjacent to the Heritage Centre, which lies just by the island's pier and is a ten-minute ferry ride from Lerwick, had been identified by local group members for the reconstruction. The purchase of the land was left to the local group for two reasons; local politics and the fact that the group would ultimately own and be responsible for the reconstructed structure and so needed to own the land too. Purchasing the land proved more problematic than some group members had initially thought, but an agreement was eventually arranged and the Bressay Heritage Group paid for the land from funds raised from local funding partners.

### *Fieldwork*

The fieldwork commenced after the purchase of the land. The project was split between two locations, the site of the excavation and the reconstruction site. EASE Archaeology won the tender to re-excavate the burnt mound (Moore and Wilson 2008), while the Shetland-based masons who had worked at Sandwick, Jim Keddie and Rick Barton, were contracted to undertake the rebuilding work.

Work on the burnt mound started in June 2008. The initial focus was to uncover the structures at the excavation site and undertake

an electronic survey before the archaeological team arrived. Bressay History Group members worked with Adopt-a-Monument and SCAPE to clear spoil from the corridors, cells and tank. At the end of the 2000 excavation, geotextile membrane had been placed over walls and floors before the site was backfilled, meaning that it was relatively easy to remove spoil from the site, leaving unexcavated deposits unharmed. A mechanical digger was used where possible, but the small size of the cells and corridors meant that much of the backfill had to be cleared by hand and the digger was mainly used for transporting spoil away from the excavation. Once the site had been cleared, an electronic theodolite was used to create a digital plan of the structures which provided the data for marking out the area of the reconstruction.

Once the excavation proper started, some local group members worked with the archaeologists on the dig while others helped to prepare the reconstruction site. The structures within the burnt mound were not originally free standing, but had been built into the mound of stones. This gave the reconstruction team two choices, either move the mound of burnt stones to the reconstruction site and rebuild the structures within it; or dig a hole into a natural hillock on the plot next to the Heritage Centre. It was decided to excavate into the hillock and the irregular shape of the outer edge of the building was marked onto the ground using the electronic theodolite. Local Bressay contractors dug a precise hole within the painted lines, piling the freshly excavated bedrock to the side (Figure 9). The original structure was not only of irregular shape, but it was also built at varying levels, and this had to be taken into account when digging the hole. As the site was going to be built below ground level, a drainage channel was cut from the site to the sea.

At the excavation site, all walls were planned and photographed and every stone was numbered by members of the reconstruction team. The site was dismantled in two phases, with the simpler structures associated with the eastern corridor removed first. This left the hearth cell, tank and corbelled cells in place, giving the team a chance to familiarise themselves with new techniques before moving on to the more complicated elements of the site. The dismantling of the site was overseen by the reconstruction team and the three partner organisations and involved many local

volunteers, tractors, trailers and hoists (Figure 10). Neighbouring farmers helped lift the numbered stones, placing them on trailers so that they could be transported two km by road to the new location.



Figure 9: Precision digging within the painted lines at the reconstruction site, Cruester



Figure 10: Local volunteers helping to move stone from the original site, Cruester

At the Heritage Centre, the stones were placed number-side up so that the reconstruction team could locate them. The electronic theodolite was used to mark the position of the larger orthostats on the ground and sockets were drilled into the bedrock to accommodate the stones. The orthostats were then machine-lifted into position by the local contractor (Figure 11); and once they had been made secure, the stonemasons referred to elevations and photographs to rebuild the stretches of wall between them.



Figure 11: Volunteers work with contractors to place the orthostats in position.

When the eastern half of the monument had been rebuilt stone by stone, the remaining half was dismantled. This was a more challenging task, involving the dismantling of the tank, hearth cell and corbelled structures. A large number of volunteers helped to shift the stones, with volunteer numbers increasing because of growing awareness of the project. This was partly due to the weekly press releases, but also to the high visibility of the reconstruction work, located next to the ferry terminal car park. The reconstruction work was open to the public, and large numbers of people visited as the project progressed.

In just eight weeks, all elements of the original structure had been moved and rebuilt. In addition to reconstructing the site, another aim of the project had been to equip people with heritage and traditional skills. One way that this was achieved was through training sessions in dry stone wall building, with the masons using the stone that had been excavated when digging the hole to teach people building techniques. The lessons focussed on building a replica of the hearth cell, passageway and tank at the same size as the original structure. This replica of the structure was built on the same plot of land as the reconstruction.

