

# ARFORDIR COASTAL HERITAGE 2011 - 2012



Prepared by Dyfed Archaeological Trust

For Cadw



ymddiriedolaeth archaeolegol  
**DYFED**  
archaeological trust



**DYFED ARCHAEOLOGICAL TRUST**

**RHIF YR ADRODDIAD / REPORT NO. 2012/24  
RHIF Y DIGWYDDIAD/ PROJECT RECORD NO. 102763**

**WHITESANDS BAY CIST  
RHIF Y DIGWYDDIAD/ EVENT RECORD NO. 102765**

Mawrth 2012  
March 2012

# **ARFORDIR COASTAL HERITAGE 2011-2012**

Gan / By

**James Meek,**

With contributions from  
Menna Bell, Pete Crane and Hubert Wilson of DAT,  
Ellie Graham of GGAT and Iwan Parry of GAT

*Paratowyd yr adroddiad yma at ddefnydd y cwsmer yn unig. Ni dderbynnir cyfrifoldeb gan Archaeoleg Cambria am ei ddefnyddio gan unrhyw berson na phersonau eraill a fydd yn ei ddarllen neu ddibynnu ar y gwybodaeth y mae'n ei gynnwys*

*The report has been prepared for the specific use of the client. Cambria Archaeology can accept no responsibility for its use by any other person or persons who may read it or rely on the information it contains.*



Llywodraeth Cynulliad Cymru  
Welsh Assembly Government

Ymddiriedolaeth Archaeolegol Dyfed Cyf  
Neuadd y Sir, Stryd Caerfyrddin, Llandeilo, Sir  
Gaerfyrddin SA19 6AF  
Ffon: Ymholiadau Cyffredinol 01558 823121  
Adran Rheoli Treftadaeth 01558 823131  
Ffacs: 01558 823133  
Ebost: [info@dyfedarchaeology.org.uk](mailto:info@dyfedarchaeology.org.uk)  
Gwefan: [www.archaeolegdyfed.org.uk](http://www.archaeolegdyfed.org.uk)

*Dyfed Archaeological Trust Limited*  
*The Shire Hall, Carmarthen Street, Llandeilo,*  
*Carmarthenshire SA19 6AF*  
*Tel: General Enquiries 01558 823121*  
*Heritage Management Section 01558 823131*  
*Fax: 01558 823133*  
*Email: [info@dyfedarchaeology.org.uk](mailto:info@dyfedarchaeology.org.uk)*  
*Website: [www.dyfedarchaeology.org.uk](http://www.dyfedarchaeology.org.uk)*

Cwmni cyfyngedig (1198990) ynghyd ag elusen gofrestredig (504616) yw'r Ymddiriedolaeth.  
The Trust is both a Limited Company (No. 1198990) and a Registered Charity (No. 504616)

**CADEIRYDD CHAIRMAN: C R MUSSON MBE B Arch FSA M IFA.  
CYFARWYDDWR DIRECTOR: K MURPHY BA MIFA**



## ARFORDIR, COASTAL HERITAGE, 2011 - 2012

### CONTENTS

<b>SUMMARY</b>	1
<b>ACKNOWLEDGEMENTS</b>	2
<b>INTRODUCTION</b>	3
<b>Project outline</b>	3
<b>Project background</b>	3
<b>Project objectives</b>	3
<b>METHODOLOGY</b>	4
<b>Volunteer recruitment and Training</b>	4
<b>Identification of Coastal Sites</b>	4
<b>SUMMARY OF THE MAIN ACTIVITIES COMPLETED 2010-2011</b>	5
<b>1 Website Updates</b>	5
<b>2 Arfordir Recording Forms and Manuals</b>	5
<b>3 Presentations and Events</b>	5
<b>4 Guided Walks, Training Sessions and Meetings</b>	5
<b>5 Archaeological Investigations</b>	8
<i>Whitesands Bay, St David's</i>	8
<b>6 Identification of Coastal Sites (both those under threat and new sites)</b>	17
<b>DIARY OF EVENTS, TALKS, WALKS, MEETINGS ETC 2011 – 2012</b>	18
<b>REVIEW OF THE FIRST THREE YEARS OF ARFORDIR</b>	20
<b>CONCLUSIONS</b>	24
<b>Tasks for 2012 -2013</b>	24
<b>REFERENCES</b>	25
<b>APPENDIX I: DAT ARFORDIR REVIEW FORM</b>	26
<b>APPENDIX II GAT ARFORDIR REVIEW FORM</b>	33
<b>APPENDIX III GGAT ARFORDIR REVIEW FORM</b>	39
<b>APPENDIX IV: INTRODUCTORY LEAFLET FOR BORTH</b>	47
<b>FIGURES</b>	
<b>Figure 1:</b> Location map, based on the Ordnance Survey	9
<b>Figure 2:</b> Location plan of cist on the Ram's Nose	10
<b>Figure 3:</b> Showing the layout of the cist grave with outline of capstone shown over shale uprights beneath	14
<b>Figure 4:</b> South to north profiles through cist and adjacent mound material or former ground surface	15
<b>Figure 5:</b> West to east profile through cist and adjacent mound material or former ground surface	15

## PHOTOGRAPHS

Photo 1:	Hubberstone Fort 20/09/11	6
Photo 2:	Upright timber posts exposed on the foreshore at Llanelli	6
Photo 3:	Erosion at Abermawr, Pembrokeshire	7
Photo 4:	Coastal erosion at Llansantffraid / Llanon	7
Photo 5:	Volunteers working at St Ishmael	8
Photo 6:	Volunteers working at St Ishmael	8
Photo 7:	Ysgol Meidrim visit to St Ishmael	8
Photo 8:	Volunteers working at East Blockhouse	8
Photo 9:	Eroding cist grave in December 2011	9
Photo 10:	Cist grave following removal of eastern half of subsoil (003)	11
Photo 11:	The Dolerite capstone and surrounding rounded dolerite pebbles following removal of turf (001) and subsoils (002) & (003)	11
Photo 12:	Lifting the capstone	12
Photo 13:	The cist following removal of the capstone showing shale levelling slabs	12
Photo 14 - 17:	Excavation of the cist	13

## **ARFORDIR, COASTAL HERITAGE, 2011 - 2012**

### **SUMMARY**

*Arfordir is a Cadw grant-aided and Pembrokeshire Coast National Park Authority (PCNPA) funded project designed to identify, monitor and record archaeological and historical sites within the coastal zone that are under threat of erosion from tidal action, and other forms of damage resulting from the effects of visitors and livestock erosion or changes in use. The project aims to enable interested community groups and individuals to take an active role monitoring and recording threatened sites and identifying new sites with minimal input from the professional sector.*

*2011-2012 was the third year for the Arfordir Project, run by the Dyfed, Gwynedd and Glamorgan-Gwent Archaeological Trusts. The Dyfed region project has been undertaken by staff from DAT, PCNPA and numerous volunteers.*

*This year has been geared more towards specific archaeological projects: including those reported upon in separate reports: a week for the PCNPA archaeologist and some volunteers at St Bride's, Pembrokeshire; the East Blockhouse, Angle, Pembrokeshire; Boulston Manor, Pembrokeshire; and St Ishmael, Carmarthenshire. A further excavation has been undertaken at an eroding Bronze Age cist site newly discovered at Whitesands Bay, Pembrokeshire, the results of which are included in this report. Further site visits have been undertaken to monitor known sites and new sites identified by members of the public and other professionals.*

*Information from members of the public has again proved very useful in identifying new sites and monitoring threats to known archaeological and historic sites. This is evidenced by the information regarding a timber post structure identified at Llanelli, Carmarthenshire; with the building remains eroding from the cliffs at Llansantffraid, Ceredigion; the Bronze Age cist grave at Whitesand's Bay, Pembrokeshire; further finds and information on erosion from St Ishmael, Carmarthenshire; and as yet unconfirmed archaeological features eroding from the cliffs at Marros, Carmarthenshire.*

*This report presents the methodologies, results and outcomes of the second year of the Arfordir project as run by Dyfed Archaeological Trust. It will provide methodologies and information to assist in the continuation of the project into 2012-2013.*

*The report also includes an assessment of the success, strengths and weaknesses of the Arfordir project using information supplied by all three of the Trusts involved in the project. Feedback forms are included in their entirety in the appendix.*

*As noted in the previous two years, working with volunteers has been a very rewarding experience, which increases interest and enthusiasm for the project. It has been evident that organized events have been far the most successful parts of the Arfordir project. We have seen a decline in the number of recording forms returned to us this year by individuals or groups, and it is felt that the recording methodologies need to be improved and made far more user friendly. We have still been informed of archaeological sites, albeit without accompanying forms. This is not seen to be too much of a problem at this stage, but would become so if more sites were being recognized.*

## **ACKNOWLEDGEMENTS**

Thanks to the numerous volunteers who have taken an interest in and supported the work of the Arfordir – Coastal Heritage project.

Thanks also to Ken Murphy, Marion Page, Simon Ratty, Duncan Schlee and Hubert Wilson of Dyfed Archaeological Trust, Andy Williams of Orchardweb Design, Pete Crane of Pembrokeshire Coastal National Park Authority, Iwan Parry of Gwynedd Archaeological Trust and Ellie Graham of Glamorgan Gwent Archaeological Trust.



## **INTRODUCTION**

### **Project outline**

Arfordir is a Cadw grant aided partnership project with the Pembrokeshire Coast National Park Authority (PCNPA) and the Royal Commission on the Archaeological and Historical Monuments of Wales (RCAHMW). The project was designed with the intention of providing support and training to volunteers from the community and other groups to give them the skills and information needed to enable them to monitor the impact of tidal action and other sources of erosion on archaeological sites along the coast of Carmarthenshire, Ceredigion and Pembrokeshire, with minimal input from the professional sector.

This report provides a summary of the work undertaken during the April 2011 – April 2012 period. The project has continued to successfully collect new archaeological information and provide community engagement while also contributing to the achievement of the Welsh Government's objectives regarding Climate Change. Further sources of funding are still being approached to provide additional support and continue the project into the future, with the HLF bid prepared by GAT and DAT having now been resubmitted to establish Coastal Community Archaeologist posts in North and South Wales. DAT has also submitted an application to WVCA for a volunteer coordinator post to assist with the organisation of volunteers, to improve contact and assist with the development of volunteer training programmes.

### **Project background**

The project background is the same as previous years, namely: awareness of the impacts of coastal erosion on Welsh coastal archaeology has been recognised for many years, and has been the subject of previous Cadw and PCNP funded fieldwork and survey projects (Cole 1995; Sambrook & Williams 1996; Murphy & Allen 1997, 1998; Page & Scott 1998, Page 1998). In the context of increasing global awareness and concern about the effects of climate change, the issue has recently become more pertinent, and the need to establish a means by which the predicted effects can be monitored and mitigated has become more evident.

In addition, as the popularity of archaeology among the public increases, and public engagement increasingly features as a condition for accessing sources of funding, the need to establish a framework, and means of sustaining future projects has been recognised.

The aspirations of the project were based on the award winning SCAPE (SHOREWATCH) project in Scotland, which has been a constant source of inspiration and ideas throughout the pilot year.

### **Project objectives**

The aims of this project are to develop new and sustainable (ie. with minimal input from the professional sector) links with community groups and working partnerships with other professional bodies and educational establishments to provide local communities with the skills and information that will be useful in monitoring and mitigating the predicted effects of climate change on the region's coastal archaeology.

To identify known and new coastal sites under threat. To implement appropriate recording prior to their destruction. The project will also build upon and add value to previous projects relating to coastal archaeology.

## **METHODOLOGY**

The project has continued to use the methodologies utilised during the previous years. For the project the coastal zone is defined as a band c.500m from the water's edge. **Volunteer Recruitment and Training**

The Arfordir project has continued to try and engage members of the public in the identification and monitoring of coastal sites under threat of erosion.

As stated in the project objectives, the intention is to provide community and other groups with the skills and information to enable them to monitor the archaeology of the coastal zone in the future, with minimal input from the professional sector. Regular users of the coast for leisure and work purposes are an ideal source of volunteers, who will be able to undertake more regular site monitoring.

This year we have delivered a number of talks or meetings to local groups in an attempt to raise interest in the project. These have again provided an initial very enthusiastic response, but it is the organised fieldwork events that have attracted the best response and feedback.

The Arfordir project has provided further opportunities for highlighting the work undertaken on the recent West Coast Submerged Landscape Project (supported by the Aggregate's Levy Sustainability Fund and Cadw). The 'Lost Lands of Our Ancestors' booklets have been provided to a number of Arfordir volunteers both during talks and lectures, and a number were taken to Borth during the recent work there by University of Wales Trinity St David's.

