A Report for English Heritage

# Rapid Coastal Zone Assessment
# for
# The Isles of Scilly

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Within the Historic Environment Service, Charles Johns was the Project Manager and also undertook the research and consultation exercises and compiled the report; Bryn Perry Tapper undertook and supervised the GIS and database method and compiled the characterisation texts; Andy Young and Emma Taylor carried out the NMP plot; Ainsley Cocks undertook database entry and advised on significance; Peter Herring advised on characterisation; Cathy Parkers advised on significance, Megan Val Baker contributed to the characterisation section of the report, mapped the HLC types and undertook database entry, Peter Rose edited the text and provided administrative support. The report owes much to the extensive work previously carried out in Scilly by Jeanette Ratcliffe.

The views and recommendations expressed in this report are those of the Historic Environment Service projects team and are presented in good faith on the basis of professional judgement and on information currently available.

## Maps



## Cover illustration

Aerial view of Bryher with New Grimsby Channel separating it from Tresco and St Martin's in the far distance (photo: ©Gibson Collection)

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## Abbreviations

| | |
|---|---|
| ACHWS | Advisory Committee on Historic Wreck Sites |
| ADS | Archaeology Data Service |
| ADU | Archaeological Diving Unit, University of St Andrews |
| AID | Archaeological Item description |
| AONB | Area of Natural Beauty |
| bcd | below Chart Datum |
| CD | Chart Datum |
| CAU | Cornwall Archaeological Unit, now the Historic Environment Service, CCC |
| CIOS | Council of the Isles of Scilly |
| CISMAS | Cornwall and Isles of Scilly Maritime Archaeology Society |
| CCC | Cornwall County Council |
| CSUS | Cornwall & Scilly Urban Survey: Historic Characterisation for Regeneration |
| CUCAP | Cambridge University Committee for Aerial Photography |
| DCMS | Department of Culture, Media and Sport |
| EH | English Heritage |
| EIA | Environmental Impact Assessment |
| GIS | Geographic Information System |
| HER | Cornwall and Scilly Historic Environment Record |
| HES | Historic Environment Service, Cornwall County Council |
| HL | Historic Landscape Characterisation |
| HWM | High Water Mark |
| ICS | Institute of Cornish Studies |
| IOS | Isles of Scilly |
| IRIS | Interactive Resource for the Isles of Scilly |
| LAT | Lowest Astronomical Tide |
| MAFF | Ministry of Agriculture, Fisheries and Food |
| MoD | Ministry of Defence |
| MOL | Minimum Occupation Level |
| μm | micron, one millionth of a metre |
| NAS | Nautical Archaeological Society |
| NMP | National Mapping Programme |
| NMR | National Monuments Record, Swindon |
| OD | Ordnance Datum |
| OS | Ordnance Survey |
| PRN | Primary Record Number in Cornwall HER |

| | |
|---|---|
| PRO | Public Record Office |
| RCHME | Royal Commission on the Historical Monuments of England |
| RCM | Royal Cornwall Museum |
| RCZA | Rapid Coastal Zone Assessment |
| RNAS | Royal Naval Air Station |
| ROW | Receiver of Wreck |
| RSM | Register of Scheduled Monuments |
| SAC | Special Area of Conservation |
| SCRZA | Rapid Coastal Zone Assessment for the Isles of Scilly |
| SSSI | Site of Special Scientific Interest |
| UKHO | United Kingdom Hydrographic Office, Taunton |
| VOC | Verenidge Oostindishe Compagnie (Dutch East India) |
| WWI | World War One |
| WWII | World War Two |

# 1 Summary

This report describes the results of a rapid coastal zone assessment (RCZA) of the Isles of Scilly carried out in 2003 and early 2004 by the Historic Environment Service, Cornwall County Council for English Heritage.

The Isles of Scilly RCZA is an innovative project, being the first such assessment to be commissioned since the National Heritage Act (2002) enabled English Heritage to assume responsibility for all monuments on, in, or under the seabed within UK territorial waters around the coast of England. The aim of the project is to improve our knowledge and understanding of the submerged heritage by extending existing terrestrial, shoreline and intertidal assessments of the islands out to the 12 nautical mile limit in order to achieve integrated management of the whole of the historic environment in Scilly.

The Isles of Scilly are a tiny granite archipelago: a drowned landscape of some 200 islands and rocks located in the Western Approaches some 45 kilometres from Land's End. The study area forms part of the wide continental shelf to the south and west of England where granitic bodies such as Scilly and the Seven Stones reef intruded through the metamorphosed rock of the flat seabed plain some 225 million years ago. Originally Scilly was one large island but by *c*3000 BC rising sea levels had created the islands of St Agnes, Annet and the Western Rocks with the northern islands originally forming one larger island but gradually separating over an uncertain timespan. A distinctive feature of Scilly is the submerged and semi-submerged stone remains and peat exposures fringing the northern islands in the intertidal and subtidal zones.

The terrestrial historic environment of the Isles of Scilly is of national and international importance because of the remarkable variety, abundance and preservation of archaeological and historical remains, representing over 4,000 years of occupation. Many of the archaeological sites are located on or near the coast or on the beach and intertidal flats. The submerged historic resource in the project area, supported by the Gibson collection of historic maritime photographs, the assemblage of retrieved shipwreck and other maritime-related material held by the Isles of Scilly Museum and the Valhalla figurehead display on Tresco is arguably of world class standard.

A primary goal of the project was the assimilation of wreck data into the Cornwall and Scilly Historic Environment Record (HER). A total of 771 wreck sites are recorded; the data provided by the Maritime Section of the National Monuments Record and the United Kingdom Hydrographic Office has been transferred to the HER, each site being mapped on GIS with a linked record entry to the HER database. At the same time the existing 340 HER entries for coastal, intertidal and subtidal sites have been verified and enhanced. A 'project dataset' has been generated which is compatible with the technologies of the principal partners thus ensuring the successful exchange and deposition of the project's results. Provision to the Isles of Scilly Council and the Joint Advisory Committee of the AONB of digital map and text data on the heritage assets within the project area will assist in decision making at source.

Other aspects of the project included incorporation of the results of the National Mapping Programme for Scilly, extension of the existing Historic Landscape Characterisation for the islands into the intertidal and maritime zones, and development of a methodology for rapid application of criteria to assess the absolute and relative importance of individual sites.

Numerous threats to the historic resource in the study area were identified including rising sea level, climate change and coastal erosion, exacerbated by global warming and unsystematic sampling and collection of finds from the various sites, transport related development, dredging and aggregate extraction, visitor pressure, irresponsible diving,

commercial fishing activity (in particular scalloping), submarine cables, wood boring organisms, fly tipping, bait digging, use of metal detectors, positioning of anchors, mooring and outhauls.

## 1.1 Current issues

There are a number of important issues relating to the historic environment in Scilly at the present time:

- the extension of English Heritage's remit and new role since the 2002 National Heritage Act. The management of the HMS *Colossus* Protected Wreck site has a high public profile. In addition to its intrinsic importance the site is significant because it raises the question of how future maritime discoveries are to be dealt with in Scilly and provides the opportunity to apply methods of developing best practice in maritime archaeology and resource management. To this end English Heritage is following a staged approach to understanding the issues surrounding the *Colossus* and has commissioned a desk-based study of the site and stability trials for the submerged remains. Successful handling of this case will underpin the success of future management of the historic maritime resource in the islands;
- the threat to submerged, intertidal and coastal remains from the imminent proposals for improving transport infrastructure. The proposals include possible harbour dredging in the approaches to St Mary's to provide a deepwater berth for ro-ro or conventional vessels and improvements to St Mary's harbour and to the off-island quays. These proposals are likely to have a severe impact on the historic resource and the existing character of islands. The possible long term effects of altered wave action and sediment movement are difficult to predict;
- the continuing unrecorded loss of significant archaeological sites, many of them scheduled, due to coastal erosion and sea action.

## 1.2 Summary of recommendations

### 1.2.1 Transport Strategy

***St Mary's harbour***

In terms of the historic resource it is crucial that the forthcoming Environmental Impact Assessment (EIA) for St Mary's harbour should refer to the CSUS Hugh Town report (Kirkham 2003) and address the following issues:

- the visual impact on Hugh Town itself, and the impact of possible increased traffic on the historic fabric of the town;
- the visual impact of the development on the historic setting of The Garrison;
- the impact on the historic fabric of the quay;
- the potential for buried archaeological remains, including palaeoenvironmental deposits on, in, or under the seabed;
- the potential for shipwreck sites in St Mary's Pool and St Mary's Sound and in the Crow Bar area, on, in, or under the seabed;
- the potential consequences of new patterns of sand and sediment movement and deposition caused by dredging; and
- appropriate mitigation.

***The off-island quays***

- Sensitive development is crucial; damage to known archaeological remains should be avoided where possible and/or practicable.

### 1.2.2 The historic maritime resource

- Involve and encourage local stewardship and decision making in regards to the marine historic environment. There is a perceived need for a local contact for maritime matters; this could possibly be a part-time local 'Marine Co-ordinator' under contract to report marine matters through the existing FMW post;
- open access to sites and responsible diving should be encouraged. Education and promotion of codes of conduct are the keys to this. Create diver trails and encourage diving clubs to take more responsibility, perhaps by adopting a wreck or monitoring illicit activities; encourage divers to continue reporting wreck from previously unknown sites;
- EH have offered the option of a general Code of Practice leaflet to the IOS Museum; the new leaflet could broaden the scope of and perhaps supersede the existing, undistributed, Code of Practice leaflet prepared by the Museum;
- a multidisciplinary approach to area survey and verification has the potential to reveal the location of possible archaeological sites and of shipwrecks. This would include high resolution side scan sonar, multibeam bathymetry, caesium magnetometer and CHIRP and Boomer sub bottom profiling, followed by archaeological diver inspection and complemented by broader marine environmental assessment of the area;
- undertake desk-based assessments of known wreck sites and the history of early salvage and diving in Scilly;
- there is considerable potential for a holistic interpretation of the marine world around Scilly, in partnership with English Nature, the IOS AONB unit and the IOS Wildlife Trust.

### 1.2.3 Coastal erosion and monitoring

- Initiate a positive management strategy for sites threatened by coastal erosion; this could comprise a programme of coastal monitoring and research-led survey and excavation of threatened sites, the former community-based; the latter linked to proposed or ongoing projects by archaeological departments of several academic institutions. Because of the concentration, potential and importance of coastal sites in Scilly this would result in significant research gains. The new coastal monitoring project would involve annual or biennial monitoring of the cliff face as a whole. For selected sites that are considered to be of sufficient archaeological importance and/or very seriously threatened by cliff erosion, more detailed and extensive survey, excavation, sampling and recording would be necessary;
- fly tipping; the dumping of domestic, building or garden rubbish or scrap metal over a cliff edge is a threat to archaeological sites. Coastal monitoring would identify areas where this is occurring so that remedial measures can be taken;
- the percussive effect of containers from the *Cita*, repeatedly pounded against the cliff by wave action, is significantly increasing erosion in some areas, particularly around the Garrison. Establishing exactly who is responsible for removing the

debris may be difficult and in the first instance liaison between EH, CIOS, HES and the ROW is recommended to establish how best to resolve this issue.

### 1.2.4 Research themes

The following themes for academic research are suggested:

- the date and character of early settlements;
- the culture and contacts of their inhabitants (through analysis of artefactual evidence);
- the economy and diet of early Scillonians;
- the vegetational and land use history of the islands;
- the submergence of Scilly (cf Ratcliffe and Straker 1996, 51).

The following projects would contribute to these:

- A comprehensive study and analysis of the prehistoric chipped stone assemblages from Scilly by a lithics specialist. This could broaden our knowledge of Scilly during the Mesolithic and Neolithic and would enhance our understanding of later periods of prehistory;
- dissemination of the results of cliff-face sites recorded during the 1989-93 coastal monitoring project;
- analysis and publication of the cist grave excavated at Porth Cressa in 1994 and the Bronze Age urn recovered from the same stretch of cliff in 1999;
- an integrated study of the two types of evidence in the intertidal zone, ie stone remains (field walls, hut circles, cists) and the intertidal 'peat' deposits. This would include detailed survey as well as palaeoenvironmental sampling and analysis; there is proven potential for archaeological dates from palaeoenvironmental deposits to inform the general sea level rise issue;
- early Scillonian diet and economy as evidenced by faunal remains.

### 1.2.5 Conservation Plan for The Garrison

The Transport Strategy proposals have highlighted the need for a detailed study and Conservation Plan for The Garrison and the other island defences.

### 1.2.6 Data sharing

- Practically, the electronic transfer of existing information progressed well and was achieved, if prone to delay at times, with the raw information being exported and imported with relative success between the principal archives. However the design differences between the NMR and Cornwall and Scilly HER databases prevented an automated transfer of data instead incurring a manual input of approx 75% of the records identified during this rapid assessment. Whilst the respective database models concord closer correlation between the local authority and national archaeological database designs would, in this instance but possibly elsewhere and with particular reference to data structure, make transfer more effective. Access to the Cornwall and Scilly HER's 'in-house' systems was crucial to the implementation of this project especially considering the established record of information provision and advice sharing between HES and the unitary CIOS;

- at present there is no formal agreement between the UKHO and the NMR for the sharing or correlation of wreck data. Such an agreement would greatly benefit any future RCZAs;
- sensibly and for good future management relevant AI records from the RSM held by EH should be made available to external organisations carrying out RCZAs (indeed all existing Scheduled Monument summary notifications currently held in the Cornwall and Scilly HER, particularly those that are area based, would be considerably enhanced if they were accompanied by the AI descriptions drawn up by MPP archaeologists. This would prevent serious omission and discrepancy between local and national records);
- it seems that, while the RSM contains details of a large number of sites that are not recorded in local HERs, in some case HERs may record sites in scheduled monument areas that are not recorded in the RSM. This is an issue crucial to the integrity of both archives and the feasibility of integrating data between them should be discussed;
- an awareness of current initiatives such as the Integrated Coastal Zone Map project, a partnership venture between Ordnance Survey, the United Kingdom Hydrographic Office and the British Geological Survey (http://www.iczmap.org.uk/), would encourage the integration of map bases (including modern and historic maps derived from various disciplines with cartographic traditions) so crucial to the understanding and accurate spatial representation of archaeological and historic monuments and landscapes.

## 1.3 Provisional timetable for implementation

| 2004 | Event |
|---|---|
| April/May | Appraisal of IOS RCZA methodology by HES |
| " | Business plan for off-island quays completed? |
| " | Environmental Impact Assessment for St Mary's harbour proposals |
| " | Detailed conceptual design for preferred St Mary's harbour option |
| June | Submission of St Mary's harbour entry for Cornwall Local Transport Plan for committee cycles |
| ongoing | Liaison between EH, CIOS, HES and ROW to resolve the problem of wreck debris from the *Cita* |
| " | Liaison between EH, HES, English Nature, IOS AONB Unit and IOS Wildlife trust concerning scope for a holistic interpretation of Scilly's marine world |
| " | Liaise with UKHO and NMR regarding sharing of wreck data |
| " | Liaison between EH and HES with regard to enhancing HER with ASI descriptions and elated issues |
| " | Liaise with Chris Scarre of the McDonald Institute for Archaeological Research, Cambridge regarding proposed international islands project |
| June/July | Work on HMS *Colossus* stabilisation trials |
| " | Preparation and distribution of new Code of Practice archaeological |

| 2004 | Event |
|---|---|
| | leaflet |
| By end of June | Submission of Cornwall Local Transport Plan to Government |
| Early July | Timetable a meeting in Scilly to agree an approach to implementing the maritime recommendations in this report. The meeting should include EH, the diving contractor, HES, CIOS and representatives from CISMAS and the IOS Shipwreck and Underwater Archaeological Group |
| July | Timetable a meeting at HES offices to discuss upcoming terrestrial/coastal project plans. The meeting should include EH, HES, Mary Ann Owoc (Mercyhurst College, Pennsylvania, USA), Trevor Kirk (Trinity College, Carmarthen, University College Wales), local archaeologist Katharine Sawyer, Mike Dymond (Truro College) and Jacqui Mulville of Cardiff University |
| July-August | Prepare project design for new coastal monitoring programme |
| July onwards | Project design for survey and verification of seabed sites |
| ” | Porthkillier *Cornish Archaeology* article in preparation (HES) |
| Summer | The diving contractor working on HMS *Colossus*, Bartholomew Ledge and Tearing Ledge sites – mainly inspection and position fixing |
| September | Survey and excavation at Halangy Porth and Pendrathen |
| “ | Work on HMS *Colossus* stabilisation trials |
| “ | Survey of the HMS *Colossus* debris field by CISMAS |
| October | Timetable a meeting a meeting between EH, HES and CIOS to discuss proposal for a Conservation Plan for The Garrison |
| December | Learn outcome of Cornwall Local Transport Plan |
| Winter | Construction work possibly commencing on off-island quays |
| 2005 | Event |
| | Project design for survey and sampling in the intertidal zone |
| | Project design for analysis of Scillonian lithic assemblages |
| | Analysis and draft report on Porth Cressa finds |
| | Project design for publication of 1989-93 cliff face sites |

# 2 Introduction

## 2.1 Project background

"*The seas around Britain contain an immense wealth of archaeological sites and remains, potentially without equal in the world in terms of their number and diversity*"

(Roberts and Trow 2002, 2)

The 1997 survey of England's coastal heritage for English Heritage and the RCHME (now English Heritage) noted that the quality of the available record of coastal remains is such that in many areas rapid baseline studies were required to enable a broad assessment of the range, significance and vulnerability of historic coastal assets (Fulford *et al* (eds) 1997). Consequently English Heritage is supporting a number of local authorities, Kent, Essex, Norfolk and Suffolk, in undertaking Rapid Coastal Zone Assessment surveys (RCZAS) and, in order to encourage a common approach to such coastal surveys, provided 'A Brief for Rapid Coastal Zone Assessment Surveys' (June 1999) which envisaged each RCZAS comprising two phases, Survey Phase I Desk-based Assessment and Survey Phase II Field Assessment.

The National Heritage Act (2002) extended English Heritage's remit to encompass the historic environment out to the 12-mile limit of UK territorial waters around England and in March 2003 English Heritage commissioned the Historic Environment Service to undertake a rapid coastal zone assessment (Phase 1 desk-based assessment) for the Isles of Scilly with the purpose of extending existing terrestrial assessments to the 12 nautical mile limit. The aim of the RCZA was to place the surviving 'dry' cultural heritage of Scilly within its wider and now submerged context and to allow a holistic reassessment of the cultural importance of the area and identification of threats to the historic resource.

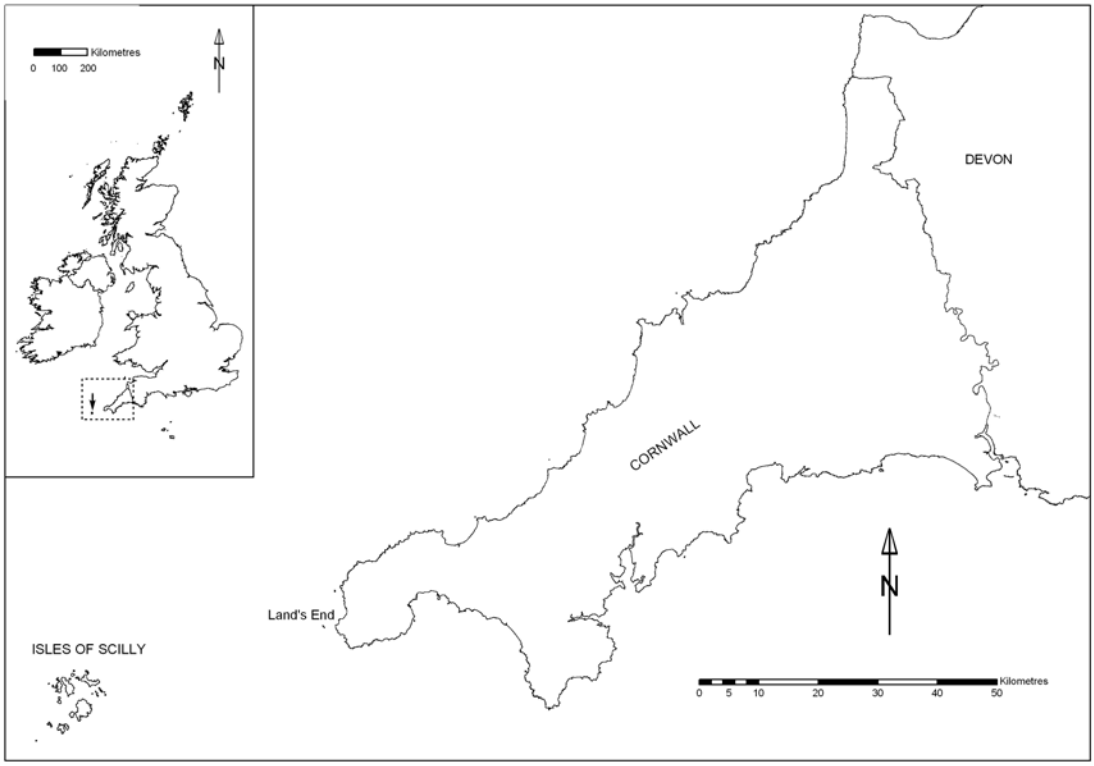



*Fig 1 Location map, Cornwall and Scilly*

## 2.2 The Isles of Scilly

The Scillonian archipelago of approximately 200 islands, islets and rocks situated 45km (28 miles) south-west of Lands End demonstrates a unique environment of exceptional quality, with the relationship between the land and sea providing a very strong and distinctive cultural identity (Morrison 2003).

The environment is responsible for the recent success of tourism, contributing up to 85% of the islands' GDP. Understandably, the level of statutory and non-statutory designation reflects the international significance of this valuable resource. The islands are unusual in that they are designated as an Area of Outstanding Natural Beauty (AONB), Heritage Coast and a Conservation Area. They contain many Sites of Special Scientific Interest (26 covering some 50% of land mass), a Voluntary Marine Park to the 50m-depth contour, and evidence of human influence on the land covering the last 8,000 years, which includes 242 Scheduled Ancient Monuments. There are also three shipwreck sites designated under the Protection of Wrecks Act 1973 (Arbery 2002; Morrison 2003).

It is possible that approximately 10,000 years ago, towards the end of the last Ice Age, the melting ice cap led to a significant rise in sea level, which separated Scilly from what is now mainland Cornwall, although exactly when separation occurred remains a subject for debate. Initially Scilly comprised one island roughly 10 miles long and 5 miles wide. The rising waters eventually created the islands of St Agnes, Annet and the Western Rocks by 3,000 BC, with the other modern day islands being encompassed within one larger island known as Ennor, 'The Land'. There are currently two models for sea level change in Scilly. The first, published by Charles Thomas in 1985, suggests this island existed until about the 5$^{th}$ century AD and would have continued to form a visible single entity at low tide until as late as the 11$^{th}$ century, the final separation perhaps not occurring until the early 16$^{th}$ century. The second model results from analysis of radiocarbon dates and corresponding levels from intertidal peat deposits sampled between 1989 and 1993 which indicate a less dramatic sea level rise and suggest that the islands could have been separated at high water from *c*1000BC (Thomas 1985; Ratcliffe and Straker 1996, 1997; Morrison 2003). The process of inundation is ongoing; although there is no absolute prediction, the latest prediction provided by the Environment Agency suggests a possible rise of 0.57m by 2050.

Whichever model is correct, much of Scilly can be considered to be a drowned landscape, with evidence of human occupation and settlement, perhaps dating from the Late Upper Palaeolithic onwards, surviving beneath the sea. Ancient field boundaries can be traced running from the land, across the intertidal zone, and off into the sea. Moreover, the submerged landscape has also proven to be a very real and hidden danger to shipping for the least 700 years, and a significant number of historic shipwrecks are located around the islands (Morrison 2003).

## 2.3 Previous work

In 1988 the Cornwall Archaeological Unit (CAU - now HES) compiled an assessment and management plan for the archaeological resource of the Isles of Scilly, the result of a programme of research and fieldwork (Ratcliffe 1989). The work, which was commissioned by English Heritage, provided the archaeological input into a comprehensive management plan for the IOS Environmental Trust (now the Wildlife Trust) prepared by the Countryside Commission, English Heritage and the Nature Conservancy Council. All identified terrestrial and intertidal sites and also some suspected marine sites in the straits between the Islands were recorded during a campaign of fieldwork. The data collected during the assessment significantly enhanced the Scillonian component of the Cornwall and Scilly Sites and Monuments and Buildings Record (now

the HER) and was input by Jeanette Ratcliffe and Carl Thorpe of CAU. At the commencement of the Isles of Scilly Rapid Coastal Zone Assessment (SRCZA) there were 1791 known sites in Scilly recorded in the HER, of which 206 were in the intertidal zone.

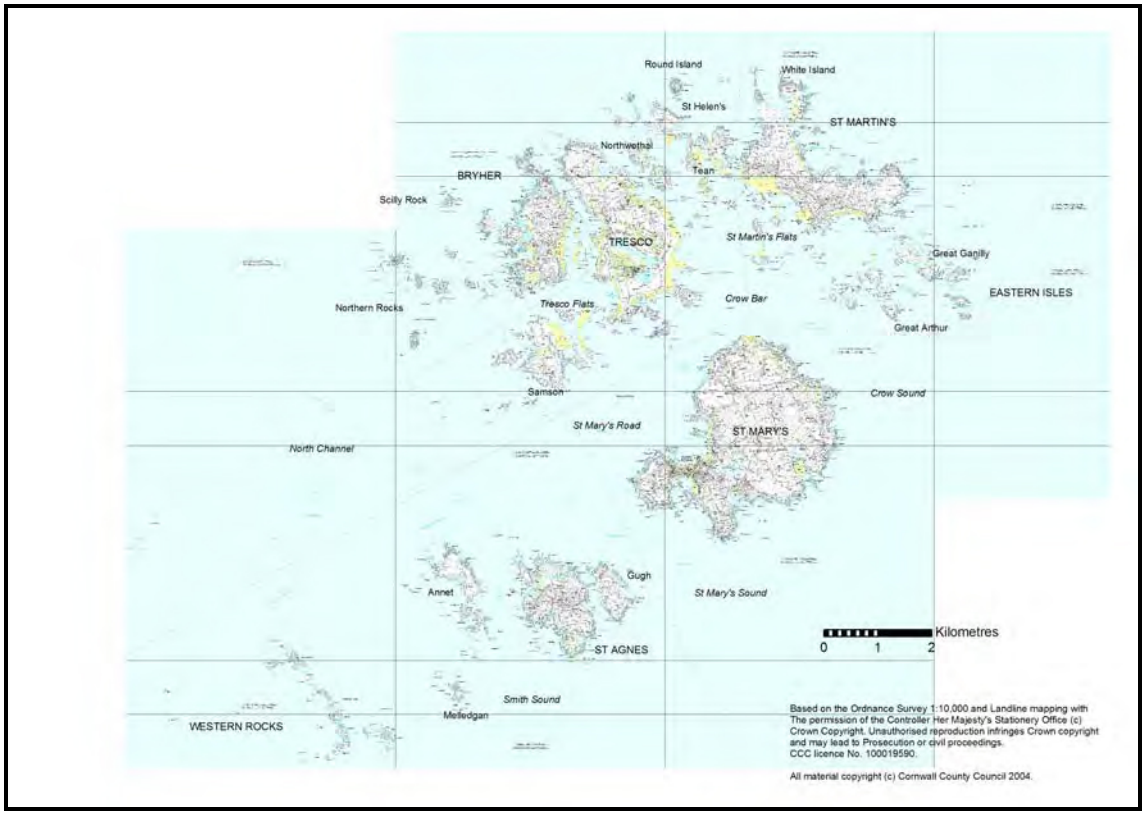



*Fig 2 The Isles of Scilly*

One of the recommendations of the 1989 management plan was a five-year rolling programme of survey, recording, palaeoenvironmental sampling, conservation work and coastal monitoring, which was funded by English Heritage and carried out by CAU with English Heritage specialists and teams of British Trust for Conservation Volunteers. This rolling programme was reported on annually, the new data being added to the SMR. The palaeoenvironmental work resulted in the important review and update of the environmental history of the archipelago mentioned above and described in detail in detail in Section 9.1.4 below (Ratcliffe and Straker 1996 and 1997).

In more recent years other partnerships have been formed (most notably the Joint Advisory Committee overseeing the management of the IOS AONB) to help ensure that the Islands' heritage and special qualities and features are preserved and enhanced for future generations to enjoy as the islands continue to develop. To aid this process, assessments of the special qualities of landscape of Scilly were carried out. The first was 'The Isles of Scilly Historic Landscape Assessment and Management Strategy', prepared by Land Use Consultants in association with CAU for the Duchy of Cornwall in partnership with the Countryside Commission and MAFF (Land Use Consultants 1996), and the second 'The Isles of Scilly; A landscape assessment of the Area of Outstanding Natural Beauty' (2002) prepared for the Countryside Agency. Both these documents are primarily focused on the current landscape of Scilly (Morrison 2003).

## 2.4 Organisation of this report

The organisation of this report is based on the project Brief: the Aims and Objectives of the project are stated Section 3; the survey method is detailed in Section 4; Section 5

outlines the geology and nature of the seabed in the study area; existing statutory and non-statutory controls are listed in Section 6; threats to the historic resource are identified in Section 7, and where appropriate recommendations are made to address these threats; Section 8 is an assessment of the resource by period and Section 9 assessment by theme, Section 10 explores an approach to intertidal and maritime characterisation; Section 11 describes the form, distribution, and threats to the various monument classes in the study area and includes a 'Class Importance Statement' for the main classes of monument and overall statement of significance for the project area; Section 12 comprises a methodology for the rapid application of criteria to assess the absolute and relative significance of individual sites; Section 13 discusses gaps in our knowledge and outlines suggested proposals for further research and/or projects. Section 14 comprises appendices to the report: 14.1 outlines the contents of the HES project archive; 14.2 is a list of coastal and intertidal sites in the project area; 14.3 a list of wreck sites; 14.4 a list of scheduled monuments; 14.5 is a list of droits (reports of wreck) received by the Receiver of Wreck for Scilly between 2000 and 2003, plus the results of the Wreck Amnesty of 2001; 14.6 gives details of research contacts and consultees; 14.7 lists the various sources used. Throughout the report the PRN number of sites which fall within the area of study are normally highlighted in bold, eg the Atlantic Hotel, **PRN 7833**.

*Fig 3 Sampling intertidal 'peats' on Par Beach, St Martins in September 1991 (photo: CCC)*

# 3 Aims and objectives

## 3.1 Aims

The aim of the Phase 1 desk-based assessment was to improve our knowledge and understanding of the submerged heritage in order to achieve integrated management of the whole of the historic environment of Scilly (Morrison 2003).

## 3.2 Objectives

The primary objectives of the assessment were to:

- enhance the Cornwall and Scilly Historic Environment Record, as administered by Cornwall County Council, and the NMR record for the areas between the high tide mark and the 12 nautical mile limit to improve the curatorial response (national and local) to threats to the historic resource;
- provide data that is compatible with the needs of the Council of the Isles of Scilly, the AONB unit and other managers and researchers working within the Isles of Scilly and territorial waters of the United Kingdom;
- provide a sound basis for the development of archaeological research and resource management frameworks for the study area;
- identify and quantify, where appropriate, threats to the historic resource of the study area (eg dredging, scalloping, coastal erosion, climate change, pollution, infrastructure developments, irresponsible diving etc);
- provide an overview of coastal change from the Late Upper Palaeolithic to the present day;
- provide an assessment of the archaeological resource within the study area, identifying both the potential and vulnerability of areas and monuments on the seabed and foreshore;
- develop expertise in maritime archaeology within the local Historic Environment Service;
- explore the historic landscape /seascape with GIS; and
- consider the potential and if feasible carry out a characterisation exercise to extend the existing Historic Landscape Characterisation out to the intertidal and maritime zones.

# 4 Methodology

## 4.1 Survey method

The project Brief (Morrison 2003) required assessment of existing information to establish the location (or possible location) of archaeological deposits and artefacts, and/or monuments (and wrecks), their date (where known), an indication of archaeological importance and potential of a site, in both absolute and local terms, and any identifiable threats to the resource. The Brief was solely for a desk-based assessment of existing resources and specifically excluded fieldwork and/or site visits. The work was carried out according to the revised project design submitted by HES to English Heritage in March 2003 (Johns and Tapper 2003).

## 4.2 The project area

The project area is defined as an oval area including all of the seabed and foreshore from the high water mark (HWM) of all the islands of the archipelago and extending to 12 nautical miles from shore (Fig 4). To the south and west of the islands the project area extends to the 12 mile nautical limit of UK territorial waters, to the north and north-east the limits of the project area lie well within UK territorial waters, which extend continuously from Scilly to the mainland, passing 12 nautical miles beyond Wolf Rock and the coast of Penwith.

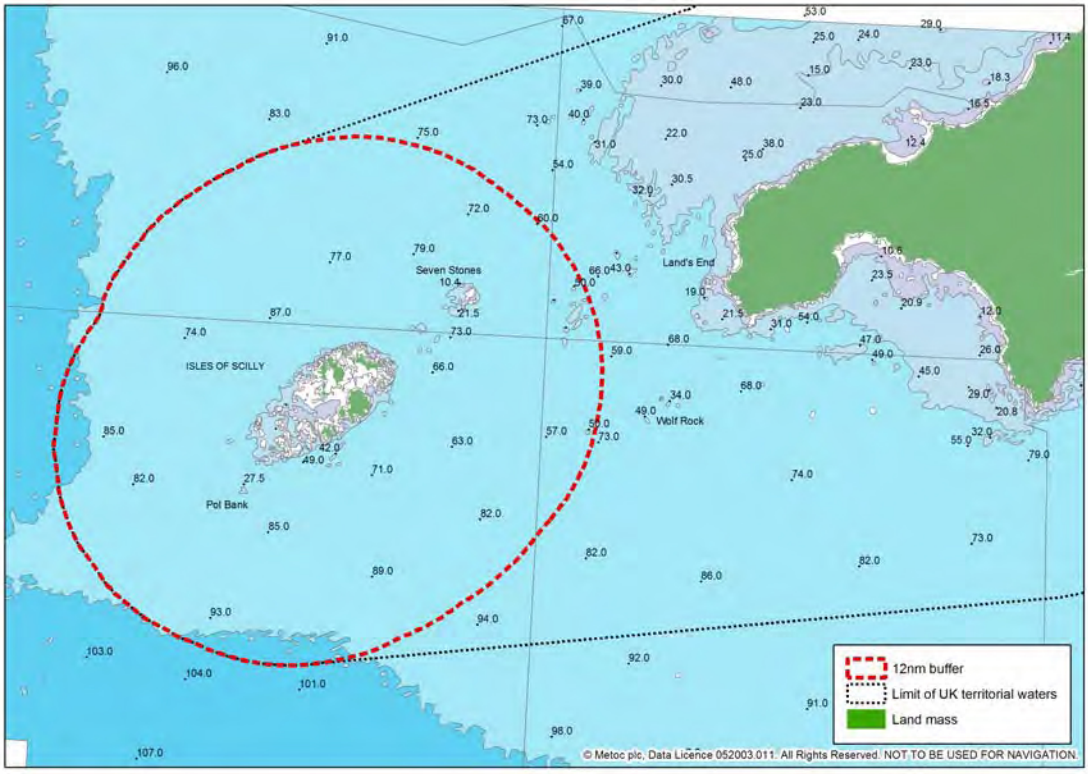



*Fig 4 The project area*

A 10-metre wide 'buffer zone' extending inland from the HMW was incorporated in order to provide a seamless join, as far as is possible, between our understanding of both the historic landscape and the submerged resource. The buffer zone was, of necessity, slightly flexible in order to accommodate significant sites that lie one or two metres beyond its inland extent and to retain the context of some features. For example, Cromwell's Castle on Tresco is included in the project area although it is 12m inland from the HWM,

Nornour is essential to the story, the Pest House on St Helen's, although some way beyond the inland limit is included to explain the context of the associated slipway, which lies within the study area.

The chronological extent of the desktop survey and assessment encompassed the earliest possible human occupation (*c*500000 BC) to 1945, but includes discussion of more recent events such as treasure hunting in the 1960s and wreck of the *Cita* in March 1997.

## 4.3 Research, data collection and collation

*'I have swum through oceans and sailed through libraries'.*

Herman Melville, "*Moby Dick*"

All relevant published and unpublished sources of historic, archaeological, geographical, topographical, and environmental data relevant to the study area were consulted. The method for research and data varied according to the form of the data and availability of the material on the Internet. Online searches are available at some libraries, archives and collections but not at others. Visits in person were made to local libraries and museums; a one-day visit to the UKHO archives was made to view relevant admiralty charts (the archive is due to be dispersed between the UKHO, the PRO and the Admiralty in the near future).

The main sources consulted were as follows:

*Primary sources*

- Cornwall and Scilly HER
- Register of Scheduled Monuments (RSM) for AI records
- Early maps, charts and photographs (see Section 17.3)
- The Maritime Record of the National Monuments Record, English Heritage, Swindon
- The Wreck Records and Survey Records of the United Kingdom Hydrographic Office, Taunton
- Lloyds Register of British and Commonwealth Shipping at the Falmouth Maritime Museum
- Site reports held within the archive of the Advisory Committee on Historic Wrecks
- Relevant "Dive Guides"
- Aerial photographs used by the NMP (see Section 17.6)

*Secondary data*

Secondary historic sources were collated at the following libraries and collections:

- The Caird Library of the National Maritime Museum
- The Bartlett Library of the National Maritime Museum, Falmouth
- The National Monument Record Centre Library
- The United Kingdom Hydrographic Office Archive
- The Cornish Studies Library, Redruth
- Other Local Libraries and Local Museums (St Mary's, Truro, Falmouth, Penzance)

- HES's offices

Research contacts are listed in Section 14.16.1; publications are listed in Section 14.7.

## 4.4 Consultation

As part of the assessment process, it was necessary to consult with a number of individuals and organisations in order to present a comprehensive overview of the issues involved with the submerged maritime resource. Consultation was achieved principally through personal interview and also through telephone discussion and e-mail. Copies of bylaws of relevance to the project were obtained from CIOS. The consultees are listed at the end of the report (Section 14.6.2).

## 4.5 Database records and GIS mapping

### 4.5.1 Method

The application of databases and GIS to the rapid coastal zone assessment has aided the collation, collection, interpretation and presentation of archaeological and historical data.

Besides facilitating input, storage, manipulation and output of data the use of databases and GIS has enabled the generation of an inventory of the assessment results. Spatial analyses have enabled the production of distribution maps, submergence models and identification of areas of likely archaeological potential.

Archaeological and historical sites were identified and plotted into GIS (ESRI's ArcGIS package) with a linked descriptive (textual) record entered into the Sites, Monuments and Buildings database housed at CCC HER (Access 2000). Each record conforms to the minimum heritage information content and coverage specification as advised by the HER including elements such as name, site type, location, period (if known), description, date, and source etc (see project design for breakdown of database elements recorded per site).

### 4.5.2 CCC HER, NMR, CICC HER, RSM, CIOSS

A primary goal of the project was to generate a 'project dataset' compatible with the technologies of the principal partners thus ensuring the successful exchange and deposition of the project's results.

The principal benefit has been the enhancement of the Cornwall and Scilly HER (and specifically the Sites, Monuments & Buildings record database) as well as those data holdings at the NMR and CIOS.

The Isles of Scilly archaeological record, maintained by Cornwall and Scilly HER is a well documented and sourced dataset bearing testament to the extensive and thorough work previously carried out by fieldworkers from CAU (new HES). As part of this assessment 385 new and existing coastal and intertidal sites were created, updated, and verified. This was achieved by checking site record descriptions, types, locations and other attributes etc. A gazetteer of these sites can be found in Section 15 and can be cross-referred, by PRN, against the sites mentioned in the report.

Maritime sites, predominantly shipwreck sites, were an absent feature of the record however. 771 wreck and underwater obstruction sites have been positively identified and entered into the Cornwall and Scilly HER. A gazetteer of these wrecks can be found in Section 16 and can be cross-referred, by PRN, against the sites mentioned in the report. More so than terrestrial sites the precision to which these maritime sites have been accurately located reflects the dynamic nature of the marine environment. The majority of the wrecks are named locations, often bearing an island name or geographic identifier, rather than fixed coordinates and should therefore be regarded with some degree of

caution. Their presence however is stark testament to the lost mariners and craft that foundered on their way to Davey Jones' Locker.

Additionally over 80 new 'events', principally archaeological excavations, have been input from the ADS' online Excavation Index, extending the current HER catalogue back to 1930. Although overwhelmingly terrestrial and coastal their inclusion reflects the historical interest to archaeologists of Scilly.

The NMR has been augmented through the identification of new sites through the NMP aerial plots and existing sites as yet recorded by the NMR (these number over 100 intertidal sites and 20 wrecks).

The RSM, via Dave Hooley, provided a list of 108 Scheduled Monuments, comprising 284 archaeological items spanning or adjacent to the coastal and intertidal zone, of which 165 archaeological item descriptions were made available and 46 items deemed to directly impinge on the study area were prioritised for inclusion in Cornwall and Scilly HER. 61 AIs were actually input into the HER SMR database of which 22 were previously unrecorded whilst the remainder existed as records but required enhancement and updating with designation and MPP site descriptions. This situation is compounded by the fact that historically CCC has not maintained a paper or GIS-based register of Scheduled Monuments for the Isles of Scilly due to the islands' unitary status; the Cornwall and Scilly HER has traditionally received Schedule notifications from EH but without accompanying detailed AI descriptions. Instead it relied on existing records (identified independently of MPP) to match against the summary scheduling notifications (which themselves do not appear to list their component AIs) resulting in the serious omission of some AIs comprising Scheduled Monument areas (one third in the example identified above!).

The opportunity was also taken to digitise existing archaeological constraint areas (as provided to CIOS by CAU (now HES) in the early 1990s). Provision of the coastal, intertidal and maritime sites assessed as part of this project has also been made along with all known terrestrial sites held by the Cornwall and Scilly HER. The 1996 historic landscape characterisation has been partially revised and extended out to a 12 nautical mile limit around the islands.

### 4.5.3 UKHO

183 wreck and underwater obstruction records held by the UKHO were consulted and referenced against those held by the NMR. Only those wrecks predating 1945 were incorporated into the Cornwall and Scilly HER and only 20 had previously been unrecorded by the NMR. This low number also reflects that many of the records recorded other submarine features such as rocks or fisherman's fasteners. All UKHO wreck locations are, relative to the NMR and reflecting the increased survey sensitivity of sonar sub-bottom profiling, given precisely in OSGB36 longitude and latitude degrees, minutes and decimals of a minute. These were converted to British National Grid eastings and northings using the 'CoordTrans' conversion programme (http://franson.biz/coordtrans/index.asp) and plotted in the GIS.

An important aspect of the project has been the acquisition and use of digital vector UKHO Admiralty Charts for the islands. Reprojected in GIS (from WGS84 coordinate system to British National Grid) they have been matched with modern OS maps for the islands. These vector charts enabled the generation of submergence models (based on soundings and bathymetric layers). They also facilitated the digitisation of the new maritime historic landscape character types. Charts consulted included the following:

- Chart 883, 1:12500, St Mary's and the Principal Off-Islands

- Chart 34, 1:25000, Isles of Scilly
- Chart 1148, 1:75000, Isles of Scilly to Land's End
- Chart 2565, 1:150000, St Agnes Head to Dodman Point including the Isles of Scilly
- Chart 1178, 1:200000, Approaches to the Bristol Channel
- Chart 2655, 1:325000, English Channel Western Entrance

It is understood that currently there is no formal agreement between the UKHO and the NMR for the sharing of wreck information. Such an agreement would greatly benefit any future rapid coastal zone assessments.

#### 4.5.4 Submergence models

The coarsely rendered submergence models presented here (Figures 17, 18, 19, 21, 22, 23 and 24) are based on and crudely extrapolated from the 'best fit line', Line C, suggested by Ratcliffe and Straker (1996, fig 6) and based on survey work and palaeoenvironmental sampling carried out between 1989 and 1993. In order to tentatively visualise this submergence model of the islands throughout (pre)history it has been possible to join digital Ordnance Survey contour data with UKHO chart soundings to produce a seamless DEM (digital elevation model) incorporating both terrestrial heights and maritime depths. OS heights are relative to Mean Sea Level (MSL) or OS Datum, as taken at Newlyn harbour. Digital UKHO Charts 883 and 34 soundings were used as they depict Lowest Astronomical Tide (LAT), which serves as Chart Datum (0m) for maritime craft. OS datum represents a height difference of 2.91m with Chart Datum as taken at Hugh Town on St Mary's.

To facilitate comparison with earlier models of sea-level change (Thomas 1985; Ratcliffe and Straker 1996) it was decided that all z values would reference to OS datum or MSL. To join the soundings with OS heights 2.91m was added to all depth (soundings) values. This has meant that during interpolation of these points to a 3D surface model (TIN) a straight line has been inferred between 0m (MSL) and -2.91m (Chart Datum). Considering the sensitivity of Ratcliffe and Straker's model this may represent a coarse interpretation of the inter-tidal zone particularly considering the shallow gradients and sand flats between the islands. However using the submergence gradient has enabled sea-level heights to be calculated and displayed in the GIS producing tentative maps depicting suggested MSL at varying periods throughout (pre)history. In order to facilitate comparison with Ratcliffe and Straker's and Thomas' data, the (possibly erroneous) assumption has been made that the difference between MSL and HST has remained constant, with MSL being *c*2.8 m below HST. The assumption of a consistent tidal range (*c*5m on Scilly) throughout (pre)history based on that of today has thus enabled the plotting of relative MHWS and LAT marks which give an indication of the likely area of inter-tidal human activity and by extension likely submerged archaeological potential.

The DEM against which the sea-level rise ('Line C') was projected integrated interpolated 10cm grid resolution where converted from UKHO data ie below CD, with interpolated 5m grid resolution above OS datum with the intervening 2.91m being interpolated between the two. This undoubtedly limits its use when considering sub-metre variation in sea-level.

Further work in the coastal, intertidal and maritime zones will allow the assumptions made in this report to be refined and revised as necessary.

### 4.5.5 Archaeological Item Record

Dave Hooley's comments on the first draft of this report noted that an important source of data had not been used in the project. Each scheduling is supported by detailed documentation on every archaeological component of that scheduling (eg for every individual cairn on Shipman Head and Castle Downs), this is called the Archaeological Item (AI) Record and forms a component of the Register of Scheduled Monuments (RSM), which also includes a detailed description and interpretation of many previously unrecognised features noted by Dave Hooley during his scheduling visits. Historically there had been problems with access to the data and a previous attempt at transferring the Shipman Head Down schedulings to a CAU database had been unsuccessful. Sensibly and for good future management EH decided to make the AIs available to CAU for this project. 283 of the AIs have a bearing on the RCZA project area of which 48 were selected by Dave Hooley because either they were not included in the HER or only had a very cursory HER mention. The records were supplied individually as Word documents attached to e-mails and assimilated into the project.

## 4.6 Integration with the National Mapping Programme

An important aspect of the project was the potential for integrating the results of the National Mapping Programme (NMP) with SRCZA. The NMP for Scilly, originally programmed for 2004, was brought forward to coincide with the research and data gathering phase of SRCZA in May and June 2003. The NMP was of potential value in mapping sites in the intertidal zone and, possibly, submerged sites in the shallower straits between the islands. Relevant results from the NMP were integrated into the GIS mapping and record entries for the assessment.

Cornwall's NMP, carried out by NMP archaeologists based in the HES at Truro, in line with the NMP nationally, aims to plot all archaeological features visible on all available air photographs. The photographs used are listed below in Section 14.7.5).

Archaeological features visible on these photographs were plotted using AutoCAD Map 5. Where necessary, rectification of the photos was carried out using the Aerial 5 rectification programme. Completed plots were exported as a layer into the HES GIS. In addition a 1:10,000 ink drawing was produced for each map sheet. Descriptions of the sites recorded, including photo serial numbers have been included in their relevant HER records and where necessary new HER records were created.

The NMP plot for Scilly added 108 sites to the HER, of these approximately 25% are in the coastal and intertidal zones. At the time of writing a new flight over Scilly by Damien Grady of EH is imminent but the results are likely to be too late to be incorporated in this report.

## 4.7 Approaches to characterisation

The project explored the feasibility of undertaking map-based characterisation of the intertidal and maritime zones; the potential for this was considered in the light of data collection and mapping results and takes into account the consultation draft project design for extending the coverage of Historic Landscape Characterisation to England's intertidal and maritime zones by Dave Hooley (2003). Peter Herring, of HES, advised and developed the approach for this. HES sent notes on early, internal characterisation meetings to Ian Oxley and Dave Hooley of EH. HES's HLC methodology is outlined in Section 10.

# 5 Geology and nature of the seabed in the project area

In 1997 Ambios Environmental Consultants Ltd carried out a habitat and biotope mapping survey of the Isles of Scilly for English Nature (Munro and Nunny 1998). Their report, along with the British Geological Survey report on the geology of the western English Channel and its western approaches (Evans 1990), forms the basis for this section.

## 5.1 Geology and geomorphology

The Isles of Scilly are situated at the merging of the Western Approaches and the English and Bristol Channels. The area forms part of the wide continental shelf to the south and west of England. The rocks at seabed are resistant, metamorphosed, Palaeozoic sediments locally intruded by mainly granitic igneous bodies such as Scilly and the Seven Stones reef (Evans 1990, 1).

A line around the islands defines the study area, which is an irregular oval shape 34.7 nautical miles long (south-west to north-east) and 30.4 nautical miles wide (south-east to north-west) (Fig 4). The southern and western extremities of the study area extend just beyond the 100m-seabed contour line. North and east of the 100m contour, the bottom is flat with the granitic cupola of Scilly rising sharply from the seabed plain at about 70m below sea level to a highest point of 63m on St Mary's.

Scilly is a geologically defined archipelago, an incised and partly submerged cupola forming the western tail of the ridge of exposed granite cupolas, or bosses, running along the spine of the south-western peninsula: Dartmoor, Bodmin Moor, St Austell, Carmenellis and Land's End – the visible part of the single, large Cornubian batholith which intruded into Devonian and Carboniferous stratas some 225 million years ago as a result of the Variscan orogeny (Evans 1990, 20-8). The single rock type has resulted in a uniform morphology in the archipelago, the detailed form of which is controlled by crystalline variation within the granite, fault patterns and variation in exposure to wave energy (Munro and Nunny 1998, 3-4).

During the past two million years of the Pleistocene and Recent periods major climatic fluctuations have resulted in a series of marine transgressions affecting the islands; at times sea levels have been 100m below the present level. During these long periods of advancing and receding sea levels the presently sub-tidal slopes of the Scilly cupola would have been subject to intense erosion and sediment redistribution as a result of shoreline wave action. These processes produced peripheral slopes dominated by massive granite exposure and boulder deposits, passing into sand and gravel deposits of the seabed plain surrounding the archipelago.

Although sedimentary deposits are widespread within the archipelago, shallow seismic profiling has shown that in many areas these sediment layers are very thin (less than 1m), although localised basins of deeper deposition occur (*ibid*).

There are three major active sources of intertidal and subtidal sediments in Scilly:

- breakdown of the granite under present-day wave action and weathering processes;
- reworking and redistribution of deposits formed during the Pleistocene and Flandrian periods; notably ram (periglacial sediments), alluvium, marine and wind-blown sands; and
- shell material, generated by the population of shell-forming organisms that inhabit the Scilly intertidal and subtidal zones.

Extensive intertidal flats, bars and shallow subtidal areas cover much of the inner region of the archipelago; most of the subtidal areas between Tresco, St Mary's and St Martin's are no more than 5m below Chart Datum (bcd). Broad, fairly shallow sounds radiate outwards from the central areas, eg St Mary's Roads, a sound between Tresco and St Mary's and extending to the south-west, which varies between 5m bcd (at the north eastern end) to 15025m bcd (off Annet to the south-west). The outer slopes of the cupola are characteristically steep and dominated by boulder and bedrock substrates. To the north, east and south of the archipelago the 50m contour lies within 500m of the shore and frequently within 100m (*ibid*, 9).

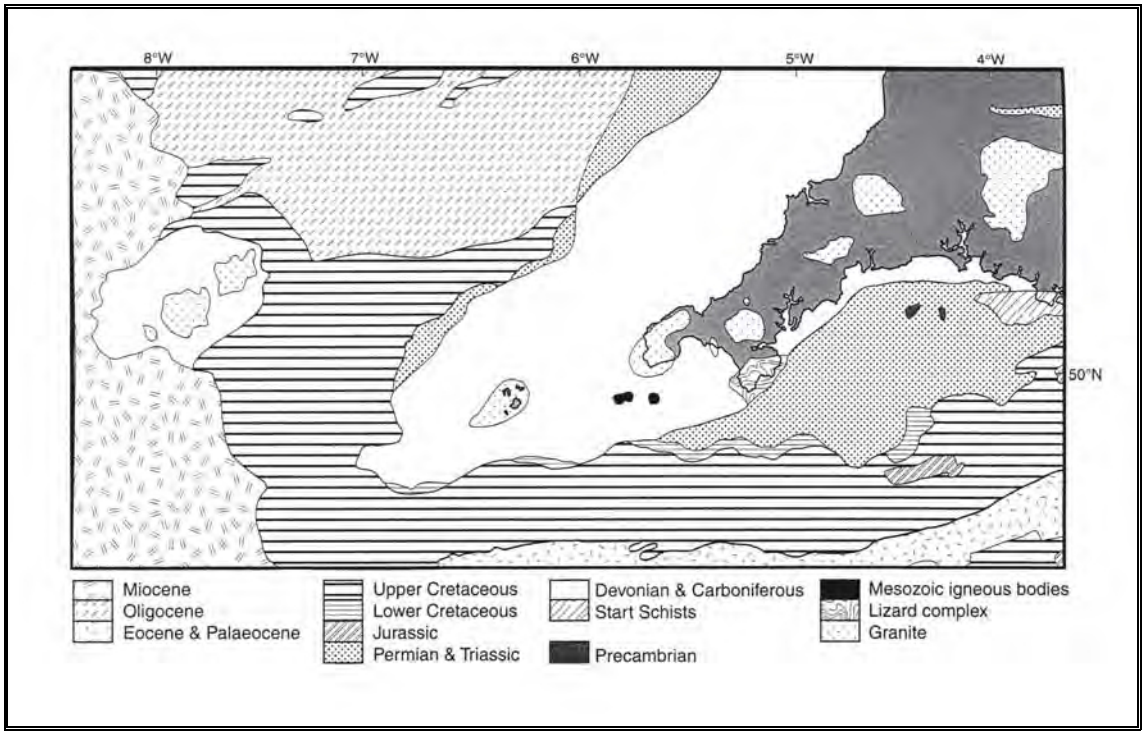



*Fig 5 An offshore geological map of Cornwall and Scilly (from Selwood et al (eds) 1998 and after Evans 1990 © University of Exeter)*

## 5.2 Tides and tidal streams

Scilly is subject to a semi-diurnal tidal regime. The mean spring tide range is 5.0m, and the mean neap tide range is 2.3m.The critical levels relative to local chart datum are as follows:

| | | |
|---|---|---|
| Highest Astronomical Tide (HAT) | 6.4m | |
| Mean High Water Springs (MHWS) | 5.7m | |
| Mean High Water Neaps (MHWN) | 4.3m | |
| Mean Sea Level (MSL) | 2.91m | Ordnance Datum (OD) |
| Mean Low Water Neaps | 2.0m | |
| Mean Low Water Springs (MLWS) | 0.7m | |
| Lowest Astronomical Tide (LAT) | 0.0m | Chart Datum (CD) |

Tidal stage has been recorded for many years at St Mary's quay. The unit was replaced following wave damage in 1989. Considerable water surface gradients are believed to exist due to frictional effects of tidal flow through the archipelago; level differences possibly attain values approaching 1m on mid-spring tides.

The semi-diurnal tidal rise and fall generates a complex flow of water through the islands. The tide in the open sea is a progressive wave, with slack water 4 hours before and 2 hours after High Water (HW). The currents flow in a rotary fashion through the cycle. The pattern of flow through the islands on a typical tidal cycle can be summarised thus:

FIRST FLOOD (HW-4 to HW-2). Flow is from the south through south-west. Water is funnelled into St Mary's Sound and leaves via all other exits. At the end of the period flow is starting to enter between Tresco and St Martin's.

LATE FLOOD (HW-2 to HW+2). Flow is from south-west, west, north-west, and then west. Water enters St Mary's Sound and between Bryher and Tresco and Tresco and St Martin's, exits between St Mary's and St Agnes and St Mary's and St Martin's. After HW there is little flow into St Mary's Sound, and flow reverses in the Bar Point area carrying water southwards.

EARLY EBB (HW+2 to HW+4). Flow is from north to north-east. Water enters between Bryher and Tresco, Tresco and St Martin's and exits by all other routes.

LATE EBB (HW+4 to HW-4). Flow is from north-east, east, and then south-east. Water enters between St Mary's and St Martin's, and exits by all other routes.

Tidal currents rarely exceed 1 knot within the island group, but flows of 2 knots or greater occur around the outer edges of the archipelago, with strong tidal races off major headlands (Munro and Nunny 1998, 5).

## 5.3 Wave climate

Wave data are available for Scilly from a series of recorded data sets and from 'Metwave' model output. The islands are very exposed to wave energy, storm wave heights attaining 14m. Directional data shows that the biggest waves approach from between the south-west and north-west, but that large waves can also approach from the east (Munro and Nunny 1998, 5).

Through processes of refraction the island system is a focus for wave energy. With short wave-length there is less efficient refraction on shoaling, and much of this wave energy is lost as waves break against or reflect from the outward facing coasts, leaving the inner waters of the archipelago relatively calm. The longest wavelengths are more able to deform to the tortuous nature of the major inlets, and more efficiently penetrate the inner waters, particularly at High Tide (*ibid*).

## 5.4 Sediment mobility

Sand transport by tides or combined tidal/wave action is evident from the seabed deposits in several parts of the archipelago. In the Crow Bar area to the north of St Mary's, in the channels between Tresco, Tean and St Martin's, and in the channel separating Tresco from Bryher and Samson, tidally-generated megaripples and sand ribbons have been identified in side-scan sonar records and air photographs (Munro and Nunny 1998, 5).

Available meter data indicates that peak velocities in these areas are sufficient to transport sands and fine gravels in salutatory (ie lifting in short hops) or rolling movement, consistent with the observation that bedload transport of sands is regularly occurring in these zones (*ibid*, 5).

The simplest pattern of residual sand transport consistent with the available data indicates movement of sand from the north of the archipelago to the south. On the Bryher-Tresco-St Martin's Flats there appears to be a consistent southward movement of sand. In the latter area this splits in the vicinity of Crow Bar to pass east and west of St Mary's. The appearance of the stone row, **PRN 7008**, on Par Beach, St Martin's at the end of the 1980s may be consistent with this, but does not suggest much of a balance in that area as a build up of sand by May 2002 had covered one of the stones and the exposed peat (J Searle pers comm).

Current mater data confirms a southward movement of sand between St Mary's and St Agnes. There appears to be a balance between east and west going transport at the southern end of Crow Bar, which may explain the accumulation of sand in this area. If tidal currents are not strong enough to transport sand in the St Mary's Road and Crow Sound areas (there are no data available) these zones may be sink sites for sand (*ibid*, 6).

The passage of a wave produces an orbital motion in the water column beneath the wave. In the water this motion impinges upon the seabed, where it is compressed to a simple to-and-fro movement, with a stronger onshore flow that produces a landward movement of sediment moving as bedload. Within the archipelago wave action tends to move coarser material towards the high-water marks while sand finer than about 200μm tends eventually to be dispersed into suspension (*bid*, 6).

Most of the exposed substrates in Scilly are composed of 'residual' deposits of cobbles and boulders, or are rock, and hence essentially stable, subject to some disturbance during severest wave action. Almost all sediment areas will be mobile at some time due to wave energy. In the absence of wave climate records within the archipelago, where most of the sedimentary areas are found, it is impossible to make predictions of the frequency with which seabed disturbance by wave action occurs (*ibid*, 6).

## 5.5 Major seabed types within the archipelago

Munro and Nunny identified seven major seabed types around the archipelago. These are listed below and summarised in the table at the end of this section.

### 1 Fine-medium/fine, suspension sand

When sands finer than 200μm are subject to motion, they tend to move directly into suspension rather than behaving as bed load, and thus are subject to wide dispersion potential. Sand deposits of this nature represent major fallout zones, caused by settling out of fine sand from adjacent high-energy areas. These fallout zones are normally stable areas with low ambient energy, but they may be subject to intermittent wave-induced disturbance. Substrates of this type were identified in three areas:

- an extensive zone off the north-eastern shore of St Mary's in Crow Sound (10-30m bcd). This zone may represent a lee area sheltered by St Mary's from the prevailing direction of storm wave approach and also a fallout zone from the area of higher tidal activity to the north-west in the Crow Bar area;
- the deeper water margins (25-50m bcd) to the north and north-east of St Martin's. Again an area in the lee of the archipelago relative to the prevailing wave approach. These sands contain substantial quantities of coarse biogenic material; and
- localised intertidal patches in sheltered bays eg Green Bay on Bryher, East Porth on Samson and in St Mary's harbour. Localised patches of fine sands also occur in St Mary's Roads (5-10m bcd), possibly associated with *Zostera* beds.

Medium-fine sands may also be associated with higher energy, sand re-circulation zones, created by a local pattern of tidal flows when fine sand moving in suspension is unable to escape into quieter areas. As a result an accumulation of sand occurs, typically forming a bank or shoal complex. In contrast to fallout areas the sand is frequently in motion, and the bed is normally contorted into mega-ripple sequences. The extensive shallow, medium-fines sand zones in the Crow Bar – south St Martin's Flats area is likely to be such a zone, subject to tidal and wave-induced transport. These sands are well sorted, consistent with the high level of sediment mobility. Munro and Nunny mapped three depth/wave exposures, corresponding roughly with the examples given above.

*Shallow (<20-m), sheltered fine sand.*

These occur in areas very sheltered from wave exposure, mostly between Tresco, Bryher and St Martin's, in sheltered bays or adjacent to *Zostera* beds. This includes intertidal and very shallow subtidal (<10m bcd areas).

*Medium depth (10-20m) moderately exposed fine sand*

These areas correspond to the shallower fine sand areas off the north shore of St Mary's. They are sheltered by St Mary's from the prevailing south-westerly waves.

*Deep (>30m) wave exposed, fine sand*

These correspond to the deep-water margin areas described above. They are sheltered by the main islands, but are low energy, fallout areas for fine sediment due to their depth. Most are located to the north of St Martin's and the east of St Mary's.

**2 Medium, bedload sand**

This sediment type (particles in the range 200-600μm) forms the commonest sedimentary substrate widely found within the survey area. In areas of strong tidal flow it forms shoals of mega-rippled sand, such as in the vicinity of Crow Bar, in the channels between Tresco, Tean and St Martin's, in the channels between Bryher and Samson and Tresco (Hulman area) and in the channel between Gugh and St Mary's (St Mary's Sound). Many of these medium sand substrates had wave-induced ripple marks at the time of the 1997 survey and therefore are subject to frequent wave disturbance. This grouping can be divided into four sub-groups on the basis of depth, wave exposure and gravel content.

*Shallow, sheltered medium sand with variable or low gravel content*

This occupied much of the channels between the main islands, often bounding deeper or more sheltered areas of fine sediment and usually found in water 5m or less in depth.

*Shallow, moderately exposed, well-sorted medium sand*

This was found mainly in St Mary's Road. Transitional between the shallow sheltered sand and the more exposed medium sands and tending to occupy the 2-5m bcd zone. The sands in this group were generally well-sorted through exposure to strong wave action.

*Exposed medium sand*

Medium sand in wave-exposed regions around the main islands occurred either in relatively deep water (>20m bcd) or very shallow and intertidally within exposed bays where it has been trapped by wave action. This category consists mainly of the former, but also includes some shallow and intertidal sands. Exposed medium sand forms a major band of sediment along the southern edge of the archipelago, in the deeper water below bedrock and cobbles.

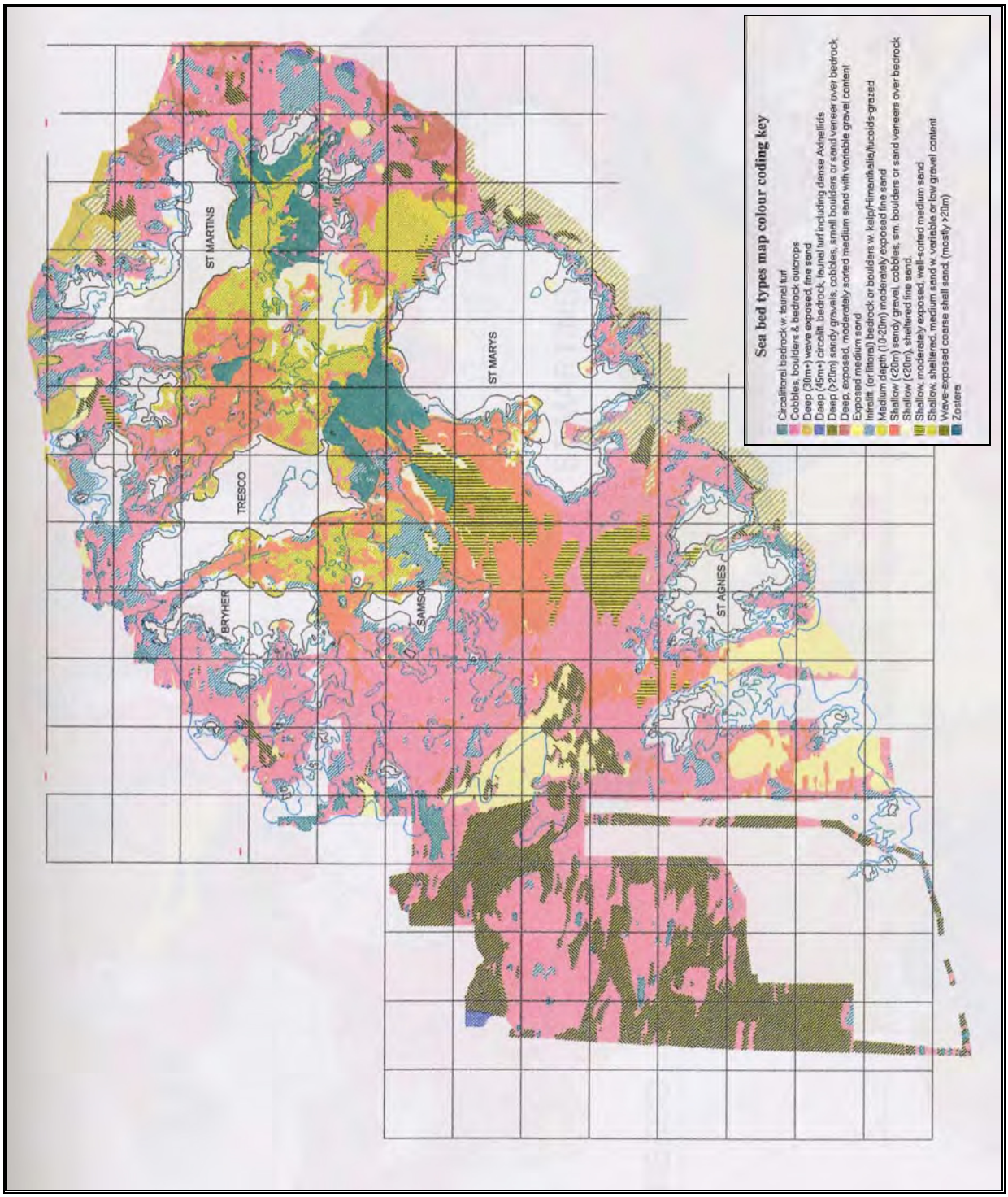



*Fig 6 Distribution of major seabed types within Scilly (from Munro and Nunny 1998, Map 5 ©English Nature)*

*Deep, exposed moderately sorted medium sand with variable gravel content*

This differs from the exposed medium sand category in the presence of significant rock and shell gravel content within the sediment. This category is also found in relatively deep water, but is mostly confined to the south-eastern side of the archipelago.

**3 Coarse sands**

These sands, which occurred in the highly exposed area between Annet and the Western Rocks in depths of 30-40m CD and in localised areas at similar depths north-east of St Martin's and south-east of St Mary's, are composed almost exclusively of shell fragments and other biogenic debris. Off Annet these sands were mega-rippled, thus being mobile under storm conditions.

**4 Sandy gravels: thin sand veneers over hard substrates, large sand or gravel patches between rock / boulder / cobble zones**

The distribution of this sediment type is very varied within the archipelago. It is essentially a peripheral zone separating rockier areas from areas of extensive sand accumulation. The gravels are commonly lithogenic. This grouping can be divided into two categories corresponding to depth (above and below 20m).

**5 Localised rock outcrop, cobbles and boulder fields**

This 'lag' material, the winnowed remains of rock outcrops and periglacial weathering dominates subtidal Scilly, with the exception of the channel separating Samson and Bryher from Tresco. The substrate is mostly covered with faunal or algal turf, kelp park or kelp forest, depending on depth and wave exposure.

**6 Massive rock**

The 1997 survey avoided major reef areas, but mapped some step rock slopes, usually topped by dense kelp forest, which can be divided into three depth zone categories.

*Infralittoral (or littoral) bedrock or boulders with kelp*

The very large number of small rocky outcrops around the islands makes the separation of littoral and shallow sublittoral rock an impractical task. Because of the exceptional clarity of the waters around Scilly, compared with the rest of Britain, infralittoral rock has been mapped to the 20m contour.

*Circalittoral bedrock with faunal turf*

Exposed bedrock and massive boulder slopes deeper than 20m bcd are widely distributed around the periphery of the archipelago.

*Deeper circalittoral rock with faunal turf*

Bedrock around 45m bcd or deeper, could be divided into basic categories, being either heavily scoured or grazed (or both) in some areas and in others supporting a rich hydroid / bryozoan / sponge turf.

**7 *Zostera* beds**

*Zostera* beds occurred in the channel dividing Bryher and Samson from Tresco and also north-east of St Martins. (The genus *Zostera* is constituted by small, submerged marine flowering plants with ribbon-like leaves, also called eel-grass or grass-wrack).

| Major seabed types within Scilly | Characteristics | Main identified locations |
|---|---|---|
| 1 Fine-medium / fine, suspension sand | Shallow (<20m), sheltered fine sand, diverse and variable fauna | Green Bay, Bryher; off East Porth, Samson; St Mary's harbour. Between Bryher and St Martin's, in sheltered bays or adjacent to *Zostera* beds |
| | Medium depth (10-20m) moderately exposed fine sand | Off NE shore of St Mary's, in Crow Sound |
| | Deep (>30m) wave exposed, fine sand | Deeper water margins to N and NE of St Martin's and E of St Mary's |
| 2 Medium, bedload sand | Shallow, sheltered medium sand with variable or low gravel content | Crow Bar; channel between Samson, Bryher and Tresco (Hulman area); between Gugh and St Mary's (St Mary's Sound) |
| 3 Coarse sand | Wave exposed coarse shell sand (mostly >20m) | Between Annet and the Western Rocks |
| 4 Sandy gravels: thin sand veneers over hard substrates; large sand or gravel patches between rock / cobble / boulder zones | Shallow (<20m) sandy gravel, cobbles, small boulders or sand veneers over bedrock | Varied distribution |
| | Deep (>20m) sandy gravels, cobbles, small boulders or sand veneers over bedrock | Varied distribution |
| 5 Localised rock outcrop, cobbles and boulder fields | Cobble, boulder and bedrock outcrops | Dominates subtidal Scilly with the exception of the channel between Samson, Bryher and Tresco |
| 6 Massive rock areas | Infralittoral (or littoral) bedrock or boulders with kelp | Rock outcrops between and around main islands |
| | Circalittoral bedrock with faunal turf | Widely distributed around the periphery of the archipelago |
| | Deep (45m+) circalittoral bedrock with faunal turf including dense Axinellids | " |
| 7 *Zostera* | *Zostera* beds | NE of St Martins and in the channel between Samson, Bryher and Tresco |

*Fig 7 Table showing major seabed types within Scilly (from Munro and Nunny 1998)*

**Note:** There are late glacial drift deposits present in Scilly which will have extended into the marine zone. These are unique in south-west England. There are also palaeoenvironmental deposits (pollen) in some cliff sections, eg Bread and Cheese Cove, St Martin's, that date to the last glaciation. There are no cultural remains but these deposits (drift and palaeosols) are a very rare survival and vulnerable to erosion.

# 6 Existing statutory and non-statutory controls

## 6.1 Sites of Special Scientific Interest

The Isles of Scilly were first proposed as a National Nature Reserve in 1947 and there are currently 26 Sites of Special Scientific Interest (SSSIs) covering a total area of *c*789 ha, of which approximately 50% is located on the unenclosed land of the inhabited islands. Only the St Martin's Sedimentary Shore SSSI includes intertidal land below mean low water mark.

Porth Seal on St Martin's is a Geological Conservation Review Site, showing a sequence of deposits including a raised beach, and provides important information on late Pleistocene environmental conditions in South West England; there are four other geological SSSI's on Scilly including Porth Loo and Watermill Cove on St Mary's.

## 6.2 Marine Park and cSAC

The sea and seabed lying within the 50m depth contour surrounding the islands was defined as a 'Marine Park', having the status of a Voluntary Marine Nature Reserve. The marine park is administered by a Management Committee established by the Duchy of Cornwall, the former Isles of Scilly Environmental Trust (now the Isles of Scilly Wildlife Trust), The Sea Fisheries Committee of the Council of the Isles of Scilly, and English Nature. Its aims are 'to conserve and protect the ecological, archaeological, historical and environmental heritage contained within the park's boundaries, and ensure its harmonious co-existence with traditional local activities, to the mutual benefit of the marine environment, the local community and visitors to the islands'. It also aimed to control and co-ordinate the opportunities and facilities for research.

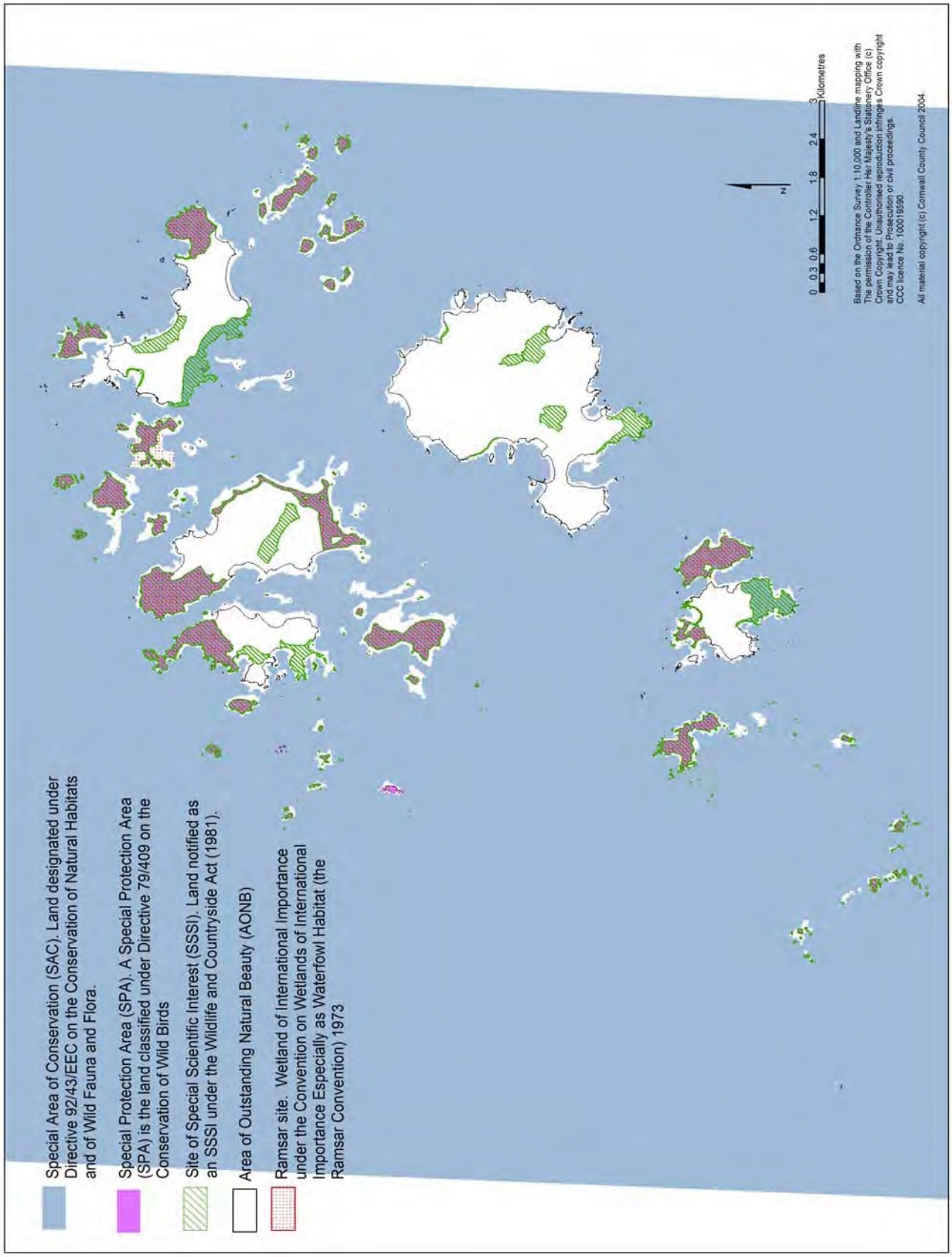
## 6.3 Candidate SAC, SPA and Ramsar designations

The candidate Special Area of Conservation (cSAC) designated under the EU Habitats Directive extends some way beyond the 50m depth contour. The cSAC area is one of twelve marine SACs selected around the UK to protect the marine environment and develop approaches and techniques for the management and monitoring of SACs. The Isles of Scilly Special Protection Area (SPA) and Ramsar sites are comprised of all or parts of 14 component SSSIs and are designated for their breeding seabirds.

## 6.4 AONB / Heritage Coast

Scilly was given national landscape designation as a Heritage Coast and Area of Outstanding Natural Beauty (AONB) by the Countryside Commission in 1975, with confirmation by the Minister in the following year. The primary purpose of the AONB designation is to conserve and enhance natural beauty, despite being a land based designation the importance and influence of the maritime setting and all its resources in Scilly is strongly recognised. A landscape assessment of the AONB was carried out by Land Use Consultants in 2002, and a draft Management Plan has recently been produced for 2004-2009 with the following Vision for the Marine & Coastal Environment: *'The islands have a clean, healthy, safe, productive and biologically diverse marine and coastal environment that is valued and enjoyed. It is well recorded, understood and managed in a manner sensitive to its needs, enabling it to support a sustainable local fishery. The contribution of the islands' outstanding seascape to their overall natural beauty and their concealed archaeological and heritage value is widely recognised and protected'* (Davey 2003).

IRIS (Information Resource for the Isles of Scilly) on IOS AONB website provides a useful database of information for the islands (www.ios-aonb.info).




*Figs 8 Natural designations*

## 6.5 Scheduled Monuments

Statutory protection is extended to archaeological sites and historic structures by scheduling. A Scheduled Monument is one designated by statute as a site of national importance and is protected by **The Ancient Monuments and Archaeological Areas Act of 1979, as amended by the National Heritage Act 1983**. By law, any proposed work affecting such sites requires Scheduled Monument Consent from the Secretary of State for Culture, Media and Sport.

The 1979 AM&AA Act provided for scheduling to take place anywhere out to the 12 nautical mile limit of UK Territorial Waters, but there was no provision for English Heritage, or any other body, to formally advise the Government on scheduling and related issues beyond the boundaries of England, which were often taken to be Mean Sea Level. The 2002 National Heritage Act has changed this insofar as English Heritage has now been given the remit to advise the Government on schedulings (and other matters pertaining to the historic environment) out to 12 nautical mile limit.

Following the recent re-survey in the 1990s under English Heritage's Monuments Protection Programme (MPP), 242 historic monuments have been scheduled in Scilly, a remarkable concentration in a landmass amounting to only 16 sq km. A large proportion of these are scheduled areas containing a number of individual sites and comprising a total of over 900 separate 'archaeological items'. Forty-seven Scheduled Monuments are located in the study area (Scheduled Monuments in Scilly are listed in Section 14.4 of this report).

## 6.6 Listed buildings

The Secretary of State is required to compile lists of buildings of special architectural or historic interest for the guidance of local planning authorities. There are 129 Listed Buildings in Scilly (four Grade 1, eight Grade II* and 117 Grade II). Approximately 50% of these are located in Hugh Town.

Demolition, alterations and extensions to listed buildings require Listed Building consent. Alterations to buildings attached to the main Listed Building or within the curtilege and inexistence before 1948 also need Listed Building consent.

Development proposals that will have an impact on Listed Buildings and their setting do not need specific Listed Building consent unless they come into the above categories. However, their impact on the Listed Building is a material consideration in assessing the development.

The five Listed Buildings in the study area are Cromwell's Castle which is Grade II* (its Listing is held in abeyance due to its Scheduled status which takes precedence), Hugh Town Quay which is Grade II, the Bishop Rock Lighthouse which is Grade II, the Atlantic Hotel, incorporating the *c*1840 Custom House, which is Grade II, and the fish salting trough in Old Town Bay, which is Grade II. Sir Cloudesley Shovel's grave at Porth Hellick was formerly Listed Grade III but now has no statutory protection. A number of other maritime-related Listed Buildings in Scilly are outside the study area.

## 6.7 Wreck Law

There are three main laws which apply to shipwrecks: The Merchant Shipping Act 1995, the Protection of Wrecks Act 1973, and the Protection of Military Remains Act 1986. The Government is reviewing heritage protection for the marine historic environment alongside terrestrial designation. A public consultation paper, 'Protecting our Marine Historic Environment: Making the System Work Better', was launched by DCMS in March 2004. In support of this initiative English Heritage has commissioned an assessment of

existing legislation relating to maritime archaeology in the UK (School of Legal Studies 2003).

As part of the new approach outlined in the consultation paper the Government *'proposes to introduce a statutory definition of 'marine historic asset' that encompasses all parts of the anthropogenic marine environment. These could include, for example:*

- *assets relating to the use of the sea: eg boats, submarines, sea planes and maritime weapons munitions;*
- *assets related to the use of the sea bed: eg fish traps, quays etc that used to be in the intertidal zone but are now submerged, oil rig installations and military installations;*
- *assets unrelated to the use of the sea or the sea bed: ie items that have dropped from the air, such as planes, rockets and munitions fired from the land;*
- *assets related to dry land activity that are now submerged; eg old land surfaces, palaeoenvironmental deposits, field systems, settlements and stray finds'* (DCMS 2004, 15).

### 6.7.1 Merchant Shipping Act 1995

Under Section 236 of the Merchant Shipping Act 1995, all wreck material recovered from the seabed in UK territorial waters (to the 12 mile limit), or outside the UK and brought within UK territorial waters must by law be reported to the Receiver of Wreck.

Wreck is defined as including 'jetsam, flotsam, lagan and derelict in or on the shores of the sea or any tidal water (Section 255). All items that are raised regardless of age or importance must be reported to the Receiver, and this includes historical and archaeological material such as medieval pots, gold coins, cannon etc. Ten reports of wreck (droits) for Scilly have been made to the Receiver in 2003; these are listed below in Section 14.5.

Once a report has been received, the Receiver will investigate ownership of the wreck items. The owner has one year to come forward and prove title to the property, during which time the finder is normally allowed to hold the wreck on indemnity to the Maritime and Coastguard Agency.

Finders who report their finds to the Receiver of Wreck have salvage rights. The Receiver of Wreck acts to settle questions of ownership or salvage.

Wreck from UK waters that remains unclaimed at the end of one year becomes the property of the Crown (or grantee of the Crown such as the Duchy of Cornwall) and the Receiver will dispose of the wreck on behalf of the Crown.

Approximately 20% of reported finds are over 100 years old. The Receiver of Wreck recognises the importance of archaeologically and historically significant material and is committed to keeping collections together and on display in a public museum, preferably in a location close to the find site.

The Receiver of Wreck deals with wreck that comes from tidal waters. Material from non-tidal waters are treated as if they were found on land and come under other legislation such as the Treasure Act 1996 and Ancient Monuments and Archaeological Areas Act 1979.

This part of the 1995 Merchant Shipping Act is administered by the Maritime and Coastguard Agency through the Receiver of Wreck.

### 6.7.2 The Protection of Wrecks Act 1973 and the National Heritage Act 2002

The Protection of Wrecks Act 1973 (Section 1) is designed to protect wrecks that are of historic, archaeological or artistic importance. It is administered by the Department of

**Figure 9. Cultural designations**

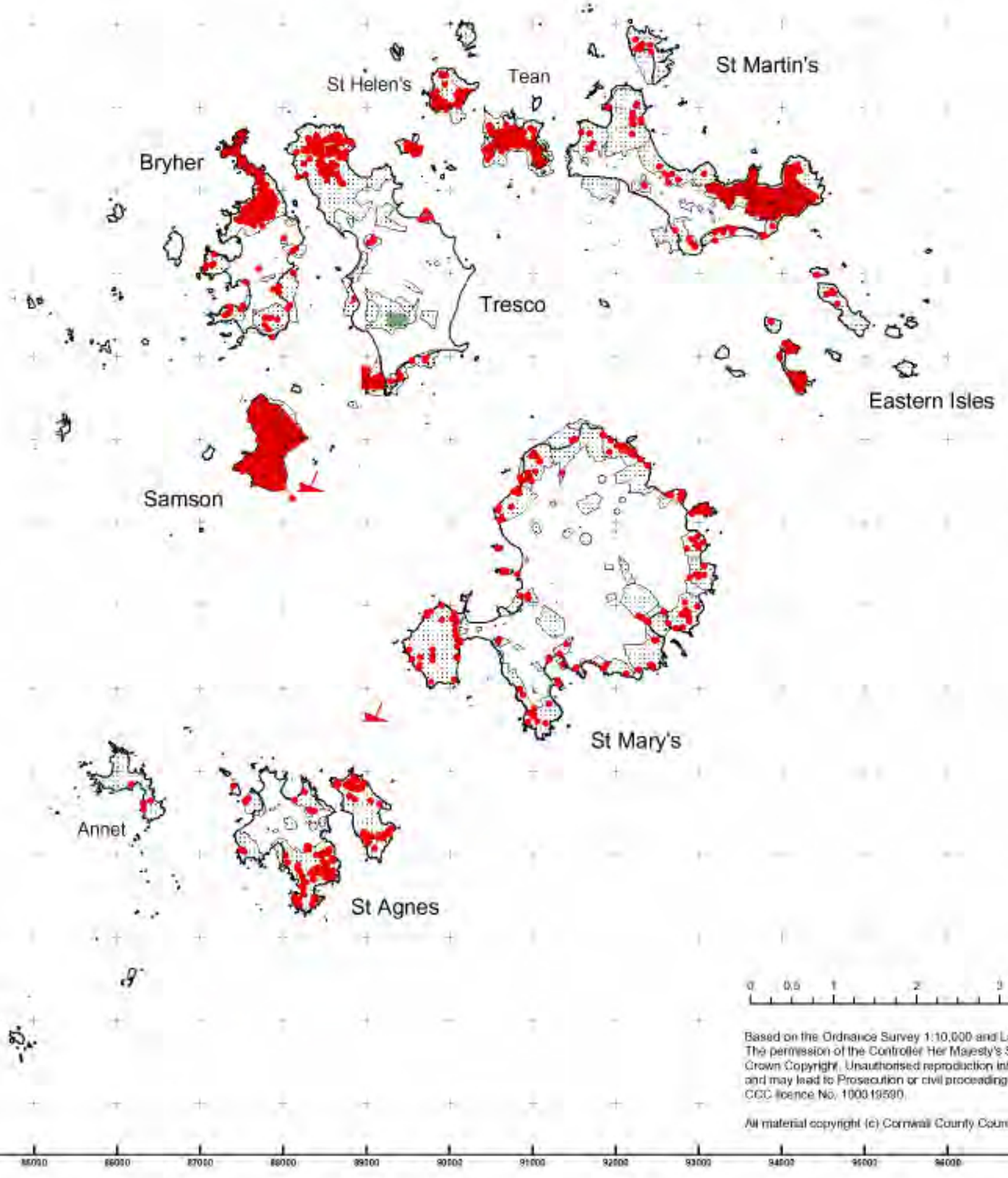
Scheduled Monument (coastal and inter-tidal only)

Designated Wreck

Historic Park and Garden

Archaeological Constraint Area (CIOS)

Note: The whole of the Isles of Scilly is designated as a Conservation Area.