#### *Presentation of the reconstruction*

The area around the finished reconstruction resembled a building site (Figure 12) and turf was placed over exposed bedrock and on the tops of walls to landscape the site. An area of land was levelled and prepared so that it could be used for Living History events and a gently-sloping path, wide enough for disabled access, was laid, stretching around the reconstruction from the car park (Figure 13). The site was launched in August 2008 by local MSP Tavish Scott, accompanied by experimental archaeology sessions within the replica; Bronze Age pottery classes; weaving and spinning demonstrations; and the making of prehistoric artefacts. The event received national press coverage, including a live interview on BBC Radio 4's Today Programme.



Figure 12: The reconstruction site during the project.



Figure 13: A similar view, less than one month later, showing the site after rebuilding was finished.

A report was written about the excavation (Moore and Wilson, 2014) and the information was used in interpretive material to inform people about the monument and about the problems of coastal erosion more generally. Members of the Bressay History Group were involved in the design of a leaflet, an outdoor display panel and several indoor panels within the Heritage Centre. Help was given by the Shetland Amenity Trust to ensure that the interpretation boards conformed to the local 'house' style adopted in the rest of Shetland. A project website widened access to information (<http://www.shorewatch.co.uk/cruester/>) and group members successfully applied for funding to produce an education pack for distribution to schools (Renwick, 2010). The site has also featured in public lectures, and on the television and radio, increasing awareness of both the project and of problems associated with coastal erosion. This included public talks given about the project by Douglas Coutts of the Bressay History Group, who has spoken at local and national conferences and has featured in TV and radio interviews.

The Bressay History Group, now custodian of the reconstruction and the replica, cares for their upkeep. A series of Open Days have featured Living History re-enactments and experimental archaeology sessions and a PhD candidate has been using the site to test theories on the activities undertaken at burnt mounds. Although the Bressay Heritage Centre is closed during the winter, the reconstruction is open all year round, allowing visitors to learn about the past and adding a visitor attraction to both Bressay and to Shetland as a whole.

### *Lessons learned*

Bronze Age Bressay was a relatively complex community heritage project. It was conducted by three organizations, each assigned different roles and responsibilities. Having several organizations working together meant that there was greater stability and each partner brought complementary skills. It also meant that if one member was struggling to fulfill elements of their assigned role, the other members of the team could step in. This happened in the latter stages of the project, after completion of the reconstruction work. The downside was that a heavier workload was placed on the other two partners than initially envisaged. However, the mix of

partners ensured that the project was completed according to plan and budget. In future projects, a more formal contract between partners would help ensure that each group has the capability to undertake the tasks assigned to it, and that resources are not diverted before the project ends.

Perhaps surprisingly, the single most expensive element of the entire project was the archaeological excavation. As the site had already been excavated, it could be argued that a detailed watching brief was all that was required and that resources could have been diverted elsewhere. However, the excavation was included in the project design in order to give local people the chance to participate in an archaeological dig. As it turned out, helping with the dismantling of the site attracted the most interest. This experience strongly suggests that with future projects of this sort, the desire for a community excavation should be fully evaluated.

Some Bressay History Group members noted that the project took much more effort and dedication than had been expected. They found that much tact and diplomacy was required within the local community in order to achieve goals and it was not always easy to coordinate tasks with volunteer availability. They also found that it was difficult to delegate some of the less interesting voluntary aspects of the project work. The group was able to attract a substantial level of local support, although it sometimes took a lot more organising than they had expected.

Bressay History Group members also noted that fund-raising was hard work, but in the final evaluation report, they commented that they had saved an important monument from the sea and had reconstructed and interpreted the site for future generations to enjoy. They also noted that the reconstructed mound had added an enhanced visitor experience to the Bressay Heritage Centre and that the monument and its interpretation inspired people to think about heritage.

The group saw the project as a success, despite the hard work. The project aimed to raise awareness of the problem of erosion and to rescue an archaeological site by working in partnership with a local community. Group members were involved in all aspects of the project, from the initial planning through to the launch of

the completed reconstruction and subsequent Open Days. The challenge of transporting the monument's large stones from the excavation area to the Heritage Centre was solved by the local group members, working in collaboration with heritage specialists. Using their own tractors and other machinery, the group members worked as a team to move the Bronze Age structure and help rebuild it. From being an eroding site with no future, the Cruester Burnt Mound is now a visitor attraction and vibrant educational resource.