### **Identification of Coastal Sites (both those under threat and new sites)**

The methodology developed in the pilot year for identifying new and threatened coastal sites is still being used, although as the majority of the coastline has now been assessed, fewer site visits have been undertaken.

It was hoped that a methodology for undertaking recording of peat exposures would have been developed during this year, building on the works already carried out at various parts of the coastline and also through commercial work carried out at Borth. A start was made, but it became evident that it was a bigger task than originally anticipated and it is intended that the development of this methodology will be an important part of the 2012-2013 year. Support will be given by the existing CBA Outreach archaeologist and the forthcoming trainee position. Methodologies will be tested at both Borth, Ceredigion and at Abermawr, Pembrokeshire. At Abermawr it will be necessary to develop a methodology that will allow accurate locating of flint finds which are still being recovered from the surface of the clay levels.

It may be possible to develop a smart phone application to assist those volunteers who have one, in undertaking accurate and quick recording. This would be able to use the standard capabilities of most of these phones, namely: geo-referenced photographs; gps locations, typed or spoken notes on the site, compass directions etc. There is also a possibility that the HER could be made available by a similar application, thereby leading to those correctly equipped to view the site, see what is already know and record information on present condition or identify if they are new sites. Supplemented with applications such as Google earth/satellite photographs etc, this should enhance capabilities for recording by both professionals and volunteers alike.

## **SUMMARY OF THE MAIN ACTIVITIES COMPLETED 2011-2012**

### **1 Website Updates**

Previous years reports have been added to the website. The website will be further updated in the early part of next year, with support from the new trainee CBA Community Archaeologist. A dig diary was maintained throughout the St Ishmael, Carmarthenshire excavations (and those at St Bride's, mostly from the previous year work). The St Ishmael excavation dig diary was also posted on Facebook accounts.

Downloadable versions of the updated recording form, manual and introductory leaflets are available.

Further work needs to be done on the Flickr website to increase its audience. It has recently been highlighted through the Cadw publication Heritage in Wales, and as such, it is hoped that this will increase membership.

### **2 Arfordir Recording Forms and Manuals**

Arfordir recording forms and manual have been updated by GGAT during this year through collaboration with DAT and GAT.

### **3 Presentations and Events**

A number of talks and presentations have been provided on the project during the year, some specifically about Arfordir, and others using the opportunity of other presentations to highlight the project to a wider audience.

### **4 Guided Walks, Training Sessions and Meetings**

A number of meetings regarding the project have been undertaken during the year, both with professionals and with volunteers and members of the public.

Guided walks to look at archaeological remains were undertaken at Whitesands Bay, Abermawr, Morfa Bychan, Kidwelly and Llanelli.

A meeting was arranged to visit Hubberstone Fort, Pembrokeshire with the Milford Haven Port Authority to view the abandoned fort and assess the state of preservation of the remains.



**Photo 1:** Hubberstone Fort 20/09/11



**Photo 2:** Upright timber posts exposed on the foreshore at Llanelli



**Photo 3:** Erosion at Abermawr, Pembrokeshire



**Photo 4:** Coastal erosion at Llansantffraid / Llanon

## 5 Archaeological Investigations

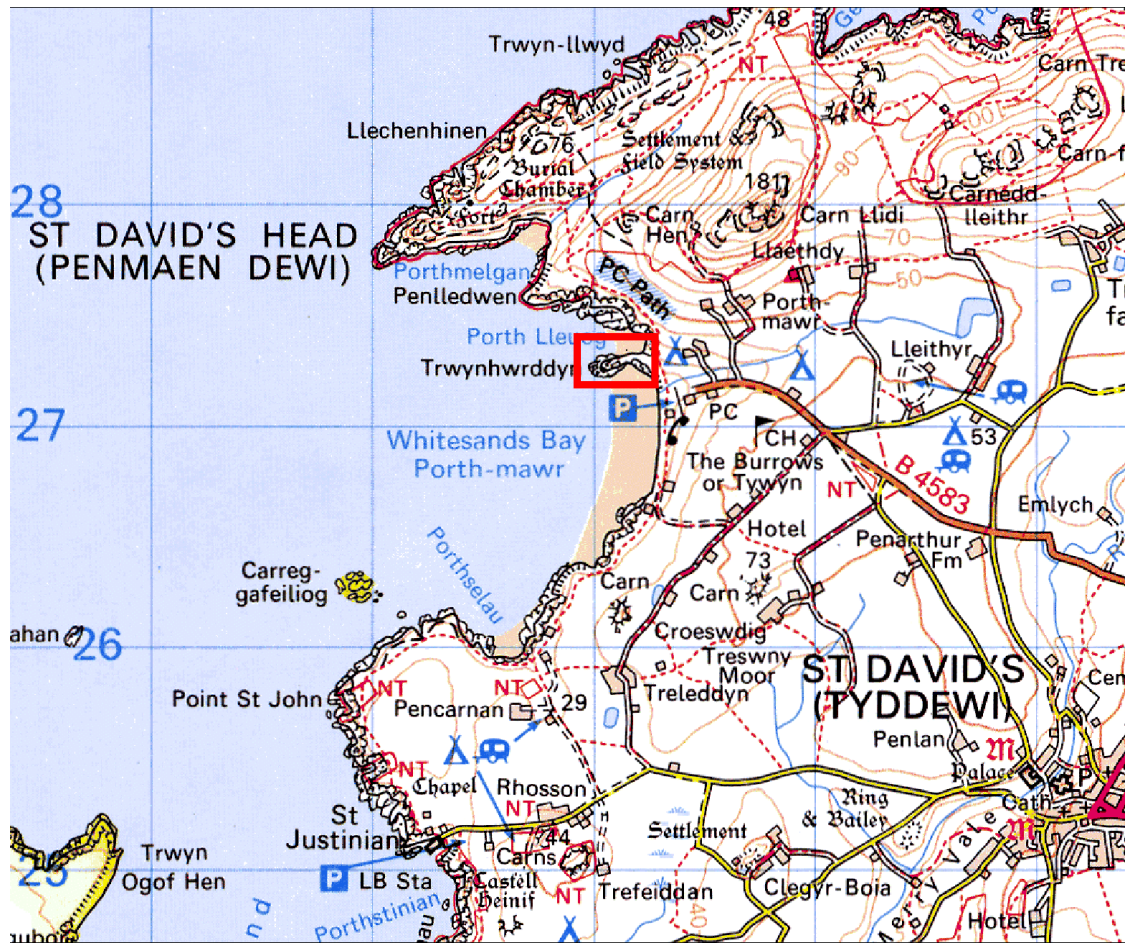
The 2011-2012 year of Arfordir has been run slightly differently than the last two, with a number of specific fieldwork projects identified in the original project design. These include the excavation of the East Blockhouse at Angle, Pembrokeshire (Crane 2012); further investigation of St Ishmael deserted medieval village in Carmarthenshire (Meek 2012) and building recording at Boulston Manor, Pembrokeshire (Poucher 2012). Volunteer support was used at East Blockhouse and at St Ishmael, but it was not deemed appropriate at Boulston Manor due to health and safety considerations. Ysgol Meidrim visited the investigations at St Ishmaels, which was a very successful event. All of these three sites are reported on separately, including recommendations for further work.



**Photos 5 – 8:** Volunteers working at St Ishmael, Carmarthenshire (top left & bottom left) and school visit (top right), East Blockhouse, Pembrokeshire (bottom right)

### ***Whitesands Bay, St David's, Pembrokeshire (SM 7316 2734; PRN 102766)***

In late autumn 2011 Martin Bell was visiting the Ram's Nose, the small rocky promontory projecting into Whitesands Bay near St David's. He noted the edge of a feature which had the appearance of a small stone cist (Figures 1 & 2). Dyfed Archaeological Trust were informed and in December a site visit was carried out with a volunteer to find the site and assess whether it was under threat from erosion and worthy of further investigation. This was a newly identified site. A number of flint objects have been previously recorded on the Ram's Nose, including one oval scraper attributed to the Neolithic (PRN 11371) and a number of finds recovered by a local resident (only one of which was seen, and none have been recorded on the HER).



**Figure 1:** Location map, based on the Ordnance Survey.

Reproduced from the 1995 Ordnance Survey 1:50,000 scale Landranger Map with the permission of The Controller of Her Majesty's Stationery Office, © Crown Copyright Cambria Archaeology, The Shire Hall, Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AF. Licence No AL51842A

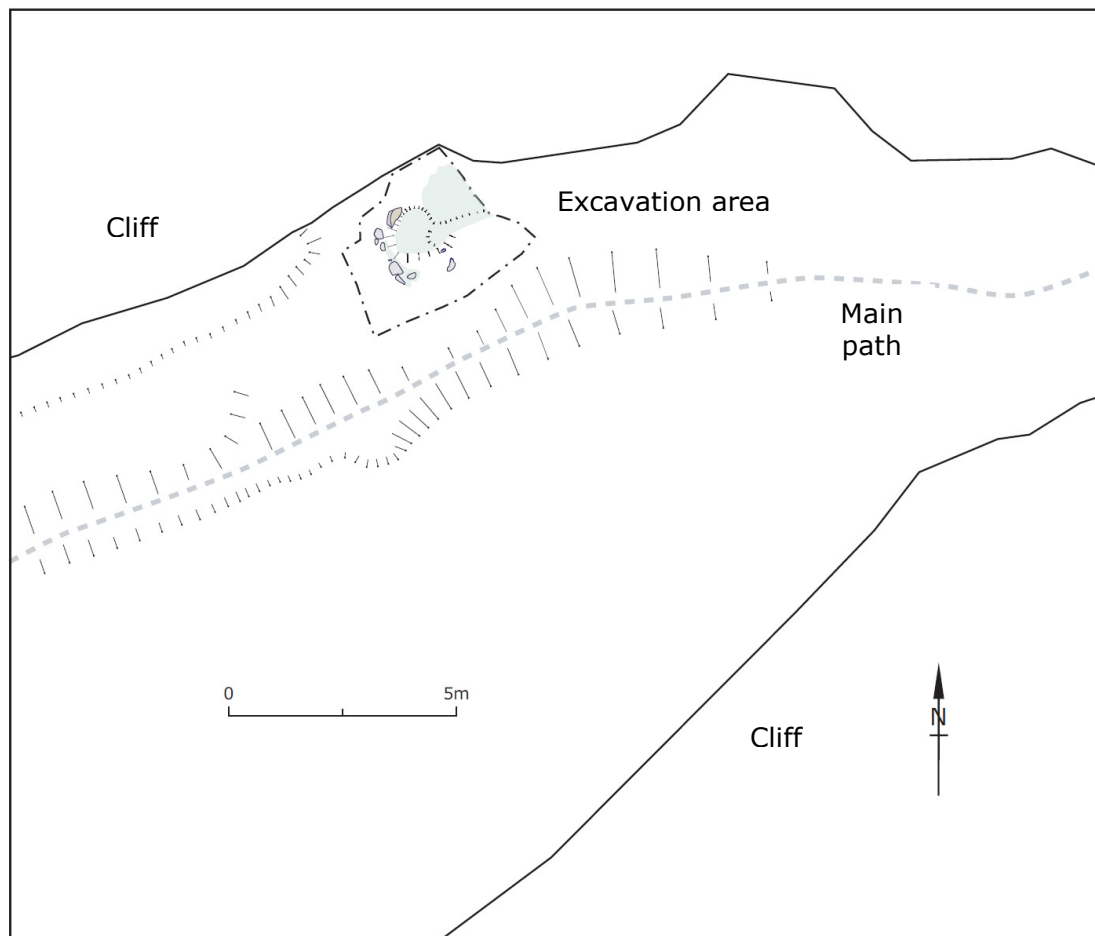


**Photo 9:** Eroding cist grave in December 2011

The cist comprised a low mound of turf which had suffered from erosion to the north and northwest (Photo 9). This erosion had been caused by a mix of rainwater run-off and foot-fall, the Ram's Nose being a popular viewpoint and fishing spot. The eroded edge revealed an apparent large rounded capstone and underlying horizontal, angular shale slab. The ends of two upright shale slabs could be seen on its northern edge, with medium sized rounded pebbles in between and to the side. In plan-view an apparent kerb of large rounded pebbles surrounded the cist. One of these larger pebbles was found slipped down the adjacent cliff edge.

The potential significance of the site and its evident ongoing erosion was such that it was decided that excavation should be undertaken to record the site before it completely eroded away. The excavation was arranged to be undertaken with two members of DAT staff and 3 volunteers from the local area who had been involved in Arfordir previously: Rhod Kemp, Babs Spittle and Liz Taylor. The PCNPA Archaeologist obtained permissions for the excavation.