0 0.5 1 2 3 4 Kilometres

Culture, Media and Sport (DCMS) in England and Northern Ireland with the assistance of English Heritage and the Heritage and Environment Service Northern Ireland respectively, and by the devolved administrations with the assistance of Historic Scotland and Cadw in Scotland and Wales respectively. All with the provision of advice from the Advisory Committee on Historic Wreck Sites (ACHWS) and the diving contractor. It is the Department's policy to protect the best examples of our underwater heritage whilst encouraging greater access to it.

A designate order is made by statutory instrument whenever such a site is designated. It identifies a point on the seabed around which an area of seabed is protected; it does not identify the wreck site. Within this area it is an offence without the authority of a licence granted by the Secretary of state to tamper with, damage or remove any part of the wrecked vessel or anything contained or formerly contained within it, to carry out diving or salvage operations, to use diving or salvage equipment or deposit materials so as to obliterate or obstruct access to the site, or to damage the wreck. There are currently four types of licence issued by the Secretary of State: Visitor, Survey, Surface Recovery and Excavation. Project designs or written schemes of investigation based on the staged approach set out in the Management of Archaeological Projects (2nd Edition; English Heritage 1991) (Map 2) are a requirement for excavation licence applications.

The ACHWS and English Heritage assists the Secretary of State in selecting sites to be designated and persons licensed to carry out diving or salvage operations on designated sites. The intention to designate has a wide consultation with all stakeholders. The intention to designate is advertised in the local press.

In the UK there are currently 54 designated wreck sites under the Protection of Wrecks Act 1973, 39 of which are in England. Out of the total of *c*771 recorded wreck sites in Scilly only three are designated as Protected Wrecks, these are:

- the mid-late 16th century possible small Spanish cargo vessel on Bartholomew Ledge in St Mary's Sound, designated as a Protected Wreck from 3 October 1980;
- the Tearing Ledge shipwreck, south of the Bishop Rock Lighthouse, which is now thought to be the *Eagle*, lost in 1707, rather than the *Romney*, lost in the same incident, as recorded by the NMR; and
- HMS *Colossus*, lost in 1798. The site was relocated by divers led by Roland Morris in 1974 and designated as a Protected Wreck, the main reason being the presence within the cargo of Sir William Hamilton's second collection of Greek pottery (the Hamilton vases). The designation was revoked in 1984, following the recovery of most of the pottery by Roland Morris. The discovery of the stern section in 2001 led to the second designation for HMS Colossus, which came into effect in the same year. The radius of the designated circle around the site is 300m.

Section 2 of the Protection of Wrecks Act concerns vessels designated as dangerous because of their contents. This Section is administered by the Maritime and Coastguard Agency through the Receiver of Wreck.

### 6.7.3 The National Heritage Act 2002

The National Heritage Act 2002 extended English Heritage's remit into the marine zone below the low-water line and out to the 12 nautical mile limit of UK territorial waters around England. In particular it:

- extends EH's remit by amending the definition of 'ancient monuments' in the National Heritage Act 1983 and the Ancient Monuments and Archaeological Areas

Act 1979 to include sites in, on or under the seabed (including those comprising the remains of vehicles, vessels, aircraft or movable structures) within the seaward limits of the UK territorial waters adjacent to England;

- enables the Secretary of State to direct EH to exercise functions relating to ancient monuments in, on or under the seabed on his behalf; and
- enables EH to defray or contribute to the cost of maintenance of wrecks protected under the Protection of Wrecks Act.

The 2002 Act modified English Heritage's functions to include:

- securing the preservation of ancient monuments in, on, or under the seabed; and
- promoting the public's enjoyment of, and advancing their knowledge of ancient monuments in, on, or under the seabed.

As a result of the Act EH have appointed a Head of Maritime Archaeology and a Maritime Archaeologist, based at the Centre for Archaeology, Fort Cumberland, Portsmouth to manage the archaeological diving contract and take the lead on all matters pertaining to the management of the maritime resource. The 2002 Act has a number of other implications which are discussed at length in 'Taking to the Water' (Roberts and Trow 2002, 15-25).

### 6.7.4 Protection of Military Remains Act 1986

The Protection of Military Remains Act deals with military remains of both aircraft and ships. All military aircraft are automatically designated under this legislation which is administered by the Ministry of Defence (RAF for aircraft, Navy for vessels).

Vessels may be designated under this Act either as a Protected Place or a Controlled Site. Divers may visit a Protected Place on a 'look but don't touch' basis. Divers are prohibited from visiting Controlled Sites. Protected Wrecks in the study area are listed below in Section 9.11.5.

## 6.8 Portable Antiquities Scheme

The recently published Treasure Annual Report 2001 by the DCMS shows that reported cases of Treasure can be expected to increase further with the expansion of the Portable Antiquities Scheme. The Portable Antiquities Scheme is designed mainly for terrestrial sites, including finds from the shoreline and coastal zone; only maritime finds originating from ships are usually reported to the Receiver of Wreck. The Finds Liaison Officer for Cornwall and Scilly is Anna Tyacke (e-mail: anna.tyacke@royalcornwallmuseum.org.uk).

## 6.9 The Historic Environment Record for Cornwall and the Isles of Scilly

The Historic Environment Service Historic Environment Record (HER) for Cornwall and the Isles of Scilly is maintained by Cornwall County Council, currently using a Microsoft Access 2000 database with links to ArcView GIS and AutoCAD. At the outset of the project a considerable body of known archaeological and historical data existed for the Isles of Scilly, with 385 mainly coastal and intertidal sites being recorded within the study area. Each site in the HER is identified by a unique Primary Record Number (PRN).

## 6.10 Planning instruments

Planning Policy Guidance Note 16 'Planning and Archaeology' requires that the archaeological assessment of proposed developments should be carried out 'prior to determination of the application; and that the archaeological resource should be conserved *in situ* or by record. It also places an emphasis on the need to include policies for

protection, enhancement and preservation of sites of archaeological interest and their settings in development plans.

Sea defences fall under Schedule 2 of the Town and Country Planning (Assessment of Environmental Effects) Regulations 1988 (as amended). This means that planning applications for sea defence works, which may have significant environmental effects because of their nature, size and location must be accompanied by an Environmental Statement. In accordance with this, all of the coast defences formally constructed on the islands since 1992 have had Environmental Statements produced for them as a matter of policy.

## 6.11 Conservation Area

The entire Isles of Scilly were defined as a Conservation Area in 1975, emphasising the integration of the buildings and landscape with the need for an overarching approach to their management (Arbery 2002, 9).

## 6.12 Local plans

CIOS has drafted the 'Isles of Scilly Climate Change Scoping Study' and it is hoped that the work will be taken forward in partnership with the South West Coastal Issues group and C-Clif, a group of South West academic institutions.

CIOS's Shoreline Management Plan (Aspen Burrow Crocker Ltd 1997) sets out a strategy of coastal defence for Scilly, taking into account natural coastal processes and human and other environmental influences and needs.

'The Replacement Isles of Scilly Draft Local Plan (First Deposit March 2004)' has just been produced. Environmental Protection forms Core Policy 1 of the Plan:

***'Ensure the quality of the islands' natural, archaeological and built environment is maintained and enhanced.'***

*'Development must respect and protect the important characteristics of the islands, in particular the Area of Outstanding Natural Beauty, Conservation Area, statutory nature conservation sites and protected specie (especially bats). The character and quality of the environment is defined in a suite of documents that collectively form supplementary guidance for Hugh Town and the Isles.'*

*'Proposals must demonstrate a contribution to the sustainability of the islands' environment and community and:*

- *no significant environmental harm and satisfactory mitigate any loss;*
- *positively relate to the character of the landscape, seascape and built form of the islands through relationship to established settlements, siting, design, layout, density and use of materials;*
- *optimise the re-use of buildings for the economic, social and environmental benefit of the islands and their communities; and*
- *make the best and most efficient use of resources including energy efficiency and re-use of materials arising on site'.*

*24 'The environment of the Isles of Scilly underpins all life on the islands. The presumption is to protect it and keep development to the minimum required for sustaining viable communities.'*

*25 'Our environment embraces the built environment, archaeology, landscape, air and sea and everything that lives in it, ie its biodiversity, including the human community.'*

*26 'Environmental designations of national and international importance cover the whole of the isles. This provides a home for the islands' communities and forms the basis for our economy. This special environment also brings with it an obligation of custodianship on behalf of the wider world community. The unique policy circumstances enable planning policy to allow only development that can make a genuine contribution to a sustainable future.*

*27 Planning decisions must ensure that proposals are in character with the isles. Character should be a positive experience and is an ongoing process of change as we interact with our environment. It is not just about preserving things as they are in certain cases and environmental impact assessment will be required to inform the decision making process and ensure that the quality of the environment is maintained with the best possible social and economic solutions.'*

## 6.13 Local bylaws

Since 1999 a Coastal Protection Order has been in place to prevent large-scale sand and aggregate extraction from the seashore within the Isles of Scilly down to the 10-metre depth contour line. This particularly applies to Bar Point on St Mary's, where the coastline has been significantly affected; and to a lesser extent Crab's Ledge on Tresco where small amounts can still be extracted.

CIOS has three marine bylaws. The Methods of Fishing Bylaw passed in 1998 restricts any fishing vessel heavier than ten tonnes or longer than 11 metres from coming within six miles of the Islands. The second bylaw regulates the size of lobsters that can be caught.

The third marine bylaw is the Methods of Fishing Dredgers bylaw created by the Sea Fisheries Committee of CIOS in September 2002. This bylaw prevents scallopers working with more than two dredges a side within four miles of Scilly with the purpose of helping to prevent damage to the seabed within the cSAC.

## 6.14 Proposed shipping exclusion zone

Despite modern navigational aids new shipwrecks still occur. In 1967 the *Torrey Canyon* was wrecked on the Seven Stones reef, seven miles north-east of St Martin's. Fortunately for Scilly her cargo of over 100,000 tonnes of crude oil missed the islands (due to wind and tide conditions) but polluted the Cornish coast. More recently, in 1997 two shipwrecks occurred within six weeks of each other. Firstly the *Cita* foundered on the north-east coast of St Mary's in the early hours of the morning of 27 March; then a few weeks later a 25,000 tonne Cunard-built passenger liner struck rocks in misty conditions while leaving the islands. In order to afford some measure of protection from environmental disaster CIOS has been campaigning since 1993 for various maritime measures to be put in place. The four principle aims are to get:

- an ocean-going tug on standby all year round to cover the Western Approaches;
- increased radar surveillance in the Islands;
- compulsory transponders to be carried on all merchant shipping carrying hazardous cargo; and
- an exclusion zone around Scilly.

The islands have been awarded 'Area To Be Avoided Status' (an advisory message only to merchant skippers) but there is now almost three times as much sea traffic between Scilly and Land's End as there was ten years ago and there is a very real danger of a maritime environmental disaster occurring in the future (Wavelength, Newsletter for the Isles of Scilly AONB, Issue 1 April May 2003, 4).

# 7 Threats to the historic resource

The threats to the archaeological and historic resource come from both natural and man-made causes.

## 7.1 Transport related development

The Duchy of Cornwall is the Harbour Authority for St Mary's and as 'Freeholder of all the Off-Islands' has responsibility for the off-island quays and roads. Responsibility for public highways, which are only on St Mary's, lies with the CIOS, whilst rural paths are the responsibility of the Isles of Scilly Wildlife Trust where they occur on their land and of the tenant farmers on their land.

In 2002, the Countryside Agency and the Council for the Isles of Scilly commissioned a specialist management consultancy working in the transport sector to develop a Transport Strategy for the Isles of Scilly. The Council substantially accepted the final report (Fisher Associates 2002) on 4th February 2003 and subsequently set up a new Transport Strategy Select Committee to pursue implementation of the various aspects of the strategy.

The Transport Strategy includes proposals to improve passenger and freight services between Scilly to the mainland and also the inter- and intra-island services.

Essentially, the proposals for improving sea transport comprise possible dredging in the approaches to St Mary's to provide a deepwater berth for ro-ro or conventional vessels and improvements to St Mary's quay and harbour at Hugh Town and to the off-island quays.

The Council has since established a 'Route Partnership' of key stakeholders as a vehicle for securing the integrated package outlined in the report and prepared a 'Stage 1: Technical Investigations and Appraisals Business Plan' for St Mary's Quay (Buchanan 2003). Improvements to the off-island quays are a separate project by the Duchy and Tresco Estate.

### 7.1.1 St Mary's harbour

There are two options currently being considered for the development of St Mary's Harbour:

**Option 1 Rat Island:** This option includes various scenarios ranging from minimum work to creation of a new berth. Even the minimum option is likely to entail some reclamation of the area between Rat Island and The Garrison shore and creation of a new access road. This will have an impact upon the historic fabric and visual prominence of the quay and the historic integrity and distinctive visual setting of The Garrison and the historic town. Access to the enlarged quay would have to use existing narrow roads flanked by historic buildings.

**Option 2 Newford Island.** This option would require significant road building as existing roads are narrow and winding and has a potential impact on a number of archaeological and historical sites including a civil war breastwork, **PRN 7510**, and battery, **PRN 168677** (SAM 15482) and a post-medieval building and field system, **PRN 7511**. In terms of impact on the historic environment this option is, on the whole, preferable to option 1 and it would have more direct access to the industrial area of Hugh Town.

A third option, not currently being considered, is the existing lifeboat slip at Porth Mellon. The problem with this option is that it would require a very long quay to reach out to deep water and would effectively divide the harbour in two. Access would also be a significant problem.

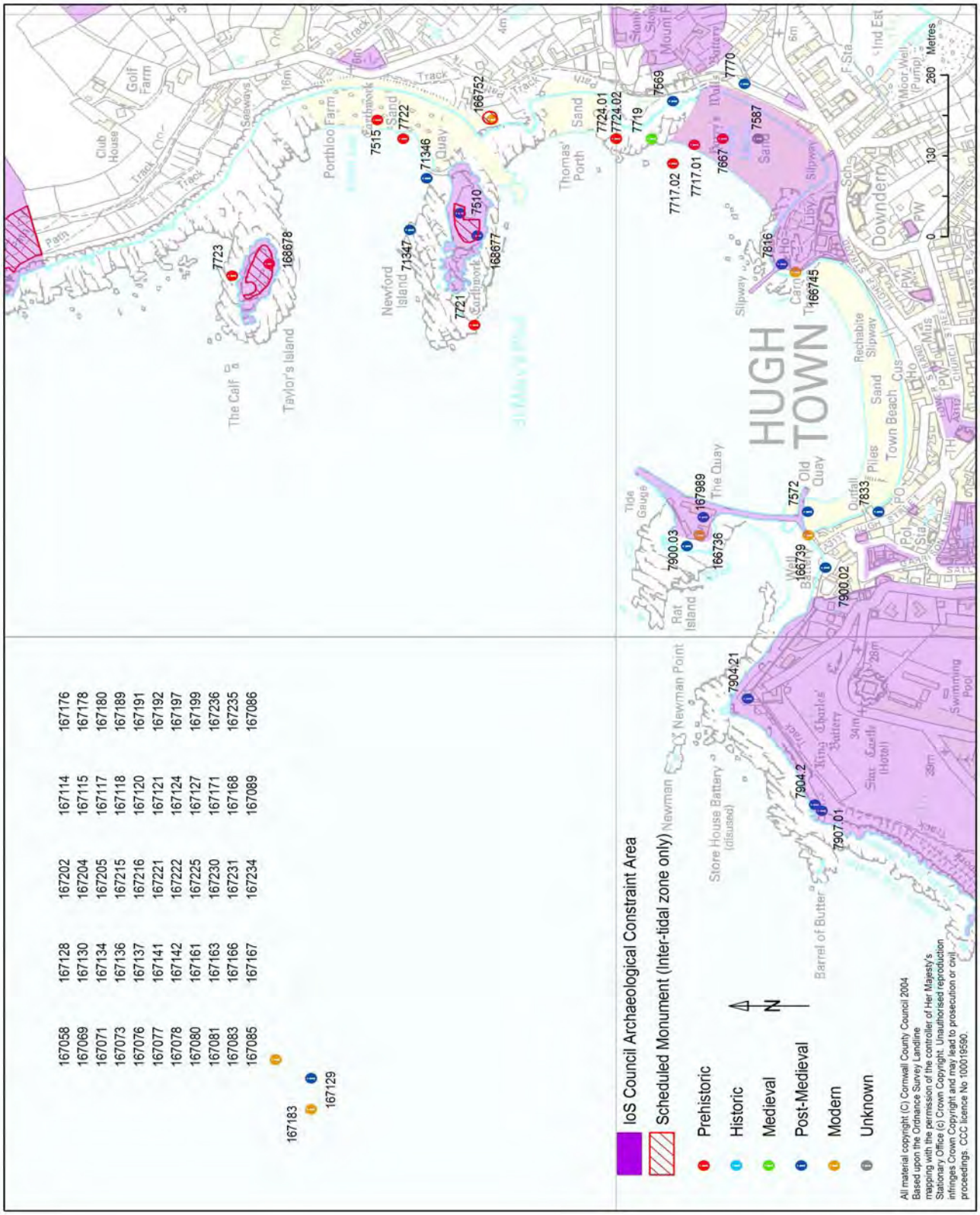



*Fig 10 Archaeological sites and constraint areas around St Mary's harbour as recorded in the HER. The concentration of numbers in the sea refers to wrecks recorded at that location*

### 7.1.2 Recommendations for St Mary's harbour

The 'Stage 1: Technical Investigations and Appraisals Business Plan' includes provision for an Environmental Impact Assessment (EIA) which will:

- undertake a scoping study to identify key environmental issues and agree the scope of the assessment, including sediment sampling, underwater video and photography in the areas of ecology, archaeology, hydrology etc;
- carry out an EIA in accordance with the agreed scoping parameters;
- carry out an Appropriate assessment for the cSAC, if required;
- consult with statutory partners including English Heritage, English Nature, DEFRA Marine Unit, the IOS AONB Team and the IOS Wildlife Trust;
- seek advice from English Nature as cSAC advisers on whether an Appropriate assessment is also required; and
- produce an Environmental Statement together with the ecological components, consultations and steps needed to maximise environmental benefit and minimise environmental cost (Buchanan 2003).

In terms of the historic environment it is important that reference is made to the CSUS Hugh Town report (Kirkham 2003) and that the following archaeological and historical issues are addressed:

- the visual impact on Hugh Town itself, and also the impact of possible increased traffic on the historic fabric of the town;
- the visual impact of the development on the historic setting of The Garrison;
- the impact on the historic fabric of the quay;
- the potential for buried archaeological remains, including palaeoenvironmental deposits on, in, or under the seabed;
- the potential for shipwreck sites in St Mary's Pool and St Mary's Sound and in the Crow Bar area on, in, or under the seabed;
- the potential consequences of new patterns of sand and sediment movement and deposition caused by dredging; and
- appropriate mitigation.

### 7.1.3 The off-island quays

The transport strategy suggests a common approach for improving the off island quays eg greater strength to resist loads from the bigger boats, wider quays for safer cargo handling, improved shore layouts with segregation for passenger waiting and cargo handling.

Proposed harbour and quay improvements for each island, as described in the Transport Strategy document, are summarised below and the archaeological/historical implications discussed, although it is difficult to assess these without seeing detailed plans.

**St Agnes**

There is only one commercially usable quay on St Agnes, located on the north-eastern coast at Porth Conger. Although of robust construction it is inaccessible at low water, exposed to storms from the west and north-west, offers insufficient shelter to boats in rough weather and is unsuited to the larger vessels now in use. The proposals are to

lengthen and widen the quay at the lower end with additional armouring for protection from westerly storms and to improve passenger waiting and cargo storage/handling areas to enable greater segregation between these activities.

**A slip and quay at Porth Conger, associated with the coastguard station are first shown on the 1908 OS, although a slipway is indicated on the 1889 OS. The quay was rebuilt by the Duchy in 1951. Graeme Spence's 1792 chart shows earlier island quays on the south side of Cove Vean and at Periglis.**

**St Martin's**

On St Martin's the proposals affect Higher Town quay at the south of the island at Higher Town and Lower Town quay at the west of the island. Higher Town Quay is the principal landing point for cargo and passengers. Lower Town quay was constructed as part of the St Martin's Hotel in 1989 and remains in private ownership but with a right of use by the public. At high tide there is limited working space at Higher Town quay and at low tide the water is too shallow for boats to approach the quay. In certain combinations of tidal and weather conditions it is preferable to use one or other of the quays. Because of this it is desirable to keep both quays open for regular use by passengers while concentrating cargo operations at Higher Town.

It is proposed to strengthen the structure of Higher Town quay, upgrade it with a smooth berthing face similar to the other off island quays and also to raise the deck level. Because of the number of passengers now using the Lower Town quay it is proposed to realign the access road and provide parking space and facilities for pedestrians further away from private hotel land. A system to improve safety in handling baggage and occasional cargo vessels is also proposed.

*Fig 11 Higher Town quay under construction in c1888 (photo: © Gibson Collection)*

**The new quay at Higher Town Bay, built by St Martin's men, is first shown on the 1889 OS map. It has since been repaired and rebuilt by the Duchy. Higher Town Bay (also known as Par Beach) contains a wide range of archaeological sites including buried peat deposits. The potential impact of the proposed improvements on these sites needs to be carefully assessed. The oldest quay on St Martin's, possibly dating to the early post-medieval period, is situated adjacent to the hotel quay at Lower Town quay and it is important that it is not accidentally further damaged in any works that are carried out.**

**Bryher**

There are two quays on the east coast of Bryher. The 'Old Quay', first shown on Captain Maxwell's *c*1898 chart, can only be used at higher tidal levels because it does not extend very far down the beach. 'Anneka's Quay', a few hundred yards to the north was built in 1990 by the popular television programme 'Challenge Anneka'. It can be used at lower tides but not at high tide and is a lightweight structure not suitable for regular large-scale cargo operations.

Rather than enhancing these quays it is proposed to construct a new quay further north at Dunstan's Rock, giving the opportunity to develop a quay extending to low water on strong foundations for a reasonable cost.

**The visual impact of the proposed new quay will need to be carefully considered. Approximately 300m north of 'Anneka's Quay', below high water in the middle of Kitchen Porth are the substantial remains of an old quay consisting of a slightly curving stone platform, faced with large boulders. This will need to be safeguarded from accidental damage.**

**Tresco**

There are four quays on Tresco, New Grimsby on the west coast, Old Grimsby and Long Point on the east coast and Carn Near at the southern tip of the island. Of these, New Grimsby and Carn Near are the most used and it is proposed to upgrade them to accommodate inter-island vessels. The scheme for New Grimsby proposes to widen the quay to enable better segregation between cargo and passengers and provide better cargo storage arrangements. At Carn Near the quay will be widened to permit safer cargo handling and an on-shore waiting area will be provided.

**The quay at New Grimsby is first shown on Graeme Spence's 1792 Map of Scilly. The modern concrete quay at Carn Near is adjacent to an old disused stone one, probably that indicated on the 1889 Ordnance Survey map. It is important that this should not be damaged during the proposed work.**

**The beach and intertidal area on either side of Carn Near is particularly archaeologically sensitive, with potential for buried palaeoenvironmental deposits. There is a prehistoric field system and two possible round houses to the east in Bathinghouse Porth (Scheduled Monument no 15502) To the west is a probable prehistoric field system and enclosure in Appletree Bay, (Scheduled Monument no 15503), whilst overlooking the quay is Oliver's Battery, built by Admiral Blake in 1651 on the probable site of a Bronze Age entrance grave (not in the study area).**

### 7.1.4 General recommendations for the off-island quays

Sensitive development is crucial; damage to known archaeological remains should be avoided where possible and/or practicable.

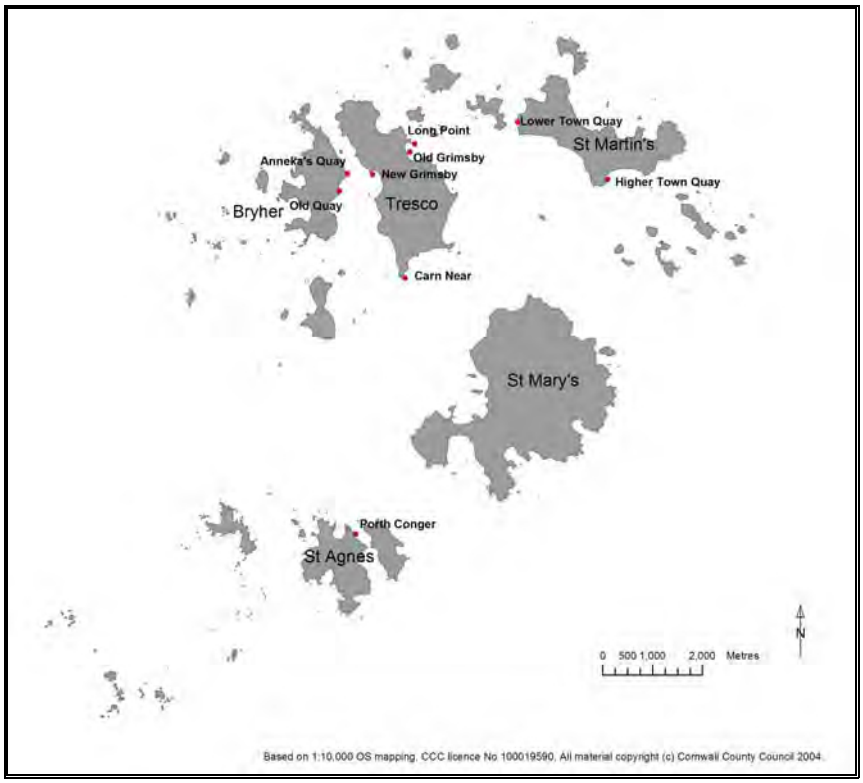



*Fig 12 Location of the off-island quays*

## 7.2 Rising sea level, climate change and coastal erosion

Over a prolonged timescale, rising sea levels and climatic change may have a profound influence on the islands with a possible rise of 0.57m by 2050 (The Environment Agency). It could be exacerbated by tectonic displacement causing a gradual downward tilt of the islands' land surface (Hawkins 1971) and may be increased by the predicted effects of global warming which will increase storm surges resulting in erosion from wave penetration which may cause rapid coastal changes. In addition human activity, principally wall building and aggregate extraction, appears to have destabilised part of the coastline and this is worsened by the rising sea level.

Erosion around the edges of Scilly's existing islands, exacerbated by these factors, continually exposes archaeological structures and layers in the low cliff-face. Although ultimately destructive this process does provide cross-sections through many sites which otherwise would remain undiscovered. Where remains of prehistoric settlements are exposed a great deal of information can be obtained by the small-scale recording and sampling work aimed at identifying structural, artefactual, animal and plant remains. Work of this nature can provide information not only about individual sites but also about the early settlement pattern, economy and environment of Scilly as a whole.

There are many archaeological and historical sites around the present coastline of Scilly that are threatened by coastal erosion. It affects not only sites situated on the cliff-edge or exposed in the cliff-face, but also those exposed within the intertidal zone, a total of some 310 sites ranging in date from the Mesolithic period to the 20th century. Both cliff and intertidal sites are concentrated around those stretches of coast characterised by low earth cliffs or dunes and extensive sand flats, but cliff-edge and cliff-face sites also occur where the foreshore is more rock and cliffs higher and more precipitous.

*Fig 13 A winter storm on Porth Cressa beach (photo: © The Gibson Collection)*

The systematic programme of EH funded coastal monitoring carried out by CAU (now HES) between 1989 and 1993 recorded comparative information about the nature and extent of the erosion of archaeological sites and enable some conclusions to be drawn (Ratcliffe and Parkes 1989, Ratcliffe and Sharpe 1990, Ratcliffe 1993, 1994):

- the erosion patterns of intertidal and cliff sites differ; intertidal sites are not only exposed by wave action but also sometimes reburied (and consequently protected to an extent) by sand, while cliff-edge and cliff-face sites are inevitably destroyed by progressive coastal erosion;
- stone remains in the intertidal zone appear to remain relatively stable despite being periodically exposed as a result of shifting sand (although an as yet unknown factor is the degree of vertical movement which these remains may experience as a result of sands or sediments being scoured from beneath them);
- in contrast, intertidal peat deposits and sediments are much more vulnerable to the effects of wave action and once exposed surfaces quickly begin to break up and will erode away completely unless they become re-covered with sand;
- as a general rule the lower and softer the cliff-face and the archaeological deposits exposed in it, the greater is the degree of erosion, even when the archaeological remains are underlain by several metres of periglacial head (known locally as *ram*), if the base of the cliff is not formed by rock, undercutting and eroded cavities in the ram can result in the collapse of the overlying archaeology; and
- the rate of erosion at any given site is not necessarily constant, this is particularly true of cliff sites which, apart from very slight erosion may remain stable for a

number of years (especially if the cliff-face is protected by a mat of overhanging vegetation as was formerly the case at Halangy Porth), but then become severely eroded as a result of a single winter storm, after which they may either stabilize again or erode at a greater rate than before (Aspen Burrow Crocker Ltd 1997, 5 – 17/18).

### 7.2.1 Current coastal protection and mitigation

**Coastal protection schemes**

Coastal protection schemes specifically designed to protect archaeological remains are restricted to three locations in Scilly:

- Nornour (Eastern Isles), **PRN 7247**; a low concrete and stone bank was constructed at the top of the beach in front of the excavated prehistoric settlement and Roman-British shrine on the south side of the island (built in 1988 by the Royal Marines for the Isles of Scilly Environmental Trust);
- The Garrison (St Mary's); in the 1990s EH's Historic Properties Workforce (HPR) carried out coastal protection work to prevent erosion of two of the post-medieval batteries on The Garrison (part of the Property in Care). At Lower Benham Battery a mortared granite wall was built in front of the outer face of the original battery wall. Below King Charles' Battery, **PRN 7904.02**, concrete-filled sacks were used to infill cavities in the cliff-face resulting from undercutting by the sea. Work was also carried out at Colonel Boscawen's Battery (infilling cavities in the cliff-face);
- Cromwell's Castle (Tresco), **PRN 7354.02**; concrete and stone were used in the 1990s to revet the causeway that provides access from the land to infill cavities undermining walling at the base of the castle (work carried out by HPR) (Aspen Burrow Crocker 1997, 5-18/19).

**Coastal monitoring**

From 1989–1993 the recording and sampling of exposed remains in advance of their destruction was carried out as part of the coastal monitoring project. Cliff-face recording has not only taken place at early settlement sites; following severe winter storms in January 1990 EH funded emergency recording work of Civil War batteries on The Garrison (Parkes 1990).

Since the conclusion of the coastal monitoring project in 1993, the monitoring of sites affected by coastal erosion has been carried out on an *ad hoc* basis by local people and visitors.

### 7.2.2 Coastal defence strategy for Scilly

The CIOS's Shoreline Management Plan (Aspen Burrow Crocker Ltd 1997) sets out a strategy of coastal defence for Scilly, taking into account natural coastal processes and human and other environmental influences and needs. The Islands form a single sediment cell in themselves, since they rise from the deep surrounding seabed and are therefore isolated from the mainland coast and its sediment transport processes (sediment cells are stretches of coastline which are self-constrained insofar as the movement of sand and shingle is concerned regardless of administrative boundaries).

The Plan's recommendations can be summarised:

- St Agnes and Bryher – no needs were identified other than monitoring recently completed works;

- St Martin's – no needs were identified;
- Tresco – works to remedy undermining of the dining room of the Island Hotel and topographical surveys of the south of the island were recommended and undertaken;
- St Mary's – post-construction monitoring at Porth Cressa, Porth Minick and Old Town. Potential further coast defence works at Town Beach, Porth Loo, Porth Hellick and Old Town Bay identified. Survey of Town Beach to determine the long-term trend of erosion. Topographical study of Porth Loo. Monitor Porth Hellick;
- Inter-island area – a bathymetric survey of the Crow Bar area would be useful in establishing the causes of erosion on Tresco.

All the formal coastal defence constructed for the Islands since 1992 have had Environmental statements produced for them as a matter of policy. Archaeological recording has been carried out during the following coastal protection schemes: Old Town Bay (Ratcliffe and Straker 1998), Porthkillier and Porth Coose St Agnes 1996 (Ratcliffe and Johns forthcoming), Great Porth, Bryher (Johns 1995).

It should be noted, however, that armouring of one area of shoreline often causes exacerbated erosion to another area of coast, Porth Cressa being a good example of this.

Another problem is the construction of *ad hoc* defences, undertaken without reference to the planning process and archaeological or historical constraints.

### 7.2.3 Predicted future trends

It is expected that erosion will continue to occur at archaeological sites around Scilly's coastline. It is unlikely to decrease and global warming, an ever-rising sea level and more erratic weather patterns mean that it may increase.

There are currently no plans for more protection work at Nornour although EH intends to continue its protection work at The Garrison and Cromwell's Castle.

The 1997 Shoreline Management Plan considered the following sites to be candidates for protection because of their archaeological importance (either in terms of amenity and interpretation value or their potential to provide more information) and because protection of some sort was considered to be feasible:

- Nornour, **PRN 7247**, multi-phase prehistoric settlement and Romano-British shrine (the effectiveness of the existing defences should be reviewed);
- The Garrison, post–medieval batteries which are part of an internationally important military complex (protection to be increased here);
- Cromwell's Castle, **PRN 7354.01**, distinctive 17th century castle which is one of Scilly's best-visited sites (protection to be increased here)
- Halangy Porth (St Mary's), **PRN 7444**, Iron Age settlement remains exposed in the relatively low (3-4m high) cliff-face and apparently extending some distance inland;
- East Porth (Tean), **PRN 7111**, a late Roman/early medieval midden exposed in the very low (0.5m high) cliff-face, part of an important multi-period (Roman-18th century) domestic and ecclesiastical site;

- Pendrathen (St Mary's), **PRN 7480**, extensive but as yet little understood prehistoric remains in the dune-covered cliff-face;
- Porth Cressa (St Mary's), **PRN 7581**, Bronze Age settlement and Romano-British cist graves in the 3-4m high cliff face (Aspen Burrow Crocker Ltd 1997, 5-21).

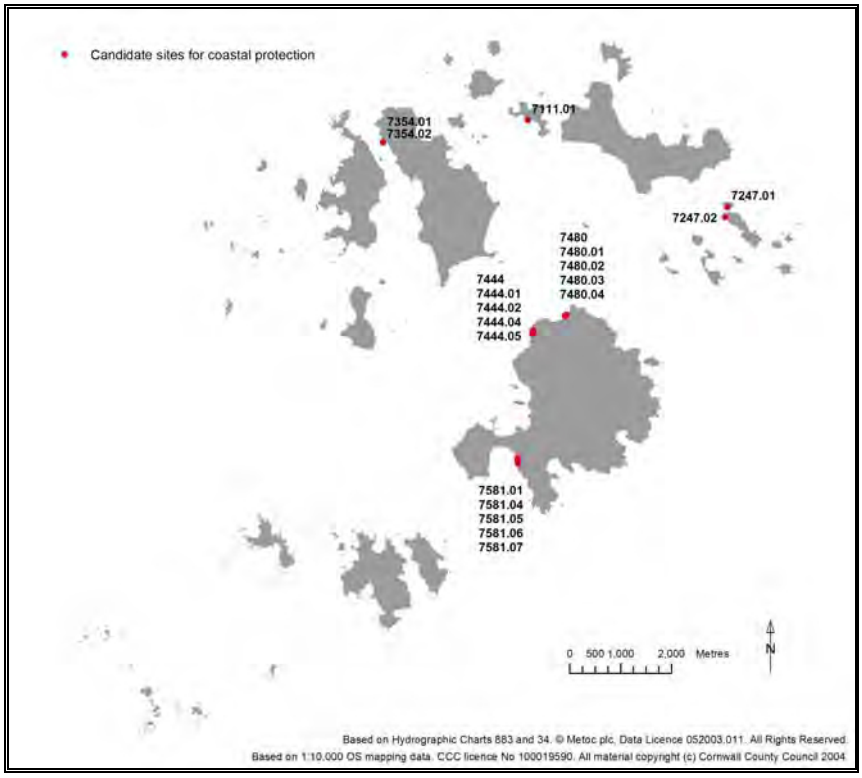



*Fig 14 Location of sites suggested as candidates for coastal protection*

### 7.2.4 Recommendations

1. The Council should continue to require planning permission for coastal protection structures (whether publicly or privately owned), if the necessary criteria are fulfilled. An environmental impact assessment would then need to be submitted with the application.
2. New sea defences can have a potential impact on the character of the historic environment and should be sympathetically designed where possible.
3. Beach boulders should not be used in the construction of a sea defence if their removal will encourage further erosion.
4. The use of stone from existing field walls is not desirable.
5. The percussive nature of wreck debris on the foreshore from the *Cita* is significantly increasing the rate of erosion in some areas, particularly around the Garrison, as it is repeatedly beaten against the cliffs by wave action. Establishing exactly who is legally responsible for removing the debris may be difficult and in the first instance liaison between EH, CIOS, the ROW and HES is recommended on how best to resolve this issue.
6. A co-ordinated programme of coastal monitoring and recording should be reinstated and tied into a positive management strategy (see below Section 13.2.2).

## 7.3 Unsystematic sampling and collection of finds

Some cliff-face sites have become relatively well known to members of the public, including visiting archaeologists. Artefacts, such as sherds of pottery and worked flint, are collected from these and are not always recorded or deposited in the IOS Museum; in some cases sites are dug into to recover of artefacts. The context of such artefacts is lost and with it valuable archaeological data. This problem is becoming more acute with accelerating coastal erosion caused by severe winter storms and in the absence of a co-ordinated official coastal monitoring programme.

### 7.3.1 Recommendations

1. EH have offered the option of a general Code of Practice leaflet to the IOS Museum, and are awaiting a costing, the new leaflet could expand and broaden the scope of and replace existing, undistributed Code of Practice leaflet prepared by the Museum. HES, CCC would be pleased to contribute towards its preparation (see also below Section 7.7.3). The Duchy of Cornwall Yacht Master's Guide information should also be updated to complement the archaeology leaflet.
2. The Museum should be equipped with forms and maps on which details of the artefacts and the location at which they were found can be recorded.
3. As for Section 7.2, recommendation 6.

## 7.4 Sea action

Shifting sand obscures and exposes archaeological remains in the beach and intertidal areas, including peat deposits and old land surfaces containing palaeoenvironmental evidence. Sea action does not appear to be causing serious damage to identified remains on the sheltered flats in the northern part of Scilly. In contrast, intertidal remains on the west side of Bar Point have largely been destroyed since their discovery in the late 1940s. The reason for the rediscovery of HMS *Colossus* was partly due to an unexpected drop in the seabed levels that exposed large areas of ship structure.

An important issue is the displacement by sea action and eventual loss of larger stone artefacts such as quernstones from recorded sites such as Nornour and Bathinghouse Porth on Tresco. In the past the accepted policy has been that, if removed from the site, such items would be kept on the island of their provenance.

The effect of sea action on submerged sites and shipwrecks is more difficult to assess. The energy around Scilly is sufficiently strong to cause planation of the seabed and only divers can substantiate the condition of these features. A problem on the *Colossus* site is kelp rafting, where large boulders can bounce across the seabed due to the large size of the kelp in Scilly possibly causing extensive damage to exposed or organic materials (Black 2003, 33).

### 7.4.1 Recommendations

1. Beach, cliff and intertidal areas should be regularly monitored and the potential of newly exposed remains assessed for further recording and sampling.
2. Removal of displaced larger stone artefacts should be preceded by a Written Scheme of Investigation to be approved by the IOS Field Monument Warden. Appropriate recording should take place prior to removal of the artefact(s). In general the presumption should be that the artefact stays on the island from whence it came, although in some cases it may be removed to the IOS museum for safekeeping.

3. Targeted marine environmental assessments of the seabed to model and predict areas of significant risk and high archaeological potential.
4. A systematic survey of the seabed, or parts of it, to follow up to any geophysical surveys.
5. Monitoring of identified seabed sites by archaeologically aware divers.

## 7.5 Dredging, sand and gravel extraction

Sand and gravel extraction from the intertidal and subtidal areas at Bar Point, St Mary's, and off Tresco had a detrimental effect on the archaeological and historic resource. The 1999 Coast Protection Order addressed this issue and most aggregate is now imported into the Islands.

The cessation of dredging could also have an unforeseen negative effect on submerged remains. Apparently it may have resulted in the build up of the sandbars which keeps the sand offshore and prevents the previous migration of the sand inshore and this could be one of the reasons why sand levels are depleting so quickly on the site of HMS *Colossus* following the removal of the protective crust in the 1990s (Black 2003, 32), although as Hooley has pointed out the good preservation of the newly-exposed wood shows that it must have been covered by sand in earlier periods before intensive gravel extraction, eg when mid-20th century maps were portraying Bar Point as far longer than it is today (pers comm).

Dredging for proposed improvements to St Mary's harbour, as well as directly affecting possible sites on or below the seabed, could alter existing patterns of sand and sediment deposition and so reveal other wrecks currently buried below the seabed in other parts of the archipelago.

## 7.6 Visitor pressure

'*Somewhere among the note-books of Gideon I once found a list of diseases as yet unclassified by medical science, and among these here occurred the word* ***Islomania****, which was described as a rare but by no means unknown affliction of spirit. There are people, Gideon used to say, by way of explanation, who find islands somehow irresistible. The mere knowledge that they are on an island, a little world surrounded by sea, fills them with an indescribable intoxication…'*

Lawrence Durrell, "*Reflections on a Marine Venus*"

It interesting to reflect that Scilly, sometimes a place of exile and hardship is now a desirable holiday destination. Sara Hudston has suggested that the Durrell brothers, Gerald and Lawrence, more or less invented the modern idea of an island as paradise retreat (2000, 5). The improved rail and sea transport of the mid-19th century marked the beginning of Scilly's tourist industry and this now forms the largest part of its economy, with 120,000 visitors received annually at the beginning of the 21st century. As Geoffrey Grigson pointed out 'the islands are apt to catch hold of people and make them return…' (1977, 59).

Tourism-led development is a force for change in Scilly and will have a continuing impact on the landscape, potentially to the detriment of the archaeological resource. Collection of finds and casual excavation of cliff-exposed archaeological sites such as Halangy Porth is an ongoing problem and the foot traffic of day trippers along well worn paths can exacerbate erosion of sites.

A Code of Conduct for visitors, including paragraphs on archaeological sites and wreck diving, is included in 'The Yacht Masters Guide and Visitor Information' leaflet published by The Duchy of Cornwall.

### 7.6.1 Recommendations

- See above Section 7.3.1, recommendation 1.

## 7.7 Irresponsible diving (treasure hunting)

'*Further west still…lie the magical Isles of Scilly. The five inhabited islands and some 100 islets and rocks are a Mecca for divers, frequently offering underwater visibility in excess of 120ft (37m) and some of the most famous wrecks in history, including the treasure laden men-o-'war Association, Eagle, Romney, Firebrand and Colossus. There are some 900 other wrecks around the islands including the Dutch East Indiaman Hollandia and Princess Maria, and literally dozens of cannon sites. Here you can genuinely frolic with grey seals and dolphins, explore underwater caves and deep gullies, sheer rock faces, particularly the aptly named Deep Point, pinnacles reaching up from 165ft (50m) or simply forage through the debris of generations of lighthouse keepers thrown into the sea from the Bishop Rock or Round island lights…"*

http://www.silverquick.net/cornwall/waterside/DivingFarWest.html

The most dived-on wreck sites in Scilly, in no particular order, are: SS *Torrey Canyon*; MV *Fantee* (both on the Seven Stones); *St Vincent*, SS *King Cadwallon*, *Filmore*, MV *Cita*; SS *Lady Charlotte*; SS *Minnehaha*; SS *Magdalene*; SS *Italia*; SS *Hathor*; SS *Plympton*; SS *Thames*; SS *Antonios*; SS *Schiller*; *Falkland*; *Thornliebank*; *Susanna*; SS *Little Western*; SS *Toledo*; SS *Zelda*; SS *Sussex*; SS *Brinkburn*; SS *Isabo*; *Eric Rickmers*; MV *Poleire*; SS *Mando*.

Diver Magazine's website DIVERNET rates three of Scilly's wrecks as amongst the 100 best wreck dives in Britain. These are:

The *Torrey Canyon* (no 89), which is described as a very broken wreck spread over much of the square mile of the Seven Stones reef, the bow section lying to the north-west of Pollard Rock in a deep gulley in the granite, stern well to the south, with much growth;

*Plympton* and *Hathor* (no 59), the *Plympton* is upside down under the *Hatho*r, which lies crosswise. *Hathor*'s boilers are clear at 25m. *Plympton*'s bows are towards shore, the wreckage is very tangled;

The *Association* (no 9), which is on the Gilstone Ledges. Sport divers have recovered 30,000 coins since 1967. Nearly 1,000 coins are found each year, although many are very worn. Most are discovered in crud near iron cannon among boulders in gullies, which can plunge to more than 40m. The stern has yet to be found. Divers are warned about rough waters and a big swell on the Gilstone (http://www.divernet.co/wrecks/best10100.htm).

### 7.7.1 Threats

Irresponsible diving threatens the integrity of underwater sites, causing the loss and damage of sites and artefacts, however the threat by divers is very difficult to quantify and differentiation between origin (local and visitor) even more so. There are broadly five types of diving activity:

1. divers resident on the Isles of Scilly, there are some 22-24 individuals who regularly dive for pleasure or in connection with underwater work. There is only one commercial diving operator and vessel. One diver has been undertaking salvage work since the mid-1970s and since 1988 using a specially designed boat and targeting Victorian steamship engines and wrecks with defined cargoes (Wigglesworth 1994, 121);
2. divers visiting the islands who make use of the current three diving centres. It is estimated that on average between 400 and 500 divers visit Scilly each year from the mainland and overseas, who utilise local dive centre boat facilities to reach dive sites. Visiting divers using the current three diving centres, St. Martin's Diving

Centre, the Isles of Scilly Underwater Centre and Underwater Safaris, are all taken to sea on a day-to-day basis to sites chosen by the boat operators. Today there is generally a more enlightened attitude to diving than there was in the 1960s and 1970s, although there is still some souvenir collecting. For example, bronze slave bangles (tokens or manilas) from the *Douro*, a snow wrecked off Crebawethan in 1843, are popular mementoes;

3. divers visiting the islands on 'live-aboard' diving vessels. An additional 350 divers, possibly less, visited Scilly in 2003 on board three 'live-aboard' organised, hire vessels. Divers visiting Scilly on 'live-aboard' boats are in much the same position as those who make use of the dive centres, in that the boat's skipper generally chooses their daily dive sites;
4. divers visiting the islands bringing with them their own craft and diving support. Difficult to determine for various reasons, but not less than 35 divers each year visit, who come to Scilly completely self-sufficient and self-contained. There are also a number of companies operating from the south coast of Cornwall which carry out self-contained diving expeditions to the deeper waters around Scilly. Use of nitrox and mixed gas breathing apparatus (Trimix), giving them a depth capability of up to 200m, placing deep water wrecks beyond 50m (165ft) within their reach; and
5. commercial diving companies visiting the island. The only commercial diving activities undertaken around the islands relate to civil engineering or construction work, ie work on quays, Trinity House erection of beacons and buoy maintenance. No commercial ship salvage has taken place for many years.

### 7.7.2 Existing local safeguards

The shipwreck resource of Scilly and its coastal zone is protected to a degree in a number of ways:

1. the three dive centre operators who handle the majority of visiting divers are keen to preserve what is left on the seabed for their customers to explore touch and photograph - but not remove, otherwise there will be nothing left for future generations to see. It is in their own commercial interest to stop, or at least restrict, the further destruction of wreck sites and the removal of artefacts;
2. none of the dive centre operators or private individuals with air compressor used for re-charging diving cylinders on Scilly has a Nitrox or Heli-Ox (mixed gas) charging capability, and none are foreseen due to insurance liabilities and HSE regulations; and
3. the important and best known 'treasure' wrecks have all been found and the attraction that these shipwrecks exercised in the period 1967 to 1980 has diminished. Also the unpredictable weather conditions around Scilly, strong tides, frequent heavy sea swell and fog, the difficulties of shipping equipment to the islands, the overall high cost of transport and freight involved and the competition of cheap foreign holiday packages has made the islands' diving potential far less attractive.

### 7.7.3 Recommendations

- Involve and encourage local stewardship and decision making in regards to the marine historic environment. There is a perceived need for a local contact for maritime matters, this could possibly be a part-time local 'Marine Co-ordinator' under contract to report marine matters through the existing FMW post;

- open access to sites and responsible diving should be encouraged. Education and promotion of codes of conduct are the keys to this;
- EH have offered the option of a general Code of Practice leaflet to the IOS Museum, and are awaiting a costing, the new leaflet could expand and broaden the scope of and perhaps replace the existing, undistributed, Code of Practice leaflet prepared by the Museum. It should include a voluntary code of practice for divers stressing the importance of reporting discoveries to the appropriate authorities rather than encouraging recovery without proper resources for conservation and curation. Any leaflet/training should make it clear what sorts of feature; wood, 'soils', 'peats', different types of sediment etc could be present underwater and how to record them in a useful way;
- there is considerable potential for an holistic interpretation of the marine world around Scilly, in partnership with English Nature, the IOS AONB unit and the IOS Wildlife Trust;
- encourage diving clubs to take more responsibility – adopt a wreck or monitor illicit activities;
- continue to encourage divers to report wreck from previously unknown sites, to sustain the flow of information to the archaeological record;
- creation of underwater 'diver trails'. The Low Lee nature trail maintained by Penzance BSAC is a local example.

## 7.8 Marine wood borers, bacterial and fungal activity

Submerged wood is very vulnerable to attacks by crustaceans and molluscs, in particular the gribble 'worm', *Limnoria lignorum*, which is in fact a wood-boring isopod crustacean, bacterial and fugal activity can also be a problem. The adult Limnoria resembles an ordinary wood louse, 6mm in length with seven pairs of legs and four pairs of mouthpads. The *Limnoria* feeds gregariously on marine timbers. All wood that has not been penetrated by preservatives is consumed, leaving a hollow shell of wood. This isopod attacks in great numbers and is usually concentrated at low tide level.

*Fig 15 The gregarious gribble worm (photo: Clare)*

English Heritage is funding a site stabilisation trial on HMS *Colossus* to assess techniques which will enable preservation of the site; preliminary results of the trial indicate that if submerged timber is covered with only 20mm of sand conditions are too anaerobic for Limnoria to ingest wood. This suggests that although there would be little chance of survival for exposed wooden timbers on the seabed there is a very good chance for buried timbers surviving. The problem is would such timbers be observed if they were to become exposed? (Kevin Camidge pers comm).

Ongoing *Limnoria* and wood borer research is being carried out at:

- The Institute of Marine Sciences, University of Portsmouth by Dr Simon Cragg and colleagues;
- Buckingham Chilterns University College by Dr Andrew Pitman;
- CSIRO, Australia by Dr Laurie Cookson and colleagues.

(http://podcentral.plus.com/clare_refs.htm).

## 7.9 Commercial fishing activity (scalloping)

a)


b)



c)

*Fig 16 Underwater images of a) undisturbed seabed, b) a turned boulder and c) a furrow caused by scallop dredging east of the Bristows, St Martin's (Courtesy of Dave Parry – Plymouth Marine Laboratory)*

With only a handful of small fishing boats based on Scilly, who engage solely in netting and pot fishing, the major threat to submerged historic resource in deeper water comes from the fleets of outside scallopers coming to Scilly each summer. This form of bottom fishing which drags steel nets (dredges) across the seabed is known to be extremely destructive to both marine life and historic ship remains. The dredges used are indiscriminate in what they disturb and cause enormous environmental damage to the seabed.

Reports are occasionally heard of trawlers 'snagging' and bringing up pottery, ship's timbers, other ship remains and even a 17th century bronze cannon (off Devon), although fishermen are often reluctant to disclose such finds. Even if declared there is always the problem of location, since trawling may commence several miles back from where a net is eventually lifted to the surface to reveal its contents, hence making it impossible to determine when or where artefact material may have been accidentally scooped up.

The 2002 bylaw prevents scallopers from working with more than two dredges a side within four miles of Scilly, but a considerable amount of damage has already been done, particularly around the Eastern Isles, regarded as a breeding ground for shellfish. Underwater film by Plymouth Marine Laboratory shows profound damage there, with huge boulders overturned and great tracks where the dredges have gone through (Western Morning News, 12/06/2003, p33).

## 7.10 Submarine cable laying

The islands are connected by underwater telephone and electricity cables. Submarine cable laying and trenching can potentially cause damage to the historic resource. The electricity cables linking the four inhabited off-islands to the electricity supply on St Mary's were laid in 1985. The underwater sections of cable were bedded with bags of cement and between the high and low water mark on each island were buried by a mechanical digger in trenches approximately 1m deep (Ratcliffe 1991, 13). The cables will need to be renewed in 15-20 years time.

### 7.10.1 Recommendations

Prior archaeological assessment of proposed submarine cable routes.

## 7.11 Fly tipping

The dumping of domestic, building or garden rubbish or scrap metal over a cliff edge can obscure archaeological remains exposed in the cliff face. For instance, Wine Cove well, **PRN 7248**, in the cliff face on St Martin's has been filled with rubbish (although the use of the site as St Martin's tip ceased in the late 1990s).

### 7.11.1 Recommendations

1. Rubbish should not normally be dumped in front of a cliff face where archaeological remains have been recorded;
2. Dumping of rubbish could be noted during coastal monitoring and steps taken to remove the rubbish.

## 7.12 Minor threats

### 7.12.1 Bait digging

The current amount of bait digging is small scale. However there is the potential for causing damage to buried archaeological remains in the intertidal flats if it should become more common and especially if it were operated on a commercial scale (cf Aspen Burrow Crocker Ltd 1997).

### 7.12.2 Recommendations

Monitor the amount and location of bait digging.

### 7.12.3 Metal detectors

A number of individuals in Scilly have metal detectors, which appear to be used largely on beaches, especially on St Mary's. The Duchy will not allow use of metal detectors on their land without a permit, which is rarely given. Metal detecting on Scheduled Monuments is illegal.

### 7.12.4 Recommendations

Metal detectors should not be used unscientifically on archaeological sites and monuments on land or undersea.

### 7.12.5 Anchors, moorings and outhauls

Anchors, boat moorings and outhauls may displace or damage archaeological remains, but do not at present, appear to constitute a threat to known beach or intertidal remains.

### 7.12.6 Recommendations

1. Archaeological sites adjacent to moorings or outhauls should be regularly monitored to ensure no damage is being caused to them;
2. Where archaeological remains are being damaged by the use of anchors, moorings outhauls, the latter should normally be moved.

# 8 Assessment by period

*'Perhaps one could fairly sum the Scillonians up by saying that they are a people without a history, living on islands whose history was made from the outside.'*

Geoffrey Grigson, "The *Scilly Isles*"

## 8.1 Prehistory

### 8.1.1 The Palaeolithic (to *c*7000 BC)

There is increasing evidence of sporadic human activity in Cornwall during the Palaeolithic period represented by occasional flint or chert handaxes, blades, other tools and cores. There are no recorded Palaeolithic remains in Scilly although the dramatic changes to the coastline caused by sea level rise during the Postglacial warming may have washed away or inundated traces of activity (Berridge and Roberts 1986, 8).

**There is possibly some potential for Palaeolithic remains to survive in the project area, particularly if buried by sand below the seabed.**

### 8.1.2 The Mesolithic (*c*7000 – 4000 BC)

Analysis of peat samples from the two major wetlands of the Higher and Lower Moors on St Mary's has provided a general vegetational history for Scilly. The pollen sequence from the Higher Moors peat deposit indicates that during the 6th millennium BC the islands were predominantly covered by oak woodland, with hazel understorey and patches of elm and ash (Scaife 1984). Ratcliffe and Straker (1996, 33) reconsidered the pollen evidence from Higher and Lower Moors in relation to that from Par Beach and Porth Mellon and birch, forming scrub on exposed coastal localities or as an understorey to the oak woodland, could be a major part of the post glacial climax woodland rather than being due to initial human disturbance relating to hunter-gathering activity as previously suggested (Ratcliffe 1989, 33).

The traditional view is that Scilly was not occupied until the Neolithic, but the possibility of an earlier presence on the Islands has been considered (Berridge and Roberts 1986, 30) and mention must be made of Paul Ashbee's intriguing hypothesis that Scillonian entrance graves are Mesolithic megalithic monuments and that some field walls may date from this period (Ashbee 1982).

Mesolithic occupation is not easy to prove because much artefactual evidence is likely to have been on the contemporary coastline, much of which is now submerged (although it is important to remember that the whole of Scilly, even in the Mesolithic, could be considered as coastal compared to other area of Britain as it would still have been small with the coast easily accessible). In addition, because no comprehensive specialist study has been undertaken of the numerous lithic assemblages from Scilly, the presence of Mesolithic pieces amongst these has not been noted. Current artefactual evidence is limited to twenty or so pieces, most of which were collected from the cliff face at Old Quay on St Martin's, the only identified Mesolithic flintworking site in Scilly, **PRN 7185** (Ratcliffe 1989, 33 and 1994, 13). The earliest sampled intertidal peat deposit, on Par Beach, St Martin's, is dated to the late Mesolithic, **PRN 7661.01** (Ratcliffe and Straker 1996).

The evidence is sparse but Scilly must have been visited occasionally, perhaps seasonally, by groups of Mesolithic hunter-gatherers. Sea level data about the islands is sketchy before the beginning of the postglacial but the islands may have been joined to the Cornish mainland at the end of the last glaciation, and during the warmer postglacial period they could have been reached by boat. There is good evidence for watercraft and sea travel in the Mesolithic elsewhere, boats would have been necessary for Mesolithic groups to reach

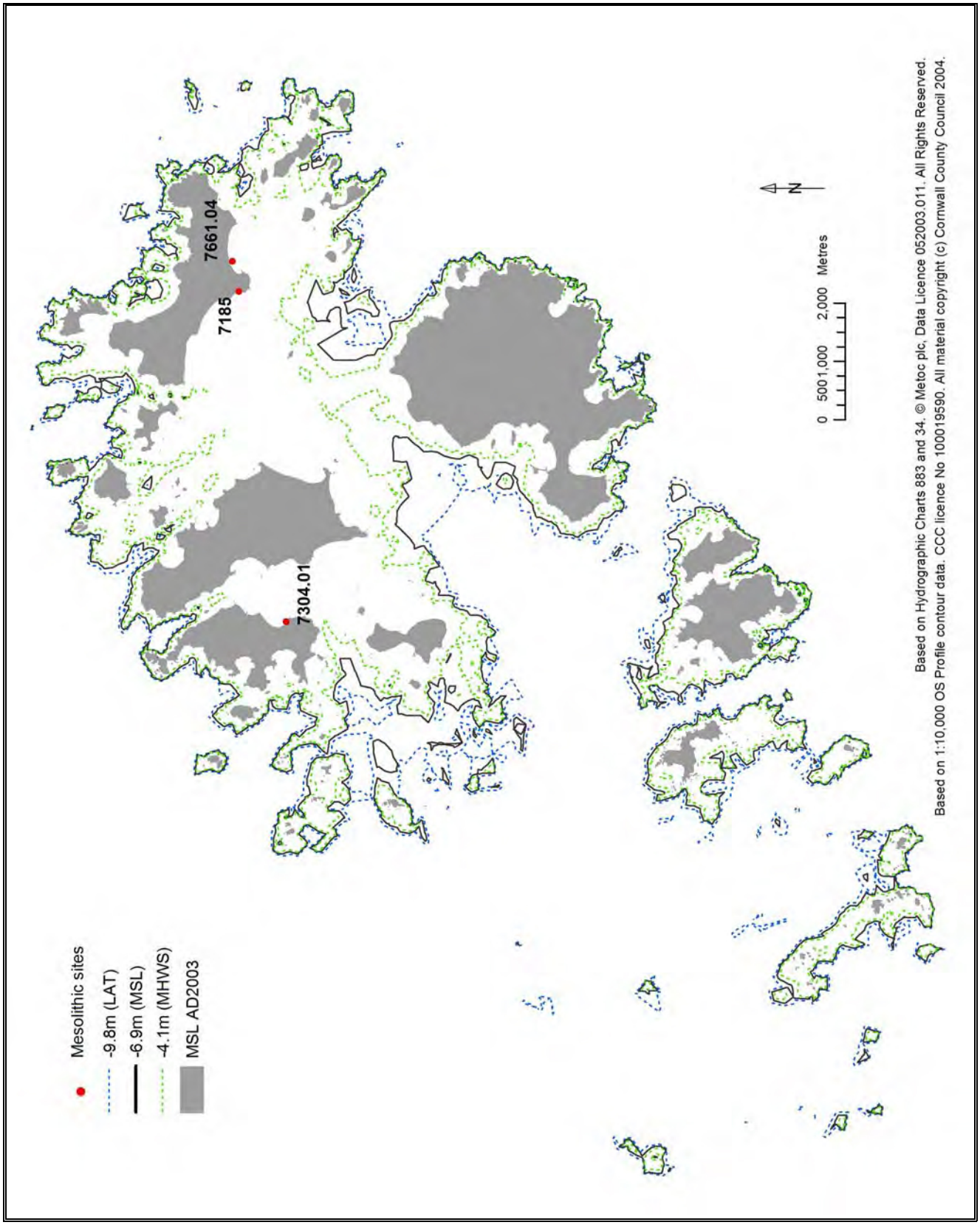



*Fig 17 Distribution map of Mesolithic sites and inferred submergence model, 7,000 BC*

Ireland, the physical remains of Mesolithic boats and paddles are scattered throughout north-western Europe, including the paddle from Star Carr in Yorkshire (Clark 1954; Berridge and Roberts 1986, 30; Ratcliffe 1989, 33).

**The potential for the survival of Mesolithic remains in the intertidal and subtidal zones of Scilly is highlighted by the recent discovery of Mesolithic artefacts at a depth of 8m and 500m off the Tyneside coast (The Guardian, 12 September 2003; historical-studies.ncl.ac.uk/SALT).**

### 8.1.3 The Neolithic (*c*4000 – 2500 BC)

The pollen sequence in Scilly shows evidence of partial forest clearance and cultivation of cereal crops around 3000BC, followed by a period of woodland regeneration and apparent agricultural decline.

Until 1989 the only identified Neolithic artefacts were a handful of stone axes and flint arrowheads and a few sherds of middle-Neolithic, Carn Brea type pottery from Bant's Carn entrance grave and from a series of pits excavated in East Porth, Samson in 1970, **PRN 7071.01** (Neal ms). The latter is within the study area, but may not have been a coastal site in the Neolithic period.

Work carried out during the 1989-93 coastal monitoring project identified a Neolithic settlement site, exposed in the cliff-face at Porthkillier, St Agnes, **PRN 7029**, and Neolithic settlement in the vicinity of Bonfire Carn, Bryher, **PRN 7307.01**, which has also produced the only Beaker sherd to be found in Scilly, and at Halangy Porth, **PRN 7444**. In the light of this a scattering of Neolithic pottery sherds from St Agnes, Bryher, St Martin's and Tresco has been identified amongst the assemblage recovered during the 1985 Electrification Project (Quinnell nd, Ratcliffe 1991). The calf tooth from the lower peat on Par Beach, St Martin's may represent the earliest evidence for Scillonian Neolithic husbandry (Ratcliffe and Straker 1996, 34).

On balance, the present evidence suggests that Scilly was not permanently settled until the Bronze Age and that the few Neolithic artefacts so far represent seasonal pre-settlement visits from West Penwith (Thomas 1985, 101; Ratcliffe and Johns 2003, 5).

**There is potential for further Neolithic sites to be identified in Scilly, in the intertidal and subtidal zones. The majority of surviving prehistoric houses and entrance graves are unexcavated some of these may have their origins in this period.**

### 8.1.4 The Bronze Age (c2,500 – 700 BC)

In contrast to Neolithic, Bronze Age remains in Scilly are numerous and it seems that at the beginning of this period the Islands were permanently settled from West Cornwall and farming began on a large scale. The pollen sequence from Higher Moors indicates that woodland clearance occurred during this period (Scaife 1984) whilst occupation debris from settlements indicates that the inhabitants practised a mixed subsistence economy, as well as growing crops and raising stock they fished, gathered shellfish and hunted wild animals and birds (Ratcliffe 1989, 35).

The Neolithic/Bronze Age transition would appear to have been gradual and some classes of monument such as entrance graves appear to have their origins in the earlier period. Most sites of this period have been identified by their pottery, found in both domestic and funerary contexts, which has a number of distinctive traits and is related to mainland Bronze Age pottery (*ibid*).

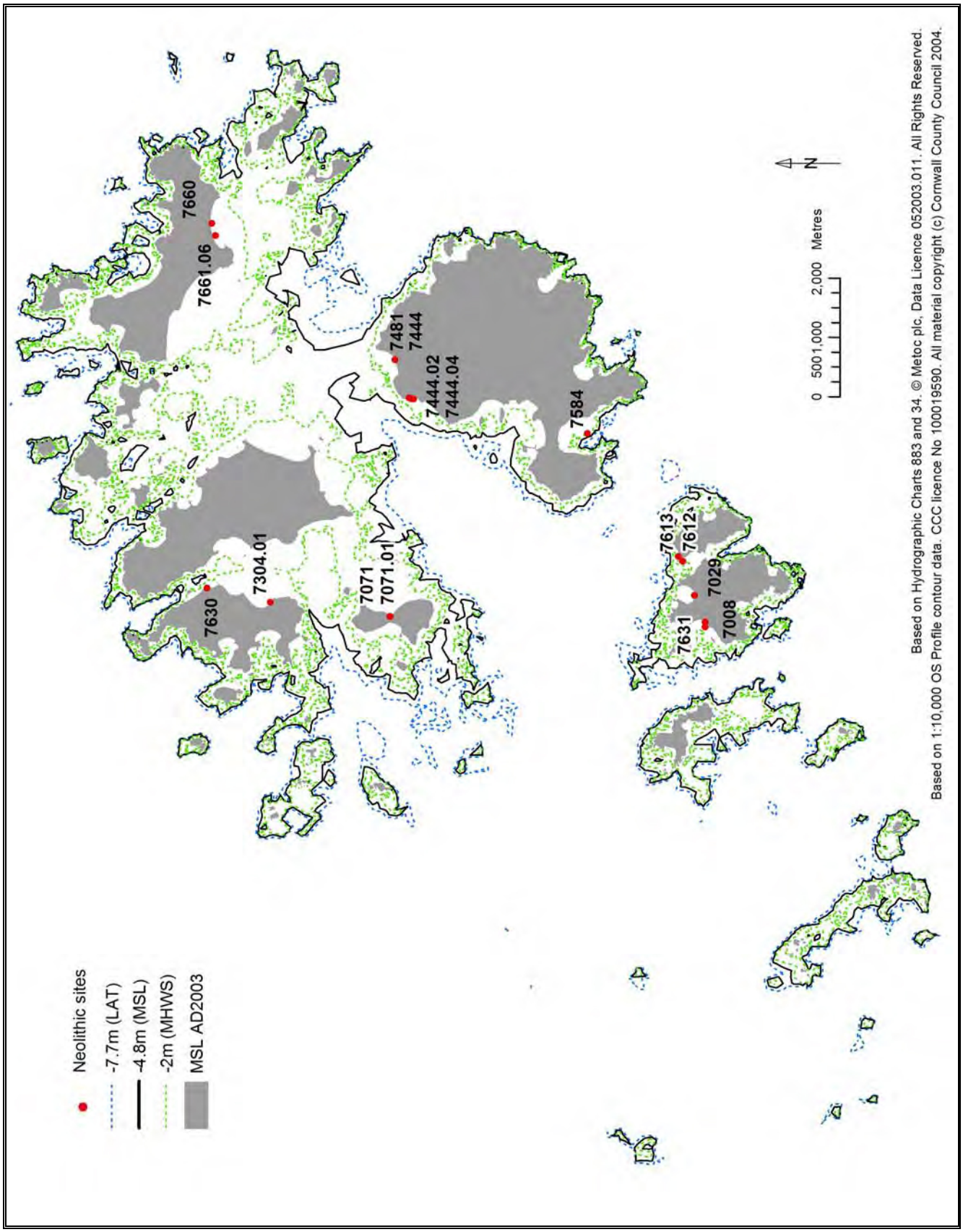



*Fig 18 Distribution map of Neolithic sites and inferred submergence model, 4,000 BC*

There are remains of some 150 hut circles in Scilly and whilst many are probably Bronze Age only fifteen can be securely dated to this period. Settlements favoured low-lying land and many will have been submerged or destroyed by the sea. Settlements and hut circles within the study area dated to this period include the earliest phase of Nornour, **PRN 7247**, Little Bay, St Martin's, **PRN 7208**, Halangy Porth, St Mary's, **PRN 7445** and on the east Side of Porth Cressa, **PRN 7581**. These early settlements invariably lie within or adjacent to the remains of contemporary field systems; small rectilinear fields defined by boulder walls, stony banks (the result of field clearance) and lynchets. As with unexcavated houses, it is difficult to precisely date these systems, but those lying on exposed moorlands must have been laid out before the present unworkable peaty soils developed. Submerged field walls may similarly be of early origin, but probably continued in use throughout prehistory and, in some cases, into the Roman and early medieval periods. Field systems attributable to this period include Nornour, **PRN 7042.02**, and Great Bay, St Martin's, **PRN 7201**, excavated by O'Neill in 1952.

The number of Bronze Age funerary monuments in Scilly is exceptional. Over eighty entrance graves (kerbed cairns with roughly rectangular chambers) have been recorded here compared with only nine in West Penwith. There are also four hundred simple cairns, some kerbed and a few known to house cist graves. A number of apparently uncovered cist-graves have also been identified, as well as two alleged Later Bronze Age 'urnfields' (Ratcliffe 1989, 34).

*Fig 19 Bronze Age cairn at the edge of Hell Bay, Bryher (photo: Mary Ann Owoc)*

There is only one recorded entrance grave in the study area on the Old Man of Tean, a low-lying island), **PRN 7103**, and at least 16 cairns including two submerged examples, one south of Tean **PRN 7107**, the other mentioned, but unlocated (Ratcliffe 1989, 40). Another possible cairn with a cist is exposed in the cliff face at Pendrathen, St Mary's, **PRN 7485.01**. Others, if not within the study area, lie precariously close to the cliff edge on Shipman Head Down and will be lost to erosion in the near future.

Other Bronze Age ceremonial monuments recorded in Scilly are a number of standing stones (menhirs) and two possible holed stones. The study area contains a single example of a standing stone on Priest Rock, **PRN 7008**, and a stone row on Par Beach St Martin's, **PRN 7660**. Two more stone alignments have identified on Castle Down, Tresco by Dave Hooley during the MPP (not in the study area). Stone circles, monuments often found in mainland Cornwall, appear to be absent from Scilly although one may have been be documented on St Mary's in the 18th century (Troutbeck 1796, 38).

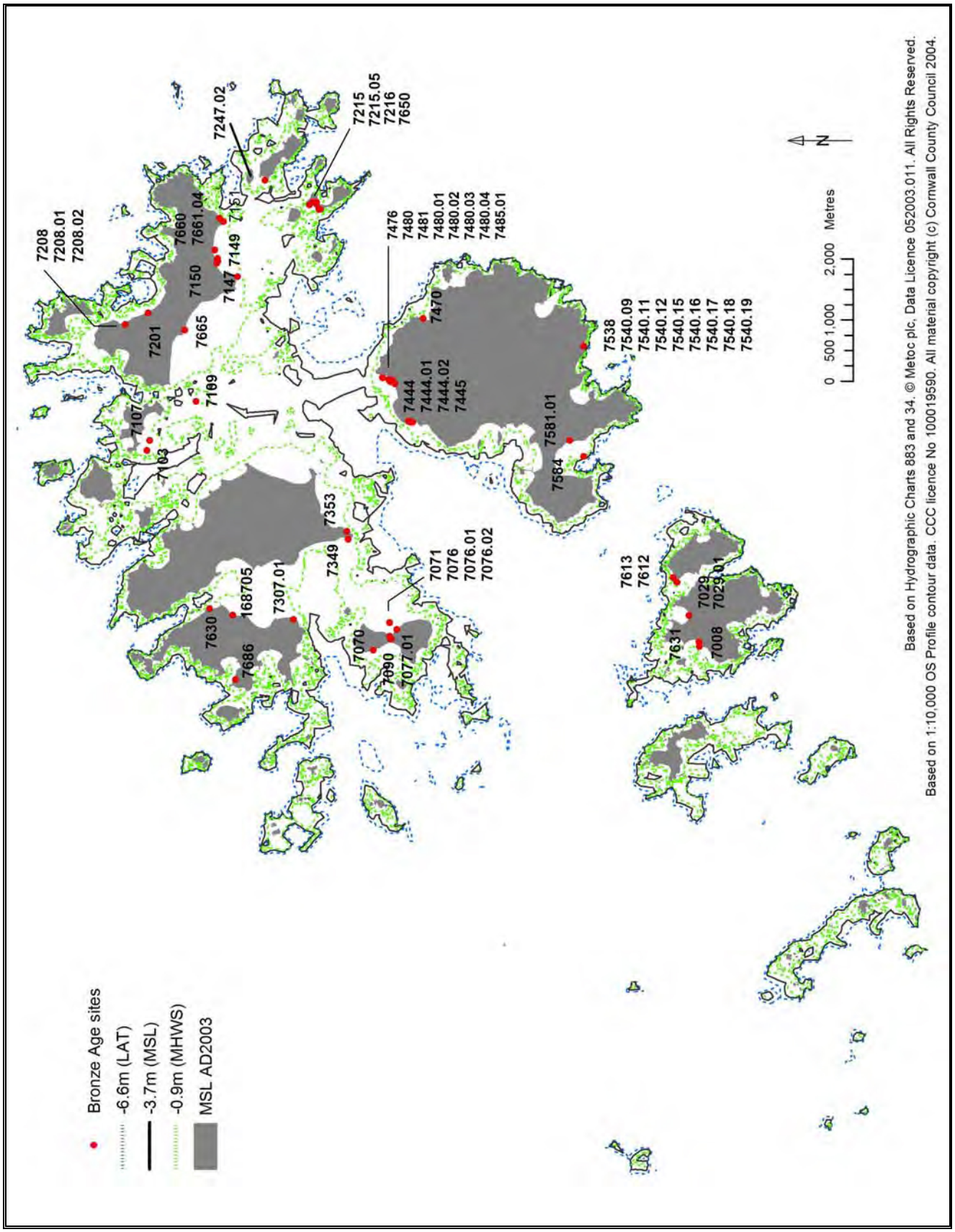



*Fig 20 Distribution map of Bronze Age sites and inferred submergence model, 2,500 B*

Three Bronze Age lithic scatters have been identified in the project area, in Appletree Bay, Tresco and West Porth, Samson, **PRNs 7734** and **7738**, and 10 findspots; the latter are usually individual flint artefacts, although many are more broadly described as prehistoric.

An Irish gold bracelet dating to 1000 BC found on a beach east of Yellow Rock on St Martin's probably originated from a hoard, **PRN 7665**. Gold would always have been a rare metal used only for objects of prestige and display, but in Cornwall bronze was also not used for everyday tools until about 1400 BC.

**There are no known Bronze Age shipwreck sites, but there is potential for boats or, more likely, cargoes of this period to survive below the seabed if protected by sand.**

#### 8.1.5 The Iron Age (*c*700 BC – AD 43) and Romano-British period (AD 43 – AD 410)

The pollen sequence from Higher Moors reveals that woodland cover had virtually disappeared by the Early to Middle Iron Age (Scaife 1984), and pollen analysis from

Nornour, Halangy Down and Bar Point reflect open conditions and more intensive agriculture (Ratcliffe 1989, 35).

Few iron objects survive in the acid soils of Cornwall and Scilly, and pottery and the introduction of hillforts have traditionally been used to identify the beginnings of the local Iron Age. More recent evidence has made the division between the Bronze and Iron Ages less clear, since Cornish pottery formerly regarded as Early Iron Age could also belong to the Later Bronze Age and hillforts elsewhere in Britain are now known to have been constructed in that period (Quinnell 1986, 112-113).

There are no definite examples of hillforts in Scilly, although the Civil War battery on Mount Todden, St Mary's may have re-used the site of such a monument. There are however the remains of three cliff castles: Giant's Castle on St Mary's, possibly Burnt Hill on St Martin's and Shipman Head on Bryher, which falls within the study area, **PRN 7276.02**. Such promontory fortifications are currently being interpreted as socio-economic or ritual centres rather than defensive strongholds.

The overall picture is one of continuity of earlier traditions throughout most of the 1st millennium BC but with some changes occurring after 500 BC. People still lived in oval or circular houses (and in some cases the same houses themselves), farmed small rectilinear fields, used mainly stone tools and similar types of pottery. This was better made but remained essentially unchanged throughout the early Iron Age, continuing in use for a while alongside the new South West Decorated or Glastonbury wares that appeared from the 5th century BC. They reflect greater contact with the mainland and were often made with gabbroic clay from the Lizard peninsula in Cornwall.

Open settlements became more common. Excavated hut settlements at Halangy Down, St Mary's and Nornour, indicate continuity between the Iron Age and Romano-British period in Scilly (Butcher 1978; Ashbee 1996). Though few other sites are securely dated it is likely that many of the recorded hut and field systems can be assigned to these periods.

During the Late Iron Age and Romano-British periods the local burial rite involved contracted inhumation in north-south orientated cists in the south-western tradition, there are eight recorded cist graves in the study area, at Green Bay, Bryher, **PRN 7388**, Par Beach St Martin's, **PRN 7148**, in the cliff face between Yellow Rock and Knackyboy Carn on St Martin's, **PRN 7165**, two in the cliff face at Toll's Porth, St Mary's, **PRN 7447** and another in the cliff face at Porth Cressa, **PRN 7581.07**.

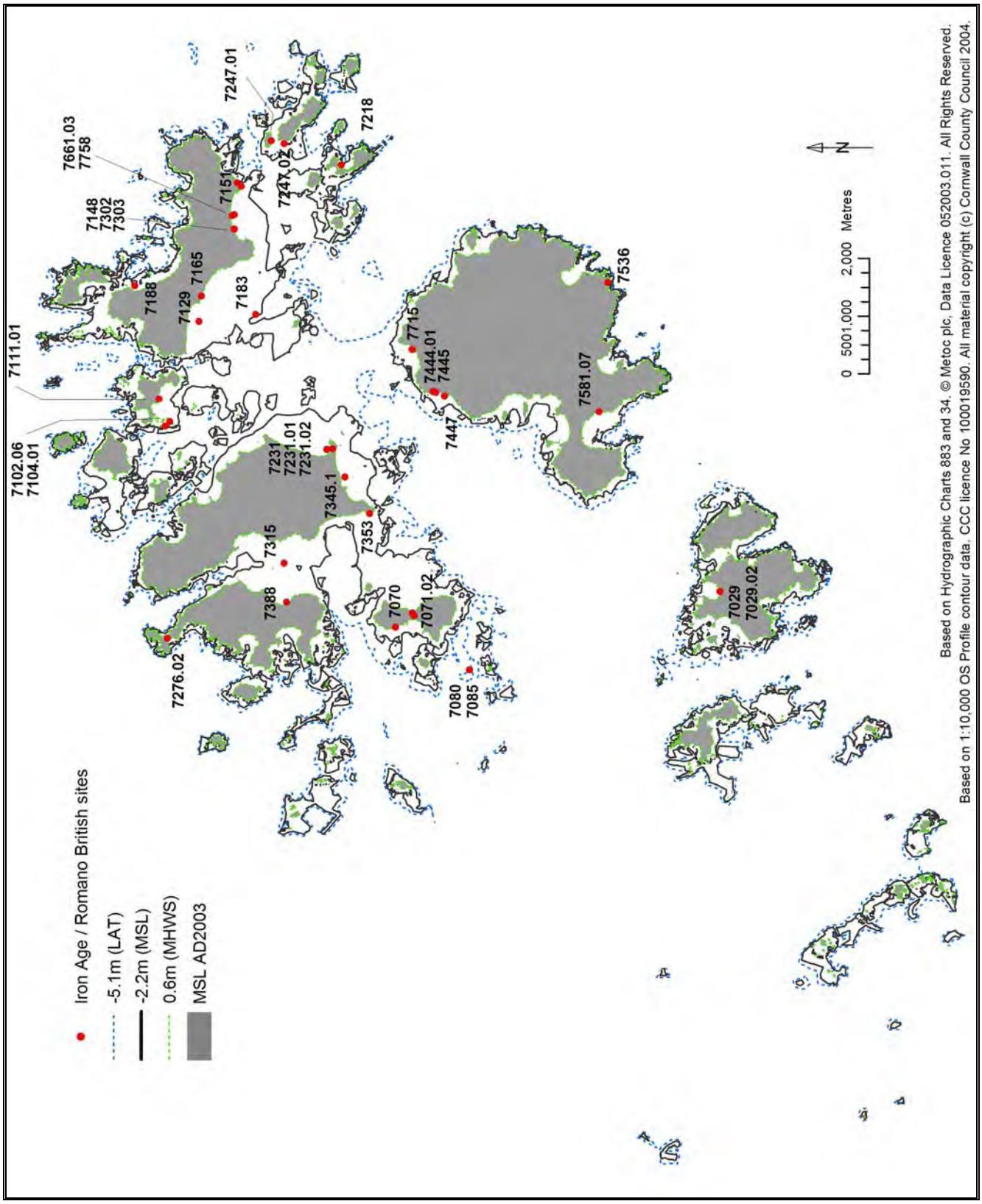



*Fig 21 Distribution map of Iron Age and Romano-British sites and inferred submergence model, 700BC*

Place-name evidence hints at the islands being a cult centre. The remarkable collection of Roman finds at Nornour, **PRN 7247.01**, strongly suggests that in its last occupation phase the site was a shrine to a native marine deity.

**There are no recorded shipwreck sites from this period; however the votive offerings maritime shrine at Nornour attests to the frequency of maritime traffic during at this time and there is potential for such a site to survive if buried below sand on the seabed.**

## 8.2 Medieval

### 8.2.1 Early medieval (AD 410-1066)

In Scilly, as in Cornwall, early medieval society and settlement had its foundations in the Romano-British period, but significant changes did occur, not least in the adoption of Christianity, which may have been introduced from Cornwall, France or the Mediterranean. The earliest evidence for which is a 6th century inscribed tombstone now incorporated into the later priory church on Tresco which probably once marked one of several cist graves found nearby in the 19th century during the construction of Augustus Smith's garden. Simple rectangular chapels of the 8th to 10th centuries are also found in Scilly eg on St Helen's, Tean and Chapel Brow, St Martin's. Traditionally thought of as insular hermitages they were reinterpreted in the late 1980s as the earliest parish churches for Scilly, sited near to contemporary settlements (Ratcliffe 1989). At East Porth on Samson, excavation revealed a series of timber and stone rectangular buildings containing domestic occupation material thought to be an ecclesiastical rather than secular settlement (Neal ms; Ratcliffe 1989, 36). The chapels at St Helen's and Tean and the Samson site were associated with early Christian cemeteries. Though these cemeteries are superficially similar to Romano-British ones, their graves are longer, narrower and coffin-shaped, aligned roughly east-west and contain extended skeletons facing east. They are occasionally covered by simple kerbed cairns or marked by small stones, like the sub-circular slab with a simple incised cross found in one cemetery.

The early medieval settlement pattern is reflected by the distribution of locally-made grass-marked pottery, and sherds of imported wheel made Gaulish and Mediterranean wares. A dozen or so sites have been identified, four of which involve continued occupation of huts or sites inhabited during the Romano-British period. Other finds have come from middens presumably associated with domestic structures.

Scilly appears to have been unaffected by sporadic Anglo-Saxon conquests in East Cornwall. The story that Athelstan (King of Wessex AD 935-939) made a short visit to the islands to deal with Scandinavian raiders is probably legendary, as are connections with the mythical British king, Arthur, or Olaf Triggvason, King of Norway, Sweden, Denmark and Iceland, who the 'Heimskringla' saga records visited Scilly at the end of a four-year long raid and was converted to Christianity there (in Bowley, 1964, 34).

By the end of the Early Medieval period Christianity was firmly established in Scilly but it would have assimilated some old pagan beliefs. For example, St Warna's holy well on St Agnes, (a few metres outside the study area), is probably an early medieval structure, but the tradition of attributing supernatural powers is a survival from pagan times.

The Early Medieval sites recorded in the study area are mostly findspots; Higher Town, St Martins, **PRN 7168**, Annet, **PRN 7043**, Porth Mellon, **PRN 7719**, Samson, **PRN 7086**, but also include two middens at Northward, Bryher, **PRN 7367**, Periglis, St Agnes, **PRN**

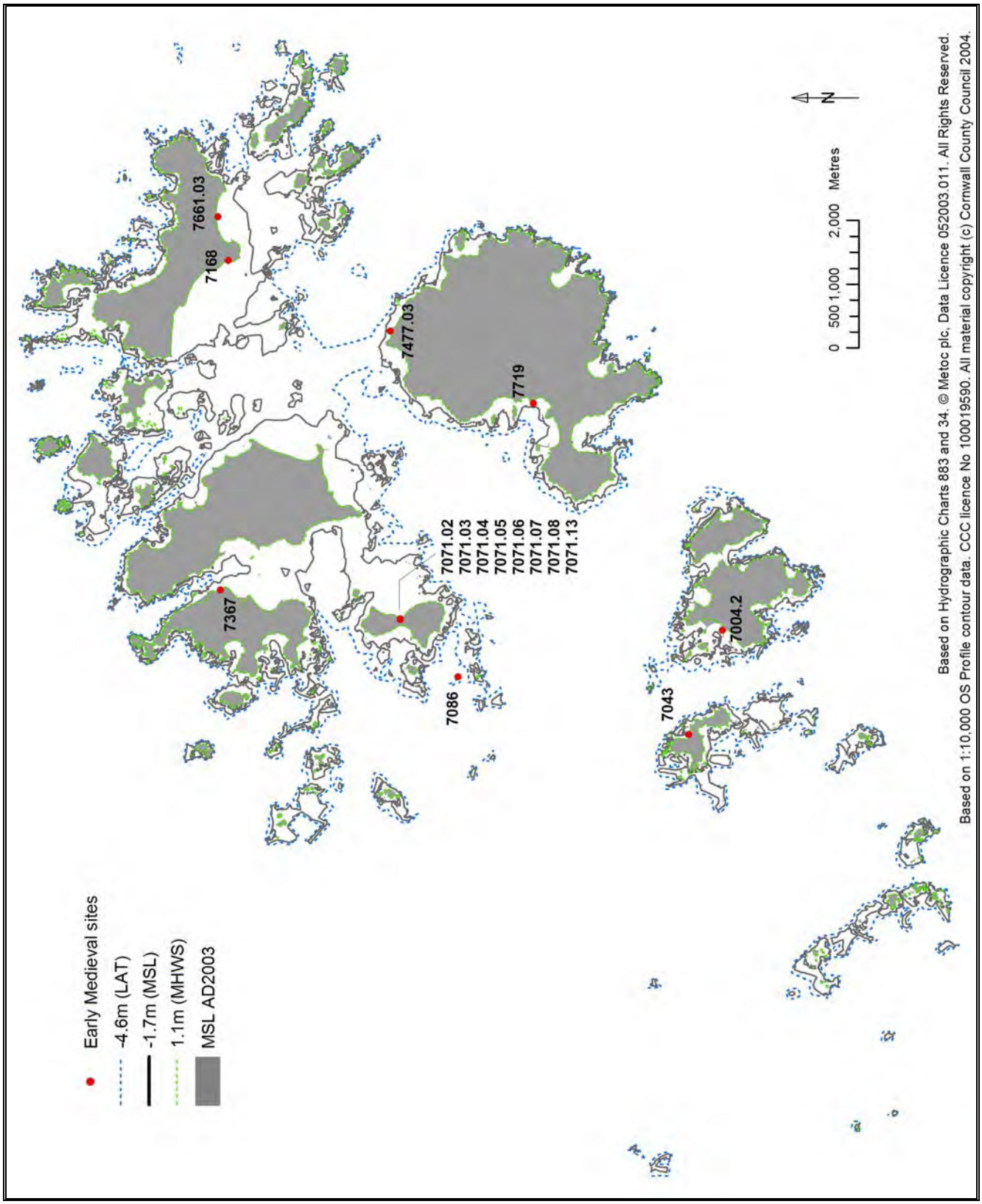



*Fig 22 Distribution map of Early Medieval sites and inferred submergence model, AD 410.*

**7004.02**, a field system at Little Porth, **PRN 7477.03**, and a peat deposit on Par Beach, **PRN 7661.03**.

**There are no recorded early medieval shipwreck sites, but there is potential for such sites to survive if protected below the seabed by sand.**

### 8.2.2 Later medieval (1066-1540)

Shortly after the Norman Conquest the islands became the property of the Crown of England, and from 1141, part of the Earldom then, after 1337, the Duchy of Cornwall. From the 12th century the administration of Scilly was divided with Tavistock Abbey presiding over the northern part whilst the de Wika family of Week St Mary in north Cornwall and later the Blanchminsters, also from north Cornwall, were the proprietors of what are now St Mary's and St Agnes (Land Use Consultants 1996, 23).