### **The way forward – The Scotland's Coastal Heritage at Risk Project**

As shown above, Shorewatch projects have successfully engaged groups in recording sites at the coast, and have helped develop a model for community rescue. There have been lessons learned from both Shorewatch recording and practical projects, and these have been applied when developing SCAPE's latest initiative, the Scotland's Coastal Heritage at Risk Project (SCHARP). The project is a development of Shorewatch, and is taking as its basis the 12,000 sites recorded during the Coastal Zone Assessment Surveys and analysed during the prioritisation project. SCHARP has two elements, ShoreUpdate and ShoreDig.

*ShoreUpdate - asking the public to edit and enhance coastal survey data*

ShoreUpdate has evolved from Shorewatch recording. Participating local communities are being expressly asked to update the information already recorded. All sites recorded in the CZAS have been placed onto an interactive '*Sites at Risk*' map on the SCHARP project website (<http://www.scharp.co.uk/>). The map is available in both Bing and Google versions, which often allow different satellite views to be observed for the same area, which can be especially important for intertidal sites when a view at low tide is required.

The main focus of ShoreUpdate is to update information on the c. 1,000 priority sites, although information on all 12,000 sites is welcome. Users can zoom to an area and click on a dot (colour-coded according to priority) in order to bring up the original site record, together with links to other national on-line records (National

Monument Record of Scotland and local Sites and Monuments Record where available). Registration is free and is only required to prevent spam and to allow the project team to clarify ambiguous entries. Once registered, users have the option of editing the record. All fields can be altered, including the site name, type and description. The position of the site can be updated, and a cross-hair tool allows users to click the correct location on the map or satellite image in order to move a site. Once an entry has been altered, the user submits changes and the project team validates the information before making it live on the website. Some heritage professionals have voiced concern that the system will allow bogus records to be submitted, but the registration and validation process will make this very unlikely. In addition, changes made by the public do not alter the original record, but enhance it, so if bogus entries are detected, they can be removed.

#### *ShoreUpdate field surveys*

In addition to desk-top edits by the public, ShoreUpdate asks people to visit sites to report on their current condition. This information will help to redefine priorities, while giving an up-to-date picture of the coastal heritage resource. The original coastal surveys date back to the 1990s and much may have changed since then. In order to update the database and to reassign priority scores for destroyed sites, surveys that are unable to find anything can be as important as those that locate sites.

A recording form with site information and a map and satellite view can be downloaded from the website. The form has several basic questions, the majority of which are multiple choice to ease completion in the field. The form asks people to describe the condition of the monument, to say whether the recorder considers any further work to be necessary and asks whether the site is valued locally. The form prompts users to take several photographs of the site, as images are very helpful to assess the present condition and vulnerability of the site.

After a fieldtrip, the information can be quickly transferred to a digital mirror of the form, accessible on the website. Again, submissions are validated and then added to the existing site record, including images that have been sent in.

### *ShoreUpdate mobile apps*

In order to simplify field recording, Android and iOS apps have been developed that work on phones and tablets (Figure 14). Training videos showing the functionality of the apps can be accessed from the project website (<http://www.ssharp.co.uk/guidance/>). It has been found that some group members prefer to use tablets, as the typeface and size of the form is larger and easier to use. The mobile recording form contains buttons and drop-down lists to aid selection in the field and people can use their device's camera to take photographs and GPS to record location. Once the mobile version has been completed, it can either be uploaded immediately or saved for uploading when connected to wi-fi.

At present, not all tablets are able to work with a mobile signal (3G or 4G), and some remote coastal areas do not currently have mobile coverage. This situation will improve in the future, but in the meantime, the app allows forms and maps to be downloaded in advance for use in the field.

### *ShoreDig – practical projects at threatened sites*

The ShoreDig phase of SCHARP has been developed after working with community groups on other practical projects at eroding sites. Twelve sites highlighted by community groups as a result of the ShoreUpdate surveys will be selected for a range of follow-up work. The projects will take place at locally-valued places that have been put forward by the public. As seen from the two Shorewatch projects above, different communities have different desires for their threatened heritage. Some may want to excavate, others to protect or undertake interpretation projects. ShoreDig wants to embrace a range of different project types. In addition to the examples of projects presented above, projects could include a geophysical survey, the design of interpretation boards and trails or the creation of 3D digital reconstructions that users can explore by controlling avatars.