The site was excavated between 14<sup>th</sup> and 18<sup>th</sup> March 2012. An initial plan of the site was drawn, followed by stratigraphic removal and recording of underlying layers. Following the removal of subsoils around the cist, a ditch like feature was noted running along the southern part of the excavation area. A few of the rounded pebbles around the cist had slumped into this feature fill 005 cut [008]. The feature was not fully excavated as it soon became apparent that it was of modern date, containing plastic and other rubbish. The feature is presumably associated with drainage works that have been undertaken by PCNPA on the promontory in recent years.



**Figure 2:** Location plan of cist on the Ram's Nose



The thin turf layer 001 overlay a very sandy subsoil which contained a few flint fragments, mixed with many roots and occasional bits of plastic and other rubbish (003). Layer 003 was removed in two halves to provide a profile of the deposit across the Dolerite capstone (Photo 10 & 11). The Dolerite capstone and surrounding Dolerite pebbles could also have been locally sourced from the shingle banks of the beach to the north.



**Photo 10:** Cist grave following removal of eastern half of subsoil (003)



**Photo 11:** The Dolerite capstone and surrounding rounded dolerite pebbles following removal of turf (001) and subsoils (002) & (003)

The exposed capstone was then lifted (Photo 12) revealing a number of small horizontal shale slabs had been placed on the two long sides of the cist, presumably as levelling for the capstone (Photo 13). The cist looked intact.



**Photo 12:** Lifting the capstone



**Photo 13:** The cist following removal of the capstone showing shale levelling slabs

The cist was then excavated in half centimetre spits to ascertain if any staining from organic remains were present within the fill (Photos 14 – 17). The cist measured between 0.40 and 0.42m in width and was 0.52m in length (Figure 3). It was formed by slabs of shale which may well have been cut from the natural bedrock on the promontory or nearby on the southern side of Whitesands Bay. The slab sides of the cist grave had been set within the sandy soils overlying the bedrock which was exposed in its base. No finds or any evidence for organic staining was revealed within the fill of the cist. A number of samples were taken of the fill, although it was noted that it seemed very sterile, without any charcoal flecks or any other sign of human activity. The cist was an average depth of between 0.38 - 0.40m with an irregular shaped base formed by the bedrock (Figures 4 & 5). It is possible that the very lowest material removed from between the fissures in the bedrock was original ground surface material pre-dating the cist.

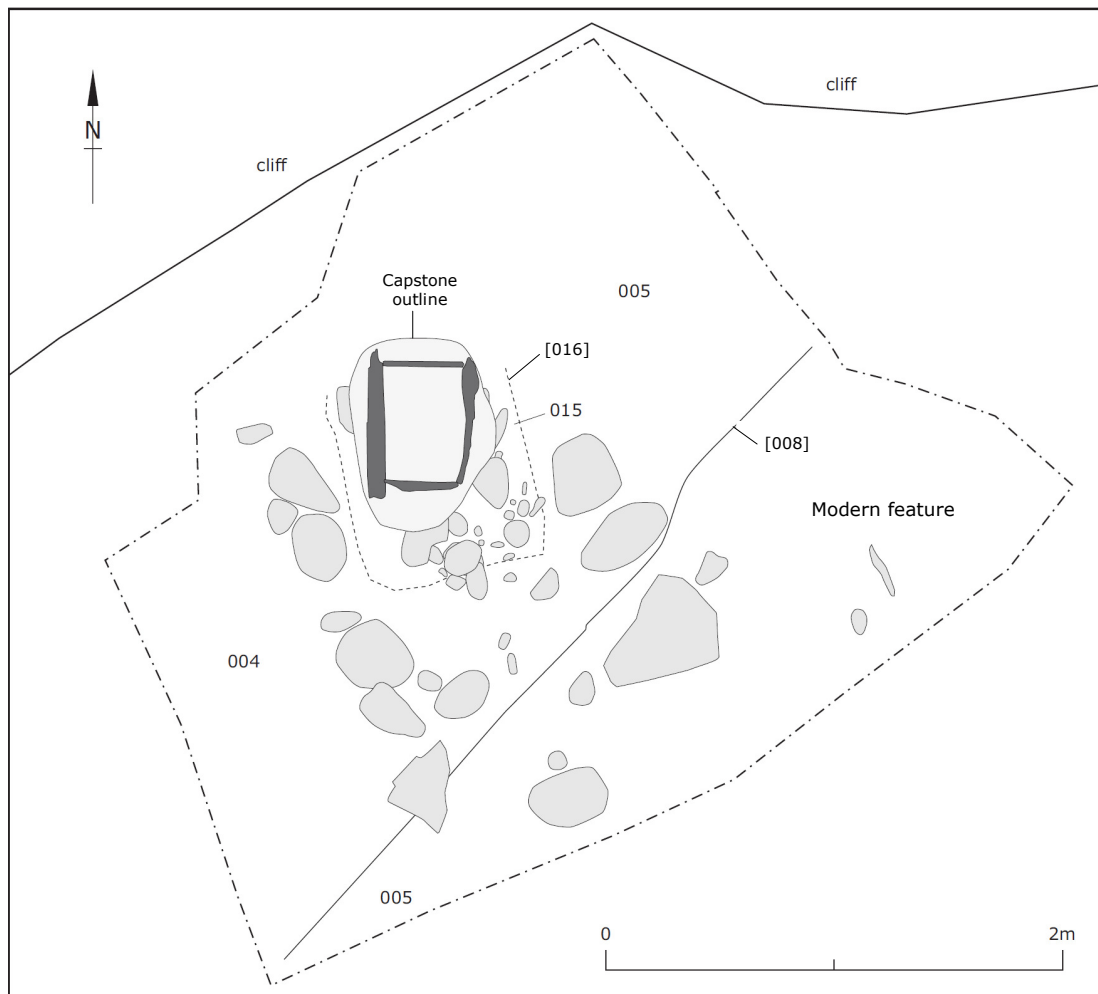


**Photos 14 – 17:** Excavation of the cist

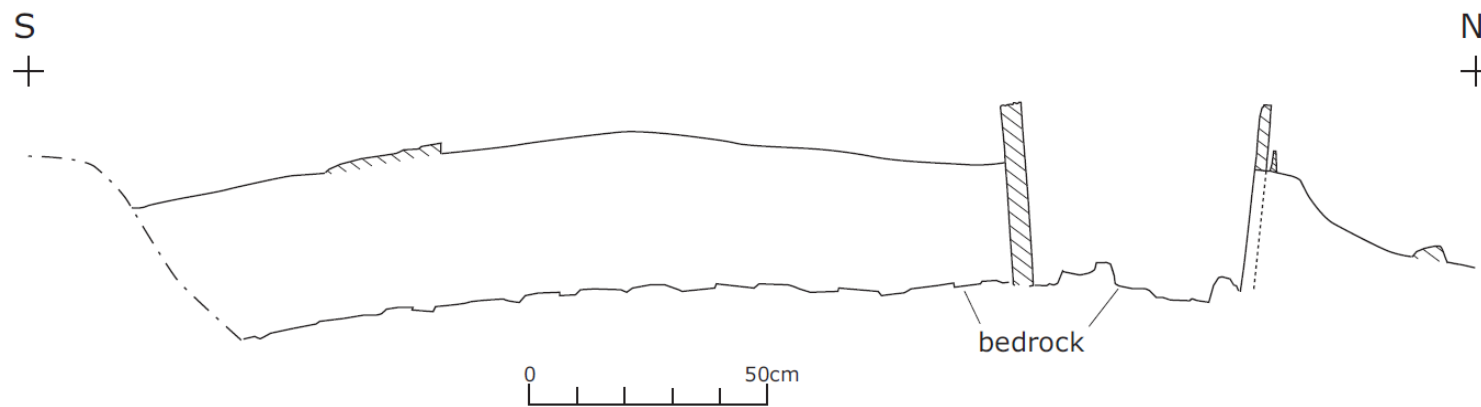
Further excavation was undertaken around the cist itself (a large quadrant was excavated to the southeast) which confirmed how it had been constructed. It appears that a soil horizon survives on this part of the Ram's Nose promontory which is prehistoric in date. It comprises mostly of medium coarse sand which seems very clean, perhaps having been substantially washed through with rain and sea spray, and any organic content has long since been washed away and replaced with sand (layers 004 to the west and 005 to the west). The grave cut [016] was excavated through this soil onto bedrock and the side slabs 011 erected within the hole. It seems that this hole was excavated through the partial depth of this soil horizon, to a size larger than the eventual cist. The upright shale slabs 011 were then pushed into the lower soils till they hit bedrock

(around 0.15m in depth). Once the chamber was formed, the interior of it was excavated to create an empty chamber. The exterior of the exposed upper parts of the slabs were then packed using a mix of soils, medium sized Dolerite pebbles, a few smaller pebbles and broken pieces of shale (015). The soil around the grave was then levelled off. The burial was then presumably deposited into the cist grave.

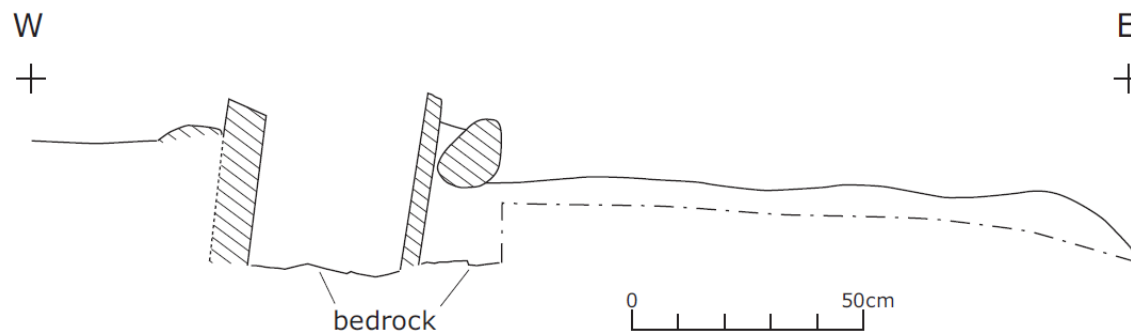
Once the burial had been laid, the capstone was placed on top, although probably it wobbled and so some levelling shale slabs were inserted on top of the side slabs of the cist. A mix of small, medium and large Dolerite pebbles were then placed over the grave. Whether a much larger mound or barrow was originally present over the cist could not be discerned from the excavation area and the amount of erosion that had already taken place at the site.



**Figure 3:** Showing the layout of the cist grave with outline of capstone shown over shale uprights beneath.



**Figure 4:** South to north profiles through cist and adjacent mound material or former ground surface



**Figure 5:** West to east profile through cist and adjacent mound material or former ground surface

The lack of any evidence for charcoal, ceramic material or any cremated bone, all of which should have survived the acidity of the soil at least in part, suggests that the burial was not cremated. No evidence survived for any grave goods being deposited, as noted above no staining was noted during the excavation of the soils within the cist. It is suggested that the original burial was an inhumation, possibly of a young child, which would be far more susceptible to the acidic nature of the soil. The size of the cist is also such that an adult inhumation would not have been possible, unless the deceased had been removed of all flesh, the bones then collected, disarticulated and placed into the grave. If this had been the case, then the leg bones would probably have been snapped to make them fit (this is not an unheard of practice). The loose sandy fills within the cist (fills 012, 013 and 014) are likely to be as a result of sands leaching into the chamber over time. Any organic remains have also apparently been washed through. It was noted during excavation that a looser area of fill was present within the centre of the cist. As the fills were gradually taken down, this looser area of fill moved location within the cist. No indication of staining around the edges or any other sign of a former object within the grave could be discerned, and it had all the appearance of a small animal burrow as opposed to a decayed Bronze Age artefact.

The possibility of more burials remaining beneath later accumulations of wind-blown sand in the vicinity must be considered. The volunteers who worked at the site will be monitoring the area in the future in case of other exposures.

Following completion of the recording of the site, the cist was backfilled and the capstone re-laid on top (with levelling shales also reused). The pebbles and shale fragments were piled around the sides and infilled with soils. The capstone was then covered with more soil and re-turfed with the meagre and fragmentary turf that had originally been removed. It is not anticipated that this will protect the monument from medium-term erosion, but it is hoped that it will prevent damage from curious visitors.

Further work that is required for the site is the completion of a fuller excavation report. The soil removed from the site was dry sieved with a medium fine meshed sieve and all finds / possible finds retained for further investigation. Material recovered included small quartz pebbles and fragments, all flint and occasional other stone objects of possible interest. The finds recovered will need to be processed and assessed for their provenance, as many pieces may be natural. Samples were taken from the fill of the cist, and from the possible buried soil horizon. Ideally these samples should be assessed by an environmentalist to see if there is any chance that significant environmental information may survive within them.