The centre of the ecclesiastical administration was St Nicholas' Priory; its ruined church still visible in the Tresco Abbey gardens. This island, together with Bryher, possibly formed a larger land mass, known first as *Rentemen* (meaning unknown) and later as *Saint Nicholas' Ile*, and may have been more important than St Mary's during this period. In Scilly, the Right of Wreck, taken as vested in the Crown the first place, passed to the church in 1114, in charter granting Tavistock Abbey 'all the churches of Sully with their appurtenances and land'. Pirates and raiders preying on English merchantmen may have been part of the reason behind Henry I's grant, and the monk, Turold, sent to take charge was instructed to 'keep a firm peace'. As prior, he would have been one of only two or three brethren, with servants living nearby and farming the adjoining land (Larn 1993, 10). At a later date Reginald, Earl of Cornwall confirmed the charter with the amendment 'All the wrecks, except whale and a whole ship' (Larn 1993, 10).

From the 11th century there appears to have been a general revival in Christianity in Scilly, which increased under Tavistock's influence; existing establishments were improved and new ones built, for example, on St Helen's, and at Old Town, St Mary's. By 1461, St Helen's church was in a state of disrepair and, like St Nicholas' Priory (hardly mentioned in documentary sources after the 15th century); it may have become ruined before the Reformation. The priory does not even feature in a list of Tavistock's possessions drawn up at that time.

The main settlement on medieval Ennor was at Old Town, where secular rule was based. Mentioned in 12th century documents it was perhaps then referred to by its Cornish-speaking occupants as **an Dre** 'the Town, the Settlement' (Thomas 1985, 210). The monks of Tavistock Abbey had an alternative name for it; *La Val*, Norman French for 'Down-there' or 'At-the-bottom', referring to its low-lying situation. Protected by a castle, first mentioned in 1244, and not visible from the open sea, the village was at the end of a bay that deep-water ships could not penetrate. The harbour, with its medieval quay, **PRN 7549,** was then known as *Porthenor*, 'the porth or landing-place for Ennor', the *Maríuhöfn* plundered by Vikings in *c*1151 (Thomas 1985, 210). Mark Groves has recovered many stone anchors or fishing net weights, possibly from a wreck, on the eastern side of Old Town Bay (see below Section 9.11.4 and Fig 59). In the early 14th century it was held by Ranulph de Blanchminster in return for maintaining twelve men-at-arms for keeping the peace. As tenant-in-chief he paid a yearly tribute to the king of three hundred puffins or 6s 8d. (Puffins, considered fish rather than fowl, could be eaten during Lent, and their feathers were also valuable, but money seems always to have been paid).

A return of Edward I's Commissioners of 1275 for the Hundred of Penwith (which included Scilly) stated 'They [the jury] say that John de Allet and the Prior of St Nicholas, Lords of Scilly, take wreck from the sea in those Islands, but they know not by what

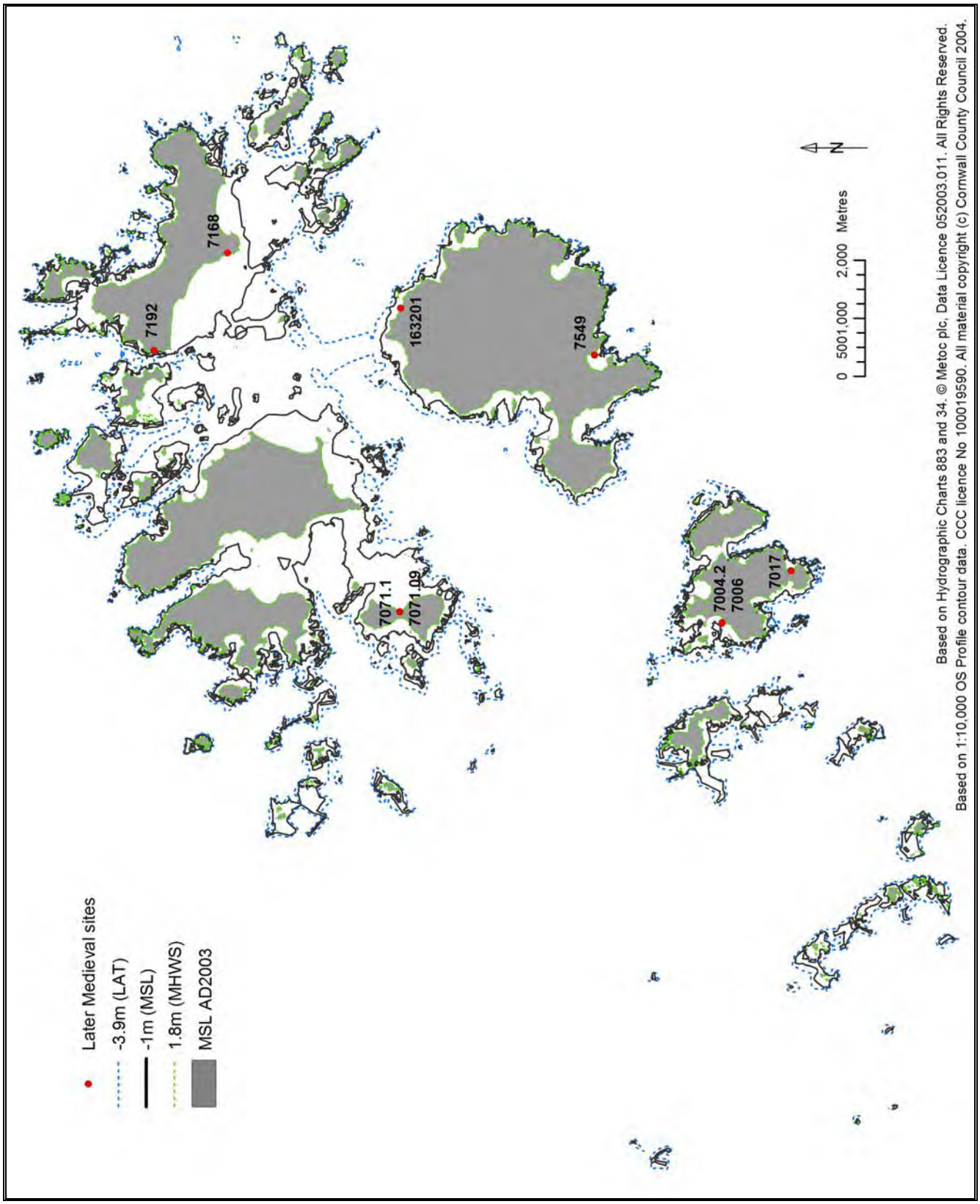



*Fig 23 Distribution map of later Medieval sites and inferred submergence model, 1066*

warrant, the ancestors of the aforesaid John and the Prior having done so from the time whereof memory is not'.

In 1302, Edward I challenged the Tavistock abbot's right to wreck but the abbot claimed 'the ship-wrecks happening in all the Islands', which he and all his predecessors had 'enjoyed without interruption from time immemorial', except for whales, gold, scarlet cloth, masts and firs, which were reserved for the king (Bowley 1990, 28). The first documentary reference to a specific shipwreck in Scilly is in 1305 when William le Poer, the king's coroner of the Isles of Scilly, was imprisoned and held to ransom after going to Tresco to take charge of wreck cargo. Another shipwreck on the island of Annet was mentioned at about the same time. Three years later Le Poer, was imprisoned at La Val for carrying away a whale cast up on Ranulph's land, and only released after he had paid a fine of 100s (Larn 1999, 8; Bowley 1990. 42).

The traditional punishment for wrongdoers in medieval Scilly appears to have been marooning, 'When anyone is attainted of any felony, he ought to be taken to a certain rock in the sea [the Bishop rock], with two barley loaves and one pitcher of water upon the same rock, they leave the same felon until by the flowing of the sea he is swallowed up' (Bowley 1990, 31).

In 1337 the Right of Wreck in Scilly reverted to the crown, when Edward III endowed his son, Edward, the Black Prince, with the Duchy of Cornwall. Between 1342 and 1345 the cargo and materials of three wrecked vessels was plundered by Scillonians, but no other details survive and it is thought that ships of the period were not identified by names anyway, a custom which did not prevail until the 15th century (Larn 1999, 8 and 2003, 11).

In 1345 Ranulph was unable to raise his full rent because 600 Welsh sailors on an expedition to Brittany were driven into Scilly and becalmed for twenty days, stripping the islands bare (taking corn, animals, bread and other goods) and generally causing havoc (Bowley 1990, 42).

This incident illustrates Scilly's vulnerability. Strategically placed, but poorly defended, it was easy prey for the 12th century Viking raiders, who were probably the reason for the decline of the religious establishments on Tresco and St Helen's, and for later pirates and freebooters. But there must have been some sort of law and order if, as recorded on Ascension Day 1209, 'pirates were beheaded in St Nicholas Isle in Sully to the number one hundred and twelve' (Larn 1993, 10).

Between 1340 and 1357 the first Admiralty Courts in England sat to deal with the enforcement of maritime law. As a result, two local Admirals were appointed, one of the 'north' and the other of the 'south and west', later almost every coastal county had a similar Vice Admiral, who was charged with administration of maritime affairs and incidents. The Admirals' duties included ensuring that the Royal share was collected in respect of everything washed ashore, and as a small inducement Admirals were allowed to retain a small percentage of the value of a wreck. This often led to an abuse of privilege (Larn and Larn 1993, vi-xii).

The Later Medieval sites in the study area are a findspot at Innisdgen, **PRN 163201**, and Old Quay at Old Town, **PRN 7549**. Uncle Tom's quay on St Agnes, **PRN 7006**, and the quay at Point of Fields on St Martin's, **PRN 7192**, may also have their origins in this period.

***The only shipwreck recorded by the NMR/HER in this period is the 1305 wreck on Tresco. As can be seen above at least four more shipwrecks are documented between the early 14th century and the mid-16th century and there were must have***

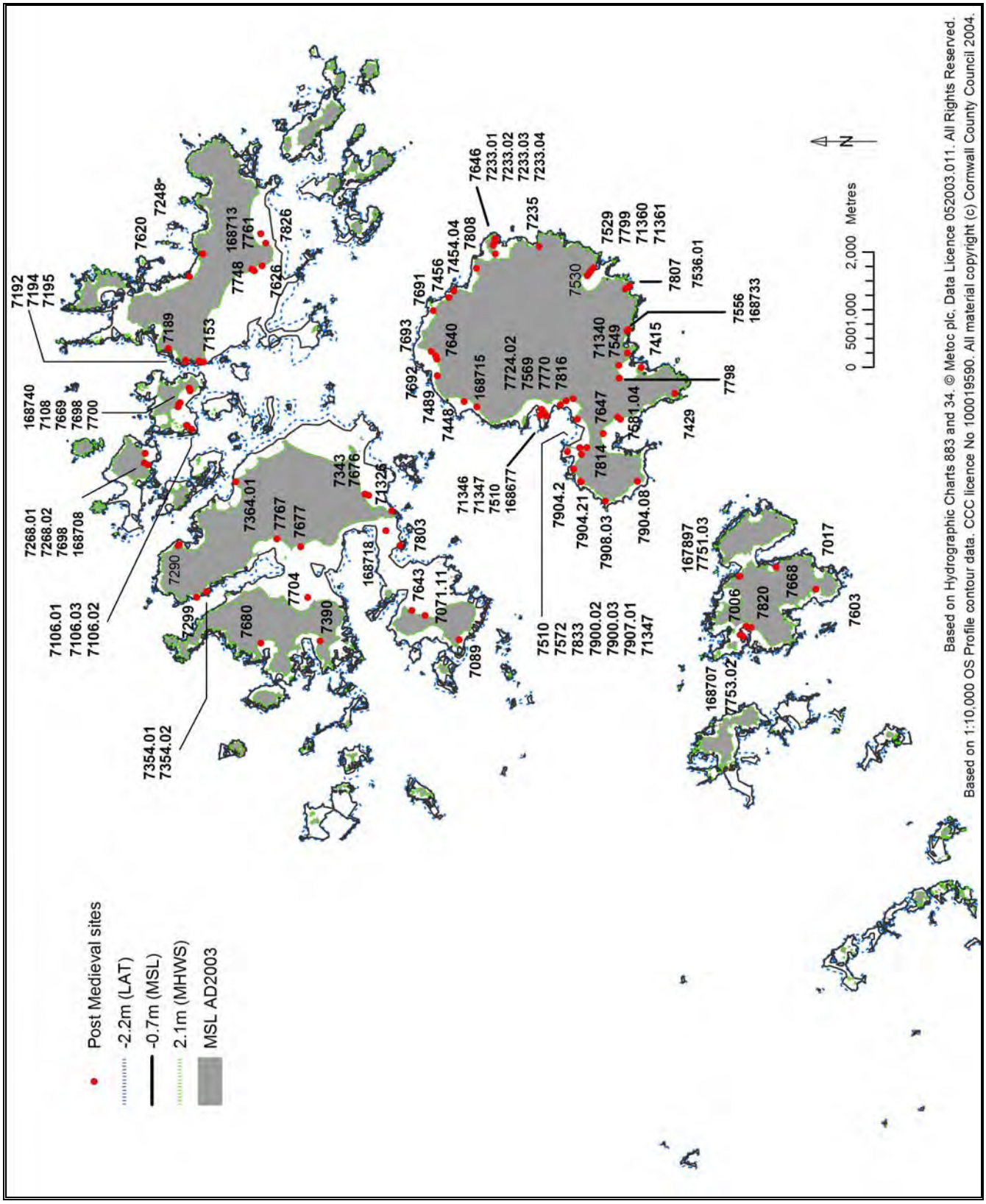



Fig 24 Distribution map of post-medieval sites and inferred submergence model, 1540

**been many others. Scatters of medieval pottery have been found in Tresco channel by Mac Mace and the ADU. No shipwreck sites have yet been found, although there is considerable potential for their survival around Scilly if protected below the seabed by sand.**

## 8.3 Post-medieval to modern

### 8.3.1 Post-medieval (*c*1540 – *c*1740)

Tavistock Abbey's interest in the Islands had dwindled by the Reformation and in 1547 Thomas Seymour, the Lord Admiral of England, acquired the whole of Scilly. Two years later Seymour was accused of plotting against Edward VI and using the islands as a base for piracy. His execution marked the beginning of the Godolphin connection with Scilly; initially appointed as Captains of the Isles, in 1570 Elizabeth I granted Francis Godolphin a thirty-eight year lease in return for an annual rent of £20. The Godolphins ruled in Scilly almost continuously until 1831 when the Islands returned to the direct control of the Duchy (Land Use Consultants 1996, 24).

The discovery of the New World increased the strategic importance of Scilly and from the mid-16th century English foreign policy exerted much greater influence on the islands. The threat of invasion by France and Spain led Henry VIII to order the building of a chain of new fortifications along the south coast of England. During the reigns of his successors, Edward VI and then Mary I, fortifications were built to guard the main approaches, harbours and anchorages of Scilly. Erected between 1548 and 1554 they include King Charles' Castle and three blockhouses; one on the site of Cromwell's Castle, **PRN 7354.02**, another south of Old Grimsby (both on Tresco) and a third on the north-east coast of St Mary's, **PRN 7466**. The fort named Harry's Walls, overlooking St Mary's pool, was begun but never completed and guns were mounted on The Hugh. Henry VIII maintained a garrison at Ennor Castle, from 1544-47 and during the reigns of Edward VI's and Mary I it continued to defend Old Town harbour, being used as the armoury for garrison.

During Elizabeth I's reign (1558-1603) the defences were run down, with, surprisingly, no special provision being made against the Spanish Armada of 1588. However, the threat of a second invasion fleet led, in 1593, to the building of Star Castle on The Hugh. Robert Adams, England's leading expert on coastal defences supervised the work, and shortly after its completion a bastioned curtain wall was constructed across the neck of the headland. The first quay, **PRN 7572**, built in the harbour below in 1601. From this time The Hugh (originally pronounced *Hoo* and meaning 'elevated ground' or 'promontory') became the main focus of military activity and Hugh Town, the island's new urban centre, developed on the isthmus below to service the garrison and passing ships.

During the Civil War (1642-51), Scilly was caught up in the drama of national events when the islands became a Royalist stronghold. The garrison at Star Castle was strengthened and batteries and earthen breastworks constructed around the coast of St Mary's: around The Hugh, below Innisidgen Hill, **PRN 7454.04**; Little Toll's Hill, Little Porth, Newford Island, **PRNs 7510** and **168677**; west of Porth Hellick; **PRN 7529**; Dick's Carn **PRN 7530**; west of Inner Blue Carn, Rat Island, **PRN 7570**, a battery SW of Old Quay; and on most of the other islands: Castella Downs, St Agnes, the east side of Shipman Head Down, Bryher, Old Grimsby and Gimble Porth, Tresco, **PRN 7299**.

In spring 1646, Prince Charles (later Charles II) stayed in Scilly on his way to the safety of Jersey. Following the fall of Pendennis Castle, the last Royalist stronghold on the mainland, Scilly surrendered on September 12th of the same year. Parliament appointed Colonel Buller as governor but in September 1648 while he was attending church his soldiers revolted and the islands were once again under Royalist command. Sir John Grenville became governor,

but under him privateering led to piracy, passing ships being plundered regardless of nationality. In 1651 the Dutch under Admiral van Tromp sailed to capture Scilly, arriving at the same time as a Parliamentary fleet led by Admiral Blake. The Dutch backed off and Blake, after being deliberately led astray by a local pilot, captured Tresco and, when negotiations for surrender broke down, pounded The Hugh with fire from his ships and Oliver's Battery. The Royalists finally surrendered on 23 May 1651. With the security of the Islands still threatened by the Dutch fleets, Cromwell's Castle, **PRN 7354.01**, was erected to replace King Charles' in the defence of New Grimsby Harbour. There are two recorded wrecks in the Civil War; the *John*, **NMR 880107**, in 1645 and a frigate, **NMR 88086**, name unknown in 1651.

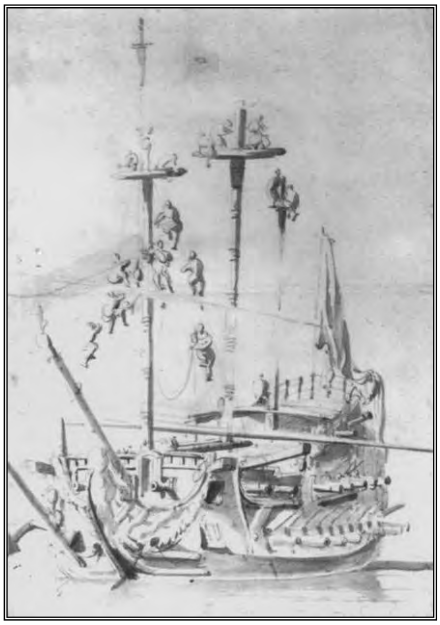


*Fig 25 The Constant Warwick was one of the principal warships involved in Admiral Blake's reduction of Scilly in 1651. She helped to bombard King Charles' Castle on Tresco and in the capture of two Royalist frigates (drawing by Van de Velde the Elder, National Maritime Museum)*

The Restoration of the Monarchy in 1660 saw the return of the Godolphin family as governors. Fifty years later the War of the Spanish Succession prompted England to strengthen its defences against France and Spain. In Scilly this meant a thirty-year programme supervised by Master Gunner Abraham Tovey, during which the curtain wall on The Hugh was rebuilt and extended around most of the headland, which became known as The Garrison. Many of the older buildings surviving on The Garrison and in Hugh Town were erected at this time and the quay was also rebuilt.

In 1551 the population of the islands was only around two hundred and fifty. After 1570 Francis Godolphin induced Cornish people to settle in Scilly, notably on St Martin's. On St Mary's, Tresco, Bryher and probably St Agnes, occupation continued unbroken throughout the post-medieval period; not so on St Helen's where re-occupation did not occur until the building of the isolation hospital in 1764. By the time of the 1652 survey Tean and Samson were also uninhabited. The Nance family, who introduced the kelp burning industry, resettled Tean from 1684, until after 1800 when they moved to St Martin's. The resettlement of Samson probably took place around 1683 when new holdings were being established on St Martin's.

The earliest located shipwreck site in Scilly dates from the beginning of this period, **NMR 1082126**. A *c*1542 cannon, artefacts, lead ingots and hundreds of bronze bell fragments as well as silver coins of Ferdinand and Isabella of Spain (1474-1504) and the Emperor Charles V (1521-55) found on Bartholomew Ledge, indicate a small Spanish cargo vessel, possibly bound from Amsterdam to Spain. A single thaler coin of 1555 suggests the wreck was of this period or later, perhaps around 1597. The site was designated as a Protected Wreck from 3 October 1980 (*Fenwick and Gale 1999, 54-5; Larn 1999, 8*).

**The post-medieval fortifications of Scilly are primarily coastal defences; the study area contains a Tudor blockhouse, Cromwell's Castle, and some Civil War Batteries and lengths of cliff top breastwork.**

**There are a total of 50 recorded shipwrecks in Scilly between 1540 and 1740. The most renowned being that of the *Association*, flagship of Sir Cloudesley Shovel's**

**fleet, lost on 22 October 1707 with three other ships of the fleet, *Eagle*, *Romney* and *Firebrand*, on the Western Rocks (Cooke etc 1883; McBride and Larn 1997). There is potential for other sites to survive on the seabed if protected by sand.**

### 8.3.2 Early modern or industrial age (c1740-1914)

Everyday life in Scilly was never easy and could be very harsh. After the Napoleonic Wars distress was so widespread that a relief committee was set up on the mainland and a fund of £9,000 raised. It was not until 1834 Augustus Smith (1804-1872), member of an old Hertfordshire family, became the Lord Proprietor of the Islands that economic stability was established. He was interested in 'improving the lot of the labouring classes' and Scilly (for years misruled by the agents of absentee landlords and struggling under difficult economic conditions) represented the ideal challenge. Adopting an autocratic role, he began by reallocating farm lands, which had become minute and scattered by sub-division, and introduced a system of inheritance by which land passed only to the eldest son, all other offspring being forced to find alternative employment. Smith encouraged this by financing existing and new local industries, building schools on all the main islands and making education compulsory (thirty years before this became law on the mainland). He broke with tradition by becoming a resident landlord and erecting his house not on St Mary's but on Tresco, next to the remains of the medieval priory, around which he created a sub-tropical garden out of bare moorland. In fulfilment of a condition of his lease, in 1838 Smith built the new quay, **PRN 7572**, connecting Hugh Town Old Quay with Rat Island, which may hold remains of a military blockhouse and breastwork, **PRN 7900.03**, a limekiln and of the mid-19th century site on which masonry was prepared for the construction of the Bishop Rock lighthouse (Kirkham 2003, 53-4). Between 1855 and 1861 Smith depopulated Samson so that he could establish a deer park. This venture was unsuccessful, but the deer park walls survive.

*Fig 26 Augustus Smith with St Agnes pilots in c1860 (photo: ©Gibson Collection)*

At the time when shipbuilding and piloting in the islands had largely come to an end and the early potato harvests were failing, Scilly's flower industry began. It started in a small way around 1879, when William Trevellick of Rocky Hill Farm, St Mary's sent an experimental consignment of cut flowers to Covent Garden in a hat box. Its long-term success was largely due to Augustus Smith's nephew, T. A. Dorrien-Smith, who studied the Dutch system of cultivation and introduced new kinds of bulbs. The remains of steam-heated glasshouses and packing sheds can be seen on many farms. The through railway connection from Penzance established in 1859 and its link with a steamer service begun the previous year, made the transportation of flowers to market viable. It also marked the beginning of the tourist industry that now forms the largest part of Scilly's economy.

**Most post-medieval and early modern industrial archaeological sites in Scilly represent activities associated with the sea and include the small stone-lined kelp pits, ruined boathouse and quays, the sites of shipyards and limekilns, and the**


*Fig 27 Distribution map of Early Modern sites*

**remnants of fish processing. Documentary sources or inscribed date stones indicate that most monuments belong to 17th – 19th centuries. A number of quays may be of medieval construction, but this earlier date is inferred rather than proven. The isolation hospital, slipway and well on St Helen's date to this period.**

**There are 588 recorded shipwreck sites for this period including the HMS Colossus in 1798, famously carrying part of Sir William Hamilton's second collection of Greek pottery and vases, most of which was lost. Another notable loss was the steamship *Schiller* in May 1875. She was 'flagship of the Eagle Line and the pride of the Atlantic sea-lanes', and some 340 passengers and crew were drowned in the calamity. The Rennel Current was almost certainly the cause of this shipwreck, which occurred in thick fog (Austin 2001).**

### 8.3.3 Modern (1914 onwards)

During both World Wars The Garrison accommodated up to a thousand servicemen. During the U-boat campaign in WWI the islands once more assumed strategic importance, being situated near the main shipping lanes. A naval and seaplane base was established, first at Porth Mellon on St Mary's, **PRN 7770**, but then rebuilt south of New Grimsby on Tresco, **PRN 7767**. The concrete standings for both survive and on Tresco the ramp and iron rails for trundling the planes down to the water.

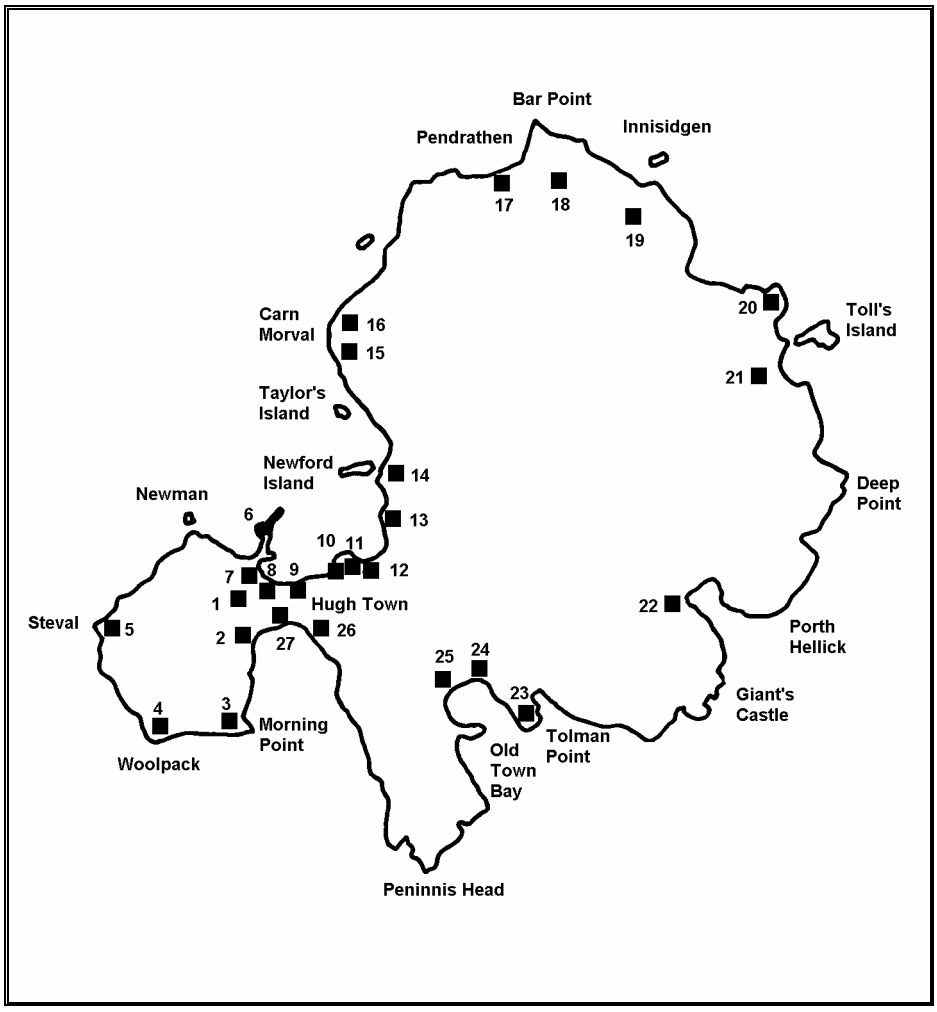



*Fig 28 Sketch map of St Mary's showing the location of the twenty-seven coastal defence pillboxes (after Bowley 2001)*


*Fig 29 Distribution map of Modern sites*

With the fall of France at the beginning of World War II, Scilly was heavily fortified, suffered frequent strafing and occasional bombing by enemy aircraft, and became a centre of activity against German submarines, one of which was wrecked on the Western Rocks and another on the Wolf Rock (Bowley 1990, 108). In 1941 twenty-seven pillboxes or blockhouses with machine-gun posts were built around the coast of St Mary's, where Hurricane fighter planes and air-sea rescue launches were also stationed, six are located within the study area. A WWII pillbox, **PRN 166736,** known to have been built on Rat Island may be incorporated within the south-west walling of the storage complex west of the Harbourside Hotel (Kirkham 2003, 53-4). The WWII pillboxes on St Mary's were recorded in 1999 by Alwyn Harvey for the Defence of Britain project (Harvey 1999 Volume 6).

Ships continued to come to grief in Scilly, creating new wreck sites. The *Torrey Canyon* wrecked on the Seven Stones reef in 1967; the most recent are the *Cita* in March 1997, with its cargo of clothes, plastics and computer parts and the Rachel Harvey in 2000.

**Modern sites in the study area include the two naval seaplane bases (flying boat stations), six surviving pillboxes and 108 recorded shipwrecks**.

# 9 Assessment by theme

The 1997 survey of England's coastal heritage (Fulford *et al*) identified eight broad themes for research and record enhancement that generally apply to all periods. Following discussion with English Heritage these themes have been adapted to form the basis of this section:

- Palaeo-environments and the creation of the coastal landscape;
- Dendrochronology;
- Historic management of the coastal landscape;
- Coastal settlement;
- Coastal trade, transport and communications;
- Coastal industry;
- Coastal fortifications and maritime conflict;
- Exploitation of marine resources;
- Harbour and quay installations.

Additional themes explored are:

- Religious, Ritual and Funerary;
- Shipwreck and salvage;
- Navigation and time;
- Island culture;
- Sea as inspiration.

## 9.1 Palaeoenvironments and the creation of the coastal landscape

### 9.1.1 Coastal palaeoenvironmental studies in Scilly

*'The Flats…are quite dry at the low water of a Spring-Tide and men pass easily dry-shod from one Island to another over Sand-banks, where Hedges and Ruins are frequently discovered upon the Shifting of the Sands, and upon which at full Sea there are ten and twelve feet of water.*

William Borlase, "*Observations on the Ancient and Present State of the Islands of Scilly*"

An important aspect of Scilly's archaeology is the presence of formerly terrestrial remains below high water, the result of the gradual submergence of a once much larger land mass. Submerged stone remains (such as field walls, hut circles and cist graves) have been documented since Dr Borlase in the mid-18th century, but it is only in recent years that intertidal 'peat' deposits have been recognised. In addition, as sea level continues to rise, erosion around the edge of Scilly's existing islands continually exposes archaeological structures and layers in the low cliff face. Though ultimately having a destructive effect, this process provides informative cross sections through many sites, including prehistoric and later settlement remains consisting of stone round houses and midden deposits (Ratcliffe and Straker 1997, 64).

Over a five-year period from 1989 to 1993, with funding from English Heritage, CAU (now HES) (in conjunction with the Ancient Monuments Laboratory and Bristol University) implemented a small-scale recording and sampling programme to assess the

palaeoenvironmental potential of such early coastal sites. For the intertidal 'peat' deposits, the aim was to test their potential for enhancing understanding of the vegetational history of Scilly and as a means of testing and refining Thomas' model for sea level change (Thomas 1985). For cliff-face sites, the main aim was to assess their potential for yielding information on the subsistence economy and diet of the early inhabitants of the islands, with particular emphasis on sampling for plant macrofossils that, apart from charcoal, were virtually unknown for Scilly (Ratcliffe and Straker 1997, 64).

A total of nine cliff face sites were assessed (Fig 30). These were located on both the outer and inner-facing shores of the present coastline, the cliffs in which remains were exposed being only 0.5-3.0m high thus making them particularly vulnerable to coastal erosion, but also, on the whole, very accessible, and easily recorded and sampled from the beach below. In order to provide a context for the environmental sampling, a detailed section drawing was made of the cliff face in each case (*ibid,* 64, 66).

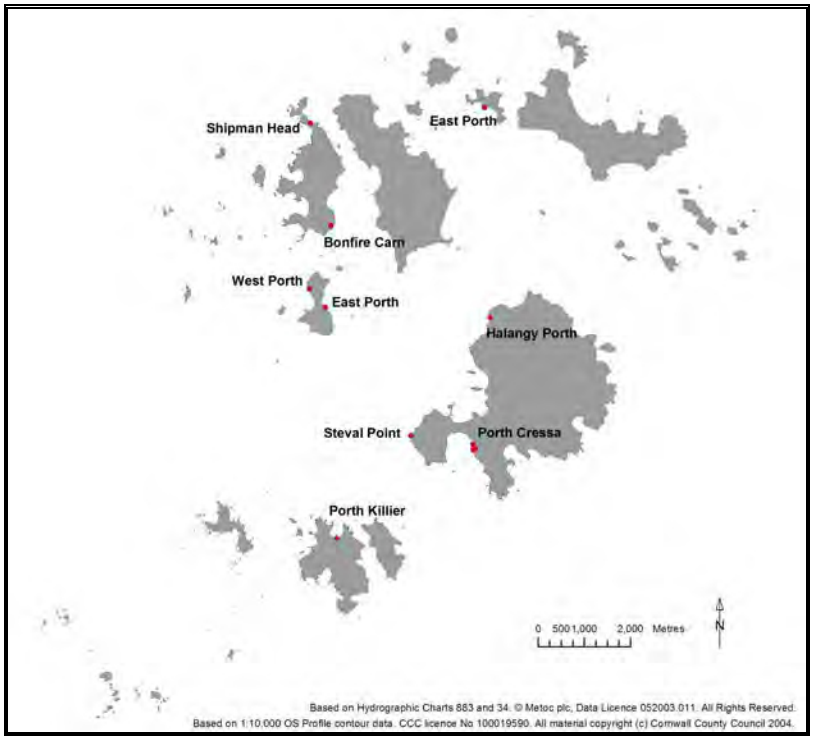



*Fig 30 Cliff face sites sampled 1989-93*

The majority of sites were early settlements. At most of these, ruined stone walled buildings were exposed in the cliff face, together with occupation and post-occupation layers and, in some cases, features such as hearths and stone-lined drains. A trend recorded at four settlement sites was the disposal of domestic waste (midden material) within buildings that had gone out of use (*ibid* 65-6).

Middens dominated by limpets were a feature of three of the sites and in two cases (at Porthkillier and on Tean) provided alkaline conditions necessary for good bone preservation. With the exception of Shipman Head, all sites yielded artefacts – pottery, flints and stone objects, such as saddle querns. Of particular note is pottery of a form dateable to the late Bronze Age/Early Iron Age found at West Porth, Samson. This is the first identification of such pottery in Scilly. The Neolithic potsherds and flints from the otherwise Bronze Age site at Bonfire Carn are also important, as evidence for Neolithic occupation, although increasing, remains quite rare in the Islands (*ibid*, 66).

All the bulk samples were processed by flotation, and the resulting floats and residues were completely sorted through. Animal bone, marine shell, charcoal and plant macrofossils were extracted. Both charred and mineralised plant remains were preserved. The discovery of mineralised seeds was significant, since it emphasises that the potential of archaeological deposits in Scilly to preserve information on past flora and fauna is not confined, in dry soils, to charred plant macrofossils, which are inevitably biased towards arable activities. Charcoal, charred grain, animal bone and limpets were all successfully used to obtain radiocarbon determinations. The calibrated date ranges provide a near continuous sequence from the Early Bronze Age to the Late Iron Age, with a few Romano-British and Early-Medieval (6th-8th century AD) date ranges in addition which increased the existing number of radiocarbon-dated settlement sites in Scilly from four to eleven (*ibid* 66-7).

The intertidal 'peats' were recorded and sampled at three sites, located on inner facing shores of the lagoon that according to Thomas' model for sea level change was a low-lying plain during prehistoric times (Fig 31). As well as shelves of 'peat' exposed on the surface of the beach, buried bands were also recorded. A total of ten deposits were identified; five on Par Beach, St Martin's, three at Crab's Ledge, Tresco and two in Porth Mellon, St Mary's. Most of these are not true peats but minerogenic intertidal sediments containing varying amounts of organic matter (humic silts, sands and sandy silts) and hence are referred to in this report as 'peats'. Because these sediments were waterlogged soils it is unsurprising that wood content was low or absent and the deposits are different in character to the submerged forest beds documented around the Cornish coast. The large piece of oak from the 'true' peat on Par Beach did not provide a dendro match and was radiocarbon dated to the late Mesolithic period. All exposed areas of 'peat' were found to be truncated by marine erosion and probably also by peat-cutting for fuel, since this is known to have been carried out until recent times on Scilly's downs and inland mires. On all three beaches prehistoric stone remains - field systems, hut circles and a stone row were shown to have a direct or indirect stratigraphic relationship with the 'peat' deposits (*ibid*, 66).

The intertidal peaty soils have been shown to have the potential to provide radiocarbon dates, revealing when the locations at which they were found were areas of boggy ground or salt marsh rather than marine beach. In addition they contain pollen that provides evidence of the surrounding ancient vegetation, and diatoms and foraminifera which can be useful in the understanding of sea level changes. Auguring has revealed as many as five successive phases of 'peat' formation on the same beach (Par Beach), with the different phases of 'peat' being separated by layers of sediment. Together with the 'peats', these sediments can be seen as the key to understanding sea level change in Scilly (*ibid*).

Palynological evidence previously collected in Scilly (during the 1960s and 1970s) came almost exclusively from St Mary's, primarily from the inland mires of Higher and Lower Moors (Scaife 1984). The pollen sequence from Higher Moors is the longest from Scilly and dates back to the 6th millennium cal BC. At this time the surrounding vegetation consisted of mixed oak woodland. This was subsequently partially cleared for cultivation (probably during the Neolithic), but during the Middle Bronze Age or later there was a period of forest regeneration, though some land remained open. However from the late Bronze Age or Early Iron Age there was extensive woodland clearance. This general picture of a deciduous forest which by the Iron Age had been transformed into an open environment of cultivated fields, pasture and heathland, was confirmed by the pollen evidence from Lower Moors and soil pollen analysis on St Mary's and on Nornour (*ibid* 72-3).

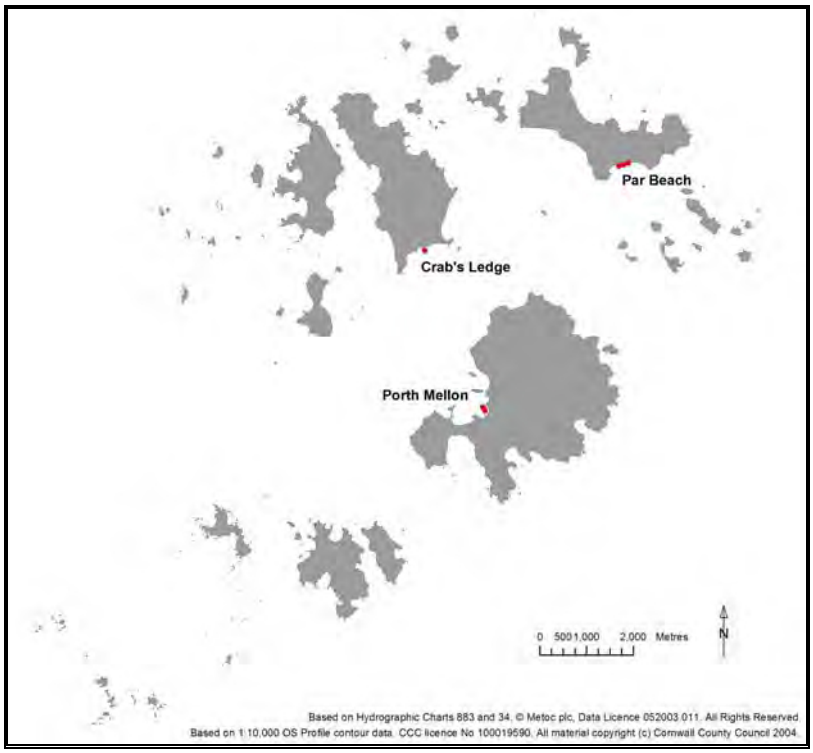



*Fig 31 Location of the intertidal 'peats', sampled 1989-93*

In general, the intertidal evidence corresponds with that from Higher Moors. The earliest of the deposits examined, at Par Beach, St Martin's was dated to the late Mesolithic or early Neolithic (the late 5th/early 4th millennia cal BC). These provided evidence for the existence of mixed deciduous woodland (oak, hazel, birch, lime, elm, holly, alder and willow), broadly similar to that identified at Higher Moors for the earlier Mesolithic. By the late Neolithic (3rd to 4th millennia cal BC), at Porth Mellon on St Mary's, this woodland was still a major feature of local vegetation. This deposit may tentatively be correlated with the start of the second phase at Higher Moors, as may an insecurely dated late Neolithic deposit on Par Beach. Here there was charcoal with only low levels of tree and shrub pollen, suggesting that around this location some clearance took place at this date *(ibid*, 72-3).

There is no pollen evidence from elsewhere in Scilly for the mid- to late Bronze Age forest regeneration recorded at Higher Moors. Neither is there any indication of it in the archaeological record, the two Middle to Late Bronze Age settlements sampled as part of the 1989-1993 project produced evidence for arable and pastoral farming. The Higher Moors evidence may reflect a local vegetational change and not necessarily the situation elsewhere in Scilly. Equally, the only dated pollen evidence for the start of the main phase of woodland clearance still comes from Higher Moors, where radiocarbon dating places it in the Late Bronze Age or Early Iron Age. However, given the picture emerging from settlement sites of fairly intensive occupation throughout the Bronze Age, this could have occurred earlier in other parts of Scilly (*ibid*, 72-3).

The other intertidal deposits, from Crab's Ledge and Par Beach, date from the Late Iron Age to the 7th century cal AD and the pollen measurements from this accord with the evidence from the Higher Moors. At Crab's Ledge areas of saltmarsh and open ground had largely replaced woodland and scrub by the end of the Iron Age and beginning of the Romano-British period. By at least the Early Medieval Period the area around Par Beach was an open landscape, with plants of disturbed ground, sand dunes and heathland represented in the pollen record (*ibid*, 72-3).

### 9.1.2 Old Town Bay Coast Protection Scheme

In 1997 archaeological recording was undertaken during coast protection work at Old Town Bay, St Mary's and two 'peat' layers below the surface of the beach were sampled. Radiocarbon dating and palaeoenvironmental analysis (pollen, plant macrofossils, diatoms and foraminifera) of the lower 'peat' deposit indicated that between the Iron Age and early medieval periods the site consisted of an area of shallow freshwater surrounded by a largely open landscape, with arable fields and pasture bordering wetland. Following an episode of sand encroachment, the upper 'peat' began forming within a similar environment some time during the 10th to 12th centuries. The site itself supported sedges growing in damp grassland, which was subsequently inundated with sand (Ratcliffe and Straker 1998).

### 9.1.3 Submergence studies

Today the Isles of Scilly comprise some two hundred individual islands, islets and rocks but it is not difficult to imagine these as part of a much larger landmass that has become gradually submerged. At low tide, extensive sand flats are exposed on the inner facing shores of the northern half of Scilly, making it easy to visualise former plains fringed by low granite hills and sand dunes. Bryher, Tresco and Samson are still joined at low astronomical tide (LAT), and the water is so shallow between the islands that a drop in sea level of less than 10 metres would re-unite all except St Agnes and Annet (Ratcliffe and Straker 1997, 74-5). The submergence of Scilly is still not fully understood. The intertidal and subtidal remains are intriguing and there is potential for archaeological dates from palaeoenvironmental deposits to inform the general sea level rise issue. The two most recent models for the submergence of Scilly are discussed below.

### 9.1.4 Professor Charles Thomas' model for sea level change, 1985

Thomas' dramatic model for sea level rise was published in 1985. To calculate sea level change since 3000 BC in the absence of radiocarbon dates from the intertidal zone, he used the vertical positions of submerged archaeological sites which could be broadly dated from artefactual evidence or by analogy with sites elsewhere. Thomas assumed that these sites were originally located at what he termed the Minimum Occupation Level (MOL), just above the contemporary shoreline, at 1.8m above High Astronomical Tide (HAT), 5.3m above Mean Sea Level (MSL) and that the tidal range in Scilly has remained constant for the last 5000 years - that is 6.4m between HAT and LAT (Low Astronomical Tide) (Ratcliffe and Straker 1997, 74-5).

Having plotted the vertical positions of the dated sites in relation to present MSL, he was able to calculate the height of the latter for the periods when the sites were in use, by subtracting 5.3m in each case (Thomas 1985, 26, fig 2). Thomas then adjusted the results of this calculation by introducing a downward deflection of 2cm at AD 1000 and doubling this deflection at 5-century intervals. In this way he changed his sea level/age line into a curve, which indicated that around 3000 BC MSL was almost 17m below that of today (Thomas 1985, 27, fig 3). The curve for Scilly is much steeper than that for Newlyn or the Bristol Channel. Thomas suggests that this difference is the result of a very localised downward displacement of Scilly's granitic laccolith in addition to more general isostatic movement (Ratcliffe and Straker 1997, 74-5).

According to Thomas, his model represents an average yearly rise in sea level of 2.1-2.6mm (*ibid*, 28), which equates to 21-26cm every 100 years and 2.1-2.6m every 1000. However, although Thomas' model assumes that the submergence of Scilly was a gradual process, he recognised that there may be an alternative scenario, in that it could also have involved more dramatic events such as tidal surges, which are the displacement of huge volumes of water in a particular direction (Thomas 1985, 29-31, 48-52).

Perhaps the most controversial aspect of Thomas's model is his suggestion that today's islands did not finish forming until relatively recent times (*ibid*, 34). He suggested that until the end of the Roman period all of them (excluding St Agnes, Gugh and Annet) were joined together at high water and that as recently as the 11th century AD the position was still the same at low water, separation not being complete until the early Tudor period. He has used the distribution of Cornish and English coastal and shore place-names to support this hypothesis. The early pre-16th century Cornish forms are seen to be restricted to the outer coasts and rocks of today's islands, while the later English names populate their inward facing shores (*(ibid*, 39, fig 10; Ratcliffe and Straker 1997, 74-5).

### 9.1.5 Assessment of the intertidal 'peats', 1989-1993

One of the key aims of the 1989-1993 recording and sampling programme was to assess whether the intertidal 'peat' deposits could be used to test and refine Thomas' model. The assessments of the 'peats' indicate that this should be possible provided that detailed analyses are carried out. At the height of the Devensian glaciation, sea level would have been *c*120m lower than it is today, rising to *c*45m below present levels by around 11,500BC, the approximate beginning of the Holocene period. The data which emerged from biological analysis and radiocarbon dating indicates that sea level rise in Scilly was more gradual than Thomas' model suggests. During the first five centuries AD, for example, the mean sea level may have been *c*1-1.6m below the present level compared with Thomas' estimates *c*3.5-4.7m below. However, there are problems with making such comparisons because different data has been used and for both types of data there are difficulties in ascertaining what the evidence actually means in terms of the evolution of the present coastline (Ratcliffe and Straker 1997, 74-6).

Thomas had to assume that his dateable sites were located at the contemporary MOL and also that MOL has consistently been 5.3m above MSL. In addition, most of his sites are only very broadly dated and some could be attributed to different periods than those chosen by him (*ibid*)

As far as the intertidal 'peats' are concerned, the extent of marine influence on the formation of these is varied and can be unclear. At Par Beach, for example, the deposits seem to have formed in and around the edges of freshwater pools, and marsh and fen conditions existed, perhaps developed in wet dune slacks. In contrast the deposits sampled at Crab's Ledge are more likely to have formed under saltmarsh conditions or were at least subjected to marine inundation, though the exact nature of this needs clarifying. At Porth Mellon, though the area may have on occasions been protected by dunes, there is evidence for it having been subjected to marine inundation and salt spray (*ibid*).

Ratcliffe and Straker's tentative first attempt to refine the curve for sea level change in Scilly is shown in Figure 32 (Line C), but it should be noted that detailed biostratigraphic analyses would be required to confirm this. The 2 sigma calibrated date ranges for selected radiocarbon measurements obtained from the intertidal sediments were plotted against their respective Ordnance Datum (OD) heights, and a best fit line (estimated by eye) drawn through them (Line C). This is shallower in gradient than Lines A and B, which are taken from Thomas (1985, fig 2) and recalculated to OD rather than CD (Chart Datum). The intersection of Line C with around AD 2000 appears to suggest that the present intertidal sediments accumulated close to the High Spring Tide (HST) level. In order to facilitate comparison with Thomas' data, if the (possibly erroneous) assumption was made that the difference between MSL and HST has remained constant (with MSL being *c*2.8m below HST), then between about 1 and 500 AD, MSL may have been at about 1-1.6m below the present level, compared with Thomas' estimate of *c*3.5-4.7m below it. At about 1000 BC, Thomas' model suggests a figure of about -7.25m OD for MSL, which is in the

order of 4.7m lower than that which the results from the 'peat' deposits might indicate. The results of the 1989-93 project indicated it is unlikely that the land area was as great as Thomas has suggested although it was clear that the land exposed above HST was formerly more extensive in Scilly (Ratcliffe and Straker 1997, 74-6).

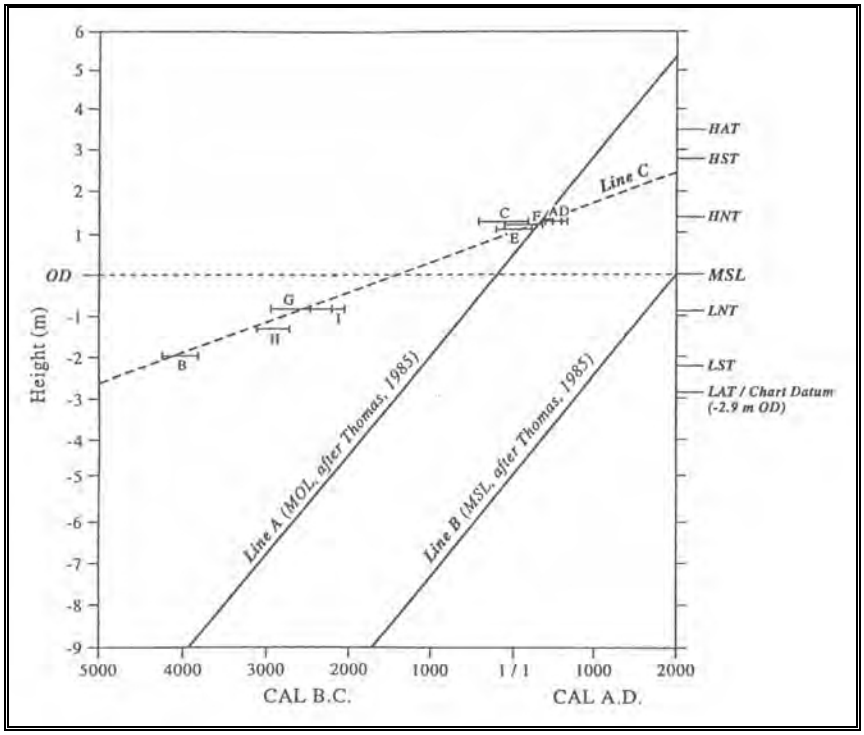



*Fig 32 Sea level change in Scilly – Lines A and B after Thomas 1985, fig 2; Line C based on calibrated date ranges for selected intertidal 'peat' samples (A-B = Par Beach, C-F = Crab's Ledge; G-I = Porth Mellon (from Ratcliffe and Straker 1997)*

During the RCZA the levels and radiocarbon dates from the 1989-1993 project were translated into GIS. The resulting maps are startling in that they show the separation of the islands at high water was largely complete by 1000BC (this is not incompatible with the existing submerged stone remains, for the individual islands obviously have somewhat larger landmasses than they are today) but that Tresco, Bryher and Samson were still joined at low water during the early Tudor period. It is important to note, however, that further work in the coastal, intertidal and marine zones will allow the assumptions made in this report to be refined and revised as necessary.

The following 'peat' deposits are recorded in the study area: Par Beach, St Martin's, **PRN 7661.01-.05**; Porth Mellon, St Mary's, **PRNs 7717.01/.02**; Crab's Ledge, Tresco, **PRN 7345.01-03**. A number of other 'peat' exposures are as yet unrecorded in the HER; Bathinghouse Porth and Pentle Bay (Tresco), East Porth (Tean), Porth Hellick (St Mary's), Town Beach (Bryher), Porth Coose (St Agnes) and Samson Flats.

**In summary, the valuable work carried out between 1989 and 1993, and at Old Town Bay in 1997, established that intertidal organic deposits represent a valuable source of information on the vegetational history of Scilly and can provide radiocarbon dates which can date the vegetation sequences and potentially the process of marine submergence and the evolution of the present coastline. While the deposits have this potential to assist in the refinement of the model for sea level rise, this is complicated by the fact that in some cases the surviving surfaces may**

**be eroded and therefore the transition from freshwater to marine influence cannot always be clearly identified. Thus careful biostratigraphic work will be needed to identify the levels at which radiocarbon determinations will date periods of environmental change. In addition to the pollen evidence, analysis of diatoms and foraminifera can be particularly useful in the understanding of sea level changes. These organisms were poorly preserved in the 1989-1993 sediments but would repay further investigation at some sites, the results from Old Town Quay, for example, being more useful in this respect.**

**There is potential for identification of additional submerged peat deposits. Divers have 'eyeballed' such deposits around the Western Rocks and off Samson and it is possible that local divers know the locations of more submerged 'peat' deposits and other underwater archaeological features.**

## 9.2 Dendrochronology

At present there is little scope for dendrochronology in Scilly. Wood content in the intertidal 'peats' is low or absent and the deposits appear, therefore, to be different in character to the submerged forest beds documented around the Cornish coast (Ratcliffe and Straker 1997, 76), however there are some diver's stories of a submerged or 'petrified' forest off the Western Rocks which it would be useful to verify. Dendrochronology might also be useful for dating purposes in the event of an ancient wooden shipwreck being discovered.

## 9.3 Historic management of the coastal landscape

The inhabited islands have a fringe of rough ground around their edges, heathland or blown sand/dunes between the settlements and farmland and the rocky or sandy foreshore. Rough ground is a general term used to describe land which is no longer farmed but was once an integral part of farming regimes, either as rough grazing or as enclosed grassland or arable fields. Owing to this previous use areas of rough ground often contain relict prehistoric (and later) field systems and on St Mary's include linear boundaries dividing up the rough ground into blocks of land for common grazing or turbary (peat cutting). A wide range of other archaeological remains are found on rough ground – prehistoric houses, ritual and funerary monuments, early Christian chapels, churches, cemeteries and many maritime-related post-medieval remains; fortifications, lookouts, signal stations, lighthouses and daymarks, gig sheds, kelp pits and an isolation hospital (Land Use Consultants 1996, 29).

On St Mary's the interface between the coastal rough ground and the present fields on the northern and eastern sides of the island has been planted with pine shelterbelts to protect the interior agricultural land. The coastal edge may also include small parcels of enclosed land, either anciently enclosed fields bounded by stone walls or bulb fields with dense shelter hedges. Such areas have often been abandoned or only receive a low level of agricultural management. Evidence of earlier field systems on the heathland attests to the importance of the coastal areas for agriculture at one time. On St Mary's in particular several of the farmsteads are connected to the outlying coastal land by winding lanes and tracks. Now usually unmanaged, many areas of coastal heathland and grassland would traditionally have been maintained by grazing. The island edges also have paths and are important for recreation by providing circular access around the island coastline (*ibid*, 63).

*Fig 33 Intertidal and subtidal clam farm at Carril on the coast of Galicia (photo: Lucas Labrada)*

Blown sand can cover evidence of prehistoric coastal occupation, a 'buried landscape' that can be exposed by coastal erosion or sand extraction. A range of later remains survive on the dune surface eg post-medieval field systems and Civil War batteries. On St Martin's the light sandy soils of the coastal strip on the southern, more sheltered side of the island, behind the dunes, were once intensively cultivated as bulb fields, but have now mostly fallen out of use (*ibid*, 61, 65).

Historically, seaweed was gathered from the beaches for manuring farmland, as well as being used in the kelp burning industry, donkeys and ponies were kept as pack-animals for transporting the seaweed to the fields. It has been suggested recently that at least some of those submerged and intertidal stone remains which have been interpreted since Dr Borlase's time as old field walls could in fact be fish traps, or more possibly boundaries between kelp gathering territories. The kelp burning industry was introduced to Scilly in 1684, submerged 'Hedges' were noted by Dr Borlase 72 years later in 1756 and assumed to be prehistoric in date. Was Dr Borlase actually noting comparatively recent features associated with kelp burning? Similar features, beginning on land and continuing into the water, which have this function, have been observed off the west coasts of Ireland and France, and clam cultivation boundaries at Carril on the coast of Galicia have the appearance of submerged field systems (Fig 33). As a caveat to this hypothesis it is useful to note that Hooley (pers comm) has observed that the intertidal walls show a very poor correlation with areas of kelp growth and are not aligned in a suitable manner to function as fish-traps.

## 9.4 Coastal settlement

On Scilly today nowhere is much more than 1km from the sea and it could, with justification, be argued that all settlement in Scilly is coastal. This section discusses settlements that are on the coast or present shoreline of Scilly. Most of these are on the inner-facing shores of the present islands, and so may not always have been coastal sites.

### 9.4.1 Prehistoric period

**Neolithic and Bronze Age**

There is increasing evidence of Neolithic activity in the islands, mainly revealed by analysis of pottery from cliff face sites such as Porthkillier, **PRN 7029**, Bonfire Carn, **PRN 7307.01**, and Halangy Porth, **PRN 7445**.

As mentioned in above in Section 8.1.4, only 15 prehistoric houses in Scilly, about 10% of the total, can be securely dated to the Bronze Age. These houses are oval or circular in plan, built of thick double-faced stone walling and would have had conical roofs thatched with ferns, reeds or straw. Settlements favoured low-lying land and many will have been submerged or destroyed by the sea. Most surviving houses are simple structures, but a few have annexes and additional rooms. They usually occur in pairs or small groups, sometimes interconnected. On the whole, the evidence suggests people were living in family groups or hamlets rather than villages. Internal diameters of buildings range from 2.5 to 13m presumably reflecting variation in the number of occupants and the function of the building (some must have been barns or byres rather than dwelling houses). Usually there is a single entrance flanked by stone door jambs, but no window openings. Floors are formed by subsoil, *ram*, but stone paving is sometimes found, especially around entrances and the inside of walls. Other internal features are clay and stone-lined hearths (often centrally placed); stone-lined drains; post-holes and post-hole stones (for holding roof supports); door pivot-stones; stone benches and internal partitions (sometimes forming a radial pattern). Corn-drying ovens and clay or stone-lined pits (probably for storing water) have also been found.

The project area includes 17 Bronze Age hut circles, or sites of hut circles, that have been excavated; Halangy Porth, **PRNs 7444**, **7444.01**, **7445**, Porth Cressa **PRN 7581.01**, Samson **PRN 7070**, Samson Flats, **PRN 7076.02**, West Broad Ledge, **PRN 7109**, Par Beach **PRN 7147**, Bar Point **PRN 7476**, four at Pendrathen, **PRNs 7480.00-4** plus an excavated example **PRN 7480,** two at Little Bay, **PRNs 7208.00-1** and south of Bonfire Carn in the cliff face **PRN 7307.1**.

In addition, the project area includes six Bronze Age occupation sites, Halangy Porth **PRN 7444.02** (excavated), Great Bay **PRN 7201** (excavated), Porthkillier (settlement) **PRN 7029**, Samson Flats (hut circle settlement), **PRN 7076**, Bathinghouse Porth (settlement) **PRN 7346**, Carn Near, **PRN 7349**.

These early settlements invariably lie within or adjacent to the remains of contemporary field systems; small rectilinear fields defined by boulder walls, stony banks (the result of field clearance) and lynchets. As with unexcavated houses, it is difficult to precisely date these systems, but those lying on exposed moorlands – like Shipman Head Down, Castle Down and Chapel Down may have been laid out before the present unworkable peaty soils developed, unless they were intended solely for pastoral use. Submerged field walls may also be of early origin, but probably continued in use throughout prehistory and, in some cases, into the Roman and early medieval periods.

The project area includes three field systems which are attributable to the Bronze Age: East Porth, **PRN 7077.01**, Nornour, **PRN 7247.02**, Samson Flats, **PRN 7076.01**.

**Findspots** comprise by far the greatest number of terrestrial sites recorded in study area by the HER, representing 114 sites out of a total of 310. These can include flints and individual finds of all periods, and more exotically, the Bronze Age gold bracelet found on a St Martin's beach in 1989, **PRN 7665**. In addition there are three prehistoric lithic scatters in the project area, the one at Old Quay is Mesolithic, **PRN 7185**, the others at

Appletree Bay, Tresco, **PRN 7734**, and West Porth, Samson, **PRN 7738**, are less diagnostic.

**Iron Age and Romano-British periods**

During the Iron Age settlement is likely to have been increasingly concentrated on low-lying land, which was itself being reduced by the rising sea level and inundation by blown sand as the coastal dune systems retreated farther inland. This would have resulted in more intensive use of the land that remained for farming. Such intensive use is reflected in the pollen record, which shows that by this time virtually all the woodland had been cleared and Scilly transformed into an open landscape of cultivated fields, pasture, heathland and dunes (Land Use Consultants 1996, 21-2).

Part of the settlement at Halangy Down, St Mary's consists of a courtyard house, a house type common in West Cornwall during the Romano-British period, which consists of a main round room and several lesser rooms opening onto a central unroofed courtyard, the whole forming one unit and enclosed by thick walling. Excavation has shown that several huts here were rebuilt and modified during their period of occupation (Ashbee 1996).

The project area includes three Iron Age hut circles at Little Arthur (excavated), **PRN 7218**, Par Beach (excavated), **PRN 7302**, Halangy Porth, **PRN 7444.01** and a settlement at Porthkillier, **PRN 7029**. A single Romano-British hut circle was excavated on Par Beach, **PRN 7303**.

Eleven other prehistoric hut circles which cannot be more closely dated are: Bryher, **PRN 167242**, Shipman Head, **PRN 7278**, Point of Fields, **PRN 7193**, White Island, **PRN 7099.02**, The Bar**, PRN 7374.02**, Porth Morran, **PRN 7095**, Porth Mellon, **PRN 7667**, Samson, **PRN 167329**, Top Rock, **PRN 7197**, Bathinghouse Porth, **PRNs 7364.02/03**.

*Fig 34 Recording intertidal field walls in Green Bay, Bryher in September 1985 (photo: CCC)*

There are also 15 prehistoric occupation sites; Periglis, **PRN 7004.01**, Butter Porth, **PRN 7135**, Great Bay, **PRN 7328**, St Warna's Cove, **PRN 7003**, St Helen's Pool, **PRN 7756**, Pentle Bay (Romano-British settlement), **PRN 7231**, Old Man, Tean, **PRN 7102.02**, Old Man, Tean, **PRN 7102.05**, Little Ganilly, **PRN 7703.01**, Appletree Point, **7309.01/2**, Bant's Carn, **PRN 7641**, Crow Point, **PRN 7675**, Lizard Point, **PRN 7230** Inner Blue Carn, **PRN 7557**. There is also an undated occupation site at Black Porth, **PRN 7701**.

There are 24 prehistoric field systems; Green Bay, **PRN 7386,** a small field system with two round houses on Little Ganilly, **PRN 7703.02**, North and South Hill, Samson, **PRN 7069**, Par Beach (Romano-British), **PRN 7758**, Old Man (Romano-British) PRN 7102.06, Pentle Bay, **PRN 7231.02**, The Bar, **PRNs 7374** and **7374.01**, The Brow, **PRN 7305**, Tresco Flats, **PRN 7340**, West Porth, Samson, **PRNs 7082** and **7102.07**, Samson, **PRN 167239**, Nornour (Iron Age), **PRN 7247.02**, Appletree Bay, **PRN 7340.01** and Appletree Point, **PRN 7309.02**, Bathinghouse Porth, **PRN 7346.01**, Crab's Ledge, **PRN 7345**, East Porth, **PRN 7102.08**, Great Porth, **PRN 7389**,

Great Arthur, **PRN 7222** and **168722**, a linear field boundary on Middle Arthur, **PRN 168690** and three similar boundaries on Peninnis Head, **PRNs 168736-8**.

### 9.4.2 The medieval period

**Early medieval period**

Early medieval occupation in Scilly is distinguishable by the presence of pottery, both locally made grass-marked wares and pottery arriving in Scilly as a result of long distance trade to west Britain and Ireland from Gaul and the Mediterranean, the islands being a convenient point for sailors to land for water and provisions (Land Use Consultants 1996, 22).

Early medieval sites within (or just outside) the study area tend to be ecclesiastical in nature, comprising cemeteries, chapels and sometimes living accommodation eg St Helen's, **PRN 7115**, East Porth, Tean, **PRN 7111**, East Porth on Samson, **PRN 7071**.There is also an early medieval field system at Little Porth, **PRN 7477.03**.

**Later medieval period**

The location of other medieval settlements is revealed by documentary and place-name evidence and pottery scatters. These include Churchtown and Lower Town on St Martin's;

Old Grimsby and Borough on Tresco (and also around the Priory and New Grimsby); Norrard and Southard on Bryher; Periglis and Middle Town on St Agnes; Old Town, of course, Trenoweth, Helvear, Holy Vale, Normandy and probably most of the other existing farms on St Mary's. Medieval strip fields are rare in Scilly, the best example being that south of the road at Lower Town, St Martin's, which is clearly shown on the 1880 OS map but was subsequently sub-divided for flower cultivation. It is tempting on the basis of this and artefactual evidence to push the origin of most modern settlements back into pre-medieval times, possibly to the Iron Age (although less securely in Scilly than in Cornwall). The sinuous character of many of the roads and trackways connecting these settlements suggests that they too have an ancient origin, having been laid out in medieval (or earlier) times (Land Use Consultants 1996, 23). There are no later medieval settlement sites in the study area.

## 9.5 Religious, ritual and funerary

*'All these stories seem to point to a Celtic belief in a land of the dead across the sea, and from Plutarch and Procopius one might guess that the land of shades itself was believed to be off western or south-western Britain. If this be so, it is quite possible that Scilly may have been among the many islands which the western Celts and possibly earlier peoples of the Atlantic coast looked upon as special abodes of the departed.'*

H O'Neill Hencken, *"The Archaeology of Cornwall and Scilly"*

Islands and shorelines are mutable, liminal places, and none are more so than Scilly, which, it could be argued, contains disproportionate prehistoric ritual landscapes compared to the size of the contemporary landmass. The distribution of Scillonian entrance graves seems generally to relate to the original coastline with particular concentrations on Gugh, Samson, the west of Bryher and eastern side of St Mary's. There may be broad comparisons with the density of chambered tombs on the Molène archipelago off the north-west coast of Brittany (Scarre 2001). Thomas has pointed out that the chambers of some entrance graves resemble the shape of a boat and on the island of Middle Arthur in the Eastern Isles there is a cairn containing a perfectly boat-shaped cist built of granite slabs (Thomas 1985, 144).

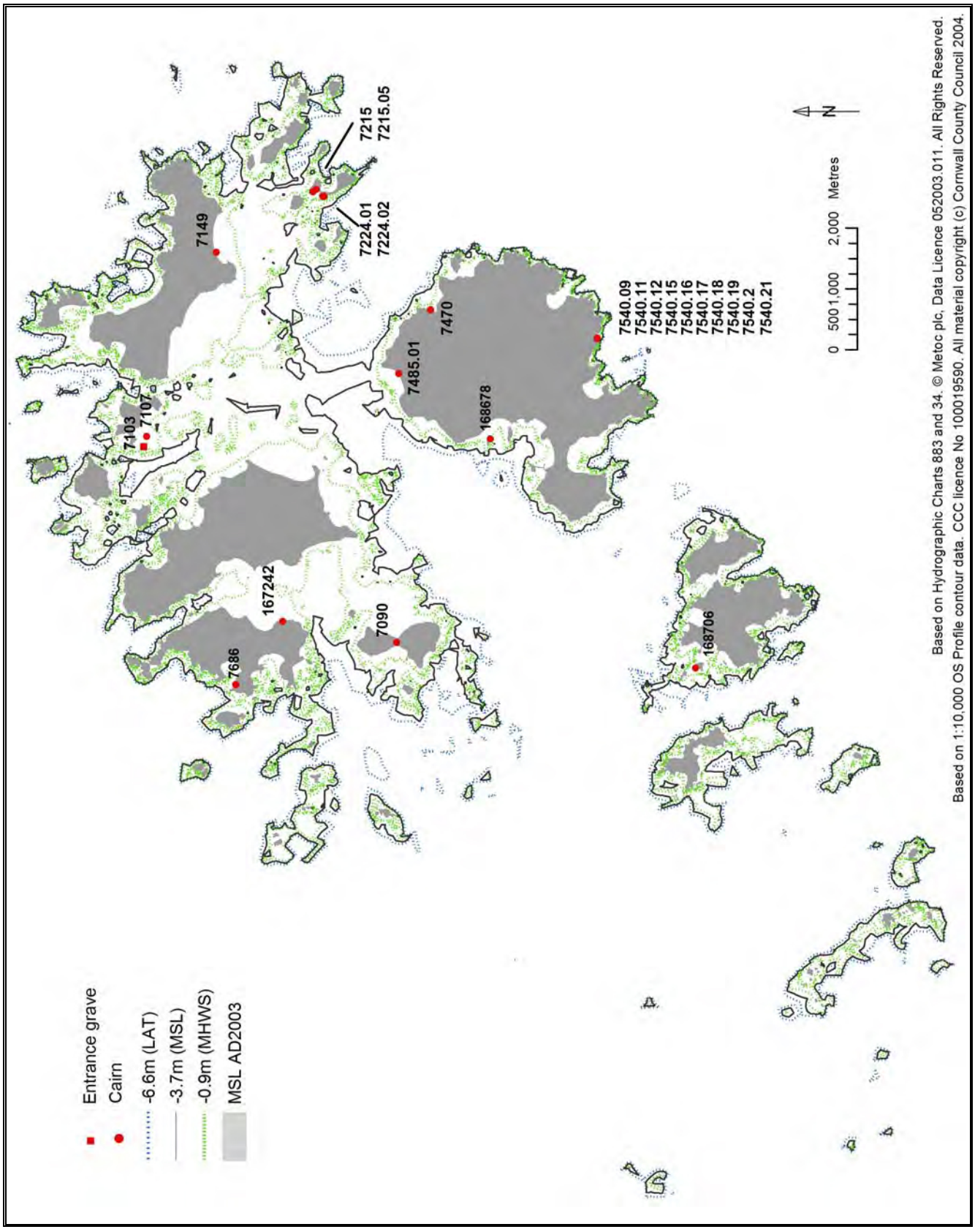



*Fig 35 Distribution map of Scillonian entrance graves and cairnfields*

### 9.5.1 Neolithic/Bronze Age

It has often been suggested that the islands were once some kind of necropolis for the Cornish mainland (eg Hencken 1932) or that their ritual function could have been of a maritime nature, ensuring the continuing fertility of the sea and associated with well-established patterns of voyaging in pursuit of fish (Ashbee 1986, 199; Coate 1994, 45-6).

*Fig* 36 *Kistvaen on Samson by JT Blight, 1862*

Following recent investigation of the construction, siting and orientation of these sites by Mary Ann Owoc has suggested that these monuments could reflect the local geological and visual landscape in which early Scillonian communities dwelled, the entrance graves themselves representing a ritual reworking of the natural world, their distinctive form being understood as 'a product of imaginative and uniquely Scillonian encounters between the community, landscape and the cosmos' (Owoc *et al* 2003, 4-5).

Most of the Neolithic and Bronze Age ritual monuments are situated on higher ground but there is one recorded entrance grave in the study area on low-lying island of Old Man, off Tean, **PRN 7103**.

Visually least impressive, but most common amongst Bronze Age ceremonial monuments are the simple **cairns**, some covering **cists**. Almost four hundred of these survive, the majority in large groups covering the main moorland tracts. At least 18 cairns have been identified in the project area. Eight are on Salakee Down, St Mary's, **PRNS 7540.11-19** (where there are also two clearance cairns, **PRNs 7540.2** and **7540.21**). There is a cairn cemetery on Little Arthur, **PRN 7215**, also a cist, **PRN 7216** and a single cairn **PRN 7125.05**, and a cist in Arthur Porth, **PRN 7216**. Other cairns are on Bryher, **PRN 167432**, Helvear, **PRN 7470**, the Neck of Samson, **PRN 7090**. Three cairns have been identified below the high water mark, one south of Tean, **PRN 7104.01**, another in West Porth, Samson, **PRN 7107**, and one was excavated on Par Beach, St Martin's, **PRN 7147**. A settlement in cliff face at Pendrathen, **PRN 7482**, includes alleged cairn with cist, **PRN 7485.01**. There is the site of a cist at English Island Carn, **PRN 7151**, a kerbed cairn on Taylor's Island St Mary's, **PRN 168678**, a platform cairn on Burnt Island, **PRN 168706**.

The project area also contains a probable **stone alignment** in Scilly, which is sometimes exposed by the shifting sands on Par Beach, St Martin's, **PRN 7660**. Two others have been recorded by Dave Hooley on Castle Down, Tresco (not in the study area). There is a solitary standing stone on Priest Rock, **PRN 7008** and a kerbed boulder north-west of Horse Point, St Agnes, **PRN 168725**.

### 9.5.2 Iron Age and Romano-British periods

During the Late Iron Age and Romano-British period the local burial rite involved contracted inhumation in north-south orientated cists in the south-western tradition. Cist cemeteries have been excavated at Porth Cressa on St Mary's and other cemeteries and individual cists are recorded elsewhere in Scilly, some thirty-two graves overall. Some of the excavated burials contained grave goods such as brooches, pottery and beads. A cist grave discovered and excavated at Hillside Farm on Bryher in 1999 uniquely contained an

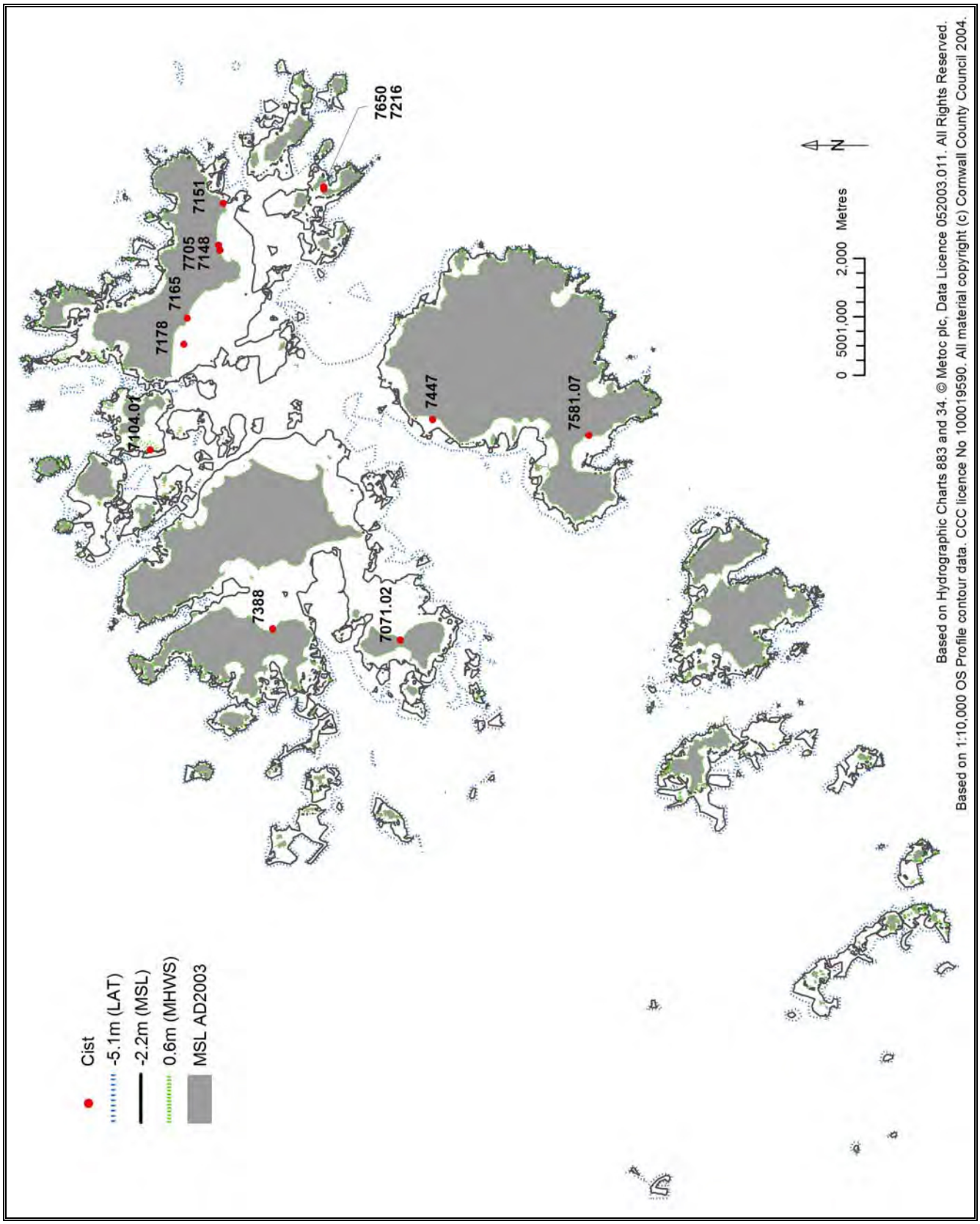



*Fig 37 Distribution map of Iron Age/Romano-British cist graves*

iron sword in a bronze scabbard, a decorated bronze mirror, shield fittings and other items of copper alloy and tin. Skeletal remains from the Bryher cist were radiocarbon-dated to 200±45 CAL BC (Johns forthcoming). In contrast to the Bronze Age monuments these cist burials are low-lying and were located close to contemporary settlements. Burial in a cist may well have been reflective of status, the majority of the dead perhaps being excarnated, a practice that may account for the lack of archaeological evidence for the disposal of the dead in the Early Iron Age.

Eight later Iron Age or Romano-British cists or sites of cists and one cist-grave cemetery have been identified in the project area; Porth Cressa, **PRN 7581.07,** English Island Carn, **PRN 7151**, Old Man, **PRN 7104.01**, a cemetery at Neck of Pool, **PRN 7129**, the site of a cist at Yellow Rock Carn, **PRN 7165**, excavated examples in the intertidal zone at Green Bay, Bryher, **PRN 7388**, and Par Beach, St Martin's, **PRN 7148**. Also a prehistoric cist at Par Beach, **PRN 7705**, the site of one at St Lawrence's Bay, **PRN 7178**, and cists in the small headland between Halangy and Toll's Porth.

Place-name evidence hints at the islands being a cult centre during the late Iron Age (water being one focus of religious practice at this time). Scilly is first mentioned as *insula sillina* by classical Roman writers of the 1st–3rd centuries AD, but the name is of native pre-Roman origin and may incorporate that of a Celtic female deity.

Scilly occupied a very remote position at the edge of the Roman Empire but at the same time a pivotal position on Atlantic façade along the routes of trade and cultural interchange between Brittany and Western Britain; although unlike Cornwall it was not a source of streamed tin. The cultural origins of Roman Scilly are rooted in the local Iron Age but sites can be identified which reflect the cult practices of the wider Roman world.

*Fig 38 Venus figurine from Nornour (photo: Charles Woolf)*

Such sites include Nornour, **PRN 7247.01**. Here the remarkable collection of Roman finds strongly suggests that in its last occupation phase the site was a shrine to a marine deity. The assemblage includes several hundred brooches representing more than fifty different types, coins from the late 1st to the late 4th centuries, glass from numerous vessels, beads, bronze finger rings, miniature pots and fragments of small clay Venus-like Gallic figurines. These objects are clearly votive and Charles Thomas believes sailors travelling between Gaul and Britain could have deposited them. He envisages Roman Scilly as principally a place of pilgrimage dominated by a native marine goddess (Thomas 1985, 170-2; Ratcliffe 1989).

### 9.5.3 Early medieval period

An important result of external trade or other cultural contacts was the introduction of Christianity from the 6th century. Three chapels survive from the 8th – 10th centuries; on St Helen's, Tean and St Martin's. The probable holy well of St Warna also dates to this period. Cist graves of this period, east-west orientated and containing extended inhumations are known to survive below enclosed land, heathland, dune sand and existing settlements (Land Use Consultants 1996, 23). All these sites lie inland from the project area.

## 9.6 Coastal and maritime trade, transport and communications

*'Still, many Iron Age trading vessels must have foundered around the coasts of Devon and Cornwall – it can only be a matter of time before a well-dated example is found complete, let us hope, with its cargo of ingots.'*

Barry Cunliffe, "*The Extraordinary Voyage of Pytheas the Greek*"

### 9.6.1 Prehistoric and Romano-British maritime trade

During the Iron Age and Roman period Scilly was part of an Atlantic 'maritime culture zone'. The south-western British mainland and Brittany were connected by ties of reciprocal exchange involving elements of long distance maritime trade which had commenced by the 7th century BC and developed by the 1st century BC. These trading links with Brittany and also Ireland encouraged connections with the Iberian peninsula and the Mediterranean (Cunliffe 1996, 116) and it is possible that prehistoric Scillonian burial traditions, described in the preceding section, may have developed as a result of continuing contact with other communities on the Atlantic façade.

Cunliffe has suggested that knowledge of La Tène art styles may have been introduced from the Continent to Britain during the 4th century BC by way of two sea routes: to western Britain via Brittany, and to the east coast by way of the southern North Sea (2000, 326-7). If this model is a true reflection of events, Scilly was geographically well placed to be at the forefront of developments. The recent discovery of the Bryher mirror, which is probably the earliest British decorated bronze mirror so far found, and the subsequent reassessment of the mirror from Trelan Bahow near St Keverne, Cornwall, indicates that local Scillonian or Cornish metal workers were playing an innovative role in the development of insular La Tène art (Johns forthcoming).

Recent work on pottery supports this theory. The introduction of South-Western Decorated pottery styles from *c*400BC marks the beginning of the Later Iron Age in Cornwall and Scilly. Virtually all South-Western Decorated pottery contains minerals derived from the gabbroic rocks of the St Keverne area. It is thought that, during this period, pottery in Cornwall was manufactured exclusively on the Lizard peninsula and distributed by increasingly sophisticated and extensive exchange networks (Quinnell 1986, 113-4). Gabbroic pottery is found on most Scillonian sites of this period: Halangy; Nornour; Hillside Farm, Bryher. Pottery styles were previously thought to have filtered in from the east but now the general perception is that South-Western Decorated pottery styles start earlier in Cornwall than elsewhere in the country. At Carn Euny decorative beginnings, with Breton affinities, have a suggested 5th or possibly 4th century date. Similar sherds occur at Trevelgue. Cornwall's cross-channel contacts during the Later Iron Age are further highlighted by the imported Dressel 1A amphora of later 2nd to earlier 1st century BC from Carn Euny (Fitzpatrick 2001, 86).

But Scilly was not only an important maritime station on the trade route, it was also a possible place of pilgrimage … 'In the context of navigation…and for any marine traffic proceeding around the south-west extremity of Britain, *Sillina* as the isles or island of Scilly was probably both well known and important. It could have been a freshwater station, a source of provisions and at certain times a discreet base from which to counter pirates and raiders. Apparently from an early date, the beneficial quality of Scilly as an oceanic station found expression in the shape of a particular religious focus; the insular shrine of a native deity, one to be visited by shipmen…the oldest known name for the whole island group may incorporate the name of that goddess' (Thomas 1985, 172).

It seems Scilly was not necessarily a marginal place in the Iron Age and Romano-British periods, people were living here who could commission local works of fine metalwork and

who were tied into wider sets of trade and ideas, acting as a pivotal point and possibly with a formative role in linking the English Channel distribution of weapon burials and mirrors and the Irish Sea pattern. They had their own vibrant and innovative tradition of La Tène art, similar to other parts of Britain but with apparently distinctive elements.

### 9.6.2 Medieval maritime trade

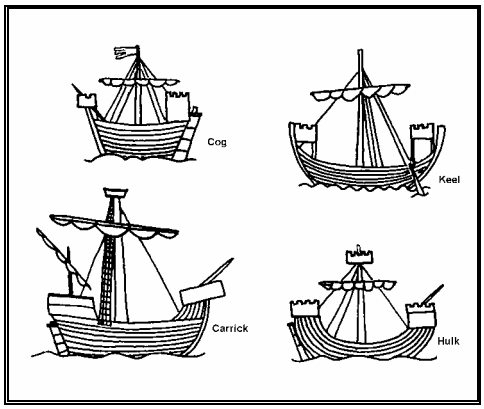



*Fig 39 Medieval ships (after Friel 2003)*

Early Medieval occupation is distinguished mainly by the presence of new types of pottery. As well as local pottery, imported wheel-made wares arrived in Scilly as a result of long distance trade to West Britain and Ireland from the Mediterranean and France. The islands benefited from being a convenient point for sailors to land for fresh water and provisions, exchanged for East Mediterranean amphorae containing wine and olive oil, and barrels of Gaulish wine, accompanied by domestic pottery (jars, beakers, bowls and pitchers). A settlement on Tean may have served as a small trading port for the rest of Scilly during this period. An important result of these external contacts was the introduction of Christianity during the late 5th or early 6th century.

During the later medieval period evidence for the monks of Tresco being involved in long distance trade is provided by a reference in the *Orkneyinga-saga* (a traditional history of Orkney compiled around 1200) to the plundering of one of their merchant ships. Split dried fish and seabirds from the islands may have been exchanged for Cornish pottery, tin, slate and cloth; Breton salt, linen and canvas; Irish cloaks and wood; French wine and pottery; and Spanish wine and fruit. Pottery was also imported from other parts of southern England; Dorset, Wiltshire, Bristol and Exeter. The priory may have collected tolls for anchorage in St Helen's Pool, as well as from Old Town Bay, the *Maríuhöfn* of the *Orkneyinga-saga*.

### 9.6.3 Post-medieval period

#### 9.6.3.1 Packets and passenger boats

The need for regular communications with the mainland grew during the 18th century as the maritime importance of St Mary's developed. The link was provided by open boats at four to six week intervals in summer and longer in winter, sometimes it was worse and Borlase in 1752 mentioned 'seventeen weeks without any provisions whatsoever or intelligence'. The *Prudence and Jane*, carrying essential goods from Penzance to Scilly, was driven by storms to Cherbourg in 1793 (Gill 1975, 145; Chudleigh 1992, 5).

In 1804 a mail service was established with a voluntary payment of 2d a letter, the contract being given to James Tregarthen master of the 30-ton Hope, at the recommendation of the garrison commander. From 1827 the mail was carried by the *Cherub*, commanded by Captain John Tregarthen, and after she was lost in 1837, by the *Lord Wellington*, on which Augustus Smith ha earlier made his first visit to the islands in 1834. The first *Lyonesse*, a sailing cutter started service in 1845, commanded by Captain Frank Tregarthen, who later

took command of the *Ariadne*, a sloop provided by the islanders as a connecting link between Scilly and Penzance. For about two years the *Ariadne* and *Lyonesse* ran in opposition, but eventually the former secured the mail contract worth £300 per annum, running three days a week. On a good day a cutter could make the journey in about six hours, with a light wind it could take all day (Chudleigh 1992, 5).

Coastal steamers on the Cork-London run had been passing Scilly since1823 and excursion steamers calling since 1831. The West Cornwall Steamship Company was formed in 1857, using the steamer *Scotia* for mails passengers and cargo until their new ship *Little Western*, **NMR 858300**, built in Glasgow, came into service two years later. She was 115ft 7in long with an 18ft beam and gross tonnage of 148 tons. In October 1872 she went to the aid of a disabled brigantine but was overcome by a heavy sea and sank on the Southward Well rocks off Samson (Gill 1975, 146; Chudleigh 1992, 5).

The West Cornwall group amalgamated with the Isles of Scilly Steam Navigation Co. and ran the paddle steamer *Earl of Arran*, **NMR 858299**, which was wrecked on Nornour in 1872 (Fig 40). She was succeeded by the *Guide*, the *Queen of the Bay* and the *Lady of the Isles*. The latter was built by Harvey's of Hayle in 1875 and was in service until 1904, when she hit a rock and sank off Lamorna during an excursion trip. Salvaged and repaired she went on to carry out a relief service when the first *Scillonian* (later known as *Scillonian 1*) was away for refit and also helped during busy flower seasons (Chudleigh 1992, 8). The second *Lyonesse* was also built at Hayle for John Banfield in 1888. She towed the sailing ship *Horsa*, **NMR 858998**, off the rocks of St Martin's in 1893, and helped the *Queen Mab* (not listed by the NMR or UKHO), which struck the Spanish ledges. She was sold in 1918 (Chudleigh 1992, 8).