In order to inform communities about the range of archaeological and interpretive projects possible, and to help groups decide what they would like to do, a series of training events are being held around the country. A conference is also planned that will bring



Figure 14: Using the ShoreUpdate app to record coastal sites.

heritage professionals together with local groups so that new ideas can be explored.

SCHARP has funding for three years and twelve projects will be initiated. However, it is expected that other potential projects will be identified, and that SCHARP will be the seed that starts a wave of community rescue projects around Scotland and beyond.

## **Conclusion**

The challenges presented by coastal erosion are great, but the rewards can be greater. Many nationally important archaeological sites are vulnerable, sites that under normal circumstances would be legally protected and would very rarely present an opportunity for excavation. However, the imminent demise of some of these sites means that there is a chance to rescue information, but only if action is taken quickly. The public can act as the eyes and ears of heritage managers at the coast, informing heritage managers of sudden change, and highlighting sites which are about to be lost. They can also speak about sites that are relevant to them, about questions that they think are important. Working with community groups, archaeologists can refine priorities and take action at threatened sites, answering research questions at locations that would otherwise be destroyed. More importantly, they can work with communities, undertaking joint action that increases the relevance of archaeology within society and promotes awareness of threats to our built and cultural heritage.

We need to use our threatened sites or we will lose them; instead of being pessimistic about the loss of archaeological remains to coastal erosion, we should work together to make the most of the opportunities presented.

## **References**

Angus, S. and Elliot, M.M. 1992. Erosion in Scottish machair with particular reference to the Outer Hebrides. In: Carter, R.W.G. Curtis, T.G.F and Sheehy-Skeffington, M.J (eds.) *Coastal dunes:*

*geomorphology, ecology and management for conservation: Proceedings of the 3rd European Dune Congress Galway, Ireland, 17-21 June 1992.* A.A. Balkema, Rotterdam.

Armit, I. 1993. Baleshare, North Uist (N Uist parish): cist and middens, *Discovery and Excavation in Scotland*.

Armit, I. 2006. *Anatomy of an Iron Age Roundhouse: the Cnip Wheelhouse Excavations, Lewis*. The Society of Antiquaries of Scotland, Edinburgh.

Armit, I. 2012. *Headhunting and the Body in Iron Age Europe*. Cambridge University Press, Cambridge.

Barber, J. 2003. *Bronze Age Farms and Iron Age Farm Mounds of the Outer Hebrides*. Scottish Archaeological Internet Reports 3.

Barber, J. 2011. *Characterising Archaeology in Machair*, Scottish Archaeological Internet Reports 48.

Barclay, G.J. 1997. *State Funded Rescue Archaeology in Scotland: Past, Present and Future*. Historic Scotland Occasional Paper No 2. Historic Scotland, Edinburgh.

BBC Radio Scotland. 2011. Radio Scotland – Past Lives programme, interview with Douglas Coutts <http://www.bbc.co.uk/blogs/radioscotland/2011/09/welcome-to-bronze-age-bressay.shtml> accessed 18th Feb 2013.

Beveridge, E. 2001 [1911]. *North Uist: its Archaeology and Topography with Notes upon the Early History of the Outer Hebrides*. Birlinn, Edinburgh.

Campbell, E. 1991. Excavations of a Wheelhouse and other Iron Age Structures at Sollas, North Uist, by RJC Atkinson in 1957 *Proceedings of the Society of Antiquaries of Scotland*, Volume 121,117-174.

Davidson, A (ed.). 2002. *The Coastal Archaeology of Wales*. CBA Publications, York.

Dawson, A. 1999. *Assessment of Landform Change in Dune/Machair Systems of Coll and Tiree*. Scottish Natural Heritage, Perth.

Dawson, T., Lelong, O. and Shearer, I. 2011. *Local community groups and Aeolian archaeology: Shorewatch and the experience of the Shetland Community Archaeology Project*. Scottish Archaeological Internet Reports 48.