## **6 Identification of Coastal Sites (both those under threat and new sites)**

The majority of site visits undertaken this year have been to monitor known sites that are suffering or have suffered from erosion. Further updates can be made to existing HER records on the state of preservation of these remains where changes have been noted. A few new sites have been identified by individuals that will need to have record forms completed and will be added to the HER including sites at Llanelli and Marros (which still needs a site visit as confirmation).

A number of site visits have been undertaken to Laugharne where post-medieval structures are recorded on the HER on the cliffs overlooking the River Taf. These buildings are noted as deteriorating quite rapidly (due to vegetation growth and also land slips). In recent days a possible vaulted undercroft has been noted at one of these buildings which will require further investigation as it may indicate an earlier origin for the structure. During the same visit the footprint of a building on the foreshore was also noted. These will both need to be investigated further in 2012-2013.

During the Boulston Manor survey the graveyard at the church was observed following clearance. It was noted that a badger sett has been established in the edge of the graveyard on the seaward side. The raised churchyard was surrounded by a low retaining wall which has become damaged. A portion of disarticulated skull was noted in the material dug out by the badgers. This will need to be monitored to ensure that human bone can be collected for reburial.

**DIARY OF EVENTS, TALKS, WALKS, MEETINGS ETC 2011 - 2012:**

1<sup>st</sup> April to 8<sup>th</sup> April 2011 – St Bride's Excavations, with PCNPA Archaeologist (16 volunteers)  
4<sup>th</sup> June 2011 – Flint Knapping demonstration at Castell Henllys organised by PCNPA Archaeologist  
14<sup>th</sup> June 2011 - Coastal Forum Meeting, Aberystwyth with Cadw, RCAHMW, GAT, GGAT, PCNPA  
8<sup>th</sup> July 2011 – St Ishmael monitoring visit and discussion with Owen Harris regarding forthcoming excavation strategy  
14<sup>th</sup> July 2011 – Monitoring visit to West Angle Bay medieval cemetery and Iron Age promontory fort  
18<sup>th</sup> July to 29<sup>th</sup> July 2011 – East Blockhouse, Angle Excavation (9 volunteers), with PCNPA Archaeologist  
5<sup>th</sup> – 7<sup>th</sup> August 2011 – Time Team excavations at Gateholm and at Watery Bay Rath, PCNPA archaeologist involved dig and with organising field walking at Watery Bay Rath  
16<sup>th</sup> August 2011 – Flint Knapping demonstration at Castell Henllys organised by PCNPA Archaeologist  
6<sup>th</sup> September to 15<sup>th</sup> September 2011 – St Ishmael Investigations (12 volunteers and numerous visitors), with CBA Community Archaeologist  
20<sup>th</sup> September 2011 – Meeting at Hubberstone Fort, Pembrokeshire with Milford Haven Port Authority  
11<sup>th</sup> October 2011 – Guided walk and discussion regarding coastal archaeology recording with ex-pat archaeologist from Canada who does similar work on his patch in Nova Scotia  
13<sup>th</sup> October 2011 – Site visit to Llanon/Llansantffraid after information regarding remains eroding from cliff face  
17<sup>th</sup> November 2011 – Meeting at Llanon with Cynal Y Cardi team  
19<sup>th</sup> November 2011 – Short discussion/presentation regarding Arfordir at Pembrokeshire Day School by PCNPA Archaeologist  
December 2011 – Article on coastal archaeology of Morfa Bychan in Carmarthen Journal (wrong author attributed)  
15<sup>th</sup> December 2011 – Guided walk and introduction to Arfordir to new volunteer to Whitesands Bay and Abermawr  
12<sup>th</sup> January 2012 - Coastal Forum Meeting, Aberystwyth, with PCNPA archaeologist, Cadw, RCAHMW, GAT, GGAT etc  
13<sup>th</sup> January 2012 – Site visit to timber structure exposed at Llanelli, CBA Community Archaeologist  
14<sup>th</sup> January 2012 – Meeting with Llanelli Community Heritage Group, CBA Community Archaeologist  
1<sup>st</sup> February 2012 – GGAT Arfordir Training Day attended by CBA Community Archaeologist  
2<sup>nd</sup> February 2012 – St Ishmael monitoring visit with volunteer  
2<sup>nd</sup> February 2012 – Meeting with Dros Y Tonnau coordinator, CBA Community Archaeologist  
13<sup>th</sup> February 2012 – Arfordir presentation given to the Llanelli Local History Society (c.50 attendees)  
13<sup>th</sup> to 16<sup>th</sup> February 2012 – Boulston Manor Building Recording (no volunteers, but liaison with site owners and neighbours)  
18<sup>th</sup> February 2012 – Second meeting with Llanelli Community Heritage Group regarding the HER and setting up a local Arfordir group, CBA Community Archaeologist  
25<sup>th</sup> February 2012 – Meeting with Llansteffan Historical Society with intention to set-up a youth Arfordir project, CBA Community Archaeologist  
7<sup>th</sup> – 9<sup>th</sup> March 2012 – Investigations of peat deposits and footprints at Borth, with CBA Community Archaeologist present on 7<sup>th</sup> March



*14<sup>th</sup> March 2012 to 18<sup>th</sup> March 2012 – Whitesands Bay Excavations (3 volunteers per day and a number of casual visitors)*

*16<sup>th</sup> March 2012 – Dros Y Tonnau event in Cardigan, CBA Community Archaeologist with displays on Submerged forests*

*21<sup>st</sup> March 2012 – Meeting with Hanes Llandudoch, CBA Community Archaeologist*

*24<sup>th</sup> March 2012 – Ceredigion Day School, Arfordir display and leaflets available and discussion held with a number of interested parties, also mentioned in CBA Community Archaeologist talk (c. 60 attendees)*

A number of sessions of scrub clearance have been carried out on Y Gribin, Solva by the PCNPA Archaeologist and volunteers (both from PCNPA and the National Trust). The intention is still to do some survey work at the site when permissions are finalised.

Prior to the Boulston Manor survey, PCNPA undertook some clearance work of the churchyard at Boulston which also lies directly adjacent to the tidal zone of the Western Cleddau. The PCNPA Archaeologist liaised with the clearance team prior to this being undertaken and it is hoped to set-up a graveyard recording programme in the next year.

## **REVIEW OF THE LAST THREE YEARS OF THE ARFORDIR PROJECT**

It was agreed during the Coastal Forum Group meeting in November 2010 that a review of the past three years work by all three Trusts involved in Arfordir would be provided at the end of this financial year. Originally Andrew Davidson of GAT has accepted the task, but following his appointment as GAT Trust Director, the author took on the responsibility.

A questionnaire was prepared by DAT and circulated to the Arfordir coordinators of all the Trusts. The full responses are included in Appendices I, II and II at the end of this report.

### **Assessment of Coastal Erosion Threats**

All three Trusts have successfully identified areas of coastal erosion threats. Only DAT seem to have used and updated the information gathered in the 1990s for a regional wide survey. GGAT have specifically targeted the coastline of the Gower and Swansea Bay and concluded that much of this coastline is relatively stable. GAT have been quite broad brush, identifying a number of areas of erosion, many of which are the result of water run off (numerous flint scatters being identified through topsoil erosion).

In terms of other forms of erosion the following ones have been identified: visitors and users of the coastal paths; from livestock; water run-off; general weathering; freeze-thaw effect; neglect of standing structures; and coastal defence and other foreshore works.

A mix of both volunteers and professionals have identified the erosion, but for both GAT and DAT it has mostly been identified by professional archaeologists. Within Dyfed three highly significant archaeological sites have actually been identified by members of the public/other professionals – Whitesands Bay Bronze Age cist, and footprints in peat deposits at both Lydstep and Borth.

Resulting archaeological recording undertaken directly as a result of the identification of these threatened sites has been carried out on several by both DAT and GAT. For GGAT a number of identified sites have been subject to some record, but not controlled excavation due to locations. It is known that GGAT have recorded many sites, although this has not been made clear on the feedback form. GAT are the only ones to have carried out a number of geophysical surveys of coastal sites.

In terms of mitigation for future management of identified sites, GGAT have been successful in liaising with the National Trust to move footpaths to reduce footfall erosion of some sites as well as the repair of some erosion scars. No such results have happened as yet for DAT or GAT. The recent excavation and survey work by DAT has resulted in recommendations for future mitigation work, which will hopefully be addressed in the next year. Similar information is likely to be returned by GAT.

All three Trusts have indicated that submerged forests / peat deposits have been identified and recorded in a basic manner.

### **Identification of New Sites**

All three Trusts have identified numerous new coastal archaeological sites: DAT around 70 to date have been put on the HER; GAT roughly 150; GGAT around 180 over the two years of their project.

The range of site types is extensive from World War II defences to Mesolithic peat beds.

### **Working with communities, groups and individuals**

All Trusts feel that this has been successfully achieved as part of the project. Engaging with people has been achieved through a variety of means, from presentations, walks through to training sessions and specific projects. Social media websites have been utilised, although with varying success (DAT feel that this has not been particularly successful for them). GGATs feedback indicates that theirs has been the most successful.

Both GGAT and DAT have had links with Canadian archaeologists interested in the project, and there are links here that would be worth following to compare methodologies and the way in which volunteering is organised and the way projects are run.

DAT have noted that their volunteers have been far more keen to work on organised projects as opposed to working and recording independently. This may be due to the difficulty in maintaining volunteer enthusiasm (as noted by GGAT also).

From discussions between the Trusts, it has been noted that the Arfordir recording forms are somewhat off-putting to new volunteers. When originally adapted from the Shorewatch project forms (which were considered very complicated) simplicity was seen as being essential. In the first year GAT and DAT had different recording forms, in the second year GGAT adapted those of DAT. GAT have also simplified their forms though it is uncertain if they also adopted the same form. During the last year further simplification was undertaken by GGAT through consultation with GAT and DAT. These new forms may improve usage.

Both GAT and GGAT note that they regularly get forms sent in by individuals and groups. DAT have had less success in this area.

All Trusts note that feedback has been very positive, with GGAT giving numerous examples of specific comments.

GGAT and DAT have found the over 55s to be the major demographic interested and involved in the project, as would be expected with many retired and able to give more of their time. GAT have had more success in engaging the 20s and under. Students have been involved by all Trusts. GGAT note that some full time workers have also been involved, as have DAT.

GGAT have used the NAS for talks and training purposes – including two training days recording wrecks in Swansea Bay both of which were very successful. DAT organised an NAS talk in the first year, but have not done anything with them since although plans are in place for a training event in the next year. GAT have not used the NAS as yet.

### **Non Cadw funded elements of the Arfordir Project**

All three trusts have been able to use the CBA Community Archaeologist trainee to assist with the project to greater or lesser extent. GAT have been able to use the holder of the IFA Bursary in Education and Outreach placement for all aspects of the project enabling far more time to be spent working with and maintaining the enthusiasm of volunteers. GGAT have also used National Trust staff support to assist with the project. GGAT have also organised student placements to assist with various aspects of the project. GAT also secured funding for equipment and a geophysical survey from the Llyn AONB Sustainable Development fund.

All three Trusts state that the two Coastal Archaeologist posts for which an HLF grant has been applied for, as being central to or essential for the success of the

project in the future. It is also noted that volunteers are also most keen for the bid to be successful.

### **The overall project strengths and weaknesses**

Sustaining volunteer enthusiasm is noted as being a difficulty, though GAT state that this has improved with the IFA Bursary post-holder. GGAT note that volunteer numbers started high and dropped off sharply, but has since levelled out to a smaller number committed volunteers. GGAT also state how difficult it is to inspire volunteers to go out and record coastal sites, but at the same time ensuring that they realise that they will be working in a potentially dangerous environment (cliffs, foreshore, tides etc).

The **main successes** of the project are highlighted as follows:

DAT – Organised site investigations – both for volunteer feedback and for producing the results on the archaeological remains needed for future management

GAT – Trust archaeologists undertaking initial coastal monitoring walks. The number of sites added to the HER. Excavations, detailed surveys and school site visits also very successful.

GGAT – The recruitment of volunteers and community engagement. The number of new sites identified. Presentations to local groups and at conferences have also been very successful.

The **least successful** elements have been:

DAT – getting a network of independent volunteers regularly submitting recording forms.

GAT – Getting volunteers to regularly submit information and keeping them motivated.

GGAT – Fewer sites have been taken forward for further investigation (though this is due to the level of threat to the sites being too low to warrant further work).

In terms of improving the project, both GAT and DAT note that having a full time post or HLF Coastal Archaeologist in place would be of great benefit. GGAT and DAT also identify areas into which the project should be targeted for next year. GGAT also note that improved display boards and exhibitions and a better presence at community events etc would be of great benefit to the project. DAT also note that a structured training plan would be beneficial.

