

ARCHAEOLOGICAL MONITORING OF THE INTERTIDAL AND COASTAL ZONE PEMBROKEKESHIRE 2003

INTERIM REPORT



Report No. 2003/98

Report Prepared for:
PEMBROKEKESHIRE COAST NATIONAL PARK

A R C H A E O L O G Y

CAMBRIA

A R C H A E O L O G Y

CAMBRIA ARCHAEOLOGY

REPORT NO. 2003/98
PROJECT RECORD NO. 48116

SEPTEMBER 2003

**ARCHAEOLOGICAL MONITORING OF THE INTERTIDAL AND COASTAL
ZONE PEMBROKESHIRE
2003
INTERIM REPORT**

By

Pete Crane BA Hons MIFA

Cambria Archaeology is the marketing name of the Dyfed Archaeological Trust Limited.

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

ARCHAEOLEG CAMBRIA

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
Epost: cambria@acadat.com Gwefan: www.acadat.com

CAMBRIA ARCHAEOLOGY

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: cambria@acadat.com Website: www.acadat.com

The Trust is both a Limited Company (No. 1198990) and a Registered Charity (No. 504616)
CADEIRYDD CHAIRMAN: B.C.BURNHAM, MA PHD FSA MIFA. CYFARWYDDWR DIRECTOR: E G HUGHES BA MIFA

Archaeological monitoring of the Intertidal and Coastal Zone: Pembrokeshire: 2003

Interim Report September 2003

Summary

The main aim of this project is to record and put in place archaeological monitoring of the coastal historic environment resource, including the prehistoric coastal peat deposits. To date all of the major beaches from Milford Haven north to Aber Mawr have been inspected. None of these beaches had exposed peat deposits except for Aber Mawr. As far as can be ascertained at present the sand cover is 100-150mm higher than normal.

Introduction

The submerged forest on Newgale was first mentioned in medieval times by Giraldus Cambrensis (1908, 91) and was known from antiquarian times when uncovered by a gale in 1888 (Laws and Owen 1907, 48 No 9). Whitesands Bay submerged forest was also recorded from the 1800s (Laws 1888). No systematic work has been undertaken on recording these peat deposits other than an unpublished PhD thesis (Lewis 1992) and to a limited extent the (again unpublished) work by Cambria Archaeology (Murphy 1996).

The threat to coastal buried peat deposits and intertidal archaeological sites was highlighted in February 1996 when the oil tanker *Sea Empress* grounded at the entrance to Milford Haven (James 1997). Fortunately, the contamination on the beaches was less than it could easily have been, and the subsequent clearance appears to have avoided the more sensitive beach peats.

Method

From consultation with Heather and Terry James it was decided that the initial work should focus on the Pembrokeshire coast north of Milford Haven. Before commencing fieldwork, information was obtained from the regional Sites and Monuments Record (SMR) for those beaches containing submerged forests/peat, wrecks or other archaeological features and their Primary Record Numbers (PRN) were noted and copies of the records being made as necessary. Lewis's PhD thesis (1992) was also of considerable value.

Beach work was undertaken at low tide springs where appropriate. Predicted low tide height at **chart datum**, based on lowest astronomical tide (not Ordnance Datum). If the visit was not at the time of low water, predicted tide height from low water was calculated (formula used to be put in final report appendices). The air pressure was also recorded as this effects tidal heights to a limited extent. Wind direction and force can have more considerable influence on predicted tide heights, but was not thought to be of influence at times of visits, when the weather was relatively calm. Where possible, a position was recorded at the low tide location by Global Positioning System. Known sites on the beach were also entered into the Global Positioning

System so their position could be checked (a gazetteer of all beach sites with full grid references will be produced in the final report). The low water limit was walked and the high water limit inspected at the top of the beaches. The high cliffs and caves were considered to be outside the scope of this project, as were small beaches with no archaeological records.