Dawson, T. 2008. *A review of the Coastal Zone Assessment Surveys of Scotland, 1996-2007: Methods and collected data*. Internal report for Historic Scotland, Edinburgh.

Dawson, T. 2010. *A system for prioritising action at archaeological sites recorded in the Coastal Zone Assessment Surveys*. Internal report for Historic Scotland, Edinburgh.

Dawson, T. 2011. *Baile Sear Community Excavation: Sloc Sabhaidh, Baile Sear, North Uist, Season 4 (2010)*. Data Structure Report for Historic Scotland, Edinburgh.

Dawson, T. 2015. Coastal erosion and archaeology in Scotland – managing a national problem, with examples from the Uists. *Journal of the North Atlantic*, Special Volume 9, 83-98.

Dawson, T. 2013. Erosion and coastal archaeology: Evaluating the threat and prioritising action. In: Daire, M.Y, Dupont, C, Baudry, A, Billard, C, Large, J.M, Lespez, L, Normand, E, and Scarre, C. (eds.) *Ancient Maritime Communities and the Relationship between People and Environment along the European Atlantic Coasts*. Archaeopress, Oxford.

Dockrill, S.J., Bond, J.M., Turner, V.E., Brown, L.D., Bashford, D.J., Cussans, J.E. and Nicholson, R.A. 2009. *Excavations at Old Scatness, Shetland Volume 1: The Pictish Village and Viking Settlement*. Shetland Heritage Publications, Lerwick.

Fraser, S.M., Gilmour, S. and Dawson, T. 2003. Shorewatch: Monitoring Scotland's Coastal Archaeology. In: Dawson, T (ed.) *Coastal Archaeology and Erosion in Scotland*. Historic Scotland, Edinburgh.

Graham, E. 2011. *Arfordir Coastal Heritage 2010-201: A report for Cadw*. GGAT Report 2011/019.

IPCC. 2007. Coastal Processes and Zones. In: *Climate Change 2007: Impacts, Adaptation and Vulnerability: Contribution*

*of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Section 1.3.3.* M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge.

Johnson, M. 2012. *Prehistoric Pottery Analysis, Baile Sear, North Uist, CFA Report No. 2010*, CFA Archaeology Ltd, Edinburgh

Kinnaird, T.C., Sanderson, D.C.W., Dawson, T. and Hamilton, D. 2012. *Luminescence dating of sediments from the Baile Sear Wheelhouse, North Uist: Final Report.* Scottish Universities Environmental Research Centre report, Glasgow.

MacDonald, K. and McHardy, I. 2008. *Baile Sear Community Archaeology Project. Sloc Sàbhaidh, Baile Sear, North Uist. Season 2 (2007) Data Structure Report.* Unpublished report: The SCAPE Trust and the University of St. Andrews.

MacLeod, M. 2001. *A' Cheardach Ruadh, Baile Sear, North Uist, Western Isles (North Uist parish), Iron Age burial. Discovery and Excavation in Scotland, New Series vol.2.*

McHardy, I. and Rennell, R. 2009. *Baile Sear Community Archaeology Project. Sloc Sàbhaidh, Baile Sear, North Uist. Season 3 (2008) Data Structure Report.* Unpublished report: The SCAPE Trust and the University of St. Andrews.

Meek, J. 2010. *Arfordir Coastal Heritage 2009-2010: A report for Cadw.* Dyfed Archaeological Trust Report 2010/23.

Moore, H. and Wilson, G. 1999. *Food for Thought; A survey of burnt mounds of Shetland and excavations at Tangwick.* Proceedings of the Society of Antiquaries of Scotland, Volume 129:203-237, Edinburgh.

Moore, H. and Wilson, G. 2001. *Cruester, Bressay, Shetland (Bressay parish), burnt mound with structural complex. Discovery and Excavation in Scotland, New Series vol.2.*

Moore, H. and Wilson, G. 2008. *Cruester Burnt Mound, Shetland (Bressay parish), excavation. Discovery and Excavation in Scotland, New Series vol.9.*