*Fig 40 SS Earl of Arran, a steam packet which ran a service from Penzance to Scilly, grounded on Nornour in 1872. A small part of her boiler is still visible at low water (photo: © Gibson Collection)*

During WWI a succession of trawlers, drifters and a coaster were provided by the Ministry of Shipping to carry passengers and essential supplies to the Islands. After the end of the

war the islanders had to set up their own transport arrangements. The first boat was the *Lapwing*, and then the *Argus*, a former fishery protection vessel, renamed the *Peninnis*. The Isles of Scilly Steamship Company Ltd was formed in March 1920. The first *Scillonian* was built by the Ailsa Shipbuilding Company of Troon in Scotland, she was steam driven, 177ft in length, with a beam of 28ft 6in and a draft of 10ft 6in. With a speed of 12½ knots she could carry 390 passengers and 165 tons of cargo, making her first regular trip on 2 February 1926. She 'did yeoman service' until 1956', amongst many groundings, that on Wingletang Ledges in September 1951 being the most famous. In 1946/7 a new Steamship Company ship, a second *Lady of the Isles*, was built at Poole. *Scillonian* II was launched in 1955; a second ship *Queen of the Isles* came into service in 1965. S*cillonian* III, built at Appledore, was launched in 1977. A Norwegian coaster *Gry Maritha* was bought in 1989 for all-year freight carrying and the *Lyonesse Lady*, a cargo ship for general inter-island service was introduced in 1991 (Chudleigh 1992, 12-102).

#### 9.6.3.2 The 19th century Scilly merchant fleet

The sailing ships built in Scilly in the 19th century were owned by islanders and often officered and crewed by them too. Ownership was divided into sixty-four shares in the English way; command often depended on the investment of the would-be captain. Such investments could be profitable and the best voyages paid 30% to the shareholders. Two shipping companies were formed in the islands. In 1864 the largest fleet of thirteen vessels belonged to the Banfields, but only eighteen of the thirty-five registered vessels in that year were built in Scilly. Cargoes included tea from China, grain from the Black Sea, guano from the Chincha Islands, wool and grain from Australia, currants from the Mediterranean and fish from Newfoundland; voyages could last several years (Gill 1975, 103-4).

The Scilly fleet faded as steamships took over, the last survivors were ketches carrying coal to the islands and other cargoes such as china clay from Fowey or onions from Roscoff. Peat was the main fuel in the islands until well into the 19th century, the coal trade developing from the 1860s (Gill 1975, 104-5).

## 9.7 Coastal industry

### 9.7.1 The kelp burning industry in Scilly

*Fig 41 Kelp pit on Tinkler's Hill (photo: CCC)*

The copious quantities of kelp available on Scilly gave rise to the kelp burning industry, which was introduced to the islands in 1684 by the Nance family from Falmouth who settled on the small island of Tean for several generations. Kelp burning formed an important part of Scilly's economy for some 150 years. The seaweed was collected, dried and burnt in small stone-lined pits close to the waters edge. The obnoxious smelling process produced soda ash, which was shipped to Bristol and Gloucester to be used in the manufacture of glass, soap and bleach. After the Napoleonic Wars, increased foreign supplies of soda ash and new chemical processes for the manufacture of alkali led to the decline of Scilly's industry, which ceased in 1835. Although a hundred fires are said to have burnt at one time, the remains of only a dozen kelp pits are now visible although others become intermittently exposed in section in eroding dune faces eg south of Lower Town, St Martin's (Over 1987; Ratcliffe and Johns 2003, 20-21; Hooley pers comm).

There are nine kelp pits in the study area, three on the Old Man of Tean, **PRNs 7106.01-.03**, two on Samson, at Shag Point, **PRN 7089**, and West Porth, **PRN 770**0 and two on St Martin's, one on Higher Town beach St Martin's, **PRN 7748**, the other on Tinkler's Hill, **PRN 7189**. There is one in Toll's Porth, **PRN 168715**, and four more on Tolls Island just beyond the study area.

### 9.7.2 Shipbuilding in Scilly

Recorded shipbuilding in the islands commenced in 1773 and lasted until 1878, and at its peak in the 1840s there was one yard on Bryher and four on St Mary's (two each on Town Beach and Porth Cressa) employing almost 100 men and apprentices. The first vessel built locally was a 12-ton, 30ft long sloop, the *Happy Return***,** built by a Banfield who became prominent in the trade**,** the last a 170-ton, 101ft long brigantine named *Gleaner***.** Between those dates, 164 craft or vessels were built and launched.

| Yard | Dates in operation | Sloops / cutters | Fishing boats | Schooners |
|---|---|---|---|---|
| Banfield (to 1805) Mumford (to 1873) Gluyas | 1774 - 1891 | 8 | 2 | 19 |
| Tommy Edwards | 1830 - 1878 | 8 | 2 | 17 |
| Stideford | 1829 - 47 | 1 | - | 5 |
| John Edwards | 1840 - 70 | 4 | 3 | 2 |

*Fig 42 Output of the Hugh Town shipyards between 1774 and 1891. The first two shipyards were on Town Beach, the last two on Porth Cressa (from Gill 1975, 100)*

A visitor in 1849 noted that 'the music of ringing blows of caulking mallets sounded continuously through Hugh Town'. The boom in the shipbuilding industry, together with Augustus Smith's reforms in land holding and agriculture contributed to raising the Islands from the depression of the early 1800s. The industry began to decline from the 1860s, and the last deep-sea ship was built in 1891 (Gill 1975, 98-103; Kirkham 2003, 21).

| Decade | Vessels built | Over 100 tons | Total tonnage | Main type |
|---|---|---|---|---|
| 1770-9 | 3 | 0 | 65 | Sloop |
| 178009 | 6 | 0 | 112 | Sloop |
| 1790-9 | 8 | 0 | 279 | Sloop |
| 1800-9 | 4 | 1 | 270 | Sloop |
| 1810-19 | 11 | 2 | 374 | - |
| 1820-9 | 13 | 1 | 515 | Yawl |
| 1830-9 | 37 | 5 | 2,619 | Schooner |
| 1840-9 | 38 | 23 | 4,951 | Schooner |
| 1850-9 | 19 | 12 | 2,633 | Schooner |
| 1860-9 | 12 | 7 | 2,251 | Barque |
| 1870-9 | 7 | 6 | 1,322 | Brigantine |
| 1880-91 | 2 | 0 | 57 | Fishing boat |

*Fig 43 List of ships built in Scilly compiled by Grahame Farr from Custom House registers between 1774 and 1891 (from Gill 1975, 99)*

*Fig 44 Shipbuilding on Porth Cressa, St Mary's c1870 (photo: © Gibson Collection)*

The output of the Scilly shipbuilding industry in the 19th century is remarkable for a small community but not unusual for this period in the west of England and Wales. Comparison with the yearly number of registrations at the thirty-five ports of registration between Milford Haven and Bridport shows that Scilly is fairly consistently twentieth in number of registrations (Gill 1975, 101).

The two shipbuilding yards on Town Beach are jointly recorded as **PRN 7813**, and the two on Porth Cressa as **PRN 7814**. The shipyard on Bryher is yet to be recorded.

### 9.7.3 Limeburning

Demand for lime has come from two principal sources. Firstly, the development of agriculture in the 18th and 19th centuries and the need to neutralise acid soils led to an increasing demand for lime. In particular a shortage of grain in the Napoleonic Wars encouraged landowners to cultivate marginal areas of land and many limekilns were built as a result. Secondly, lime was used in the building industry for creating mortars and for limewash finishes. Lime kilns were usually built near to harbours where limestone and coal to fuel the kilns could easily be brought by sea. By the mid-19th century there was a constant trade was carried on around the south-western coasts by small ships bringing limestone from the quarries near Plymouth or coal from South Wales as ballast.

There may have been a lime kiln in Hugh Town since an early date to produce mortar to build Star Castle and other military works. The 1862 plan of Hugh Town by Capt Williams shows two limekilns, one on Rat Island, **PRN 16789** (Fig 45), the other, outside the study area, at the end of Silver Street, at the back of Porth Cressa beach.

There are no surviving above ground remain of these limekilns.

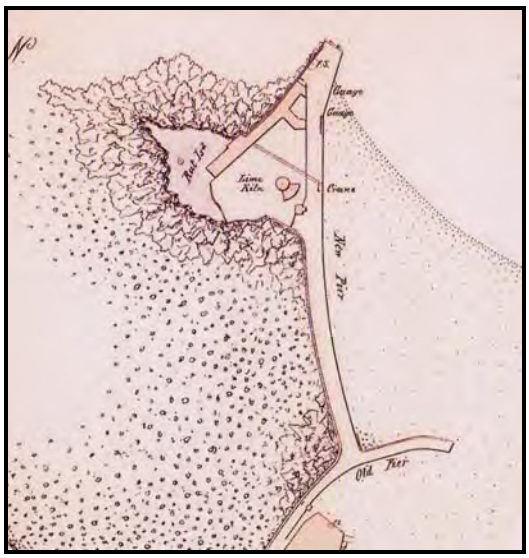



*Fig 45 Extract from the 1862 Admiralty map of Hugh Town showing the lime kiln on Rat Island (UK Hydrographic Office)*

### 9.7.4 Smuggling and the coastguard

Smuggling was a major part of the economy during the later 17th and 18th centuries, and both the Admiralty and the Customs Department had various controls of the coast-watching organisations. The first Custom House was built in Well Lane, Hugh Town in 1696, the second was built in *c*1840 and is now incorporated into the Atlantic Hotel, **PRN 7833**.

Smuggling was made more difficult by the stationing of a protection vessel in the Islands after 1784, and by an Act of Parliament of 1790 that allowed the cost of court proceedings to be met out of the sale of seizure and also allocated revenue officers to keep a small share of the proceeds as an inducement. After this smuggling declined and became a still more risky pastime as a result of the Napoleonic Wars and the formation of the Preventative Water Guard in 1809 that patrolled costal waters to tackle smugglers who had slipped past the existing Revenue Cruisers operating further out to sea. The study area contains two sites recorded in the HER as smuggler's caches, cavities dug into the cliff face or below ground and used to conceal smuggled goods. One, a good example of its type, is exposed in the cliff face on the north-east side of Porth Mellon, St Mary's, **PRN 7569**. The other, named 'Tobaccoman's Hole' is at Pendrathen, **PRN 7640**, although recent monitoring work suggests it is an Iron Age or Romano-British house drain (Hooley pers comm). We know of two Preventative Service vessels that were lost, *Fanny*, **NMR 878623**, in 1820 and another whose name was not recorded in 1821, **NMR 1126055**, also six chasse-mareés, French coasting luggers often used for smuggling or privateering, were wrecked in Scilly during the 19th century.

*Fig 46 Romanticised Scillonian smuggling scene (National Maritime Museum)*

In addition to revenue work the Guard was detailed to assist in lifesaving after a shipwreck and was a forerunner of The Coast Guard formed in 1822 by an amalgamation of the Preventative Water Guard, cruisers and Riding Officers. In 1831 the main island station was established on the Garrison with subsidiary stations at Telegraph and on Tresco, St Agnes and St Martin's with auxiliary coastguards on Bryher (Gill 1975, 113; The Coastguard Agency 1995; Cowan 2001, 13-14). In 1856 the coastguards were transferred to the Customs Department of the Admiralty. The Turk's Head public house, **PRN 7751.01**, at Porth Conger on St Agnes was originally a coastguard house; part of the coastguard station, **PRN 7751**, shown on the 1889 and 1908 OS maps which also comprised a slipway, quay and two ancillary buildings within a levelled area on the cliff top. The two buildings are gigsheds, the *Obadiah & Mary*, which has been restored with grant aid, and the *Gypsy*, which now houses the *Shah* gig. The 1908 OS map also shows a coastguard lookout at Giant's Castle on St Mary's, **PRN 7807**, on the cliff edge within the Iron Age cliff castle.

## 9.8 Coastal fortifications and maritime conflict

### 9.8.1 Prehistoric/Romano-British (to AD 410)

*Fig 47 Rampart of Shipman Head cliff castle (photo: CCC)*

Iron Age cliff castles in Cornwall and Scilly have recently been interpreted as ritual or socio-economic centres rather than defensive sites (Herring 1994, 40-56). There are Iron Age two cliff castles (Shipman Head on Bryher, Giant's Castle, St Mary's, **PRN 7536**) and possibly a third (Burnt Hill, St Martin's) on Scilly. The majority of these three sites lie outside the study area but the north-west rampart of the cliff castle on Shipman Head is exposed and eroding down the adjacent cliff face, **PRN 7276.01**.

### 9.8.2 Medieval (c410-1540)

During the later medieval period the Islands' defences centred on Ennor Castle at Old Town on St Mary's. There are no recorded medieval fortifications in the study area.

### 9.8.3 Post-medieval (c1540-1740)

Since the mid-16th century the defence of Scilly, strategically important as the most westerly anchorage and the first landfall for naval ships and merchantmen, has centred on the Hugh, the southern promontory of St Mary's which became known as The Garrison and which attracted to its isthmus the island's main settlement, Hugh Town, a shift of focus from Ennor Castle in Old Town.

The site was chosen to counter Spanish privateering and invasion threats because it controls deep water channels to Scilly's main harbour. With advice from Robert Adams, England's coastal defence expert, Star Castle was built by the Governor Sir Francis Godolphin for Elizabeth I in 1593. A curtain wall and batteries across the land approach followed with ancillary buildings within, and a quay in the harbour below. Most of the cliff top earthworks and gun platforms date to the Civil War (1642-1651 in Scilly). Scilly was Royalist in sympathies, The Garrison surrendered in 1646, but the islands rebelled to become the last Royalist stronghold, the base for up to '800 men, besides an immense number of officers', before final defeat in 1651. Most of the earthen breastworks and batteries around the main islands' coasts date from this period

During the Spanish Wars between 1715 and 1750 the Garrison was refortified under Abraham Tovey, when the walls were extended round all but the north-west coast, inside the old breastworks, Elizabethan structures were rebuilt and new buildings added.

*16th century defensive sites*

The study area contains the remains of a mid-16th blockhouse at Block House Point on the north-east coast of St Mary's, **PRN 7456**, and Cromwell's Castle on Tresco, erected in 1651-2, is believed to have been built on the site of a Tudor period blockhouse, **PRN 7354.02**. There is documentary evidence of a blockhouse on Rat Island, **PRN 7900.03**.

*Fig 48 The Garrison walls with Hugh Town beyond (photo: CCC)*

*Civil War defensive sites*

The study area includes Civil War breastworks on The Garrison and Normandy Down, **PRN 7235**, Blockhouse Point, **PRN 7364.01**, Dick's Carn, **PRN 7530**, a breastwork **PRN 7510**, and battery on Newford Island, **PRN 168677**, a battery below Innisidgen Hill, **PRN 754.04**, also at Carn Leh, **PRN 7415**, Newman Point, **PRN 7904.21**, while there is documentary evidence of another defending Old Quay, **PRN 7900.02**. There is also a Civil War siegework at Porth Hellick Point, **PRN 7529**, a breastwork and small battery at Gimble Porth on Tresco, **PRN 7299** and a gun emplacement at Inner Blue Carn, PRN **168733**. There are small coastal batteries at Works Point Bryher and at the Green, Bryher that are recorded in the RSM are not in the study area.

*Later post-medieval defensive sites*

Sites in the study area include; Cromwell's Castle on Tresco, **PRN 7354.01**, a bastion outwork at Woolpack Point, **PRN 7904.08**, King Charles' Battery and Garden, **PRNs 7904.02/.01**.

### 9.8.4 Early modern (1740-1914)

During the Napoleonic Wars (1793-1815) the Garrison was rearmed and 'Great soldiery kept up on all the Islands'; stations were built on St Martin's and St Mary's, signalling via ships to posts along England's south coast. A proposed roadstead for men-o'-war in St Mary's Roads, which would have entailed dredging the harbour is shown on a chart of 1808 but was never realised (Fig 49). After Waterloo the Garrison was occupied by army invalid gunners who maintained the barracks and cliff top gardens, but the fortifications with their ancillary buildings were neglected or rented out by mid-century.

During the period 1890 – 1910 the Islands were intended as a signalling and refuelling base in the event of war with France. Scilly was refortified principally by massive batteries and associated works on the summit of the Garrison, which lie outside

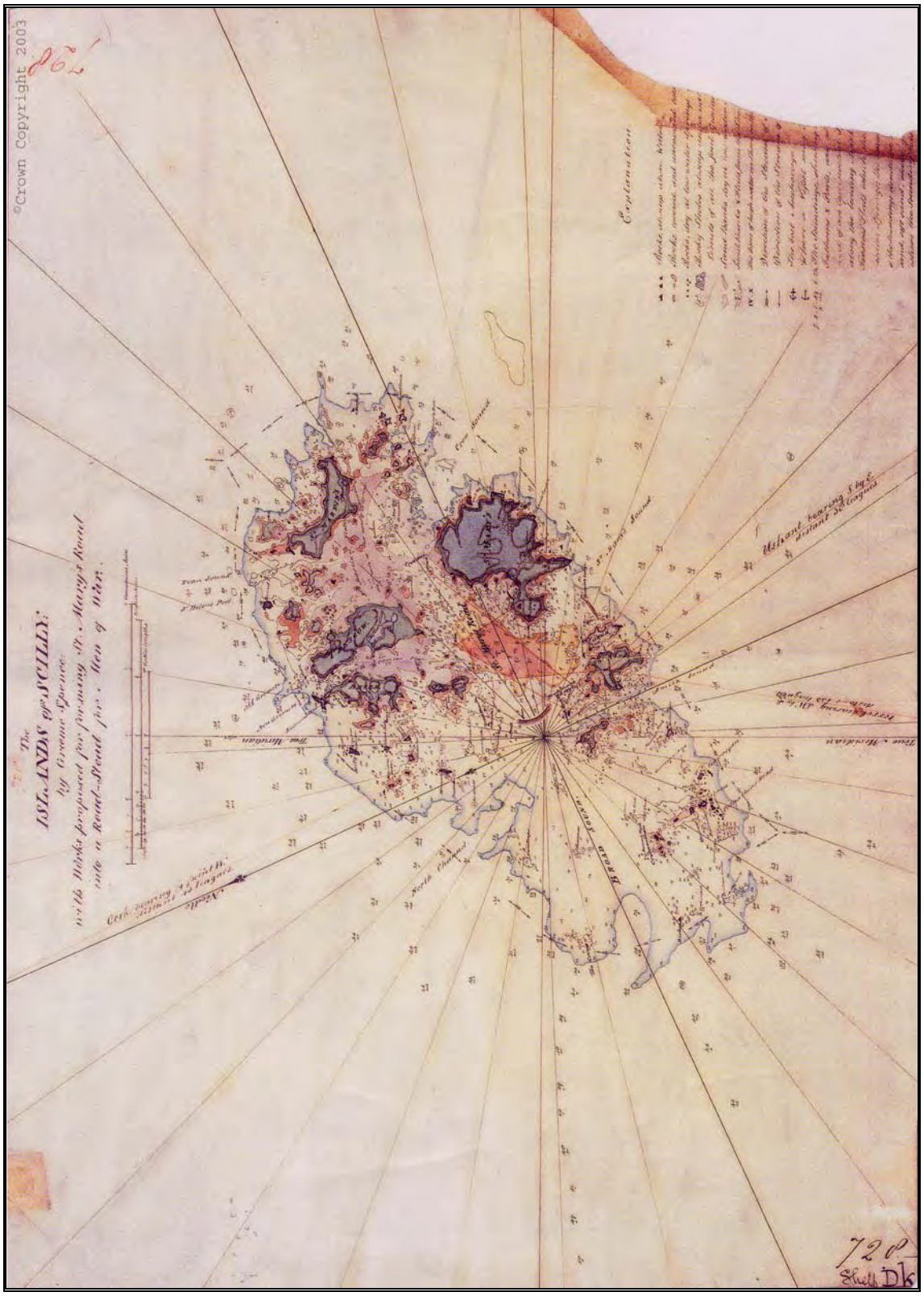



*Fig 49 A proposed roadstead for men-o'-war in St Mary's Roads, 1808 chart by Graeme Spence (UK Hydrographic Office)*

the study area. Within the study area are three DELs (Defence Electric Lights) which were rangefinding searchlights below Steval Point and Woolpack Batteries, **PRNs 7908.02/.03 /.08**. Extending south-east in a straight line across the rocky shore from Southward Well Point, Samson is an extant line of upright stone posts used to calibrate the range finder at Steval Battery – these are the reasons for the slender line running south-east from the Samson scheduled area, now revised (Hooley pers comm).

#### 9.8.5 Modern (1914 onwards)

The Garrison was not extensively remodelled to maintain its defence of Scilly in the 20th century; some of the new works such as a WWI kite balloon observation base and WWII firebreaks and barbed wire entanglements have left very little trace. Adaptions of existing fortifications ranged from the occupation of Star Castle to the skilful concealment of WW2 pillboxes in 18th century batteries such as the Woolpack Battery. Twenty-seven pillboxes were built around the coast of St Mary's, seven of them in the study area: Porth Hellick,

*Fig 50 Pillbox at Pendrathen, **PRN 7799 (**photo: Alwyn Harvey)*

**PRN 7799**, Little Carn, Porth Cressa beach, **166775**, Pendrathen, **7693**, The Bank, **166739**, Carn Thomas, **166745**, Porth Loo, **166752**, and a pillbox and battery at Tolman's Carn, **PRN 7555** (Fig 28). On Giant's Castle, St Mary's is an extant WWII firing target, **PRN 7536.01**.

The study also includes the two flying boat stations (WWI sea plane bases) on Tresco and at Porth Mellon, St Mary's, **PRNs 7767** and **7770**.

### 9.9 Exploitation of marine resources

#### 9.9.1 Prehistory and the Roman period

Fish, shellfish and sea birds have formed a substantial part of Scillonian diet since prehistory. Limpet middens occur with great frequency in the islands and the potential of such middens for the recovery of food remains, particularly bird, fish and mammal bone and shell, is well known in Scilly from sites such as Porthkillier, Porth Cressa and Tean (Ratcliffe and Straker 1996).

Bronze Age occupation debris from settlements reveals that their inhabitants practised a mixed subsistence economy; as well as growing crops and raising stock, they fished, gathered shellfish and hunted wild animals and birds. Cereals such as naked barley and emmer wheat were cultivated, with pulses such as the celtic bean, horse and horn bean. Domesticated animals included dwarf breeds of ox and sheep, and a very small pig with large feet, probably still semi-wild. Fish would have been a major source of protein, preserved by wind drying or salting using evaporated brine. Species caught include pollack, conger, ling, turbot, wrasse, bass, plaice, cod, saithe, sea-bream, gurnard and gilthead; probably mainly caught on lines from the shore or from small boats. Shellfish were used for bait and food, and the shells for decoration. Limpet shells usually make up the bulk of Bronze Age middens (domestic rubbish heaps). Also collected were cockles, dog-whelks,

strand shells, thick topshells, snails and great scallops (useful as lamps). Birds were important for their meat, feathers and oil, and identified species include guillemot, razorbill, raven, goose, gannet, white stork, and possibly swan. Amongst the wild mammals hunted were red deer, horse, pig, seal and dolphin. Whale meat was consumed when carcasses were washed ashore, their blubber and that of seals being melted down to provide oil for lamps.

At least eight species of fish were represented in the small assemblage of fish bones from the Iron Age/Romano-British settlement at Hillside Farm on Bryher; common eel *(Anguilla anguilla)*, conger eel *(Conger conger),* whiting *(Merlangius merlangus)*, pollack *(Pollachius pollachius)*, bass *Dicentrarchus labrax)*, red sea bream *(Pagellus bogaraveo)*, ballan wrasse (*Labrus bergylta)* and mackerel *(Scomber scombrus),* as well as flatfish *(Pleuronectidae)* (Ingrem in Johns forthcoming).

The majority of fish remains from Bryher were recovered from midden deposits containing domestic mammal remains so there is no reason to doubt their anthropogenic origin. Despite the small sample size, a wide range of species was represented, most of which are known to inhabit the inshore zone at the present time. The predominance of these inshore species suggest that the Iron Age/Romano-British inhabitants at Hillside Farm were practising low risk, subsistence level fishing either from the shore using hand lines, nets and/or traps, or perhaps employing small boats. The presence of both cranial and vertebral elements indicates that whole fish were brought onto the site, consistent with the scenario of a community exploiting marine resources in order to fulfil subsistence requirements. Although the Hillside Farm sample is relatively small, comparison with the quantity of mammal remains suggests that fishing was likely to have been an integral part of the economy, supplementing the protein produced by animal husbandry and sea bird exploitation (*ibid*).

Fish remains have been recovered from several sites in Scilly ranging in date from the prehistoric to medieval periods. At Halangy Down, St Mary's a small number of bird and fish remains were recovered from Romano-British midden deposits but unfortunately sieving was not carried out so that the assemblage is biased in favour of the larger species. However, ballan wrasse dominates the assemblage, indicating, as with Hillside Farm, exploitation of areas of rocky ground in the inshore zone. Other species include conger eel, whiting, pollack, sea bream and mackerel and although the sample is biased in favour of large fish, it is comparable to that found at Little Bay and Lower Town, St Martins, Nornour, and Porth Killer, St Agnes indicating a constant exploitation of fish species from the prehistoric to medieval times in the Isles of Scilly (*ibid*).

Sea birds, as well as fish, were deliberately targeted as a food source. Seven sea bird species were represented in the small assemblage from Bryher: manx shearwater *(Puffinus puffinus)*, shag *(Phalacxrocorax aristotelis)*, grey heron *(Ardea cinerea)*, razorbill *(Alca torda)*, guillemot *(Uria aalge)*, puffin *(Fratercula arctica)* and auk *(Alcidae)*. The size of auk bones suggesting they belong to the now extinct great auk *(Alca impennis*); one of them bears marks of butchery. Apparently such coastal assemblages are generally characterised by a wide range of species in relation to the total number of bones. This was the case at Hillside Farm and some other sites in Scilly including the pre-Roman settlement of Nornour, where a variety of species were present including heron, razorbill, guillemot, shearwater, puffin as well as domestic fowl. The habit of seabirds to breed in dense colonies makes them a reliable food source, and they almost certainly formed a considerable part of the diet (*ibid*).

To conclude, the excavated evidence suggests that the prehistoric and Roman inhabitants of Scilly were practising a food procurement strategy, involving the breeding of domestic mammals coupled with low risk exploitation of inshore fish and seabirds which was almost

certainly common practice for people living in coastal and marginal locations to supplement their protein supply. However, as the granite laccolith on which the islands sit is surrounded in places by deep water, it is likely that the former inhabitants of Scilly could catch a range of fish without the need to fish far offshore.

The HER records following prehistoric or early medieval (EM) or medieval (M) or post-medieval (PM) middens in the study area: Bryher – Northward (EM), **PRN 7367**, Little Popplestone (M), **PRN 7680**; St Agnes – Periglis (EM), **PRN 7004.02**, Periglis (M) **PRN 7004.04**; St Mary's – Halangy Porth (Neolithic), **PRN 7444.04**, Plumb Hill (PM), **PRN 7677**; Old Man, Tean, **PRN 7105,** East Porth, Tean **PRN 7111.01** (Romano British).

### 9.9.2 The historic period

Fishing was an important source of food but never a major industry in Scilly, although others have exploited the rich fishing grounds around the islands, as is still very much the case today.

Seine fishing was probably carried since the 16th or 17th centuries. By this traditional Scillonian (and Cornish) method of fishing pilchards and scad (horse mackerel) were taken by a net laid in a half circle from a beach and then hauled into shallow water. In the 18th and 19th centuries, at least, scad and potatoes are reputed to have formed the staple island diet (Gill 1975, 107).

The three St Mary's seine nets were named Friendship, Habnab and Industry. These seines, and those of Tresco, Bryher and St Agnes were shot in turn at The Cove between St Agnes and Gugh, while the St Martin's net was hauled at Ganilly Bar in the Eastern Isles. The catches were salted down and some went for export. The last year of plenty in the islands was 1913 (*ibid* 107-8).

Tovey and Ginver's 1779 'New Chart of the Islands of Scilly' depicts a Palace at New Grimsby, presumably a pilchard 'palace' or fish cellar. New Grimsby Quay is still referred to as 'Palace Quay' (*ibid*, 111) and the row of cottages there is 'Palace Row'.

The Sennen Fishing Company unsuccessfully attempted to establish a seine fishery in Scilly in 1870, but after two years of failure abandoned the attempt (Noall 1972, 129).

The quality of Scilly ling, caught on long lines, dried and salted, was renowned. In 1750 it was recorded that large quantities of fish were caught in spring and summer. Most of it was destined for local consumption, only the best dried ling finding a market in Penzance (*ibid*, 107). A letter of 1803 from Lord Nelson in Toulon to a friend in Plymouth thanks him for his present of Scilly Ling.

During the 1818-30 economic collapse of the off-islands a national appeal raised £9,000 to establish a commercial fishery. A fish cellar was built on Tresco, two 14-ton boats built for pilchard and mackerel fishing and another six repaired. Much money was spent on nets and other equipment but much more may have been diverted to the Hugh Town shipyards. The pilchard business appears to have made a fair start but soon collapsed although briefly revived in the early 20th century (*ibid*, 107).

Limpets and shrimps were largely exported in the later 19th century and less so until WWII. Since then shrimping has mainly been a seasonal leisure activity (*ibid*, 108).

The completion of the London to Penzance railway in 1865 gave a great impetus to the exploitation of Scilly's fishing grounds. From 1869 to the 1890s the Mount's Bay mackerel luggers often landed their catches at St Mary's, as did the ketches and yawls from Yarmouth and Lowestoft, popularly called the 'Yorkies', resulting in at least one famous fishermen's fight in Hugh Town. The fishing prospered with the new flower industry as

the shipbuilding and piloting died. Often there were two or three hundred fishing boats in the islands during this time (*ibid*, 108-9).

*Fig 51 The Mount's Bay fishing fleet in St Mary's harbour c1900 (photo: © Gibson Collection)*

During the 1930s the majority of Scillonian fishermen moved into passenger launches for the tourist trade and local fishing became limited to the catching of lobsters and crabs for the hotels or the Penzance market (*ibid*, 108). Today there are only small-scale fisheries around the Islands, although all the waters are fished. There are currently only 16 commercial fishing vessels in Scilly with some additional potting and fishing by individuals. Shellfish (including lobster, crab and crawfish) constitute two-thirds of the catch.

Evidence for **fish processing** is represented in the HER by only two monuments. Just above the shore on the east side of Old Town Bay is a deep rectangular trough cut out of a single granite block measuring 2.4m long by 0.9m wide by 0.9m high, with sides 0.1m thick, **PRN 7546**. According to Troutbeck (1796) it is was used for salting, when all the fish of the Islands were brought here for curing and stages were erected in the adjoining field for drying fish in the sun, he estimated that the trough will hold eighteen Winchester bushels and was dug from Salakee Down. At both ends the trough's inner faces slope inward. Incisions in one of its outer corners may be associated with lifting tackle.

Excavation of a drystone sub-rectangular building in the cliff face on the east side of North Hill, Samson, produced evidence suggesting that it may be a fish-smoking house, **PRN 7071.11**. Inside was a stone-built furnace 1.2m long by 0.6m wide by 0.9m deep (Ratcliffe 1989, 65).

At the southern end of Appletree Point, just north of Long Crow, there is a long rectangular shellfish bed, bordered with small edge-set stones, which probably represent part of Augustus Smith's unsuccessful attempt to stat an oyster fishery. It lies roughly at LAT level and was photographed by Hooley in 1997.

## 9.10 Harbour and quay installations

*Fig 52 Nornour in 1989 (photo: CCC)*

Thomas considered that the earliest harbour, dating at least to the Roman period, was likely to be on the relatively well-sheltered eastern side of the archipelago, just north of the possible shrine to a marine goddess at Nornour; the main site remaining undiscovered on Great Ganilly or 'below the water, covered entirely by sea-deposited sand and beds of weed' (Thomas 1985, 167). The origin of many of the artefacts recovered during excavations at Nornour point to contact with west Cornwall, Northern France and the Mediterranean suggesting that Scilly held an important position on trading routes and perhaps even had a strategic role in the early tin trade (Butcher 1978; Arbery 2002, 14).

Tradition has it that there may have been a Roman causeway between St. Martin's and St. Mary's, across what is known today as Crow Bar. This was more likely to have been an early stone boundary wall, although Crow Sound was possibly one of the important early ship anchorages.

During the later medieval period there is evidence that the monks of Tresco may have collected tolls for anchorage in St Helen's Pool, which was probably the chief harbour of the islands in medieval times. The harbour at Old Town, St Mary's, although protected by a castle and visible from the open sea was inaccessible to deep-water ships. The harbour, with its medieval quay, **PRN 7549,** was then known as *Porthenor*, 'the porth or landing-place for Ennor' (Thomas 1985, 212). There is a legend that the monks also collected tolls at Old Town quay, hence the name 'Tolman Point'.

With the construction of Star Castle on the Hugh at the end of the 16th century the settlement focus on St Mary's moved from Old Town. First built in 1601, Hugh Town quay is physically and functionally separate from the town but of fundamental importance to it. The structure itself records many of the town's and islands' significant milestones: initial construction accompanied the Elizabethan fortification of the Garrison and created the sheltered landing place around which the settlement formed; then refurbishment in the

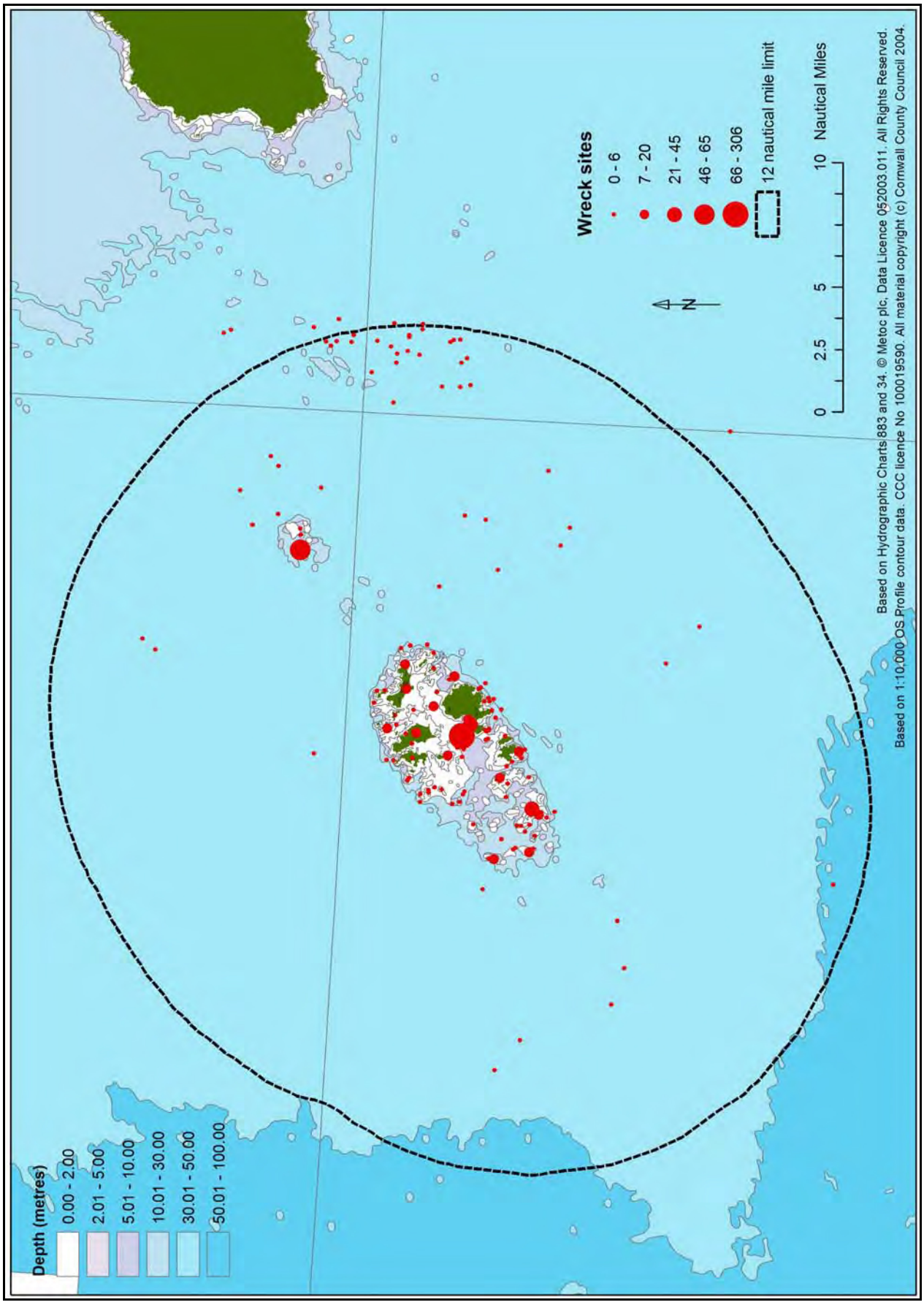



*Fig 53 Density plot of recorded wreck sites in the study area*

1740s was part of a major expansion of the Garrison defences and military presence; the new, much larger deepwater quay was built in the late 1830s testified to Augustus Smith's aspirations for the prosperity of the islands (the curious dressed granite piers at the entrance reputed to have been intended to emphasise his proprietorial control over access); extension in the late 19th century was required to serve the expanding flower trade and widening in the late 20th century to facilitate modern handling methods. The quay structure itself holds evidence of its original construction and successive phases of repair. A number of historic cannon reputed to have come from the wreck of the 18th century warship HMS *Colossus*, have been set into the Augustus Smith quay as mooring posts. Some of these were moved in 1994 during operations to widen the quay but others remain *in situ* (Kirkham 2003).

The following quays, slipways and piers in the study area recorded in the HER are: Bryher – Great Porth, **PRN 7390**, Kitchen Porth, **PRN 7363**; St Mary's - Old Quay (Old Town) , **PRN 7549**, slipway Old Town, **PRN 713409**, Old Quay (Hugh Town) , **PRN 7452**, Toll's Island, **PRN 7646**, two quays on Newford Island, **PRNs 71346/7**, Point of Fields**, PRN 7192**, Pendrathen Quay, **PRN 7489**, a pier at Porth Hellick, **PRN 71360**, slipways at Innisidgen Hill, **PRN 7691**, Pendrathen, **PRN 7362**, and Porth Cressa, **PRN 7647**, New Quay, **PRN 167538**; St Agnes - a quay, **PRN 168707**,and slipway at Periglis, **PRN 7753.02**, Porth Conger, **PRN 71360**, Uncle Tom's Quay, **PRN 7006**, Hole of Cove Vean, **PRN 7668**; St Martin's – The Porth, **PRN 7769**, Old Quay, **PRN 7761**, New Quay, **PRN 7826**; Tresco – slipway at Crow Point, **PRN 71326**, other islands – two at East Porth, Tean, **PRNs 7108** and **7698**, St Helen's (Pest House quay), **PRN 7268.03**, Arthur Quay, **PRN 7213**.

## 9.11 Shipwreck

*'We pray thee, O Lord, not that wrecks should happen, but that if they should happen, that thou wilt guide them into the Scillies for the benefit of the poore inhabitants.'*

18th century prayer attributed to the Revd Troutbeck of St Mary's

### 9.11.1 Introduction

Situated as they are at the junction of the Bristol, English and St George's Channels the Islands present a daunting obstacle to shipping. Low-lying, 45km out into the Atlantic, often shrouded with fog, with navigation complicated by the Rennel current and with hundreds of jagged rocks lying just below the surface of the sea it is unsurprising that they have claimed 771 recorded ships and many more for which there is currently no record.

The earliest mention of shipwreck in Scilly is in 1305 when William de la Poer went to Tresco to take charge of wreck cargo, another shipwreck being recorded on Annet at about the same time (Larn 1999, 8). No other details survive and it is thought that ships were not necessarily identified by names until the 15th century.

The earliest known ship remains so far found in Scilly are those on Bartholomew Ledge, located between St Mary's and St Agnes, in the centre of the main approach channel from the south. The wreck is now considered to be of Spanish-Netherlands origin from about 1597, a speculative date supported by silver coinage and the type and size of ordnance and anchors, but it is a site for which there is so far no documentary evidence.

It not until 1599 that any sort of real record of ship losses commences, and this is sketchy until around 1617, when the first of several East Indiamen were wrecked on Scilly, the extensive records of both the English and Dutch East India Companies providing confirmation and considerable detail regarding these losses.

In the early 17th century a crew of Barbary pirates is said to have passed a whole summer on Great Ganilly after being wrecked in the Eastern Isles (Gill 1974, 38). If true, it is interesting to reflect what archaeological traces such occupation may have left.

There are accounts of 19 vessels lost in the 17th century; seven of these are vaguely described as 'craft', six as 'cargo vessel'. Three are East Indiamen; two English, the *Royal Oak*, 880089 and the *Phoenix*, 880094, and one Dutch, the *Prinses Maria*, 880096; and two are 6th rate ships of the line, HMS *Primrose*, 880108 and *Hind*, 880091, another is a unamed frigate.

Lloyd's List, reporting the arrival and sailing of ships and other information including shipwrecks was first produced in 1734 by Thomas Jemson who owned Lloyd's coffee house in Great Tower Street, a favourite haunt of merchants, marine underwriters and those connected with shipping. Lloyd's Register of Shipping takes its foundation date as 1760, the year the Register Society was formed by customers of the coffee house. The first Register, printed in 1764 for use in 1764-66, was published in order to give both underwriters and merchants an idea of the condition of any vessel they owned, insured or charted.

Of the 189 recorded vessels lost in the 18th century 57 are described as 'craft' (one of these is HMS *Firebrand*, 880998), 81 as 'cargo vessel'; 20 are brigs, nine are ships of the line, one 6th rate, *Lizard*, 880142, one 5th rate, *Julie*, 880202, one English 4th rate, HMS *Romney*, 880103, and one French, name unknown, 880193, two English 3rd rates, HMS Eagle 1082123 and *Colossus*, 1343769, and two French 3rd rates, *Conquerant*, 880200 and *Le Priarus*, 1179511, one flagship man-o'-war (HMS *Association* 21806), one East Indiaman, *Supply*, 880129, three brigantines, two galliots, two cutters, five snows, four sloops, one tender, one fishing vessel, one transport vessel, one privateer, one packet.

In 1836 the report of a HM Government Select Committee to 'Inquire into the Causes of Shipwreck' was published. The report noted that 'many vessels and lives are lost by wreck or foundering at sea; of which no entry is made in Lloyd's books' and criticised the system of classification at Lloyd's which encouraged the defective construction of ships. In 1834, on the recommendations of the Select Committee, Lloyd's had amalgamated with an alternative register, the Red Book, was produced by ship owners since 1799, to become Lloyd's Register of British & Foreign Shipping, the word 'Foreign' being dropped in 1914. The findings of the Select Committee led to the introduction of the first Merchant Shipping Act in 1854 and also to the publication of annual shipwreck statistics, presented to Parliament and published in its Parliamentary Papers. The first Register of Wrecks & Casualties to Shipping was prepared by the Board of Trade in 1851, and then from 1852 to 1856 by the Admiralty before reverting to the Board of Trade who continued to produce annual reports until just after WWI (Larn and Larn 1995, vi-xii).

The post of Receiver of Wreck was created with the Merchant Shipping Act of 1854, although equivalent wreck law has been in existence in England since the 12th Century. Prior to 1993, the function was undertaken by approximately 80 HM Customs & Excise officers, and was part of their other duties. In 1993 the post was centralised and was transferred to the Maritime and Coastguard Agency. The Receiver of Wreck's duties and powers are now found in the Merchant Shipping Act 1995.

From the beginning of the 17th century to the present day there have been an estimated 900 ship losses in total in and around Scilly, the last incidents to date being the modern container feeder-ship the *Cita*, in 1997 and the *Rachel Harvey* in 2000.

There are two general background books about shipwreck in Scilly written by Richard Larn (1993, 1999) as well as the 'Shipwreck Index' complied by Richard with his wife Bridget (1995) and a number of small collections of shipwreck photographs by the Gibsons (1967, nd). The most detailed account of an individual wreck is that of SS Schiller by David Austen (2001). Roland Morris's books about the *Association* and *Colossus* contain imaginative reconstructions of the last moments of these ships (1969, 1979).

### 9.11.2 Main located historic shipwreck sites in Scilly ordered by date

The following are the most important historic shipwreck sites in Scilly that have so far been located:

1 - ***Bartholomew Ledge*** – A Protected Wreck site, the vessel is still unidentified but thought to date sometime after 1555, perhaps to around 1597. It was probably a small, armed, trading vessel of Spanish or Spanish Netherlands origin, which struck this shallow rocky ledge either entering or leaving Scilly. When found in 1974 the site held over 100 'boat-shaped' lead ingots, as well as some 5-tons of bronze bell fragments which regrettably, apart from 2-3 sample pieces, were disposed of as scrap metal. A number of different teams then surveyed the site; finding between 4 and 6 banded iron guns of a small calibre, as well as 3 anchors. With a maximum depth of 15m (45ft) the current licensee, Richard Larn, and a team of three local divers have during 2003 been cutting back the weed over a huge area to determine the extent of the site, since the cannon count has now increased to 14 guns and breech chambers, and it is reasonably certain this was a larger vessel than previously thought.

Currently a Protected Wreck, proposed work on this site will involve a survey in 2004, subject to renewal of the Survey Licence, once the full extent of the site becomes known during the 2003 diving season, and may well take two or three seasons to complete.

2 - ***Black Rock, Pednathise Head*** - An old wreck, unidentified, armed with some 14 iron guns which is scattered down a steep slope ranging from 9m (30ft) to 50m (5165ft). It is not a protected site but possibly should have been when first located in the late 1980s. From finds which included a broken, dated, navigational astrolabe, some 200 four escudo Spanish gold coins, sounding leads and other artefacts, the wreck is judged to be 16$^{th}$ century. No record of finds was made public, no site plan prepared, and it would appear that the artefact material was all sold without being recorded, declared or photographed.

3 - ***Prinses Maria*** - An outward bound Dutch East Indiaman, lost near the Crebinnicks on a rock now known as Silver Carn, in February 1686. Armed with 46 cannon and a crew of 250, all of who were lost, she had a large quantity of silver specie on board. The value of the coin was so great that King James I sent his royal yacht to Scilly to take part in the recovery, which was partially successful. The wreck site was re-located in 1976-7 by divers employed by Rex Cowan, who partially excavated the site, revealing large areas of ship's timbers, a quantity of silver coin, candlesticks, buckles and an intact Bellarmine jar filled with mercury. Rex Cowan retains site plans and diving/artefact recovery records, but it is estimated that less than 25% of the site was excavated. Whilst in only 15m (45ft) depth, the entire wreck is covered with several feet of sand.

4 – ***HMS Association*** - British 2nd rate man-o'-war, 96 guns, 1,459-tons (bm), lost on the Outer Gilstone Rock, about a mile from Bishop Rock, on 22 October 1707. Some 680 crew - all hands, lost along with Admiral Sir Cloudesley Shovell and several gentlemen.. Re-located by Royal Navy divers in 1967, the site yielded four large bronze cannon of French origin, captured in the Battle of Vigo Bay, as well as a number of small bronze cannon. The number of gold and silver coins found will never be known, but ran into many thousands, along with a wide range of artefact material including pewter, buckles, jewellery, sword

handles, brass musket fittings, lead sounding weights and personal items. There was no inventory kept of finds, very little declared, and as a direct result of the shambles that ensued after its relocation, and in particular the use of explosives on the site, the Protection of Wrecks Act 1973 was passed. The IOS Museum has a small collection of artefacts from the wreck, including one ornate bronze cannon of 1604, and one small bronze breech loading swivel gun, which is missing a chamber.

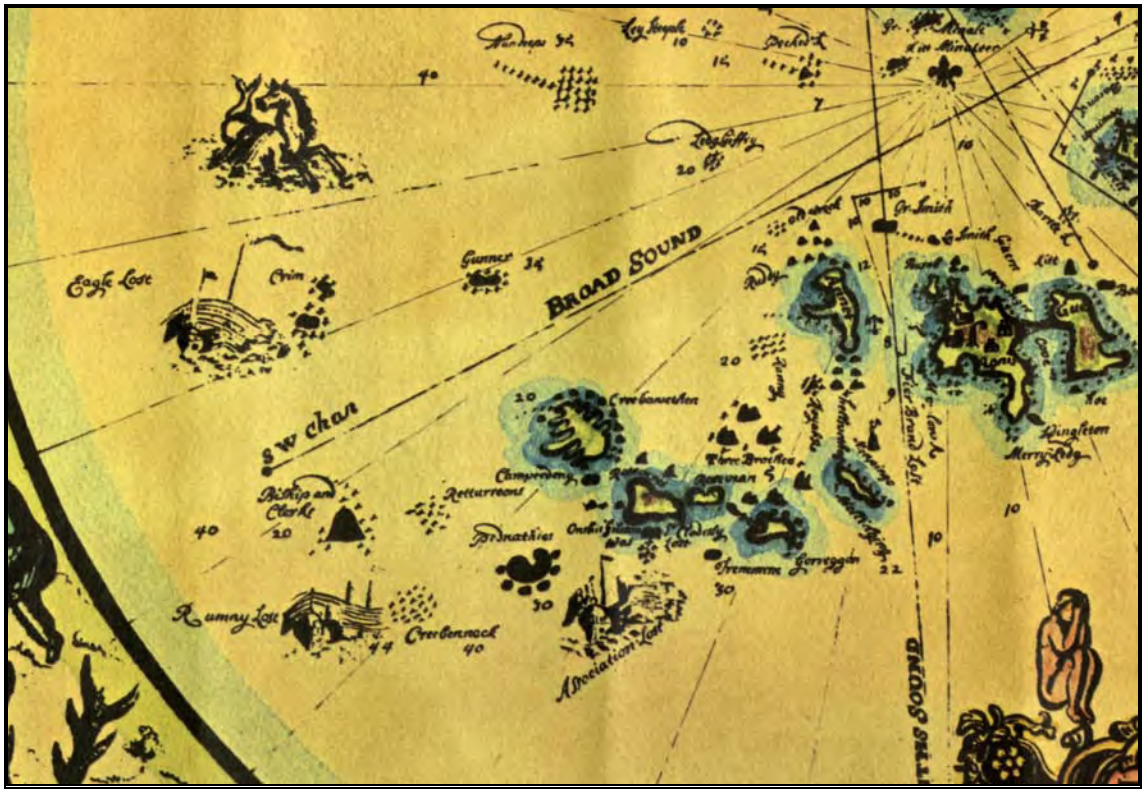



*Fig 54 Detail from Edmund Gostello's c1712 map showing the location of the wrecks of the Association, Romney, Eagle and Firebrand (PRO)*

Most of the original 96 iron cannon remain scattered amongst the rocks, and coins are still being found. The best record of finds from this site can be found in the catalogues of the many treasure auctions held in Penzance, Plymouth and London in the 1970s. The stern section of the Association wreck has yet to be located, and probably broke off in the wrecking process and floated away, to sink in deep water. What makes it certain that the stern section is missing is the lack of bronze pintles and gudgeons holding her rudder amongst the many finds, also hardly any personal pewter tableware was found, ie platters, dishes, porringers, forks and spoons, serving dishes and the like. It is recorded that prior to leaving the Mediterranean on her last voyage before being lost, Admiral Shovell entertained a great many gentlemen to dinner in the great cabin, *'where they ate off gold table-ware.'* Such a dinner service may remain within the missing stern section, along with a large amount of pewter, ornate shoe buckles, personal weapons, navigational instruments and personal effects. Several attempts have been made to locate the missing part of the ship, but to no avail. It is very common for wooden ships to break up and be separated on the seabed; other examples include *Colossus*, *Coronation* and the *Hollandia*.

The location of the wreck is such that it is very exposed to the Atlantic swell, and it is generally accepted that there are on average only 28 days a year when divers could work the site. Depths range from 9m (30ft) to 42m (140ft), the bottom terrain is almost all rock, huge boulders which move around in winter storms.

5 - ***HMS Eagle*** - A 3rd rate British man-o'-war lost the same night in 1707 as the *Association.* Of 70 guns, she too was lost with all hands, some 440 men and marines. She struck on Tearing Ledge, only half a mile from the Bishop Rock, and sank into a deep crevice with her bow to the west. Her guns still lie in an orderly pattern in 40m (130ft), and like the *Association*, the site has, over 35 years, yielded a large amount of specie and artefacts, of which there is no record other than auction catalogues.

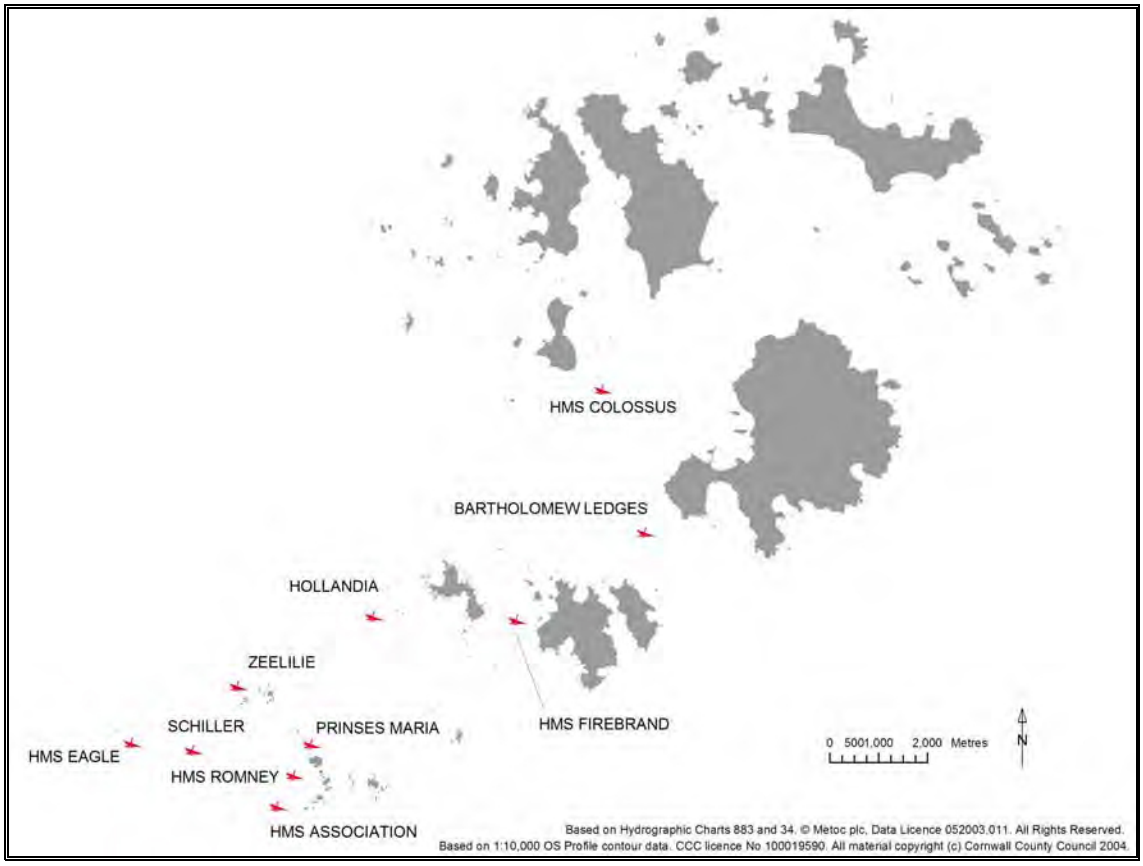



*Fig 55 Location map of known historic wreck sites*

The wreck is protected by its remote location and great depth since divers are unable safely to spend more than one dive of 40 minutes a day on the bottom. Currently a Protected Wreck, known as 'Tearing Ledge'. It seems that no archaeological work has been carried out here since the original survey by Royal Navy divers in 1968 and an unpublished survey of her armament by Peter McBride of Plymouth, over 1982-3 for Rex Cowan. Examples of 'finned cannon' are to be found on both the *Association* and *Eagle* sites, this referring to the longitudinal concretion growths that appear on some iron cannon, as many as three or four on one gun.

6 - ***HMS Firebrand*** - Another of the 1707 fleet which was wrecked on Scilly, this being a fireship of nine guns, carrying a crew of 45 when she drove into Smith Sound, between St Agnes and Annet, sinking on Menglow Rock in 15m (45ft) depth on a sand/rock bottom. The site was not found until 1976, when large areas of ship's timbers became exposed, with iron cannon and artefact material scattered across the site. Large areas of her timbers, decking and frames remain, and she appears to be a 'collapsed' wreck, so that artefactual material is probably trapped between the different deck levels. An intact wooden nocturnal, a rare navigational computing device was recovered from the wreck, also the ship's bell. Potentially an important and well preserved site.

7 – ***HMS Romney*** - A British man-o'-war of the 4th rate, of 54 guns, 290 crew of whom 289 were lost, part of the 1707 disaster along with the *Association, Eagle* and *Firebrand.* The location of this wreck is uncertain, a cannon site found near Pednathise Head may be her remains but nothing has been found to support a positive identification. The Gostello map (Fig 54) shows her on Tearing Ledge and the *Eagle* wreck on the Crim, but these locations are thought to be incorrect. There is little doubt that the ***Eagle*** sank on Tearing Ledge, and that the Crim site is another, much older, smaller, as yet unidentified wreck.

8 - ***Hollandia*** - A Dutch East Indiaman, of the Amsterdam Chamber, outward bound with a crew and soldiers of 246 and 30 passengers, all of whom were lost, when she struck the Gunner Rock in Broad Sound on 13 July 1743 and sank near George Peter's Ledge, off Annet, in 34m (110ft) depth. She carried 129,700 guilders worth of silver specie in the form of Spanish Pillar dollars and ducatoons. Rex Cowan employed divers to locate the wreck using a magnetometer, leading to the finding of the wreck in 1971. Nearly all the treasure was salvaged, as well as a large number of lead ingots, some bronze ship's guns and military mortars, pottery, porcelain, fire-engine components and a wide range of personal items including pewter tableware. Meticulous records of finds were kept and published by the Rijx Museum, Amsterdam in the 1990s.

9 - ***Zeelilie*** - A Dutch East Indiaman, homeward bound for Middleburg, which was part of the last homeward bound convoy of the VOC before it went into liquidation in December 1795. Although escorted by a Dutch man-o'-war, the entire convoy was captured by a fleet of British warships, the *Zeelilie* by the 3rd rate *Sceptre* when off St Helena, in the South Atlantic. The Dutch ships were escorted into Limerick, examined and the largest, the 1,150 ton *Zeelilie*, of 26 guns was despatched for the Thames; but with a very much reduced British crew of 69, it got amongst the Western Rocks of Scilly during the night of 13 October 1795 and was wrecked on the Crebinnicks.

The *Zeelilie's* cargo was all tea and porcelain, valued at the time at £140,000. The porcelain was the largest single shipment ever made back to Europe, consisting of some 300-tons, over a million pieces. The wreck has never been positively identified, but a vast scattering of porcelain shards lying on a sandy bottom in some 45ft(15m) depth, with iron cannon, 12 and 8 pounders lying scattered amongst the rocks, are reasonable proof of identity. The Dutch Government entered into an agreement with Richard Larn and Terry Hiron of St Mary's in 1992 regarding salvage for five years, and in 1998 a concerted search was conducted of the area. Samples of the shards were sent to the Rijx Museum, who dated the porcelain to the years1790-95. An iron cannon raised from the wreck was presented to the Secondary School on St Mary's in the late 1980s.

10 - ***HMS Colossus*** - A 3rd rate British man-o'-war wrecked in a gale on Southward Wells, off Samson, on 10 December 1798. Only one life was lost. She carried Sir William Hamilton's second great collection of Etruscan and Greek pottery and vases, and it is believed that only one crate was recovered intact. The Deane brothers visited the site in 1833 and recovered cannon from the wreck. In August 1974 divers employed by Roland Morris relocated the site and it was designated as a Protected Wreck site. Morris spent three seasons diving and recovering several thousands sherds, sponsored by the British Museum, who now hold the finds in their collection. The designation was revoked in 1984 when the pottery had been recovered.

At some time in the late 1990s or early 2000s a lowering of seabed sand levels in the area uncovered a vast debris trail from where the ship struck, exposing huge areas of deck planking and beams, several 18 pounder cannon breech up, protruding through port side upper deck gunports, and a spectacular area of port-quarter, stern carving, consisting of a 3.3m (10ft) tall neo-classical warrior, almost complete, and the upper part of a stern window.

*Fig 56 Survey in progress on HMS Colossus in 2002 (photo: Kevin Camidge)*

The subsequent history of the site is detailed in the desk-based assessment commissioned by English Heritage (Black 2003) and is very briefly summarised here. There is some debate as to when the stern carving was found, and by whom. The site was re-designated on 5 July 2001 and a licence to survey was issued to Mac Mace on 3 August of that year. A pre-disturbance survey, required by the DCMS as a condition of the licence, was carried out by Kevin Camidge, a freelance marine archaeologist. Mac Mace, commissioned a photo mosaic survey of the site. The Archaeological Diving Unit (ADU) was granted a licence to excavate the stern carving in September and commenced work with the Time Team filming. As the carving began to be uncovered it became clear that it would require more than one season's work. The statue was then recovered ready for the 2002 season by Mac Mace. The results of the first season were published in a report by Kevin Camidge (Camidge 2001).

In December 2001 Mac Mace was granted an excavation licence for 2002, the proposed work was outlined in a project design (Camidge 2002). The main carving was recorded *in situ* and then raised and transported to Tresco in a specially made holding tank, where it remains, immersed in a fresh water cascade environment, awaiting a decision regarding conservation by Mary Rose Conservation Ltd. In September 2002 a trial exploratory trench was excavated across part of the 'new' *Colossus* wreck site. The results of the second season's work were published (Camidge 2002a). English Heritage also commissioned stabilisation trials on the submerged remains (Camidge 2003).

In 2003 the Receiver of Wreck offered the stern carving to the IOS Museum for display, its acceptance being subject to having sufficient resources for conservation, transportation and display. The Museum's trustees are currently looking into the availability of grant aid to assist funding. This stern carving is unique in the British Isles and is a find of international archaeological significance.

11 - **SS *Schiller*** - this liner was 'star of the Eagle Line', built by Robert Napier & Sons in Glasgow in 1872/3 with a gross tonnage of over 3400, measuring 375ft long with a beam of 40ft and a depth of 33ft 6in from keel to gunwale. The Schiller could accommodate 71 passengers in first-class staterooms, 78 in second class and 796 on the steerage deck below with a crew of some 119 officers and men. On voyage from New York to Southampton, the *Schille*r was lost on the Retarrier Ledges on the night of 7 May 1875, while steaming in thick fog and rough weather, the Captain having miscalculated her position. Of the 372 or so passengers and crew, only forty-three survived the tragic night. The wreckage was strewn around the islands; many of the victims were buried in mass graves at Old Town Church. The *Schiller* was carrying about £60,000 of gold specie (at 1875 value). Salvage work was carried out later the same year when six kegs containing £40,000 of gold 20-dollar pieces were recovered, with another £17,712 recovered he following year.

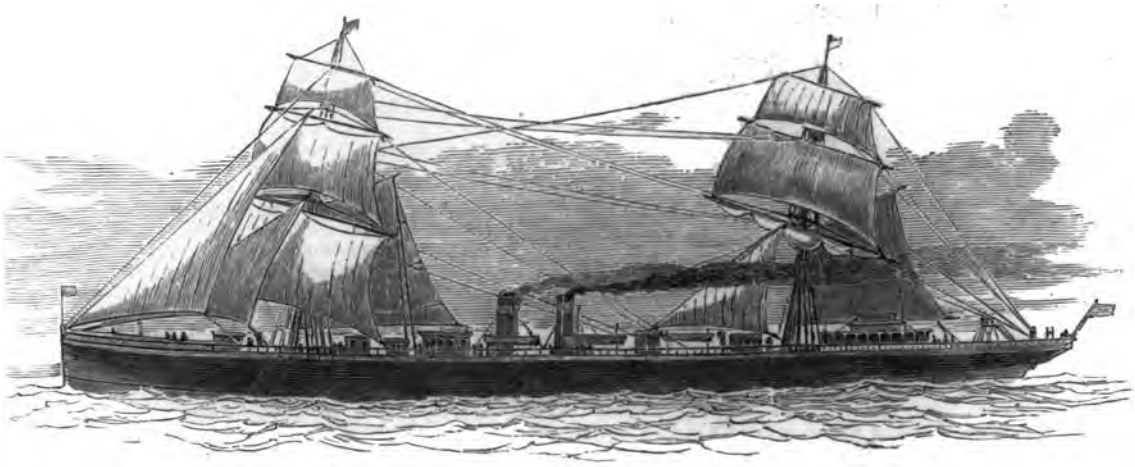


*Fig 57 SS Schiller (© Gibson Collection)*

### 9.11.3 Unlocated known historic wreck sites, ordered by date

There are a number of early named shipwrecks on Scilly that have yet to be located. At least six cannon sites are known on Scilly that have not as yet been attributed to a named vessel and may well be connected with some of the following. The following shipwrecks are 17th -18th century that are potentially of archaeological importance.

***Supply*** - Lost in 1617 somewhere amongst the Western Rocks. An English East India Company pinnace, homeward bound from the Far East, 50 crew, carrying passengers and spices. There is some doubt as to whether or not she was a total loss, since EIC records in the British Library collection mention a *Supply* of 1621, which may be the same or a different vessel.

***Gift of God*** - A Scottish merchant vessel lost on Scilly around 24 March 1636.

***John*** - An armed Royalist vessel, possibly a small man-o'-war, lost on Scilly in 1645.

***Unidentified*** - Two Royalist frigates defending the Garrison were lost 10 May 1651.

***Primrose*** - A 6th rate British man-o'-war, 16 crew, armed with 22 cannon, lost after stranding on the Seven Stones Reef in 1656, and probably lies in deep water.

***Royal Oak*** - English East Indiaman homeward bound on its first voyage to Bantam and the Far East, lost along with its cargo of peppercorns and cloth on 18 January 1665, somewhere amongst the Western Rocks. Armed with 24 cannon.

***Hind*** - British 6th rate man-o'-war, armed with 6 cannon, believed lost on the Crim, 1668.

***Phoenix*** - An English East Indiaman, Bantam to London with peppercorns, silks, cloth and general spices. Armed with 24 guns, she was lost amongst the Western Rocks on 11 January 1680. Cargo auctioned off on St. Mary's.

***Unidentified*** - A transport vessel from the West Indies carrying tobacco, indigo and sugar, said to be wrecked on the Old Town Gilstone.


*Fig 58 Lead boxes from the Association, Firebrand, Schiedam (wrecked off Cornwall) and Colossus. There are eight known examples in the world, all from men-o'-war or naval storeships c1675-1798, four are from Scilly (photo: Richard Larn)*

***Unidentified*** - A merchantman from the Canary Islands, carrying wine and silver specie, wrecked on Rosevear island in 1730.

***Triumph*** - Jamaica to London with sugar and dyewood, and almost certainly armed, she was said to be carrying £10,000 worth of gold specie in bags, much of which was saved. She is said to have been lost on Steval Rock, St Mary's in 1736, but several attempts to locate her remains have been unsuccessful.

***Lizard*** - British 6th rate man-o'-war, 14 guns, lost 'on the rocks of Scilly', 27 February 1748.

***Unidentified*** - Possibly a Dutch East Indiaman, Smyrna to Amsterdam, laden with animal hair, cotton fabrics and silks, lost 'on Scilly' 25 April 1755.

***Gracia Divinia*** - A Spanish vessel carrying cochineal, silks, currants, and silver specie wrecked amongst the Western Rocks 25 October 1758.

***Unidentified*** - Possibly a French 4th rate man-o'-war armed with 36 guns, or a privateer, lost with all hands 'on Scilly', 14 January 1780.

#### 9.11.4 Finds that may relate to historic wrecks

Some ten years ago a local diver found the two halves of a classical amphora jar close to Old Bess Rock. Whether this came from an early shipwreck or had been lost or thrown overboard is not known, the location is remote with deep water close at hand.

In 2001, Mark Groves found by chance two triangular, holed, stone anchors, one weighing some 50kg (112lbs), the other around 101kg (24lb) off Old Town Bay. Further exploration of the area revealed a large number of grooved stone anchors or fishing tackle weights scattered amongst large rocks in an average depth of 15m (45ft). In Cornwall these stones were traditionally called 'strop-stones' or 'killicks' (Morton Nance 1963, 102, 155). There was no pattern to the scatter, except that it was confined to an area approximately 24m by 24m. Mark Groves raised the two stone anchors as well as some 34 of the strop-stones and arranged them in his garden along a wall (Fig 59), it is estimated that there are a further 40-50 still remaining on the seabed. It is impossible to date these anchors, neither is it clear that these were carried in one vessel that was wrecked entering or leaving the harbour at Old Town or whether they were moorings which came adrift over a period of time.

*Fig 59 Stone anchors or fishing tackle weights (strop-stones) from Old Town Bay (photo: Richard Larn)*

### 9.11.5 Protected war graves, deep water shipwrecks and World War losses

There are probably only six vessels within the study area which fall into the category of War Graves, these being the USS ***Jacob Jones*** (sunk 3.8.1914), the German submarines ***U-681*** (11.3.1945), ***U-683*** (12.3.1945), ***U-480*** (24.2.1945), and possibly HM Destroyer ***Pincher*** (24.7.1918), since it is uncertain if there was any loss of life on this Royal Navy vessel. All of these lie in deep water, in excess of 61m (200ft), and are not easily accessible. Divers located the remains of the ***U-681*** in 1999 using mixed-gas, confirming her identity by recovering a rubber dinghy and a pair of leather overalls from outside the wreck, which lies at a depth of 70m (230ft).

### 9.11.6 Comparison of the latest UKHO wreck print out with that of 1992

The most up-to-date report on known wreck sites in and around the Isles of Scilly supplied by the UKHO was obtained by the Historic Environment Service, and its content compared to a similar print-out dated 1992 by Richard Larn. In the interval of 10 years new surveying information has become available, supplied by Royal Navy survey work, fishermen and divers. Within the 12-mile zone under consideration the Hydrographic report currently lists 178 bottom contacts, which can be broken down as follows:

a. A total of 88 of these contacts have been downgraded and are now classified since 1992 as 'dead', meaning that they were mostly fisherman-reported 'fasteners' or suspected wrecks, which following re-examination using more modern electronic equipment, are now considered to be natural seabed features or random wreckage and debris.

b. Of the 90 remaining contacts, 78 are well known recorded wrecks, many of which are regularly dived, and includes 9 unidentified deep-water contacts which are certainly wrecks, all of which appeared in the 1992 print out.

c. That leaves 12 new contacts in the 2003 print-out, of which 3 are now known to be abandoned anchors.

d. The remaining 9 contacts are new, definite shipwrecks, which have been examined by Hydrographic survey and divers but do not appear to have been identified as yet.

## 9.12 Salvage

### 9.12.1 A-shoring

Locals traditionally referred to retrieval of wreckage from the foreshore and rocks as 'a-shoring' rather than wrecking. Daniel Defoe wrote of his visit to Scilly in 1724, *'…the sands covered in people, they are charged with strange bloody and cruel dealings, even sometimes with one another, but especially with poor distressed seamen who seek help for their lives and find the rocks themselves not more cruel and merciless than their prey.' (Larn 1993, 11-12).*

Thirty-two years later Dr Borlase saw islanders stripping the clothes of the back of a shipwrecked mariner found half drowned on the foreshore, the man being lucky to escape with his life; yet in the 19th century the islanders made many valiant attempts to rescue the victims of shipwreck, and when a shipwreck occurred a fleet of small boats and gigs would be launched to help the stricken vessel, often at their own peril. After ensuring the crew were safe and if the ship had not sunk the islanders would board the vessel and claim as much cargo and ships' fittings as they could remove. The variety of cargoes carried on ships was immense; food, timber, paint, flour, soap, clothes, iron, wire, leather etc, and all could be put to use, bartered or sold (Larn 1993, 12; Over 1993, 55).

The first person to bring news of wreck to the receiver at Hugh Town was rewarded with five shillings, and often relatively large sums of money would be awarded by the owner of a derelict or damaged ship towed in and saved, which would be shared between those responsible. For example the schooner *Strathisla* was saved in 1880 after being abandoned by her crew and for getting the vessel into St Mary's, the pilot gig *Bernice* and the pilot cutters *Atlantic* and *Presto* were awarded £48, and for saving the crew the gig *Agne*s received £15. When the SS *Castleford* was lost on the Western Rocks in 1887, £12.11s went to St Agnes for saving 18 cattlemen and £500 to Bryher men for the rescue and care of 64 passengers and four stewardesses plus £5 for every head of cattle saved and £1 for every corpse buried on the foreshore. These were considerable sums of money for the Scillonians and many families literally earned their living from the sea in this way (Larn 1993, 12-13).

### 9.12.2 Early salvors

The earliest historic salvage diving appears to have taken place around the Crebinnicks, near Silver Carn. Here in February 1686, the Dutch East Indiaman *Prinses Maria* came to grief. Of 1,140-tons, belonging to the Amsterdam Chamber of the Netherlands, she sailed from the Texel for Batavia on 4 January with a crew of 250, and a very large consignment of silver specie, sufficient to cause the King of England to send his royal yacht to recover the treasure, which lay in 15m (45ft) depth. What apparatus these divers used if any is not recorded, it was possibly a diving bell, with severe limitations regarding depth and

movement. Often 'long tongs' were employed to raise material from wrecks, and an example of these can be seen in the Fraggle Rock pub on Bryher.

The next salvage attempt the Herbert expedition, concerned with the wreck of the man-o'-war *Association*, and reported in the *London Letter* of 9 July 1710;

*'We hear from Scilly that the gentlemen concerned in the wreck of Sir Cloudesley Shovell's ship have taken several iron cannon, seven brass guns with a cable, and have found the Association in 4 fathoms of water (7.3m/24ft) of water at low tide, the hull of the ship being whole wherein there is vast treasure. The Queen's plate, several chests of money with great riches from the Grandees of Spain. The divers go down in a copper engine and continue two hours underwater, wherein they have also met with the fireship cast away at the same time as the Association [this was the Firebrand]. Had not the seas been so very high and boisterous all the treasure before this, (would) have been fished out.'*

Another reference to diving and salvage in Scilly, almost certainly on the *Association* wreck, comes from Daniel Defoe's *Tour of Great Britain*, published in 1724:

'*Here also is a further testimony of the immense riches to be found which have been lost several times upon this coast, we found several engineers and projectors; some with one sort of diving engine, and some with another; some claiming such a wreck, and some such and such others; where they alleged, they were assured there were great quantities of money; and strange unprecedented ways were used by them to come at it; some, I say with one kind of engine, and some another; and though we thought several of them very strange impracticable methods, yet, I was assured by the country people, that they had done wonders with them under water, and that some of them had taken up things of great weight, and in a great depth of water; others had split open the wrecks they had found, in a manner one would have thought not possible to have done, so far under water, and had taken out things from the very holds of the ships; but we could not learn that they had come at any pieces of eight, which was the thing they seemed most to aim at, and depend upon; at least they have not found any great quantity, as they said they expected.'*

It is known for certain that the wooden diving 'engine' apparatus invented by John Lethbridge of Newton Abbot in 1740, was brought to Scilly in 1743-4 in an attempt to recover the silver specie lost in the wreck of the Dutch East Indiaman *Hollandia*, sunk in 1743 in 30.5m (100ft). Thus Lieutenant Robert Heath, a military officer in the Star Castle Garrison on St. Mary's recorded in his *Account of the Isles of Scilly*:

*'About the year 1743, a Dutch East Indiaman, outward bound was lost off St. Agnes in about 20 or 24 Fathoms of Water, with all the people. Their firing of guns, as a Signal of Distress, was heard in the night; but none could give them Assistance. Many of their Bodies floated ashore at St Mary's and other Islands, where they were buried by the Inhabitants, and some were taken up floating upon the Tide and buried.*

*'A Dutch Lady with her Children, and Servants, going to her Husband, an East India Governor, was prevented seeing of him by this unhappy Accident. A Diver thereupon was sent, by the Dutch Merchants, to discover and weigh the Plate of considerable Value. But the Tide running strong at Bottom, and the Sea appearing thick, the Diver could not see distinctly through the Glass of his Engine so returned without Success. This wreck still remains as a Booty for those who can find her.*

*'The Figure of the Diving-Engine (made of thick Planks, bound together with Iron Hoops, and headed at the Ends) was a Tapering Vessel in which the Diver was plug'ed up, with as much Air as could be blown into it with a Pair of Bellows, at the Time of his going down. His naked Arms went out at a couple of round Holes, next the biggest End; being exactly fitted to them, wrapt round with Neats-Leather, to keep out the Water. Lying flat on his Face, with his Legs buckled down with Straps to keep him steady, he looked through a Piece of round Glass, fixed right before him, in the Side of the Engine, of about six Inches over, and two in Thickness. Thus he descended by the Force of Weights fixed to the under Parts of the Engine. He carries a Life-Line in his Hand, which he pulls hard upon, when he feels too much Pressure, or wants to be drawn up. This Engine is likewise supported with Hoops on the Inside, to counter-*

*act the Pressure of the Water without, in great Depths. The biggest End of it, where the Diver enters, is made to take off, being fitted with Cross-Bars and Screws, to support it, when duly fixed. A Plug-Hole at the upper Convexity, lets in fresh Air when the Diver is drawn up; for at being opened, the confined Air rushes out. This Plug saves the trouble of taking off the Head of the Engine, to give fresh Air at each Time of drawing it up.*

*'Several Wrecks are remembered coming a-shore among these Islands, which would be tedious to describe in all their dismal Circumstances, and therefore I shall add but little more on the Subject; but shall observe that the People of Scilly are not such Gainers by Wrecks as some have imagined; for what they get out of the Sea they only enjoy a proportionable Part for Salvage; the rest belonging to the Proprietor, or perhaps to the Merchants. And as there is a military Command, and civil Power in the Islands, these Rights are duly looked after, for the persons to whom they properly belong. What is saved at the Hazard of Lives from the Devouring of the Sea, the Salvors are, by Right of Nature, as well as of Reason, entitled to a Share of: the present Agents Business being to distribute Justice in that Respect. A dead Whale came a-shore Anno 1745 among the Off-Islands, by which the Inhabitants of Tresco, Bryher, &c. were benefited in the Sperma Caeti, sold for Six-pence per Pound' (Heath 1750, 55-6).*

### 9.12.3 The first helmet divers

The first recorded use of helmet diving apparatus on the islands as opposed to diving bells concerned the wreck of the 121-ton brig *Hope,* which had gone ashore on the north side of St. Martin's on the January 1830. Homeward bound from Africa to London, she carried passengers and a valuable cargo, which included 300 elephant tusks, pepper, silver dollars and two boxes of gold dust. John Deane arrived in Scilly in 1832 accompanied by William Edward of Whitstable, Deane's friend and partner, now owner of the 47ft diving vessel *Mary Ann*, and Thomas Gann, the ships previous owner, whose family later built up the most successful diving organisation on the River Thames. They brought with them Deane's new rigid helmet apparatus, the forerunner of the 'standard' copper diving helmet and twill suit used world wide for at least the next 120 years. A measure of their success was recorded in the Kent Herald of 28th November 1832:

*Fig 60 Watercolour of three cannon raised from HMS Colossus by John Deane (Portsmouth Archive)*

'The Diving Bell - The apparatus prepared by Mr Deane of Ramsgate has recently been used to great effect by himself with Messrs Edward and James Bell of Whitstable who have just returned from a cruise on the *Mary Ann* of Whitstable. They have rescued a considerable portion of the cargoes of the *Enterprise* of Liverpool sunk off Ireland in 1813 and the *Hope* sunk off the Scilly Isles in 1828 close to where Sir Cloudesley Shovell was wrecked. Is it not a matter of some consequence that the directors of some insurance companies should be made aware of the existence of such facilities for the recovery of lost property?'

During this, his first visit to the Scillies, he enquired into the wreck of HMS *Colossus*, lost in 1798, and having returned to Ramsgate and Whitstable came back to the islands in 1833 to carry out further salvage work:

*'It is now 35 years since this vessel [Colossus] was wrecked in St Mary's Road, Scilly. A few weeks since, two young men (brothers) were there with a diving apparatus of a new construction, and succeeded in bringing up several pieces of cannon, etc. from the wreck. The following extraordinary fact merits investigation: one of the guns exploded on being struck with a hammer, while lying near St Mary's Quay, and the wadding etc. fell on Rat Island. Master Gunner Ross was severely injured in the leg by the accident (Hampshire Telegraph November 1833).*

On 16 October 1833, at the end of the diving season, the Admiralty noted that Mr T Leman of the Customs House at St Mary's reported John Deane as having landed into his charge 17cwt of sheet copper and nails (sheathing) which he had recovered from the wreck of the *Colossus* (PRO ADM 12 /1291 /31 .1).

On 21 November, the Admiralty recorded further correspondence with John Deane, from the brothers' office and workshop in Whitstable, 'respecting guns recovered from the *Colossus*' (PRO WO 45/204). Leaving his brother Charles diving in London docks on more 'bread-and-butter' work, John favoured treasure hunting further afield, and his expedition of 1833 took him not only to Scilly but also Donaghadee in Ireland.

There is no written record of Deane's recoveries, only a watercolour sketch, now held by Portsmouth Museums and Record Services, of items recovered from the *Hope* and Colossus including three cannons, a gold doubloon, a 1m long gold chain, some gold nuggets, a silver fork and a chased gold reading or eye-glass (Fig 60).

The last recorded use of the Deane brothers diving apparatus at Scilly was in March 1841, following the tragic loss of the London-Dublin steam packet *Thames* of 4th January that year. She went ashore at 5am, having lost her way in heavy seas and snow squalls, mistaking the St Agnes light for the Longships. She drove ashore on Jacky's Rock, near Crebawethan, west of Annet, where of the 62 passengers and crew aboard only four were saved. The Royal Cornwall Gazette of 19 March reported:

*'The weather having proved fine within the last few days, Deane's diving apparatus has been employed on the wreck of the Thames steamer. Only one of the chain cables and a few other articles have yet been brought up; but should the weather continue fine it is very probable that some parts of the engine will be recovered. It is likely that the operation was carried out under the instructions of the insurance underwriters.'*

It is likely that this salvage work was conducted by William Edward, John Dane's partner, since on the 10th March John was delivering a lecture to the Portsmouth and Portsea Library and Philosophical Society on the invention and principles of the diving equipment developed by him and his brother.

Divers were of course employed on Scilly during the building of the first Bishop Rock lighthouse, designed by James Walker, commencing April 1847. Work on the short-lived cast iron structure was well advanced by the time Queen Victoria and Prince Albert visited the islands that August on board the Royal Yacht *Victoria & Albert,* whilst on their way to Scotland. The Royal Cornwall Gazette reporting:

*'Scilly Islands. Interesting discovery. Sir Cloudesley Shovell's ship's guns, about 30 in number, and several round and cross-bar shot, were seen on the 17th instant near a rock called the Gilstone, to the westward of these islands, by a diver belonging to the cutter Argyle of Jersey, Captain Masters. He states that two of the guns could be raised with ease, but the remainder are covered by a rock apparently of about 30 tons weight,*

*which must have fallen upon them. He recovered two roundshot of about 24lbs each, and a crossbar shot of the same weight.'*

How many visits these divers made to the wreck of the *Association* on the Gilstone, the *Eagle* on Tearing Ledge, nearer the Bishop Rock, or the *Firebrand* in Smith Sound, between St Agnes and Annet is not recorded, but there can be little doubt that they recovered coins, artefacts and possibly bronze guns from some or all of these sites.

#### 9.12.4 Commercial salvage, the Western Marine Salvage Company and Risdon Beazley


*Fig 61 Diving on the SS Zelda c1900 (photo: © Gibson Collection)*

Apart from salvage work on the SS *Schiller*, treasure hunting by divers then seems to have ceased for some 45 years, with the next notable event being the creation of the Western Marine Salvage Company in 1895. Between the loss of the steamship *Thames* in 1841 and the formation of the Penzance-based salvage firm, there were 137 other shipwrecks around the islands, nine of which were steamers, and it is likely that the loss of these plus the liner SS *Schiller,* with its valuable cargo precipitated the formation of the organisation. The activities of the Western Marine Salvage Company are well recorded in West Country newspapers, and using standard diving apparatus, there was hardly a wreck on Scilly they failed to visit, as they engaged in very profitable towage, cargo recovery and scrap metal salvage. Their work depth was restricted to less than 46m (150ft) by the constraints of rigid helmet air diving and the non-availability of a compression chamber to treat pressure related diving illnesses (the 'bends' and embolisms) which were still not fully understood. Their specific interest was cargo recovery from shallow wrecks, with a secondary interest in scrap metal, both ferrous and non-ferrous, particularly whole engine blocks, boilers, winches, anchors and cable. At that time there was a ready and lucrative market for scrap iron and steel. The company went into voluntary liquidation on 6 June 1929.

Risdon Beazley Ltd, a Southampton based commercial salvage organisation which operated from 1926 to 1975, and was the forerunner of the Royal Navy's Admiralty Salvage Unit, investigated almost every shipwreck in English Channel Western Approaches (including Scilly). Their area of operation was down to a salvage depth of 309m (1,020ft). Their sole interest was the recovery of valuable cargoes such as copper, brass, antimony, tin, rubber etc. They seldom recovered non-ferrous ship's fittings or bronze propellers, and specialised in the destructive technique of 'smash-and-grab', employing a manned observation chamber, large quantities of explosives and a surface operated grab. The company did not

encroach on the shipwrecks being worked by the Western Marine Salvage Company, and as far as is known never touched any of the stranded wrecks on Scilly, confining their recoveries to deep water.

### 9.12.5 The first sport divers

The aqualung (compressed air diving equipment) became commercially available in about 1950, enabling diving to a depth of 20 fathoms, and a number of diving clubs and schools were formed in Britain and abroad.

Sport diving first came to Scilly in 1956 when a professional archaeologist and amateur diver John Dunbar, and friends, organised a two-week diving expedition to Scilly, based in a large wooden shed near the New Inn on Tresco. This group was almost certainly the first of the sport divers to explore the islands. They explored Southward Wells for remains of HMS *Colossus*, examined sunken walls off Samson and St Helen's, found several modern shipwrecks with the help of local boatmen, collecting marine biological samples as they went along. Their only underwater archaeological find appears to have been some Bronze Age worked flints, found off St Helen's.

Sport diving by islanders seems to have commenced in about 1960 when Geoff and Pam Coldwell moved to Scilly from Huddersfield and started a holiday diving business named Sea Sport, which lasted for only three seasons Based in Garrison Lane in what is now a bookshop, they took out visiting divers, hired and sold diving equipment, charged air cylinders, sold sea urchins and undertook minor salvage and inspection tasks mostly for the RNLI. With an old ship's lifeboat and a 'raft' made up from aircraft drop-tanks fitted with an outboard engine, they engaged in scenic diving only.

Between 1964 and 1971 a notable character on the local diving scene was Douglas Rowe, from Penryn, who worked with Roland Morris' team on the *Association* between 1967 and 1969. He lived in a converted steel ship's lifeboat which he moored over the top of wrecks while he methodically stripped them of non-ferrous metals using explosives and hand tools. Apparently the yard of the Queen's Warehouse, attached to the Custom House on St Mary's, was frequently stacked head high with scrap copper and brass fittings which he had declared to the Receiver of Wreck.

### 9.12.6 The revival of treasure hunting

In 1963 the Royal Navy diving club (NAC-SAC) decided to make a project of searching for the wrecks of the 1707 disaster on Scilly, and for four years running teams spent two or three weeks annually based on motor mine-sweepers searching the Western Rocks. If not for adverse weather conditions, the *Association* might well have been found in the first week of May 1964, but with heavy seas, strong winds and fog for three consecutive summers, the site was not located until July 1967.

At about the same time the wreck of the *Association* was targeted by Roland Morris' team of Cornish divers and by the Blue Sea Divers from London, and in 1966 all three teams were awarded contracts by the MoD to carry out underwater salvage on the wreck. This eventually led to what was popularly known as 'the Scilly shambles' with all three licensed teams and two other unlicensed groups diving as well as the use of explosives on the site. In addition to the hauls of coins and other artefacts recovered by the licensed teams Roland Morris estimated that thousands of coins were raised illegally (Gill 1975, 122-3). As result of the 'shambles' the Protection of Wrecks Act was introduced in 1973 via a Private Members Bill.

Over the next five years the sites of the other men o war, the *Eagle* and *Firebrand* were also located, the three sites revealing many bronze cannon, artefacts and a very large quantity of gold and silver specie.