Results *from south to north*

Westdale Bay: the beach is sandy with scattered rocks. There was a little erosion of the soft cliffs but no archaeological features of any antiquity were seen. However flints have been found near this location in the past (PRN 7589; 3007). The beach appeared slightly sandier than in the past. Visit 5/7/2003; tide not that low or fully out. Visit 13/8/2003, low tide height 0.87m.

Marloes Sands: the beach is sandy with a few large scattered rocks; the cliffs are generally high and steep. A waste flint (PRN 11202) is recorded at the far northwest end of the beach near Gateholm Sound. Visit 14/6/2003, low tide height 0.69m. Nothing of antiquity was seen.



Photo 1: Marloes Sands. View SW

Albion Sands: the beach is sandy with a good scattering of rocks, becoming very rocky towards the cliff. On this beach are the remains of the 1837 wreck of the Albion (PRN 32756). She was a paddle steamer 150 feet in length. The paddle wheel shaft, a wheel and a few other bits of iron can still be seen. From photographs taken in 1997 the sand would now appear to be *c.* 150mm higher. The Nautical Archaeological Society was contacted and there is no known detailed record of this wreck. Visit 14/6/2003, low tide height 0.69m.



Photo 2: Albion Sands. View S

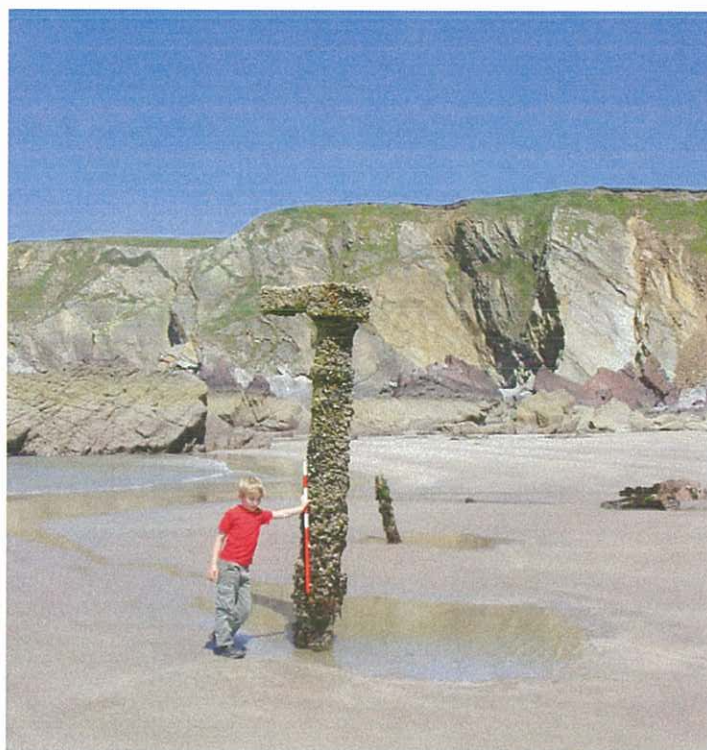


Photo 3: Albion 14/6/2003, view NE, scale 1m



Photo 4: Albion, fragment 14/6/2003, view N, scale 1m



Photo 5: Albion, paddle wheel? 14/6/2003, view S, scale 1m

St Brides Haven: a small rocky cove with drying sandy centre, low eroding cliff around limekiln to east. In the exposed cliff edge a number of graves have been exposed (PRN 7606). Bones from one stone lined grave were dated to pre-Norman times (radiocarbon date 1000 ± 70 bp). However, bones from another grave date only from around the 1800s. This part of the low cliffs continues to slowly erode and is now 1.15m to 1.25m in front of the wooden fence. As far as can be ascertained from photographs from 1990 only about 150mm has eroded over the last ten years. There are still a number of probable exposed graves including possible stone lined graves in the cliff face. The slow losses of these graves are of considerable archaeological concern. The slow steady erosion will continue but more dramatic loss is a distinct possibility during any severe winter storm. Visit 14/6/2003 about 1 hour before low tide height 0.69m (c. 1.19m).