- Moore, H. and Wilson, G 2014. *Ebbing Shores: Survey and Excavation of Coastal Archaeology in Shetland 1995-2008* Historic Scotland Archaeology Report no. 8.
- RCAHMS. 1946. *The Royal Commission on the Ancient and Historical Monuments of Scotland. Twelfth report with an inventory of the ancient monuments of Orkney and Shetland*, RCAHMS, Edinburgh.
- Renwick, E. 2010. Bronze Age Bressay Education Pack - accessible at: <http://www.shorewatch.co.uk/downloads/BressayEducationPack.pdf>
- Ritchie, W. 1976. The meaning and definition of machair *Transactions of the Botanical Society of Edinburgh* Volume 42, Issue 4, Edinburgh.
- Sanderson, D.C.W. and Kinnaird, T.C. 2011. *Fieldwork report, Baile Sear, North Uist 2010*. Scottish Universities Environmental Research Centre report, Glasgow.
- Stentoft, K., Dawson, T. and McKenna, L. 2007. *Baile Sear Community Archaeology Project. Sloc Sàbhaidh, Baile Sear, North Uist*. Unpublished report: The SCAPE Trust and the University of St. Andrews.
- Wolf, J. 2007. *Modelling of waves and set-up for the storm of 11-12 January 2005* Proudman Oceanographic Laboratory Internal Document.

## HOW TO CONTRIBUTE

*AP: Online Journal in Public Archaeology* welcomes original contributions that match the aims of the journal and have not been previously published anywhere else, or are not on the way to be published elsewhere. Being online and free can be understood as a sign of quality degradation, but this is not a barrier. It is just a way to adapt from the very first moment to the new panorama in research, where the Internet is the main vehicle for transmission, and more specifically in our field, where the prices of journals are unaffordable for any researcher that is not linked to a research institution. We try to give the widest publicity to the journal, to make it Public.

Having made this clear, the papers can be sent in different ways:

-Mail:

AP: Online Journal in Public Archaeology  
JAS Arqueología S.L.  
Plaza de Mondariz, 6  
28029 – Madrid  
(Spain)

-Email:

[jasarqueologia@gmail.com](mailto:jasarqueologia@gmail.com)

-Filemail.com:

Filemail.com ([www.filemail.com](http://www.filemail.com)) is a free tool to send large files that exceed the upload limit of a normal email account (Gmail, for example, permits up to 25 Mb). It is a useful way of sending, for example, large images. In this case, please contact us via email first in case we are not able to get them immediately (the link expires in three days).

Of course, any other similar application can be also accepted, like Wetransfer or Dropbox.

## *STYLE*

### Length:

Full articles - We will only accept papers of less than 10.000 words (including notes and references) with a maximum of 10 figures (tables are counted as text).

Work reports – We will only accept papers of less than 5.000 words (including notes and references) with a maximum of 5 figures (tables are counted as text).

Reviews – We will only accept papers of less than 2.000 words (including notes and references) with 1 figure, that in case of book reviews will be the cover. In other events (conferences, film festivals...), the figure must clearly reflect the event.

### Presentation:

To follow the indications of Public Archaeology ([www.maney.co.uk/journals/pua](http://www.maney.co.uk/journals/pua)), and aiming to standardize the procedures from our side, all material should follow the MHRA Style Guide, which can be freely downloaded from:

<http://www.mhra.org.uk/Publications/Books/StyleGuide/index.html>

### Figures:

The quality of figures should be good enough to be clear in a PDF file. There will not be any weird rule for the submission of the files. Just submit the figures in any readable format (able to be edited in Adobe Photoshop ®). Every camera, software of scanner can make good quality images, so just submit originals. If any figure is subject to copyright it will be essential to attach a written permission from the holder of the rights. To avoid any inconvenience, we encourage the publication of self-owned images. In any case, the author will be responsible for any violation of copyright issues.

### Notes and references:

It is preferable to avoid footnotes in the text, just quote or explain in brackets.

For references use Harvard style (Author 2010: 322) followed by a final bibliography. For example: 'according to Author (2010: 123) Public Archaeology can be...' or 'it has been pointed out (Author 2010: 13) that...' etc.

Multiple citations should be in alphabetical order and separated by a semi-colon, (Author et al., 1990; Creator and Author 2003; Producer 1982).

Where an author has several publications from the same year, distinguish them with 'lower-case' letters (Author 2010a, 2010b). Do not use *ibid*.

In the final bibliography follow the system below:

#### *Thesis*

Castillo Mena, A. 2003. *La Gestión del Patrimonio Arqueológico en la Comunidad de Madrid*. Unpublished PhD thesis, Universidad Complutense de Madrid.