Rex Cowan, a London solicitor who had owned a second home on St Mary's since 1963, looked into the possibility of other treasure carrying wrecks on Scilly, and commenced to research the loss of the Dutch East Indiaman *Hollandia* in Broad Sound, coming across details of the previously unknown and generally unrecorded *Prinses Maria* , another East Indiaman. Whilst not a diver himself, Cowan funded a three year search for the two ships using sport divers and a relatively new piece of electronic equipment, the proton magnetometer. This was the first use of a magnetometer on the islands, and was an important milestone in the search for local shipwrecks. Both wrecks were eventually found, the *Hollandia* in 30m (100ft) in 1971, the *Prinses Maria* in 15m (45ft). The former wreck yielded a number of bronze cannon and mortars, and both held large quantities of silver coin and artefacts. Rex Cowan is reputed to have a licence from the Dutch government to excavate all Dutch VOC ships (Dutch East Indiamen) owned by them lying in Scillonian waters.

*Fig 62 Landing a cannon from the Association on St Mary's quay 1967 (photo Roland Morris)*

The late Roland Morris had started searching for the wreck of HMS Colossus in 1967, and his team of divers found the broken sherds of Sir William Hamilton's second Greek pottery collection on the site of HMS *Colossus*, already heavily salvaged by the Deane brothers 143 years earlier. Between 1975 and 1978, with funding from the British Museum; Morris' team recovered approximately 35,000 sherds sufficient for the reconstruction of several original Hamilton pieces (Morris 1979; Black 2003, 16).

## 9.13 Navigation and time

### 9.13.1 Nautical charts

The Isles of Scilly were the first and last landfall of ships both inward and outward bound to and from Britain and northern Europe from time immemorial. Vessels from afar, coming from all points of the compass, would be extremely cautious as they approached latitude 50° north, knowing of the islands' presence and that they represented both a dangerous obstruction and a welcome landfall once sighted and identified, reassuring to ships' masters who until the 17th century, navigated whenever possible by coastal sightings. Once completely out of sight of land, the day -to-day navigation of vessels on the open sea until the problem of longitude calculation was solved, was very much a matter of 'by guess and by God', relying on dead reckoning and latitude calculations, supported by the old seafaring adage of the 'Three **L**'s' (sounding **L**ead; log **L**ine and **L**ookout). To pass the Isles of Scilly without a sighting, particularly at night, in fog or bad weather, presented sailing masters with a degree of uncertainty and the prospect of possibly blundering ashore somewhere in the Land's End or Lizard area of south Cornwall, or else along its rock strewn north coast. There are numerous references to vessels arriving off Lundy Island in

the Bristol Channel, even well provided men-o'-war and English East Indiamen, with their experienced and better qualified officers and the best instruments available, thinking they were in the English Channel. One example was an Admiralty transport vessel carrying hundreds of troops returning from the Peninsula War, which had to land them at Bristol whilst on passage from La Corunna to Portsmouth, her sailing master and captain having become completely lost. Similarly, the Channel Isles were frequently mistaken for Scilly, causing ships to miss the islands and arrive on the coast of Normandy or conversely the Scilly was mistaken for the Channel Islands which caused ships to end up off the coast of South Wales thinking it was the English Channel coastline. For the same reason, ships outward bound heading west, navigated with great caution until they sighted Scilly from whence they took their departure with a degree of confidence, reassured at least by their last landfall.

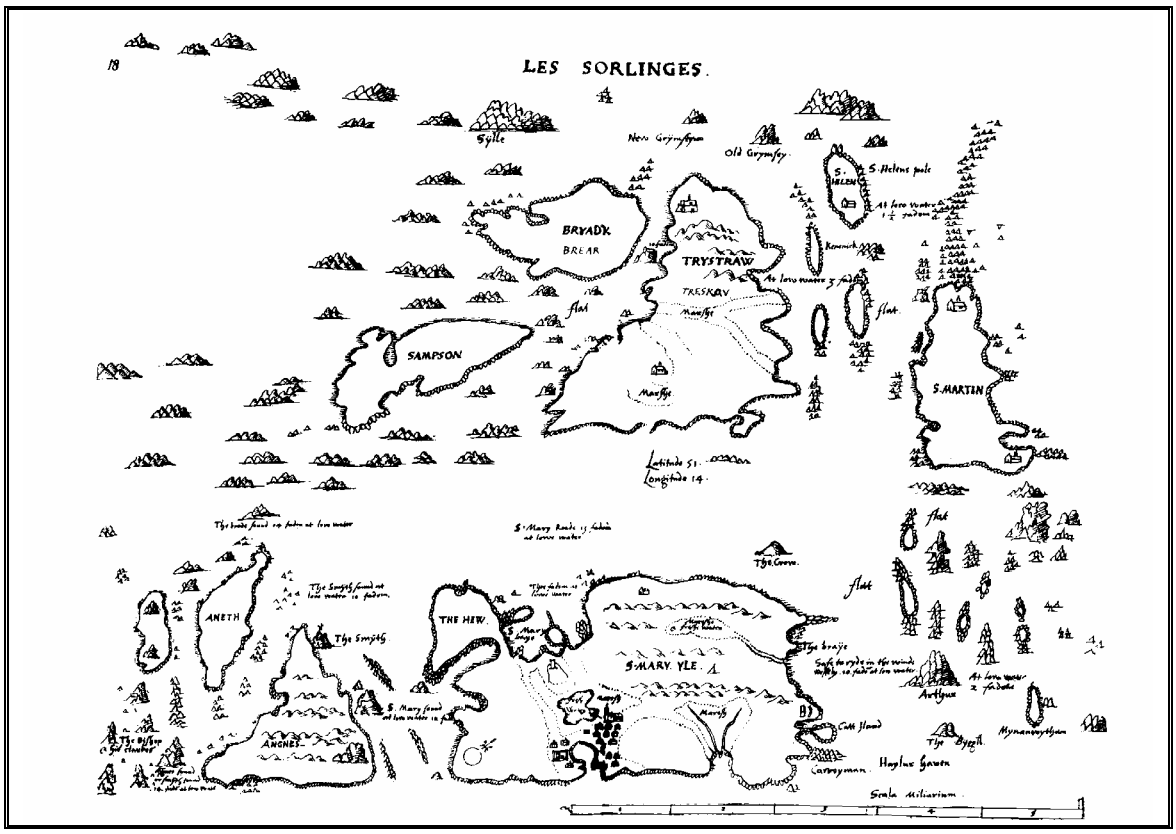



*Fig 63 Map of Scilly c1584 (from The Scillonian 22)*

The first engraved map on which the islands are named separately is Mercator's 1564 large map 'The British Isles'. Until the end of the 17th century almost all of the charts of the British shores were imported from the Netherlands. These early Dutch charts of the 'Sorlinges', their name for Scilly and the western approaches, were very inaccurate. Charts of the 17th and early 18th centuries were not graduated for longitude, and seafarers had to resort to privately published manuals of navigation, which varied from volume to volume.

*Early navigational directions are to be found in William Jansz Blaeu's 'The Sea-Mirror' of 1625, published in Amsterdam; 'Silly lyeth from Landes End westsouthwest distant eight leagues…between Lands End and Silly lye the Sevenstones westsouthwest and west by south foure leagues from the Lanes End, and northeast and by east, and eastsoutheast almost three leagues from Scilly, that is a rane of rocks which come not above high water, but always breaketh over them…'*

Even the Royal Navy had no standard reference books, a shortcoming still being complained of by captains and masters as late as 1737. Samuel Peps, Secretary to the Navy,

was made aware of the problem as early as 1683, when it was brought to his attention that predominantly privately produced Dutch charts showed that Scilly was probably between 10 and 20 miles north of their true position. Towards the end of Charles II's reign, Captain Greenvile Collins, Hydrographer to the King, was commissioned to chart the coast of Britain and spent the years 1681-88 surveying the whole of the English and part of the Scottish coast and selected Irish harbours. His chart of Scilly was presented to William III in 1689. The overall results were published in a folio in 1693 (Collins 1693). This remained the standard chart for over a hundred year but it placed the lighthouse on Scilly (St Agnes), at 50° 02' North, which was still nine miles in error, the modern determination being 49°, 53' North. The situation was further complicated by the Rennel Current, which sets across the Bay of Biscay and runs across the mouth of the English Channel. Its speed is one knot at most, but enough to push ships north of their supposed course. To establish a ship's position by dead reckoning, that is by log and course steered and not by sextant, required a recognisable landfall and knowledge of whether the ship was in the English or Bristol channels (Fowles 1974, 3).

Towards the end of the 18th century Graeme Spence was commissioned by the Admiralty to survey the Isles of Scilly which took four years, from 1789-93 to complete and has stood the test of time. The Hydrographic Department of the Admiralty was established two years later in 1795.

The next Admiralty survey was some 70 years later when the northern part of Scilly was surveyed for the Admiralty by Captain Williams in 1862 and 1863, the remainder was surveyed by Captain Maxwell in 1897 and 1898 and the two surveys joined together in 1911.

### 9.13.2 The Longitude Prize

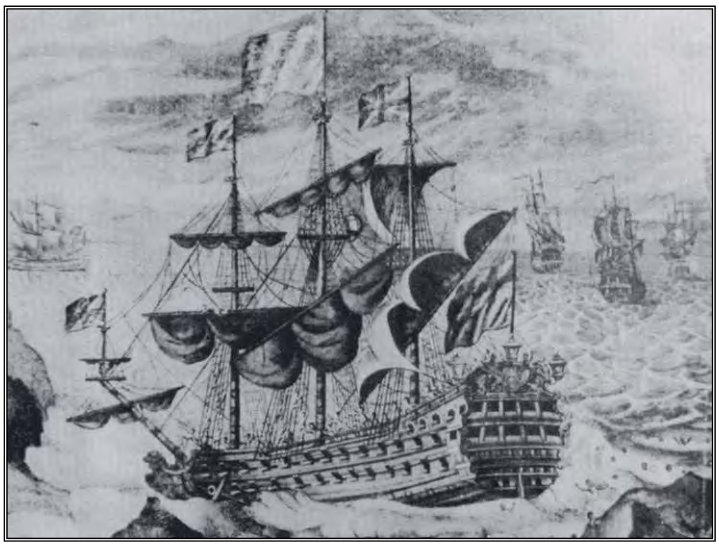


*Fig 64 The Association among the Western Rocks (National Maritime Museum)*

Before John Harrison's invention of the chronometer in *c*1736 there was no accurate way of determining a ship's longitude. Sea captains of the 15th, 16th and 17th centuries relied on 'dead reckoning' to gauge their distance east or west of home port. The captain would throw a log chip overboard and observe how swiftly the ship moved from this temporary marker. The speed was noted in the ship's logbook along with the direction of travel, which was taken from the stars or a compass and the length of time on a particular course, counted with a sandglass or pocket watch. Taking the effects of ocean currents and wind into account he would then determine his longitude. This could have disastrous consequences; on the night of 22 October 1707 Sir Cloudesley Shovel had thought his fleet in the latitude of Ushant and near the coast France rather than heading towards the Western Rocks. The ensuing catastrophic loss of four warships along with the Rear Admiral of England and some 1680 men brought the question of longitude to the forefront of national affairs and precipitated the Longitude Act of 1714 in which

parliament promised a prize of £20,000 for a solution to the longitude problem - the Longitude Prize (Sobel and Andrews 1998, 14-21).

### 9.13.3 Pilots and gigs

Between 1720 and 1870 Scilly (especially St Agnes and St Martin's) was home to many pilots, who ensured that ships had a safe passage through the Islands and beyond. By the beginning of the 19th century piloting was restricted to fewer individuals, but in 1850 there were still a good fifteen pilot boats – cutters and gigs. Piloting declined with the introduction of steamships from the 1850s, after which vessels no longer needed to stop at the Islands.


Fig 65 Gigs on Town Beach during the 2003 World Championships (photo: courtesy of Mike Hardy)

Gig racing, which has seen a revival in the past few decades, forms an important aspect of the social and cultural life of Scilly. The World Gig Racing Championships are held here each year, most of the competing non-Scillonian gigs coming from Cornwall.

Gig sheds (boathouses) remain a characteristic feature of the shoreline on some of the inhabited islands. The HER records the following boathouses in the study area: St Agnes – Porth Askin, **PRN 7603**, Periglis, **PRN 7820**; St Martin's – The Porth, **PRN 7153**, New Quay, **PRN 7808**; St Mary's – Point of Fields, **PRN 7195**. On St Agnes the *Obadiah & Mary* gigshed near the Turk's Head public house has been recently been restored with EH funding, **PRN 7751**.

Other interesting gigsheds do not fall within the study area, for example the two disused gigsheds above the beach on the north side of Great Porth, Bryher. The northern one had its roof of thatched rushes in 1966, but is now very ruinous.

### 9.13.4 Lighthouses, lightships and other maritime infrastructure

Trinity House's involvement in Scilly began as early as 1680 when they built their second lighthouse on St Agnes (the first was at Lowestoft), superseded in 1911 by one on Peninnis Head (both outside the study area). To aid navigation a day mark (also outside the study area) was built in 1683 on St Martin's by Thomas Ekins, the first steward of the Godolphins to reside on the Islands.

The Bishop Rock lighthouse is of 19th century date and still used, **PRN 7065**. On the rocky island of Rosevear, one of the Western Rocks, are the ruins of four rectangular drystone buildings which are the remains of a blacksmith's workshop, not in the study area, and the quarters of the men who built the lighthouse (1847-50 and 1847); it is possible that these may originally have been built by Edmund Herbert's expedition to salvage the *Association* in *c*1710. The most prominent building survives up to roof height and incorporates a large natural outcrop at its west end and as part of its base. There is also an anvil made from a naturally hollowed boulder, a rectangular platform made of large blocks and the remains of

*Fig 66 The Bishop Rock Lighthouse (photo: © Gibson Collection)*

stone-splitting operations (Ratcliffe 1989, 66). There has been a lightship to mark the Seven Stones reef since 1841. Round Island Lighthouse (not in the study area) was erected in 1887, around the same time as Bishop Rock was being strengthened.

**St Helen's isolation hospital**

The building on St Helen's known as the Pest House, **PRN 7268.01**, is an isolation hospital built in 1764 to house plague cases from visiting ships calling at Old Grimsby and St Helen's Pool (after a 1754 Act of Parliament decreed that any plague-ridden ship north of Cape Finisterre heading for England should anchor off this island). It is a rectangular roofless building 7m by 5.5m externally with a two-roomed extension on its east side. The walls, originally plastered on the inside, are 0.6m wide and 3m high, of mortared rubble construction with details picked out in larger stones. The building has recently been repaired and stabilised with the benefit of EH funding through the IOS Grant scheme administered by CIOS. Associated with the Pest House are a well and a slipway, **PRNs 7268.02/03** (Ratcliffe 1989, 66), and a field system along the islands' south-eastern coastal margin bounded by post-medieval banks (Hooley pers comm).

*Fig 67 Isolation hospital quay on St Helen's in 1989 (photo: CCC)*

**Lifeboats**

The Isles of Scilly lifeboat station on St Mary's was first established in 1837, the first lifeboat arriving in 1840. Her only recorded service was on January 4 1841, when she went to the aid of the steam packet *Thames*, driven ashore on the Western Rocks. There was an apparent lapse in the service around 1855 and it was re-established in 1874 following the disasters of the *Delaware* and the *Minnehaha*. The new lifeboat, the *Henry Dundas* was a 37ft, 12-oared pulling and sailing lifeboat. She first saw service when the *Schiller* was wrecked on the Retarrier Ledges on 7 May of the following year. A back-up lifeboat station was established on St Agnes in 1890 and was operational until 1920. The Carn Thomas lifeboat station was built in *c*1899 to accommodate a new Watson–type lifeboat, **PRN 7816** (Bird 1991, 66-79, 202-4).

***Troy Town maze***

*Fig 68 Troy Town maze, with the wreck of the Earl of Lonsdale, 1885 (photo: © Gibson Collection)*

Troy Town maze is situated close to the cliff edge on the west side of Castella Down, St Agnes, PRN 7002, just outside the study area. It is circular in plan, 5.6m in diameter and formed of beach pebbles averaging 0.2m in diameter and one course high. It is said to have been laid out in 1729 by a bored lighthouse keeper or his son (Nance 1924), of St Merryn, Cornwall, but may well be earlier in date and has been periodically rebuilt, latterly by Eddie Prynn in the 1980s. This maze is apparently unique in Britain, resembling in pattern and construction the stone mazes of Scandinavia (Mathews 1922).

## 9.14 Island culture

Until the advent of steamship technology in the mid-19th century the voyage to Scilly from the mainland could take anywhere from 12 hours to two days (Hudston 2000, 11); the very remoteness and isolation of Scilly has led to the evolution of a distinctive island culture

which is quite separate from mainland Cornwall. This island culture has had a fascination for many writers and has recently been summarised by Gill Arbery (2002).

The islanders have a fierce independence and a natural suspicion of anything imposed from outside Scilly, particularly if it has the stamp of Central Government officialdom.

Although there are certain affinities with Cornwall, Scilly's long-established trade links and seafaring legacy has resulted in links with the wider world, so that the islands have developed a cosmopolitan outlook. Although many place-names in Scilly have old Cornish roots Scillonians do not consider themselves to be Cornish. Nearly all the inhabitants of the islands, old Scillonians or relative newcomers alike, develop a fierce protectiveness towards any perceived threats to the island's unique qualities, and they also wish visitors to love their islands as they do. The traditional life of the islands has been based predominantly on the sea, with coastal industries, and later flower farming and tourism, supplanting subsistence agriculture since the early 18th century (Arbery 2002, 25).

The population of the islands has remained fairly static at just over 2,000 for the last 20 years with approximately 1,600 on St Mary's, the largest island. The population is more than doubled by visitors at the peak of summer holiday season (Arbery 2002, 25).

The majority of original Scillonian families can only trace their association with the islands back to the 17th century, when their ancestors came to Scilly during the post-Civil War resettlement. Nevertheless, they are proud of their descent and consider that only families with at least 'three generations under the sod' can be called Scillonians. These Scillonians are now in a minority due to successive out-migration of the local population and continual influx of people from the mainland wishing to settle or retire. Traditionally, only those born in Scilly can call themselves islanders, others, even individuals who have lived there for many years, can only claim to be residents (Arbery 2002, 25). Locally, the islands are either called 'the Isles of Scilly' or 'Scilly', the term 'Scilly Isles' is regarded as rather derogative and only used by those unacquainted with the place.

Hugh Town on St Mary's is most akin to the mainland, but the pace is still remarkably quiet and slow. Of the inhabited off-islands, Tresco is run by the Dorrien-Smith family as a private estate, marketed as a sophisticated, unspoilt island paradise, Bryher and St Agnes vie for the honour of being the most unspoilt and traditional of the islands, whilst the inhabitants of St Martin's were said to be the most independent of the off-islanders. Of necessity, there has always been a strong tradition of recycling materials, 'make do and mend', on the islands, especially using wreck wood, which in the past has enhanced many buildings (Arbery 2002, 27).

## 9.15 Sea as inspiration

*'So swam the Swallow through the springing sea…'*

AC Swinburne "*Tristram of Lyonesse*"

The sea around Scilly inspires legends; here the Atlantis myth and the Cornish belief in the lost land of Lyonesse (in Cornish *Lethowsow*) intertwine. Rich farmland, a city, a castle and 140 churches once existed between Land's End and Scilly, which perhaps submerged suddenly one winter's night in 1099 according to the *Saxon Chronicle*, *'This year also at Martinmas, the great sea-flood came up and did so much harm that no man remembered its like before, that was the same day as the first of the new moon' (Savage 1983, 237).*

*'At the Senen Church-Town, near the Extremity of Cornwall, there is the Base of an old Stone-Column, belonging to a building, which was taken up by some Fishermen, at the place of the Seven Stones…about 18 Inches Height, and three Feet Diameter at the Circular4 Base. Besides which, other Pieces of Building,*

*and Glass-windows, have been taken up at different times in the same Place, with divers Kinds of Utensils; which Circumstances, put together, persuade that, where the Seven Stones now appear in the Sea it was formerly dry Land inhabited; as it is not improbable that the City called Lions stood there, spoken of by Tradition, and that the said Pieces of Buildings and Utensils are a Part thereof. Nor is it less probable, that there was a Tract of Land called Lioness, extending itself from the present Land's End of Cornwall to Scilly, or beyond, which according to Tradition, was swallowed by the Sea* (Heath 1750, 57). Of course these items could indicate the site of an early shipwreck on the Seven Stones.

*Fig 69 The islands are liminal spaces that seem to float between sea and sky; an aerial view looking across Old Grimsby Sound to the east side of Tresco (© Gibson Collection)*

According to one legend the remnant of King Arthur's knights, after the last battle, fled along a winding road across Lyonesse pursued by Mordred and his forces. The wizard Merlin intervened and raising his arm caused an enormous earthquake, Mordred and his army were swept away, *'At evening, there was nought from what was then first termed Land's-end, to St Martin's head, but a howling and boiling wilderness of waves, bearing here and there upon its bosom a fragment from the perished world beneath or a corpse tossed upon the billows over which the sea birds wheeled and screamed. The remnant that was preserved reached in safety Cassiteris, called afterwards Silura, and now Scilly' (Whitfield 1852, 23-4).*

The Arthurian connection, discussed at length in Thomas 1985, continues with the story of Tristan, Prince of Lyonesse, and Isolde, Cornwall's greatest legend and the world's greatest love-saga. Algernon Swinburne, Thomas Arnold and Thomas Hardy all explored the story in their poems (Thomas (ed) 1970, 10-12). Alfred Lord Tennyson, who was probably responsible for relocating the Arthurian legend to Cornwall, is reputed to have composed his poem *Enoch Arden* in the garden of Tregarthen's Hotel on St Mary's, during an atmosphere-hunting tour of the islands in 1860 (Thomas 1985, 271-4; Bowley 1990, 171).

In a slightly different league, perhaps, was Richard Maybee (1810-1891), Scilly's equivalent to William McGonagle. Maybee could not read or write and his stories and poems, chiefly inspired by maritime disaster, were memorised and later printed, his memoirs being written down in 1883 (Isles of Scilly Museum 1983). His works include the loss of the SS *Castleford*,

**NMR 858678**, *the Earl of Arran*, **NMR 858299**, *the Delaware*, **NMR 858298**, the SS *Schiller*, NMR 858357, the *Association*, **UKHO 28106**, the German barque *Excelsior*, **NMR 858664**, *The Little Western*, **NMR 858300**, the *Minnehaha*, **NMR 858306**, and other contemporary wrecks further afield. Typical of his style are these lines on the loss of the *Earl of Arran*,

*'No doubt the Earl's untimely fate*
*Has shocked the country round,*
*Thousands who might have seen these isles,*
*Won't come, lest they be drowned.'*

## 9.16 Discussion

The importance of the sea in terms of palaeoenvironment, settlement, employment, trade and communications is reflected in the archaeological record for every period and, with the exception of dendrochronology, Scilly can contribute significantly to all the key coastal and maritime themes. The project area includes peat and midden deposits with huge palaeoenvironmental potential, multi-phase coastal settlements, ritual monuments, a nationally important suite of coastal defences; as well as kelp pits, gigsheds and smugglers' caches, there are extant and ruined quays and slipways.

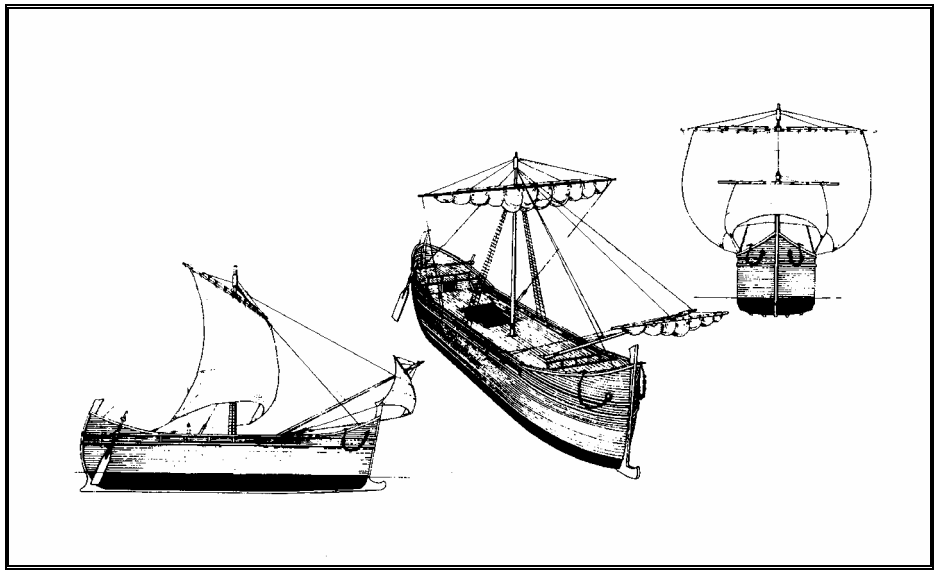
Mesolithic adventurers, Neolithic pioneers, Bronze Age settlers, Iron Age and Roman traders would all have travelled to Scilly by sea. Long distance voyages would have required reasonably sturdy boats or ships, their type and size remaining speculative. The voyage from West Penwith would require smaller and less sturdy craft, but again we can only guess at what type of craft they used to transport people and goods to and from the mainland across open sea. Prior to permanent settlement in the Bronze Age it is reasonable to assume that they were visited on a seasonal basis by hunters, fishermen and farmers. Once in Scilly they would have established sheltered landing places, close to dwellings, where relatively small boats could be pulled up above the tide, or left safely moored afloat. There is the possibility that some form of *nausts* or boat shelters may survive on Scilly. Perhaps these sites were today's Old Town Bay, Crow Sound, the north side of St. Martin's, Old Grimsby or near St. Helen's, but they would most certainly have chosen locations sheltered from the prevailing south-west wind and with a sufficient depth of water close inshore.

The nature of the early craft used for fishing or passage from West Penwith must have been of a size and build capable of crossing some 30 miles of open sea which is seldom calm. We can assume they were neither simple reed boats nor dug-outs, but possibly of a larger coracle type, substantial wood-framed hide-covered craft or even of an early 'slab-sided' or planked all wood construction. The possibility of finding the remains of such a craft buried on Scilly still exists, even if it is remote, but inundation, continuous coastal erosion and the relatively shallow depth of soil on the islands is a strong argument against this eventuality. From the Iron Age to the mid-19$^{th}$ century Scilly remained a largely treeless environment but earlier in prehistory boat building using locally felled timber may have been an early island occupation.

In addition to local seaborne 'day-to-day' visits from mainland England, larger craft, both trading and raiding, would have used Scilly as a haven, either for shelter, to carry out repairs, cargo exchange and sales, possibly bartering for fresh water, vegetables, meat, or simply on raiding expeditions. There remains a strong, if unfounded, local tradition that Merchant's Point on Tresco took its name from the Phoenician traders who arrived from the Mediterranean in ships seeking tin.

The Veneti, the maritime Celtic tribe of southern Brittany, were the great sea-going merchants of north-west Europe in the Iron Age. They regularly visited Britain and their ships, described by Julius Caesar in 'The Conquest of Gaul', were likely to have been one of the types visiting Scilly in this period (Fig 70);

*'The Gaul's own ships were built and rigged in a different manner from our own. They wee made with much flatter bottoms, to help them ride the shallow water caused by shoals or ebb tides. Exceptionally high bows and sterns fitted them for use in heavy seas and violent gales, and the hulls were made entirely of oak, to enable them to withstand any amount of shocks and rough usage. The cross-timbers, which consisted of beams a foot wide, were fastened with iron bolts as thick as a man's thumb. The anchors were secured with iron chains instead of ropes. They used sails made of raw hides or thin leather, either because they had no flax and were ignorant of its use, or, more probably, because they thought that ordinary sails would not stand the violent storms and squalls of the Atlantic and were not suitable for such heavy vessels…Moreover when it began to blow hard and they were running before the wind, they weathered the storm more easily; they could bring to in shallow water with great safety; and when left aground by the tide had nothing to fear but reefs or pointed rocks: whereas to our ships all these risks were formidable*' (Handford (trans) 1951).



F*ig 70 Venetic trading ship of the 1st century BC (after Weatherhill 1985and Cooke 1993)*

Such sturdy ships would have been ideally suited to sailing around Scilly and would have been typical of the boats plying the Atlantic coast. The *Sinagot*, the traditional fishing vessel of the Morbihan, which went out of use after about 1925, may have been a smaller version of these Venetic ships. Smaller, lighter boats of hide stretched over a light timber framework may also have been common (Weatherhill, 1985; 163-89; Cunliffe 2001, 103-4)

The weather, apart from known cyclic periods of change, and the essential nature of the seabed around the islands has probably remained virtually unchanged overall since prehistory, although the surface sediments and sandbanks can and do shift as demonstrated by the recent re-exposure of HMS *Colossus*. Therefore it is highly likely that some wooden ship or boat remains including metallic fittings and cargo, particularly ceramics or metal ingots, which have become buried underwater, will survive indefinitely. As far as we know, the seabed appears to be the same today as it always has been, a mix of sand, shell and rock, with possible underlying areas of buried mud, ooze or silt, which would be ideal for preserving organic remains, if exposed no prehistoric vessel timbers could survive the continuous onslaught of marine worm, weather and tide. The discovery of deck planking with underlying beams, large sections of the basic hull frames and

planking, and wooden carvings on the *Colossus* site, all of which was well-preserved under a covering of covering of coarse sand only some 50 to 100mm deep, points to the possibility of much older wreck remains surviving below the seabed and indicates that there is a considerable potential for the survival of medieval shipwreck remains around Scilly.

Since Scilly seems always to have been devoid of any rivers, estuaries or inland waterways, there are no areas where vessels or craft were laid up or abandoned to rot away, nor any early wharfs, jetties or areas of reclaimed land where maritime archaeological remains or artefacts might survive.

Prehistoric and medieval wreck sites may survive as concentrations of artefacts, eg the bronze weapons and tools from the Langdon Bay, Dover site or the Moor Sand, Devon or the 44 tin ingots from Erme Estuary in Devon; a plank boat such as the Dover ship, found beneath 7m of accumulated soil, would be less likely but could be preserved below sand on the seabed (cf Fenwick and Gale 1999, 26-31). Medieval wreck sites may survive as concentrations of artefacts or individual objects such as the Viking sword from the Smalls Reef, Dyfed *(ibid*, 32-3) or possibly as the well-preserved wooden hull of a vessel like the Newport ship, thought to be an Iberian vessel with a cargo of cork, dating to the late 15th century.

Every scrap of timber which floated ashore or could be removed from shipwrecks would have been was put to good use by the Scillonians, incorporated into buildings as lintels, door or window frames, floor or ceiling joists or roof timbers, or simply cut up for firewood. In many instances wreck timbers were reused in the building of new vessels in the shipyards of St Mary's and Bryher. Most of the older buildings in Scilly still hold ship's timbers in some form or other, which are frequently exposed during alterations or extensions and identifiable by their iron or wooden treenail fastenings, shape, or cut-out sections. Such finds generally go unrecorded. When the Wesleyan Chapel in Garrison Lane, St Mary's, was being refurbished for conversion to a public library, educational centre and council offices in the 1990s, a large number of wooden ship components were found beneath the floorboards.

In 1998, a local builder on lifting the floorboards of Rose Cottage at Trenoweth in preparation to replace them with a concrete floor found the boards were supported on large curved timber frames from a ship. Building work on the 'Sandpiper' shop at the Bank on St. Mary's showed that the ground floor was supported on huge oak keel timbers, some 40cm (16ins) square, which were notched out to hold hull frames. There are also several examples of ship timbers still to be seen around the islands; on St. Mary's outside commercial premises at Old Town, on the concrete hard-standing of the old RNAS seaplane base at Porthmellon, in Tresco Gardens Valhalla Collection; a door lintel in the Pest House, St. Helens's and a particularly fine example of a 18-19th century part stern-post with bronze gudgeons outside Bank Cottage on Bryher.

Since time immemorial Scilly has been a maritime 'signpost' for shipping, the first area of Britain to be sighted by those coming up from the Mediterranean, the source of much early trade and piracy, or their last as they entered the Atlantic outward bound. During that period an inestimable number of vessels have passed close to Scilly, numbering hundreds of thousands at least, representing most types of vessel known to man, from early Phoenician, perhaps, and Roman galleys, Venetic trading ships, Viking longboats, keels, cogs, galleons and carracks, East Indiamen, men-o'-war, barques, full-rigged ships, warships, liners, and every type of coastal collier, general cargo carrier, tanker and container ship ever built. It is therefore remarkable that of this gargantuan armada, relatively few appear to have come to grief on the Isles of Scilly. Whereas one would reasonably expect ship losses here to be numbered in thousands, the recorded losses amount to only 771.

Taking the current 20m (65ft) depth contour of Scilly as a rough indication of its average length of coastline, a total of perhaps 1,000 (recorded and unrecorded) shipwrecks spread over some 34 miles of Scillonian coast equates to 29 ship losses per mile, which is a greater density of wrecks than the nearby 90 miles of south Cornwall's coastline which has claimed 20 wrecks per mile (a total of 1,900 wrecks) or the 26 wrecks per mile of north Cornwall (a total of 1,400 wrecks). However, the Scillonian losses are rather less than those of the wedge-shaped Goodwin Sands, which measure just 9 miles by 4, ie approximately 23 miles of 'coastline', and have claimed 36 losses per mile or the coast of County Durham, accepted as having the worst record of shipping losses in the British Isles, which has claimed a staggering 44 ships per mile, brought about by its extensive coal trade.

*Fig 71 The pilot cutter Queen II seen here abandoned on Par Beach, St Martin's in 1880 worked in conjunction with the six oared gig Bonnet, which is still in existence (photo: ©Gibson Collection)*

So why have there apparently been relatively few recorded losses on the Isles of Scilly compared to some other areas, when the sheer volume of passing seaborne traffic, the location of Scilly and the nature of its offshore reefs and rocks would suggest otherwise? Is it simply that those early losses went unrecorded, or are they in fact documented and we simply do not know of them? Did the construction of lighthouses have any significant bearing on the subject for example? There was a lighthouse on St Agnes from 1680, the first such light built in Scilly, which continued to operate until 1911, with the Bishop Rock light operational from 1857 to the present day, and another at Round Island from 1888. From that period to the present day the islands continue to show three warning lights, which covered the peak period of shipping losses around the British Isles. From existing records it would appear that some 420 recorded losses took place between 1599 and 1857 (a period of 258 years when there was no official government or institutional recording of ship losses other than Lloyd's List, which for some reason was notoriously inaccurate in recording ship losses) with some 400 wrecks from 1857 to the present day (a period of 146 years for which records of losses are both prolific and reliable).

The answer would seem to be that Scilly probably has a vast number of unrecorded ship losses, particularly during the prehistoric and medieval periods and possibly even post-medieval, of which little or nothing is known. It should be remembered that vessels lost at night or in fog on the Western Rocks, the most prolific area for shipwrecks on Scilly, would have gone down both unseen and unheard. The distance from the Bishop Rock to St Agnes is five miles and to St Mary's seven, with no means of signalling distress and the tide capable of carrying wreckage and bodies well out to sea. In very bad weather it would be impossible to row or sail a local gig or cutter out to that vast inhospitable area of sea. With no lifeboat service on Scilly until 1837, men understandably thought twice before risking their lives and the support of their families before venturing out to a shipwreck, with the possibility of no reward or financial return. Also there would be comparatively few coastal trade casualties in Scilly, most Scillonian wrecks are Atlantic wrecks not coasting wrecks.

There is a considerable body of documentary evidence of early shipwrecks on Scilly yet to be researched, and the islands have the potential of holding the remains of extremely early and important vessels, although its environment and seabed is not conducive to preserving timbers and fragile artefact material, unless buried. With few islanders able to read and write before say, 1700, any written record of ship losses and cargoes landed would have been addressed by the resident Proprietor or Governor to the mainland, and there any such records would remain. After that, for perhaps a century or more there would have been verbal traditions and accounts of such events passed locally from father to son around the family fire, but with a fairly mobile population since the mid-19$^{th}$ century, and a sharp decrease in old Scillonian family numbers, such stories would not survive for ever.

The potential for new discoveries following significant changes in seabed levels remains high in some areas, provided they are in areas visited by divers, and the recent uncovering of the debris trail and part of the stern of the man-o'-war HMS *Colossus* is a good example. However, there are huge areas of sandy seabed in Scilly which are seldom if ever monitored or visited by man. The huge drop in seabed level off Southward Well in the last five years or so must have taken place elsewhere on Scilly, and not occurred in isolation, but apart from being evident at Bar Point, the event appears to have passed virtually unnoticed.

# 10 Intertidal and maritime characterisation

## 10.1 Background to HLC

The historic environment is either filled with or now relatively empty of people, but all of it is the product of people, and all is experienced and perceived, and thus has meaning and value for people today. These people include everyone, not just specialists or enthusiasts, artists, photographers, writers, local historians and archaeologists, but all individuals and all communities, all adults and all children. Historic landscapes need not be experienced, perceived or valued with historical consciousness or awareness; they may just be enjoyed, or loved, or loathed, lived in or lived around, and may often be just the historic landscape that is regarded as 'home'.

All these things - the individual historical and archaeological components; patterns and palimpsests of components; gaps between components; semi-natural or semi-cultural habitats; and the perceived or experienced historic landscapes - should be considered when recording, interpreting, assessing, and evaluating the historic landscape, and when guiding change within it.

Such a broad, holistic, inclusive historic landscape is the historic environment that a healthy society, and its various heritage agencies, wishes to sustain (from Herring 1998).

## 10.2 The 1996 Historic Landscape Characterisation for Scilly

Historic Landscape Characterisation (HLC) allows the historic dimension of the whole landscape to be fully considered and provides a readily understood context for the surviving archaeological remains.

A basic premise of HLC is that the whole of Britain and thus the whole of Cornwall and Scilly is one continuous but multifarious historic landscape. All natural habitats in Britain are 'semi-natural', being the products of natural conditions (geology, soils, exposure, native communities etc) as altered by various land use systems. These systems may have been either deliberate or incidental. All semi-natural habitats are therefore part of the historic environment and so there are no parts of Britain that do not have a definable historic character (from Herring 1998).

It is possible to establish through study the predominant historic landscape character of each parcel of land on the Isles of Scilly. The landscape is comprised of a mosaic of blocks of land whose predominant historical landscape character is both various and repeating. This quality allows parcels to be assigned, using a number of systematic sources (mainly maps), to one of twenty one clearly distinguishable HLC Types.

The 1996 HLC of the Isles of Scilly (Land Use Consultants 1996) was essentially land-based and designed to provide guidance for MAFF in the implementation of the Countryside Stewardship Scheme, but because of the archipelago's maritime ambience and its nature as a drowned landscape with archaeological features on the beach and intertidal zones the HLC included the Foreshore (distinguishing between rocky foreshore and offshore rocks and the sandy foreshore, beach and intertidal flats) and Marine zones, thereby to some extent prefiguring the nationwide move to extend HLC into the intertidal and maritime zones (Hooley 2003).

Detailed text was prepared in 1996 as a commentary for each Type in Scilly to enable users of the map to recognise the features and components that give it its definable character and to understand some of the historical processes that have generated them. The text also discusses how the Type fits in with others and what sorts of values people give it, and then

***Figure 72. Maritime Historic Landscape Characterisation***

- 12 nautical mile limit
- Rocky Foreshore
- Rocky foreshore (relict landscape)
- Intertidal: Marine (sand flats)
- Intertidal: Marine (relict landscape)
- Intertidal: Marine (rocks)
- Shallow Marine (0-5m)
- Intermediate Marine (<20m)
- Intermediate Marine: Rocks (hazards)
- Deep Marine: (+50m)
- Deep Marine (+100m
- Maritime Safety (active)
- Maritime Safety (disused)

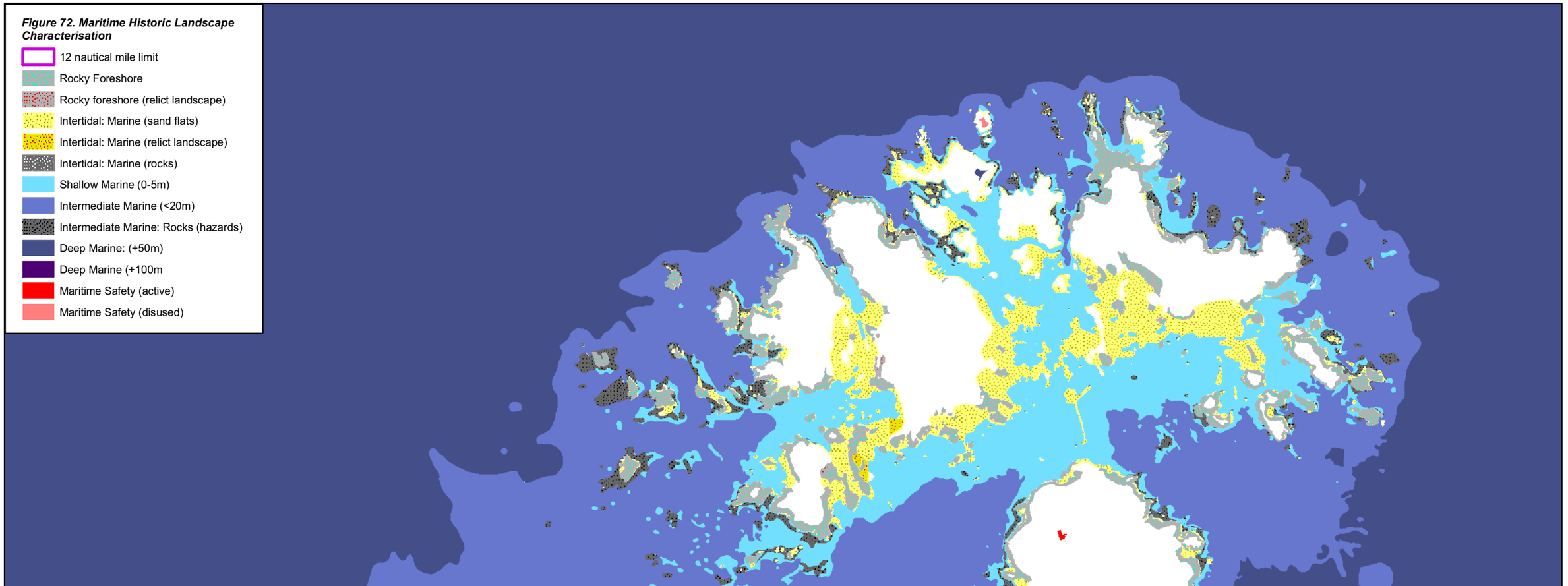
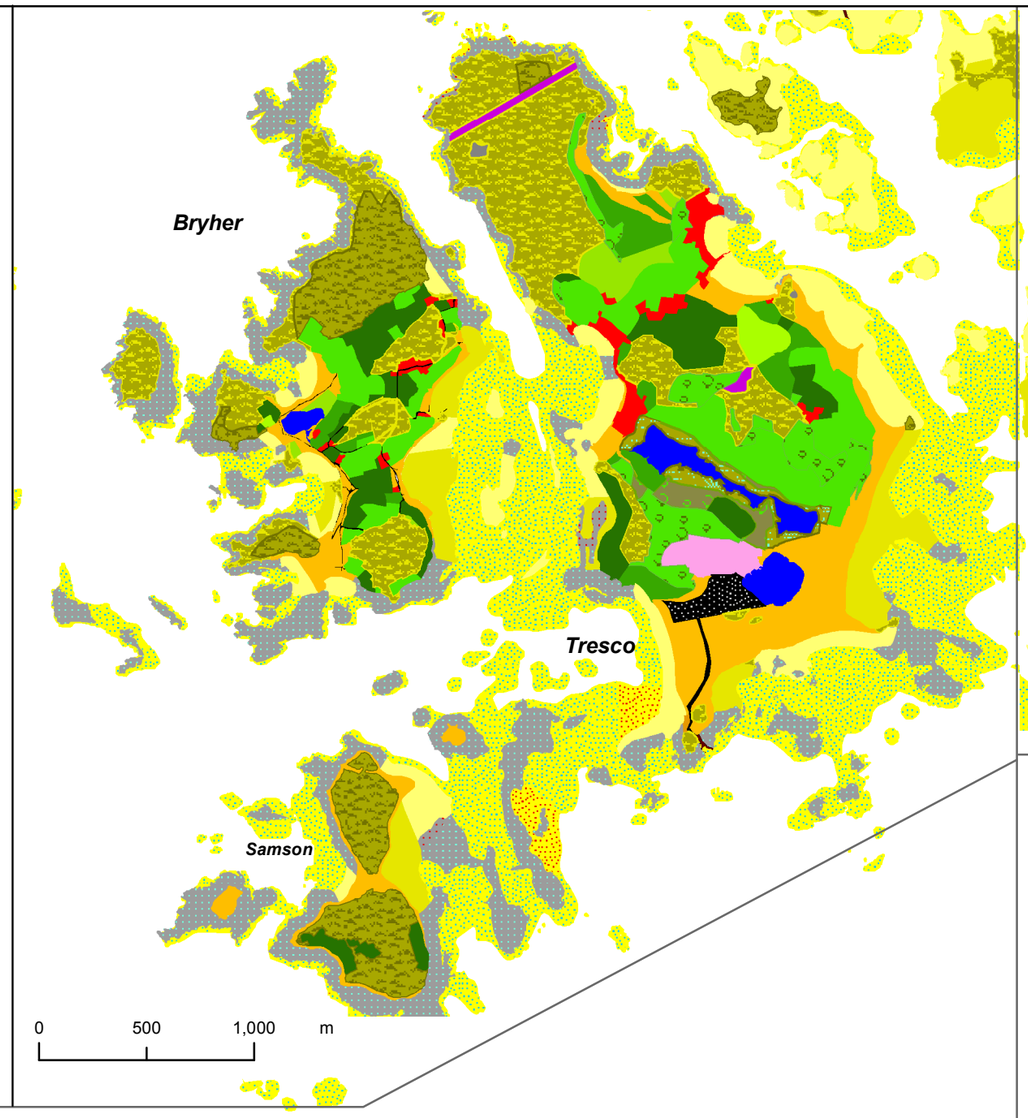
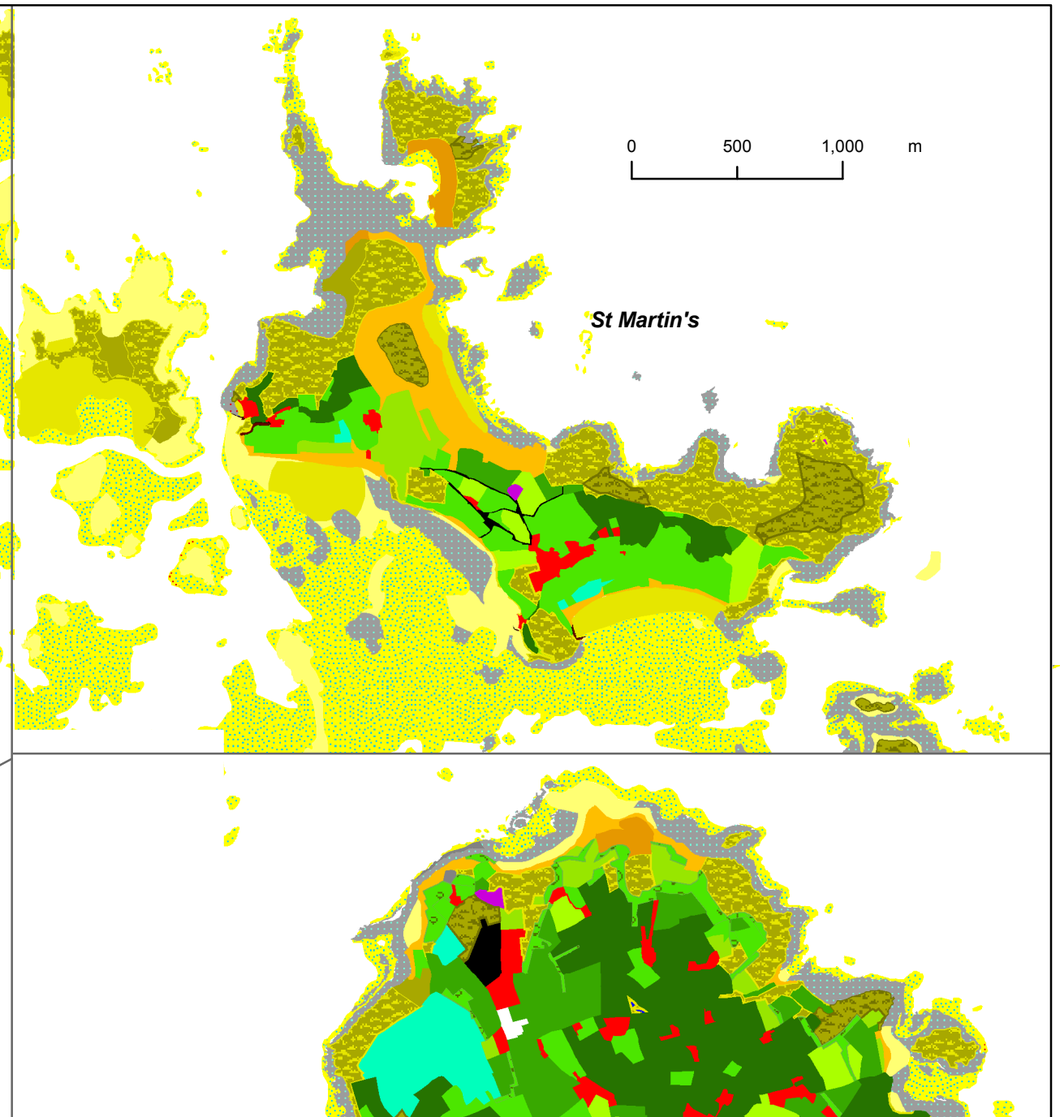
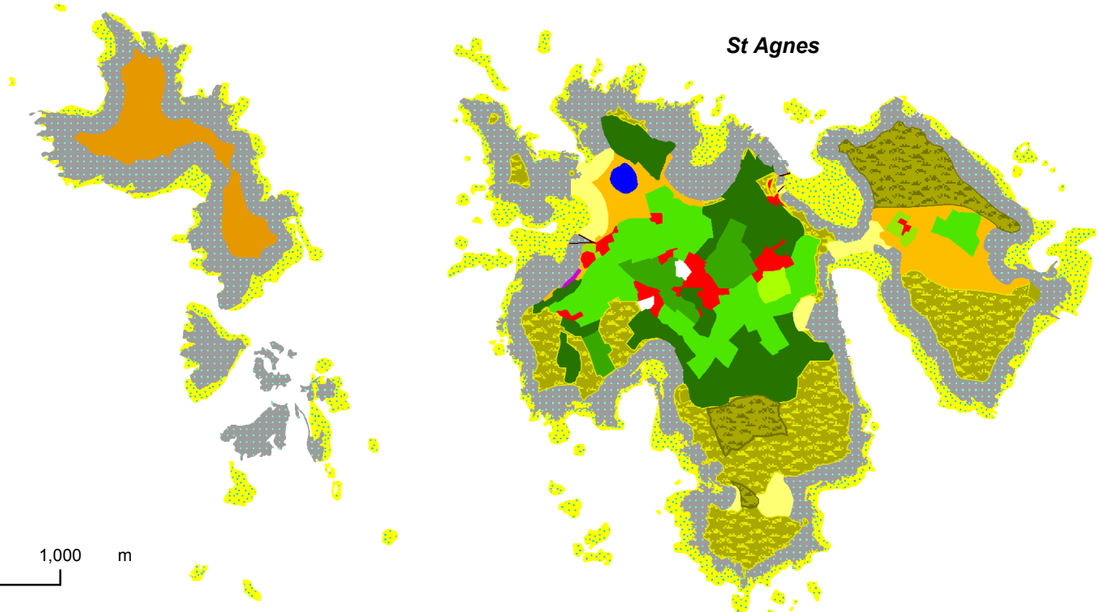


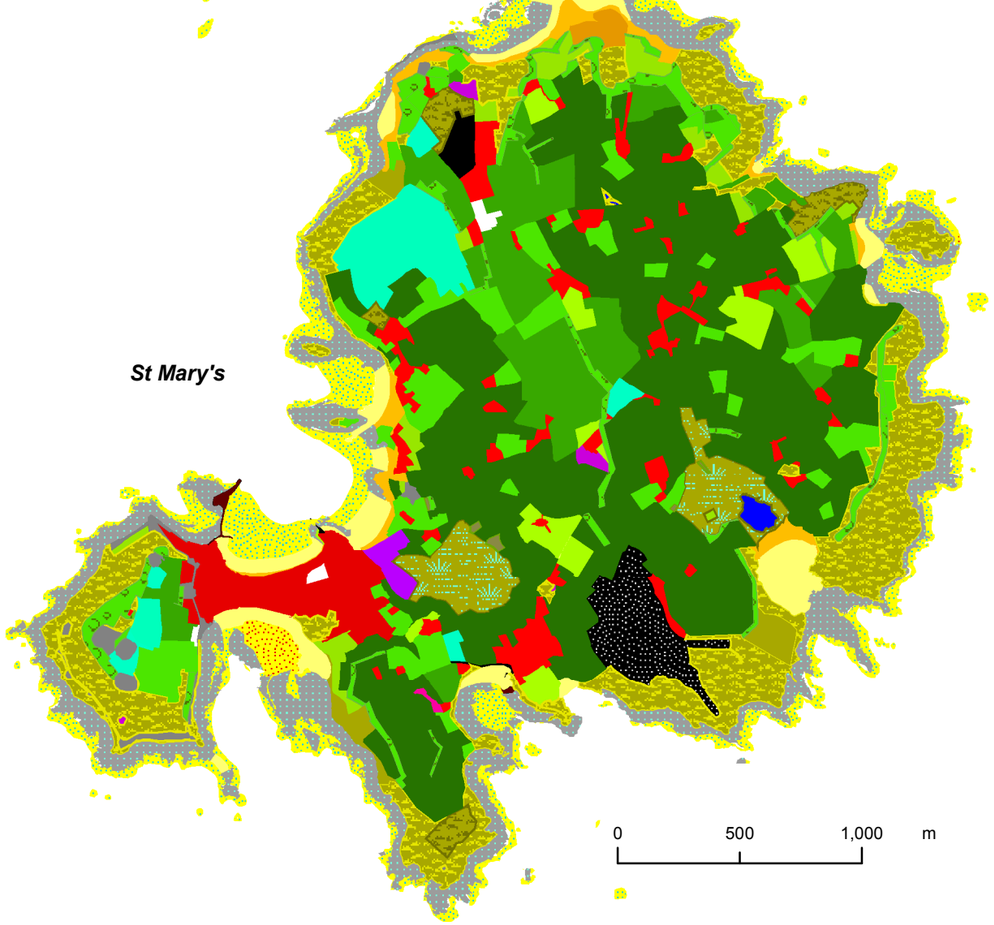
***Figure 73. Terrestrial Historic Landscape Characterisation***

- Coastal Rough Ground (unenclosed/undivided)
- Coastal Rough Ground (enclosed/divided)
- Coastal Rough Ground (relict landscape)
- Dunes (undivided)
- Dunes (relict landscape)
- Marshes/Wet Scrub
- Woodland
- Plantation
- Beach
- Beach (relict landscape)
- Rocky Foreshore
- Rocky foreshore (relict landscape)
- Medieval Enclosures (cropping units)
- Post-Medieval Enclosures (pre C20) (new farms)
- Post_Medieval Enclosures (bulb gardens)
- Modern Enclosures (20th-21st century intakes)
- Modern Enclosures (alterations)
- Homesteads/Farmsteads
- Towns
- Ornamental (gardens)
- Ornamental (park)
- Industrial: extractive (disused)
- Industrial: extractive (active)
- Industrial: processing (active)
- Communications (roads)
- Communications (airfields)
- Quays (relict)
- Quays (active
- Recreational (golfcourses,etc)
- Recreational (chalet, camping grounds)
- Recreational (theme parks)
- Military: batteries (disused)
- Military: batteries (active)
- Military: Defence Works (disused)
- Water: natural and artificial pools
- Intertidal: Marine (sand flats)
- Intertidal: Marine (relict landscape)



identifies forces for change acting on it and suggests some basic management recommendations intended to safeguard the Type's fabric and character.

For the current assessment the original 1996 characterisation of the Isles of Scilly has been partially reviewed, partly in the light of more recent changes in our understanding of the historic environment, and partly to satisfy the project's need for more detailed characterisation and understanding of key elements of the historic landscape, notably the marine environment.

## 10.3 'Catching the Tide'

Hooley's consultation draft project design 'Catching the Tide' (Hooley 2003) envisages an attribute-based characterisation exercise with the identification and grouping of archaeological, historical and other environmental data to define land parcels or HLC polygons within GIS. The principal task of the exercise would be the definition of the HLC polygons that reflect common, predominant historic characteristics within the present form of the project area. Each such polygon would be assigned to one of an initial working set of broad, high-level HLC types.

This method closely follows the original 1996 Scilly HLC which used attributes portrayed on systematic sources (mainly maps) to identify areas that could be mapped as one of a series of HLC Types that was determined through an initial assessment of the Scillonian landscape (see Herring 1998 for a presentation of the Cornwall and Scilly HLC methods). The main difference is that the attribute-based approach records on a database behind the basic Types map a table of attribute values that can be interrogated in various ways to generate new maps as appropriate.

Hooley envisages that *'Characterisation of the historic resource in this zone will be a powerful tool in enabling English Heritage to meet its new responsibilities relating to the management, research and improved understanding of the historic sites and landscapes it contains, in addition to its advisory role to government on such matters. In this respect this project contributes directly to the prioritised commitments to characterise the maritime archaeological resource and provide strategic-level frameworks for its understanding and management as outlined in 'Taking to the Water' '(Hooley 2003, 2).*

## 10.4 Methods and Sources used

The characterisation exercise for this RCZA closely followed the attribute-based principles suggested by Hooley although, partly because of time and budget constraints, the method builds on the 1996 HLC and incorporates the use of defining attributes in an achievable way.

An experienced HLC officer (Megan Val Baker) visually assessed a range of systematic sources (below), wider than most terrestrial HLCs typically use, and drew HLC Type polygons around areas that shared the attributes or components expected of each Type. This approach is less flexible in terrestrial situations where, in the attribute-led HLC method preferred by EH, an array of attributes can be interrogated to generate a range of mappings as desired. This would be the approach a fully resourced re-characterisation of Scilly and Cornwall would follow. However, it was judged that in the marine world where systematic sources are much simpler (data not extending beyond depths and the presence or absence of rocks or sand, or relict banks) that the top-down approach did not compromise the product's flexibility in any significant way.

A single layered HLC for the present day has been prepared for the current assessment and as part of the more intensive analysis of this maritime environment a number of map and aerial photo sources were examined.

- *c*1880 1st edition OS 1:2500. Used to identify field patterns and so on in the late 19th century to facilitate comparison with present mapping and the identification of 'forces for change'.
- 2003 OS MasterMap formed the basis of the present layer of the HLC in the immediate coastal zone (coastal slope and immediate foreshore).
- UK Hydrographic Office Charts 883, 34 and 2565. Digital vector charts used to generate maritime types through query and analysis of depth attributes.

Further sources included;

- 2000 1:10,000 OS mapping
- 1996 English Nature 1:10,000 colour vertical Aerial Photographs
- Cornish Place-Name index (prepared using material gathered by Oliver Padel, former Fellow of the Institute of Cornish Studies)
- Cornwall and Scilly Historic Environment Record (including NMP data)
- Published histories
- Early maps and photographs

The original 1996 HLC mapping was undertaken manually; the mapwork only existing as paper copies. As part of the current assessment, to enable all users to have easier access to the mapping, the historic landscape has been re-characterised and placed on the CCC GIS. This allows the HLC mapping to be consulted alongside all other GIS mapping (including the CCC HER). Individual archaeological sites (those held in the SMR) can be placed more securely in their historic landscape context

The opportunity was taken to subdivide some of the existing Types (essentially Coastal Rough Ground) and a number of new HLC Types were developed for the project: these are listed in the methodology section below. These were tailored to the needs of the current assessment and in particular deal with the intertidal and marine environments.

As the table below demonstrates there is a decreasing level of generalisation at type level (as noted above), comprising one or more sub-types. The first column refers to the broad, high-level HLC types identified in 1996 with the second column identifying the sub-types comprising the former. Re-interpreted and new HLC types are represented in the third column for ease of reference and clarification. Only those types directly relevant to the study have been tabulated.

| **1996 HLC Type** | **1996 HLC sub-type** | **RCZA subdivided HLC sub-type** | **Code** |
|---|---|---|---|
| Rough Ground | Heathland | Coastal Rough Ground (unenclosed/undivided) | 2ai |
| | | Coastal Rough Ground (enclosed/divided) | 2aii |
| | | Coastal Rough Ground (high cliffs, 5+m) | 2ci |
| | | Coastal Rough Ground (low cliffs, 0-5m) | 2cii |
| | | Coastal Rough Ground (relict landscape) | 2d |
| | Blown sands/dunes | Dunes (undivided) | 3ai |
| | | Dunes (relict landscape) | 3aii |
| Foreshore | Sandy Foreshore | Sandy foreshore | 7di |
| | | Sandy foreshore (relict landscape) | 7dii |
| | Rocky foreshore | Rocky Foreshore | 7ei |
| | | Rocky foreshore (relict landscape) | 7eii |

| | | | |
|---|---|---|---|
| Settlements | Settlements | Homesteads/Farmsteads | 11a |
| | | Hamlets/villages | 11b |
| | | Towns | 11c |
| Communications | Communications | Quays (relict) | 14ei |
| | | Quays (active) | 14eii |
| Military | Prominent disused and reused structures | Military: Defence Works (disused) | 16ei |
| | | Military: Defence Works (active) | 16eii |
| Maritime | Intertidal | Intertidal: Marine (sand flats) | 20ai |
| | | Intertidal: Marine (relict landscape) | 20aii |
| | | Intertidal: Marine (rocks) | 20b |
| | Shallow marine | Shallow Marine (0-5m) | 20ci |
| | | Shallow Marine (relict landscape) | 20cii |
| | Intermediate marine | Intermediate Marine (5-20m) | 21ai |
| | | Intermediate Marine (relict landscape) | 21aii |
| | | Intermediate Marine: Rocks (hazards) | 21b |
| | Deep marine | Deep Marine: (+20m) | 22a |
| | | Deep Marine (+50m) | 22b |
| Maritime Safety | Maritime Safety: existing and disused installations | Maritime safety: active | 23a |
| | | Maritime safety: disused | 23b |

## 10.5 HLC type texts

The HLC types identified below can be found in the coastal, inter-tidal and maritime zones.

### 10.5.1 Coastal Rough Ground

This refers to areas of coastal heath that have formed on peaty acid soils. Includes areas of relict prehistoric settlements and field systems. Vegetation comprises low heather or grass with areas of dense bracken, brambles or gorse.

The semi-natural habitats are to a considerable extent the product of thousands of years of human activity, particularly summer grazing, turf-cutting and extractive industry. Now almost entirely neglected; very little grazing. Long distance coastal footpaths run through the Type which is therefore quite busy in the summer months.

Five subdivisions of Coastal Rough Ground can be defined:

2ai Coastal Rough Ground (unenclosed/undivided) Coastal Rough Ground which appears to have always been open, undivided by pasture boundaries and not enclosed and farmed. Often common land.

2aii Coastal Rough Ground (enclosed/divided) Long pasture boundaries separate 'private' rough ground attached to single settlements.

2ci Coastal Rough Ground (high cliffs). *Over 5m in height*, these largely are restricted to the northern ends of Bryher and Tresco and to Round Island, and are usually below Heathland and above Rocky Foreshore. Attributes, cairns on Heathland near the cliff-edge etc.

2cii Coastal Rough Ground (low cliffs). *Less than 5m in height* and comprising most of the cliffs in the islands. Attributes include hut circles, field walls, cist graves, palaeoenvironmental data.

2d Coastal Rough Ground (relict landscape)

This type's main use would have been as areas of summer grazing and as sources of fuel, principally furze but also, in poorly drained areas, turf, broom and bracken. These agricultural and domestic uses continued through the medieval and post-medieval periods and into the first decades of the 20th century. Bracken was used as bedding for animals – there are several areas (known as fern splatts) on St Martin' s where farmers had individual or group rights to cut bracken (LUC 1996:25). Until the post-medieval period, most cliffs were undivided commons.

Typical historical and archaeological components include the ritual/ceremonial sites of the Bronze Age, mainly barrows and cairns, which are dotted along the coast, especially on the higher cliff-tops. Cairns, in particular, tend to dominate much of the coastal rough ground on the Isles of Scilly, some good examples can be viewed at Wingletang Down (St Agnes), Peninnis Head (St Mary's), Chapel Down (St Martins), Castle Down (Tresco), Shipman Head Down (Bryher) and St Helens. Standing stones can be found at Bant's Carn (St Mary's) and Kitten Hill (Gugh).

The remains of relict prehistoric and medieval field systems survive in good condition on some cliff-tops – e.g. Castella Down and Wingletang Down (both on St Agnes), Toll's Hill (St Mary's), Chapel Down (St Martins), Shipman Head Down (Bryher), Nornour and Tean. These are often associated with the remains of settlements and hut circles, for example Bant's Carn (St Mary's), Kitten Hill (Gugh), North and South Hill (Samson), Seal Rock (Eastern Isles), Castle Down (Tresco) and Heathy Hill (Bryher).

Coastal rough ground has also been divided by pasture boundaries since the medieval period, through the post-medieval and into the modern as farmers extended their cultivated land beyond traditional margins. For example medieval systems can be found on Castella Down and at Browarth Point (St Agnes) and on South Hill (Samson), post-medieval smallholdings can be found at Nag's Head (St Agnes), bulb gardens carved out of rough ground on Gugh and at Mount Todden Down (St Mary's). Modern extensions are evident at Hugh Town (St Mary's) and alterations at Gweal Hill (Bryher).

Coastal Rough Ground has also witnessed considerable military use, often the sites of defences looking out to sea. Sites include batteries and defence works, mainly disused (e.g. Cromwell Castle (Tresco), Peninnis Head, The Garrison (all St Mary's), Castle Down Brow (Tresco).

Industrial remains are where the ores or workable slates and stone lie, eg old tin workings at Gun Hill (Tresco), disused quarry at Long Rock Down and The Garrison (both St Mary's).

Other components include an old telegraph station on Chapel Down (St Martin's) and the remains of a chapel on St Martin's Head.

On the higher coastal rough ground these types of site are generally well-preserved, there having been little or no intensive human activity subsequently. However wave and sea action along the lower edges of this type has resulted in the erosion and submergence of many of the marginal sites.

There are few forces for negative change beyond a minimal encroachment by farmers and an expansion onto certain cliffs of recreation facilities. Continued neglect of the cliffs as grazing grounds will lead to the gradual submergence of less visible archaeological remains beneath a vegetation community which becomes annually less varied and more dominated by one or two vigorous species.

### 10.5.2 Dunes

Areas of blown sand and dune refer to areas of high ground which have been covered by blown sand and also more low-lying coastal dune systems. Covered primarily in marram grass, this blown sand tends to cloak prehistoric monuments and landscapes, but these can be re-exposed by coastal erosion or sand extraction. A range of later remains survive on the dune surface eg relict post-medieval field systems and Civil War batteries.

Marram grass holds together the seaward sides of Dune complexes while more mixed plant communities have developed on sheltered lees and dune-pastures have developed on lower dune-slopes. As in Coastal Rough Ground, this apparently natural habitat has been influenced and affected by human activity, mainly summer grazing of farm animals, and can be regarded as semi-natural. The marram grass itself has been introduced to some Dunes to aid stability.

Two subdivisions of Coastal Rough Ground have been defined:

3ai Dunes

3aii Dunes (relict landscape); evidence for archaeological remains

The most extensive dune systems are found on the southern half of Tresco, the northern part and southern shore of St Martin's, and on Gugh and Annet.

An important historical feature of the development of Dunes is the succession of sand movements and stabilization; a stabilised land surface may be used for pasture, cultivation and settlement before being sealed by a further sand blow, the surface of which may in due course become stabilised and again used for pasture, cultivation and settlement.

The semi-natural vegetation is partly created by grazing and deliberate planting. Dunes are generally rich in buried archaeological remains. These are usually well-preserved, the Dunes being non-acidic, and may date back to the Bronze Age. Examples include the prehistoric occupation site at Butter Porth, St Martin's; find spots at Rushey Carn, St Mary's and Porth Morran on White Island. Relict hut circles and field systems can be found on Annet Island and White Island.

Evidence for time-depth is difficult to establish as Dunes surfaces have changed so often. Surviving features tend to be isolated and unrelated except when in industrial/recreational complexes. Excavations reveal earlier phases and sand blows reveal sections showing layers of old land surfaces interspersed with layers of sand; vividly demonstrating time-depth.

The combined ecological and historical value of Dunes should be borne in mind when considering expansion or development of recreation sites and the presumption should be in favour of conserving these very important places. The continued monitoring of Dunes is important; the prevention of erosion particularly.

### 10.5.3 Settlements

Settlements include towns, villages and farms. Most present day farms are on the site of medieval or at least early post-medieval settlements. Old Town (St Agnes) is a settlement of 12th century origin and the churchtowns on St Martin's and St Agnes probably also date back to that time. Hugh Town has an early 17th century foundation, but it is built on the Iron Age/Romano-British settlement and cist cemetery at Porth Cressa and early Christian cemetery and chapel on Mount Holles (Land Use Consultants 1996, 37; Kirkham 2003, 15).

All the settlements on Scilly will relate directly or indirectly to the sea. However those that are included in the project's study area include Old Town and Hugh Town on St Mary's, and New Grimsby and Old Grimsby on Tresco.

### 10.5.4 Communications

Communications include inter- and intra-island and long distance infrastructures. This includes roads and major trackways and the main quays on each island. Historically it is the inter- and intra- island communication infrastructure that is of most interest. The winding nature of many of the roads and tracks, particularly those on St Mary's, is indicative of their medieval (or earlier origin). Most functioning quays are also historic structures, being at least a hundred years old and possibly up to four hundred years old.

Historic quays include a number of active and disused structures including quays at Lower Town and Turk's Head on St Agnes. On St Mary's Hugh Town quay extending out to Rat Island is active whilst an extensive disused quay can be found at Old Town reflecting the time when this was the main landing place on St Mary's. On Tresco a relict quay and associated slipway can be seen at Carn Near whilst on St Martin's there is Old Quay and a disused one at Point of the Fields. On St Helen's an extensive disused quay once served the pest house and hermitage.

Quays are discussed in further detail in Section 7.1.3 of this report.

### 10.5.5 Military

This type includes prominent disused and re-used structures. There are no active military installations in Scilly. In nearly all cases the military structures are located adjacent to the coast, on land that was formerly heathland or blown sand.

The military types falling within the project's area include: the Civil War breastwork and battery on Newford Island; the extensive series of breastworks and bastion outworks and later defences encircling The Garrison on St Mary's, incorporating numerous batteries, such as Woolpack battery, and other associated buildings; and the various WWII coastal pillboxes. The greatest threat to these sites is the erosion of the low cliffs by the sea.

### 10.5.6 Foreshore

This type includes the sandy and rocky foreshore, which are exposed at Mean Sea Level but may be submerged at high tides (eg MHWS or HAT). This type is historically very important as it links the land and the sea, the latter being vital to Scilly's economy since prehistoric times. Its importance is testified by the 238 of the known sites, of the 311 identified by the study, that fall within this type.

The rocky foreshore is relatively barren in terms of historic remains but does include ruined and still functioning quays and slipways of medieval to 19$^{th}$ century date. The sandy foreshore (beach) contain fairly numerous archaeological remains including relict prehistoric (and later) field systems, graves, ritual monuments, and submerged peat deposits rich in palaeoenvironmental evidence relevant to the vegetational history of Scilly and the evolution of its coastline

Four subdivisions of foreshore can be defined:

7di Sandy Foreshore

7dii Sandy Foreshore (relict landscape); evidence for archaeological remains

7ei Rocky Foreshore

7eii Rocky Foreshore (relict landscape); evidence for archaeological remains

Typical historical and archaeological components of the foreshore include the prehistoric peat deposits at Par Beach (St Martins) and Crabs Ledge (Tresco). A Romano-British cist cemetery lies beneath the sands at Neck of the Pool (St Martin's) and cists have also been found at Par Beach (St Martins), Old Man (Tean), and Green Bay (Bryher). Prehistoric

occupation sites can also be found at Point of Fields, Top Rock, Par Beach and Great Bay (all St Martin's), Lizard Point, Pentle Bay and Bathinghouse Porth (all Tresco) and The Bar (Bryher). Prehistoric field systems have been identified at East Porth and Old Man (Tean), Pentle Bay and Crabs Ledge (Tresco), Great Porth, Green Bay and The Brow (Bryher).

The medieval period includes a field system at Little Porth (St Mary's) and two middens, one at Periglis on St Agnes and another at Northward on Bryher. Post-medieval sites include the kelp pits at Higher Town Beach (St Martins) and Old Man (Tean) and stone working sites at East Porth and Three Brothers (Bryher).

### 10.5.7 Intertidal: Marine

This type comprises the extensive sandy flats and rocks out to Lowest Astronomical Tide or Chart Datum (-2.91m below OS vertical datum), at which point it is possible to walk between the northern islands or St Martins, Tresco and Bryher. At about 1000BC this would have been above Mean Sea Level and the potential for submerged and buried archaeological features is great. Attributes include possible ritual and funerary monuments, submerged field walls, hut circles and peat deposits.

Three subdivisions of Intertidal: Marine have been defined:

20ai Intertidal: Marine (sand flats)

20aii Intertidal: Marine (relict landscape); evidence for archaeological remains

20b Intertidal: Marine (rocks)

Typical historical/archaeological components include the submerged field systems on Tresco and Samson Flats, in Appletree Bay, and Green Bay, Bryher, Bronze Age hut circle remains and field system on Samson Flats, and other prehistoric hut circles at Porth Morran and West Broad Ledge (St Martin's) and Little Arthur. Cists have been recorded at Green Bay and Lawrence's Bay (St Martin's).

### 10.5.8 Shallow Marine

This type extends from LAT out to the 5m marine contour, essentially encompassing the waters between the northern islands, islets and rocks which formerly comprised the large island known as Ennor. At about 5000BC this would have been above Mean Sea Level and attributes include possible ritual and funerary monuments, submerged field walls, hutcircles, peat deposits, in addition to many shipwreck sites.

Two subdivisions of Intermediate Marine can be defined:

20ci Shallow Marine (0-5m)

20cii Shallow Marine (relict landscape); evidence for archaeological remains

Typical historical/archaeological components include a Bronze Age cairn at Neck of Samson and a hut circle at West Broad Ledge, an undated prehistoric occupation site (identified through flint finds on the seabed) at St Helen's Pool. Numerous spot finds also come from this area many having been lost during shipwrecks.

This type is also filled with numerous navigation aids for shipping, numerous navigation buoys, marks, beacons, lights, and fog signals and other aids are found in this type as shipping enter the potentially hazardous inter-island waters, particularly when entering through St Mary's Sound and north of Hulman island through Channel Ledges. There are many shallow water anchorages in this type such as at St Helen's Pool, off Hangman's Island, just south of Puffin Island, off Conger Ledge (Tresco) and in Porth Conger and off The Bar (St Agnes).

Submarine electrical cables are also a feature of this type, taking advantage of the relatively shallow waters between the islands particularly between St Mary's and the northern islands. Cables run from Pendrathen across to Crab's Ledge on Tresco and from Bar Point across to Lawrence's Bay, serving Higher Town, on St Martin's. Between Tresco and Bryher cables run from Point Carn, north of New Grimsby to Dunstan's Rock and Queen's Ledge. Submarine cables are discussed in further detail in section 7.10 of this report.

#### 10.5.9 Intermediate Marine

This type extends out to the 20m marine contour. This includes the whole Scillonian batholith. Includes many rocks and ledges and can be difficult to navigate. The Seven Stones reef 6 miles to the north of Scilly is a similar HLC type. Attributes include many shipwreck sites, and lightships or lighthouses on rocks.

Three subdivisions Intermediate Marine of can be defined:

21ai Intermediate Marine (20m)

21aii Intermediate Marine (relict landscape); evidence for archaeological remains

21b Intermediate Marine: Rocks (hazards)

This type is strewn with underwater rocks. Consequently many of the navigation buoys, marks, beacons, lights, fog signals and radar transponder beacons and other aids are found in this type as shipping enter the potentially hazardous inter-island waters. Navigation lines and recommended tracks for vessels are also a feature of this type as they lead and clear mariners to harbour. Examples include the 'North Carn of Minalto in line with western extremity of Great Minalto' which guides shipping through St Mary's Sound and 'St Agnes old lighthouse in line with Tins Walbert beacon' that guides mariners through the North West Passage. Some deep water anchorages can also be found in this area such as in St Mary's Road and off Block House Point.

Submarine electrical cables are also a feature of this type running from Porth Cressa, south of Hugh Town across to The Cove between St Agnes and Gugh, serving Higher Town.

#### 10.5.10 Deep Marine

This type extends from the 50+m marine contour and beyond. Attributes essentially include deep-water shipwrecks and derelict sites.

22a Deep Marine 50+m

22b Deep Marine 100+m

This type includes particularly turbulent waters off the western and northern approaches to Scilly. According to Richard Larn it is also the most likely area to reveal wrecks predating 1600 as ships get driven onto the rocks off Round Island to Mincarlo, out to Crim Rocks around to Gorregan and Smith Sound south of St Agnes.

Two pilot boarding places can be found off to the south-east of St Mary's probably to take ships away from Scilly off to mainland harbours such as Falmouth. Similarly a lightship with a radar transponder beacon is sited off to the north-east of Seven Stones to guide ships through this particularly hazardous stretch of water.

At least four transatlantic submarine cables pass through this type. Maritime traffic separation schemes and zones exist to the west, south and east of the islands and a national fishery zone extends out to the 6 mile limit from Scilly and the Seven Stones.

### 10.5.11 Maritime Safety

This type includes existing and disused installations. Both disused structures (such as St Martin's daymark, St Agnes lighthouse and various coastguard and lifeboat stations) and those lighthouses still in use are included here. All are historic features, ranging in age from eighty to three hundred years old.

Two subdivisions of Marine Safety have been defined:

23a Maritime Safety (existing)

23b Maritime Safety (disused)

Typical historical/archaeological components include the mid-19th century lighthouse builders' operational base at Rosevear. Coastguard stations can be found at Turk's head (St Agnes) and at Giant's Castle (St Mary's) whilst a lifeboat station is sited at Carn Thomas at Hugh Town. The old lifeboat station at Periglis, St Agnes was rebuilt in 1904. There are two principal lighthouses within this type, Bishop Rock to the south west of the Western Rocks and Hulman just off Tresco. Maritime safety is also discussed in the maritime character types 10.5.8 -10 above.

# 11 Character, distribution, potential and vulnerability of different monuments

A complete list of the archaeological and historic sites and monuments in the project area is provided in the Lists at the end of this report. In the following section the main classes of archaeological and historic monuments that survive in Scilly are described and their importance assessed. The latter has been carried out using a modified version of the non-statutory criteria adopted for English Heritage's Monument Protection Programme (MPP). A 'Class Importance Statement' concludes the description of each class of monument, the application of criteria for assessing the absolute and relative importance of individual sites is outlined in the following section.

## 11.1 Neolithic and Bronze Age Ceremonial Monuments

### 11.1.1 Cairns and cists

*Form*: **Cairns** are roughly circular mounds, constructed of small stones and earth, often surrounded by a kerb of boulders, are generally small and insignificant looking, being as little as 2.0 metres in diameter and 0.1 metres high. However, a number are very substantial (up to 22.0 metres. across and 2.2 metres high) and some contain cists (boxes lined and capped with stone slabs), which also occur without a covering cairn and would have held a single cremation. The funerary purpose of most cairns is assumed rather than proven and some, at least, may be the result of field clearance, especially those lying within early fields or connected by boulder walls – for example on Shipman Head Down. In Cornwall cairns date from 2000-1600 BC, but in Scilly, it seems likely that they overlapped with entrance graves in the middle Bronze Age and continued to be built during the Iron Age

*Distribution:* Cairns survive on most islands with particular concentrations on heathland; Shipman Head Down (Bryher), Castle Down (Tresco), Wingletang Down (St Agnes) and on Gugh. Most are set along ridges, on hill summits or gently sloping downs, however others are found on cliff tops, several lie closer to the modern shoreline and two cairns have been identified below the high water mark, one south of Tean, **PRN 7107**, the other excavated at Par Beach, **PRN 7149**. At least one other has been found during MPP work in the eastern part of East Porth, Tean (Hooley pers comm). A settlement in cliff face at Pendrathen, **PRN 7482**, includes an alleged cairn with cist, **PRN 7485.01**.

*Potential:* It is likely that further survey will increase the number of cairns in the study area. There is a great variety in the form of cairns and targeted excavation of threatened sites might elucidate the character and function of cairns as a class of monument.

*Threats/vulnerability:* The condition of the cairns in the study area is likely to be stable but vulnerable to sea action or cliff erosion.

*Class importance statement:* Cairns and cists as types of burial monument are long-lived and are likely to have spanned much of the Bronze Age. Cists are rare in Scilly, and though cairns are abundant, it is their sheer number and the groupings that they form and their relationship with other broadly contemporary features which makes them so special. Cairns display some variation in form, while cists are of uniform type. Cairns and cists are part of a small number of monument classes that represent the Bronze Age in Scilly and should normally be considered of **National Importance**.

### 11.1.2 Entrance graves

*Form:* An **entrance grave** is a roughly circular cairn of earth and stones, revetted by a kerb of boulders or coarse stone, containing a rectangular chamber. The latter is constructed of orthostats or coursed walling, covered by several large capstones, and occupies much of

the central portion of the cairn. Both cairn and chamber often incorporate natural boulders and outcrops. The chamber was accessible from the outside of the cairn from a gap in the kerb. Entrance graves were constructed as ritual monuments. They range from 3.5 to 25m in diameter and 0.3 to 2.5m in height.

*Distribution:* Entrance graves have a very restricted distribution within the British Isles. In England they are confined to Cornwall and Scilly. Further afield, similar tombs have been recorded in the Tramore area of south-east Ireland, and lesser numbers of vaguely comparable monuments are known in the Channel Islands and Brittany.

Entrance graves are clustered monuments, scattered over much of Scilly with particularly large concentrations on Samson, Gugh and the south-eastern edge of St Mary's. Most are set along ridges, on relatively level or gently sloping downs, or on hill summits. In some cases they are near to ancient sea cliffs. Low-lying entrance graves are the exception to the rule, only two known at the bottom of slopes and another, the only one in the area of study, is on the low-lying island Old Man of Tean, **PRN 7103** (Ashbee 1974, 78). Ninety-four entrance graves are recorded in the HER but only 79 of these are extant and 71 are protected by scheduling.

*Potential:* It is unlikely that further survey will increase the known number of entrance graves in the project area. Entrance graves have considerable potential to provide information about Scilly in the Neolithic and Bronze Age.

*Threats/vulnerability:* Mainly erosion.

*Class importance statement:* The tradition of constructing and using entrance graves is long lived and is likely to have spanned the late 3rd and first half of the 2nd millennium BC. Though not uncommon in Scilly, entrance graves are rare in England. These monuments exhibit some diversity in their form. They are among a very restricted range of monuments known to be of later Neolithic and early Bronze Age date, and should normally be considered of **National Importance**.

### 11.1.3 Stone alignments

A **stone alignment** is sometimes exposed on Par Beach (Higher Town Bay), St Martin's, where the sands are continually shifting, **PRN 7660**. This feature was previously thought to be unique in the islands, but two other stone alignments have since been identified on Castle Down, Tresco by Hooley during MPP work in the 1990s

*Form:* It consists of three stone slabs set roughly equidistant from each other in and east-west alignment. The overall length of the row is 15m. In plan the three stones are of similar size and rectangular shape. However, they protrude to varying heights above the height of the beach (as recorded in September 1989), the lowest stone being 0.35m high and the tallest 0.83m. All the stones are visually impressive and appear to have been selected because of their pleasing natural folds and indentations. It is of more massive proportions and of a different character to the field walls which are common in the islands (Ratcliffe and Parkes 1990, 22).

*Potential:* It is possible that other ritual monuments are buried by sand in Scilly. The stone alignment on Par Beach is likely to be part of a wider ritual landscape.

*Threats:* Sea action, accidental damage.

*Class importance statement:* The tradition of erecting stone alignments is long-lived, spanning the late 3rd and early 2nd millennium BC. This monument is unique in Scilly and should normally be considered as of **National Importance**.

*Fig 74 Stone alignment on Par Beach, St Martin's (photo: CCC)*

### 11.1.4 Standing stones

*Form:* **standing stones** (called menhirs in Cornwall and Scilly) are deliberately set upright stones constructed as ritual or burial monuments and presumed to be of late Neolithic or Early Bronze Age date. Standing stones in Scilly range from 1.5 to 2.4m in height, with a single broken example which measures only 0.6m high. Three of the extant stones lean to the south or east. On St Martin's there is a single example of a statue menhir with a roughly carved human head and shoulders, measuring only 0.6m high by 0.4m wide, which was re-erected in *c*1990.

*Distribution:* The majority of standing stones identified in Scilly are located on the northern half of St Mary's. There is a single menhir on Gugh and three stones on St Martin's. Most of the sites are on high ground, on hill tops, ridges or slopes. The site of a destroyed example on St Mary's is on the highest point of the islands; two others are in very prominent positions.

*Potential:* There are 13 menhirs recorded in the HER, but one is a natural feature, another an alleged site and three have been destroyed, leaving eight extant standing stones in Scilly. Further survey may identify additional recumbent examples and it is also possible that associated below ground remains have still yet to be recovered.

*Threats/vulnerability:* Vulnerable to erosion or poaching around base.

*Class importance statement:* The tradition of erecting standing stones is long-lived, spanning the late 3rd and early 2nd millennium BC. These monuments are rare in Scilly. They exhibit little variety in size but some diversity in their form and immediate associations. Standing stones are among a very small range of monuments of Later Neolithic and Early Bronze Age date in Scilly, and should normally be considered as of **National Importance**.

## 11.2 Prehistoric, Romano-British and Early Medieval settlement sites

### 11.2.1 Hut circles

**Hut circles**

*Form:* **Hut circles**, or perhaps more properly round house remains, in Scilly are usually circular or oval in plan, with average internal diameters of 3-5m etc and one or more entrances. In most cases, hut walls survive as stone-faced or stone and earth walls, or as stone and earth banks, some of which have boulders protruding from the top of them or stone facing on their inner side. Hut walls often incorporated natural stones; facing stones consist of large orthostats or coursed smaller stones.

*Distribution*: Settlements favoured low-lying land and many may have been destroyed by the submergence and coastal erosion. The early settlements invariably lie within or adjacent to the remains of contemporary field systems, small rectilinear fields defined by boulder walls, stony banks and lynchets.

*Potential:* It is extremely likely that further hut circles will be exposed by erosion of the cliff face and shifting sand in intertidal areas, others may lie undiscovered below the present low water mark. Further work is required on cliff face sites, which have enormous, proven potential, and submerged stone remains to establish their stratigraphic relationship with intertidal 'peats' and other deposits and securely date them (see below Section 11.3).

*Threats/vulnerability:* Cliff face sites are susceptible to coastal erosion and unsystematic and unrecorded collection of finds. Intertidal and submerged sites are vulnerable to scouring and displacement by sea action or destruction by dredging.

*Class importance statement:* The tradition of constructing and using hut circles is long lived. These monuments are relatively common in Scilly; however they exhibit some diversity in their form, especially with regard to their internal features, and are among a limited range of monument classes representing the Prehistoric to early medieval periods in Scilly. Hut circles should normally be considered of **National Importance**.

### 11.2.2 Early field systems

**Field systems**

*Form*: Early **field systems** in Scilly are defined by walls, stony banks and lynchets. The walls are generally constructed of lines of single boulders, some orthostatic, 0.3-1m wide and 0.1-1.1m high. Banks are 0.5-3m wide and 0.1-1.11m high and are formed by small stones cleared from the fields. In some cases the remnants of the boulder walls, against which these stones were cleared, protruded above the top of the banks. Where cultivation has occurred on sloping ground boundaries along contours are largely defined by lynchets. The latter are narrow terraces, 0.7-2m wide and 0.3-1.7m high, formed by soil moving down from the top of a field to accumulate against the lower boundary.

The fields are usually rectilinear in plan, and very occasionally curvilinear, though in many cases so fragmentary that it is impossible to determine any pattern. Additional features sometimes found in field systems are gateways, stone clearance cairns, and hollow ways and trackways. During the excavation of an Iron Age field system at Bar Point, St Mary's, wheel ruts and animal hoof prints were found in the old land surface (Evans 1984, 7-32).

*Distribution*: Early field system remains have a wide distribution and are found throughout Scilly. Topographical location varies from plateau and hilltop to hill slope, cliff top and the beach and intertidal zone. 85 sites are recorded in the HER, 22 lie within the project area.

*Potential*: As with the unexcavated houses it is difficult to precisely date these field systems. The submerged field walls may date to the Bronze Age, but probably continued in use throughout prehistory, and in some cases into the Roman and early medieval periods, on the other hand some of the single thickness boulder walls previously interpreted as early field boundaries may either be fish traps or post-medieval divisions associated with the kelp burning industry. The further work required on intertidal and submerged stone remains is outlined below in Section 13.4.1.