Photo 6: St Brides Haven. General view W



Photo 7: St Brides Haven, exposed cliff with at least one cist grave remains. View E



Photo 8: St Brides Haven, exposed cliff with at least one cist grave remains. View SE. Scale 1m



Photo 9: St Brides Haven, another exposed cliff section with remains of one probable cist grave. View SW. Scale 1m.

Little Haven and Broad Haven: both beaches were well covered with sand with a few rocks protruding. Visit 16/6/2003, low tide height 0.77m. High pressure probably reduced tide height by further 0.1m. Nothing of antiquity was seen.



Photo 10: Broad Haven beach with Little Haven beach at the far end. View S

Druidston beach: beach was well covered with sand with a few rocks protruding. There are very high cliffs at its northern and southern ends. Visit 16/6/2003, 1 hour before low tide height 0.77m (c. 1.24m). High pressure probably reduced tide height by further 0.1m. Nothing of antiquity was seen.



Photo 11: Druidston beach. View N

Nolton Haven: beach was well covered with sand with a few rocks protruding. Visit 16/6/2003, 1.5 hours before low tide height 0.77m (c. 1.47m). High pressure probably reduced tide height by further 0.1m. Nothing of antiquity was seen.



Photo 12: Nolton Haven. View N

Newgale Sands: the beach was almost totally covered with sand this summer with no exposed pebbles or peat deposits. The top of the beach is mostly a bank of pebbles but with high cliffs at both the northern and southern ends. Over the last few years the peat deposits and submerged forest (PRN 12991) have been exposed during winter gales. A number of Mesolithic flints (PRN 9835) have been recovered from the far north end of the beach (Cwm Beach), possibly coming from the eroding cliff top. A Bronze Age palstave (axe) (PRN 14279), was found c.1990 approximately opposite to the former filling station. Further Bronze Age artefacts (no PRNs?) were found early in 2000 after winter storms when a metal detectorist was working the beach, from about 150m west of Pinch Cottage. A number of medieval and post-medieval artefacts, also found by detectorists, have been recorded under the recent portable antiquity scheme by the National Museum of Wales. However, these later finds are not accurately located. This beach was viewed on a number of occasions during the summer, including 30/8/2003 low tide height 0.58m. Nothing of antiquity was seen.

Solva harbour entrance: high cliffs surround the entrance. At low tide there is an expanse of sand with a small pool of water. This beach was viewed on a number of occasions during the summer including 29/8/2003 low tide height 0.63m. Nothing of antiquity was seen.

Whitesands Bay St David's: the beach was well covered with sand and there was no visible sign of the submerged forest or peat deposits (PRN11978). Reported in Lewis (1992, 152) is of a flint from "the clay below the forest", and also discovery of red deer antlers, a jaw bone from a brown bear and insect remains from unspecified foreshore locations (PRNs will be assigned to these finds). Recovered from the foreshore peat were the remains a red deer and two aurochs (very large prehistoric wild cattle), one female (radiocarbon date 4540 ± 70 BP), the other probably male (PRN 13360). At least two Bronze Age palstaves (PRN s11234 and 14278) have come from near the peat deposits on the beach and it is possible that others have been recovered but not reported. There have been rumours of a Bronze Age wreck but this cannot be confirmed. A spindle whorl, slag, and a flint scraper from the north of the beach probably derive from Trwynhwrddyn promontory – their grid references are imprecise. Lewis (1992, 153) records another flint from this promontory in a test pit.

There are high cliffs around the southern half of the beach, becoming less high towards the middle section. There was little or no active erosion. North of this is an area of sand dunes and a mound that covered St Patrick's Chapel (PRN 2638). Adjacent to the mound, the sea defences have been breached in one small place and erosion is taking place (photo 14), this could easily be repaired.

Visit 12/6/2003 low tide height 1.06m. High pressure probably reduced tide height by further 0.1m. Nothing of antiquity was seen.



Photo 13: Whitesands Bay. View SW



Photo 14: Whitsands Bay. St Patrick's Chapel (PRN 2638). View E. Scale 1m.