#### *Journal article*

Matsuda, A. 2004. The concept of "the Public" and the aims of Public Archaeology. *Papers from the Institute of Archaeology* 15, 66-76.

#### *Book*

Demoule, J. P. 2007. *L'archéologie préventive dans le monde. Apports de l'archéologie préventive a la connaissance du passé*. Paris, La Découverte.

#### *Edited book*

Durbin, G. (ed.) 1996. *Developing Museum Exhibitions for Livelong Learning*. London, GEM.

#### *Section in book*

McEwan, C., Silva, M. I. and Hudson, Ch. 2006. Using the past to forge the future: the genesis of the community site museum at Aguablanca, Ecuador. In H. Silverman (ed.), *Archaeological site museums in Latin America*. Gainesville, University of Florida Press, 187-216.

### *Internet reference*

United Nations 1992, *Agenda 21*. Retrieved on 29 January 2010 from WWW [[http://www.un.org/esa/dsd/agenda21/res\\_agenda21\\_00.shtml](http://www.un.org/esa/dsd/agenda21/res_agenda21_00.shtml)]

(As it is an online publication, all the quotes referring to an Internet address should be active links).

In the case of any other kind of reference not mentioned here, please contact the editor.

Once the article has been received:

The process for the acceptance of papers will be easy and fast. Once the article has reached the editor, the decision will be taken in less than 48 hours. Papers rejected from the editor will not be considered again unless they undertake major changes. Correspondence will not be continued for those papers. If the paper is pre-accepted by the editor, it will be peer-reviewed by two different experts in the common blind process. After that, the author will be given feedback and advice in order to go over the article, which will be corrected again to check if it meets the requirements of the reviewers. Once this process has finished, the article will be edited as it will appear on the journal and returned to the author for a final check (only spelling mistakes or other details, not changes on the text). The commitment of the journal is to be able to complete the whole process in less than two months.

Work reports and reviews will not need to pass the peer-review process, but will be commented by the editor.

We will be publishing one volume per year (first trimester) and although we are willing to receive papers the whole year, full articles for next-year's volume should be sent before October in order to complete the process with time.

If you have any queries, please do not hesitate to contact the editor at: [jasarqueologia@gmail.com](mailto:jasarqueologia@gmail.com)

## **LIST OF DONORS**

We want to thank all the people that is helping to maintain this journal. Especially those that chose to use one of the procedures in the donations page. Every little help is welcome to continue with this project, and we expect to increase this list year by year with your help.

Thank you very much:

Vicky Papagiannopoulou  
Giannis Papagiannopoulos  
Alipio Sánchez  
M<sup>a</sup> Ángeles Sánchez  
José M<sup>a</sup> Almansa  
Mayca Rojo  
Gaëlle Cerruti  
Carlos Tejerizo  
Jacob Hilton  
Patrice L. Jeppson  
Gemma Cardona  
Ioannis Poullos

# *AP: Online Journal in Public Archaeology*

## Editors:

Jaime Almansa Sánchez  
Elena Papagiannopoulou  
Email: [almansasanchez@gmail.com](mailto:almansasanchez@gmail.com)

## Editors of this volume:

Elizabeth Wright  
Matt Law

## Assistant editors:

Amanda Erickson Harvey  
Kaitlyn T. Goss

## Reviews editor:

Alexandra Ion

## Assistant production editor:

Alejandra Galmés Alba

## Edited by:

JAS Arqueología S.L.U.  
Website: [www.jasarqueologia.es](http://www.jasarqueologia.es)  
Email: [jasarqueologia@gmail.com](mailto:jasarqueologia@gmail.com)  
Address: Plaza de Mondariz, 6, 28029 - Madrid (Spain)

--

Cover Image: *'Future Animals' drawn by participants (Law et al.)*

Copyright © 2016 JAS Arqueología S.L.U. (edition) & Authors (content)

ISSN: 2171-6315

AP Journal is a peer-reviewed journal devoted exclusively to Public Archaeology. It is freely distributed online on the Website:

[www.arqueologiapublica.es](http://www.arqueologiapublica.es)

You can also follow us on:

## Blogger:



<http://arqueologiapublica.blogspot.com/>

## Twitter:



<http://twitter.com/APjournal>

## Facebook:



<http://www.facebook.com/APJournal>