*Threats/vulnerability:* Most early field systems are fragmentary, but boundaries, though often robbed of stone, can usually be easily identified. Field system remains on the uninhabited islands survive in very good condition and are only threatened by coastal erosion. Walls in the intertidal and subtidal zones have suffered damage from sea action but appear to be in a generally stable condition.

*Class importance statement:* Early field systems have a long-lived period of construction and use. These remains are relatively common in Scilly and generally uniform in nature. However, they are among a limited range of monument classes that represent the prehistoric to early medieval period in Scilly. Surviving relict field systems should normally be considered of **National Importance**.

### 11.2.3 Cliff castles

*Form:* A **cliff castle** is a fortified promontory, defended on three sides by steep cliffs and across its neck by banks or walls that, in some cases, have ditches on their landward sides. Cliff castles can be univallate, bivallate or multi-vallate, and hut circles are often found inside them.

The three cliff castles on Scilly vary in form. The only one which falls within the study area is Shipman Head cliff castle at the precipitous northern extremity of Bryher. This example is apparently bivallate in form. The inner rampart lies on Shipman Head itself, and consists of small stones piled on top of large natural boulders. This piece of land is now cut off by the sea from the rest of Bryher. To the south, on Bryher itself, a second, outer defence runs from a natural outcrop known as Boat Carn for 50m down to the cliff edge. It is a wall constructed of roughly piled boulders faced with close-set stones incorporating natural rock in some places. The wall, which is largely tumbled, measures 4m wide and survives to an average height of 0.7m. There is no clear evidence of a break in the walling which might indicate an entrance. Hut circles are not visible between the two ramparts, but a single example lies outside the cliff castle to the south. It is possible that evidence of habitation may survive on the northern side of the cliff castle's inner rampart.

*Distribution:* In England the distribution of cliff castles is limited to the shores of Scilly, Cornwall and North Devon, with the greatest concentration of sites occurring along the precipitous north coast of Cornwall.

In Scilly their distribution is limited to single examples on Bryher, St Martin's and St Mary's.

*Potential:* Cliff castles are now interpreted as possible socio-economic centres rather than defensive strongholds and have considerable archaeological potential.

*Threats/vulnerability:* The ramparts will be diminished by coastal erosion. The rampart on Shipman Head is suffering from wind-borne erosion of its surface vegetation, accelerated by the effects of salt spray.

*Class importance statement:* Iron Age cliff castles have a restricted period of construction and use. These monuments are rare in Scilly. They exhibit some diversity of form and are

among a small number of monument classes which represent the Iron Age in Scilly. Cliff castles are considered to be of **National Importance**.

### 11.2.4 Lithic scatters

*Form:* Usually a finite spread of flint artefacts, could include scrapers, awls, knives, arrowheads, microliths, waste flakes and cores. Flint artefacts are usually isolated finds but at a number of locations in Scilly worked flint has been found in sufficient quantity to constitute a flint scatter, suggesting that a prehistoric flintworking site or settlement must have existed in the vicinity. Some of these are stratified, ie from primary or secondary contexts, and others unstratified surface finds.

*Distribution:* Ten are identified in the HER, usually in cultivated land, but there is a Mesolithic flint scatter exposed in the cliff face above Old Quay, St Martin's, **PRN 7185**.

*Potential:* Very little study has been made of the flints within these assemblages, but they can potentially yield a significant amount of information about the lifestyle and economy of Scilly's early inhabitants.

*Threats/vulnerability:* Flint scatters survive only as below ground remains and are exposed by development, ploughing or erosion of the cliff face. The latter two processes represent the main threats to these types of site.

*Class importance statement:* Lithic scatters are long-lived as a monument class, spanning several millennia. By their nature, they exhibit little diversity of form, though there may be considerable variation in the type of flint artefacts that constitute these assemblages. Lithic scatters are, as yet, rare in Scilly and are among a small range of monument classes representing the prehistoric period in Scilly. Lithic scatters should normally be considered of **Regional/County Importance** on the basis of our current understanding, though the pointers they provide to centres of past human activity should be borne in mind.

### 11.2.5 Findspots

*Form and distribution:* By far the greatest number of terrestrial sites recorded in study area by the HER are **findspots**, representing 114 sites out of a total of 346. Can include flints and individual finds of all periods, such as Bronze Age gold bracelet found on a St Martin's beach in 1989, **PRN 7665**.

*Potential:* There is considerable potential for stray prehistoric finds to be discovered.

*Threats/vulnerability:* Finds may not always be reported.

*Class importance statement:* Findspots are long-lived as a monument class, spanning several millennia. By their nature, they exhibit little diversity of form, though there may be considerable variation in the type of flint artefacts that constitute these assemblages. Findspots are among a small range of monument classes representing the prehistoric period in Scilly. Findspots should normally be considered of **Regional/County /Local Importance** on the basis of our current understanding, though the pointers they provide to centres of past human activity should be borne in mind.

## 11.3 Later Iron Age and Romano-British burial monuments

### 11.3.1 Cists

*Form:* **Cists** of this period are oval or rectangular graves, set in pits lined with stone slabs placed on edge or coursed walling and covered by capstones. Cist dimensions range from 0.9-1.6m in length, 0.5-1m in width and 0.3-0.8m in depth. Iron Age/Romano-British cists are clustered monuments, although there are a few isolated examples they are usually found as part of cemeteries.

*Distribution:* In Scilly there are some thirty-two known cists, whose current distribution is restricted to a few locations, on St Mary's and the shores of St Martin's, Tean, Bryher and Samson. In each case they lie on low-lying ground, associated with broadly contemporary settlements and field systems, adjacent to the modern shoreline or below the present HWM. Twenty-two of the identified cists are now destroyed; others have been reburied or have long been hidden beneath sand. Only three examples of cists of this period are currently visible.

*Fig 75 Cist in Green Bay, Bryher. Viewed from the south, September 1985 (photo: CCC)*

*Potential:* It is very likely that further cists will be uncovered in the project area by modern development, sea action and coastal erosion.

*Threats:/Vulnerability:* The location of cists, just above or close to the modern shoreline makes these monuments very vulnerable to coastal erosion. In the case of those cists below HWM, the sea has scoured out their contents, leaving only the stone walls. One of the two cists exposed in the cliff face has been partially removed due to coastal erosion. At present at least part of the sand-covered cist cemetery on Par Beach, St Martin's and a single cist in East Porth, Samson are protected by scheduling.

*Class importance statement:* The tradition of constructing and using Porth Cressa type cist graves has a restricted timespan. These monuments are rare in Scilly, but cists exhibit only slight variation in their form and contents. They are part of a small number of monument classes representing the Later Iron Age and Romano-British periods in Scilly and should normally be considered of **National Importance**.

## 11.4 Post-medieval defensive sites

### 11.4.1 16th century defensive sites

*Form:* The 16th century defensive sites in the study area are **blockhouses**, rectangular stone-paved platforms enclosed by walls with embrasures for guns, and attached living quarters, probably originally having parapets.

*Distribution:* Tudor defensive sites are restricted to the north and west side of St Mary's and the west and east sides of Tresco. Blockhouses are located adjacent to the coast.

*Potential:* Considerable educational potential.

*Threats/vulnerability:* Coastal erosion and storm damage are the main threats.

*Class importance statement:* The period of construction and use of Tudor defensive monuments in Scilly is restricted. These monuments are rare in Scilly and each one can be considered unique. They are among a very limited range of among a very limited range of monument classes representing the Tudor period in Scilly. All Tudor defensive monuments should be considered of **National Importance**.

### 11.4.2 Civil war defensive sites

Civil War defensive sites in the project area are represented by the following classes of monument: breastwork, battery, platform (there are also a blockhouse on Mount Todden, St Mary's and a fortification around King Charles' Castle on Tresco which are not in the study area). The majority were the work of the Royalists, but Parliamentarian forces constructed Oliver's Battery on the southern tip of Tresco in 1651. It is likely that some at least of the defences were maintained after the capture of Scilly.

*Form:* **Breastworks** consist of an earth or earth and stone bank on the inner side of which are usually traces of a ditch, Banks range from 0.4-4m in width and 0.1-1.7m high, and ditches from 0.5-2m wide and 0.2-1m deep. Breastworks can incorporate bastions and connect batteries. Breastworks usually run parallel with and adjacent to the cliff edge.

*Fig 76 Civil War breastwork on The Garrison (photo CCC)*

Civil War **batteries** in Scilly consist of levelled areas or platforms located on hilltops or terraced into hill slopes, sometimes incorporating natural rock. In most cases they are at least partially enclosed by a stone and earth bank, which ranges from 0.8-5.5m in width and 0.2-2m high. Adjacent to some batteries are small **platforms**, apparently for bivouacs or temporary buildings.

*Distribution:* Civil War defensive sites in Scilly are concentrated around the coast of St Mary's, and in particular around The Garrison, but are found to a lesser extent on Tresco,

Bryher, Samson, St Agnes and Gugh. Their distribution is determined by the fact that they were strategically positioned to defend the deep-water approaches to the Islands.

*Potential:* It is unlikely that further examples of Civil War defensive sites remain to be discovered in Scilly, though it is possible that impenetrable vegetation may conceal low earthworks surviving in hillslope and cliff top locations.

*Threats/Vulnerability:* The survival of Civil War monuments is fair. Coastal erosion is the greatest threat to these monuments because of the cliff top location of the majority. Documentary evidence indicates that several lengths of breastwork have been completely destroyed by cliff erosion (Troutbeck 1796), and the surviving examples run discontinuously along the cliff top.

*Class importance statement:* Civil war defensive monuments have a transient period of construction and use (1642-51), and are rare in Scilly. Batteries exhibit some diversity of form, while the remaining classes of monument are more uniform. These defensive monuments are among a very limited range of monument classes representing the Civil War period in Scilly and should normally be considered of **National Importance**.

### 11.4.3 Later post-medieval defensive sites

*Fig 77 Cromwell's Castle on the shoreline, with the earlier King Charles' castle on the cliff above (photo: CCC)*

Later post-medieval defensive sites in the project area are represented by the following classes of monument: castle, curtain wall, battery. Distribution is limited to cliff edges of St Mary's and Tresco, but there are other defensive sites of this period on St Martin's and further inland on St Mary's and Tresco which are outside the study area.

**Cromwell's Castle** on the west coast of Tresco dates to the post-Civil War period in Scilly. Named after the eponymous Lord Protector, it was built in 1651-2 at a time when the security of the newly captured islands was threatened by the Dutch Fleet. It replaced the badly situated King Charles' Castle in defence of New Grimsby harbour. Cromwell's Castle, **PRN 7354.01**, is a tall round tower constructed of massive rubble, with an internal diameter of 5.8m, walls 2.1-3.8m thick and an original doorway high up in the south side. Inside, two storeys above an unlighted basement provided living accommodation, and at the top of the tower there is a paved gun platform, originally surrounded by a parapet. On the seaward side of the tower, an earlier battery was replaced in the mid-18th century by a paved platform, 12.7m by 9.7m, enclosed by a parapet, 2.1m wide by 0.7m high. From that time entry to the castle was through a doorway leading from this platform. Lean-to buildings consisting of a guardroom and a latrine were later built against this tower on either side of the entrance.

The damaged state of defences on The Garrison by the beginning of the 18th century was recorded in a report of 1715, and led to a 30-year rebuilding programme under the supervision of Abraham Tovey. The existing **curtain wall** was rebuilt and extended around most of The Garrison. This wall consists of a rubble core faced with squared granite blocks, and has gun embrasures built into its top and drainage channels passing from its inner to its outer face, at its base. The curtain wall incorporates numerous gun batteries.

The **batteries** that interrupt and protrude from the Garrison curtain wall are largely 18th century structures to the landward of batteries originally built in the mid-17th century. They vary in size and shape but are generally angular in plan and are enclosed by walling 2-2.4m wide (up to 0.8m at its base), 0.7-1.8m high internally and 2.5-5.2m height externally. Embrasures are visible in the top of the battery walls and gun emplacements are formed by large dressed granite slabs. Three large batteries on the east side of the Garrison have restored carriage guns positioned on some of their gun emplacements.

*Threats/vulnerability:* Later post-medieval defensive sites are generally in a very good state of preservation, though two detached batteries on the Garrison have been almost totally destroyed by coastal erosion. The curtain wall along the south side of the promontory is very close to the cliff edge and in imminent danger of being undermined by erosion.

*Class importance statement:* Later post-medieval defensive monuments have a transient (less than 150 years) or restricted (between 150 and 300 years), period of construction and use. These monuments are rare in Scilly, with some classes represented by only a single example) are rare in Scilly. Batteries exhibit some diversity of form, while the remaining classes of monument are more uniform. These defensive monuments are among a relatively large range of monument classes representing the later post-medieval period in Scilly and should normally be considered of **National Importance**.

## 11.5 Early modern and modern defensive sites

### 11.5.1 Searchlight batteries

Form: Structural elements and fittings survive.

Distribution: On south side of The Garrison below Steval Point and Woolpack Batteries. The searchlights were powered by the massive generator embedded in the Bartholomew

Battery and linked by a tunnel to the coastal cliff. The Direction Range Finder (DRF) calibration posts off Southward Well, Samson relate to the Steval Battery's DRF.

Potential: Forms part of the nationally important historic defences of The Garrison.

Threats/vulnerability: Coastal erosion.

*Class importance statement:* Early modern defensive monuments have a transient (about 164 years) period of construction and use. These monuments are rare in Scilly. Searchlight emplacements exhibit some diversity of form and date from between 1898 and the first decade of the 20th century. These defensive monuments are among a small range of monument classes representing defence during the early modern period in Scilly and should normally be considered of **National Importance**.

### 11.5.2 Flying Boat Stations

*Form:* At Porth Mellon, St Mary's all that survives above ground is a concrete base **PRN 7770**. At Abbey Farm, Tresco, **PRN 7757**, some original 1916-18 buildings survive and also a concrete base, iron railings and slipway and an earlier wooden slipway and footprint of buildings.

*Distribution:* The sites of the two flying boat stations are coastal.

*Threats/vulnerability:* The whole Abbey Far area is proposed for redevelopment in the Replacement Isles of Scilly Draft Local Plan (First Deposit, March 2004, 18).

*Potential:* Provide a tangible and visible and link with the events of WWI. There is good photographic and documentary evidence for the Tresco site and the remains have been plotted by the NMP.

*Class importance statement:*

Flying boat stations have a transient period of construction and use. These monuments are rare in Scilly and have different levels of preservation and documentation. These sites are among a small range of monument classes representing defence during the modern period in Scilly and should normally be considered of **National Importance**.

### 11.5.3 Pillboxes

*Fig 78 WWII pillbox at Porth Hellick (photo: Alwyn Harvey)*

*Form:* Typically, built of concrete, hexagonal in plan 4m across and 2m high, with four gun loops, one in each wall facet.

*Distribution:* Twenty-seven pillboxes around the coast of St Mary's strategically placed to cover possible landing points.

*Threats/vulnerability:* Neglect, costal erosion.

*Potential:* Provide a tangible and visible link with the events of WWII.

*Class importance statement:*

Pillboxes have a transient period of construction and use. These monuments are rare in Scilly. Pillboxes exhibit some diversity of form and are among a small range of monument classes representing defence during the modern period in Scilly and should normally be considered of **National Importance**.

## 11.6 Post-medieval and early modern industrial sites

### 11.6.1 Kelp pits

**Kelp pits** are small circular depressions, lined with small flat stones, in some cases surrounded by stone paving or an enclosing circle of stones set back from the edge of the pit. The pits range from 1-2m in diameter and 0.2-0.6m deep, the shallowness of some is because they have become silted up with soil or sand. Kelp pits are the remnants of the kelp-making industry and were used for burning seaweed to produce kelp, an alkali used in the production of glass. Scillonian kelp pits are dated by documentary evidence to the 150-year period when kelp was manufactured in Scilly (Over 1987).

Distribution: Fifteen kelp pits are recorded in the HER, one destroyed, two alleged, twelve extant. There are six examples in the study area.

*Distribution:* Post-medieval industrial sites are found on all the inhabited islands of Scilly, and on St Helen's, White Island, Samson and Tean. Their topographic setting is largely determined by the type of activity they represent and kelp pits are sited on cliff tops adjacent to rocky, seaweed-clad shores.

*Threats/vulnerability:* Survival is fair. But kelp pits and boathouses situated near to the cliff edge and are vulnerable to coastal erosion. A single kelp pit on Tean is the only one to have been excavated.

*Class importance statement:* The period of construction and use of kelp pits is restricted to a period of 149 years between 1684 and 1835. Surviving kelp pits are quite rare in Scilly, but exhibit only a limited diversity of form. Kelp pits are among a relatively large range of monument classes representing the post-medieval period in Scilly. Kelp pits should normally be considered of **National Importance**.

### 11.6.2 Shipyards

*Form:* The observed remains are stone-paved slips which have been exposed below Holgate's Green and the Scillonian Club, buried slipway timbers consisting of upright supports which uncover from time to time opposite Holgate's Green, and, in 2003 after an exceptionally high tide which reduced the beach sand level considerably, two hardwood planks, some 2.7m (9ft) long, 300mm (12in) wide and 50mm (2ins) thick on Town Beach. These are thought to be a throwback from the shipbuilding era when timbers were buried in the beach deliberately, to keep them wet. Fragments of the clay pipes smoked by the workers are to be found on Town Beach and there are half a dozen photographs showing the location of the yards, with half-built or completed vessels awaiting launch. There are no known surviving remains of the shipyards at Porth Cressa or on Bryher.

*Distribution:* There are the sites of two shipyards on Town Beach, St Mary's and two on Porth Cressa and one on Bryher.

*Potential:* There are no known surviving remains of the shipyards at Porth Cressa or on Bryher. No definitive study of shipbuilding history on Scilly has been made as yet, nor has there ever been a book on the subject, although extensive research to this end is in progress by Richard Larn.

*Threats/vulnerability:* Shipyard remains could be affected by development on the foreshore.

*Class importance statement:* The period of construction and use of shipyards on Scilly is restricted to a period of just over 100 years between 1773 and 1878. The shipyard sites are rare in Scilly, but are likely to have only a limited diversity of form. Shipyards are among a relatively large range of monument classes representing the post-medieval period in Scilly. Shipyards should normally be considered of **Regional/Local Importance**.

### 11.6.3 Lime kilns

*Form:* Unknown

*Distribution:* Three known lime kilns, all in Hugh Town. One on Rat Island, another on Porth Cressa beach. The other, not in the study area, was on the opposite side of the road to St George's battery and 'was in use when the Garrison works were carried out in 1742', **PRN 7905.07** (Troutbeck 1794, 44).

*Potential:* Limited.

*Threats/vulnerability:* Surviving below ground remains of the lime kilns could be affected by development.

*Class importance statement:* The period of construction and use of lime kilns on Scilly is restricted to the post-medieval period. Lime kiln sites are rare in Scilly, but are likely to have only a limited diversity of form and poor survival. Lime kilns are among a relatively large range of monument classes representing the post-medieval period in Scilly. Limekilns should normally be considered of **Regional/Local Importance**.

### 11.6.4 Smuggler's caches

*Form:* **Smuggler's caches** are cavities dug into the cliff face or below ground. These tunnels or chambers are of varying sizes, the smallest being 1.32m long by 0.2m wide by 0.1m high and the largest 5m by 0.8m by 1m. They are usually stone-lined, with stone slabs or lintels forming the roofs. Caches were used to conceal smuggled goods and probably date to the 18th or early 19th centuries.

*Distribution:* Four extant smuggler's caches are recorded in the HER, a good example is exposed in the cliff face on the north-east side of Porth Mellon, St Mary's, **PRN 7569**, another the subterranean stone-lined chamber in the garden of *Smugglers* on the east side of Tresco

*Threats/vulnerability:* Coastal erosion is the main threat.

*Class importance statement:* The period of construction and use of smuggler's caches on Scilly is restricted to the 18th and early 19th centuries. Smuggler's caches are rare in Scilly, but are likely to have only a limited diversity of form. Smuggler's caches are among a relatively large range of monument classes representing the post-medieval period in Scilly and should normally be considered of **Local or Regional Importance**.

### 11.6.5 Boathouses

*Form:* **Boathouses** (gig sheds) are long narrow rectangular buildings, *c*10m by 3m internally, open at one end and constructed of stone-face walling with a stone and mortar fill, 0.601m wide and surviving to heights of 0.5-1.8m.

*Distribution:* Situated just above the beaches and originally thatched, these buildings once housed pilot gigs similar to those used for racing in Scilly today (Ratcliffe 1989, 65). Eleven boathouses are recorded in the HER, six destroyed or covered by sand, five definitely extant.

*Potential:* A distinctive component of the historic landscape and providing a visible and tangible link to the history of piloting in the Islands.

*Threats/vulnerability:* Neglect, coastal erosion, storm damage, unsuitable conversions.

*Class importance statement:* The period of construction and use of boathouse on Scilly is restricted to the 19th centuries. Boathouses are not uncommon in Scilly, and are likely to have only a limited diversity of form. Boathouses are among a relatively large range of monument classes representing the post-medieval period in Scilly and should normally be considered of **Local or Regional Importance**.

### 11.6.6 Quays

Form: Historic **quays** on Scilly are platforms of drystone construction, consisting of piled boulders faced with blocks set in courses and often incorporating natural rock. In several cases only the lowest course of facing stones survives, their diminished state the result of stone robbing and/or wave action. In plan quays are rectangular, slightly curving or L-shaped. Their dimensions range from 12-60m in length, 1.7-20m in width and 0.5-3m in height, although the Old Quay at Hugh Town, St Mary's is of larger proportions (approximately 100m long by 12m wide). A few quays have iron tie-rings set into some of their facing stones. Documentary sources provide construction dates for two quays (Pendrathen Quay, 1795; Hugh Town Old Quay, 1601, rebuilt 1749-51).

*Fig 79 Old Quay, St Martin's in September 1991 (photo: CCC)*

The ruined quay at Old Town, St Mary's (**PRN 7549**), visible at low water, is first mentioned in 1554 in connection with the fortification of Castle Ennor. It may originally have been built at the same time as the 13th century castle. A sketch of 1756 by Borlase depicts the quay as it is today; L-shaped in plan and tapering towards its seaward end. Of drystone construction with vertically-laid facing stones retaining a core of large boulders, it has two building phases, but only the lower courses survive.

*Distribution*: On rocky and sandy foreshores.

*Potential*: Upgrading of quay facilities may reveal evidence of earlier quays.

*Threats/vulnerability*: Historic quays may be threatened by development.

*Class importance statement:* With the exception of Old Town Old Quay and St Mary's Quay, which are of **National Importance**, quays should normally be considered of **Regional/County Importance**, though occasionally they may be upgraded by virtue of the fact that they are thought to be of earlier construction or because they occur in close association with other monuments of National Importance.

## 11.7 Miscellaneous sites

### 11.7.1 Middens

*Form:* **Middens**, mounds or well-defined spreads of domestic rubbish, have a date range in Scilly from the Neolithic to the post-medieval period. They are usually defined as a concentration of limpet shells. Some also contain sherds of pottery, flint implements and waste flakes, and fish, bird and mammal bones.

*Distribution:* Middens are found throughout Scilly. Identified examples are located adjacent to the modern cliff edge or infields, reflecting the fact that these sites are usually discovered as a result of coastal erosion or ploughing. It is extremely likely that more middens will be discovered.

*Potential:* Earlier middens are particularly important because of the palaeoenvironmental evidence they may yield.

*Threats/vulnerability:* Approximately 24 middens are recorded in the HER, although others have been identified during the excavation prehistoric and Romano-British settlement sites. At least one midden has been destroyed. Ploughing, animal burrowing and coastal erosion represent the main threats to these monuments.

*Class importance statement:* Middens as a class of monument are long lived, spanning the Neolithic to the post-medieval periods and by their nature, exhibiting little diversity of form. Although ubiquitous, there are, as yet, comparatively few recorded examples in Scilly and earlier middens are amongst a small range of monument classes representing the prehistoric to medieval periods. Earlier middens have a high palaeoenvironmental potential and should be considered of **National Importance**, later middens are normally only of **Regional/County** or even local importance

### 11.7.2 Peat deposits

*Form:* Shelves of peat exposed on the surface of beaches and bands of buried peat. Most of these are not true peats but minerogenic intertidal sediments containing varying amounts of organic matter (humic silts, sands and sandy silts). Wood content is low or absent.

*Distribution:* Known intertidal peat deposits are on inner facing shores of St Mary's, Samson, St Martin's, and Tresco.

*Potential:* There is considerable potential for more submerged peat deposits to be discovered and reported by divers and for intertidal peats to be exposed by storms and sea action. As well as their considerable palaeoenvironmental potential analysis of radiocarbon dates and levels from intertidal and submerged peats hold the key to understanding sea level rise and submergence in Scilly.

*Threats/vulnerability:* Marine erosion, dredging.

*Class importance statement:* Peat deposits have high palaeoenvironmental potential and should be considered of **National Importance**.

### 11.7.3 Structures and walls

*Form:* **Structures** and **walls**, individual stone walls or fragments of more complex features, with a possible date range from the prehistoric to the early modern period, often there is no dating evidence for many of features belonging to this large group.

*Distribution:* Located around the coasts of the islands, identified examples are seen in cross-section in cliff edges or disappear into dines. It is extremely likely that more walls and structures will be discovered.

*Potential:* Walls and structures may form part of extensive settlement or defensive complexes.

*Threats/vulnerability:* Vulnerable to coastal erosion, storm damage and sea action.

*Class importance statement:* Walls and structures as classes of monument are long lived, possibly spanning the prehistoric to early modern periods and by their nature, exhibiting little diversity of form. Walls and structures should be considered as potentially of **Regional or Local Importance**.

## 11.8 Wrecks

### 11.8.1 Wrecks

*'A ship is a package containing n assortment of things that made up life on that ship at that moment of time it ceased: all the day-to-day items used on board, nails that held the timbers together, knives, forks, cups and saucers, the medicine chest, the surgeons' and navigators' instruments, all of those are in this package which has disintegrated…Most shipwrecks, in fact about 90%, are not wrecks, they're just the sites where wrecks happened, and they're the really interesting ones'* (Mac Mace in Wigglesworth 1994, 122).

*Form:* **wreck**s can take a variety of forms, ship remains of wood or steel or copper and other metals; ships' fittings and equipment, personal possessions, often just the cargo, or what remains of it. Wrecks can be collapsed or imploded or, more often, dispersed over a wide area, the debris trail for HMS *Colossus* extends over some 400m, and the site of the *Association* spreads over the area of a football pitch. Wreck remains can be hidden in deep gullies and sea caves or obscured by kelp and pounded by rolling boulders. Not all wrecks are ships and boats, some are aircraft, and some are just indicated by an anchor or a fisherman's fastener

*Distribution:* A total of 771 wrecks are now recorded which are distributed throughout the study area. The three main concentrations of recorded wrecks are in St Mary's Roads, followed by the Seven Stones and the Western Rocks.

*Potential:* Wrecks are an important source of information about maritime activity, the design, manufacture, development and operation of all kinds of craft, but they also reflect the socio-economic, political, military, and domestic life of the past. Wrecks can provide a wealth of detail about the construction and appearance of historic vessels and shipbuilding materials and techniques. Many wreck sites, and particularly cargo remains, provide information on the wider themes of economics, trade and communications. Exposed remains of wrecks on harbours and beaches, old timbers and rusty hulls form a unique and fragile link with the past. Wrecks can provide connections with significant historical events or simply illustrate the day to day life of vanished coastal industries (cf Edwards 2002, 87). It is likely that more wrecks will be recovered through increased documentary research, diving activity and changing patterns of sand deposition.

*Threats/vulnerability:* Irresponsible diving, salvage, sea action, marine wood borers, fungi and bacteria, submarine cables, dredging, scalloping, corrosion.

*Class importance statement:* Wrecks are amongst a small range of classes potentially representing the prehistoric to modern period. Because of the extensive diversity of form within this monument class the importance of each wreck needs to be assessed individually. Some wrecks will be considered to be of **National Importance**, a few will be of **International Importance** and many others only of **Regional/County** or even **Local Importance**.

### 11.8.2 Vessel types

This section lists vessel types as recorded by the NMR and UKHO.

**Note**: each wreck is only listed under one vessel type by the NMR and UKHO so that the SS *Schiller*, although a **passenger vessel** and a **steamship** is described only under the vessel type **liner**.

***Cargo vessels***

*Definition:* **cargo vessel** is a self-explanatory generic term, which can include other vessel types such as East Indiaman, West Indiaman, merchantman, collier, ketch, barge etc,

*Distribution:* cargo vessels are the most numerous vessel type, with 226 examples distributed throughout the study area. It is likely that more cargo vessels will be discovered.

*Potential:* cargo vessels have considerable archaeological potential.

*Threats/vulnerability:* Irresponsible diving, salvage, sea action, marine wood borers, fungi and bacteria, submarine cables, dredging, scalloping, corrosion.

*Vessel type importance statement:* cargo vessels as a vessel type are long-lived, spanning the prehistoric to modern periods with extensive diversity of form. Cargo vessels should be considered as potentially of **National Importance**.

***Craft***

*Definition:* **craft** is a self-explanatory generic term, which can include any of the other vessel types.

*Distribution:* craft are the most second numerous vessel type, with 179 examples distributed throughout the study area. It is likely that more craft will be discovered.

*Potential:* craft have considerable archaeological potential.

*Threats/vulnerability:* Irresponsible diving, salvage, sea action, marine wood borers, fungi and bacteria, submarine cables, dredging, scalloping, corrosion.

*Vessel type importance statement:* craft as a vessel type are long-lived, spanning the prehistoric to modern periods with extensive diversity of form. Cargo vessels should be considered as potentially of **National Importance**.

***Brigs***

*Definition:* **brigs** are two-masted square-rigged vessels with an additional lower fore-and aft sail on a gaff and a boom to the mainmast, can be a shortened form of brigantine.

*Distribution:* brigs are the third most numerous vessel type in the study area with 76 examples distributed throughout the study area. It is possible that more brigs will be discovered.

*Potential:* brigs have considerable archaeological potential.

*Threats/vulnerability:* Sea action, wood borers.

*Vessel type importance statement:* brigs as a vessel type are short lived, examples being recorded in Scilly between the late 18th century and late 19thcentury, and exhibit limited diversity of form. Brigs should be considered as potentially of **National Importance**.

***Schooners***

*Fig 80 The schooner E.R.I. of 120 tons with a cargo of bone ash, hides and hooves from Montevideo was wrecked on White Island off St Martin's in 1871. All her crew were saved (photo: © Gibson Collection)*

*Definition:* **schooners** are usually small sea-going fore-and aft rigged vessels, originally with two masts, later often with three or four, the foremast being equal or smaller than the other masts.

*Distribution:* schooners are the fourth most numerous vessel type with 62 examples distributed throughout the study area. It is possible that more schooners will be discovered.

*Potential:* schooners have considerable archaeological potential.

*Threats/vulnerability:* sea action, wood borers.

*Vessel type importance statement:* schooners as a vessel type are short lived, examples being recorded in Scilly between the 19th and early 20th centuries, and exhibit limited diversity of form. Schooners should be considered as potentially of **National Importance**.

***Barques***

*Definition:* **barques** can be medium-size sailing vessels *or* ocean-going sailing vessels of a particular rig, ie with the aftermost mast fore-and aft rigged and the other masts square rigged.

*Distribution:* barques are the fifth most numerous vessel type with 40 examples distributed throughout the study area. It is possible that more barques will be discovered.

*Potential:* barques have considerable archaeological potential.

*Threats/vulnerability:* sea action, wood borers.

*Vessel type importance statement:* barques as a vessel type are short lived, examples being recorded in Scilly between the 1830 and 1916, and exhibit limited diversity of form. Barques should be considered as potentially of **National Importance**.

***Fishermen's obstructions***

*Definition:* **fishermen's obstructions** are usually just fishermen's reports of a snagging of fishing tackle on the seabed.

*Distribution:* fishermen's obstructions are the sixth most numerous 'vessel type' with 29 examples distributed throughout the study area. It is extremely likely that more fishermen's obstructions will be reported.

*Potential:* fishermen's obstructions can have considerable archaeological potential.

*Threats/vulnerability:* sea action, wood borers.

*Vessel type importance statement:* fishermen's obstructions are undated and exhibit limited diversity of form. Fishermen's obstructions should be considered as potentially of **National Importance**, although until investigated these cannot be presumed to be vessels at all.

***Merchantmen***

*Definition:* **A merchantman is** a generic term used to describe ships carrying merchandise or a vessel of the merchant marine.

*Distribution:* merchantmen are the seventh most numerous vessel type with 27 examples distributed throughout the study area. It is possible that more merchantmen will be discovered.

*Potential:* merchantmen have considerable archaeological potential.

*Threats/vulnerability:* sea action, wood borers.

*Vessel type importance statement:* merchantmen as a vessel type are short lived, examples being recorded in Scilly between the second half of the 19th century and first half 20th century, and exhibit limited diversity of form. Merchantmen should be considered as potentially of **National Importance**.

***Sloops***

*Definition:* **sloops** are small one-masted fore-and aft rigged vessels with a mainsail and jib *or* large open boats (long boats) *or* small sailing warships carrying guns on the upper deck only. The term is also used to describe one of the smaller classes of anti-submarine convoy escort vessels in WWII.

*Distribution:* sloops are the eighth most numerous vessel type with 18 examples distributed throughout the study area. It is possible that more sloops will be discovered.

*Potential:* sloops have considerable archaeological potential.

*Threats/vulnerability:* sea action, wood borers.

*Vessel type importance statement:* sloops as a vessel type are short lived, most examples being recorded in Scilly between the late 18th century and the first half of the 19th century, with

one in 1878, and exhibit limited diversity of form. Sloops should be considered as potentially of **National Importance**.

***Brigantines***

*Definition:* **brigantines** are small vessels equipped for both sailing and rowing (often used for piracy, espionage etc) *or* two-masted vessels with a square-rigged foremast and fore-and aft rigged mainmast.

*Distribution:* brigantines are the ninth most numerous vessel with 16 examples distributed throughout the study area. It is possible that more brigantines will be discovered.

*Potential:* brigantines have considerable archaeological potential.

*Threats/vulnerability:* sea action, wood borers.

*Vessel type importance statement:* brigantines as a vessel type are short lived, examples being recorded in Scilly between the late 19th century, and exhibit limited diversity of form. Brigantines should be considered as potentially of **National Importance**.

***Ships of the line***

*Definition:* **ships of the line** (popularly men-o'-war) are square-rigged vessels equipped for warfare and belonging to the recognised navy of a country. These are divided into:

- First-raters, vessels mounting 100 or more cannon ranging from 12-pounders to 32-pounders. Measuring over 61m (200ft) on the lower gun deck they were generally crewed by 875 officers and men. There are no recorded first-raters in the study area.
- Second-raters, vessels carrying 90 to 98 cannon on three gun decks. The lowest one of which was 59m (195 ft) long. Manned by 750 to 800 men. The Association, a **flagship of the line**, was a second-rater.
- Third-raters, this ship of the line came in several sizes from 80-gun three deckers to 64-gun two deckers. Manned by 490 to 720 men. There are six recorded third-raters in the study area.
- Fourth-raters, vessels 45m (150ft) in length with two gun decks, mounting between 50 and 56 guns. Crewed by 350 officers and men. Their main role was as flagships of cruiser squadrons serving overseas. There are two recorded fourth-raters in the study area.
- Fifth-raters, frigates, 45m (150ft) in length, with a crew of 250 and a single gun deck, used for scouting ahead of the fleet for contact with the enemy. Mounting 32-40 guns on a single deck. There is one recorded fifth-rater in the study area.
- Sixth-raters, nimble sloops and brigs, 38m (125ft) long with a crew of about 195. Their speed and manoeuvrability made them useful escort and courier vessels. There are three recorded sixth-raters in the study area.

*Distribution:* ships of the line are the 10th most frequent vessel type with 13 examples distributed throughout the study area, especially around the Western Rocks. It is possible that more ships of the line will be discovered.

*Potential:* ships of the line have considerable archaeological potential.

*Threats/vulnerability:* Corrosion, wood borers, sea action, Roland Morris reported the *Association* site to be in a state of flux 'as in so many places in Cornwall, the sea-bed moved in rough weather; it was obvious, guns and rocks lay mixed together in a veritable oceanic

salmagundi. The giant boulders were rounded, proving that they rolled about in the gullies' (1969, 68).

*Vessel type importance statement:* ships of the line as a vessel type are short lived, examples being restricted in Scilly to the mid to late 17th, 18th and beginning of the 19th centuries, and as a type display diversity of form. Wreck sites of ships of the line are of **National or International Importance**.

***Cutters***

*Definition:* **cutters** are ships' boats fitted for rowing or sailing and used for carrying light stores, passengers etc *or* small fore-and aft rigged boats with one mast, more than one head-sail and a running bowsprit which were used as fast auxiliary vessels *or* sailing yachts with one main sail and two fore sails, used as light pilot or patrol vessels.

*Distribution:* cutters are the 10th equal most frequent vessel type with 12 examples distributed throughout the study area. It is possible that more cutters will be discovered.

*Potential:* cutters have considerable archaeological potential.

*Threats/vulnerability:* sea action, wood borers.

*Vessel type importance statement:* cutters as a vessel type are short lived, examples being recorded in Scilly between early 19th century and early 20th century, and exhibit limited diversity of form. Cutters should be considered as potentially of **National Importance**.

***Snows***

*Definition:* **snows** are small sailing vessels resembling brigs, having a main and fore mast and a supplementary trysail mast close behind the mainmast.

*Distribution:* snows are the 10th equal most vessel type with 12 examples distributed throughout the study area. It is possible that more snows will be discovered.

*Potential:* snows have considerable archaeological potential.

*Threats/vulnerability* action, wood borers.

*Vessel type importance statement:* snows as a vessel type are short lived, examples being restricted in Scilly to the second half of the 18th century and first half of the 19th century, and exhibit limited diversity of form. Snows should be considered as potentially of **National Importance**.

***Bomber aircraft***

*Definition:* a **bomber aircraft** is an aircraft specifically equipped to carry bombs.

*Distribution:* bomber aircraft are the 11th most numerous 'vessel type' with eight examples distributed throughout the study area. It is unlikely that more bomber aircraft will be discovered.

*Potential:* bomber aircraft have considerable archaeological potential.

*Threats/vulnerability:* sea action etc.

*Vessel type importance statement:* WWII bomber aircraft as a vessel type are short lived, examples being restricted in Scilly to the years 1941-44, but as a type can display diversity of form. Bomber aircraft should be considered as of **National Importance** and are all 'Protected Placers' under the Protection of Military Remains Act 1986.

***East Indiamen***

*Definition:* **a East Indiaman** is a vessel engaged in trade with India.

*Distribution:* East Indiamen are the 12th equal most numerous vessel type in the study area. Seven examples distributed throughout the study area. It is unlikely that more East Indiamen will be discovered.

*Potential:* East Indiamen have considerable archaeological potential.

*Threats/vulnerability:* sea action, wood borers.

*Vessel type importance statement:* East Indiamen as a vessel type are short lived, examples being restricted in Scilly from 1680 to 1795, and exhibit some diversity of form. East Indiamen should be considered as of **National or International Importance**.

***Galliots***

*Definition:* **galliots** were originally small fast Mediterranean or Spanish galleys. The term was later used to describe Dutch single-masted cargo or fishing boats and then any of the various vessels resembling these.

*Distribution:* galliots are the 12th equal most numerous vessel type with seven examples distributed throughout the study area. It is possible that more galliots will be discovered.

*Potential:* galliots have considerable archaeological potential.

*Threats/vulnerability:* sea action, wood borers.

*Vessel type importance statement:* galliots as a vessel type are short lived, examples being restricted in Scilly to the 18th century and 19th centuries, and exhibit limited diversity of form. Galliots should be considered as potentially of **National Importance**.

***Wreck***

*Definition:* **wreck** is a ship or aircraft that has been wrecked *or* the remains of such a vessel or cargo *or* a piece of wreckage, washed ashore from a wrecked or stranded vessel. Wrecks can include any of the other vessel types.

*Distribution:* wrecks are the most 12th equal most numerous vessel type, with seven examples distributed throughout the study area, all unnamed and of unknown nationality. It is likely that more wrecks will be discovered.

*Potential:* wrecks may have considerable archaeological potential.

*Threats/vulnerability:* Irresponsible diving, salvage, sea action, marine wood borers, fungi and bacteria, submarine cables, dredging, scalloping, corrosion.

*Vessel type importance statement:* wrecks as a vessel type are long-lived, spanning the prehistoric to modern periods with extensive diversity of form. Wrecks should be considered as potentially of **National Importance**.

***Chasse-mareés***

*Definition:* **chasse-mareés** were French coasting luggers often used for smuggling or privateering.

*Distribution:* chasse-mareés are the 13th most numerous vessel type with six examples distributed throughout the study area. It is possible that more chasse-mareés will be discovered.

*Potential:* chasse-mareés have considerable archaeological potential.

*Threats/vulnerability:* sea action, wood borers.

*Vessel type importance statement:* chasse-mareés as a vessel type are short lived, examples being restricted in Scilly to the 19th century and exhibit limited diversity of form. Chasse-mareés should be considered as potentially of **National or International Importance**.

***Packets***

*Definition:* **packets** are boats travelling at regular intervals between two ports, in Scilly this would normally be Penzance and St Mary's, originally for the conveyance of mails.

*Distribution:* packets are the 14th equal most numerous vessel type with five examples distributed throughout the study area. It is unlikely that more packets will be discovered.

*Potential:* packets have considerable archaeological potential.

*Threats/vulnerability:* sea action, wood borers.

*Vessel type importance statement:* packets as a vessel type are short lived, examples being restricted in Scilly to the 19th century and can exhibit considerable diversity of form, being first sailing and, later, steam packets. Packets should be considered as potentially of **National Importance**.

***Fishing vessels***

*Form:* **fishing vessel** is a self-explanatory, generic term, used where the specific type of craft is not recorded; fishing vessels specifically recorded as drifters, trawlers, luggers are recorded under their own vessel type.

*Distribution:* fishing vessels are the 14th equal most numerous vessel type with five examples distributed throughout the study area. It is possible that more fishing vessels will be discovered.

*Potential:* fishing vessels have archaeological potential, dependent on period.

*Threats/vulnerability:* sea action, wood borers.

*Class importance statement:* fishing vessels as a vessel type are long lived, but depending on period could exhibit considerable diversity of form. Fishing vessels should normally be considered as of **Local or Regional Importance**.

***Trawlers***

*Definition:* **trawlers** are boats which fish with a trawl or drag net.

*Distribution:* trawlers are the 14th equal most numerous vessel type with five examples distributed throughout the study area. It is possible that more trawlers will be discovered.

*Potential:* trawlers have archaeological potential, dependent on period.

*Threats/vulnerability:* sea action, wood borers, corrosion.

*Vessel type importance statement:* trawlers as a vessel type are short lived, all recorded examples being from the 20th century. Fishing vessels should normally be considered as of **Local or Regional Importance**.

***Fighter aircraft***

*Definition:* **fighter aircraft** is a self-explanatory generic term; some may have carried bombs but were not bombers.

*Distribution:* fighter aircraft are the 15th equal most numerous 'vessel type' with four examples distributed throughout the study area. It is unlikely that more fighter aircraft will be discovered.

*Potential:* fighter aircraft have considerable archaeological potential.

*Threats/vulnerability:* sea action, corrosion etc.

*Vessel type importance statement:* WWII fighter aircraft as a vessel type are short lived, examples being restricted in Scilly to the years 1941-44, but as a type will display diversity of form. Fighter aircraft should be considered of **National Importance** and all are 'Protected Placers' under the Protection of Military Remains Act 1986.

***Luggers***

*Definition:* **luggers** are small vessels carrying two or three masts with a lugsail on each.

*Distribution:* luggers are the 15th equal most numerous vessel type with four examples distributed throughout the study area. It is possible that more luggers will be discovered.

*Potential:* luggers have some archaeological potential.

*Threats/vulnerability:* sea action, wood borers, corrosion.

*Vessel type importance statement:* luggers as a vessel type are short lived, all recorded examples being from the 19th century. Luggers should normally be considered as of **Local or Regional Importance**.

***Smacks***

*Definition:* **smacks** are single masted fore-and-aft-rigged sailing vessels, usually employed for coasting or fishing.

*Distribution:* smacks are the 15th equal most numerous vessel type with four examples distributed throughout the study area. It is possible that more smacks will be discovered.

*Potential:* smacks have some archaeological potential.

*Threats/vulnerability:* sea action, wood borers, corrosion.

*Vessel type importance statement:* smacks as a vessel type are short lived, all recorded examples being from the 19th century. Smacks should normally be considered as of **Local or Regional Importance**.

***Submarines***

*Definition:* **submarines** are vessels, usually warships, capable of operating under water and usually equipped with torpedoes, missiles and a periscope.

*Distribution:* submarines are the 15th equal most numerous vessel type with four examples distributed throughout the study area. It is unlikely that more submarines will be discovered.

*Potential:* submarines have considerable archaeological potential.

*Threats/vulnerability:* sea action, corrosion.

*Vessel type importance statement:* submarines as a vessel type are short lived, three of the recorded examples dating to 1945, the other being undated. Submarines should be considered as of **National or International Importance**.

***Anchors***

*Definition:* **anchors** are appliances for holding a ship in a fixed particular place by holding it to the bottom of the sea. Anchors can be made of stone or metal and wood.

*Distribution:* anchors are the 16th equal most numerous vessel type with three examples distributed throughout the study area. It is likely that more anchors will be discovered.

*Potential:* anchors could be indicative of further archaeological potential.

*Threats/vulnerability:* sea action.

*Vessel type importance statement:* all recorded anchors are undated and but display some diversity. Anchors should normally be considered as of **Local or Regional Importance**.

***Colliers***

*Definition:* **colliers** are any type of craft, or ship, carrying coal as cargo.

*Distribution:* colliers are the 16th equal most numerous vessel type with three examples distributed throughout the study area. It is possible that more colliers will be discovered.

*Potential:* colliers have same archaeological potential as any other vessel of the type.

*Threats/vulnerability:* sea action.

*Vessel type importance statement:* colliers date to the late 19th or earlier 20th centuries and ate likely to exhibit little diversity. Colliers should normally be considered as of **Local or Regional Importance**.

***Flying boats***

*Definition:* **flying boats** are seaplanes adapted to land on water.

*Distribution:* flying boats are the 16th equal most numerous vessel type with three examples distributed throughout the study area. It is possible that more flying boats will be discovered.

*Potential:* flying boats are of considerable archaeological potential.

*Threats/vulnerability:* Sea action.

*Vessel type importance statement:* recorded flying boats in Scilly date to WWI and exhibit diversity of form in that they are different makes and models. Flying boats should be considered as of **National Importance** and are all 'Protected Places' under the Protection of Military Remains Act 1986.

***Barquentines***

*Definition:* **barquentines** are three-masted vessels with the foremost sail square-rigged and main and mizzen masts rigged fore and aft.

*Distribution:* barquentines are the 17th equal most numerous vessel type with 2 examples distributed throughout the study area. It is possible that more barquentines will be discovered.

*Potential:* barquentines have considerable archaeological potential.

*Threats/vulnerability:* sea action, wood borers.

*Vessel type importance statement:* barquentines as a vessel type are short lived, examples being recorded in Scilly in 1879 and 1917, and exhibit limited diversity of form. Barquentines should be considered as potentially of **National Importance**.

***Destroyers***

*Definition:* **destroyers** are fast warships designed to protect other ships by attacking submarines with guns and torpedoes.

*Distribution:* destroyers are the 17th equal most numerous vessel type with two examples in the study area, HMS *Pincher* and *Jacob Jones*. It is unlikely that more destroyers will be discovered.

*Potential:* destroyers have considerable archaeological potential.

*Threats/vulnerability:* sea action, corrosion.

*Vessel type importance statement:* destroyers as a vessel type are short-lived, being restricted to WWI in Scilly although occurring elsewhere in WWII and later, and should display limited diversity of form. Destroyers should be considered as of **National Importance**.

***Drifters***

*Definition:* **drifters** are boats engaged in fishing with a drift-net (a large net for herrings etc, kept upright by weights at the bottom and floats at the top and allowed to drift with the tide). Drifters were also fishing vessels used by the Royal Navy in wartime for patrolling, conveying stores etc.

*Distribution:* drifters are the 17th equal most numerous vessel type with two examples in the study area, Phyllis Anne and Silvery Wave. It is possible that more drifters will be discovered.

*Potential:* drifters have limited archaeological potential.

*Threats/vulnerability:* sea action, marine worm, corrosion.

*Vessel type importance statement:* drifters as a vessel type are short-lived, being restricted to the first two decades of the 20th century and should display limited diversity of form. Drifters should be considered as of **Local or Regional Importance**.

***Ketches***

*Definition:* **ketches** are two-masted, fore-and-aft rigged sailing vessels in which the mizzen-mast is shorter than the mainmast and stepped forward of the rudder post. Ketches were especially used for coastal trading.

*Distribution:* ketches are the 17th equal most numerous vessel type with two examples in the study area, *Solace* and *Georges*. It is possible that more ketches will be discovered.

*Potential:* ketches have limited archaeological potential.

*Threats/vulnerability:* sea action, marine worm, corrosion.

*Vessel type importance statement:* ketches as a class of monument are short-lived, being restricted to the mid-19th to early 20th centuries and should display limited diversity of form. Ketches should be considered as of **Local or Regional Importance**.

***Pilot vessels***

*Definition:* pilot vessel is a self-explanatory generic term used to describe a vessel used by a pilot. In Scilly these are gigs or cutters.

*Distribution:* pilot vessels are the 17th equal most numerous vessel type with two examples in the study area, *Hero* and *Lord Nelson*. It is unlikely that more pilot vessels will be discovered.

*Potential:* pilot vessels have limited archaeological potential.

*Threats/vulnerability:* sea action, marine worm.

*Vessel type importance statement:* pilot vessels as a vessel type are fairly short-lived, being restricted to the 1720s to 1870s and should display limited diversity of form. Pilot vessels should be considered as of **Local or Regional Importance**.

***Preventative Service vessels***

*Definition:* **Preventative Service vessel** is a generic term used to describe vessels used by the Preventative Service or Coast Guard to deter smugglers. These vessels were usually cutters or sloops.

*Distribution:* Preventative Service vessels are the 17th equal most numerous vessel type with two examples in the study area, *Fanny* and an unnamed vessel. It is unlikely that more Preventative Service vessels will be discovered.

*Potential:* Preventative Service vessels have some archaeological potential.

*Threats/vulnerability:* sea action, marine worm, rust.

*Vessel type importance statement:* Preventative Service vessels as a vessel type are short-lived, being restricted to the early 1820s and should display limited diversity of form. Preventative Service vessels should normally be considered as of **Local or Regional Importance**.

***Privateers***

*Definition:* a **privateer** is an armed vessel owned by a private individual but holding a government commission authorising its use in war, especially in the capture of merchant shipping

*Distribution:* privateers are the 17th equal most numerous vessel type with two examples in the study area, one an unnamed ship lost in 1810. It is unlikely that more privateers will be discovered.

*Potential:* privateers have some archaeological potential.

*Threats/vulnerability:* sea action, marine worm, corrosion.

*Class importance statement:* privateers as a vessel type are short-lived, being restricted to the late 18th and early 19th centuries and should display limited diversity of form. Privateers should normally be considered as of **Local or Regional Importance**.

***Steamships***

*Definition:* **steamships** are vessels propelled by steam, whether driven by paddles or screw propeller.

*Distribution:* steamships are the 16th equal most numerous vessel type with three examples in the study area, SS *Toledo*, off Mincarlo, and SS *King Cadwallon*, on the Hard Lewis Rocks, and an unnamed ship. SS *Schiller*, although a steamship, is recorded as a liner. It is unlikely that more steamships will be discovered.

*Potential:* steamships have considerable archaeological potential.

*Threats/vulnerability:* salvors, sea action, marine worm, corrosion.

*Vessel type importance statement:* steamships as a vessel type are short-lived, being restricted to the period between the mid-19th century and the first decade of the 20th century and could display some variety of form. Steamships should be considered as of **National Importance.**

### *Tenders*

*Definition:* **tenders** are ships or boats that attend a larger one, especially to supply goods and provisions, convey orders and carry passengers to or from shore also a small naval vessel responsible to, and whose crew are appointed to, a larger parent vessel.

*Distribution:* tenders are the 17th equal most numerous vessel type with two examples in the study area, the *Joseph and Betsy* and the *Eddystone*. It is unlikely that more tenders will be discovered.

*Potential:* tenders have limited archaeological potential.

*Threats/vulnerability:* Sea action, marine worm, corrosion.

*Vessel type importance statement:* tenders as a vessel type are short-lived, being restricted to the late 18th and first half of the 19th century and could some variety of form. Tenders should be considered as of **Local or Regional Importance**.

### *Tugs*

*Definition:* **tugs** are small, stoutly built, powerful boats used to tow larger vessels.

*Distribution:* tugs are the 17th equal most numerous vessel type with two examples in the study area, *Touani* and *Blazer*. It is unlikely that more tugs will be discovered.

*Potential:* tugs have limited archaeological potential.

*Threats/vulnerability:* salvors, sea action, marine worm, corrosion.

*Vessel type importance statement:* tugs as a vessel type are short-lived, being restricted to the second decade of the 20th century and should display limited diversity of form. Tugs should be considered as of **Local or Regional Importance**.

### *Warships*

*Definition:* **warships** are armoured vessels used in war. This is a vessel type used to describe a wreck whose exact type is not recorded. Vessels recorded as destroyer, battleship etc are not listed under this vessel type.

*Distribution:* warships are the 17th equal most numerous vessel type with two examples in the study area. It is unlikely that more warships will be discovered.

*Potential:* warships have considerable archaeological potential.

*Threats/vulnerability:* sea action, marine worm, corrosion.

*Vessel type importance statement:* warships as a vessel type are short-lived, being restricted to the 20th century and should display limited diversity of form. Warships should be considered as of **National Importance**.

### *West Indiaman*

*Definition:* a **West Indiaman** is a vessel engaged in trade with the West Indies.

*Distribution:* West Indiamen are the 17th equal most numerous vessel type with two examples in the study area, *Melantho* and an unnamed vessel. It is unlikely that more West Indiamen will be discovered.

*Potential:* West Indiamen have considerable archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, marine worm, corrosion.

*Vessel type importance statement:* West Indiamen as a vessel type are short-lived, being restricted to the first decade of the 19th century and should display limited diversity of form. West Indiamen should be considered as of **National or International Importance**.

***Passenger vessels***

*Definition:* **passenger vessel** is a generic term for vessels carrying passengers; these can be packets, steamships, paddle steamers liners etc

*Distribution:* passenger vessels are the 17th equal most numerous vessel type with two examples in the study area, the paddle steamer *Earl of Arran* wrecked on Nornour and the Elizabeth. It is unlikely that more passenger vessels will be discovered.

*Potential:* passenger vessels have considerable archaeological potential.

*Threats/vulnerability:* sea action, marine worm, corrosion.

*Vessel importance statement:* passenger vessels as a vessel type in Scilly are short-lived, being restricted to the later 18th and 19th centuries and as a type should display a variety of form. Passenger vessels should be considered as of **National Importance**.

***Armed trawler***

*Definition:* **armed trawlers** are trawlers equipped with guns and used by the Royal Navy in wartime for patrolling, escorts, anti-submarine or quarantine duties.

*Distribution:* armed trawlers are the 18$^{8h}$ equal most numerous vessel type with one example in the study area, HMS *Carbineer*. It is unlikely that more armed trawlers will be discovered.

*Potential:* armed trawlers have considerable archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, marine worm, corrosion.

*Vessel type importance statement:* armed trawlers as a vessel type in Scilly are short-lived, being restricted to the single example wrecked in 1916 and should display limited diversity of form. West Indiamen should be considered as of **National Importance**.

***Barge***

*Definition:* a **barge** is a small seagoing vessel with sails *or* a flat bottomed freight-boat *or* lighters for canals, river and harbours *or* a ceremonial vessel of state propelled by oars *or* an ornamental houseboat *or* a small boat used for the conveyance of officers, usually those of warships

*Distribution:* barges are the 18$^{8h}$ equal most numerous vessel type with one example in the study area. It is unlikely that more barges will be discovered.

*Potential:* barges have considerable archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, marine worm, corrosion.

*Vessel type importance statement:* barges as a vessel type in Scilly are short-lived, being restricted to the WWI and should display limited diversity of form. Barges should normally be considered as of **Regional or Local Importance**.

***Battleship***

*Definition:* a **battleship** is a warship of the most heavily armed and armoured class, of sufficient size to take part in a main attack.

*Distribution:* battleships are the 18$^{8h}$ equal most numerous vessel type with one example in the study area. It is unlikely that more battleships will be discovered.

*Potential:* battleships have considerable archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, marine worm, corrosion.

*Vessel type importance statement:* battleships as a vessel type in Scilly are short-lived, being restricted to the WWI and should display limited diversity of form. Battleships should normally be considered as of **National Importance**.

***Dandy***

*Definition:* a **dandy** is a sloop or cutter with a jigger-mast right aft, on which a mizzen-lugsail is set.

*Distribution:* dandies are the 18$^{8h}$ equal most numerous vessel type with one example in the study area, the *Vigilant*. It is unlikely that more armed dandies will be discovered.

*Potential:* dandies have considerable archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, marine worm, corrosion.

*Vessel type importance statement:* dandies as a vessel type in Scilly are short-lived, being restricted to the single example lost in 1865 and should display limited diversity of form. Dandies should normally be considered as of **National Importance**.

***Flat***

*Definition:* a **flat** is a broad flat-bottomed boat.

*Distribution:* flats are the 18$^{8h}$ equal most numerous vessel type with one example in the study area, the *Gem*. It is unlikely that more flats will be discovered.

*Potential:* flats have limited archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, marine worm, corrosion.

*Vessel type importance statement:* flats as a vessel type in Scilly are short-lived, being restricted to the single example lost in 1867 and should display limited diversity of form. Flats should normally be considered as of **National Importance**.

***Frigate***

*Definition:* a **frigate** is a light swift vessel powered by oar or sail *or* a fast-sailing merchantman *or* a sailing warship carrying 28-60 guns *or* a general purpose warship with mixed armament usually lighter than a destroyer (except in the US and some other navies), designed for convoy work.

*Distribution:* frigates are the 18$^{th}$ equal most numerous vessel type with a single unnamed example in the study area. It is unlikely that more frigates will be discovered.

*Potential:* frigates have considerable archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, marine worm, corrosion.

*Vessel type importance statement:* frigates as a vessel type in Scilly are short-lived, being restricted to the single example wrecked in 1651, but as a type could display diversity of form. Frigates should normally be considered as of **National Importance**.

***Liner***

*Definition:* a **liner** is a vessel belonging to a line of passenger ships.

*Distribution:* liners are the 18$^{8h}$ equal most numerous vessel type with one example in the study area, the SS *Schiller* which was lost on the Retarrier Ledges in 1875. It is unlikely that more liners will be discovered.

*Potential:* liners have considerable archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, marine worm, corrosion.

*Vessel type importance statement:* liners as a vessel type in Scilly are short-lived, being restricted to the single example in 1875 and therefore displaying limited diversity of form. Liners are considered to be of **National and International Importance**.

***Paddle steamer***

*Definition:* a **paddle steamer** is a steamer propelled by paddle-wheels.

*Distribution:* paddle steamers are the 18[8h] equal most numerous vessel type with one example in the study area, the SS *Thames* lost on the Western Rocks in 1841. It is unlikely that more paddle steamers will be discovered.

*Potential:* paddle steamers have considerable archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, marine worm, corrosion.

*Vessel type importance statement:* paddle steamers as a vessel type in Scilly are short-lived, being restricted to the single example in 1841 and should display limited diversity of form. Paddle steamers should normally be considered as of **National Importance**.

***Patrol vessel***

*Definition:* **patrol vessels** are naval vessels used for patrolling or reconnaissance.

*Distribution:* patrol vessels are the 18[8h] equal most numerous vessel type with one example in the study area, the *Loretio*, a Peruvian vessel. It is unlikely that more patrol vessels will be discovered.

*Potential:* patrol vessels have considerable archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, marine worm, corrosion.

*Vessel type importance statement:* patrol vessels as a vessel type in Scilly are short-lived, being restricted to the single example lost in 1903, but as a type could display diversity of form. Patrol vessels should normally be considered as of **National Importance**.

**Reconnaissance aircraft**

*Definition:* **reconnaissance aircraft** are aircraft used for reconnoitring a geographical area in order to ascertain its strategic features and available resources or to gauge the position and strength of the enemy.

*Distribution:* reconnaissance aircraft are the 18[8h] equal most numerous vessel type with one example in the study area, a Sunderland Mk III ML770. It is unlikely that more reconnaissance aircraft will be discovered.

*Potential:* reconnaissance aircraft have considerable archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, marine worm, corrosion.

*Vessel type importance statement:* reconnaissance aircraft as a vessel type in Scilly are short-lived, being restricted to the single example in 1945, but as a type could display considerable diversity of form. Reconnaissance aircraft should normally be considered as of **National Importance** and all are 'Protected Places' under the Protection of Military Remains Act 1986.

***Tanker***

*Definition:* **tankers** are ships fitted with tanks for transporting oil or other fluids in bulk.

*Distribution:* tankers are the 18[8h] equal most numerous vessel type with one example in the study area, the *Britta*; the *Torrey Canyon* which was wrecked on the Seven Stones in 1967 is not included in the lists. It is unlikely that more tankers will be discovered.

*Potential:* tankers have considerable archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, marine worm, corrosion.

*Vessel type importance statement:* tankers as a vessel type in Scilly are short-lived, being restricted to the single example wrecked in 1939 and should display limited diversity of form. Tankers should normally be considered as of **National Importance**.

***Target tug***

*Definition:* **target tugs** are aircraft used for towing targets used in aerial shooting practice.

*Distribution:* target tugs are the 18[8h] equal most numerous vessel type with one example in the study area, a Defiant Mk I DR948. It is unlikely that more target tugs will be discovered.

*Potential:* target tugs have considerable archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, corrosion.

*Vessel type importance statement:* target tugs as a vessel type in Scilly are short-lived, being restricted to the single example lost in 1943, but as a type could display limited diversity of form. Target tugs should normally be considered as of **National Importance** and all are 'Protected Places' under the Protection of Military Remains Act 1986.

***Torpedo boat***

*Definition:* a **torpedo boat** is a small fast lightly armed warship for carrying and discharging a torpedo or torpedoes.

*Distribution:* torpedo boats are the 18[8h] equal most numerous vessel type with one example in the study area, HMS *Decoy*. It is unlikely that more torpedo boats will be discovered.

*Potential:* torpedo boats have considerable archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, marine worm, corrosion.

*Vessel type importance statement:* torpedo boats as a vessel type in Scilly are short-lived, being restricted to the single example lost in 1904 and should display limited diversity of form. Torpedo boats should normally be considered as of **National Importance**.

***Trainer aircraft***

*Definition:* a **trainer aircraft** is an aircraft used to train pilots or other aircrew.

*Distribution:* trainer aircraft are the 18[8h] equal most numerous vessel type with one example in the study area, a Tiger Moth MkII N6598. It is unlikely that more trainer aircraft will be discovered.

*Potential:* trainer aircraft have considerable archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, marine worm, corrosion.

*Vessel type importance statement:* trainer aircraft as a vessel type in Scilly are short-lived, being restricted to the single example which was lost in 1942, but as a type could display diversity of form. Trainer aircraft should normally be considered as of **National Importance** and all are 'Protected Places' under the Protection of Military Remains Act 1986.

***Transport vessel***

*Definition:* **transport vessels** (transport ships) are ships etc used carry soldiers or supplies.

*Distribution:* transport vessels are the 18[8h] equal most numerous vessel type with one example in the study area, the *Lyon*. It is unlikely that more transport vessels will be discovered.

*Potential:* transport vessels have considerable archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, marine worm, corrosion.

*Vessel type importance statement:* transport vessels as a vessel type in Scilly are short-lived, being restricted to the single example wrecked in 1776, but as a type could display diversity of form. Transport vessels should normally be considered as of **National Importance**.

***Troop ship***

*Definition:* **troop ships** are ships for transporting troops.

*Distribution:* troop ships are the 18[8h] equal most numerous vessel type with one unnamed example in the study area. It is unlikely that more troop ships will be discovered.

*Potential:* troop ships have considerable archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, marine worm, corrosion.

*Vessel type importance statement:* troop ships as a vessel type in Scilly are short-lived, being restricted to single example wrecked in 1807, but as a type could display diversity of form. Troop ships should normally be considered as of **National Importance**.

***Yawl***

*Definition:* a **yawl** is a two-masted fore-and-aft rigged sailing boat with a short mizzen stepped far abaft of the rudder post *o*r small undecked two-masted fishing boat *or* a ship's jollyboat with usually four or six oars.

*Distribution:* yawls are the 18[8h] equal most numerous vessel type with one example in the study area, the *Fly*. It is unlikely that more yawls will be discovered.

*Potential:* yawls have considerable archaeological potential.

*Threats/vulnerability:* irresponsible diving, sea action, marine worm, corrosion.

*Vessel type importance statement:* yawls as a vessel type in Scilly are short-lived, being restricted to the single example lost in 1837, and should display limited diversity of form. Yawls should normally be considered as of **National Importance**.

Definitions from L Brown (ed) 1993. *The New Shorter Oxford Dictionary on Historical Principles.* Clarendon Press, Oxford

## 11.9 The importance of the historic environment of the project area

"*The archipelago….has an exceptional maritime environment. Its varied landform, geological, ecological and archaeological heritage contribute to a unique, holistic landscape character of national and international importance*"

Gill Arbery, "*The Isles of Scilly Heritage and Culture Strategy (Consultation Draft)"*

The historic environment of the Isles of Scilly is of national and international importance. The variety, abundance and preservation of archaeological and historical remains, representing over 4,000 years of occupation is remarkable. There are unique concentrations of certain types of monument such as Bronze Age entrance graves and post-medieval

fortifications. There is good preservation of historic landscapes and much of the built environment is also historic in character. Many of the archaeological sites are located on or near the coast or on the beach and intertidal flats.

Most post-medieval structures were specifically located on the coast for functional or strategic reasons, and many earlier monuments, if not originally adjacent to the sea, now have a coastal location as a result of the sea level rise since the prehistoric period. The latter has also resulted in the unusual phenomenon of archaeological remains surviving below water. Submerged stone remains such as prehistoric field walls, round houses and cist graves have been documented since the 18th century, the intertidal peat deposits having been recognised in more recent years.

The Isles of Scilly are virtually synonymous with shipwreck and although the density of wreck sites around the islands may not be large compared with other parts of the English coast there is a high proportion of significant wreck sites, with considerable potential for early ships to be preserved below the seabed. The Longitude Prize was a direct result of the wreck of the *Association*, and the 1973 Protection of Wrecks Act itself was a result of the discovery of the wreck in 1967. The submerged historic resource in the project area, supported by the Gibson collection of historic maritime photographs, the assemblage of retrieved shipwreck and other maritime-related material held by the Isles of Scilly museum and the Valhalla figurehead and maritime display on Tresco is arguably of world class standard.

*Fig 81 The Minnehaha on Penninis Head, 1874 (photo: © Gibson Collection)*

# 12 Assessment of significance of wrecks

## 12.1 Assessment of the degree to which each wreck is significant in absolute terms within its class

### 12.1.1 Criteria for assessment

*'The subjectivity and application of professional judgement in appraising significance is an integral part of environmental management and should not be regarded as a weakness of it'*

Department of Transport, "*Guidance on the Methodology for Multi-Modal Studies*"

The non-statutory criteria used to assess the importance of historic wrecks or wreck sites under the terms of the 1973 Protection of Wrecks lend themselves for rapid or detailed application to individual sites such as HMS *Colossus* (eg Black 2003, 27-30) and also to groups of sites (eg the wrecked remains of Sir Cloudesley Shovel's fleet) as well as to the wreck resource of Scilly as a whole. (The similar non-statutory criteria used by English Heritage's Monuments Protection Programme for scheduling terrestrial ancient monuments can be employed to assess the significance of coastal, intertidal and other marine sites by applying a variation of the methodology outlined below). The non-statutory criteria were set out by the Secretary of State for the Environment in 1983, their origin can be found in the DoE Press Notice No 523 (1983) 'Criteria for the Selection of Ancient Monuments'. The criteria are:

**Period**

**Rarity**

**Documentation**

**Group Value**

**Survival/Condition**

**Fragility/Vulnerability**

**Diversity**

**Potential**

In the case of Scilly in particular, professional judgement needs to be married with in-depth local knowledge and experience if the appraisal of significance is not to be a superficial exercise. It is important to note that the methodology for rapidly applying these criteria to every feature in the study area has to take into account the final character of the data set. A large number of record entries contain minimal information which makes the criteria difficult to apply, the 'fishermen's obstruction' site type for example, and there is no site visit element as in MPP, where the desk-based assessment can be supplemented by fieldwork (and fieldwork would not be able to determine many factors anyway as it is those sites which are buried below the seabed are most likely to survive). Some of the criteria, such as Survival or Fragility/Vulnerability are simply not useful for most shipwrecks and can be simplified to a yes or no application, some such as Period would respond to more elaborate scoring and Diversity could be scored twice, once for the vessel and once for the cargo. Wrecks from the post-medieval period onwards are likely to score higher on Documentation or Survival.

The rationale for applying and scoring each criterion is described below with descriptions based on MPP non–statutory criteria for scheduling ancient monuments and ADU guidance notes on Protected Historic Wrecks for divers and archaeologists (Deane *et al* 2000, Appendix 5).

**Period:** This criteria considers the historic interest of all types of wrecks which might characterise a category or period or illustrate important aspects of our social, political, economic, cultural, military and technological history with regard to currency (the length of time over which and vessel type was constructed and used or any cargo type transported) and its representiveness (whether the vessel or cargo type was one of few or many types representative of that period).

The older a wreck is, the more important it is likely to be although this needs to be qualified; the finding of the remains of a prehistoric or medieval vessel and its cargo would immediately be a discovery of national importance but then a WWI or WWII vessel might be considered of greater historic interest than a 19th century Welsh coaster.

All types of monument or vessel that characterise a category or a period should be considered for preservation.

For rapid assessment of significance Period could be scored as:

| | |
|---|---|
| Prehistoric | 10 |
| Medieval (to 1540) | 9 |
| 16th century | 8 |
| 17th century | 7 |
| 18th century | 6 |
| Napoleonic | 6 |
| 19th century | 5 |
| 20th century | 4 |
| WWI | 6 |
| WWII | 6 |

**Rarity:** There are some monument and wreck categories that, in certain periods, are so scarce that all surviving examples that still retain some archaeological potential should be protected. The age of a vessel is often linked to its rarity and the loss of one example of a rare type may be considered more significant than the loss of one example of a very numerous class of site. This process should take account of all aspects of the situation and distribution of a particular type of monument, vessel or cargo, in a regional, national or international context.

For rapid assessment of significance Rarity value could be scored as:

| | |
|---|---|
| Scarce | 3 |
| Frequent | 2 |
| Common | 1 |

**Documentation:** The significance of a monument or wreck may be enhanced by close historic association with documented important historical events or people, or by supporting evidence of contemporary records or representations. Historical records are generally only relevant to some wrecks of comparatively recent date and the value of the range of contemporary records available needs to be assessed. The importance of a monument or wreck may also be enhanced by the existence of records of previous archaeological recording or survey work.

It is important to bear in mind that for many wreck sites imported into the CCC HER from the NMR's Maritime Record the only existing information about them is the NMR's record entry.

For rapid assessment of significance Documentation value could be scored as:

| | |
|---|---|
| Good documentation | 3 |
| Moderate documentation | 2 |
| Poor documentation | 1 |

**Group Value:** The value of a single monument, vessel or cargo may be greatly enhanced by its co-location with related contemporary monuments or other similar vessels or by its association with features such as port facilities or defensive sites or if it was built by local shipbuilders. Association with vessels of other periods (eg on long-standing navigation hazards) may also enhance the value of a site.

For rapid assessment of significance group value could be scored as:

| | |
|---|---|
| High | 2 |
| Low | 1 |

**Survival/Condition:** Application of these criteria should consider the degree of completeness of survival and the condition, the appearance and present management of the heritage resource; and also the physical form of the site, where known.

The degree of survival of a monument or wreck is a particularly important consideration. In general, earlier wrecks are less likely to survive well than later examples, and in assessing the survival of any site, it is important to consider the likely normal degree of survival of vessels of that date or type. Assessments of survival should consider the degree of intactness of a monument or wreck, the likelihood of preservation of constructional and technological detail, and the current condition of the remains.

The degree of Survival and Condition can only be assessed by a site visit so a desk-based assessment relies on divers' reports, or in the case of coastal and intertidal sites, previous fieldwork. For the majority of the data set Survival and Condition is unknown. Thus, for rapid assessment of significance Survival/Condition could be scored as:

| | |
|---|---|
| Over 50% survival | 3 |
| Less than 50% | 2 |
| Not known | 1 |

**Fragility/Vulnerability:** Highly important evidence from some sites can be destroyed by the selective or uncontrolled removal of material by unsympathetic treatment, by works or development, or by natural processes or dispersal. Some monuments and vessel types are likely to be more fragile than others, whilst the presence of commercially valuable objects within a wreck may make it particularly vulnerable; in addition there is a difficulty in predicting natural processes.

For rapid assessment of significance Fragility/Vulnerability could be scored as:

| | |
|---|---|
| Fragile/vulnerable | 2 |
| Not fragile/vulnerable | 1 |

**Diversity:** The importance of wrecked vessels can reflect the interest in their architectural design, decoration and craftsmanship, or their technical innovation or virtuosity, as well as their representivity. Consideration should be given both to the diversity of forms in which

a particular vessel may survive and to the diversity of surviving features. Some vessels may be represented in the surviving record by a wide variety of building types and techniques that may be chronologically or culturally conditioned. In addition, some monuments and vessels may be identified as being of importance because they possess a combination of high quality surviving features or, occasionally, because they preserve a single important attribute.

The above description could also be applied to the ship's cargo and Diversity could be scored twice, once for the vessel and once for the cargo, thus for rapid assessment of significance Diversity value could be scored as:

| | | | | | |
|---|---|---|---|---|---|
| Vessel | High diversity | 3 | Cargo | High diversity | 3 |
| | Moderate diversity | 2 | | Moderate diversity | 2 |
| | Low diversity | 1 | | Low diversity | 1 |

**Potential:** The precise nature of some remains cannot be specified, but it may be possible to identify reasons for their existence and importance, eg potential for preservation of archaeological and palaeoenvironmental data. Sites may also be significant in terms of her potential to provide information on site formation and decay processes, and the examination of physical, chemical and biological processes on cultural remains or through its potential for public education.

For rapid assessment of significance documentary value could be scored as:

| | |
|---|---|
| High potential | 3 |
| Moderate potential | 2 |
| Low potential | 1 |

## 12.2 Assessment of the degree to which each wreck is significant in relative terms as contributing to the general significance of the project area

This type of significance is not easy to quantify. Firstly, it requires an appraisal of the nature and level of the overall archaeological and historical significance of the Isles of Scilly, internationally, nationally, regionally and locally. Secondly, it requires an appraisal of the importance of the contribution of each class of monument or feature to that significance, and thirdly of the contribution of each feature.

In order to rapidly assess relative significance in terms of contributing to the general significance of the study area the following criteria have been adapted, some are based on the Department of Transport methodology guidelines for multi-modal studies:

**Monument class:** The assessment needs to consider the perceived contribution to the general significance of the study area of the monument or resource class to which the feature belongs.

For rapid assessment of significance monument class value could be scored as:

| | |
|---|---|
| High class value | 3 |
| Moderate class value | 2 |
| Low class value | 1 |

**Local context**: Generally representing the immediate setting of a site, and its intelligibility within its surroundings. It includes the quality and detail of its immediate visual context, and the value of any associations within that with other elements either of related period

and class or as part of a palimpsest illustrating the historic development of its setting. Various other factors should be taken into account: local manufacture of ship, whether it was a packet or passenger boat, local folklore relating to the shipwreck, incorporation of ships' timbers into local buildings, artefacts recovered and on display locally, place-names, burial sites, contribution to local marine infrastructure eg gig sheds, St Helen's pest house.

For rapid assessment a feature's Local Context value could be scored as:

| | |
|---|---|
| High local context value | 3 |
| Moderate local context value | 2 |
| Low local context value | 1 |

**National/International Context:** This criterion considers the national or international historical value of a site for instance the contemporary impact of the shipwreck of the *Schiller* on local communities in Germany and America, and the memory of the loss, or the setting up of the Longitude Prize as a result of the wreck of the *Association* in 1707.

For rapid assessment a feature's National/International Context value could be scored as:

| | |
|---|---|
| High National/International Context value | 3 |
| Moderate National/International Context value | 2 |
| Low National/International Context value | 1 |

**Complexity:** Representing both the diversity of elements and their relationships within a part of the wider complexity of its relationships beyond its immediate limits. Not dissimilar to the Group Value and Diversity criteria.

For rapid assessment of significance educational and amenity value could be scored as:

| | |
|---|---|
| High complexity | 3 |
| Moderate complexity | 2 |
| Low complexity | 1 |

**Ambience**: The assessment needs to take into account that some features that are not of great archaeological or historical significance are nevertheless important contributors to the local identity and character of the islands, what we might term the 'ambient factor'. Application of this criterion is by its nature subjective and multiple viewpoints including those of non-professional archaeologists, islanders and visitors can and should be expressed.

For rapid assessment of relative significance Ambience could be scored as:

| | |
|---|---|
| High ambient factor | 3 |
| Moderate ambient factor | 2 |
| Low ambient factor | 1 |

## 12.3 Rapid application of criteria

The criteria for assessing absolute and relative significance were applied to seven randomly selected wreck sites from the database plus a hypothetical Mesolithic craft, a 1st century BC Venetic trading ship, and some of the more high profile Scillonian wrecks:

Absolute significance, maximum score 34 (37 including cargo diversity).

| Name/ PRN | Period | Rarity | Document | Group Value | Survival/ Condition | Fragility | Diversity Vessel | Diversity Cargo | Potential | Score |
|---|---|---|---|---|---|---|---|---|---|---|
| *Mesolithic craft* | 10 | 3 | 0 | 2 | 2 | 2 | 3 | 3 | 3 | 31 |
| *Venetic trader* | 10 | 10 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 33 |
| *Plympton* 166360 | 5 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 18 |
| *Ocean Belle* 166359 | 5 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 18 |
| *Porth* 166351 | 5 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 18 |
| *Thomas W Lawson* 166359 | 4 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 17 |
| *Magdeleine* 166357 | 4 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 17 |
| *Serica* 166354 | 5 | 2 | 3 | 1 | 2 | 1 | 2 | 2 | 1 | 19 |
| *Association* | 6 | 3 | 3 | 2 | 2 | 1 | 3 | 3 | 3 | 26 |
| *SS Schiller* | 4 | 2 | 3 | 2 | 2 | 1 | 3 | 3 | 3 | 23 |

Relative significance, maximum score 15

| Name/PRN | Monument class | Local context | National/ International Context | Complexity | Ambience | Score |
|---|---|---|---|---|---|---|
| *Mesolithic craft* | 3 | 3 | 3 | 3 | 3 | 15 |
| *Venetic trader* | 3 | 3 | | 3 | 3 | 15 |
| *Thomas W Lawson 166559* | 3 | 3 | 3 | 1 | 3 | 13 |
| *Plympton* 166360 | 2 | 1 | 1 | 1 | 1 | 6 |
| *Ocean Belle* 166359 | 2 | 1 | 1 | 1 | 1 | 6 |
| *Porth* 166351 | 2 | 1 | 1 | 1 | 1 | 6 |
| *Magdeleine* 166357 | 2 | 1 | 1 | 1 | 1 | 6 |
| *Serica* 166354 | 2 | 3 | 1 | 2 | 3 | 11 |

| Name/PRN | Monument class | Local context | National/ International Context | Complexity | Ambience | Score |
|---|---|---|---|---|---|---|
| *Association* | 3 | 3 | 3 | 3 | 3 | 15 |
| *SS Schiller* | 3 | 3 | 3 | 3 | 3 | 15 |

*Fig 81 The barque Sophie on Tresco 1896 (photo: © Gibson Collection)*

# 13 Discussion: gaps in our knowledge and proposals for further research and projects

*'Against the background of a continually rising sea level and diminishing land mass there is clearly a need for further work associated with the rich coastal and palaeoenvironmental archaeology of Scilly.'*

J Ratcliffe and V Straker 1996 *"The Early Environment of Scilly"*

New discoveries are continually being made in Scilly, some of which have profoundly altered existing perceptions and interpretations of the islands' history, these include: the Iron Age warrior burial with sword and mirror at Hillside Farm on Bryher in 1999 (Johns forthcoming); the probable Iron Age/Romano-British fogou at Peninnis Head on St Mary's in 2001 (Hooley 2001); the Iron Age/Romano-British cist cemetery at Lunnon Farm, St Mary's in spring 2002 (Butcher 2002); the Bronze Age hut circle settlement at Dolphin Town, Tresco in autumn 2003 (Taylor 2004); and the significant number of new sites added to the archaeological record by Hooley during the Monuments Protection Programme in the 1990s. Future investigation of the maritime zone has further potential for revealing more new sites.

Concurrently, important sites which could otherwise add to the developing understanding of the resource are being diminished and will be eventually lost unrecorded due to coastal erosion, a process which is likely to accelerate in future years. A mechanism for systematic recording of these sites within a framework of positive management is urgently required.

The following themes for academic research and fieldwork are suggested:

- the date and character of early settlements;
- the culture and contacts of their inhabitants (through analysis of artefactual evidence);
- the economy and diet of early Scillonians;
- the vegetational and land use history of the islands;
- the submergence of Scilly (cf Ratcliffe and Straker 1996, 51);
- the extent and nature of the submerged historic resource.

## 13.1 Early Scilly

The extent of Mesolithic activity in Scilly is uncertain. Proof of the existence of a Mesolithic occupation would be of major archaeological importance. Much of the artefactual evidence, if it survives, is now under the sea, but there are some flints from the heathlands too. The potential for the survival of such material is demonstrated by the recent discovery of Mesolithic artefacts at a depth of 8m and 500m off the Tyneside coast (The Guardian, 12 September 2003; historical-studies.ncl.ac.uk/SALT). The coastal monitoring project of 1989-93 significantly increased the evidence for Neolithic settlement in the islands, although the data remains somewhat intangible. The following projects would increase our knowledge of Scilly in the prehistory.

### 13.1.1 Comprehensive specialist analysis of lithic assemblages from Scilly

A first step would be a comprehensive study and analysis of the prehistoric chipped stone assemblages from Scilly by a lithics specialist. This could broaden our knowledge of Scilly during the Mesolithic and Neolithic and would enhance our understanding of later periods of prehistory.

#### 13.1.2 Dissemination of results from cliff face sites recorded in the 1989-93 project

Dissemination of the results of the following cliff face sites recorded during the 1989-93 coastal monitoring project is desirable; with a view to publication in Cornish Archaeology, the annual journal of the Cornwall Archaeological Society:

- Porthkillier, St Agnes, **PRN 7029**;
- Bonfire Carn, Bryher, **PRN 7307.01**;
- Halangy Porth, St Mary's, **PRN 7445**;
- Porth Cressa, St Mary's, **PRN 7581.01**;
- East Porth, Samson, **PRN 7070**;
- West Porth, Samson, **PRN 7111.01**.

#### 13.1.3 Analysis and publication of finds recovered from Porth Cressa in 1994 and 1999

In 1994 an eroding Romano-British stone-lined cist grave was excavated at Porth Cressa, since then the excavation records, bone, and soil sample have been stored in HES's finds archive store at Truro. From the same stretch of cliff, but further to the north a Bronze Age urn and contents were rescued in 1999 and are now held at the IOS Museum. Analysis of these important finds and publication in Cornish Archaeology is desirable.

#### 13.1.4 International islands project

There is scope for resurrecting and taking forward the international islands project, comparing the Scilly and the Molène archipelago off the north-west coast of Brittany which was suggested by Chris Scarre of the McDonald Institute for Archaeological Research, Cambridge in 2002.

### 13.2 Integration of Archaeological Item descriptions into the HER

All existing Scheduled Monument summary notifications currently held in the Cornwall and Scilly HER, particularly those that are area based, would be considerably enhanced if they were accompanied by the AI descriptions drawn up by MPP archaeologists. This would prevent serious omission and discrepancy between local and national records.

### 13.3 Submergence studies

The submergence of Scilly is still not fully understood. The intertidal and subtidal remains are intriguing and there is potential for archaeological dates from palaeoenvironmental deposits to inform the general sea level rise issue. Cliff face sites can potentially be used as benchmarks to monitor sea level rise. Submerged and intertidal field walls and hut circles are not yet securely dated.

#### 13.3.1 Further work on intertidal sites

Future work in the intertidal zone should consist of an integrated study of the two types of evidence in the intertidal zone, that is stone remains (field walls, hut circles, cists) and the intertidal 'peat' deposits, and include detailed survey as well as palaeoenvironmental sampling and analysis.

*Survey in the intertidal zone*

Survey of intertidal remains in Scilly has so far been very piecemeal, carried out in several field projects by a variety of organisations and individuals using different types of equipment, some of it now regarded as antiquated, usually compass, dumpy level, alidade and plane table, which are on the whole unsuitable with the special factors affecting survey

in the intertidal zone. The survey area is often distant from any fixed points, the ground is often unstable (wet or dry sand) and remains are only exposed above water for a short time. There is a pressing need for a comprehensive and accurate survey of Scilly's intertidal sites so that their geographical, topographical and chronological relationships can be better understood and so that sampling work can be carried forward against a background of good survey evidence representing the wider archaeological context of palaeoenvironmental results. Future survey should prioritise:

- EDM survey to produce accurate plans of all exposed intertidal remains;
- Using differential GPS to establish the accurate ordnance datum height of all exposed (and recorded buried) intertidal remains is particularly important;
- EDM contour surveys of beaches on which remains are exposed;
- Using EDM/GPS to establish fixed survey points from which intertidal remains can be monitored periodically

*Sites prioritised for survey*

- **PRN 7076.01/.02** Samson Flats, settlement and field system
- **PRN 7102.05-.07** Tean, settlement and field system
- **PRN 7247.01/.02** Nornour, settlement and field system
- **PRN 7345** Crab's Ledge, Tresco, field system
- **PRN 7346.01-03** Bathinghouse Porth, Tresco, settlement and field system
- **PRN 7305** The Brow, Bryher, field system

*Sampling and analysis*

Previous work on intertidal 'peat' deposits has been aimed at assessing their palaeoenvironmental potential and involved small scale sampling at Par Beach, Crab's Ledge and Porth Mellon. Now that the potential has been established there is a need for a more detailed and extensive programme of sampling and analysis. The following recommendations are a slightly modified version of those published by Ratcliffe and Straker in 1996 (pp52-3):

- re-sampling of some previously sampled exposures where larger samples for more detailed analysis is required or to obtain more secure radiocarbon dates;
- sampling of other known unsampled 'peat' exposures for radiocarbon and environmental analysis, including:
    - Crab's Ledge, **PRN 3345.01-03** and the following exposures as yet unrecorded in the HER:
    - Bathinghouse Porth and Pentle Bay (Tresco),
    - East Porth (Tean),
    - Porth Hellick (St Mary's),
    - Town Beach (Bryher),
    - Porth Coose (St Agnes)
    - Samson Flats;

- auguring to locate other buried 'peat' deposits possibly surviving on all of Scilly's beaches, including along outward-facing shores whose potential has yet to be established;
- transects across beaches where buried 'peat' deposits have been recorded to obtain profiles of these buried layers and determine their extent. Augers and/or other prospection techniques could be used. Augurs have proved only partly successful and advice should be sought on whether suitable technology exists for non-invasive prospection;
- using auguring and/or other prospection techniques to assess the inland extent of intertidal 'peat' deposits (ie behind the dune systems beneath which they seem to extend);
- detailed geochemical and/or sedimentological analyses of buried 'peat' and inter-peat deposits to study the process of deposition and accumulation which may reveal important information on the topographical development of Scilly's central plain;
- archaeoentomological assessment of the intertidal 'peats' to expand their palaeoenvironmental scope;
- excavation of test pits or trenches adjacent to submerged field walls (and other stone structures) to establish their stratigraphic relationship with intertidal 'peats' and other deposits.
- the suggestion that the intertidal peats originally occupied a position between High Normal Tide (HNT) and HST gives a tentative context, which could be examined by looking at the relationship of Scilly's present inland mires to OD/CD. Examination of the coastal (and other) processes affecting these mires may also be relevant to the study of the submerged deposits.