Aber Mawr: the beach was well covered with sand with an upper bank storm beach of pebbles. In the southern part of the pebble bank there are stream scours (photo 16) exposing peat deposits and wood of the submerged forest PRN 32832 (photos 17 and 18). Peat deposits start nearly 60m south of a stone outcrop in the pebble storm beach.

Nearly 50 flints or fragments of flints (PRN 7390) were recovered in a tilled area behind the storm beach and are probably Mesolithic (Dunn 1968). Another assembly (no PRN) including a microlith were found by an archaeological tutor and students beneath the intertidal peat. Lewis (1992, 172, 177) found three more flints from one of his test pits behind the storm beach.

Brunel had proposed Aber Mawr as a rail and sea terminus to Ireland. Remains can still be seen of embankments, piers, breakwaters and a ledge for the station. This construction was abandoned in 1848. The terminus was later located at Fishguard. The large pebble bank has only been here since 1859 when a fierce storm forced mountainous seas into the bay. The first Atlantic telegraph cable was laid across from the north end of this beach to Ireland in 1873.

Visit 12/6/2003 low tide height 1.06m. High pressure probably reduced tide height by further 0.1m. This beach was visited at the beginning of January when more timber was visible below the storm beach just into the sand (photo 19). These timbers may now have been lost. Unusually these timbers are not oak (pers com Nigel Nailing).



Photo 15: Aber Mawr. View S



Photo 16: Aber Mawr, scours. View SSE



Photo 17: Aber Mawr, timber (PRN 32832). View E



Photo 18: Aber Maw, peat and timber (PRN32832). View E



Photo 19: Aber Mawr, exposed timbers (PRN 32832) 4/1/2003. View NE

No exposed peat deposits having been found in any of the known locations on beaches north of Milford Haven, except for Aber Mawr It is intended inspect the known beach peat deposits south of the Haven investigated by Lewis at Lydstep and Freshwater West. Also a visit will be made to the fish trap at the west end of Tenby beach recorded in the report of the Sea Empress Oil Spill (James 1997). However, should there be storms within this project period some revisits to the northern sites may be advisable. The final report is likely to recommend contingency funding to monitor the known buried peat beach deposits, especially after storm scouring, with sufficient funds for samples to be analysed and dated. It may also be possible to include more recent metal detecting finds, from the beaches in this project, recorded in the Portable Antiquities Scheme by the National Museum of Wales. A gazetteer of all sites will be included in the final report.

Sources

Dunn C J 1968 Note on Aber Mawr. *Archaeology in Wales, CBA 2, Vol 8, 12 No 28*

Giraldus Cambrensis 1908 *The Itinerary Through Wales and the Description of Wales*, Dent: London

James H 1997 *The Sea Empress Oil Spill. Archaeological assessment of effects on inter-tidal & shoreline features*. Unpublished report for Countryside Council for Wales. Copy held by Cambria Archaeology SMR

Laws E 1888 *The History of Little England Beyond Wales*

Laws E and Owen 1907 Pembrokeshire Archaeological Survey

Lewis M P 1992 *The Prehistory of South West Wales, 7500-3600 BP: An Interdisciplinary Palaeoenvironmental and Archaeological Investigation*. Unpublished Ph. D. thesis, Lampeter University

Murphy K 1996 *Pembrokeshire Coastal Survey*. Unpublished report for Cadw. Copy and archive held by Cambria Archaeology SMR

**ARCHAEOLOGICAL MONITORING OF THE INTERTIDAL AND COASTAL ZONE
PEMBROKESHIRE
2003
INTERIM REPORT**

REPORT NUMBER 2003/98

SEPTEMBER 2003

This report has been prepared by Pete Crane

Position Senior Archaeologist

Signature Pete Crane Date 30 sept 2003

This report has been checked and approved by Ken Murphy on behalf of Cambria Archaeology,
Dyfed Archaeological Trust Ltd.

Position Principal Archaeologist

Signature [Signature] Date 30/09/03

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