All three Trusts provide information on how they think an ideal Arfordir project would be undertaken, although due to the wording of the question this ranges from the project as a whole down to specific fieldwork projects (as the question should have stated!).

It is noted by all that there has not been enough cross-working between the three Trusts and that this should be addressed next year.

### **Any other issues to be raised**

An area for other issues was also included on the forms. GAT made no further comment. Both GGAT and DAT make suggestions as to how some aspects could be further improved. GGAT also note a few other successful parts of their project

## **Conclusions of Review**

The project is evidently being very successful in identifying coastal erosion threats and monitoring them. The fact that programmes of further investigation have taken place is very positive outcome. The varying types of threats identified (and I am sure more will be added) will assist in further management of coastal heritage sites and presumably lead to more threatened sites being identified. Offshore or foreshore development is perhaps a major threat that will not necessarily be acknowledged by developers or planners as being relevant to archaeology, and hopefully this can be addressed from the works undertaken especially on peat exposures and foreshore structures or wrecks. It is evident that with the regular monitoring that has occurred, that extensive peat deposits survive to a greater extent than maybe previously thought. The need for a consistent recording methodology is noted from the feedback.

The fact that so many new sites and the range of site types that have been identified is seen as a very positive outcome of the project.

The project has been successful in engaging with communities, groups and individuals. In terms of independent working, GGAT has been most successful in empowering groups to undertake independent site visits and recording. DAT have found organised fieldwork events as the most rewarding. To engage with volunteers in full time/part time employment or education, some fieldwork events/training sessions need to be undertaken at weekends.

All Trusts note that using external funded posts is an essential part of the Arfordir project and necessary to sustain it in the future. Using externally funded posts to assist with the delivery of the project has increased the engagement with new and potential volunteers and allowed more time to be spent training them.

Overall the project has been very successful in identifying new archaeological sites. It has identified the range of threats to the coastal heritage, and identified some of the most threatened sites. In some cases this has led to further fieldwork being undertaken to provide more information on the sites and allow recommendation for future management and monitoring to be put forward.

From feedback from volunteers on the project, one of its great successes has been enabling people to become involved with archaeology, in many cases for the first time. The volunteers have learnt new skills and more about archaeology, their heritage and the coastline itself. All of the Trusts have noted how much the projects success has been dependent upon volunteers giving their time to assist, and how enjoyable it has been for all involved. The first three years of the project have been a success and although it is recognised that it would not be feasible for Cadw to provide year on year funding, it will be essential to secure funding from elsewhere enable the project to continue at a successful level well into the future.

## **CONCLUSIONS**

The 2011-2012 year of Arfordir has been carried out in a slightly different way, with more emphasis on carrying out more detailed programmes of archaeological investigation on specific threatened coastal sites. This was undertaken firstly to provide further information on these sites identified as under threat from work in the previous years, and secondly to provide volunteers supervised volunteering opportunities.

Both the 2009-2010 and 2010-2011 years revolved around an assessment of our existing knowledge of coastal erosion threats based on 1990s data and updating this with site visits to determine existing conditions. From this work a number of archaeological sites were identified for further investigation or updating information on the HER. The last year has continued further updating of the HER sites.

During the first and second years, and continued into the third, a few sites were highlighted to the Trust by interested members of the public/other professionals which were also assessed through site visits and discussions with the discoverers. This is still an important part of the project. The discovery of the previously unknown site at Whitesands Bay and resultant scheme of fieldwork illustrates this very well.

We have again noted that volunteer involvement has been greatest during organised site visits and fieldwork and that independent working is very hard to maintain. The occasional use of the CBA Community Archaeologist post to assist with liaising with local groups regarding the project has been very beneficial, increasing our audience. Unfortunately it was not possible to have the sustained involvement of this post in the project due to numerous other work commitments.

For both DAT staff and volunteers, the fieldwork projects have been incredibly rewarding. A number of regular volunteers have been able to undertake more site recording tasks independently (as was most gratefully acknowledged at St Ishmael). The fact that volunteers are willing to give their time on these organized fieldwork projects means that the information we can gain from the sites is maximized.

## **Tasks for 2012 -2013**

The next year of the Arfordir project for DAT will continue to monitor known coastal sites under threat.

Liaison with local groups and communities in the Cardigan and St Dogmaels areas has been undertaken and will hopefully result in some specific lectures and training sessions in the next year. Similarly a meeting will be prepared at Borth to try and establish a group to monitor the peats and submerged forests that are present. These are exposed and covered over with sand on a regular basis due to the dynamics of tidal movement.

A recording methodology for peat exposures is to be devised next year in conjunction with Nigel Nayling at University of Wales Trinity St Davids. This can be trialed at Borth. It is also hoped that the methodology can be implemented to record the clay levels being exposed at Abermawr and enable accurate location of flint artefacts.

The Arfordir website will be updated. New recording forms and methodologies for recording may be devised, especially if it is possible to utilise new technologies in the improvement of the accuracy of recording.

## REFERENCES

- Cole, A., 1995, *A Coastal Survey of Carmarthen Bay*, DAT and RCAHMW Report
- Crane, P., 2012, *East Blockhouse, Angle*, DAT Report No. 2011-33
- Meek, J., 2010, *Arfordir Coastal Heritage 2009 - 2010*, DAT Report Number 2010-23
- Meek, J., 2011, *Arfordir Coastal Heritage 2010 - 2011*, DAT Report Number 2011-18
- Meek, J., 2012, *Arfordir Archaeological Investigation 2011: St Ishmael, Carmarthenshire Deserted Medieval Village*, DAT Report No. 2012-25
- Murphy, K. & Allen, B., 1997, *Coastal Survey 1996-7, Strumble Head to Ginst Point*, DAT Report, PRN 33470
- Murphy, K. & Allen, B., 1998, *Coastal Survey 1997-8, Lower Milford Haven, Pembrokeshire*, DAT Report, PRN 35003
- Page, N., 1998, *Coastal Survey 1997-8, Carmarthen Bay, Ginst Point to Loughor*, DAT Report, PRN 35205
- Page, N. & Scott, S., 1998, *Coastal Survey 1997-8, The Dyfi Estuary, Ceredigion*, DAT Report, PRN 35311
- Poucher, P., 2012, *Boulston Manor, Pembrokeshire: Building Recording*, DAT Report No. 2012-27
- Sambrook, R. P. & Williams, G., 1996, *Cardigan Bay Coastal Survey*, DAT Report, PRN 30751
- Schlee, D., 2010, *West Angle Bay, Angle, Pembrokeshire: Arfordir Excavation 2010*, DAT Report Number 2010-56
- UKCIP 2009a, *UK Climate Projections – Marine and Coastal*
- UKCIP 2009b, *UK Climate Projections – Climate Change Projections*

# **APPENDIX I:**

# **DAT ARFORDIR REVIEW FORM**



## **ARFORDIR REVIEW – DYFED ARCHAEOLOGICAL TRUST JAMES MEEK**

### **Questionnaire**

#### **Part 1: Cadw funded element of the Arfordir project**

##### ***Assessment of coastal erosion threats:***

Has the project been successful in identifying/updating our existing knowledge of coastal erosion threats (please give a couple of examples)?

Yes – the first years work highlighted the changes in perceived erosion rates from the 1990s work had changed by 2009. This was evident in the Burry Port area where constant silting is covering up significant archaeological remains.

Also a few areas around Pembrokeshire and Carmarthenshire were probably at higher threat from erosion than identified in 2009, such as at the Telpyn Point end of Amroth (Carms/Pembs border); north of Laugharne along the cliff edges alongside the mouth of the River Taf; at St Ishmael, Carmarthenshire where erosion was previously seen as slight but we know it is eroding at between 0.3m and 0.5m per year; and at Llanon/Llansantffraid where again slight erosion was recorded, but it is evident that the coast is receding quite rapidly into the medieval field systems.

Other than coastal erosion, what other forms of erosion threats have been identified?

Foot-fall is definitely a problem around the Pembrokeshire Coastal Path. The Bronze Age cist at Whitesands Bay being an obvious example.

Probably one of the main threats is from water run-off from the land, whether through rain or just ground water, eroding the cliffs from the top or de-stabilising sand dunes from below such as St Ishmael.

Decay of isolated standing structures is clearly evident in places.

The impact of new coastal defences very clear at Borth. Even though it has been a commercial project, we have learnt valuable lessons regarding how such works should ideally be treated in the future by archaeological curators, consultants and contractors, namely:

- Developers need to be given information regarding archaeological remains and their significance at the initial stage of development design;
- Need better evaluation of potential archaeological remains well in advance of development;
- The methodology for creating coastal defences and other offshore structures should be made known from the start so that the actual threats from the coastal development can be assessed;
- Information on tidal movement predictions should be made known in order that future impacts resultant on the developments can be assessed.

Were these identified by the Trust's or by volunteers?

With a definition of volunteers to include fully signed up Arfordir volunteers to interested members of the public / other professionals who have identified threatened coastal archaeological sites - a mixture of both.

Many sites identified by individuals and then assessed through site visits and possibly further investigation.

Lydstep and Whitesands perhaps the best two examples of information being made known to the Trust on very significant archaeological sites.

Has this led to any further survey or excavation of said sites?

Yes. Lydstep footprints recording, Whitesands Bay, possible further work to be done at the West Angle promontory Fort, St Ishmael and Boulston Manor. East Blockhouse Angle has been another project. Even the recent work at Borth undertaken by university of Wales Trinity St David's, Lampeter should be included, even though it was not possible at the time to run a specific Arfordir project, information was made available on the project by the CBA trainee. It is intended that a talk will be provided to the interested parties at Borth to make them aware of the significance of the peats and from there hopefully start regular monitoring.

Has the work led to any mitigation measures being put in place, or being proposed for the future?

Not as yet – only in terms of archaeological recording.

Work next year should assist in the production of recording methodology for peat exposures as noted above at Borth, but also at Abermawr and other parts of the southern Pembrokeshire and Carmarthenshire coastlines.

The results of this year's St Ishmael, Boulston Manor and East Blockhouse projects have all provided information on mitigation measures that should be implemented. In the case of Boulston Manor, some simple remediation work could prolong the survival of some large parts of the masonry. It was also noted that Badgers have burrowed into the graveyard exposing human remains, and some form of mitigation should be implemented.

The St Ishmael investigations have indicated that there is still a large amount of significant archaeological remains buried beneath the dunes which will be exposed over time by erosion and the denuding sand dunes. What is also identified as a possible threat is future stabilisation or coastal defence works that will eventually be necessary to protect the adjacent railway line. Any such defensive schemes could directly impact upon the buried remains of the medieval village.

Have you been dealing with peat or submerged forest deposits, and if so in what form has this taken?

Yes. Seen at Morfa Bychan, Wiseman's Bridge, Amroth, Abermawr, Borth.

Borth has been discussed above, and was also the subject of a commercial project during the construction of the defences. The methodology could certainly be improved.

### ***Identification of new sites***

Has the project enabled new sites to be added to the HER, and if so could rough estimates of numbers be given?

Many new sites identified from our initial walkovers, perhaps in the three years around 70 new sites have been identified with more yet to be added to the HER.

Please give details of a range of the site types identified.

Peat exposures and footprints – Lydstep, Borth, Morfa Bychan, Wiseman's Bridge, Amroth etc

Flint artefacts at Druidstone Haven, Abermawr

Bronze Age cist at Whitesands Bay

Iron Age Promontory Fort – West Angle Bay

Medieval buildings – St Ishmael, Boulston Manor, Llansantffraid

Post-medieval structures associated with the coast – at Aberystwyth, Aberporth, Porth Lisky Bay, Laugharne, Llanelli etc, and including some remains on the foreshore – Laugharne, Picton Point

Coastal Military / World War II defences – Morfa Bychan, St Ishmael, Kidwelly, Pendine

### ***Working with communities, groups and individuals***

Has the project successfully engaged with local communities, groups and individuals?

It has been successful in engaging with some local communities and groups. The group at West Angle has perhaps been the most successfully engaged.

We have had some individual volunteers who will regularly turn up for organised projects. The work at St Ishmael has a number of volunteers who turned up for both seasons of excavation. The work at West Angle / East Blockhouse also had 'repeat business'. There have also been individuals who have worked on a number of North Pembrokeshire sites, including the Iron Age promontory forts elements of the first year of the project, Whitesands Bay excavation and Abermawr monitoring.

In what forms has this taken (talks, walks, site investigation, websites, blogs, facebook etc), and what form is considered to be the most successful (a couple of examples would be good)?

Talks, walks, site investigations, website information, training sessions.

Most successful pieces of work would be the site investigations themselves.