The following cliff face sites are recommended for palaeoenvironmental recording and sampling:

- **PRN 1785**, Old Quay, St Martin's; a site which has produced Neolithic pottery and flints associated with an old land surface and small pit;
- **PRN 7482, 7485, 7640, 7694-5** etc, Pendrathen, St Mary's; An extensive, probably Iron Age exposure consisting of an old land surface, which has yielded pottery and is associated with fragments of stone walling and a stone lined drain, all overlain by a thick layer of blown sand; and
- **PRN 7673-5,** Appletree Bay and Crow Point, Tresco; where blown sand overlies an old land surface which has yielded a significant number of worked flints and possible stone hut circle remains.

### 13.3.2 Cliff face sites and coastal monitoring

Ongoing coastal erosion is constantly revealing more sites and reducing previously identified ones. Since the end of the EH funded rolling programme of coastal monitoring in 1994, observations on the condition of coastally exposed sites have been carried out on an *ad hoc* basis by interested local individuals and holidaymakers. There is an evident need for a programme of integrated monitoring within a framework of positive management which would include preservation by record of sites under threat. Gill Arbery has suggested that a proposed study on climate change could provide the impetus to use the cliff face sites as a benchmark for sea level rise, potentially yielding evidence on both

coastal erosion and archaeology (2002, 13). The project would be organised by a professional archaeologist but with community involvement linked to Lifelong Learning and the 'A' level archaeology course now being taught by Jim Hudson at the local secondary school.

There is scope for this work to be tied with research projects, in particular:

- a proposed project on faunal remains in Scilly by Jacqui Mulville of Cardiff University, perhaps focussing on the evidence for economy and diet and in the first instance revisiting the assemblages from excavated sites, and
- ongoing research and fieldwork being carried out in Scilly by Mary Ann Owoc of Mercyhurst College, Pennsylvania. USA and Trevor Kirk of University College, Carmarthen;
- research on entrance graves/chambered cairns by local Scillonian archaeologist Katharine Sawyer.

The proposed coastal monitoring project would involve:

- annual or biennial monitoring of the cliff face as a whole to enable the identification of new sites as they are exposed;
- annual or biennial monitoring of all identified sites, using a system of measuring from fixed points, to establish the rate of cliff erosion and thereby the degree of threat to each site;
- annual or biennial recording of all cliff face sites where fresh erosion has occurred, by;
    - photographing the exposed cliff section;
    - drawing the section using a fixed datum with recorded OD height;
    - collecting artefacts visible in the section;
    - collecting charcoal and other scientifically dateable material;
- a necessary and integral part of the programme would be assessment of the most important cliff face sites which would include the following techniques:
    - cutting back the cliff face to eliminate modern animal disturbance, to enable the drawing of the cleaned up section and systematic sampling of palaeoenvironmental and dating evidence (soils, pollen, macroscopic plant and animal remains, and material for radiocarbon and archaeomagnetic dating);
    - geophysical prospection to establish the inland extent and nature of the site
    - trial trenching to evaluate the extent and character of the site and obtain dating and environmental evidence; and
    - partial or complete excavation of the surviving remains if preservation *in situ* is not feasible
    - assessment of importance.

### 13.3.3 Sites prioritised for further work

- **Pendrathen**, St Mary's, where settlement remains, including a probable early drain, **PRN 7640**, are exposed along the coastal cliff and also to the north-east at Bar Point. These settlement remains are associated with a prehistoric field system,

**PRN 7483**, extending across the coastal slope, now partly blanketed by later deposits of blown sand. Excavation of part of the field system behind Bar Point in 1979-80 confirmed multiple phases of development including Iron Age activity and produced pollen evidence for cereal cultivation in an open landscape before inundation by the blown sand (Evans 1984). In addition to the Iron Age remains there is a possible Bronze Age round cairn, **PRN 7485.01**, exposed in the cliff face at Pendrathen. Since 1993 significant quantities of Bronze Age pottery has been recovered from cliff-falls there, while the exposure of pottery in the cliff-faces is tempting the general public to dig into the cliff to recover even more. Some of the pottery is taken to the IOS Museum, but the important contextual information of this material is being lost.

- **Halangy Porth**, St Mary's, where Iron Age settlement remains, **PRN 7445**, consisting of three buildings and a drain are exposed in the relatively low (3-4m high) cliff-face and apparently extend some distance inland. The cliff-face section, recorded by CAU in September 1991, has been considerably eroded away. This site is particularly vulnerable to impromptu excavation and collection of finds by the public. At the south end of Halangy Porth (Toll's Porth) are two Romano-British cist graves in the cliff face, one of which has virtually disappeared due to coastal erosion since 1992, **PRN 7447**. The sites at Halangy Porth and Pendrathen were reviewed under the Monuments Protection Programme (MPP) in 1993. Although scheduling was not recommended for these sites because their extent was unknown Dave Hooley considered that they are of national importance and that further investigation should rank very high among Scilly's Research priorities. He further emphasised the need for a programme of investigative survey and excavation 'to determine the landward extent of these sites to inform designation and management decisions regarding these sites; and to prevent total loss with little record of this valuable data' (Hooley 1993 a, b and 1993/99).

*Fig 83 Hut circle exposed in the cliff at Halangy Porth, May 2002 (photo: courtesy of Jenny Searle)*

Other prioritised sites are:

- **Porthkillier**, St Agnes, **PRN 7029**;
- **Bonfire Carn**, Bryher, **PRN 7307.01**;
- **Porth Cressa**, St Mary's, **PRN 7581.01**;
- **East Porth**, Samson, **PRN 7070**;
- **West Porth**, Samson, **PRN 7111.01**.

## 13.4 The extent and condition of the submerged archaeological resource

The extent, degree of survival, condition and distribution of the submerged archaeological resource is still unclear. Detailed archaeological work has so far been restricted to sites in the intertidal zone where the earliest peat deposit is dated to the Late Mesolithic. Several permanently submerged sites have been identified in the shallow marine zone between the present islands, including stone field walls, possible hut circle settlements, a peat deposit (potentially of Mesolithic date), a limpet midden and two possible Bronze Age cairns.

Details are recorded of 771 shipwreck sites, but often know little more is known than their location, whether accurate or estimated. The largest concentration of recorded wrecks is in St Mary's Roads, followed by the Seven Stones, with 71 wrecks, and then the Western Rocks. This is likely to be a biased representation because the grid reference given for a wreck is often the nearest prominent landmark. Whilst there has been extensive diving on shipwreck sites in Scilly since the mid-1960s and considerable historic research targeted at pinpointing the location of specific wrecks carrying valuable cargoes, divers' reports vary greatly in content and are not widely available. Also some areas are more favoured by divers than others, giving a skewed representation of shipwreck numbers and their condition. Hell Bay, for example, has entered into popular imagination as a notorious place for shipwreck (eg Llewellyn 1980), yet there are comparatively few recorded wrecks on the west coast of Bryher in comparison to St Mary's Roads and the Western Rocks. This may partly be because in the past much diving activity has been focused on the Western Rocks and conditions are only suitable for diving off the western coast of Bryher at the same time when they are suitable for the Western Rocks.

There is potential for the remains of extremely early and important vessels to survive in the islands. The environment and seabed is not conducive to preserving timbers and fragile artefact material, but it seems that there is potential for the timbers of historic wrecks to survive below the seabed if protected by sand and sediments although little chance if exposed due to the energy on the seabed and the depredations of marine worms.

### 13.4.1 Bathymetric survey and verification

- A multidisciplinary approach to area survey and verification has the potential to reveal the location of possible archaeological sites and of shipwrecks. This would include high resolution side scan sonar, multibeam bathymetry, caesium magnetometer and CHIRP and Boomer sub bottom profiling, followed by archaeological diver inspection and complemented by broader marine environmental assessment of the area.

### 13.4.2 Documentary research into shipwreck sites

- There is a considerable body of documentary evidence for early shipwrecks that has yet to be researched;

- There is scope for desk-based assessments of the other protected wreck sites, 'Tearing Ledge' and 'Bartholomew Ledge' and other wrecks such as the *Hollandia*, the *Prinses Maria* and the *Schiller*.

#### 13.4.3 Holistic interpretation of the marine world around Scilly

- There is considerable potential for a holistic interpretation of the marine world around Scilly, in partnership with English Nature, the IOS AONB unit and the IOS Wildlife Trust.

#### 13.4.4 Old Town Bay

Further investigation and survey of the stone anchor site in Old Town Bay might elucidate the context of the discoveries.

## 13.5 The history of early salvage and diving in Scilly

There are numerous accounts of wrecks and salvage from 1305 onwards. The islanders have a long and honourable tradition of helping the survivors of shipwreck, but salvage was an important part of the economy, and there are many stories and folklore attesting to the range of salvage undertaken locally.

- Undertake a desk-based study of the history of salvage and diving in Scilly up to the first archaeological diving expedition in 1956, which would for the first time collate the various sources into a single document. It has been suggested that further research into the salvage techniques of the 1800s may help to explain the state of the wreckage of the *Colossus* on the seabed (Black 2003, 31).

The picaresque diving scene in Scilly in the late 1960s and the 1970s is recorded, amongst others, in the books of Roland Morris, which are gripping tales of adventure and unabashed treasure hunting (Morris 1969 and 1979). We could to a certain extent equate this period of shipwreck looting with the approach of the barrow diggers of the 18th and 19th centuries. However there are conflicting accounts of what actually happened during this era (eg Rogers nd; 'Norm' nd) and the extent of underwater exploration and plundering.

- There is scope for a study of the history of diving and salvage in Scilly between the first archaeological dive in 1956 and the present day. This would comprise desk-based research and personal interview with the surviving divers from that period, many of who still live on Scilly.

## 13.6 Medieval and post-medieval

#### 13.6.1 Conservation Plan for The Garrison

The Transport Strategy proposals have highlighted the need for a detailed study and Conservation Plan for The Garrison and the other island defences along the lines of the Fortress Falmouth Conservation Plan (Linzey 2000).

#### 13.6.2 Sites prioritised for survey/large scale plans

- **PRN 7006** St Agnes, Uncle Tom's quays (3)
- **PRNs 7106.01-03** Tean, kelp pits
- **PRN 7195** St Martins, boathouse
- **PRN 7456** St Mary's, blockhouse
- **PRN 7569** St Mary's, smugglers' cache

- **PRN 7640** St Mary's, smugglers' cache
- **PRN 7646** St Mary's, quay
- **PRN 7647** St Mary's, quay
- **PRN 7549** St Mary's, quay
- **PRN 7489** St Mary's, quay

### 13.6.3 Research themes

- Medieval trade
- Further study of the of kelp-burning industry in Scilly;
- Study of the history of pilchard and mackerel fishing in Scilly;
- There is as yet no dedicated study of the 19th century shipbuilding industry in Scilly, although Richard Larn is working on this as a private project, which will be published in due course. A research project augmented by fieldwork would be useful here.

*Fig 84 The barque River Lune, lost on Isinvrank on the west side of St Agnes in 1879 (photo ©Gibson Collection)*

# 14 Appendices

## 14.1 HES archive

The HES project number is **2003021**

The project's archive is housed at the offices of the Historic Environment Service, Cornwall County Council, Kennall Building, Old County Hall, Station Road, Truro, TR1 3AY. The contents of this archive are as listed below:

1. A project file containing site records and notes, project correspondence and administration and copies of documentary/cartographic source material (file no 2003021).
2. Copies of historic maps stored in an A2-size plastic envelope (GRE 470).
3. This report held in digital form as:

   G:\CAU\DOCUMENT\SITES\SCILLY\SRCZA 2003021\

   SRCZA REPORT.DOC

*Fig 85 The hulk of the James Anderson on Town Beach c1870 (photo: ©Gibson Collection)*

## 14.2 List of coastal and intertidal sites in the project area

The list below identifies 385 known sites within the immediate coastal and intertidal zones of the islands as held by CCC HER. Some record number (PRN) duplication occurs due to the recording of multi-site types and multi-phases within a single record.

| PRN | Name | Site Type | Form | Period | Easting | Northing |
|---|---|---|---|---|---|---|
| 7003 | ST WARNAS COVE | OCCUPATION SITE | EXTANT | PX | 87910 | 7910 |
| 7004.1 | PERIGLIS | OCCUPATION SITE | EXTANT | PX | 87650 | 8330 |
| 7004.2 | PERIGLIS | MIDDEN | EXTANT | EM | 87650 | 8330 |
| 7006 | UNCLE TOMS QUAY | QUAY | EXTANT | PM | 87554 | 8440 |
| 7008 | PRIEST ROCK | STANDING STONE | EXTANT | NE | 87650 | 8330 |
| 7017 | BEADY POOL | FINDSPOT | ARTEFACT | MD | 88374 | 7374 |
| 7029 | PORTH KILLIER | SETTLEMENT | EXTANT | NE | 88100 | 8480 |
| 7029.01 | PORTH KILLIER | FINDSPOT | ARTEFACT | BA | 88100 | 8480 |
| 7029.02 | PORTH KILLIER | FINDSPOT | ARTEFACT | IA | 88100 | 8480 |
| 7038 | PORTH CONGER | FINDSPOT | ARTEFACT | HX | 88570 | 8640 |
| 7039.03 | PERIGLIS | FINDSPOT | ARTEFACT | PX | 87700 | 8330 |
| 7043 | ANNET | FINDSPOT | ARTEFACT | EM | 86200 | 8800 |
| 7065 | BISHOP ROCK | LIGHTHOUSE | EXTANT | 19 | 80700 | 6440 |
| 7069 | NORTH AND SOUTH HILL | FIELD SYSTEM | EXTANT | PX | 87700 | 12800 |
| 7070 | SAMSON | HUT CIRCLE | EXTANT | BA | 87600 | 13040 |
| 7071 | PORTH | SETTLEMENT | EXCAVATED | NE | 87800 | 12800 |
| 7071.01 | EAST PORTH | PIT | EXCAVATED | NE | 87800 | 12800 |
| 7071.02 | EAST PORTH | CIST | EXCAVATED | RB | 87800 | 12800 |
| 7071.03 | EAST PORTH | BUILDING | EXCAVATED | EM | 87800 | 12800 |
| 7071.04 | EAST PORTH | OCCUPATION SITE | EXCAVATED | EM | 87800 | 12800 |
| 7071.05 | EAST PORTH | METAL PROCESSING SITE | EXCAVATED | EM | 87800 | 12800 |
| 7071.06 | PORTH | BUILDING | EXCAVATED | EM | 87800 | 12800 |
| 7071.07 | EAST PORTH | GRAVE | EXCAVATED | EM | 87800 | 12800 |
| 7071.08 | EAST PORTH | BUILDING | EXCAVATED | EM | 87800 | 12800 |
| 7071.09 | EAST PORTH | OCCUPATION SITE | EXCAVATED | MD | 87800 | 12800 |
| 7071.1 | EAST PORTH | TRACKWAY | EXCAVATED | MD | 87800 | 12800 |
| 7071.11 | EAST PORTH | FISH PROCESSING FACTORY | EXCAVATED | PM | 87850 | 12900 |
| 7071.12 | EAST PORTH | FIELD SYSTEM | EXCAVATED | UX | 87800 | 12800 |
| 7071.13 | EAST PORTH | SCIENTIFIC ANALYSIS | EXCAVATED | EM | 87800 | 12800 |
| 7071.14 | EAST PORTH | BUILDING | EXTANT | HX | 87800 | 12800 |
| 7076 | SAMSON FLATS | HUT CIRCLE SETTLEMENT | EXTANT | BA | 88000 | 12800 |
| 7076.01 | SAMSON FLATS | FIELD SYSTEM | EXTANT | BA | 88000 | 12800 |
| 7076.02 | SAMSON FLATS | HUT CIRCLE | EXTANT | BA | 88000 | 12800 |
| 7077.01 | EAST PORTH | FIELD SYSTEM | EXTANT | BA | 87900 | 12700 |
| 7079 | SAMSON | FINDSPOT | ARTEFACT | PX | 87000 | 12000 |
| 7080 | SAMSON | FINDSPOT | ARTEFACT | RB | 87000 | 12000 |
| 7082 | WEST PORTH | FIELD SYSTEM | EXTANT | PX | 87270 | 12500 |
| 7085 | SAMSON | FINDSPOT | ARTEFACT | RB | 87000 | 12000 |
| 7086 | SAMSON | FINDSPOT | ARTEFACT | EM | 87000 | 12000 |
| 7088 | SAMSON | FINDSPOT | ARTEFACT | UX | 87000 | 12000 |
| 7089 | SHAG POINT | KELP PIT | EXTANT | PM | 87510 | 12420 |
| 7090 | NECK OF SAMSON | CAIRN | EXTANT | BA | 87760 | 12791 |
| 7095 | PORTH MORRAN | HUT CIRCLE | EXTANT | PX | 92350 | 17430 |

| PRN | Name | Site Type | Form | Period | Easting | Northing |
|---|---|---|---|---|---|---|
| 7098 | WHITE ISLAND | BANK (EARTHWORK) | EXTANT | HX | 92430 | 17470 |
| 7099.02 | WHITE ISLAND | HUT CIRCLE | EXTANT | PX | 92440 | 17330 |
| 7100 | PORTH MORRAN | FINDSPOT | ARTEFACT | PX | 92320 | 17480 |
| 7102.05 | OLD MAN | HUT CIRCLE | EXTANT | PX | 90450 | 16170 |
| 7102.06 | OLD MAN | FIELD SYSTEM | EXTANT | RB | 90490 | 16210 |
| 7102.07 | WEST PORTH | FIELD SYSTEM | EXTANT | PX | 90690 | 16370 |
| 7102.08 | EAST PORTH | FIELD SYSTEM | EXTANT | PX | 90950 | 16270 |
| 7103 | OLD MAN | ENTRANCE GRAVE | EXTANT | BA | 90490 | 16310 |
| 7104.01 | OLD MAN | CIST | EXCAVATED | RB | 90430 | 16270 |
| 7104.02 | OLD MAN | FINDSPOT | ARTEFACT | PX | 90430 | 16270 |
| 7105 | OLD MAN | MIDDEN | EXTANT | PX | 90460 | 16310 |
| 7106.01 | OLD MAN | KELP PIT | EXTANT | PM | 90510 | 16230 |
| 7106.02 | OLD MAN | KELP PIT | EXTANT | PM | 90510 | 16240 |
| 7106.03 | OLD MAN | KELP PIT | EXTANT | PM | 90460 | 16170 |
| 7107 | WEST PORTH | CAIRN | EXTANT | BA | 90630 | 16270 |
| 7108 | EAST PORTH | QUAY | EXTANT | PM | 90830 | 16330 |
| 7109 | WEST BROAD LEDGE | HUT CIRCLE | EXTANT | BA | 91200 | 15600 |
| 7111.01 | EAST PORTH | MIDDEN | EXCAVATED | RB | 90810 | 16360 |
| 7129 | NECK OF POOL | CEMETERY | SITE OF | RB | 91900 | 15800 |
| 7130 | WHITE ISLAND | FINDSPOT | ARTEFACT | PX | 92170 | 17550 |
| 7134 | NECK OF POOL | FINDSPOT | ARTEFACT | PX | 91697 | 16000 |
| 7135 | BUTTER PORTH | OCCUPATION SITE | EXTANT | PX | 92000 | 17050 |
| 7147 | PAR BEACH | HUT CIRCLE | EXCAVATED | BA | 93200 | 15300 |
| 7148 | PAR BEACH | CIST | EXCAVATED | RB | 93200 | 15300 |
| 7149 | PAR BEACH | CAIRN | EXCAVATED | BA | 93200 | 15300 |
| 7150 | PAR BEACH | FINDSPOT | ARTEFACT | BA | 93265 | 15288 |
| 7151 | ENGLISH ISLAND CARN | CIST | SITE OF | BA | 93849 | 15258 |
| 7153 | THE PORTH | BOAT HOUSE | EXTANT | PM | 91400 | 16000 |
| 7160 | STONY PORTH | FINDSPOT | ARTEFACT | PX | 93700 | 15900 |
| 7165 | YELLOW ROCK CARN | CIST | SITE OF | RB | 92260 | 15760 |
| 7168 | HIGHER TOWN | FINDSPOT | ARTEFACT | EM | 92784 | 15186 |
| 7176 | KNACKYBOY CARN | WALL | EXTANT | UX | 92300 | 15750 |
| 7178 | LAWRENCES BAY | CIST | SITE OF | PX | 91898 | 15802 |
| 7183 | ST MARTINS | FINDSPOT | ARTEFACT | IA | 92000 | 15000 |
| 7185 | OLD QUAY | LITHIC SCATTER | ARTEFACT | ME | 92781 | 15187 |
| 7188 | TOP ROCK HILL | BANK (EARTHWORK) | EXTANT | IA | 92400 | 16700 |
| 7189 | TINKLERS HILL | KELP PIT | EXTANT | PM | 91589 | 16498 |
| 7192 | POINT OF FIELDS | QUAY | EXTANT | MD | 91430 | 16210 |
| 7193 | POINT OF FIELDS | HUT CIRCLE | EXTANT | PX | 91440 | 16220 |
| 7194 | POINT OF FIELDS | FINDSPOT | ARTEFACT | PM | 91425 | 16255 |
| 7195 | POINT OF FIELDS | BOAT HOUSE | EXTANT | PM | 91420 | 16250 |
| 7197 | TOP ROCK | HUT CIRCLE | EXTANT | PX | 92340 | 16730 |
| 7201 | GREAT BAY | OCCUPATION SITE | EXCAVATED | BA | 92480 | 16290 |
| 7208 | LITTLE BAY | HUT CIRCLE | EXCAVATED | BA | 92310 | 16620 |
| 7208.01 | LITTLE BAY | HUT CIRCLE | EXCAVATED | BA | 92310 | 16620 |
| 7208.02 | LITTLE BAY | FIELD SYSTEM | EXCAVATED | BA | 92310 | 16620 |
| 7213 | ARTHUR QUAY | QUAY | EXTANT | HX | 94000 | 13900 |
| 7214.03 | LITTLE ARTHUR | FIELD SYSTEM | EXTANT | PX | 94130 | 13880 |
| 7215 | LITTLE ARTHUR | CAIRN CEMETERY | EXTANT | BA | 94080 | 13910 |

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| 7215.05 | LITTLE ARTHUR | CAIRN | EXTANT | BA | 94040 | 13960 |
| 7216 | ARTHUR PORTH | CIST | EXTANT | BA | 94080 | 13860 |
| 7218 | LITTLE ARTHUR | HUT CIRCLE | EXCAVATED | IA | 94100 | 13800 |
| 7220 | GREAT ARTHUR | MIDDEN | EXTANT | PX | 94270 | 13570 |
| 7222 | GREAT ARTHUR | FIELD SYSTEM | EXTANT | PX | 94159 | 13508 |
| 7224.01 | MIDDLE ARTHUR | CAIRN | EXCAVATED | BA | 93980 | 13800 |
| 7224.02 | MIDDLE ARTHUR | CAIRN | EXTANT | BA | 93980 | 13820 |
| 7228 | ARTHUR HEAD | MIDDEN | EXTANT | PX | 94200 | 13400 |
| 7230 | LIZARD POINT | OCCUPATION SITE | EXTANT | PX | 90300 | 14800 |
| 7231 | PENTLE BAY | SETTLEMENT | EXTANT | RB | 90100 | 14000 |
| 7231.01 | PENTLE BAY | BUILDING | EXTANT | RB | 90110 | 13920 |
| 7231.02 | PENTLE BAY | FIELD SYSTEM | EXTANT | RB | 90100 | 14000 |
| 7233.01 | TOLLS ISLAND | KELP PIT | EXTANT | PM | 93040 | 11940 |
| 7233.02 | TOLLS ISLAND | KELP PIT | EXTANT | PM | 93070 | 11930 |
| 7233.03 | TOLLS ISLAND | KELP PIT | EXTANT | PM | 93090 | 11920 |
| 7233.04 | TOLLS ISLAND | KELP PIT | EXTANT | PM | 93130 | 11920 |
| 7235 | NORMANDY DOWN | BREASTWORK | EXTANT | PM | 93020 | 11300 |
| 7247.01 | NORNOUR | SETTLEMENT | EXCAVATED | IA | 94440 | 14780 |
| 7247.02 | NORNOUR | FIELD SYSTEM | EXCAVATED | BA | 94400 | 14600 |
| 7248 | PRESCELLA WELL | WELL | EXTANT | PM | 92920 | 16010 |
| 7257 | RUSHY CARN | FINDSPOT | ARTEFACT | PX | 92440 | 17090 |
| 7268.01 | ST HELENS | BUILDING | EXTANT | PM | 89989 | 16829 |
| 7268.03 | PEST HOUSE | QUAY | EXTANT | PM | 89960 | 16780 |
| 7273 | NORTHWETHEL | FINDSPOT | ARTEFACT | UX | 89600 | 16200 |
| 7276.02 | SHIPMAN HEAD | CLIFF CASTLE | EXTANT | IA | 87440 | 16240 |
| 7278 | SHIPMAN HEAD | HUT CIRCLE | EXTANT | PX | 87580 | 16020 |
| 7289 | PIPERS HOLE | FINDSPOT | ARTEFACT | PX | 88630 | 16540 |
| 7290 | CASTLE DOWN | BREASTWORK | EXTANT | PM | 88840 | 16340 |
| 7299 | GIMBLE PORTH | BREASTWORK | EXTANT | PM | 88100 | 16100 |
| 7302 | PAR BEACH | HUT CIRCLE | EXCAVATED | IA | 93200 | 15300 |
| 7303 | PAR BEACH | HUT CIRCLE | EXCAVATED | RB | 93200 | 15300 |
| 7304.01 | THE BROW | FINDSPOT | ARTEFACT | ME | 88000 | 14500 |
| 7304.02 | THE BROW | FINDSPOT | ARTEFACT | PX | 88000 | 14500 |
| 7305 | THE BROW | FIELD SYSTEM | EXTANT | PX | 88080 | 14420 |
| 7307.01 | BONFIRE CARN | HUT CIRCLE | EXTANT | BA | 88041 | 14193 |
| 7307.02 | BONFIRE CARN | FINDSPOT | ARTEFACT | UX | 88041 | 14193 |
| 7309 | APPLETREE POINT | HUT CIRCLE | EXTANT | PX | 88820 | 14470 |
| 7309.01 | APPLETREE POINT | HUT CIRCLE | EXTANT | PX | 88830 | 14490 |
| 7309.02 | APPLETREE POINT | FIELD SYSTEM | EXTANT | PX | 88820 | 14470 |
| 7310 | APPLETREE POINT | FINDSPOT | ARTEFACT | UX | 88830 | 14310 |
| 7311 | CLIFF FIELDS | FINDSPOT | ARTEFACT | PX | 88890 | 14420 |
| 7315 | GREEN BAY | FINDSPOT | ARTEFACT | RB | 88500 | 14600 |
| 7328 | GREAT BAY | OCCUPATION SITE | EXTANT | PX | 92480 | 16290 |
| 7339 | TRESCO FLATS | ENCLOSURE | EXTANT | UX | 89090 | 13450 |
| 7340 | TRESCO FLATS | FIELD SYSTEM | EXTANT | PX | 89055 | 13568 |
| 7340.02 | APPLETREE BAY | FINDSPOT | ARTEFACT | PX | 89140 | 13510 |
| 7343 | SEA CARN | BUILDING | EXTANT | PM | 89550 | 13740 |
| 7345 | CRABS LEDGE | FIELD SYSTEM | EXTANT | PX | 89710 | 13750 |
| 7345.1 | CRABS LEDGE | PEAT DEPOSIT | ARTEFACT | IA | 89710 | 13750 |
| 7345.2 | CRABS LEDGE | PEAT DEPOSIT | ARTEFACT | PX | 89710 | 13750 |

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| 7345.3 | CRABS LEDGE | PEAT DEPOSIT | ARTEFACT | PX | 89710 | 13750 |
| 7346 | BATHINGHOUSE PORTH | HUT CIRCLE | EXTANT | PX | 89410 | 13560 |
| 7346.01 | BATHINGHOUSE PORTH | FIELD SYSTEM | EXTANT | PX | 89410 | 13560 |
| 7346.02 | BATHINGHOUSE PORTH | HUT CIRCLE | EXTANT | PX | 89410 | 13580 |
| 7346.03 | BATHINGHOUSE PORTH | HUT CIRCLE | EXTANT | PX | 89410 | 13540 |
| 7346.04 | BATHINGHOUSE PORTH | FINDSPOT | ARTEFACT | PX | 89420 | 13570 |
| 7349 | CARN NEAR | OCCUPATION SITE | EXTANT | BA | 89320 | 13420 |
| 7350 | CARN NEAR | FINDSPOT | ARTEFACT | PX | 89200 | 13500 |
| 7353 | CROW POINT | FINDSPOT | ARTEFACT | BA | 89200 | 13400 |
| 7354.01 | CROMWELLS CASTLE | CASTLE | EXTANT | PM | 88180 | 15960 |
| 7354.02 | CROMWELLS CASTLE | BLOCKHOUSE | SITE OF | PM | 88180 | 15960 |
| 7364.01 | BLOCKHOUSE POINT | BREASTWORK | EXTANT | PM | 89720 | 15550 |
| 7367 | NORTHWARD | MIDDEN | SITE OF | EM | 88200 | 15300 |
| 7374 | THE BAR | FIELD SYSTEM | EXTANT | PX | 88150 | 15100 |
| 7374.01 | THE BAR | FIELD SYSTEM | EXTANT | PX | 88150 | 15100 |
| 7374.02 | THE BAR | HUT CIRCLE | EXTANT | PX | 88120 | 15070 |
| 7386 | GREEN BAY | FIELD SYSTEM | EXTANT | PX | 87938 | 14609 |
| 7388 | GREEN BAY | CIST | EXCAVATED | RB | 87950 | 14570 |
| 7389 | GREAT PORTH | FIELD SYSTEM | EXTANT | PX | 87519 | 14409 |
| 7390 | GREAT PORTH | QUAY | EXTANT | PM | 87490 | 14369 |
| 7415 | CARN LEH | BATTERY | EXTANT | PM | 91328 | 9868 |
| 7429 | PENINNIS HEAD | BATTERY | EXTANT | PM | 90960 | 9400 |
| 7444 | HALANGY PORTH | HUT CIRCLE | EXCAVATED | NE | 90900 | 12500 |
| 7444.01 | HALANGY PORTH | SOCKETED STONE | ARTEFACT | PX | 90900 | 12470 |
| 7444.01 | HALANGY PORTH | HUT CIRCLE | EXCAVATED | BA | 90900 | 12470 |
| 7444.02 | HALANGY PORTH | OCCUPATION SITE | EXCAVATED | NE | 90910 | 12530 |
| 7444.03 | HALANGY PORTH | DRAIN | EXCAVATED | UX | 90900 | 12450 |
| 7444.04 | HALANGY PORTH | MIDDEN | EXCAVATED | NE | 90890 | 12470 |
| 7444.05 | HALANGY PORTH | FINDSPOT | ARTEFACT | PX | 90909 | 12486 |
| 7445 | HALANGY PORTH | HUT CIRCLE | EXTANT | BA | 90910 | 12510 |
| 7447 | HALANGY PORTH | CIST | EXCAVATED | IA | 90850 | 12350 |
| 7448 | TOLLS PORTH | BATTERY | EXTANT | PM | 90850 | 12350 |
| 7454.04 | INNISIDGEN HILL | BATTERY | EXTANT | PM | 92308 | 12561 |
| 7456 | BLOCK HOUSE POINT | BLOCKHOUSE | EXTANT | PM | 92396 | 12492 |
| 7470 | HELVEAR | CAIRN | EXTANT | BA | 92400 | 12320 |
| 7476 | BAR POINT | HUT CIRCLE | EXTANT | BA | 91545 | 12907 |
| 7477.03 | LITTLE PORTH | FIELD SYSTEM | EXTANT | EM | 91800 | 12940 |
| 7480 | PENDRATHEN | HUT CIRCLE | EXCAVATED | BA | 91504 | 12809 |
| 7480.01 | PENDRATHEN | HUT CIRCLE | EXTANT | BA | 91487 | 12794 |
| 7480.02 | PENDRATHEN | HUT CIRCLE | EXTANT | BA | 91491 | 12798 |
| 7480.03 | PENDRATHEN | HUT CIRCLE | EXTANT | BA | 91504 | 12809 |
| 7480.04 | PENDRATHEN | HUT CIRCLE | EXTANT | BA | 91516 | 12814 |
| 7481 | PENDRATHEN | FINDSPOT | ARTEFACT | NE | 91450 | 12730 |
| 7485.01 | PENDRATHEN | CAIRN | EXTANT | BA | 91510 | 12760 |
| 7489 | PENDRATHEN QUAY | QUAY | EXTANT | PM | 91212 | 12723 |
| 7502 | BAR POINT | FINDSPOT | ARTEFACT | PX | 91504 | 12809 |
| 7510 | NEWFORD ISLAND | BREASTWORK | EXTANT | CW | 90680 | 11220 |
| 7515 | PORTHLOO | FINDSPOT | ARTEFACT | PX | 90829 | 11336 |
| 7522 | MAYPOLE | FINDSPOT | ARTEFACT | PX | 92000 | 10000 |
| 7529 | PORTH HELLICK POINT | SIEGEWORK | EXTANT | PM | 92720 | 10540 |

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|---|---|---|---|---|---|---|
| 7530 | DICKS CARN | BREASTWORK | EXTANT | PM | 92639 | 10600 |
| 7536 | GIANTS CASTLE | CLIFF CASTLE | EXCAVATED | IA | 92450 | 10060 |
| 7536.01 | GIANTS CASTLE | DEFENCE | EXTANT | PM | 92430 | 10090 |
| 7538 | SALAKEE DOWN | FINDSPOT | ARTEFACT | BA | 92000 | 10000 |
| 7540.09 | SALAKEE DOWN | CAIRN | EXTANT | BA | 92000 | 10000 |
| 7540.1 | SALAKEE DOWN | FINDSPOT | SITE OF | PX | 92000 | 10000 |
| 7540.11 | SALAKEE DOWN | CAIRN | EXTANT | BA | 92000 | 10000 |
| 7540.12 | SALAKEE DOWN | CAIRN | EXTANT | BA | 92000 | 10000 |
| 7540.13 | SALAKEE DOWN | PLATFORM | EXTANT | UX | 92000 | 10000 |
| 7540.14 | SALAKEE DOWN | PLATFORM | EXTANT | UX | 92000 | 10000 |
| 7540.15 | SALAKEE DOWN | CAIRN | EXTANT | BA | 92000 | 10000 |
| 7540.16 | SALAKEE DOWN | CAIRN | EXTANT | BA | 92000 | 10000 |
| 7540.17 | SALAKEE DOWN | CAIRN | EXTANT | BA | 92000 | 10000 |
| 7540.18 | SALAKEE DOWN | CAIRN | EXTANT | BA | 92000 | 10000 |
| 7540.19 | SALAKEE DOWN | CAIRN | EXTANT | BA | 92000 | 10000 |
| 7540.2 | SALAKEE DOWN | CLEARANCE CAIRN | EXTANT | 20 | 92000 | 10000 |
| 7540.21 | SALAKEE DOWN | CLEARANCE CAIRN | EXTANT | 20 | 92000 | 10000 |
| 7543 | PORTH HELLICK | FINDSPOT | ARTEFACT | PX | 92470 | 10680 |
| 7546 | OLD TOWN QUAY | FISH PROCESSING FACTORY | EXTANT | HX | 91380 | 10160 |
| 7549 | OLD QUAY | QUAY | EXTANT | MD | 91370 | 10100 |
| 7555 | TOLMAN CARNS | BATTERY | EXTANT | PM | 91530 | 10060 |
| 7555 | TOLMAN CARNS | PILLBOX | EXTANT | W2 | 91530 | 10060 |
| 7556 | INNER BLUE CARN | BREASTWORK | EXTANT | CW | 91839 | 10068 |
| 7557 | INNER BLUE CARN | HUT CIRCLE SETTLEMENT | EXTANT | PX | 91829 | 10070 |
| 7558 | PORTH MINNICK | FINDSPOT | ARTEFACT | PX | 91600 | 10100 |
| 7569 | PORTH MELLON | SMUGGLERS CACHE | EXTANT | PM | 90860 | 10920 |
| 7572 | OLD QUAY | QUAY | EXTANT | PM | 90200 | 10730 |
| 7581.01 | PORTH CRESSA | HUT CIRCLE | EXTANT | BA | 90630 | 10200 |
| 7581.04 | PORTH CRESSA | FINDSPOT | ARTEFACT | PM | 90630 | 10200 |
| 7581.05 | PORTH CRESSA | WALL | EXTANT | UX | 90620 | 10160 |
| 7581.06 | PORTH CRESSA | FINDSPOT | ARTEFACT | PX | 90634 | 10105 |
| 7581.07 | PORTH CRESSA | CIST | EXTANT | RB | 90630 | 10180 |
| 7582 | PORTH CRESSA | FINDSPOT | ARTEFACT | PX | 90600 | 10200 |
| 7584 | PORTHCRESSA | FINDSPOT | ARTEFACT | NE | 90400 | 10000 |
| 7587 | PORTH MELLON | FINDSPOT | ARTEFACT | UX | 90800 | 10800 |
| 7603 | PORTH ASKIN | BOAT HOUSE | EXTANT | PM | 88219 | 7419 |
| 7612 | TOL TUPPENS | FINDSPOT | ARTEFACT | NE | 88580 | 8650 |
| 7613 | TOL TUPPENS | FINDSPOT | ARTEFACT | NE | 88650 | 8710 |
| 7620 | GREAT BAY | FINDSPOT | ARTEFACT | PM | 92600 | 16200 |
| 7626 | HIGHER TOWN BEACH | FINDSPOT | ARTEFACT | PM | 92678 | 15288 |
| 7630 | BRYHER | FINDSPOT | ARTEFACT | NE | 88200 | 15400 |
| 7631 | ST AGNES | FINDSPOT | ARTEFACT | NE | 87718 | 8330 |
| 7640 | PENDRATHEN | SMUGGLERS CACHE | EXTANT | PM | 91490 | 12750 |
| 7641 | BANTS CARN | OCCUPATION SITE | EXTANT | PX | 91090 | 12790 |
| 7643 | EAST PORTH AND BLACK LEDGE | STONE WORKING SITE | EXTANT | PM | 87920 | 13080 |
| 7646 | TOLLS ISLAND | QUAY | EXTANT | PM | 92920 | 11910 |
| 7647 | PORTH CRESSA | SLIPWAY | EXTANT | PM | 90600 | 10160 |
| 7650 | LITTLE ARTHUR | CIST | EXTANT | BA | 94050 | 13860 |

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| 7660 | PAR BEACH | STONE ALIGNMENT | EXTANT | NE | 93390 | 15330 |
| 7661.01 | PAR BEACH | PEAT DEPOSIT | ARTEFACT | PX | 93340 | 15300 |
| 7661.02 | PAR BEACH | FINDSPOT | ARTEFACT | PX | 93220 | 15280 |
| 7661.03 | PAR BEACH | PEAT DEPOSIT | ARTEFACT | EM | 93390 | 15330 |
| 7661.03 | PAR BEACH | PEAT DEPOSIT | ARTEFACT | RB | 93390 | 15330 |
| 7661.04 | PAR BEACH | PEAT DEPOSIT | ARTEFACT | BA | 93220 | 15280 |
| 7661.05 | PAR BEACH | PEAT DEPOSIT | ARTEFACT | PX | 93220 | 15280 |
| 7661.06 | PAR BEACH | FINDSPOT | ARTEFACT | NE | 93220 | 15280 |
| 7665 | YELLOW ROCK | FINDSPOT | ARTEFACT | BA | 92230 | 15760 |
| 7666 | PENDRATHEN | FINDSPOT | ARTEFACT | PX | 91480 | 12760 |
| 7667 | PORTH MELLON | HUT CIRCLE | EXTANT | PX | 90800 | 10850 |
| 7668 | HOLE OF COVE VEAN | QUAY | EXTANT | PM | 88530 | 7980 |
| 7669 | THE PORTH | QUAY | EXTANT | PM | 91420 | 16070 |
| 7670 | TOLLS PORTH | SETTLEMENT | EXTANT | PX | 90857 | 12319 |
| 7672 | APPLETREE BAY | WALL | EXTANT | PX | 89230 | 13480 |
| 7674 | APPLETREE BAY | FINDSPOT | ARTEFACT | PX | 89200 | 13460 |
| 7675 | CROW POINT | OCCUPATION SITE | ARTEFACT | PX | 89210 | 13380 |
| 7676 | BATHINGHOUSE PORTH | STONE WORKING SITE | EXTANT | PM | 89530 | 13690 |
| 7677 | PLUMB HILL | MIDDEN | EXTANT | PM | 88810 | 14640 |
| 7680 | LITTLE POPPLESTONE | MIDDEN | EXTANT | PM | 87460 | 15200 |
| 7681 | PENTLE BAY | WALL | EXTANT | UX | 90150 | 15940 |
| 7686 | BLACK CARN | CAIRN | EXTANT | BA | 87170 | 15030 |
| 7687 | LITTLE POPPLESTONE | FINDSPOT | ARTEFACT | UX | 87410 | 15250 |
| 7691 | INNISIDGEN HILL | SLIPWAY | EXTANT | PM | 92120 | 12780 |
| 7692 | PENDRATHEN | SLIPWAY | EXTANT | PM | 91440 | 12730 |
| 7693 | PENDRATHEN | PILLBOX | EXTANT | PM | 91550 | 12810 |
| 7695 | PENDRATHEN | WALL | EXTANT | UX | 91530 | 12780 |
| 7697 | HALANGY PORTH | WALL | EXTANT | UX | 90910 | 12630 |
| 7698 | EAST PORTH | QUAY | EXTANT | PM | 91000 | 16190 |
| 7699 | EAST PORTH | FIELD SYSTEM | EXTANT | PM | 91040 | 16200 |
| 7700 | WEST PORTH | KELP PIT | EXTANT | PM | 90770 | 16360 |
| 7701 | BLACK PORTH | OCCUPATION SITE | EXTANT | UX | 90900 | 16600 |
| 7703.01 | LITTLE GANILLY | HUT CIRCLE | EXTANT | PX | 93869 | 14218 |
| 7703.02 | LITTLE GANILLY | FIELD BOUNDARY | EXTANT | PX | 93881 | 14217 |
| 7704 | THREE BROTHERS | STONE WORKING SITE | EXTANT | PM | 88100 | 14540 |
| 7705 | PAR BEACH | CIST | EXTANT | PX | 93270 | 15320 |
| 7706 | PAR BEACH | FINDSPOT | ARTEFACT | PX | 93300 | 15300 |
| 7709 | CARN LEH | HUT CIRCLE | EXTANT | PX | 91300 | 9900 |
| 7715 | BAR POINT | FINDSPOT | ARTEFACT | IA | 91504 | 12809 |
| 7716 | OLD TOWN | PILLBOX | EXTANT | W2 | 91330 | 10220 |
| 7717.01 | PORTH MELLON | PEAT DEPOSIT | ARTEFACT | PX | 90790 | 10890 |
| 7717.02 | PORTH MELLON | PEAT DEPOSIT | ARTEFACT | PX | 90760 | 10920 |
| 7719 | PORTH MELLON | FINDSPOT | ARTEFACT | EM | 90800 | 10950 |
| 7721 | NEWFORD ISLAND | FINDSPOT | ARTEFACT | PX | 90500 | 11200 |
| 7722 | PORTHLOO BAY | FINDSPOT | ARTEFACT | PX | 90800 | 11300 |
| 7723 | TAYLORS ISLAND | FINDSPOT | ARTEFACT | PX | 90579 | 11541 |
| 7724.01 | THOMAS PORTH | FINDSPOT | ARTEFACT | PX | 90800 | 11000 |
| 7724.02 | THOMAS PORTH | FINDSPOT | ARTEFACT | PM | 90800 | 11000 |
| 7728 | LAWRENCES BAY | FINDSPOT | ARTEFACT | PX | 92400 | 15400 |

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| 7730 | NECK OF POOL | FINDSPOT | ARTEFACT | PX | 91700 | 15800 |
| 7731 | TOWN BEACH | FINDSPOT | ARTEFACT | PX | 88200 | 15000 |
| 7732 | PENTLE BAY | FINDSPOT | ARTEFACT | PX | 90200 | 14400 |
| 7734 | APPLETREE BAY | LITHIC SCATTER | ARTEFACT | PX | 89000 | 13500 |
| 7736 | EAST PORTH | FINDSPOT | ARTEFACT | PX | 90900 | 16300 |
| 7737 | TOWN BEACH | FINDSPOT | ARTEFACT | PX | 88200 | 15100 |
| 7738 | WEST PORTH | LITHIC SCATTER | ARTEFACT | PX | 90600 | 16400 |
| 7739 | ST HELENS QUAY | FINDSPOT | ARTEFACT | PX | 89900 | 16700 |
| 7740 | PELISTRY BAY | FINDSPOT | ARTEFACT | PX | 92850 | 11970 |
| 7741 | GREAT PORTH | FINDSPOT | ARTEFACT | PX | 87530 | 14650 |
| 7742 | ST HELENS PORTH | FINDSPOT | ARTEFACT | PX | 90630 | 16520 |
| 7743 | NEW GRIMSBY | FINDSPOT | ARTEFACT | PX | 88850 | 15230 |
| 7744 | EAST PORTH | FINDSPOT | ARTEFACT | PX | 87900 | 12700 |
| 7745 | BAR POINT | FINDSPOT | ARTEFACT | PX | 91510 | 12803 |
| 7748 | HIGHER TOWN BEACH | KELP PIT | EXTANT | PM | 92706 | 15323 |
| 7749 | LITTLE ARTHUR | FINDSPOT | ARTEFACT | PX | 94000 | 13900 |
| 7751.03 | TURKS HEAD | COASTGUARD STATION | EXTANT | PM | 88398 | 8485 |
| 7753.02 | PERIGLIS | SLIPWAY | SITE OF | PM | 87679 | 8332 |
| 7756 | ST HELENS POOL | OCCUPATION SITE | EXTANT | PX | 90100 | 16500 |
| 7758 | PAR BEACH | FIELD SYSTEM | EXTANT | RB | 93400 | 15300 |
| 7761 | OLD QUAY | QUAY | EXTANT | PM | 92750 | 15180 |
| 7767 | ABBEY FARM | FLYING BOAT STATION | EXTANT | PM | 88921 | 14973 |
| 7770 | PORTH MELLON | FLYING BOAT STATION | EXTANT | PM | 90887 | 10819 |
| 7798 | OLD TOWN BAY | PILLBOX | EXTANT | PM | 91178 | 10176 |
| 7799 | PORTH HELLICK | PILLBOX | EXTANT | W2 | 92400 | 10600 |
| 7803 | HULMAN | LIGHTHOUSE | SITE OF | PM | 88830 | 13250 |
| 7807 | GIANTS CASTLE | COASTGUARD STATION | EXTANT | PM | 92470 | 10030 |
| 7808 | NEW QUAY | BOAT HOUSE | EXTANT | PM | 92715 | 12174 |
| 7814 | PORTH CRESSA | SHIPYARD | SITE OF | PM | 90400 | 10400 |
| 7816 | CARN THOMAS | LIFEBOAT STATION | EXTANT | PM | 90598 | 10766 |
| 7820 | PERIGLIS | BOAT HOUSE | SITE OF | PM | 87700 | 8400 |
| 7826 | NEW QUAY | QUAY | EXTANT | PM | 93070 | 15130 |
| 7833 | ATLANTIC HOTEL | CUSTOM HOUSE | EXTANT | PM | 90200 | 10630 |
| 7900.02 | OLD QUAY | BATTERY | DOCUMENTARY | PM | 90110 | 10705 |
| 7900.03 | RAT ISLAND | BLOCKHOUSE | DOCUMENTARY | PM | 90145 | 10900 |
| 7904.08 | WOOLPACK POINT | BASTION OUTWORK | DOCUMENTARY | PM | 89730 | 9920 |
| 7904.2 | KING CHARLES BATTERY | BATTERY | DOCUMENTARY | PM | 89730 | 10720 |
| 7904.21 | NEWMAN POINT | BATTERY | EXTANT | PM | 89900 | 10814 |
| 7907.01 | KING CHARLES BATTERY | GARDEN | EXTANT | PM | 89720 | 10710 |
| 7908.03 | STEVAL POINT | SEARCHLIGHT BATTERY | EXTANT | PM | 89453 | 10371 |
| 71295 | ST MARTINS | FIELD SYSTEM | EXTANT | PX | 91897 | 16797 |
| 71298 | ST MARTINS | STRUCTURE | EXTANT | HX | 91379 | 16149 |
| 71305 | BRYHER | STRUCTURE | EXTANT | UX | 88100 | 15048 |
| 71305 | BRYHER | STRUCTURE | EXTANT | 20 | 88100 | 15048 |
| 71307 | GREEN BAY | STRUCTURE | EXTANT | UX | 88180 | 14580 |
| 71319 | FIGTREE ROCKS | ENCLOSURE | EXTANT | UX | 89552 | 13766 |

| PRN | Name | Site Type | Form | Period | Easting | Northing |
|---|---|---|---|---|---|---|
| 71319 | FIGTREE ROCKS | BUILDING | EXTANT | HX | 89552 | 13766 |
| 71326 | CROW POINT | SLIPWAY | EXTANT | PM | 89315 | 13366 |
| 71340 | OLD TOWN | SLIPWAY | EXTANT | PM | 91356 | 10179 |
| 71346 | NEWFORD ISLAND | QUAY | EXTANT | PM | 90736 | 11267 |
| 71347 | NEWFORD ISLAND | QUAY | EXTANT | PM | 90653 | 11291 |
| 71360 | PORTH HELLICK | PIER | EXTANT | PM | 92613 | 10624 |
| 71361 | PORTH HELLICK | SLIPWAY | EXTANT | PM | 92667 | 10579 |
| 71364 | ST MARTINS | STRUCTURE | EXTANT | 20 | 91316 | 15776 |
| 71365 | ST MARTINS | FIELD BOUNDARY | EXTANT | UX | 92430 | 14900 |
| 71365 | ST MARTINS | STRUCTURE | EXTANT | 20 | 92430 | 14900 |
| 163201 | INNISIDGEN | FINDSPOT | ARTEFACT | MD | 92020 | 12790 |
| 164252 | HALANGY PORTH | CUP MARKED STONE | EXTANT | PX | 90907 | 12413 |
| 166736 | ST MARYS, RAT ISLAND | PILLBOX | EXTANT | W2 | 90162 | 10882 |
| 166739 | ST MARYS, THE BANK | PILLBOX | SITE OF | W2 | 90162 | 10729 |
| 166745 | ST MARYS, CARN THOMAS | PILLBOX | SITE OF | W2 | 90585 | 10747 |
| 166752 | ST MARYS, PORTHLOO | PILLBOX | EXTANT | W2 | 90830 | 11174 |
| 166775 | PORTHCRESSA BEACH, LITTLE CARN | PILLBOX | SITE OF | W2 | 90253 | 10411 |
| 167059 | TRESCO | WALL | EXTANT | UX | 87270 | 12500 |
| 167239 | SAMSON | FIELD SYSTEM | EXTANT | PX | 88000 | 12900 |
| 167239 | SAMSON | FIELD BOUNDARY | EXTANT | PX | 88000 | 12900 |
| 167239 | SAMSON | WALL | EXTANT | PX | 88000 | 12900 |
| 167239 | SAMSON | HUT CIRCLE | EXTANT | PX | 88000 | 12900 |
| 167242 | BRYHER | CAIRN | EXTANT | PX | 88050 | 14380 |
| 167242 | BRYHER | HUT CIRCLE | EXTANT | PX | 88050 | 14380 |
| 167538 | NEW QUAY | QUAY | EXTANT | 19 | 92654 | 12189 |
| 167897 | PORTH CONGER | SLIPWAY | EXTANT | PM | 88396 | 8494 |
| 167989 | RAT ISLAND | LIME KILN | SITE OF | 19 | 90191 | 10876 |
| 168677 | NEWFORD ISLAND | BATTERY | EXTANT | CW | 90644 | 11195 |
| 168678 | TAYLORS ISLAND | CAIRN | EXTANT | PX | 90598 | 11489 |
| 168690 | MIDDLE ARTHUR | BOUNDARY | EXTANT | PX | 93979 | 13789 |
| 168701 | BRYHER | BOUNDARY | EXTANT | PX | 88119 | 14808 |
| 168705 | THE BAR | Hut Circle | EXTANT | BA | 88109 | 15069 |
| 168706 | BURNT ISLAND | CAIRN | EXTANT | PX | 87400 | 8628 |
| 168707 | PERIGLIS | QUAY | EXTANT | PM | 87579 | 8478 |
| 168708 | ST HELENS | GRAVE | EXTANT | PM | 90119 | 16817 |
| 168713 | PAR BEACH | MOORING ROCK | EXTANT | PM | 93199 | 15198 |
| 168715 | TOLLS PORTH | KELP PIT | EXTANT | PM | 90770 | 12169 |
| 168716 | TOLLS ISLAND | STONE SETTING | EXTANT | PX | 93027 | 11964 |
| 168718 | APPLETREE BAY | FIELD SYSTEM | EXTANT | PM | 89035 | 13446 |
| 168722 | GREAT ARTHUR | FIELD SYSTEM | EXTANT | PX | 94149 | 13588 |
| 168725 | HORSE POINT | KERBED BOULDER | EXTANT | PX | 88169 | 7228 |
| 168731 | PENNINIS HEAD | FIELD SYSTEM | EXTANT | PX | 91198 | 9618 |
| 168733 | INNER BLUE CARN | GUN EMPLACEMENT | EXTANT | CW | 91858 | 10049 |
| 168736 | PENNINIS HEAD | FIELD BOUNDARY | EXTANT | PX | 90847 | 9796 |
| 168737 | PENNINIS HEAD | FIELD BOUNDARY | EXTANT | PX | 90888 | 9727 |
| 168738 | PENNINIS HEAD | FIELD BOUNDARY | EXTANT | PX | 90966 | 9506 |
| 168739 | SOUTHWARD | FIRING RANGE | EXTANT | 20 | 88109 | 12088 |
| 168740 | TEAN | SOCKETED STONE | EXTANT | PM | 90810 | 16347 |
| 168741 | CASTLE DOWN | BATTERY | EXTANT | CW | 88829 | 16357 |

## 14.3 List of shipwrecks in the study area

The list below has been compiled from NMR and UKHO wreck records. The majority of the 771 sites are named locations, based on nearest island or geographic identifier, and should therefore be regarded with some degree of error.

| NMR/UKHO no. | Name | Date | Vessel Type | Nation | Source | Easting | Northing |
|---|---|---|---|---|---|---|---|
| 1082126 | BARTHOLOMEW LEDGES | 1597 | Cargo Vessel | Spanish | NMR | 89112.61054 | 9534.77968 |
| 880085 | UNKNOWN | 1616 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 880107 | GIFT OF GOD | 1636 | Cargo Vessel | Scottish | NMR | 89320 | 11480 |
| 880086 | JOHN | 1645 | Craft | English | NMR | 89320 | 11480 |
| 880087 | UNKNOWN | 1651 | Frigate | English | NMR | 90180 | 10840 |
| 880108 | HMS PRIMROSE | 1656 | Sixth rate ship of the line | British | NMR | 103180 | 23480 |
| 880089 | ROYAL OAK | 1665 | East Indiaman | English | NMR | 83910 | 6280 |
| 880090 | UNKNOWN | 1667 | Cargo Vessel | Spanish | NMR | 89320 | 11480 |
| 880091 | HIND | 1668 | Sixth rate ship of the line | English | NMR | 80000 | 9170 |
| 880109 | REVENGE | 1674 | Craft | English | NMR | 103180 | 23480 |
| 880092 | UNKNOWN | 1675 | Craft | Unknown | NMR | 89320 | 11480 |
| 880093 | UNKNOWN | 1679 | Craft | Unknown | NMR | 83910 | 6280 |
| 880094 | PHOENIX | 1680 | East Indiaman | English | NMR | 83910 | 6280 |
| 880095 | UNKNOWN | 1681 | Cargo Vessel | English | NMR | 88170 | 7240 |
| 880097 | UNKNOWN | 1686 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 880096 | PRINSES MARIA | 1686 | East Indiaman | Dutch | NMR | 83790 | 6160 |
| 880098 | UNKNOWN | 1689 | Cargo Vessel | British | NMR | 92070 | 9090 |
| 1225933 | UNKNOWN | 1696 | Craft | Unknown | NMR | 90670 | 8950 |
| 1225942 | UNKNOWN | 1696 | Craft | Unknown | NMR | 90670 | 8950 |
| 1225958 | UNKNOWN | 1696 | Craft | Unknown | NMR | 90670 | 8950 |
| 880101 | UNKNOWN | 1700 | Craft | Unknown | NMR | 89320 | 11480 |
| 880998 | HMS FIREBRAND | 1707 | Craft | British | NMR | 82840 | 8940 |
| 1082123 | HMS EAGLE | 1707 | 3rd rate ship of the line | British | NMR | 80925.72431 | 6176.46997 |
| 880103 | HMS ROMNEY | 1707 | Fourth rate ship of the line | British | NMR | 80926 | 6177 |
| 21806 | HMS ASSOCIATION | 1707 | Flagship man of war | British | UKHO | 83248.36 | 5166.15 |
| 880110 | UNKNOWN | 1720 | Craft | Dutch | NMR | 88170 | 7240 |
| 880112 | MARY | 1720 | Craft | English | NMR | 89320 | 11480 |
| 880111 | HESTER | 1721 | Brigantine | English | NMR | 89320 | 11480 |
| 1368332 | STAVELY | 1728 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 880114 | UNKNOWN | 1730 | Cargo Vessel | English | NMR | 83910 | 6280 |
| 880115 | UNKNOWN | 1733 | Cargo Vessel | Unknown | NMR | 83910 | 6280 |
| 880116 | FLYING FISH | 1736 | Craft | British | NMR | 89320 | 11480 |
| 880117 | TRIUMPH | 1736 | Cargo Vessel | English | NMR | 90180 | 10840 |
| 880118 | UNKNOWN | 1737 | Craft | Dutch | NMR | 88170 | 7240 |
| 880119 | UNKNOWN | 1737 | Cargo Vessel | Unknown | NMR | 89500 | 15620 |
| 880120 | BETSY | 1737 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 880121 | ENDEAVOUR | 1737 | Craft | British | NMR | 89320 | 11480 |
| 880122 | UNKNOWN | 1738 | Cargo Vessel | English | NMR | 90180 | 10840 |
| 880123 | DIANA | 1738 | Cargo Vessel | French | NMR | 85330 | 12980 |
| 880124 | GRIFFIN | 1739 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 880126 | MERMAID | 1739 | Craft | English | NMR | 91540 | 13550 |
| 880127 | ST JOSEPH | 1739 | Cargo Vessel | French | NMR | 87880 | 12530 |
| 880128 | DILIGENCE | 1740 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 880129 | SUPPLY | 1740 | East Indiaman | British | NMR | 83910 | 6280 |
| 880130 | HANNAH | 1740 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 880131 | JANE | 1740 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 1182652 | UNKNOWN | 1740 | Craft | Unknown | NMR | 89320 | 11480 |
| 880132 | MARIGOLD | 1741 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 880133 | SUSANNA | 1741 | Cargo Vessel | English | NMR | 89320 | 11480 |

| NMR/UKHO no. | Name | Date | Vessel Type | Nation | Source | Easting | Northing |
|---|---|---|---|---|---|---|---|
| 880134 | MARGARET AND SARAH | 1742 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 880137 | NANCY | 1742 | Cargo Vessel | British | NMR | 88750 | 15160 |
| 1375764 | ANNE | 1742 | Craft | British | NMR | 89320 | 11480 |
| 880139 | CATHERINE | 1743 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 880141 | HOLLANDIA | 1743 | East Indiaman | Dutch | NMR | 84780 | 8200 |
| 1124211 | UNKNOWN | 1743 | Craft | Dutch | NMR | 87670 | 15150 |
| 1208643 | UNKNOWN | 1743 | Cargo Vessel | Unknown | NMR | 90180 | 10840 |
| 880138 | NANCY | 1744 | Cargo Vessel | British | NMR | 87880 | 12530 |
| 880136 | DRAPER | 1745 | Cargo Vessel | Dutch | NMR | 89320 | 11480 |
| 1317374 | PHENIX | 1747 | Craft | Unknown | NMR | 89320 | 11480 |
| 880142 | LIZARD | 1748 | Sixth rate ship of the line | British | NMR | 103180 | 23480 |
| 880143 | THELMA | 1748 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 880144 | SEA FLOWER | 1748 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 880145 | UNKNOWN | 1750 | Craft | Unknown | NMR | 83910 | 6280 |
| 880147 | JOHANNA | 1751 | Craft | English | NMR | 88170 | 7240 |
| 880146 | UNKNOWN | 1752 | Cargo Vessel | Dutch | NMR | 83460 | 5730 |
| 859160 | BRITANNIA | 1753 | Cargo Vessel | British | NMR | 89760 | 9750 |
| 880148 | GRANVILLE | 1754 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 880149 | NEPTUNE | 1755 | Cargo Vessel | Dutch | NMR | 89320 | 11480 |
| 1208646 | PROVIDENCE | 1755 | Craft | Welsh | NMR | 89320 | 11480 |
| 1318393 | UNKNOWN | 1755 | Cargo Vessel | Unknown | NMR | 80680 | 6470 |
| 880150 | HAPPY JENNET | 1756 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 1208640 | INDUSTRY | 1756 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 880151 | CRAVEN | 1757 | Craft | British | NMR | 90670 | 8950 |
| 880152 | ELIZABETH | 1757 | Craft | British | NMR | 103180 | 23480 |
| 859161 | FRIENDSHIP | 1758 | Cargo Vessel | Welsh | NMR | 89320 | 11480 |
| 880153 | FURNACE | 1758 | Cargo Vessel | English | NMR | 89580 | 14850 |
| 880154 | GRACIA DIVINA | 1758 | Cargo Vessel | Italian | NMR | 83910 | 6280 |
| 880155 | HAMPTON | 1758 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 880156 | SCIPIO | 1758 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 880157 | SPEEDWELL | 1758 | Cargo Vessel | English | NMR | 103180 | 23480 |
| 1124644 | POWNALL | 1759 | Snow | British | NMR | 83910 | 6280 |
| 1208663 | FORTUNE | 1759 | Cargo Vessel | Norwegian | NMR | 89320 | 11480 |
| 1208668 | PRETTY PEGGY | 1759 | Craft | British | NMR | 89320 | 11480 |
| 880160 | NUESTRA SENORA DE MURIEL | 1760 | Cargo Vessel | Spanish | NMR | 89320 | 11480 |
| 1124218 | UNKNOWN | 1760 | Cargo Vessel | Dutch | NMR | 83910 | 6280 |
| 880161 | UNKNOWN | 1762 | Craft | French | NMR | 83460 | 5730 |
| 880162 | EUROPA | 1763 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 880163 | GALLAWAY | 1763 | Cargo Vessel | British | NMR | 103180 | 23480 |
| 1319565 | PITT | 1763 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 880164 | UNKNOWN | 1764 | Galliot | Dutch | NMR | 88170 | 7240 |
| 880165 | UNKNOWN | 1764 | Cargo Vessel | British | NMR | 88170 | 7240 |
| 880166 | UNKNOWN | 1764 | Cargo Vessel | Portuguese | NMR | 83910 | 6280 |
| 880167 | DUKE OF CUMBERLAND | 1764 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 1208671 | EAGLE | 1764 | Craft | British | NMR | 89320 | 11480 |
| 880169 | CHARLESTOWN | 1765 | Snow | British | NMR | 89320 | 11480 |
| 880170 | UNKNOWN | 1765 | Cargo Vessel | Dutch | NMR | 89320 | 11480 |
| 880171 | UNKNOWN | 1766 | Cargo Vessel | French | NMR | 89320 | 11480 |
| 880172 | EXPEDITION | 1766 | Craft | British | NMR | 89320 | 11480 |
| 1182658 | SEAHORSE | 1766 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 878661 | MERCURY | 1767 | Craft | British | NMR | 90180 | 10840 |
| 1124691 | UNKNOWN | 1767 | Craft | Unknown | NMR | 90180 | 10840 |
| 1208672 | ALEXANDER | 1768 | Craft | British | NMR | 89320 | 11480 |

| NMR/UKHO no. | Name | Date | Vessel Type | Nation | Source | Easting | Northing |
|---|---|---|---|---|---|---|---|
| 1320396 | ROUSE | 1768 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 1320437 | UNKNOWN | 1768 | Craft | Unknown | NMR | 103180 | 23480 |
| 1320454 | UNKNOWN | 1768 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 880175 | BROTHERS | 1769 | Craft | British | NMR | 89320 | 11480 |
| 880218 | SALLY | 1769 | Snow | British | NMR | 90180 | 10840 |
| 1320830 | PRINCESS OF WALES | 1770 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 1321277 | UNKNOWN | 1770 | Craft | French | NMR | 89320 | 11480 |
| 880176 | UNKNOWN | 1771 | Cargo Vessel | Unknown | NMR | 92820 | 10220 |
| 880177 | UNKNOWN | 1771 | Craft | Unknown | NMR | 89310 | 6250 |
| 880217 | JOSEPH AND BETSEY | 1771 | Tender | British | NMR | 89320 | 11480 |
| 880219 | MARGARET | 1771 | Craft | British | NMR | 89320 | 11480 |
| 1182661 | PETWORTH | 1771 | Cargo Vessel | British | NMR | 92860 | 15610 |
| 1182669 | DOUGLAS | 1771 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 1208675 | LONDON PACKET | 1771 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 880178 | FELICITY | 1773 | Cargo Vessel | French | NMR | 90180 | 10840 |
| 880179 | SQUIRREL | 1773 | Craft | British | NMR | 92860 | 15610 |
| 880180 | DUKE OF CUMBERLAND | 1773 | Snow | British | NMR | 89910 | 17020 |
| 880182 | NIMROD | 1774 | Craft | British | NMR | 89320 | 11480 |
| 1208682 | MOLLY | 1774 | Brig | British | NMR | 103180 | 23480 |
| 1208687 | ELIZABETH | 1774 | Craft | British | NMR | 89320 | 11480 |
| 1323651 | UNKNOWN | 1774 | Brig | Unknown | NMR | 89500 | 15620 |
| 880184 | UNKNOWN | 1775 | Cargo Vessel | Dutch | NMR | 89320 | 11480 |
| 880185 | THOMAS | 1776 | Galliot | German | NMR | 90180 | 10840 |
| 880186 | LYON | 1776 | Transport Vessel | British | NMR | 90550 | 11000 |
| 880187 | TRIUMPH | 1776 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 880189 | DUKE OF CUMBERLAND | 1776 | Packet | English | NMR | 89320 | 11480 |
| 880188 | HUNTER | 1777 | Brig | English | NMR | 90180 | 10840 |
| 880190 | THREE SISTERS | 1777 | Cargo Vessel | Prussian | NMR | 89320 | 11480 |
| 880191 | UNKNOWN | 1777 | Cargo Vessel | Italian | NMR | 89320 | 11480 |
| 1208725 | JOSEPH | 1777 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 1208753 | JASON | 1777 | Privateer | French | NMR | 89320 | 11480 |
| 1324469 | UNKNOWN | 1777 | Craft | Dutch | NMR | 89320 | 11480 |
| 1324471 | UNKNOWN | 1777 | Craft | Unknown | NMR | 89320 | 11480 |
| 880192 | FRIENDSHIP | 1779 | Cargo Vessel | Dutch | NMR | 89320 | 11480 |
| 880193 | UNKNOWN | 1780 | Fourth rate ship of the line | French | NMR | 83910 | 6280 |
| 880194 | CHRISTIAN | 1780 | Snow | French | NMR | 89320 | 11480 |
| 880195 | PHEASANT | 1780 | Brig | British | NMR | 89320 | 11480 |
| 880196 | GLORY | 1780 | Brig | British | NMR | 89320 | 11480 |
| 880197 | TRYAL | 1780 | Brig | English | NMR | 93790 | 12010 |
| 880198 | CHARMING MOLLY | 1780 | Brig | British | NMR | 87670 | 15150 |
| 880199 | MARIA CLARA | 1780 | Brig | British | NMR | 90180 | 10840 |
| 1325129 | UNKNOWN | 1780 | Brig | English | NMR | 89320 | 11480 |
| 880200 | CONQUERANT | 1781 | Third rate ship of the line | French | NMR | 89320 | 11480 |
| 880202 | JULIE | 1781 | Fifth rate ship of the line | French | NMR | 89320 | 11480 |
| 880203 | ENDEAVOUR | 1781 | Brig | English | NMR | 89910 | 17020 |
| 880204 | ST ANTONIO DE LISBOA | 1781 | Cargo Vessel | Portuguese | NMR | 89320 | 11480 |
| 1179511 | LE PRIARUS | 1781 | Third rate ship of the line | French | NMR | 89320 | 11480 |
| 1208747 | SANTISSIMO TRINIDADE | 1781 | Craft | Spanish | NMR | 92860 | 15610 |
| 878668 | UNKNOWN | 1782 | Craft | Dutch | NMR | 89320 | 11480 |
| 880205 | NEW YORK | 1782 | Brig | English | NMR | 90180 | 10840 |
| 880206 | LADY JOHANNA | 1782 | Cargo Vessel | British | NMR | 88170 | 7240 |
| 880207 | MADONNA DE CARMINE | 1782 | Cargo Vessel | Italian | NMR | 89910 | 17020 |
| 880208 | PROVIDENTIA DIVINA | 1782 | Cargo Vessel | Italian | NMR | 80000 | 9170 |
| 1208778 | UNKNOWN | 1782 | Cargo Vessel | Dutch | NMR | 90180 | 10840 |

| NMR/UKHO no. | Name | Date | Vessel Type | Nation | Source | Easting | Northing |
|---|---|---|---|---|---|---|---|
| 880209 | OLDENBURGER | 1783 | Brig | German | NMR | 88750 | 15160 |
| 880210 | UNKNOWN | 1783 | Craft | Unknown | NMR | 89320 | 11480 |
| 880211 | FREDERICUS | 1783 | Craft | Swedish | NMR | 89320 | 11480 |
| 880212 | NANCY | 1783 | Cargo Vessel | British | NMR | 86220 | 8650 |
| 880213 | FINANCIER | 1783 | Cargo Vessel | British | NMR | 86220 | 8650 |
| 1208770 | AGNETTA | 1783 | Cargo Vessel | Danish | NMR | 89320 | 11480 |
| 1208781 | SOPHIA | 1783 | Cargo Vessel | British | NMR | 89910 | 17020 |
| 880215 | NANCY | 1784 | Packet | English | NMR | 83460 | 5730 |
| 880216 | ROBERT AND SALLY | 1784 | Craft | British | NMR | 89320 | 11480 |
| 1326897 | AURORA | 1784 | Cargo Vessel | British | NMR | 89910 | 17020 |
| 880221 | UNKNOWN | 1786 | Cargo Vessel | American | NMR | 89320 | 11480 |
| 1208784 | ELIZABETH | 1786 | Passenger Vessel | British | NMR | 83910 | 6280 |
| 880222 | BETSEY | 1787 | Brig | English | NMR | 89040 | 9700 |
| 880223 | DUKE OF CORNWALL | 1787 | Brigantine | English | NMR | 88170 | 7240 |
| 1208787 | JANUS | 1787 | Craft | British | NMR | 89320 | 11480 |
| 859157 | TERWAGOUT | 1788 | Sloop | British | NMR | 89320 | 11480 |
| 859158 | DOWSON | 1788 | Craft | British | NMR | 89320 | 11480 |
| 859159 | ELIZABETH | 1788 | Craft | British | NMR | 89320 | 11480 |
| 880224 | MARY | 1788 | Craft | British | NMR | 89320 | 11480 |
| 880225 | UNKNOWN | 1788 | Cargo Vessel | Unknown | NMR | 83910 | 6280 |
| 1208865 | UNKNOWN | 1788 | Brig | Unknown | NMR | 89320 | 11480 |
| 1208905 | UNKNOWN | 1788 | Sloop | Unknown | NMR | 89320 | 11480 |
| 880227 | LONDON | 1789 | Cargo Vessel | English | NMR | 83910 | 6280 |
| 880231 | BISCAYNEER | 1789 | Craft | Unknown | NMR | 83910 | 6280 |
| 880232 | ANN | 1789 | Craft | British | NMR | 89320 | 11480 |
| 880228 | ELIZABETH | 1790 | Cargo Vessel | American | NMR | 89320 | 11480 |
| 880229 | STORMONT | 1790 | Craft | Unknown | NMR | 89320 | 11480 |
| 880230 | EAGLE | 1790 | Brigantine | American | NMR | 83910 | 6280 |
| 1335917 | NANNY | 1790 | Craft | Unknown | NMR | 90180 | 10840 |
| 1126073 | UNKNOWN | 1791 | Cutter | English | NMR | 91900 | 9400 |
| 1336443 | UNKNOWN | 1792 | Brig | Unknown | NMR | 89320 | 11480 |
| 1336445 | UNKNOWN | 1792 | Brig | Unknown | NMR | 89320 | 11480 |
| 1336446 | UNKNOWN | 1792 | Brig | Unknown | NMR | 89320 | 11480 |
| 880235 | UNKNOWN | 1793 | Cargo Vessel | French | NMR | 90550 | 11000 |
| 1336436 | BROTHERS | 1793 | Cargo Vessel | Unknown | NMR | 89320 | 11480 |
| 880236 | JAMES | 1794 | Craft | British | NMR | 89320 | 11480 |
| 1208791 | HENRIETTA | 1794 | Cutter | Unknown | NMR | 89320 | 11480 |
| 880061 | UNKNOWN | 1795 | Cargo Vessel | Unknown | NMR | 89320 | 11480 |
| 880062 | HOPE | 1795 | Craft | British | NMR | 90180 | 10840 |
| 880237 | GARNET | 1795 | Brig | English | NMR | 89320 | 11480 |
| 880238 | MONMOUTH | 1795 | Craft | British | NMR | 89320 | 11480 |
| 880239 | RECOVERY | 1795 | Brig | English | NMR | 90180 | 10840 |
| 1208800 | UNKNOWN | 1795 | Sloop | Unknown | NMR | 89320 | 11480 |
| 1208802 | UNITY | 1795 | Craft | British | NMR | 89320 | 11480 |
| - | ZEELILIE | 1795 | East Indiaman | Dutch | RL | 82617.86776 | 7083.40870 |
| 880063 | UNKNOWN | 1796 | Craft | American | NMR | 83910 | 6280 |
| 1208828 | VINE | 1796 | Craft | British | NMR | 83910 | 6280 |
| 880065 | MERCURY | 1797 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 880066 | ALBION | 1797 | Craft | British | NMR | 89320 | 11480 |
| 880068 | UNKNOWN | 1797 | Craft | Danish | NMR | 89320 | 11480 |
| 880069 | UNKNOWN | 1797 | Fishing Vessel | English | NMR | 103180 | 23480 |
| 880071 | UNKNOWN | 1797 | Brig | French | NMR | 89320 | 11480 |
| 1208846 | SISTERS | 1797 | Craft | British | NMR | 89320 | 11480 |
| 1343769 | HMS COLOSSUS | 1798 | Third rate ship of the line | British | NMR | 88432.98805 | 11815.00198 |

| NMR/UKHO no. | Name | Date | Vessel Type | Nation | Source | Easting | Northing |
|---|---|---|---|---|---|---|---|
| 880072 | MARY AND BETSEY | 1798 | Sloop | Welsh | NMR | 89320 | 11480 |
| 880070 | HMS COLOSSUS | 1798 | Third rate ship of the line | British | NMR | 87778 | 11442 |
| 880073 | LARK | 1799 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 880075 | CAROLINE | 1799 | Craft | Unknown | NMR | 89320 | 11480 |
| 880076 | WILLIAM | 1800 | Craft | Unknown | NMR | 89320 | 11480 |
| 880074 | MELANTHO | 1801 | West Indiaman | British | NMR | 90180 | 10840 |
| 880077 | THOMAS AND WILLIAM | 1801 | Sloop | British | NMR | 89320 | 11480 |
| 880078 | ESPERANCE | 1801 | Brig | English | NMR | 89320 | 11480 |
| 880079 | SISTERS | 1801 | Brig | British | NMR | 89320 | 11480 |
| 880080 | FORTUNE | 1801 | Brig | Scottish | NMR | 103180 | 23480 |
| 1338593 | UNKNOWN | 1801 | Craft | Unknown | NMR | 89320 | 11480 |
| 880081 | CAROLINE | 1803 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 1126032 | LOYALTY | 1803 | Sloop | British | NMR | 90670 | 8950 |
| 1208926 | LA CALIPSO | 1803 | Craft | French | NMR | 89320 | 11480 |
| 878572 | ACTIVE | 1804 | Craft | British | NMR | 89320 | 11480 |
| 878573 | PADSTOW | 1804 | Brig | English | NMR | 89320 | 11480 |
| 880083 | QUICKSILVER | 1804 | Cargo Vessel | English | NMR | 91540 | 13550 |
| 1339593 | EXCHANGE | 1804 | Craft | Unknown | NMR | 89320 | 11480 |
| 878574 | UNKNOWN | 1805 | Third rate ship of the line | French | NMR | 88170 | 7240 |
| 878575 | PERSEVERANCE | 1805 | Brig | British | NMR | 103180 | 23480 |
| 878576 | BETSY | 1806 | Sloop | British | NMR | 87880 | 12530 |
| 878577 | BRAVE | 1806 | Third rate ship of the line | British | NMR | 83910 | 6280 |
| 878578 | VIRGIN DEL CARMEN | 1806 | Lugger | Spanish | NMR | 89320 | 11480 |
| 878579 | DUCK | 1807 | Craft | British | NMR | 89320 | 11480 |
| 878580 | MARY | 1807 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 878581 | UNKNOWN | 1807 | Troop Ship | Unknown | NMR | 103180 | 23480 |
| 878582 | HOPE | 1807 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 878583 | ANN | 1807 | Brig | English | NMR | 89580 | 14850 |
| 878584 | TAMER | 1807 | Brig | English | NMR | 89580 | 14850 |
| 878586 | UNITY | 1807 | Brig | English | NMR | 89320 | 11480 |
| 878587 | HARRIET AND ANN | 1807 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 878589 | SWALLOW | 1807 | Brig | English | NMR | 89320 | 11480 |
| 1340544 | CATHERINE | 1807 | Cargo Vessel | Unknown | NMR | 89320 | 11480 |
| 878588 | COURIER | 1808 | Brig | British | NMR | 89320 | 11480 |
| 878590 | NANCY | 1809 | Brig | English | NMR | 89910 | 17020 |
| 878591 | GOOD INTENT | 1809 | Cargo Vessel | Channel Islands | NMR | 89760 | 9750 |
| 878592 | HUGH | 1809 | Craft | English | NMR | 90180 | 10840 |
| 878593 | NYMPH | 1809 | Brig | English | NMR | 87880 | 12530 |
| 878594 | PERSEUS | 1810 | Cargo Vessel | English | NMR | 87880 | 12530 |
| 878595 | AMELIA | 1810 | Cargo Vessel | English | NMR | 83910 | 6280 |
| 878596 | REWARD | 1810 | Brig | English | NMR | 103180 | 23480 |
| 1208962 | RENOVATION | 1810 | Cargo Vessel | British | NMR | 103180 | 23480 |
| 1341785 | UNKNOWN | 1810 | West Indiaman | Unknown | NMR | 89320 | 11480 |
| 1341788 | UNKNOWN | 1810 | Sloop | Unknown | NMR | 103180 | 23480 |
| 1342554 | UNKNOWN | 1810 | Privateer | French | NMR | 89320 | 11480 |
| 878597 | FRANCISCO | 1811 | Cargo Vessel | Unknown | NMR | 89320 | 11480 |
| 1217688 | UNKNOWN | 1811 | Cargo Vessel | Unknown | NMR | 89320 | 11480 |
| 1342558 | UNKNOWN | 1811 | Brig | Unknown | NMR | 89320 | 11480 |
| 878598 | MARIA | 1812 | Galliot | British | NMR | 89320 | 11480 |
| 878599 | UNKNOWN | 1812 | Cargo Vessel | Spanish | NMR | 83910 | 6280 |
| 878600 | JOHN AND MARY | 1812 | Brig | English | NMR | 81650 | 8550 |
| 878601 | DISPATCH | 1812 | Packet | British | NMR | 83910 | 6280 |
| 878602 | NEW FRIENDS | 1812 | Cargo Vessel | British | NMR | 89320 | 11480 |

| NMR/UKHO no. | Name | Date | Vessel Type | Nation | Source | Easting | Northing |
|---|---|---|---|---|---|---|---|
| 878604 | THOMAS AND SALLY | 1812 | Brig | British | NMR | 89320 | 11480 |
| 1343018 | SALAMANCA | 1813 | Craft | English | NMR | 89320 | 11480 |
| 878605 | RICHARD | 1814 | Snow | British | NMR | 89320 | 11480 |
| 878606 | UNKNOWN | 1814 | Craft | Unknown | NMR | 83910 | 6280 |
| 878607 | HOPE | 1814 | Sloop | English | NMR | 103180 | 23480 |
| 878608 | HOPE | 1814 | Snow | English | NMR | 89320 | 11480 |
| 1343466 | CHRISTIAN | 1814 | Craft | Unknown | NMR | 89320 | 11480 |
| 878609 | QUEEN CHARLOTTE | 1815 | Brig | English | NMR | 86020 | 15540 |
| 878610 | SEA NYMPH | 1815 | Cargo Vessel | Unknown | NMR | 90180 | 10840 |
| 878611 | MARGARET AND ELIZABETH | 1815 | Craft | American | NMR | 90180 | 10840 |
| 878612 | JACKSON | 1815 | Brig | American | NMR | 83910 | 6280 |
| 878656 | ELIZABETH | 1815 | Cargo Vessel | Unknown | NMR | 89320 | 11480 |
| 1217705 | GOOD INTENT | 1815 | Craft | Unknown | NMR | 89320 | 11480 |
| 1344531 | ENDEAVOUR | 1815 | Craft | British | NMR | 103180 | 23480 |
| 1344749 | VINE | 1815 | Craft | Channel Islands | NMR | 83910 | 6280 |
| 878613 | BARBADOES | 1816 | Craft | English | NMR | 83910 | 6280 |
| 878614 | MARY | 1816 | Cutter | English | NMR | 89320 | 11480 |
| 878657 | HENRIETTA | 1816 | Craft | Unknown | NMR | 89320 | 11480 |
| 1344598 | UNKNOWN | 1816 | Cargo Vessel | Unknown | NMR | 89320 | 11480 |
| 1344750 | UNKNOWN | 1816 | Cargo Vessel | Unknown | NMR | 89320 | 11480 |
| 1344754 | JOHN | 1816 | Craft | British | NMR | 89320 | 11480 |
| 858297 | UNKNOWN | 1817 | Lugger | French | NMR | 90180 | 10840 |
| 878615 | LINNET | 1817 | Sloop | Welsh | NMR | 91540 | 13550 |
| 878616 | UNKNOWN | 1817 | Cargo Vessel | Unknown | NMR | 89320 | 11480 |
| 878617 | ISABELLA | 1817 | Craft | English | NMR | 103180 | 23480 |
| 878658 | ELIZA | 1817 | Cargo Vessel | Unknown | NMR | 89320 | 11480 |
| 878659 | SUSANNAH | 1817 | Sloop | Welsh | NMR | 89500 | 15620 |
| 878618 | UNKNOWN | 1818 | Cutter | English | NMR | 89320 | 11480 |
| 878619 | BETSEY | 1819 | Smack | British | NMR | 89320 | 11480 |
| 878620 | MARY | 1819 | Sloop | Welsh | NMR | 83460 | 5730 |
| 878660 | MARY | 1819 | Cargo Vessel | Unknown | NMR | 89320 | 11480 |
| 1217745 | SALLY | 1819 | Sloop | English | NMR | 89320 | 11480 |
| 878621 | UNION | 1820 | Snow | British | NMR | 90160 | 16320 |
| 878622 | CITY OF EDINBURGH | 1820 | Cargo Vessel | Canadian | NMR | 93790 | 12010 |
| 878623 | FANNY | 1820 | Preventive Service Vessel | English | NMR | 90160 | 16320 |
| 878624 | UNKNOWN | 1820 | Craft | American | NMR | 93790 | 12010 |
| 878625 | UNKNOWN | 1820 | Craft | Unknown | NMR | 90180 | 10840 |
| 1224224 | SHANNON | 1820 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 878626 | PROVIDENCIA | 1821 | Brig | Spanish | NMR | 86220 | 8650 |
| 1348785 | LORD NELSON | 1821 | Pilot Vessel | English | NMR | 89320 | 11480 |
| 1348797 | HERO | 1821 | Pilot Vessel | English | NMR | 86220 | 8650 |
| 1348806 | UNKNOWN | 1821 | Preventive Service Vessel | English | NMR | 91540 | 13550 |
| 1349037 | UNKNOWN | 1821 | Cargo Vessel | Unknown | NMR | 89320 | 11480 |
| 878627 | YORK | 1822 | Schooner | English | NMR | 86220 | 8650 |
| 1224233 | CHIEFTAIN | 1823 | Craft | English | NMR | 89320 | 11480 |
| 1224265 | UNKNOWN | 1823 | Cargo Vessel | Unknown | NMR | 89320 | 11480 |
| 878628 | CECILIA | 1824 | Cargo Vessel | Dutch | NMR | 83910 | 6280 |
| 1124932 | JOHN AND ANN | 1826 | Brig | English | NMR | 89580 | 14850 |
| 1126055 | UNKNOWN | 1826 | Schooner | Unknown | NMR | 103180 | 23480 |
| 878631 | UNKNOWN | 1827 | Sloop | Unknown | NMR | 89320 | 11480 |
| 878632 | TWENDE SODSKENDE | 1827 | Galliot | Danish | NMR | 87670 | 15150 |
| 878633 | CATHARINA MARIA | 1827 | Sloop | Danish | NMR | 103180 | 23480 |
| 878635 | SUSAN | 1827 | Cargo Vessel | American | NMR | 103180 | 23480 |

| NMR/UKHO no. | Name | Date | Vessel Type | Nation | Source | Easting | Northing |
|---|---|---|---|---|---|---|---|
| 878636 | NEW JANE | 1828 | Sloop | English | NMR | 83460 | 5730 |
| 878637 | EXPERIMENT | 1828 | Schooner | Swedish | NMR | 87880 | 12530 |
| 878638 | COMET | 1828 | Schooner | English | NMR | 90550 | 11000 |
| 1208634 | EGBERTINA | 1828 | Brig | Dutch | NMR | 83460 | 5730 |
| 878639 | OCEAN | 1829 | Snow | English | NMR | 83460 | 5730 |
| 878641 | LETITIA TENNANT | 1829 | Brig | Scottish | NMR | 90180 | 10840 |
| 878642 | PROSPER | 1829 | Brig | French | NMR | 93790 | 12010 |
| 878643 | UNKNOWN | 1829 | Cargo Vessel | Canadian | NMR | 83910 | 6280 |
| 878644 | HOPE | 1830 | Brig | English | NMR | 92860 | 15610 |
| 878645 | BORODINO | 1830 | Barque | British | NMR | 90180 | 10840 |
| 878646 | DESIRE DE LA PAIX | 1830 | Chasse-Maree | French | NMR | 90180 | 10840 |
| 878647 | LIBANUS | 1830 | Cargo Vessel | Unknown | NMR | 89320 | 11480 |
| 1208639 | COMMERCE | 1830 | Craft | English | NMR | 89320 | 11480 |
| 878648 | SACKVILLE | 1832 | Craft | English | NMR | 90670 | 8950 |
| 878649 | UNKNOWN | 1832 | Sloop | Unknown | NMR | 83910 | 6280 |
| 878650 | UNKNOWN | 1832 | Cargo Vessel | Unknown | NMR | 83910 | 6280 |
| 878651 | PROVIDENCE | 1833 | East Indiaman | English | NMR | 91540 | 13550 |
| 878652 | UNKNOWN | 1833 | Smack | Unknown | NMR | 103180 | 23480 |
| 878653 | JOSEPH | 1833 | Brig | English | NMR | 103180 | 23480 |
| 21873 | FORESTER | 1833 | Brig | British | UKHO | 95496.21 | 13567.99 |
| 878662 | JULIA | 1834 | Cargo Vessel | Unknown | NMR | 89580 | 14850 |
| 878654 | MERCURIUS | 1835 | East Indiaman | Dutch | NMR | 90180 | 10840 |
| 878655 | MALTA | 1835 | Cargo Vessel | English | NMR | 89910 | 17020 |
| 878665 | PROSPEROUS | 1836 | Packet | English | NMR | 89320 | 11480 |
| 878666 | BASSENTHWAITE | 1836 | Brig | Welsh | NMR | 81650 | 8550 |
| 1124621 | MINERVA | 1836 | Schooner | English | NMR | 83910 | 6280 |
| 1124632 | FAME | 1836 | Brig | English | NMR | 88170 | 7240 |
| 878670 | FLY | 1837 | Yawl | English | NMR | 87880 | 12530 |
| 878671 | VICTORIA | 1838 | Schooner | English | NMR | 91540 | 13550 |
| 878672 | KITTY O'FLANAGHAN | 1838 | Schooner | English | NMR | 90180 | 10840 |
| 878673 | TWEE GEBROEDERS | 1838 | Galliot | Dutch | NMR | 89320 | 11480 |
| 878674 | L'AMILTA | 1838 | Brig | Italian | NMR | 89580 | 14850 |
| 878676 | DEUX SOEURS | 1838 | Cargo Vessel | French | NMR | 89320 | 11480 |
| 878677 | PACQUEBOT DE CAYENNE | 1838 | Barque | French | NMR | 93790 | 12010 |
| 878678 | ANTHONY | 1838 | Brig | English | NMR | 103180 | 23480 |
| 1124256 | OSIRIS | 1838 | Barque | French | NMR | 90550 | 11000 |
| 1364430 | CYGNET | 1838 | Craft | English | NMR | 89320 | 11480 |
| 878679 | HANNAH LOUISA | 1839 | Brig | English | NMR | 86220 | 8650 |
| 878680 | SOLACE | 1839 | Ketch | English | NMR | 83460 | 5730 |
| 878681 | THEODORICK | 1839 | Brig | English | NMR | 83910 | 6280 |
| 878682 | HOPE | 1839 | Brig | Unknown | NMR | 80680 | 6470 |
| 878683 | ST VINCENT | 1839 | Chasse-Maree | French | NMR | 92860 | 15610 |
| 878684 | LADY LOUISA | 1840 | Brigantine | English | NMR | 93790 | 12010 |
| 878685 | LOUISE GABRIELLE | 1840 | Schooner | French | NMR | 88750 | 15160 |
| 878686 | SYMMETRY | 1840 | Schooner | English | NMR | 90180 | 10840 |
| 878687 | JANE ELLEN | 1840 | Brig | Welsh | NMR | 89910 | 17020 |
| 878688 | UNKNOWN | 1840 | Schooner | Unknown | NMR | 103180 | 23480 |
| 878691 | WATERLOO | 1840 | Cutter | English | NMR | 89320 | 11480 |
| 1086952 | NERINA | 1840 | Brig | French | NMR | 92820 | 10220 |
| 1124610 | PLENTY | 1840 | Schooner | English | NMR | 96130 | 14030 |
| 878693 | UNKNOWN | 1841 | Schooner | Unknown | NMR | 88170 | 7240 |
| 878692 | THAMES | 1841 | Paddle Steamer | Irish | NMR | 83710 | 6140 |
| 878694 | WILLIAM PRESTON | 1842 | Brig | English | NMR | 83910 | 6280 |
| 878695 | BRIGAND | 1842 | Cargo Vessel | English | NMR | 80680 | 6470 |