A number of one on one sessions have also been carried out where people have identified specific sites they are interested in or alternatively wanted a 'taster session' to see if they could be of use. These have been both rewarding for the volunteer, but also for the person taking the session as different perspectives on the term 'coastal heritage' can be discussed. In one case an ex-pat who regularly comes over from Canada got in contact in the hope of seeing some of the sites we monitored along the Carmarthenshire coastline – this gave an opportunity to monitor a number of sites as well as discuss the archaeological work that we have been doing and compare with the work that he has been doing in Nova Scotia on a similar kind of coastal heritage project. He is still a regular contact and could be a very valuable source of comparative information in techniques and also community engagement.

Has the project enabled independent working from these communities, groups or individuals?

Although some individuals are happy to do elements of recording themselves, most will come to talks or walks and get very enthused, but are not prepared to or do not want to work independently. They will often turn up to further organised events.

Are Arfordir site recording forms being used by members of the public? And are these being completed with professional support or independently?

Occasionally, but not as often as would be ideal.

Has feedback been positive from volunteers?

Very positive in almost all cases. Again the best feedback has come from organised investigations.

What is the demographic of the people engaged through the project?

Mostly the over 50s.

Some younger volunteers on the excavations, but no under 20s.

School visits were organised for the excavations at West Angle and at St Ishmael, which were very enjoyable.

Have you used the NAS for talks and training purposes, and if so has this been successful?

One talk was organised in the first year which was well attended and had positive feedback.

We would like to organise something for next year in terms of training.

## **Part 2: Non-Cadw funded elements of the Arfordir project**

What other resources have been used to supplement work on the Arfordir project (eg CBA posts/IfA Bursary posts)?

The CBA trainee position has been used occasionally, but not as much as we would have liked due to their multitude of other work commitments.

The PCNPA archaeologist has also been involved with a certain amount of his time allocated to the project per year. He has been involved in a number of the fieldwork projects, keeps contact with many of the local groups in Pembrokeshire and keeps a very regular eye on the coastline.

Has this been successful and is this seen as being an essential part of the project development?

Successful, and should definitely be seen as a necessary part of the project in the future. For 2012-2013 it is intended that the new CBA post holder will assist with the development and delivery of the peat/submerged forest recording methodology. Communication with the PCNPA archaeologist could be improved.

What has this enabled that could not have been achieved through the Cadw grant alone?

More liaison with local groups, and individuals – such as at Llanelli, St Dogmaels and Cardigan. They also assisted with the supervision of volunteers at the investigations at St Ishmael.

Do you see the HLF bid for two permanent coastal community archaeologists (North and South) as being necessary to continue the Arfordir project? And would your volunteers (communities, groups and individuals) be keen to see this taken forward?

Essential as it is not possible to devote the amount of time that is definitely needed to take this project forward. The resources are tight, and due to other projects, a sustained Arfordir work programme has not been able to be achieved. It has been carried out in small chunks as and when time allowed. This may well be a reason why the organised events and investigations have been so successful and independent working less so, as it has not been possible to sustain the momentum of individuals.

## **Part 3: The overall project strengths and weaknesses**

What difficulties have you encountered undertaking the project?

Not enough time to do all of the tasks that we would like to have completed – as mentioned above. It is very difficult to sustain volunteer enthusiasm to progress to independent working.

What have been the most successful elements of Arfordir?

Organised site investigations. These have been most rewarding for volunteer support, with the best feedback. Also the results have been incredibly interesting and essential for future recording / mitigation measures for sites under threat. They have also demonstrated how the threats might increase in the future.

What have been the least successful?

Getting a network of independent volunteers regularly submitting recording forms.

How could the project be improved?

More time allotted to deal with volunteers and groups. This can only be achieved through the establishment of the HLF funded coastal archaeology posts.

At DAT we could benefit from the development of more structured volunteer training programme.

Extend works into Ceredigion, work with Cynal Y Cardi groups, Hanes Llandudoch and Dros Y Tonnau, more links with PLANED, work with the new curator at Ceredigion museum, establish a monitoring group at Borth.

How would an ideal Arfordir project be undertaken?

Site identified by volunteer/individual or group.

Initial site visit and discussion with the discoverer leading to confirmation of the need for further recording.

Site investigation set up, training plan established, volunteers organised for the work.

Investigation starts, all volunteers who have booked turn up, training provided and the site successfully recorded.

Volunteers issued with certificate/documentation to say what they have done/achieved and as recognition of the work they have done for us.

All volunteers feel that they have come away having gained a good knowledge of the archaeology of the site and enough confidence to undertake independent working.

The information gained from the site either fully records the remains to a more than appropriate level or enables a mitigation strategy to be implemented.

Have DAT, GAT and GGAT worked together enough on the project? If not, then should we try harder to do so?

No – and we should definitely try and coordinate more. This is something that the CBA training posts may be able to resolve or the subsequent community archaeologists that will hopefully result from these trainee placements.

Similarly DAT need to do more with the PCNPA archaeologist and vice versa.

#### **Part 4: Any other issues that should be raised?**

Recording forms have been simplified, but are still thought to be cumbersome and difficult for people not used to such things. The DAT CBA trainee has mentioned the possibility of getting a 'smart phone' app developed, where a site can be recorded in an ad-hoc fashion if identified during a basic site visit. This app could use all of the capabilities of the majority of smart phones designed today – including geo-referenced photographs, compass direction for photos, written information or spoken information recorded on the phone, cross reference with on-line HER / APs on Google maps etc etc.

Need structured training plans for volunteers – also possible certificates or similar in recognition of the work the volunteers have undertaken.

Use of HER terminology on the recording forms has been off putting for many individuals. Although the terms to be used are given within the recording manual, they are not terms non-archaeologists are used to, and many do not feel confident enough to use them correctly. Ideally we would have a very simple form with basic prompts – where? what? why is it important? how close to the coast? and is it under threat? Photo or sketch. It would be possible for the Arfordir coordinators to then take this information and place it into a better HER friendly form, rather than getting the volunteers to do this. This would need to be discussed further with the relevant HER officers.

# **APPENDIX II:**

# **GAT ARFORDIR REVIEW FORM**

**ARFORDIR REVIEW – GWYNEDD ARCHAEOLOGICAL TRUST  
IWAN PARRY**

**Questionnaire**

**Part 1: Cadw funded element of the Arfordir project**

***Assessment of coastal erosion threats:***

Has the project been successful in identifying/updating our existing knowledge of coastal erosion threats (please give a couple of examples)?

Something that has become evident is that archaeology is under threat from erosion even in areas where there is very little chance of substantial land loss (e.g. rocky coastline). Many of the flint scatters have been found where the shallow soil covering bedrock has started eroding.

There have been many sites flagged up that were not known about before this project. This project has allowed us time to re-evaluate existing sites.

The badly eroding Iron Age hillfort at Dinas Dinlle has been re-surveyed to monitor the erosion.

A previously unknown fish weir and an eroding pit containing Bronze Age pottery and flint have been identified at Glanllynau, Llanystumdwy. Subsequent magnetometer survey revealed possible early field boundaries in the surrounding area.

January 2011 at Penychain, Abererch. Flints have been reported eroding from this area since the early 1920s but the site was brought back to our attention through the Arfordir project. Six test pits were excavated with the aid of a volunteer, five of these contained worked flint and showed signs of a ground surface covered by sand encroachment.

A second excavation in February 2011 aimed to determine if an orthostat, found eroding from dunes at Morfa Abererch in 2004, was a prehistoric standing stone or later feature. The excavation of a single test pit against the stone showed that it stood over 2m tall and was almost certainly a Bronze Age standing stone. Unfortunately the test pit was abandoned due to safety concerns before the cut of the stone hole or base of the stone was identified. In 2012 an area close to the stone was subject to a magnetometer survey, unfortunately the results did not reveal any associated features.

Excavation at the eroding promontory fort of Dinas Dinllaen, Porthdinllaen in Autumn 2011 and magnetometer survey in 2012.

Buried soil/old ground surface with possible pits has been located at Aberdesach near Clynnog, on the day this was identified the temperature was very low and even the sea had frozen in the rock pools. As I walked along this coast I could see (and hear) coastal erosion in effect due to freeze-thaw action. Large stones tumbled down the cliff face and visible movement of sections of the cliff face was spotted.

Other than coastal erosion, what other forms of erosion threats have been identified?

General weathering, freeze-thaw action. Erosion on coastal paths by walkers.

The dramatic effect of Freeze-thaw action has been quite surprising and appears to be responsible for much of the erosion in certain areas. Large blocks of earth have been seen to fall from eroding cliffs on frosty mornings as thawing occurs.

Were these identified by the Trust's or by volunteers?

The majority of erosion threats have been identified by Trust staff but areas of erosion have been brought to our attention by volunteers.



Most flint scatters, pits and buried soils (buried features) have been identified by the Trust archaeologists. Surface sites such as upstanding buildings and other structures have been identified by both Trust archaeologists and volunteers. The peat deposits and fish weir at Glanllynau were identified by a volunteer.

Has this led to any further survey or excavation of said sites?

- A handheld GPS survey was conducted of exposed peat, glacial clay and associated features in the area of the standing stone excavation at Morfa Abererch and of a peat exposure and newly identified fish weir at Glanllynau, Llanystumdwy.
- An EDM survey was conducted of the erosion and WW2 features which had been previously recorded in detail by a volunteer at Penychain, Abererch.
- Geophysical survey has been undertaken in the field behind the standing stone at Abererch.
- Geophysical survey was undertaken around the area of the promontory fort of Dinas Dinllaen.
- Geophysical survey has been carried out at Glanllynau where a cut feature containing Bronze Age pottery and flints were seen in the eroding section.

Has the work led to any mitigation measures being put in place, or being proposed for the future?

Unknown/Pending.

Have you been dealing with peat or submerged forest deposits, and if so in what form has this taken?

The peat deposits found have been recorded using a handheld GPS (as with most of the sites).

### ***Identification of new sites***

Has the project enabled new sites to be added to the HER, and if so could rough estimates of numbers be given?

Roughly 150 new sites have been identified with more continuously being added to the database.

Please give details of a range of the site types identified.

Prehistoric sites - mostly flint scatters, such as those found in Cemlyn Bay and Porth Neigwl, to WWII pillboxes previously unrecorded, such as one found at Dinas Dinlle and At Godreddi Bach, Red Wharf Bay, Anglesey, a WW2 pillbox disguised as a cottage. A granite quarry site at Porth Namarch, Holyhead which is largely only visible from the sea was reported by a volunteer who often sails around the coast of Anglesey. Further investigation on shore revealed the presence of grinding stones and other features.

Some previously unknown peat deposits have also been identified.

### ***Working with communities, groups and individuals***

Has the project successfully engaged with local communities, groups and individuals?

We have promoted the project to local communities and individuals with local historical societies being one of our main targets. Those expressing an interest in

volunteering for the Trust have also been made aware of, and encouraged to participate in, the project.

In what forms has this taken (talks, walks, site investigation, websites, blogs, facebook etc), and what form is considered to be the most successful (a couple of examples would be good)?

We have given a number of talks, where daytime talks have been given to historical groups they have usually been accompanied by a guided walk. Many evening talks have also been given to historical groups, at these information has been provided about how to become involved in the project and invitations given to come on future guided walks.

Pages dedicated to the project have been placed on the GAT website with links to the Arfordir pages of other Trusts. This was also linked to a facebook page set up for promotion of the project.

Volunteers on the Trust's Tai Cochion excavation were made aware of and encouraged to become involved in the project.

A community project was carried out at Dinas Dinllaen promontory fort. This was funded through Arfordir and with a grant obtained from the Llŷn AONB. This was successful in engaging a number of enthusiastic volunteers as well as three local primary schools which took part in site visits and produced artwork based on the site's history. An event will be held on the 23<sup>rd</sup> of February where the artwork will be presented to the community along with the results of the excavation.

All aspects of public engagement have been successful in raising awareness and interest in the project but all have also presented some problems. The talks given to historical groups generally reach retired individuals who have the time and enthusiasm to give to the project but often lack the required degree of physical fitness. Results from those targeted through the volunteer excavations were initially promising but most had more of an interest in excavation rather than survey. One of the most productive groups have been mature students currently studying Archaeology at Bangor, the majority of publicly submitted information has come from mature students.

Has the project enabled independent working from these communities, groups or individuals?

Individuals have been active in independently surveying sections of coastline but all additional work has been done with the support of Trust staff.

A community group which have been given an introduction to the project have expressed an interest in conducting survey and more detailed recording independently. An initial training session has been provisionally arranged for the last week of February.

Are Arfordir site recording forms being used by members of the public? And are these being completed with professional support or independently?

Yes the forms have been used by volunteers, most of which have been filled in independently. Following the Harlech meeting on the 6<sup>th</sup> July 2010, it became apparent that the recording forms were somewhat complicated and off-putting to the volunteers. Using the feedback received these were edited, and more user friendly ones produced. Alongside the recording forms there is a hand-out which explains how best to fill in the form and what all the individual areas of the form are explained. This hand-out was given with the forms. The volunteers were encouraged to contact us if they had any problems or questions regarding the site recording forms.

Has feedback been positive from volunteers?

Yes, apart from the original recording forms which have now been improved.

What is the demographic of the people engaged through the project?

The majority of information received through the volunteer aspect of the project has come from mature university students. There were also a few students who wanted to boost their C.V. Primary school pupils have been engaged through the activities associated with the work conducted at Dinas Dinllaen and a number of sixth form students have undertaken independent survey and supervised fieldwork.

The majority of those engaged in the talks given have been retired individuals.

Have you used the NAS for talks and training purposes, and if so has this been successful?

No

## **Part 2: Non-Cadw funded elements of the Arfordir project**

What other resources have been used to supplement work on the Arfordir project (eg CBA posts/IfA Bursary posts)?

A grant was secured from the Llŷn AONB Sustainable Development fund to buy equipment for volunteers and to conduct an excavation at the eroding promontory fort of Dinas Dinllaen, Porthdinllaen. A further grant was obtained from the same source to conduct geophysical survey at a number of sites and to provide further activities for local primary schools.

The holder of the CBA Education and Outreach placement at the Trust has been actively involved in various elements of the project including the fieldwork at Dinas Dinllaen and associated school and community elements.

The holder of the IfA Bursary in Education and Outreach was actively involved in the organisation and implementation of all aspects of the project. The additional time provided by the bursary made it possible to dedicate far more time to volunteers and their needs. During the time that the bursary holder was able to concentrate fully on the project volunteer involvement increased substantially.

Has this been successful and is this seen as being an essential part of the project development?

This element of the project has been very successful with our understanding of Dinas Dinllaen which has been eroding significantly increasing significantly. The geophysical surveys conducted as part of the AONB grant have also increased our understanding of other eroding sites. Publicity generated by the work will also be used to promote the project in general.

The additional time provided by the training placements has been invaluable in developing outreach activities and methods of engagement.

What has this enabled that could not have been achieved through the Cadw grant alone?

The funding has allowed us to engage with schools in a way which would not have been possible through the Cadw funding alone. We were able to work with a local artist to produce pieces of art based on fieldwork at an eroding site.

We were also able to purchase five equipment packs which are loaned out to volunteers to make surveying a little easier and accessible to all who wish to be involved. These include a GPS and digital camera which are the two main pieces of equipment used by Trust staff while surveying.

Do you see the HLF bid for two permanent coastal community archaeologists (North and South) as being necessary to continue the Arfordir project? And

would your volunteers (communities, groups and individuals) be keen to see this taken forward?

I believe that a permanent coastal community archaeologist is essential for the effective continuation of the Arfordir project. It has been clear that volunteer engagement, and subsequently submitted information, increases when there is a member of staff permanently dedicated to the project.

I believe that everyone who has been involved in the project would be keen to see the plans for a permanent community archaeologist taken forward.

### **Part 3: The overall project strengths and weaknesses**

What difficulties have you encountered undertaking the project?

There has been some difficulty in receiving information from volunteers which have initially shown a great deal of interest. This was improved to some degree with the introduction of the equipment packs and the additional staff time provided by the IfA bursary.

What have been the most successful elements of Arfordir?

Trust archaeologists undertaking the coastal walks. It has given the archaeologists time to pass their expert eye over the eroding coast and without this project the time and money would not have been there.

The additional sites which will be added to the HER demonstrate that coastal erosion is constantly exposing previously unknown sites which may well have been lost without the Arfordir project – this is true of sites identified by both volunteers and professionals.

The excavations, detailed surveys and school site visits (organised outreach) were all very successful

What have been the least successful?

Getting volunteers to regularly submit information (not all the volunteers have handed in their recording forms yet) and keeping them motivated.

How could the project be improved?

In an ideal world dedicating a member of staff to work on the project full time would greatly benefit the project.

How would an ideal Arfordir project be undertaken?

An ideal Arfordir project would have at least one archaeologist (in each trust) permanently working on the project.

At least one high profile piece of fieldwork each year with a high degree of community and volunteer involvement, and a number of other well organised fieldwork opportunities.

Have DAT, GAT and GGAT worked together enough on the project? If not, then should we try harder to do so?

The coastal meetings attended by the three trusts have certainly been beneficial. Greater communication between meetings via email/phone may benefit the project to some degree.

### **Part 4: Any other issues that should be raised?**

# **APPENDIX III: GGAT ARFORDIR REVIEW FORM**

**ARFORDIR REVIEW – GLAMORGAN GWENT ARCHAEOLOGICAL TRUST  
ELLIE GRAHAM**

**Questionnaire**

**Part 1: Cadw funded element of the Arfordir project**

***Assessment of coastal erosion threats:***

Has the project been successful in identifying/updating our existing knowledge of coastal erosion threats (please give a couple of examples)?

Yes, in GGAT's area, areas of erosion were identified by volunteers working on the project (especially Broughton Bay and Burry Holms) and the project has established a monitoring presence along the coastline to continue this. Most of the work so far has identified that much of the coastline in the existing study area is relatively stable.

Other than coastal erosion, what other forms of erosion threats have been identified?

In Gower especially damage caused to monuments by visitors/tourists using coastal paths, and animal damage to some sites, mainly defensive banks of promontory forts, tidal exposure of sites on the foreshore.

Were these identified by the Trust's or by volunteers?

Both, on different sites

Has this led to any further survey or excavation of said sites?

No, but has led to discussions with the National Trust (whose land the sites are on) about mitigation works: repairs and preventing the damage through moving the footpaths causing erosion and vegetation management. Has also led to recording of exposed sites, in areas where controlled excavation is impossible.

Has the work led to any mitigation measures being put in place, or being proposed for the future?

Yes, repair work to erosion scars and moving the footpath causing the problem, to be undertaken by NT rangers and volunteer groups.

Have you been dealing with peat or submerged forest deposits, and if so in what form has this taken?

Yes, ongoing monitoring of exposures on Swansea Bay and recording of any features exposed in the peat shelf. Volunteer group currently undertaking mapping work of peat exposures and submerged forest in Swansea Bay, by establishing a baseline with GPS points and measuring from that.

***Identification of new sites***

Has the project enabled new sites to be added to the HER, and if so could rough estimates of numbers be given?

Yes, has been very successful in this. About 120 new sites in year 1, about 60 in year 2 – this is increasing as volunteers return information and completed forms/reports.

Please give details of a range of the site types identified.

Prehistoric cairns and hut sites, possible chambered tomb, burnt mounds, prehistoric worked wood in peat shelf, possible medieval settlement sites, medieval cross base, post-medieval mining and quarrying remains, agricultural

remains (field boundaries etc), abandoned post-medieval houses, shooting butts from 19th century volunteer rifle range, post-medieval and modern intertidal sites, including shipwrecks, fish traps and other fishing remains, WWII remains, modern lighthouse base.

### ***Working with communities, groups and individuals***

Has the project successfully engaged with local communities, groups and individuals?

Yes, though with varying success in different areas

In what forms has this taken (talks, walks, site investigation, websites, blogs, facebook etc), and what form is considered to be the most successful (a couple of examples would be good)?

Introductory presentations and meetings, recording training, guided walks, wreck training weekends, site investigation – recording and recovery of eroding trackway – project website, advertising on archaeological websites, blogs, twitter account, facebook pages. The blog, the project website and the advertising of the project of sites such as Past Horizons has resulted in interest not only locally but abroad. A number of students elsewhere in Europe have enquired about working on the project, and several Canadians have expressed an interest in the project after seeing the website or adverts online. The guided walks and site visits have generally been very popular, with up to c.20 attendees at some, and useful for providing volunteers with practical training in the identification and recording of sites. The twitter account has over 50 followers, some volunteers on the project, some other heritage bodies and professionals in the area. This has allowed recruitment to be expanded and has got the word out about the project. The facebook pages have probably been the most successful aspect of the social media use, with volunteers regularly using them to organise site visits and meetings and to upload photos of the sites they've visited. They've also been useful for advertising events and recruiting for specific activities.

Has the project enabled independent working from these communities, groups or individuals?

Yes. The degree of independent engagement has varied, but there are groups who regularly undertake independent fieldwork in all parts of the project study area.

Are Arfordir site recording forms being used by members of the public? And are these being completed with professional support or independently?

Volunteers are regularly using the forms and returning them. The use of the forms is generally demonstrated during a guided walk/site visit which gives the volunteers confidence in completing them. Groups then return completed forms from independent fieldwork for verification by project staff.

The forms have also been adapted for use for fieldwork for other Cadw projects at GGAT.

Has feedback been positive from volunteers?

Yes, overwhelmingly positive, with lots of oral feedback, as well as written feedback. Examples:

Training sessions:

"Very many thanks for the superb training yesterday - I've just spent a happy hour re-reading and making a file for my future adventures into surveying. Very many thanks also for the web address for a trowel. I look forward to the upcoming coastal site walks too. Best wishes" Gillian Austin

"Dear Ellie, Just a quick email to let you know how good it was to meet you yesterday. Today I've seen some of the people who came along and they really enjoyed your presentation too...so thanks! Regards" Esther Richards

Guided walks:

"Hello Ellie, Thank you for Saturday - really had a good day. I will hopefully be at the meeting on the 6th. See you then, Lynne" Lynne Esson

"Dear Ellie, Thanks for walks last week. I really enjoyed them. Best wishes" Lyn Richards

"Hello, Thank you Ellie for the guided walk today! I enjoyed myself and learned a lot! Best wishes," Rosa Cheesman

"Hi Ellie, I really enjoyed last week - can't believe how many sites we found. I keep thinking of more around the coast now, wondering if they're recorded. I'll look up photos etc soon to send in. Best wishes," Peter Francis

"Hi Ellie, I had a fantastic time and yes I loved telling everyone about our wonderful potential discovery. Looking forward to the next training day. Cheers" Lea Halborg

Time Team 12th August feedback:

"Hi Ellie, We really enjoyed our guided tour of the Time Team site. It was the highlight of our year's activities...." (Ian Hutchinson, on behalf of Porthcawl U3A Archaeology group)

What is the demographic of the people engaged through the project?

Largely people c.55+ often retired or working reduced hours, many of whom are also actively involved in other voluntary societies or groups. Also full-time workers, and some university students, some college students. Generally a good mix and not confined to the 'typical' demographic you might expect to engage with a project like this.

Have you used the NAS for talks and training purposes, and if so has this been successful?

Yes, the NAS delivered two wreck-recording training weekends for volunteers on Swansea Bay. These were very successful and popular, and the volunteers learnt a lot of new skills. One issue identified was that although the first weekend was very well-attended (despite a clash with a Rugby World Cup game!) and the second weekend was fully booked, turn-out for the second weekend was disappointing, with a lot of last-minute cancellations. One solution which has been proposed for this (by Polly Groom, Cadw) is to make a small charge for the training. I don't think this is likely to be a problem or put volunteers off attending (volunteers are regularly surprised that there is no charge for events). This could either be used to pay for refreshments, or as a refundable deposit paid in advance to be returned on attendance (perhaps a cheque that won't be cashed except in a case of no-show or last-minute cancellation).

Feedback:

"Hi Ellie and Tash, thanks for a great weekend really enjoyed all that recording, did me head in though. Thanks again, Maggie & John" (Maggie Cornelius and John Robertson)

"Thanks for organising the wreck recording it was really good!" (Sarahjayne Clements)

"Hi Ellie, That's fine if you pass them on. I had a good weekend and learnt a lot. I think I speak for all. Much appreciated, thanks for setting it up. Cheers, Paul."



## **Part 2: Non-Cadw funded elements of the Arfordir project**

What other resources have been used to supplement work on the Arfordir project (eg CBA posts/IfA Bursary posts)?

Two students on exchange from UNCW at Swansea University, total four days on research/cross-referencing records.

Work placement student from University of Wales Trinity St David's, four weeks on community engagement, advertising project, and contacting local groups.

CBA-funded CATP bursary holder sporadically throughout year-long placement working on all aspects of the project. This in particular has been very useful for raising the profile of the project by allowing it to have a presence at a greater number of events, and allowing more training events to take place.

Also support in kind (staff time) from the National Trust.

Has this been successful and is this seen as being an essential part of the project development?

This has been very successful and should definitely be part of the plan for the project in the future. It increased the potential for community engagement and offers a sustainable means by which the project can continue in the future with reduced funding by Cadw.

What has this enabled that could not have been achieved through the Cadw grant alone?

It has allowed the project to be presented at a greater number of outreach events and has allowed a greater number of training events to be held than would otherwise have been possible. Also, through the CATP's work with a number of other community groups, an informal advertising of the project has been possible. Where both the Arfordir coordinator and the CATP have been present at events, it has allowed a higher level of supervision of volunteers and guidance on recording. Presentations about the project have also been made at the TAG conference, which was attended by the CATP as part of the placement, which brought the project to the attention of a wider group of people than would otherwise have been reached.

Do you see the HLF bid for two permanent coastal community archaeologists (North and South) as being necessary to continue the Arfordir project? And would your volunteers (communities, groups and individuals) be keen to see this taken forward?

Yes to both. I see the provision of a permanent coastal community archaeologist as central to the continuation of the type of work the project does, and as a sustainable means of continuing the project's work in the future. Although the groups are now working independently, a degree of professional support and help will continue to be required by the groups and individuals working on the project. Although the independent monitoring work done by the volunteers may continue, responding to threats and undertaking follow-up work would be facilitated by having a permanent coastal community archaeologist. When this has been mentioned to volunteers, they have been very keen to see this happen and feel it would be very beneficial for the area and for the work of the project.

## **Part 3: The overall project strengths and weaknesses**

What difficulties have you encountered undertaking the project?

The rate of attrition amongst volunteers has been disappointing. After very enthusiastic responses to initial advertising, of the volunteers who initially expressed an interest, a majority then undertook the theoretical training, and a

significant number then joined the guided walks and site visits. The independent monitoring which then followed on from this stage witnessed a significant drop in numbers as the planning and organisation of group visits then devolved to the volunteers. However, this attrition appears to have stabilised and a smaller but sustainable core of very enthusiastic volunteers has evolved in each area and regularly undertake independent work and return information to the project coordinators. From nearly 70 people expressing an interest and joining training events, perhaps a quarter to a third of them have genuinely engaged with the project. From discussions with other bodies who run groups of volunteers this is fairly standard, however, and is to be expected when dealing with volunteers.

The lack of response from some organisations, groups and societies has in some cases been disappointing, but following up initial letter or email contact hasn't generally been possible due to lack of time.

The enthusiasm of the regular volunteers has been excellent, one of the difficulties has been limiting them to the coastal areas, they also return information about sites which lie inland, outside of the project study area. This isn't a problem, but does indicate that perhaps similar projects could be undertaken elsewhere and not restricted to the coastal zone.

The issue of the logistics of undertaking site investigation has sometimes prevented work being done, or at least being done by volunteers. Sites which are inaccessible, being partway up a collapsing dune for example, would be great to investigate but are completely impractical to dig.

There is a tension between firing volunteers' enthusiasm for the project while also emphasising the importance of health and safety on the foreshore and on cliffs etc – I'm sometimes worried I'm scaring them off by underlining the dangers and the need to be very careful in some environments.

A logistical difficulty encountered is the piecemeal nature of volunteer recruitment following the initial recruitment drive. After the initial mail-shot, leaflet drop, press-release and contacting local societies, training events were held to train the members of the public who had expressed an interest. However, some of the advertising and group contact particularly took some time to permeate, while volunteers who had heard of the project more informally got involved later. There were therefore a lot of enthusiastic people who got involved after the initial round of training events, one or two at a time. Providing training for these people was slightly awkward as we wanted to wait until there were enough people to justify holding a training event but without making them wait too long and therefore lose interest. One solution to this was for the new recruits to get involved with existing groups which were already active to learn the skills needed to undertake monitoring and recording work, and for more formal training to be provided at a later date.

Some of the societies contacted were keen to have a presentation delivered but had a fully-booked programme of events for the coming year and couldn't accommodate a full-length talk on the project within the timescale for recruitment.

Some volunteers were very enthusiastic about recording 'new' sites for the record and completing forms but the need for keeping records of sites already visited and cross-referencing a possibly 'new' site with existing records wasn't always fully understood, with the result that there was some duplication of results.

**What have been the most successful elements of Arfordir?**

The recruitment of volunteers and the community engagement have, I think, been particular strengths, and the numbers of individuals who have got involved has been great. The response from the volunteers to the training they have been

provided with has also been very positive. The number of new sites identified has also been very encouraging.

The presentation of the project at conferences and to local interest groups has been very successful both in engaging members of the public with archaeology, coastal heritage and the project's work, and in raising the profile of coastal archaeology with other professional bodies and stakeholders in coastal areas.

What have been the least successful?

Fewer sites have been taken forward for investigation than I might have wanted; this is largely due to the lack of identified threat which would justify intrusive works. In fact, there has been little ongoing coastal erosion noted on sites where excavation would be suitable, or even possible. Much of the coastline in parts of the area has in fact been found to be relatively stable, with the result that many of the volunteers are more actively looking for new sites than monitoring existing ones.

How could the project be improved?

Hopefully extending the project study area into the Vale of Glamorgan Heritage Coast for its third year will increase the number of candidate sites to be taken forward for investigation. This is an area where serious ongoing erosion is an issue and where GGAT have previously undertaken emergency recording and recovery works of sites eroding out of cliff faces. It is hoped that in its third year the project will monitor more of these sites under imminent threat, and be able to respond to these threats with further site investigation.

The project would also benefit from investment in more project-specific display material advertising the project's work and recruiting volunteers.

Provision for a greater presence at a wider variety of outreach and community events would be beneficial – this is where the CATP contribution has been very valuable.

How would an ideal Arfordir project be undertaken?

A larger study area covering more of the coastline in a single year would help to increase the number of potential sites for follow-up work. A methodology similar to that already in use for recruitment, though with the ability to invest more time in contacting existing groups and presenting the project to them. A longer time for the recruitment period would be helpful as this would allow presentations on the project to be added to a society or group's programme. A rolling programme of training events to accommodate later recruits would be useful. A series of training events in both theoretical and practical recording skills would equip volunteers with the skills and confidence needed to undertake independent monitoring, and sites they identified as being under threat or having management issues could then be dealt with through follow-up survey, excavation etc.

Have DAT, GAT and GGAT worked together enough on the project? If not, then should we try harder to do so?

It would be helpful to have more regular updates on the progress of the project in each area than the six-monthly coastal heritage forum meetings, to share best practice and discuss developments, issues, approaches etc and I would like to see the Trusts working more closely together on the project. However, I am aware that the distances involved would make this difficult to implement or perhaps to justify in terms of the expenditure, while we all also have commitments to other projects.

#### **Part 4: Any other issues that should be raised?**

Some thoughts on the way the project developed in GGAT's area...

The compression of year 1 of the project for GGAT into the end of the financial year was in some ways very positive as it focused the volunteer interaction into a short space of time. The relatively short periods of time involved between initial contact and theoretical training, guided walks and fieldwork inadvertently capitalised on the initial momentum and enthusiasm of the volunteers, which offset the inevitable attrition rate as the project progressed. This late start meant that there was little time in year 1 for volunteers to undertake independent work, but information and data was returned from teams in both areas in year 2.

We found that a variety of styles for the training events was useful – as were a variety of timings. Some volunteers preferred a separation of the theoretical classroom-based training and the practical elements, with each being a couple of hours on different days, in the evenings or at weekends, sometimes several weeks apart. For the later training events held after the initial round of recruitment and training a different approach was adopted, with a whole-day event; the theory-based training in the morning followed by a guided walk and site visit in the afternoon. This obviously depended on having a suitable training venue close to an area suitable for undertaking practical recording – GGAT is fortunate in having an office very close to the Bay, which is full of sites to record with volunteers.

The provision of a set of recording equipment for each group has acted as a motivational incentive for people involved in the project.

# **APPENDIX IV: INTRODUCTORY LEAFLET FOR BORTH**

# ARFORDIR – COASTAL HERITAGE

## ARFORDIR

'Arfordir', or 'Coastline', is a project which has been set up to record, understand and monitor changes in the coastal heritage.

Arfordir is a Cadw grant aid and PCNPA funded project designed to identify, monitor and record archaeological and historical sites within the coastal zone that are under threat of erosion from tidal action, and other forms of damage resulting from the effects of visitors and livestock erosion or changes in use. The project aims to enable interested community groups and individuals to take an active role monitoring and recording threatened sites and identifying new sites with minimal input from the professional sector.

Volunteers will work alongside professional archaeologists who act as 'mentors', providing training, advice and assistance. It is expected that local residents and regular users of the coast will already know of sites that are under threat from erosion, and with regular monitoring of the coastline numerous new sites will also be identified. The project also gives scope for some followup work to investigate threatened sites.

The project is being organised by Dyfed Archaeological Trust and the Pembrokeshire Coast National Park Authority and receives funding from Cadw and the National Park Authority. Gwynedd Archaeological Trust and Glamorgan Gwent Archaeological Trust are also running parallel projects within their areas.

The first years of the project have concentrated on certain parts of the Pembrokeshire and Carmarthenshire coastline. A number of introductory talks were set up to discuss the aims of the project with interested volunteers and to get feedback on how members of local communities could assist in the recording and monitoring of known coastal heritage sites. These meetings were followed up by guided walks, to demonstrate a range of archaeological sites and how to identify them, and training sessions on recording techniques.



*Excavations at St Ishmael, Carmarthenshire*

In 2009, 2010 and 2011 sites have been identified for further archaeological investigation using volunteer support; West Angle Bay medieval cemetery and a Bronze Age cist in Pembrokeshire and St Ishmael Deserted Medieval Village in Carmarthenshire.



*Excavations at West Angle Bay, Pembrokeshire*



## ARFORDIR – COASTAL HERITAGE

### GET INVOLVED

It is hoped to encourage volunteer support along the Ceredigion Coastline during 2012. The Ceredigion coastline is subject to significant amounts of erosion as can be clearly seen between Llansantffraid to Aberaeron. At Borth there are large swathes of submerged forests and peats beds, representing the former land surface some 4000 to 5000 years ago. The exposed areas of these submerged forests change regularly with tidal movement. It is occasionally possible to see animal footprints preserved in the peat of deer and wild pigs that roamed the forests. Occasionally human footprints can be exposed within similar submerged forests, as recorded at Lydstep, Pembrokeshire.



*Llansantffraid, Ceredigion*



*Submerged Forest and peat beds,  
Borth, Ceredigion*

It is intended to present a talk on the project and how volunteers can get involved at Borth in April or May 2012. This will be followed up with guided walks and training sessions to demonstrate what you can do to help us with monitoring changes in our coastline and learn more about coastal heritage.

During the construction of the coastal defences at Borth, recording has been undertaken on the affected parts of the submerged forests and peat beds. This has included analysis of environmental evidence preserved in the peats to tell us about the plants and insects which lived there. The tree stumps have been recorded and are presently being dated. Further work is being done by University of Wales Trinity St Davids, Lampeter on other areas of exposed peat beds which have only recently been exposed. Possible evidence of human activity is being investigated.



*Fallen tree at Borth, Ceredigion*

For further information on the project and how you can get involved, please contact:

James Meek –  
[j.meek@dyfedarchaeology.org.uk](mailto:j.meek@dyfedarchaeology.org.uk)  
Dyfed Archaeological Trust  
01558 823121 [www.dyfedarchaeology.org.uk](http://www.dyfedarchaeology.org.uk)

For further information, up-coming talks, investigations, site walkovers etc, please see the Dyfed Archaeological Trust website: <http://www.dyfedarchaeology.org.uk/arfordir/arfordir1.htm>



# ARFORDIR COASTAL HERITAGE 2011 – 2012

**DYFED ARCHAEOLOGICAL TRUST**

**RHIF YR ADRODDIAD / REPORT NO. 2012/24  
RHIF Y DIGWYDDIAD/ EVENT RECORD NO. 102763**

**WHITESANDS BAY CIST  
RHIF Y DIGWYDDIAD/ EVENT RECORD NO. 102765**

Mawrth 2012  
March 2012



**INVESTOR IN PEOPLE**  
**BUDDSODDWR MEWN POBL**

Paratowyd yr adroddiad hwn gan / This report has been prepared by

James Meek

Swydd / Position: Head Of Field Services

Llofnod / Signature .....  ..... Date 30/03/2012

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith  
This report has been checked and approved by

Ken Murphy

ar ran Ymddiriedolaeth Archaeolegol Dyfed Cyf.  
on behalf of Dyfed Archaeological Trust Ltd.

Swydd / Position: Trust Director

Llofnod / Signature .....  ..... Date 30/03/2012

*Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau  
sydd gennych ar gynnwys neu strwythur yr adroddiad hwn*

*As part of our desire to provide a quality service we would welcome any  
comments you may have on the content or presentation of this report*