| NMR/UKHO no. | Name | Date | Vessel Type | Nation | Source | Easting | Northing |
|---|---|---|---|---|---|---|---|
| 878697 | DOURO | 1843 | Snow | English | NMR | 82660 | 7380 |
| 878696 | EMMA | 1843 | Snow | English | NMR | 93790 | 12010 |
| 878699 | CHALLENGER | 1843 | Schooner | British | NMR | 82730 | 10640 |
| 878700 | NICKERIE | 1843 | Barque | Dutch | NMR | 83460 | 5730 |
| 878701 | MARY AND ELIZA | 1844 | Schooner | English | NMR | 90550 | 11000 |
| 878702 | UNKNOWN | 1844 | Brig | Unknown | NMR | 92860 | 15610 |
| 878703 | DEFIANCE | 1844 | Cutter | English | NMR | 87880 | 12530 |
| 878704 | JOHN ESDALE | 1845 | Barque | English | NMR | 88170 | 7240 |
| 1124293 | EDDYSTONE | 1846 | Tender | British | NMR | 89910 | 17020 |
| 1201968 | ZOLLER | 1846 | Craft | Unknown | NMR | 88170 | 7240 |
| 1201970 | JULES DE BLOSSVILLES | 1846 | Craft | Unknown | NMR | 103180 | 23480 |
| 878706 | EAGLE | 1848 | Schooner | Scottish | NMR | 80680 | 6470 |
| 878707 | TANCRED | 1848 | Brig | English | NMR | 103180 | 23480 |
| 878708 | CAROLINE | 1848 | Schooner | English | NMR | 103180 | 23480 |
| 878710 | PALINURUS | 1848 | Barque | Unknown | NMR | 91790 | 17990 |
| 1124552 | CHARLOTTE | 1848 | Brig | Swedish | NMR | 83910 | 6280 |
| 878711 | UNKNOWN | 1849 | Cargo Vessel | Unknown | NMR | 83910 | 6280 |
| 878712 | UNKNOWN | 1849 | Cargo Vessel | Unknown | NMR | 89320 | 11480 |
| 859165 | CAROLINE | 1850 | Schooner | Unknown | NMR | 103180 | 23480 |
| 878713 | WOODPECKER | 1850 | Snow | English | NMR | 83910 | 6280 |
| 878714 | CALLIOPE | 1850 | Brig | Greek | NMR | 89760 | 9750 |
| 878715 | AMETHYST | 1851 | Brig | English | NMR | 103180 | 23480 |
| 1217810 | ALLESANDRO IL GRANDE | 1851 | Brig | Austrian | NMR | 89580 | 14850 |
| 858230 | ANNA MARGRETA | 1852 | Galliot | German | NMR | 88170 | 7240 |
| 878717 | RENOWN | 1852 | Cargo Vessel | English | NMR | 90180 | 10840 |
| 878718 | ELIZABETH | 1852 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 858242 | LA POROUCHE | 1853 | Brig | French | NMR | 89320 | 11480 |
| 858243 | DE VREDE | 1853 | Galliot | Dutch | NMR | 89320 | 11480 |
| 878719 | SARAH | 1853 | Schooner | English | NMR | 92860 | 15610 |
| 878720 | SULTANA | 1853 | Schooner | German | NMR | 93790 | 12010 |
| 878721 | AMBASSADOR | 1853 | Brig | Maltese | NMR | 103180 | 23480 |
| 878722 | AMERICA | 1854 | Cargo Vessel | Canadian | NMR | 103180 | 23480 |
| 878723 | CATHERINE | 1854 | Schooner | Irish | NMR | 89320 | 11480 |
| 878724 | BELINDA | 1854 | Cutter | Welsh | NMR | 80680 | 6470 |
| 878725 | PROVIDENCE | 1854 | Chasse-Maree | French | NMR | 90180 | 10840 |
| 878726 | LIBOURNAIS | 1855 | Chasse-Maree | French | NMR | 93790 | 12010 |
| 878727 | ROSHERVILLE | 1855 | Brig | English | NMR | 91540 | 13550 |
| 878728 | DIAMOND | 1855 | Schooner | Welsh | NMR | 89320 | 11480 |
| 878729 | CUSTOS | 1856 | Cargo Vessel | English | NMR | 80000 | 9170 |
| 21887 | CHIEFTAIN | 1856 | Craft | Unknown | UKHO | 95873.73 | 15993.53 |
| 878730 | VELOX | 1857 | Schooner | Welsh | NMR | 87510 | 16570 |
| 878731 | VOLUNA | 1857 | Brig | English | NMR | 88170 | 7240 |
| 878732 | MARIA WHITFIELD | 1858 | Craft | English | NMR | 89320 | 11480 |
| 858226 | DUKE OF WELLINGTON | 1859 | Schooner | British | NMR | 89320 | 11480 |
| 878733 | FAME | 1859 | Fishing Vessel | English | NMR | 103180 | 23480 |
| 858227 | ADELINE | 1860 | Brig | French | NMR | 89320 | 11480 |
| 858228 | BRITISH QUEEN | 1860 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 858229 | YACA | 1860 | Cargo Vessel | Scottish | NMR | 89320 | 11480 |
| 858232 | OSVETITEL | 1860 | Barque | Austrian | NMR | 84400 | 14590 |
| 858233 | AURORA | 1860 | Brig | Austrian | NMR | 80680 | 6470 |
| 858234 | PUNJAB | 1860 | Barque | English | NMR | 103180 | 23480 |
| 858235 | EMPIRE | 1860 | Cargo Vessel | English | NMR | 81650 | 8550 |
| 858236 | PAULINE | 1860 | Schooner | French | NMR | 91540 | 13550 |
| 858231 | JOSEPH HOWE | 1861 | Cargo Vessel | British | NMR | 89320 | 11480 |

| NMR/UKHO no. | Name | Date | Vessel Type | Nation | Source | Easting | Northing |
|---|---|---|---|---|---|---|---|
| 858237 | ERNE HAGEMEISTER | 1861 | Cargo Vessel | German | NMR | 89320 | 11480 |
| 858239 | MERLIN | 1861 | Schooner | English | NMR | 90180 | 10840 |
| 858240 | AWARD | 1861 | Cargo Vessel | English | NMR | 87670 | 15150 |
| 858244 | CORNELIA | 1861 | Cargo Vessel | American | NMR | 89320 | 11480 |
| 858241 | CHARLES | 1863 | Barque | English | NMR | 89320 | 11480 |
| 858245 | SARAH AND EMMA | 1863 | Brigantine | Welsh | NMR | 103180 | 23480 |
| 858246 | SCOTIA | 1863 | Brig | English | NMR | 89320 | 11480 |
| 858247 | LAVINIA | 1863 | Brig | Welsh | NMR | 90180 | 10840 |
| 858248 | ADOLPHE | 1863 | Chasse-Maree | French | NMR | 90160 | 16320 |
| 858249 | EUPHEMIE | 1863 | Schooner | French | NMR | 90160 | 16320 |
| 858250 | FRIAR TUCK | 1863 | Cargo Vessel | English | NMR | 90550 | 11000 |
| 858251 | FACTORY GIRL | 1863 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 858252 | GROOTZEESJK | 1864 | Schooner | Dutch | NMR | 89320 | 11480 |
| 858256 | AGNESE | 1864 | Schooner | French | NMR | 89320 | 11480 |
| 858253 | CALLIOPE | 1865 | Barque | Norwegian | NMR | 89320 | 11480 |
| 858254 | UNKNOWN | 1865 | Brig | Unknown | NMR | 89320 | 11480 |
| 858255 | VIGILANT | 1865 | Dandy | English | NMR | 87510 | 16570 |
| 858257 | SARAH | 1865 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 858258 | DAUPHINE | 1866 | Schooner | French | NMR | 88170 | 7240 |
| 858259 | HARRIET | 1866 | Cargo Vessel | Scottish | NMR | 89320 | 11480 |
| 858261 | EMILIE | 1866 | Schooner | Scottish | NMR | 103180 | 23480 |
| 858262 | CUBANA | 1866 | Barque | English | NMR | 103180 | 23480 |
| 858260 | GILMORE | 1866 | Craft | English | NMR | 96070 | 15280 |
| 858263 | JEUNE CELESTINE | 1867 | Schooner | French | NMR | 93790 | 12010 |
| 858264 | CARNANTON | 1867 | Schooner | Welsh | NMR | 87880 | 12530 |
| 858266 | VESPER | 1867 | Cargo Vessel | Scottish | NMR | 89320 | 11480 |
| 858267 | PATRIE | 1867 | Brig | Norwegian | NMR | 89320 | 11480 |
| 858268 | NOEL RAPHAEL | 1867 | Brig | French | NMR | 103180 | 23480 |
| 858269 | AMELIA | 1867 | Schooner | British | NMR | 89320 | 11480 |
| 858270 | GOOD INTENT | 1867 | Brigantine | Portuguese | NMR | 96130 | 14030 |
| 858271 | GEM | 1867 | Flat | British | NMR | 80680 | 6470 |
| 1214360 | ENCHANTRESS | 1867 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 858273 | ATLANTIC | 1868 | Cutter | English | NMR | 90550 | 11000 |
| 858274 | GLEANER | 1868 | Brig | Welsh | NMR | 89320 | 11480 |
| 858275 | LOGAN | 1868 | Barque | English | NMR | 103180 | 23480 |
| 858276 | CAROLINE | 1868 | Schooner | French | NMR | 89320 | 11480 |
| 858277 | QUATRE FRERES ET MARIE | 1868 | Brigantine | French | NMR | 89580 | 14850 |
| 858282 | MARGARET AND JANE | 1868 | Barque | English | NMR | 90180 | 10840 |
| 1124833 | BROTHERS | 1868 | Schooner | English | NMR | 103180 | 23480 |
| 858278 | BERTHE | 1869 | Schooner | French | NMR | 92860 | 15610 |
| 858279 | HUIT FRERES | 1869 | Brigantine | French | NMR | 89580 | 14850 |
| 858281 | OXUS | 1869 | Cargo Vessel | Scottish | NMR | 103180 | 23480 |
| 858285 | EXPRESS | 1869 | Barque | French | NMR | 90180 | 10840 |
| 858286 | TICINA | 1869 | Barque | French | NMR | 90180 | 10840 |
| 1124493 | OTTO | 1869 | Brigantine | Swedish | NMR | 87880 | 12530 |
| 1140732 | ALIDA | 1869 | Schooner | Dutch | NMR | 92860 | 15610 |
| 858287 | SARAH | 1870 | Schooner | English | NMR | 80680 | 6470 |
| 858288 | ST PETERBORG | 1870 | Cargo Vessel | Unknown | NMR | 103180 | 23480 |
| 858289 | SADO | 1870 | Cargo Vessel | English | NMR | 83460 | 5730 |
| 858291 | NELSON | 1870 | Barque | English | NMR | 103180 | 23480 |
| 858293 | E R I | 1871 | Schooner | English | NMR | 92680 | 17760 |
| 858295 | UNKNOWN | 1871 | Schooner | British | NMR | 87510 | 16570 |
| 1093544 | PRIMAS | 1871 | Barque | Spanish | NMR | 103180 | 23480 |
| 1124431 | SALMON | 1871 | Schooner | English | NMR | 89320 | 11480 |

| NMR/UKHO no. | Name | Date | Vessel Type | Nation | Source | Easting | Northing |
|---|---|---|---|---|---|---|---|
| 858298 | DELAWARE | 1871 | Cargo Vessel | English | NMR | 85500 | 13490 |
| 858299 | EARL OF ARRAN | 1872 | Passenger Vessel | English | NMR | 96130 | 14030 |
| 858301 | ROSA TACCHINE | 1872 | Barque | Italian | NMR | 89580 | 14850 |
| 858302 | FLORENCE | 1872 | Cargo Vessel | Welsh | NMR | 89320 | 11480 |
| 858300 | LITTLE WESTERN | 1872 | Packet | English | NMR | 88330 | 11340 |
| 858303 | UNKNOWN | 1873 | Brigantine | Welsh | NMR | 103180 | 23480 |
| 858304 | ELIZABETH | 1873 | Cargo Vessel | Unknown | NMR | 89320 | 11480 |
| 858305 | CORNISH GIRL | 1873 | Lugger | English | NMR | 89310 | 8250 |
| 858307 | BORDELAISE | 1874 | Cargo Vessel | English | NMR | 93790 | 12010 |
| 858308 | GEM | 1874 | Cutter | English | NMR | 88170 | 7240 |
| 858306 | MINNEHAHA | 1874 | Barque | English | NMR | 91230 | 9240 |
| 858309 | ZELDA | 1874 | Cargo Vessel | English | NMR | 85000 | 14540 |
| 858536 | FLORESTA | 1875 | Barque | English | NMR | 103180 | 23480 |
| 858538 | CATHERINE GRIFFITHS | 1875 | Brigantine | English | NMR | 83910 | 6280 |
| 858537 | SCHILLER | 1875 | Liner | German | NMR | 81900 | 6060 |
| 858643 | AKSAI | 1875 | Merchantman | Russian | NMR | 92710 | 17180 |
| 858644 | MARY JANE | 1876 | Cargo Vessel | Welsh | NMR | 89320 | 11480 |
| 858645 | ESSIE | 1877 | Cargo Vessel | Scottish | NMR | 89320 | 11480 |
| 858646 | HENDON | 1877 | Brig | English | NMR | 89320 | 11480 |
| 858647 | WILLIAM VAN NAME | 1877 | Barque | American | NMR | 103180 | 23480 |
| 858648 | FREDERICK | 1878 | Schooner | Welsh | NMR | 89320 | 11480 |
| 858649 | MINERVE | 1878 | Brigantine | French | NMR | 90180 | 10840 |
| 858650 | BERTHA | 1879 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 858651 | ROSAIRE | 1879 | Brig | French | NMR | 103180 | 23480 |
| 858652 | TOBASCO | 1879 | Barquentine | French | NMR | 92680 | 17760 |
| 858654 | MAIPU | 1879 | Barque | English | NMR | 87670 | 15150 |
| 858655 | ST JACQUES | 1879 | Sloop | French | NMR | 87670 | 15150 |
| 858653 | RIVER LUNE | 1879 | Merchantman | English | NMR | 86230 | 6520 |
| 858656 | FLOSSIE | 1880 | Cargo Vessel | British | NMR | 89320 | 11480 |
| 858657 | ARGO | 1880 | Schooner | Irish | NMR | 90860 | 16410 |
| 858658 | CHARLOTTE DUNBAR | 1881 | Schooner | French | NMR | 88170 | 7240 |
| 858660 | BANGALORE | 1881 | Cargo Vessel | Scottish | NMR | 89320 | 11480 |
| 858661 | CULMORE | 1881 | Cargo Vessel | English | NMR | 80680 | 6470 |
| 858662 | INDIPENDENZA | 1881 | Barque | Italian | NMR | 90180 | 10840 |
| 1146791 | GEM | 1881 | Cargo Vessel | English | NMR | 90550 | 11000 |
| 858664 | EXCELSIOR | 1882 | Barque | German | NMR | 91540 | 13550 |
| 858665 | RICHARD WARBRICK | 1882 | Schooner | English | NMR | 103180 | 23480 |
| 1146770 | ST VINCENT | 1882 | Barque | English | NMR | 93790 | 12010 |
| 858667 | CRICCIETH CASTLE | 1883 | Brig | Welsh | NMR | 90180 | 10840 |
| 858668 | ALA CHARLES | 1883 | Cargo Vessel | Welsh | NMR | 103180 | 23480 |
| 858669 | MOEL RHIWAN | 1884 | Barque | Welsh | NMR | 89320 | 11480 |
| 858670 | UNKNOWN | 1884 | Cargo Vessel | Unknown | NMR | 103180 | 23480 |
| 858673 | PLUMP | 1885 | Cutter | English | NMR | 87880 | 12530 |
| 858671 | EARL OF LONSDALE | 1885 | Merchantman | English | NMR | 87400 | 7750 |
| 858672 | SUSSEX | 1885 | Cargo Vessel | English | NMR | 85300 | 13970 |
| 858674 | NELLIE | 1886 | Brigantine | Danish | NMR | 83910 | 6280 |
| 858675 | HARRIET | 1886 | Schooner | English | NMR | 90180 | 10840 |
| 858676 | BOLINA | 1887 | Schooner | Welsh | NMR | 89310 | 8250 |
| 858680 | JANE SOPHIA | 1887 | Schooner | English | NMR | 103180 | 23480 |
| 858681 | BRIGHOUSE | 1887 | Cargo Vessel | Welsh | NMR | 103180 | 23480 |
| 1126616 | BARREMAN | 1887 | Cargo Vessel | Scottish | NMR | 103180 | 23480 |
| 858678 | CASTLEFORD | 1887 | Merchantman | English | NMR | 82720 | 6440 |
| 858677 | GAULOISE | 1888 | Barque | French | NMR | 94360 | 13570 |
| 858682 | BERNARDO | 1888 | Barque | Italian | NMR | 86220 | 8650 |

| NMR/UKHO no. | Name | Date | Vessel Type | Nation | Source | Easting | Northing |
|---|---|---|---|---|---|---|---|
| 858683 | GOMES V | 1888 | Cargo Vessel | Portuguese | NMR | 96130 | 14030 |
| 858684 | JANE OWEN | 1889 | Schooner | Welsh | NMR | 87550 | 17070 |
| 858685 | FELIX GUEMOLE | 1889 | Brigantine | Italian | NMR | 89320 | 11480 |
| 858686 | UNKNOWN | 1890 | Cargo Vessel | French | NMR | 103180 | 23480 |
| 1146855 | CHISWICK | 1891 | Cargo Vessel | English | NMR | 104770 | 23480 |
| 858687 | INDIANA | 1891 | Schooner | English | NMR | 89320 | 11480 |
| 858688 | CHISWICK | 1891 | Cargo Vessel | English | NMR | 103180 | 23480 |
| 858690 | PORTH | 1891 | Smack | English | NMR | 86220 | 8650 |
| 858691 | ELIZA | 1891 | Smack | English | NMR | 83910 | 6280 |
| 858692 | FRERE ET SOEUR | 1891 | Chasse-Maree | French | NMR | 90180 | 10840 |
| 858693 | STANLEY | 1891 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 858694 | ROXBURGH CASTLE | 1891 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 858695 | HAST | 1891 | Brigantine | Norwegian | NMR | 89320 | 11480 |
| 858697 | CAVALIER | 1891 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 1124311 | J K A | 1891 | Schooner | English | NMR | 96130 | 14030 |
| 1146858 | CAMIOLA | 1892 | Cargo Vessel | English | NMR | 104310 | 23420 |
| 858698 | EMBIRICOS | 1892 | Cargo Vessel | Greek | NMR | 92680 | 17760 |
| 858699 | TRIGNAC | 1892 | Cargo Vessel | French | NMR | 89320 | 11480 |
| 858700 | PLATO | 1892 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 858992 | VALENTINE ET HELENE | 1892 | Barque | French | NMR | 89320 | 11480 |
| 858994 | GENERAL NOTT | 1892 | Barque | Welsh | NMR | 89320 | 11480 |
| 858995 | NIORD | 1892 | Cargo Vessel | Swedish | NMR | 89320 | 11480 |
| 858996 | CAMIOLA | 1892 | Cargo Vessel | English | NMR | 103180 | 23480 |
| 859000 | SERICA | 1893 | Merchantman | English | NMR | 89860 | 9430 |
| 858997 | LE BEARNAIS | 1893 | Barque | French | NMR | 89320 | 11480 |
| 858999 | CARMARGO | 1893 | Cargo Vessel | Welsh | NMR | 89320 | 11480 |
| 858998 | HORSA | 1893 | Merchantman | English | NMR | 85190 | 11280 |
| 1124775 | SULTANA | 1895 | Barque | Norwegian | NMR | 80680 | 6470 |
| 859002 | OCEAN BELLE | 1896 | Schooner | Welsh | NMR | 88170 | 7240 |
| 859003 | MOUETTE | 1896 | Fishing Vessel | French | NMR | 89320 | 11480 |
| 859004 | KONG SVERRE | 1896 | Barque | Norwegian | NMR | 83910 | 6280 |
| 859005 | SOPHIE | 1896 | Barque | Norwegian | NMR | 88750 | 15160 |
| 859006 | PALMOS | 1897 | Schooner | Norwegian | NMR | 89320 | 11480 |
| 859007 | HEATHMORE | 1897 | Cargo Vessel | English | NMR | 103180 | 23480 |
| 859011 | BRINKBURN | 1898 | Merchantman | English | NMR | 85110 | 13920 |
| 859008 | CRAIG ELVAN | 1898 | Barque | Scottish | NMR | 83910 | 6280 |
| 859009 | NYANZA | 1898 | Lugger | English | NMR | 83910 | 6280 |
| 859010 | TOLEDO | 1898 | Cargo Vessel | English | NMR | 84260 | 12190 |
| 881006 | TOLEDO | 1898 | Steamship | Unknown | NMR | 84410 | 11640 |
| 859012 | BOHALLARD | 1899 | Brigantine | French | NMR | 91540 | 13550 |
| 859014 | PARAME | 1899 | Barque | French | NMR | 86020 | 15540 |
| 859013 | ERIK RICKMERS | 1899 | Merchantman | English | NMR | 86098 | 15461 |
| 859015 | FALKLAND | 1901 | Merchantman | English | NMR | 82200 | 6790 |
| 1106458 | LOFARO | 1902 | Barque | Italian | NMR | 92860 | 15610 |
| 859017 | LORETIO | 1903 | Patrol Vessel | Peruvian | NMR | 89320 | 11480 |
| 1106552 | RUPERRA | 1903 | Cargo Vessel | Welsh | NMR | 89320 | 11480 |
| 859025 | PHOSPHOR | 1904 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 859019 | HMS DECOY | 1904 | Torpedo Boat | British | NMR | 109060 | 5050 |
| 859020 | HYDRANGEA | 1905 | Trawler | Welsh | NMR | 103180 | 23480 |
| 859026 | CARAPANAMA | 1905 | Cargo Vessel | Brazilian | NMR | 89320 | 11480 |
| 859022 | GENERAL ROBERTS | 1906 | Trawler | English | NMR | 89320 | 11480 |
| 859021 | MAGDELEINE | 1906 | Fishing Vessel | French | NMR | 89040 | 9700 |
| 859023 | KING CADWALLON | 1906 | Steamship | Scottish | NMR | 96030 | 15300 |
| 859027 | ST CHRISTOPHE | 1907 | Cutter | French | NMR | 93790 | 12010 |

| NMR/UKHO no. | Name | Date | Vessel Type | Nation | Source | Easting | Northing |
|---|---|---|---|---|---|---|---|
| 859029 | THOMAS W LAWSON | 1907 | Merchantman | American | NMR | 85750 | 8070 |
| 859030 | LATONA | 1908 | Cargo Vessel | Scottish | NMR | 89320 | 11480 |
| 859031 | ST LOUIS | 1908 | Cutter | French | NMR | 103180 | 23480 |
| 859032 | SHAMROCK | 1908 | Barge | English | NMR | 89320 | 11480 |
| 859033 | PHYLLIS ANNE | 1909 | Drifter | English | NMR | 89320 | 11480 |
| 859035 | L'AUTHIE | 1909 | Trawler | French | NMR | 83910 | 6280 |
| 859034 | PLYMPTON | 1909 | Merchantman | English | NMR | 88140 | 6270 |
| 859036 | IDA | 1910 | Fishing Vessel | English | NMR | 93790 | 12010 |
| 859037 | KAROLOS | 1910 | Cargo Vessel | Greek | NMR | 89320 | 11480 |
| 859040 | SETIEMBRE | 1911 | Merchantman | Spanish | NMR | 92600 | 13300 |
| 859039 | GEORGES | 1911 | Ketch | French | NMR | 90180 | 10840 |
| 859041 | FRAU MINNA PETERSEN | 1911 | Schooner | Norwegian | NMR | 89320 | 11480 |
| 859038 | ARDEN CRAIG | 1911 | Merchantman | Scottish | NMR | 84980 | 11400 |
| 859042 | WENDUR | 1912 | Barque | Scottish | NMR | 103180 | 23480 |
| 859043 | PIERRE L'ABBE | 1912 | Schooner | French | NMR | 89320 | 11480 |
| 859045 | VOLMER | 1912 | Cargo Vessel | Danish | NMR | 89320 | 11480 |
| 859044 | ANTONIOS | 1912 | Merchantman | Greek | NMR | 83670 | 4600 |
| 859046 | ASTILLERO | 1913 | Cargo Vessel | Spanish | NMR | 89320 | 11480 |
| 859048 | TOANUI | 1913 | Tug | Scottish | NMR | 103180 | 23480 |
| 859049 | SUSANNA | 1913 | Cargo Vessel | German | NMR | 80000 | 9170 |
| 859051 | THORNLIEBANK | 1913 | Cargo Vessel | Scottish | NMR | 80000 | 9170 |
| 859052 | ST PIERRE | 1914 | Barque | French | NMR | 89320 | 11480 |
| 859054 | ANDALUSIAN | 1915 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 859055 | INDIAN CITY | 1915 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 859056 | CROWN OF CASTILE | 1915 | Cargo Vessel | Scottish | NMR | 89320 | 11480 |
| 859057 | CITY OF BREMEN | 1915 | Cargo Vessel | Irish | NMR | 89320 | 11480 |
| 859058 | EUROPE | 1915 | Cargo Vessel | French | NMR | 89320 | 11480 |
| 859059 | DELTA B | 1915 | Trawler | Belgian | NMR | 89320 | 11480 |
| 859060 | CADEBY | 1915 | Cargo Vessel | Scottish | NMR | 89320 | 11480 |
| 859061 | STRATHNAIRN | 1915 | Cargo Vessel | Scottish | NMR | 89320 | 11480 |
| 859062 | PELHAM | 1915 | Collier | British | NMR | 89320 | 11480 |
| 859063 | RESTORMEL | 1915 | Cargo Vessel | Welsh | NMR | 89320 | 11480 |
| 859064 | BARON ERSKINE | 1915 | Craft | Scottish | NMR | 89320 | 11480 |
| 859065 | SAMARA | 1915 | Collier | Scottish | NMR | 89320 | 11480 |
| 859066 | U27 | 1915 | Submarine | German | NMR | 89320 | 11480 |
| 859068 | SILVERY WAVE | 1915 | Drifter | British | NMR | 90180 | 10840 |
| 859053 | HEADLANDS | 1915 | Merchantman | English | NMR | 72040 | -570 |
| 859069 | MYOSOTIS | 1916 | Schooner | French | NMR | 89320 | 11480 |
| 859070 | LUIS VIVES | 1916 | Cargo Vessel | Spanish | NMR | 89320 | 11480 |
| 859071 | KONG RING | 1916 | Cargo Vessel | Norwegian | NMR | 89320 | 11480 |
| 859072 | LA FRATERNITE | 1916 | Cargo Vessel | French | NMR | 89320 | 11480 |
| 859073 | CANNEBIERE | 1916 | Barque | French | NMR | 89320 | 11480 |
| 859074 | ROTHESAY | 1916 | Cargo Vessel | Welsh | NMR | 89320 | 11480 |
| 859076 | SAINTE MARIE | 1916 | Cargo Vessel | French | NMR | 89320 | 11480 |
| 859079 | HITTEROY | 1916 | Cargo Vessel | Norwegian | NMR | 89320 | 11480 |
| 859080 | GIUSTIZIA | 1916 | Cargo Vessel | Italian | NMR | 89320 | 11480 |
| 859081 | MARIE | 1916 | Schooner | Danish | NMR | 89320 | 11480 |
| 859082 | ANS | 1916 | Schooner | Russian | NMR | 89320 | 11480 |
| 859083 | NAIAD | 1916 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 859084 | ASON | 1916 | Cargo Vessel | Spanish | NMR | 89320 | 11480 |
| 1257789 | UNIONE | 1916 | Craft | Italian | NMR | 80680 | 6470 |
| 859075 | BRODFIELD | 1916 | Merchantman | English | NMR | 92150 | 9500 |
| 859078 | BRIARDENE | 1916 | Merchantman | English | NMR | 97450 | -6170 |
| 1320761 | HMS CARBINEER | 1916 | Armed Trawler | British | NMR | 83910 | 6280 |

| NMR/UKHO no. | Name | Date | Vessel Type | Nation | Source | Easting | Northing |
|---|---|---|---|---|---|---|---|
| 832064 | BOYNTON | 1917 | Merchantman | British | NMR | 119329 | 29138 |
| 859103 | MAR COR | 1917 | Merchantman | Italian | NMR | 77900 | 9930 |
| 859085 | RUBY | 1917 | Barquentine | Russian | NMR | 89320 | 11480 |
| 859086 | HOUSATONIC | 1917 | Cargo Vessel | American | NMR | 89320 | 11480 |
| 859087 | MARTHE | 1917 | Schooner | French | NMR | 89320 | 11480 |
| 859088 | JAPANESE PRINCE | 1917 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 859089 | NORMANNA | 1917 | Cargo Vessel | Norwegian | NMR | 89320 | 11480 |
| 859090 | GAASTERLAND | 1917 | Cargo Vessel | Dutch | NMR | 89320 | 11480 |
| 859091 | ZAANDIJK | 1917 | Cargo Vessel | Dutch | NMR | 89320 | 11480 |
| 859092 | EEMLAND | 1917 | Cargo Vessel | Dutch | NMR | 89320 | 11480 |
| 859093 | BANDOENG | 1917 | Cargo Vessel | Dutch | NMR | 89320 | 11480 |
| 859094 | JACATRA | 1917 | Cargo Vessel | Dutch | NMR | 89320 | 11480 |
| 859095 | NOORDERDIJK | 1917 | Cargo Vessel | Dutch | NMR | 89320 | 11480 |
| 859096 | DON BENITO | 1917 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 859097 | AIMEE MARIA | 1917 | Cargo Vessel | French | NMR | 89320 | 11480 |
| 859098 | HESPERUS | 1917 | Cargo Vessel | Russian | NMR | 89320 | 11480 |
| 859099 | HEATHER | 1917 | Trawler | British | NMR | 89320 | 11480 |
| 859100 | BEEMAH | 1917 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 859105 | NASCENT | 1917 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 859106 | SOUTH POINT | 1917 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 859107 | ALBERTINE BEATRICE | 1917 | Cargo Vessel | Dutch | NMR | 89320 | 11480 |
| 859109 | SADI CARNOT | 1917 | Cargo Vessel | French | NMR | 89320 | 11480 |
| 859110 | MADURA | 1917 | Cargo Vessel | Scottish | NMR | 89320 | 11480 |
| 859113 | JACOB JONES | 1917 | Destroyer | American | NMR | 89320 | 11480 |
| 1124014 | SEAPOINT | 1917 | Cargo Vessel | English | NMR | 103180 | 23480 |
| 859101 | LADY CHARLOTTE | 1917 | Collier | British | NMR | 93240 | 9730 |
| 859102 | ITALIA | 1917 | Merchantman | Italian | NMR | 88540 | 6250 |
| 859108 | BEECHPARK | 1917 | Merchantman | English | NMR | 94720 | -3690 |
| 859111 | ANNIE F CONLON | 1917 | Merchantman | American | NMR | 91270 | 15050 |
| 906466 | BOYNTON | 1917 | Steamship | English | NMR | 119540 | 28600 |
| 859115 | A A RAVEN | 1918 | Cargo Vessel | American | NMR | 89320 | 11480 |
| 859116 | HMS PINCHER | 1918 | Destroyer | British | NMR | 103180 | 23480 |
| 859117 | ATLANTICO | 1918 | Schooner | Portuguese | NMR | 89320 | 11480 |
| 859118 | BLAZER | 1918 | Tug | British | NMR | 89650 | 9640 |
| 859119 | HOMESTEAD | 1920 | Cargo Vessel | English | NMR | 89320 | 11480 |
| 859121 | HATHOR | 1920 | Merchantman | German | NMR | 88140 | 6270 |
| 859123 | WESTERN FRONT | 1921 | Cargo Vessel | American | NMR | 89320 | 11480 |
| 1124092 | LEON BONNAT | 1921 | Schooner | French | NMR | 80000 | 9170 |
| 859152 | ISABO | 1921 | Merchantman | German | NMR | 86210 | 15360 |
| 859124 | MONARCH | 1925 | Battleship | British | NMR | 89320 | 11480 |
| 859125 | MIARKA | 1926 | Schooner | French | NMR | 89320 | 11480 |
| 881015 | THEOTOKOS | 1931 | Merchantman | Greek | NMR | 110150 | 25640 |
| 859153 | BRITTA | 1939 | Tanker | Norwegian | NMR | 89320 | 11480 |
| 1329887 | SUNDERLAND U N9045 | 1939 | Flying Boat | British | NMR | 89320 | 11480 |
| 859154 | LONGSHIPS | 1939 | Merchantman | Scottish | NMR | 103180 | 23480 |
| 1329127 | SPITFIRE MK I N3101 | 1941 | Fighter Aircraft | British | NMR | 89320 | 11480 |
| 1357319 | WELLINGTON MK IC W5631 | 1941 | Bomber Aircraft | British | NMR | 89320 | 11480 |
| 859155 | NGAROMA | 1942 | Cargo Vessel | South African | NMR | 103180 | 23480 |
| 1318392 | WELLINGTON IC DV661 | 1942 | Bomber Aircraft | British | NMR | 89320 | 11480 |
| 1323502 | HURRICANE MK I R4228 | 1942 | Fighter Aircraft | British | NMR | 83910 | 6280 |
| 1329565 | TIGER MOTH MK II N6598 | 1942 | Trainer Aircraft | British | NMR | 90180 | 10840 |
| 1352701 | BRISTOL BEAUFIGHTER MK VI T5156 | 1942 | Fighter Aircraft | British | NMR | 89320 | 11480 |
| 1354000 | WELLINGTON MK IC W573 | 1942 | Bomber Aircraft | British | NMR | 89320 | 11480 |

| NMR/UKHO no. | Name | Date | Vessel Type | Nation | Source | Easting | Northing |
|---|---|---|---|---|---|---|---|
| 1354579 | WHITLEY MK VII Z9524 | 1942 | Bomber Aircraft | British | NMR | 89320 | 11480 |
| 1318353 | DEFIANT MK I DR948 | 1943 | Target Tug | British | NMR | 88170 | 7240 |
| 1353071 | WALRUS MK I W3026 | 1943 | Flying Boat | British | NMR | 89320 | 11480 |
| 1353996 | WELLINGTON MK IC W5714 | 1943 | Bomber Aircraft | British | NMR | 89320 | 11480 |
| 1355229 | WELLINGTON MK X HZ957 | 1943 | Bomber Aircraft | British | NMR | 89320 | 11480 |
| 1356762 | LANCASTER MK III ED717 | 1943 | Bomber Aircraft | British | NMR | 89320 | 11480 |
| 1317923 | SUNDERLAND MK III DD836 | 1944 | Flying Boat | British | NMR | 90180 | 10840 |
| 1343345 | HURRICANE MK IIB BW949 | 1944 | Fighter Aircraft | British | NMR | 90180 | 10840 |
| 1356384 | HALIFAX MK II JD176 | 1944 | Bomber Aircraft | British | NMR | 89320 | 11480 |
| 1340976 | SUNDERLAND MK III ML770 | 1945 | Reconnaissance Aircraft | British | NMR | 89320 | 11480 |
| 859156 | U681 | 1945 | Submarine | German | NMR | 66690 | 7150 |
| 859162 | U480 | 1945 | Submarine | German | NMR | 104830 | 3460 |
| 21809 | U1208 | 1945 | Submarine | German | UKHO | 103487.95 | 4141.59 |
| 880993 | UNKNOWN (probably U683) | - | Submarine | Unknown | NMR | 78260 | -16100 |
| 880994 | UNKNOWN | - | Craft | Unknown | NMR | 112000 | -8450 |
| 880995 | UNKNOWN | - | Craft | Unknown | NMR | 75570 | -60 |
| 880996 | UNKNOWN | - | Craft | Unknown | NMR | 69330 | 370 |
| 880997 | UNKNOWN | - | Craft | Unknown | NMR | 80980 | 7480 |
| 880999 | UNKNOWN | - | Craft | Unknown | NMR | 91300 | 8540 |
| 881000 | UNKNOWN | - | Warship | Unknown | NMR | 80200 | 9510 |
| 881001 | CHARLES MAUREAUR | - | Craft | Unknown | NMR | 91210 | 9240 |
| 881002 | UNKNOWN | - | Craft | Unknown | NMR | 101690 | 8790 |
| 881003 | UNKNOWN | - | Anchor | Unknown | NMR | 91920 | 9810 |
| 881004 | UNKNOWN | - | Anchor | Unknown | NMR | 92900 | 10070 |
| 881005 | UNKNOWN | - | Craft | Unknown | NMR | 105410 | 9700 |
| 881007 | UNKNOWN | - | Anchor | Unknown | NMR | 93760 | 11920 |
| 881008 | UNKNOWN | - | Craft | Unknown | NMR | 93850 | 12080 |
| 881009 | UNKNOWN | - | Craft | Unknown | NMR | 100450 | 13140 |
| 881011 | UNKNOWN | - | Craft | Unknown | NMR | 88020 | 22450 |
| 881012 | UNKNOWN | - | Craft | Unknown | NMR | 107820 | 21920 |
| 881013 | UNKNOWN | - | Craft | Unknown | NMR | 105820 | 25100 |
| 881014 | UNKNOWN | - | Craft | Unknown | NMR | 109410 | 25090 |
| 881016 | UNKNOWN | - | Craft | Unknown | NMR | 105050 | 27040 |
| 881017 | UNKNOWN | - | Craft | Unknown | NMR | 107610 | 27920 |
| 881018 | UNKNOWN | - | Obstruction | Unknown | NMR | 96560 | 35190 |
| 1006814 | UNKNOWN | - | Obstruction | Unknown | NMR | 115420 | 10830 |
| 1006826 | UNKNOWN | - | Obstruction | Unknown | NMR | 117430 | 11080 |
| 1006844 | UNKNOWN | - | Obstruction | Unknown | NMR | 117110 | 11490 |
| 1006845 | UNKNOWN | - | Obstruction | Unknown | NMR | 115300 | 11600 |
| 1006848 | UNKNOWN | - | Obstruction | Unknown | NMR | 118830 | 11580 |
| 1006869 | UNKNOWN | - | Obstruction | Unknown | NMR | 118790 | 12070 |
| 1006892 | UNKNOWN | - | Obstruction | Unknown | NMR | 118650 | 12330 |
| 1006899 | UNKNOWN | - | Obstruction | Unknown | NMR | 115310 | 12940 |
| 1006954 | UNKNOWN | - | Obstruction | Unknown | NMR | 119970 | 14350 |
| 1006955 | UNKNOWN | - | Obstruction | Unknown | NMR | 119570 | 14390 |
| 1006962 | UNKNOWN | - | Obstruction | Unknown | NMR | 117690 | 14610 |
| 1006984 | UNKNOWN | - | Obstruction | Unknown | NMR | 119160 | 15370 |
| 1006985 | UNKNOWN | - | Obstruction | Unknown | NMR | 119020 | 15380 |
| 1006987 | UNKNOWN | - | Obstruction | Unknown | NMR | 117980 | 15470 |
| 1007019 | UNKNOWN | - | Obstruction | Unknown | NMR | 117770 | 16260 |
| 1007020 | UNKNOWN | - | Obstruction | Unknown | NMR | 117100 | 16320 |
| 1007027 | UNKNOWN | - | Obstruction | Unknown | NMR | 114130 | 16570 |
| 1007031 | UNKNOWN | - | Obstruction | Unknown | NMR | 120020 | 16460 |
| 1007035 | UNKNOWN | - | Obstruction | Unknown | NMR | 118300 | 16720 |

| NMR/UKHO no. | Name | Date | Vessel Type | Nation | Source | Easting | Northing |
|---|---|---|---|---|---|---|---|
| 1007048 | UNKNOWN | - | Obstruction | Unknown | NMR | 118730 | 17750 |
| 1007051 | UNKNOWN | - | Obstruction | Unknown | NMR | 116400 | 18160 |
| 1007060 | UNKNOWN | - | Obstruction | Unknown | NMR | 119150 | 19500 |
| 1007061 | UNKNOWN | - | Obstruction | Unknown | NMR | 118660 | 19650 |
| 1007071 | UNKNOWN | - | Obstruction | Unknown | NMR | 120330 | 20590 |
| 1007074 | UNKNOWN | - | Obstruction | Unknown | NMR | 118710 | 20750 |
| 1007078 | UNKNOWN | - | Obstruction | Unknown | NMR | 118370 | 21190 |
| 1007079 | UNKNOWN | - | Obstruction | Unknown | NMR | 118690 | 21560 |
| 1007082 | UNKNOWN | - | Obstruction | Unknown | NMR | 119740 | 22460 |
| 16018 | UNKNOWN | - | Obstruction | Unknown | UKHO | 95756.18 | 34240.68 |
| 16158 | UNKNOWN | - | Obstruction | Unknown | UKHO | 105049.53 | 26998.25 |
| 21864 | UNKNOWN | - | Obstruction | Unknown | UKHO | 93790.35 | 12147.15 |
| 21863 | UNKNOWN | - | Anchor | Unknown | UKHO | 93759.09 | 11914.82 |
| 21852 | UNKNOWN | - | Steamship | Unknown | UKHO | 105714.78 | 11245.44 |
| 21849 | UNKNOWN | - | Anchor | Unknown | UKHO | 92936.92 | 10061.02 |
| 21843 | UNKNOWN | - | Anchor | British | UKHO | 91922.92 | 9808.84 |
| 21932 | UNKNOWN | - | Wreck | Unknown | UKHO | 89733.73 | 9470.42 |
| 21834 | UNKNOWN | - | Wreck | Unknown | UKHO | 80203 | 9503.95 |
| 21927 | UNKNOWN | - | Wreck | Unknown | UKHO | 91300.59 | 8543.92 |
| 21923 | UNKNOWN | - | Wreck | Unknown | UKHO | 64444.28 | 9040.27 |
| 21824 | UNKNOWN | - | Craft | Unknown | UKHO | 80864.31 | 7663.72 |
| 21922 | UNKNOWN | - | Wreck | Unknown | UKHO | 69316.2 | 373.06 |
| 21925 | UNKNOWN | - | Wreck | Unknown | UKHO | 75528.42 | -66.29 |
| 21865 | UNKNOWN |  | Wreck | Unknown | UKHO | 93511.64 | 12412.05 |

## 14.4 List of scheduled monuments in Scilly

As at August 1999

| Parish | No. | Title | Grid Ref. |
|---|---|---|---|
| **Bryher.** | | | |
| Bryher | 15397 | Civil War battery at Works Point, Bryher. | SV 878 140 |
| Bryher | 15398 | Prehistoric linear boundary on Puffin Island | SV 881 134 |
| Bryher | 15399 | Civil War battery on The Green. | SV 878 146 |
| Bryher | 15424 | Prehistoric entrance grave and round cairn on western Samson Hill (formerly 1006) | SV 878 142 |
| Bryher | 15425 | Two kerbed platform cairns north of Bonfire Carn on eastern Samson Hill | SV 879 142 |
| Bryher | 15426 | Prehistoric entrance grave at Works Carn, Bryher (formerly 851) | SV 878 141 |
| Bryher | 15457 | Three prehistoric cairns on Gweal Hill (formerly 1007) | SV 871 149 |
| Bryher | 15458 | Prehistoric field system on Gweal Hill | SV 870 148 |
| Bryher | 15459 | Kerbed platform cairn 120m SE of Black Carn | SV 871 150 |
| Bryher | 15460 | Prehistoric field system and settlement on Heathy Hill. | SV 873 143 |
| Bryher | 15461 | Prehistoric field system and post-Medieval quay in Great Porth | SV 875 144 |
| Bryher | 15462 | Prehistoric field system on the SW flank of Samson Hill. | SV 877 141 |
| Bryher | 15463 | Prehistoric field system and Romano-British cist in Green Bay. | SV 879 146 |
| Bryher | 15464 | Prehistoric enclosure SE of The Brow | SV 880 144 |
| Bryher | 15466 | Prehistoric linear boundary SSE of The Island | SV 881 148 |
| Bryher | 15465 | Prehistoric hut circle S of The Brow | SV 880 143 |
| Bryher | 15491 | Prehistoric linear boundary & cairns SW of The Bar. | SV 881 150 |
| Bryher | 15492 | Post-Medieval watch house & Coastguard lookout on Watch Hill. | SV 880 152 |
| Bryher | 15493 | Post-medieval pilot lookout on Timmy's Hill. | SV 877 148 |
| Bryher | 15494 | Gig shed on the north coast of Great Porth | SV 875 147 |
| Bryher | 15495 | Prehistoric cliff castle & cairns at Shipman Head (formerly 1008) | SV 874 162 |
| Bryher | 15516 | Prehistoric cairn cemetery and field system on Shipman Head Down and Great Bottom (formerly 1009) | SV 877 156 |
| Bryher | 15546 | Iron age cist on northern Samson Hill, 165 m NE of Western Carn. | SV 877 144 |

**St Agnes.**

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| St Agnes | 15288 | Kerbed platform cairn 175m NNW of Hoe Point, Gugh. | SV 891 078 |
| St Agnes | 15289 | Kerbed platform cairn 160m north of Hoe Point, Gugh. | SV 891 078 |
| St Agnes | 15290 | Four round cairns 70m south east of Carn Wrean, Gugh. | SV 889 080 |
| St Agnes | 15291 | Round cairn 120 ESE of Carn Wrean, Gugh. | SV 890 080 |
| St Agnes | 15292 | Two round cairns 65m NNW of the Clapper of Works, Gugh. | SV 890 080 |
| St Agnes | 15293 | Two round cairns 90m north of the Clapper of Works, Gugh. | SV 890 080 |
| St Agnes | 15294 | Prehistoric entrance grave and two round cairns on the Clapper of Works, Gugh. | SV 890 079 |
| St Agnes | 15295 | Platform cairn 65m ENE of the Clapper of Works, Gugh. | SV 891 079 |
| St Agnes | 15296 | Round cairn with peripheral kerb 50m north of Cuckold's Carn, Gugh. | SV 892 080 |
| St Agnes | 15297 | Round cairn 40m SW of Dropnose Point., Gugh. | SV 892 080 |
| St Agnes | 15298 | Round cairn 90m NE of the Carn of Works, Gugh. | SV 892 080 |
| St Agnes | 15299 | Platform cairn with inner kerb 70m NE of the carn of Works, Gugh. | SV 891 080 |
| St Agnes | 15300 | Round cairn 40m NE of the Carn of Works, Gugh. | SV 892 080 |
| St Agnes | 15301 | Round cairn 20m NNE of the Carn of Works, Gugh. | SV 891 080 |
| St Agnes | 15302 | Round cairn 30m west of the Carn of Works, Gugh. | SV 891 080 |
| St Agnes | 15303 | Civil War battery and prehistoric entrance grave on the Carn of Works, Gugh. | SV 891 080 |
| St Agnes | 15304 | Prehistoric linear boundary on Dropnose Point, Gugh. | SV 893 081 |
| St Agnes | 15312 | Kerbed Platform cairn on Wingletang Down. | SV 881 072 |
| St Agnes | 15313 | Round cairn on Wingletang Down. | SV 881 072 |
| St Agnes | 15314 | Platform cairn on Wingletang Down, 65m SSW of Porth Askin. | SV 881 072 |
| St Agnes | 15315 | Platform cairn on Wingletang Down, 60m south of Porth Askin. | SV 881 072 |
| St Agnes | 15316 | Platform cairn on Wingletang Down, 30m south east of Porth Askin. | SV 882 073 |
| St Agnes | 15317 | Kerbed platform cairn on Wingletang Down, 160m north east of Horse Point. | SV 883 072 |
| St Agnes | 15318 | Kerbed platform cairn on Wingletang Down, 45m south of Beady Pool. | SV 883 072 |

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| St Agnes | 15319 | Kerbed platform cairn on Wingletang Down, 25m SSW of Beady Pool. | SV 883 072 |
| St Agnes | 15320 | Kerbed platform cairn on Wingletang Down, 80m north east of Porth Askin. | SV 882 074 |
| St Agnes | 15321 | Kerbed platform cairn on Wingletang Down, 75m NNE of Porth Askin. | SV 882 074 |
| St Agnes | 15322 | Two platform cairns on Wingletang Down, 35m WNW on Wingletang Carn. | SV 883 075 |
| St Agnes | 15323 | Platform cairn on Wingletang Down 90m north west of Wingletang Carn. | SV 883 075 |
| St Agnes | 15324 | Platform cairn on Wingletang Down, 130m north west of Wingletang Carn. | SV 883 076 |
| St Agnes | 15325 | Platform cairn on Wingletang Down, 115m north west of Wingletang Carn. | SV 883 075 |
| St Agnes | 15326 | Platform cairn on Wingletang Down, 90m ESE of Cairn Adnis. | SV 882 075 |
| St Agnes | 15327 | Platform cairn on Wingletang Down, 50m NNE of Cairn Adnis. | SV 881 076 |
| St Agnes | 15328 | Platform cairn on Wingletang Down, 100m NNE of Cairn Adnis. | SV 881 076 |
| St Agnes | 15329 | Round cairn on Wingletang Down, 105m SSW of of Sun Rock. | SV 884 076 |
| St Agnes | 15330 | Round cairn on Wingletang Down, 120m SSW of Sun Rock. | SV 884 076 |
| St Agnes | 15331 | Kerbed platform cairn on Wingletang Down, 120m SSE of Sun Rock. | SV 884 076 |
| St Agnes | 15332 | Two kerbed platform cairns on Wingletang Down, 110 NE of Wingletang Cairn. | SV 884 075 |
| St Agnes | 15333 | Three platform cairns on Wingletang Down, 110 ENE of Wingletang Carn. | SV 885 075 |
| St Agnes | 15334 | Three platform cairns on Wingletang Down, 135m south of Crooked Rock. | SV 885 075 |
| St Agnes | 15335 | Kerbed platform cairn on Wingletang Down, 75m SSE of Crooked Rock. | SV 886 076 |
| St Agnes | 15336 | Kerbed platform cairn on Wingletang 85m SW of Crooked Rock. | SV 885 076 |
| St Agnes | 15337 | Three platform cairns and adjacent prehistoric linear boundary on Wingletang Down, 70m west of Crooked Rock. | SV 885 076 |
| St Agnes | 15338 | Platform cairn on Wingletang Down, 25m south of Sun Rock. | SV 884 077 |
| St Agnes | 15339 | Platform cairn on Wingletang Down, 78m north of Crooked Rock. | SV 885 076 |
| St Agnes | 15340 | Eight platform cairns and incorporated prehistoric irregular field system SW of Carn of Cove Vean on Wingletang Down. | SV 885 078 |

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| St Agnes 15341 | 19th Century gig-shed NE of Porth Askin | SV 882 074 |
| St Agnes 15342 | Two 19th century gig-sheds ENE of Porth Askin | SV 882 074 |
| St Agnes 15343 | Medieval or later shipwreck grave 52m NNE of Crooked Rock, Wingletang Down. | SV 886 077 |
| St Agnes 15344 | Prehistoric irregular field system NE of St Warna's Carn. | SV 880 077 |
| St Agnes 15443 | Kerbed platform cairn with cist 90m NW of Carn Kimbra, Gugh (formerly 1015) | SV 891 084 |
| St Agnes 15444 | The Old Man prehistoric standing stone Gugh (formerly 1015) | SV 890 084 |
| St Agnes 15445 | Prehistoric cairns, entrance graves field system and settlements and post-medieval kelp pits on Kittern Hill, Gugh (formerly 1015) | SV 888 086 |
| St.Agnes 15430 | Kerbed platform cairn on the North Hill, Annet. | SV 860 208 |
| St.Agnes 15447 | Prehistoric boundary wall E of Carn Irish, Annet | SV 858 087 |
| St.Agnes 15448 | Prehistoric midden at West Porth, Annet | SV 861 086 |
| St.Agnes 15449 | Prehistoric field system, hut circle & middens on S of Annet. | SV 863 084 |
| St Agnes 15450 | Prehistoric settlement and field system at Porth Killier | SV 882 085 |
| St Agnes 15451 | Old Lighthouse (formerly 629) | SV 880 082 |
| St Agnes 15452 | 19th century horse engine and threshing machine at Lower Town Farm. | SV 879 084 |
| St. Agnes 15453 | Prehistoric field system, post medieval breastwork and Maze, Castella Downs. | SV 875 079 |
| St Agnes 15454 | St. Warna's Well, St. Warna's Cove. | SV 880 077 |
| St Agnes 15455 | Prehistoric field system, settlement & cairn E of Barnaby Lane. | SV 882 078 |
| St Agnes 15456 | Prehistoric to Romano-British field system and settlement at Higher Town. | SV 883 083 |
| St Agnes 15496 | Lighthouse builders operational base on Rosevear, Western Rocks. | SV 839 059 |
| St Agnes 15527 | Platform cairn on Burnt Island. | SV 874 086 |
| St Agnes 15528 | Prehistoric kerbed boulder 172 NW of Horse Point. | SV 881 072 |
| St Agnes 15529 | Two early post-medieval quays in N & NW Periglis | SV 875 084 |

**St Martins.**

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|---|---|---|
| St Martins 15386 | Kerbed platform cairn on Menawathen | SV 955 136 |
| St Martins 15387 | Kerbed platform cairn 60m NNE of Holmbush Cairn, Great Ganilly (formerly 1027) | SV 945 145 |
| St Martins 15388 | Kerbed platform cairn 125m NE of Holmbush Cairn, Great Ganilly (formerly 1027) | SV 946 145 |
| St Martins 15389 | Kerbed platform cairn 45m NNW of Stoney Porth, White Island. | SV 924 176 |

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| St Martins 15390 | Kerbed platform cairn 90m NW of Stoney Porth, White Island. | SV 924 176 |
| St Martins 15391 | Kerbed platform cairn 110m N of Porth Morran, White Island. | SV 923 176 |
| St Martins 15392 | Round cairn 55m west of Stoney Porth White Island (formerly 998) | SV 924 175 |
| St Martins 15393 | Two kerbed platform cairns 50m N of Porth Morran, White Island (formerly 998) | SV 923 175 |
| St Martins 15394 | Two kerbed platform cairns 40m N of Porth Morran, White Island (formerly 998) | SV 922 175 |
| St Martins 15395 | Kerbed platform cairn and prehistoric field system NW of Porth Morran, White Island (formerly 998) | SV 922 174 |
| St Martins 15396 | Entrance grave on the summit of the northern hill, White Island (formerly 998) | SV 922 176 |
| St Martins 15416 | Prehistoric entrance grave, northern one of three on Cruthers Hill (formerly 992) | SV 928 152 |
| St Martins 15417 | Prehistoric entrance grave, middle one of three on Cruthers Hill (formerly 992) | SV 929 151 |
| St Martins 15418 | Prehistoric entrance grave, the southern one of three and kerbed round cairn with cist on Cruthers Hill (formerly 992) | SV 929 151 |
| St Martins 15419 | Platform cairn at Cruthers Neck | SV 928 153 |
| St Martins 15422 | Kerbed round cairn with central cist on Gun Hill (formerly 993) | SV 939 153 |
| St Martins 15423 | Post-medieval kelp pit an the western coast of Tinklers Hill | SV 915 164 |
| St Martins 15440 | Prehistoric regular field system & hut circle on Great Ganilly. | SV947 144 |
| St Martins 15441 | Prehistoric settlement & field system on Little Ganilly. | SV938 142 |
| St Martins 15442 | Prehistoric field system and kerbed cairn, with post-medieval kelp pit and linear boundary on southern White Island (formerly 999) | SV 925 173 |
| St. Martins 15487 | Prehistoric cairn group, cists and prehistoric to Roman field system and settlement on Little Arthur. | SV941 139 |
| St. Martins 15488 | Prehistoric chambered cairns and boundaries on Middle Arthur (formerly 1029) | SV 939 138 |
| St. Martins 15489 | Prehistoric cairn group and field systems on Great Arthur (formerly 1030) | SV 941 135 |
| St Martins 15490 | Iron Age and Roman settlement on Nornour (formerly 854) | SV 944 147 |
| St Martins 15517 | Prehistoric cairn cemetery and field system on Tinklers Hill (formerly 997) | SV 917 163<br>SV 916 164 |
| St Martins 15518 | Prehistoric platform cairn, settlement and field system at Pernagie. | SV 919 116 |

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| St. Martins 15519 | Prehistoric cairn cemetery, field system and settlements on Top Rock Hill (formerly 996 & 1003) | SV 922 166 |
| St Martins 15520 | Prehistoric chambered cairn 60m north of Knackyboy Carn (formerly 850) | SV 923 158 |
| St Martins 15521 | Prehistoric cairn cemetery and prehistoric to post-medieval field systems between The Plains and Wine Cove. | SV 926 158<br>SV 926 159 |
| St Martins 15522 | Platform cairn on Turfy Hill. | SV 930 159 |
| St Martins 15523 | Prehistoric house platform settlement SW of English Island Carn. | SV 937 152 |
| St Martins 15524 | Prehistoric to Romano-British ritual, funerary and settlement remains on Par Beach (formerly 849) | SV 933 153 |
| St Martins 15525 | Prehistoric cairns, field system and settlements, Medieval chapel & post-medieval Daymark, lookout & signal station on N E St. Martins. | SV 937 157 |

**St Mary's**

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| St Marys 15305 | Round cairn 135m NE of Dutchman's Carn, Peninnis Head (formerly 1020) | SV 910 095 |
| St Marys 15306 | Two round cairns 85m east of Dutchmans Cairn, Peninnis Head (formerly 1075) | SV 910 094 |
| St Marys 15307 | Round cairn 130m NE of Peninnis Head lighthouse. | SV 911 094 |
| St Marys 15308 | Round cairn 108m NNE of Peninnis Head lighthouse. | SV 911 094 |
| St Marys 15309 | Civil War battery at Kettle and Pans rocks, Peninnis Head (formerly 1076) | SV 910 094 |
| St Marys 15310 | Civil War battery 80m SSE of Dutchman=s Carn, Peninnis Head. | SV 909 094 |
| St Marys 15311 | Civil War battery at Carn Leh. | SV 913 098 |
| St Marys 15345 | Platform cairn on northern Peninnis 200m ESE of Buzza Tower. | SV 908 102 |
| St Marys 15346 | Kerbed platform cairn 15m NE of Inner Blue Cairn (formerly 576) | SV 919 101 |
| St Marys 15347 | Civil War Battery 150m WNW of Church Point | SV 921 099 |
| St Marys 15348 | Kerbed platform cairn with central funerary chamber on Salakee Down,10m W of Church Porth. | SV 922 100 |
| St Marys 15349 | Kerbed platform cairn on Salakee Down 55m W of Church Porth. | SV 922 100 |
| St Marys 15350 | Two kerbed platform cairns on Salakee Down 40m NW of Church Porth. | SV 922 100 |
| St Marys 15351 | Kerbed platform cairn on Salakee Down 85m NW of Church Porth. | SV 922 101 |
| St Marys 15352 | Entrance grave on Salakee Down, 160m NW of Church Porth. | SV 921 101 |

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| St Marys | 15353 | Kerbed platform cairn on Salakee Down 190m NW of Giant's Castle. | SV 923 102 |
| St Marys | 15354 | The Giant's Castle cliff castle. (formerly 1023) | SV 924 100 |
| St Marys | 15355 | Two entrance graves and a platform cairn 95m NNW of Pig Rock on NE Salakee Down. (formerly 1022) | SV 924 103 |
| St Marys | 15356 | Two entrance graves 220m ENE of Salakee Farm (formerly 628) | SV 923 106 |
| St Marys | 15357 | Platform cairn 195m NE of Salakee Farm. | SV 922 107 |
| St Marys | 15358 | Civil War breastwork ESE of Dick's Carn. | SV 926 105 |
| St Marys | 15359 | Civil War breastwork and battery 60m E of Carn Nore. | SV 927 105 |
| St Marys | 15360 | Civil War battery above Porth Hellick Point. | SV 928 105 |
| St Marys | 15361 | Entrance grave 23m west of Old Rock Porth Hellick Down (formerly 1026) | SV 929 106 |
| St Marys | 15362 | Entrance grave 47m NW of Old Rock, Porth Hellick Down (formerly 1026) | SV 928 106 |
| St Marys | 15363 | Kerbed platform cairn 90m NW of Old Rock, Porth Hellick Down. | SV 928 106 |
| St Marys | 15364 | Entrance grave 80m SSE of Basin Rock, Porth Hellick Down (formerly 1026) | SV 928 106 |
| St Marys | 15365 | Entrance grave 105m SE of Basin Rock Porth Hellick Down (formerly 1026) | SV 928 106 |
| St Marys | 15366 | Two entrance graves and a platform cairn 90m ESE of Basin Rock, Porth Hellick Down (formerly 1026) | SV 928 107 |
| St Marys | 15367 | Prehistoric entrance grave & regular field system on NW Porth Hellick Down (formerly 353) | SV 928 108 |
| St Marys | 15368 | Platform cairn 100m NNW of Water Rocks, Normandy Down. | SV 929 111 |
| St Marys | 15369 | Entrance grave 135 NNE of Water Rocks Normandy Down (formerly 1018) | SV 929 111 |
| St Marys | 15370 | Round cairn 155m NNE of Water Rocks Normandy Down (formerly 1018) | SV 930 111 |
| St Marys | 15371 | Kerbed platform cairn with funerary chamber 190m NE of Water Rocks, Normandy Down (formerly 1018) | SV 930 111 |
| St Marys | 15372 | Civil War breastwork and battery on the north coast of Normandy Down. | SV 930 112 |
| St Marys | 15373 | Kerbed platform cairn 80m NE of Mount Todden Farm (formerly 1082) | SV 928 114 |
| St Marys | 15374 | Prehistoric linear boundary 50m ENE of Mount Todden Battery. | SV 930 115 |
| St Marys | 15375 | Civil War battery on northern slope of Mount Todden Down. | SV 930 116 |
| St Marys | 15376 | Round cairn 137m east of Helvear Farm | SV 922 123 |
| St Marys | 15377 | Kerbed platform cairn on Helvear Hill | SV 923 123 |
| St Marys | 15378 | Civil War battery on Helvear Hill. | SV 923 124 |
| St Marys | 15379 | Round cairn on Helvear Down, 300m NNE of Higher Trenoweth Farm. | SV 919 126 |

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| St Marys 15380 | Civil War battery and two associated platforms 300m SE of Bar Point. | SV 917 127 |
| St Marys 15381 | Platform cairn on Carn Morval Down, 275m NNW of Golf Course club house (formerly 1081) | SV 907 119 |
| St Marys 15382 | Platform cairn on Carn Morval Down, 235m N of Golf Course club house. | SV 908 119 |
| St Marys 15383 | Civil War battery and associated platform at Carn Morval Point. | SV 905 119 |
| St Marys 15384 | Round cairn with funerary chamber on Buzza Hill, 45m W of Buzza Tower (formerly 598) | SV 905 103 |
| St Marys 15385 | Civil War battery at Tolman Carns. | SV 915 100 |
| St. Marys 15400 | Two entrance graves, prehistoric field system, Civil War fieldworks & blockhouse on Innisidgen Hill & Helvear Down (formerly 485) | SV 922 126 |
| St. Marys 15401 | Civil War breastwork and two prehistoric stone hut circles at Little Porth | SV 919 127 |
| St. Marys 15402 | Entrance graves, Standing stones, field systems, Settlements & post-medieval kelp pit & stone pit on Halangy & Carn Morval Downs (formerly 782/350) | SV 909 123 |
| St. Marys 15403 | Harry=s Walls unfinished C16th artillery castle & adjacent prehistoric standing stone at Mount Flagon, St. Mary=s. | SV 909 109 |
| St. Marys 15405 | The Long rock prehistoric standing stone on Long Rock Down(formerly 573) | SV 913 124 |
| St. Marys 15412 | Prehistoric linear boundary SE of Horse Rock on Porth Hellick Down | SV 929 107 |
| St Marys 15434 | Post- medieval breastwork, curtain wall & associated defensive structures on the periphery of The Garrison. | SV 895 103 |
| St Marys 15435 | The Rocket House, 17th - 18th century powder magazine and adjacent prison on the Garrison. (formerly 600) | SV 900 106 |
| St Marys 15436 | Late 19th-early 20th century Woolpack Battery, The Garrison (formerly 1080) | SV 897 101 |
| St Marys 15437 | Late 19th- early 20th century Steval Battery, The Garrison. | SV 897 103 |
| St Marys 15438 | Late 19th-early20th century defended barracks and caretaker block at Greystones, The Garrison. | SV 897 102 |
| St Marys 15439 | Early 20th century gun battery at Bants Carn | SV 910 126 |
| St. Marys 15467 | Prehistoric field system E of Peninnis Head lighthouse | SV 911 094 |
| St. Marys 15468 | Prehistoric field system on E Peninnis Head. | SV 912 096 |
| St. Marys 15469 | Ennor Castle, Old Town (formerly 990) Medieval shell keep castle. | SV 914 103 |
| St. Marys 15470 | The Old Quay, Old Town, St. Mary's. | SV 913 101 |
| St. Marys 15471 | Hut circle settlement and Civil War breastwork NE of Porth Minick. | SV 918 100 |

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| St. Marys 15472 | Civil War Battery & 18th century watch house at Mount Todden (formerly 1019) | SV 929 115 |
| St. Marys 15473 | Prehistoric field system on the northern slope of Mount Todden. | SV 929 116 |
| St. Marys 15474 | Prehistoric field system and stone setting, Civil War Fieldworks, post medieval kelp pits and quay on Tolls Island(formerly 1024/1025) | SV 930 119 |
| St. Marys 15476 | Prehistoric hut circle and Civil War fieldworks on eastern Tolls Hill, St Marys. | SV 928 121 |
| St. Marys 15477 | Prehistoric linear boundary and Civil war fieldworks on north western Tolls Hill. | SV 926 121 |
| St. Marys 15478 | Hut circle settlement in Pendrathen, | SV 914 127 |
| St. Marys 15479 | Prehistoric settlement, Romano British cist cemetery and Civil War battery at Tolls Porth. | SV 908 123 |
| St. Marys 15480 | Prehistoric field system and Civil War fieldworks on south western Carn Morval Down. | SV 906 118 |
| St. Marys 15481 | Prehistoric linear boundary, cairn and post-medieval Building on Taylors Island. | SV 905 115 |
| St. Marys 15482 | Civil War breastwork and battery on Newford Island | SV 906 112 |
| St. Marys 15483 | Post-medieval smugglers' cache at Porth Mellon 110m west of Harry's Walls Battery. | SV 908 109 |
| St. Marys 15484 | Prehistoric linear boundaries, house platform and Cairn on south western Peninnis Head. | SV 908 097 |
| St. Marys 15485 | Prehistoric house platform and boundary north east Of Carn Leh. | SV 913 098 |
| St. Marys 15486 | The Star Castle.16th century artillery fort and mid 18th century dewpond. | SV 899 106 |
| St Marys 15530 | World War II Pillbox 250m SE of Carn Warvel Farm | SV 911 101 |
| St Marys 15531 | The Cats Coffin World War II pillbox, Old Town. | SV 913 102 |
| St. Marys 15532 | World War II pillbox & Civil War battery at Tolman Point | SV 916 099 |
| St Marys 15533 | World War II pillbox west of Porth Hellick, 90m north of Drum Rock. | SV 923 106 |
| St Marys 15534 | World War II pillbox between Thomas Porth & Porthloo | SV 908 111 |
| St. Marys 15560 | Iron Age to Romano-British fogou on northern Peninnis Head, 170 m south of Carn Gwarvel Farm. | SV 909 101 |

**Tresco.**

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| Tresco 15404 | Cromwell's castle mid-17th century Blockhouse & 18th century gun platform on western coast of Castle Down (formerly 354) | SV 881 159 |
| Tresco 15406 | Old blockhouse.(356 revised 31/1/96) | SV 898 155 |
| Tresco 15411 | King Charles' Castle mid 16th century castle. Civil War earthen artillery defence on W Castle Down. | SV 882 161 |
| Tresco 15427 | Round cairn 50m WSW of Vane Hill summit, Tresco (formerly 1010) | SV 890 215 |
| Tresco 15428 | Round cairn 25m south west of Vane | SV 890 151 |

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| | | Hill summit, Tresco (formerly 1010) | |
| Tresco | 15429 | Two platform cairns north east of Vane Hill summit, Tresco (formerly 1010) | SV 890 152 |
| Tresco | 15431 | Two kerbed platform cairns 240m north of the Pest House, St. Helens. | SV 899 170 |
| Tresco | 15432 | Kerbed platform cairn 360m north of the Pest House, St. Helens. | SV 899 171 |
| Tresco | 15433 | Kerbed platform cairn and prehistoric house platform 370m NNW of the Pest House, St. Helens. | SV 899 171 |
| Tresco | 15497 | Prehistoric field systems, settlement & cairns, with Post-medieval boundary & shelter on Northwethel (formerly 1002) | SV 895 163 |
| Tresco | 15498 | Prehistoric field system & cairn, early & later medieval religious complex, post-medieval lookout & quarantine station on St. Helen's (formerly 852) | SV 900 168 |
| Tresco | 15499 | Prehistoric cairn group on Great Hill, Tean (formerly 1000) | SV 909 165 |
| Tresco | 15500 | Prehistoric cairns, prehistoric to post-medieval settlements & field systems, an early Christian focus, post medieval kelp pits & quay on Tean & Old Man (formerly 1001) | SV 908 164 |
| Tresco | 15501 | Prehistoric field system & hut circle north of Crab's Ledge | SV 897 137 |
| Tresco | 15502 | Prehistoric field system & settlement in Bathinghouse Porth | SV 894 135 |
| Tresco | 15503 | Prehistoric field system & settlement in southern Appletree Bay. | SV 891 135 |
| Tresco | 15504 | Oliver's Battery (formerly 589) | SV 893 135 |
| Tresco | 15505 | Prehistoric field system & settlement N of Appletree Point. | SV 888 144 |
| Tresco | 15506 | Prehistoric cairn group on Abbey Hill. | SV 890 142 |
| Tresco | 15507 | St. Nicholas' Priory. | SV 894 142 |
| Tresco | 15508 | Early medieval cemetery 40m N of St. Nicholas' Priory | SV 894 142 |
| Tresco | 15509 | Post-medieval smugglers' cache at Tresco Abbey. | SV 895 142 |
| Tresco | 15510 | Post-medieval animal-driven crushing mill 270m SW of Blockhouse Cottages. | SV 894 152 |
| Tresco | 15511 | Prehistoric round cairn 255m SW of Blockhouse Cottages. | SV 894 152 |
| Tresco | 15512 | Post-medieval smugglers' cache at Smugglers Cottage. | SV 897 153 |
| Tresco | 15513 | Prehistoric to early medieval field system and settlement at Dial Rocks. | SV 888 155 |
| Tresco | 15514 | Prehistoric field system in southern Pentle Bay. | SV 902 140 |
| Tresco | 15515 | Prehistoric funerary, ritual & settlement remains; Post medieval defences, tin mine, lookouts and enclosures on Castle Down (formerly 1011) | SV 885 160 |
| Tresco | 15526 | Prehistoric to post-medieval funerary, field system & settlement remains, with post-medieval kelp pit & deer park on & adjacent to Samson (formerly 853/1058) | SV 878 127 |

*Fig 86 The Horsa aground in Bread and Cheese Cove, St Martin's in 1893 (photo: © Gibson Collection)*

## 14.5 List of droits for Scilly

For the years 2000-2003 and the Wreck Amnesty, 23 January - 23 April 2001.

| Droit Number: | Exact Position Found: | Name of Wreck: | Description: |
|---|---|---|---|
| 037/03 | Retarrier Ledges, Western Rocks, Isles of Scilly | Schiller (possibly) | 2 x Gold coins dated 1865. 1 x rigging hawser end (?) |
| 043/03 | | | 1 x 3 1/2" diameter iron cannon ball. 1 x 8"x8" lead patch. |
| 051/03 | Retarrier Ledge, Western Rocks, Isles of Scilly | Schiller (SS) | 1 x Bronze HP. Steam manifold (50kg). 1 x Brass window/port stay. 2 x brass utensil lids/covers |
| 057/03 | Retarrier Ledges, Isles of Scilly | Schiller 1875 | Lots, see droit. Finds include: wooden pulley, brass deck filler cap, brass drain plug, brass disc, brass screw, brass tube, pieces of broken glass (heavy duty), potter fragments, silver cutlery handle, copper piping, copper coin, brass knob, etc. |
| 123/02 | Designated wreck. Find UTM zone 30 260165/5535588 M | Colossus (HMS) | 1 x port stern carving / decoration. Referred to as small find number 285 in the excavation records / site finds list |
| 127/02 | Wreck of SS Schiller under rocks and concretion | Schiller | 1 x silver plated 'turin' lid - with company inscription concreted, (near the bow), 1 x silver tea pot cleanish, located in engine room area, 1 x silver spoon - concreted, located around engine room. |
| 150/01 | Isles of Scilly | Colossus (HMS) **Designated** | 8 x wooden pulley wheels, 1 x trigger guard, 1 x butt end, 1 x musket side piece, 1 x wedge shaped timber, 1 x brass cannon trigger, 1 x wooden timber shaft, half double pulley block, 2 x 4' copper nails, 1 x 2' copper nail & 1 x 1' copper nail |
| 159/01 | 10m E St Mary's, Isles of Scilly | Unknown (1900) | 1 x compass pedestal |
| 165/02 | Retarrier Ledges at the Western Rocks, Isles of Scilly | Schiller | 3 x 20 dollar gold coins (USA 1878), one is wedged into a piece of Fancy brass, another is stuck into a piece of iron crud, the third is a separate coin, 1 x broken gold thimble very ornate with name Elsa in the pattern |
| 166/03 | Bryher, Isles of Scilly, 16m deep | Delaware | 1 x Porthole dog clip |
| 183/02 | | Unknown (possibly Camiola 1892) | 1 x steering pedestal, 2 x portholes |
| 183/03 | Retarrier Ledges, Western Rocks, Isles of Scilly | Schiller | 1 x black kitchen knife handle, no marks, 1 x brass tap gas/oil marked makers name/glasgow, 1 x rear plate brass porthole, 1 x brass tread plate diamond tread 18" x 4, 1 x dial brass numbered 0-80 sawtooth edge, 1 x watch cog 2 1/2 in. see below |
| 184/02 | | Unknown (poss Camiola) | 1 x telegraph pedestal, 1 x codfish compass stand |

| Droit Number: | Exact Position Found: | Name of Wreck: | Description: |
|---|---|---|---|
| 197/03 | West of Zantman's Rock in 42 m, Crim rocks, Isles of Scilly | unknown | 1 x remains of a lignum vitea pulley sheave |
| 198/03 | Retarrier Ledges, Western Rocks, Isles of Scilly | Schiller | 1 x brass porthole door (no glass) |
| 201/03 | Salvage claimed but states not from the Isles of Scilly Museum | colossus | 1 x wine glass stem, 1 x canister shot remains, 1 x pottery bowl remains, 130 musket balls, 1 x brass barrel hoop, 1 x button (size of 2 penny), 1 x fragment of glass, 1 x flint, 1 x crud, 1 x gun flint, 1 x 9lb shot, 1 x flint, 1 x button, 1 x buckle, |
| 203/02 | On wreck at Retarrier Ledges, Isles of Scilly | Schiller | Pieces of brass clock movement. 5 x silver spoons marked "NLB". 1 x broken glass inkbottle. 1 x glass ink blotter container. 1 x brass door lock. 1 x porthole. 1 x brass hinge. 2 x pieces of ornate brass. 1 x porcelain door handle. 1 x brass door handle. |
| 204/02 | Low tide at Tobaccoman's Ledge, Tresco Island | Colossus (HMS) ? | 1 x small 3"x3" piece of 4th century BC Greek Romano pottery black glaze. |
| 211/02 | In gulley where previous finds where removed - possibly pantry storage area | Schiller | 1 x silver spoon with company crest. 1 x silver sugar spoon. 1 x bone knife handle. 1 x brass plug stopper. 1 x porcelain pull cord end. 2 x 20 Dollar gold coin. 1 x copper box lid. 1 x brass container top. 1 x copper/brass receptacle with rusty contents. |
| 215/02 | The Mare Ledges, Tresco, Isles of Scilly | RAF Sunderland Flying Boat - plane | 1 x valve and tappet. 1 x Alearon control arm (sketch provided - very basic) |
| 245/03 | Western Rocks, Isles of Scilly | Douro | 1 x bronze slave token, manilla. Image provided. |
| 246/02 | Retarrier ledges, Isles of Scilly | Schiller | 1 x brass porthole (damaged), 1 x silver spoon (handle only) with eagle emblem |
| 249/02 | Seven Stones, off Land's End | Torrey Canyon | 1 x Damaged Porthole - no glass. |
| 254/02 | Retarrier Ledges, Isles of Scilly | Schiller | 1 x half of brass porthole door (in saltwater display tank on St Mary's Quay), pieces of a brass lamp to be offered to IOS Museum, pieces of ornate brasswork which make up one item |
| 259/02 | Western Rocks, Isles of Scilly | Douro | 9 x copper manillas. 2 x glass beads. 1x knife. 1 x corroded remains of sextant. |
| 262/02 | Southward Well, off Samson | Colossus (HMS) | see list, but includes: bottles, shoe, trigger guards, sounding lead, pulley wheel, scissors, buttons, pottery, rope, brush, window, pin, fabric, lantern bracket, hook, brick, handle, etc |
| 274/02 | Maiden Bower, Isles of Scilly | Brinkburn | 1 x China isolator from a radio, 14cm high, 4 3/4cm wide - sketch provided. |
| 275/02 | Golden Ball Bar, Isles of Scilly | Mando | 1 x Stop cock/gate valve - brass, sketch provided. 16cm in height & marked "Marsh, 200" |
| 299/02 | seabed | Zeelelie | 1 x bronze keel pin, 18 cm long, bent to 90 degrees, 1 x shard of porcelain, 3.5 cm x 2 cm, blue decoration |
| 326/02 | single cannon site outside of the designated area | Colossus (HMS) | 1 x Wine bottle with G.R. on seal. 1 x twopenny cartwheel coin, very worn. 1 x Brass drawer handle. 2 x lead encased objects? 1 x button with anchor on it - brass. |

| Droit Number: | Exact Position Found: | Name of Wreck: | Description: |
|---|---|---|---|
| 327/02 | Little Crebawethen, Western Rocks, Isles of Scilly | Zeelilie | Many pieces of broken pottery. 18th century, koalin (?) blue/white, Chung Wng Dynasty. |
| 340/01 | Southward Well, Isles of Scilly - original site | Colossus (HMS) | 1 x gold cufflink. 3 x pieces of octant. 4 x cannon balls. Pot sherds. Brass and copper ships fastenings. Bottle tops & bases. Pewter container. |
| 341/01 | Southward Well, Isles of Scilly | Colossus (HMS) | Lead shot. Pottery sherds. Musket flints. Copper nails. Copper barrel hoops. Copper ships fastenings. Half a brass lock. Pieces of shoe leather. 1 domino. 8 brass buttons. Various unidentified bits of brass |
| 342/01 | Southward Well, Isles of Scilly | Colossus (HMS) | 1 x sword scabbard and hilt. 2 x brass box locks. Miscellaneous pieces of pistol and musket. Pot sherds. Lead shot & musket flints. |
| 347/01 | St Mary's Quay, Isles of Scilly | Douro | 1 x Manilla trade token |
| 348/01 | Pollard Rock, Seven Stones off Land's End | Torrey Canyon | 1 x 1 1/2" Cu alloy gate valve (damaged). 1 x 2' length of stainless steel pipe. 1 x deadlight torn buckle. |
| 403/00 | 400 Yards East of the Southward Well site of Wreck of HMS Colossus | Colossus (HMS) | All artefacts recovered are listed on a separate sheet and all handed over to the St Mary's Museum and those that have not will be when the conservation is complete |
| | | | |
| | **WRECK AMNESTY** | | |
| A/0064 | Isles of Scilly | Cita | 1 x orange painted metal piece, approx 8" diameter. |
| A/0105 | Crebawethen Rocks, Nr Bishops Light, Scilly Isles | Douro | 2 x slave bangles |
| A/0107 | Isles of Scilly | Douro | 1 x slave currency bangle |
| A/0151 | Isles of Scilly | Association (HMS) | 1 x cannon ball |
| A/0209 | Middle Ledges, Isles of Scilly | Delaware | 1 x curvilinear brass 'coathanger' like object |
| A/0221 | Gilstone Ledges, Isles of Scilly | Association (HMS) | 1 x cannonball |
| A/0222 | Isles of Scilly | Hollandia (1743) | wooden knife handles |
| A/0223 | Western Rocks, Isles of Scilly | Princess Maria (1686) | bricks |
| A/0224 | Kettle Rock, Isles of Scilly | Poliere (1970) | 1 x ceramic tile |
| A/0226 | Baker Rock, Isles of Scilly | Aksai (1875) | 1 x valve tap, 1 x porthole |
| A/0227 | Hard Lewis, Isles of Scilly | Juno | 1 x cannonball |
| A/0230 | Retarrier Ledges, Isles of Scilly | Schiller (1875) | 1 x brass flange |

| Droit Number: | Exact Position Found: | Name of Wreck: | Description: |
|---|---|---|---|
| A/0239 | Isles of Scilly | Douro (1843) | bronze manillas |
| A/0274 | off Scillies | Douro ? | 1 x manilla, brass, horseshoe shaped. |
| A/0286 | Crebawethan, Isles of Scilly | Douro | 50 x manilas (slave tokens) |
| A/0287 | Tresco, Isles of Scilly | Poleire | 1 x ventilation cover (door) |
| A/0297 | Seven Stones, off Land's End | Torrey Canyon | 1 x porthole clamp, electrical junction box |
| A/0301 | Penninis, Isles of Scilly | Minnehaha | 1 x 14.5" copper pin |
| A/0412 | Isle of Scilly | King Cadwallon | 4 x bits of copper nails with barbs |
| A/0427 | Isles of Scilly | Douro | 30 x bronze manillas |
| A/0466 | Isles of Scilly | Unknown | 1 x porthole, 1 x deadlight |
| A/0508 | Found off the Scillies | Unknown wreck | 1 x Charles II crown coin dated 1679 |
| A/0579 | Isles of Scilly | Association (HMS) | 1 x iron cannonball |
| A/0582 | Isles of Scilly | Minnehaha | 1 x brass lamp cover |
| A/0590 | Crebawethan, Isles of Scilly | Douro | 9 x bronze manila bangles (8= broken) |
| A/0656 | Seven Stones, off Lands End | Torrey Canyon | 1 x brass wheel, 1 x hinge |
| A/0730 | Broad Sound, isles of Scilly | Hollandia | 4 x fragments of onion bottles (see remarks box) |
| A/0732 | Round Rock, Isle of Scilly | Douro | 5 x manilla fragments |
| A/0738 | White Island, St Martins, Isles of Scilly | Tobasco | 2 x bottle sherds |
| A/0739 | Retarrier ledges, Isles of Scilly | Schiller | 1 x lead piping |
| A/0773 | off Scilly Isles | Cita | 1 x ships radio |
| A/0817 | off Isles of Scilly | Poleire | 1 x door handle |
| A/0818 | off Isles of Scilly | Cita | 1 x small circular door |
| A/0942 | Round Rock, Western Rocks, Isles of Scilly | Douro | 1 x manilla |
| A/0943 | Western Rocks, Isles of Scilly | Unknown | 1 x bronze/brass pin |
| A/0947 | Seven Stones Reef, Isles of Scilly | Torrey Canyon | 1 x junction box, 1 x fire sprinkler |
| A/0958 | Gilstone Rock, Isles of Scilly | Association (HMS) | 1 x silver plate |

| Droit Number: | Exact Position Found: | Name of Wreck: | Description: |
|---|---|---|---|
| A/0968 | Near Maiden Bower Island, Isles of Scilly | Zelda | 1 x steel spring-like item, 10cm high & 15cm across. |
| A/1092 | Purchased from Richard Larn, from Association, Isles of Scilly | Association (HMS) | 1 x silver piece of eight |
| A/1096 | Western Rocks, Isles of Scilly | Douro | 13 x complete slave tokens, 22 x incomplete slave tokens, 1 x blue glass bead |
| A/1097 | Hard Lewis (?), Isles of Scilly | Gilmour | 1 x 18" copper nail |
| A/1099 | N of Hard Lewis Rocks, Isles of Scilly | Unknown | 1 x 12" copper nail in bit of timber |
| A/1135 | St Mary's, Isles of Scilly | Cita | 1 x wristwatch, 1 x lighter, 1 x toy car, 3 x pair woollen socks |
| A/1146 | Seven Stones, off Lands End | Torrey Canyon | 20 x gaskets |
| A/1196 | E side of St Martin, Isles of Scilly | Unknown | 1 x deadeye & rope |
| A/1198 | Western Rocks, Isles of Scilly | Douro | 1 x manila |
| A/1287 | Flat ledges, east of St Martins, Isles of Scilly | Schooner wreck | 1 x copper pin 4" long |
| A/1290 | Western Isles of Scilly | Douro | 1 complete and various pieces of copper amulets 2" diam |
| A/1303 | Isles of Scilly | T.W. Lawson | 1 x 3" brass nut |
| A/1319 | Off Isles of Scilly | Douro | 12 x manillas |
| A/1412 | Western Rocks, Isles of Scilly | Douro | 2 x slave bangles |
| A/1503 | Isles of Scilly | Mather? | 1 x urn tap |
| A/1528 | Isles of Scilly | Douro | 1 x wooden knife handle, 6 x slave tokens |
| A/1545 | Isles of Scilly | Lady Charlotte | 1 x firebrick |
| A/1550 | Isles of Scilly | Malta | 1 x valve, 1 x brass object |
| A/1561 | Isles of Scilly | Rarau | 1 x valve |
| A/1567 | Isles of Scilly | Santa Cristo De Castello | 1 x bit wooden rigging, 1 x copper cake?, 6 x pins, 1 x 9lb barshot |
| A/1574 | Isles of Scilly | Toledo | 1 x plate |
| A/1707 | Isles of Scilly | Minnehaha | 1 x porthole |
| A/1732 | Western Rocks, Isles of Scilly | Zee Lelie | approx 50 x porcelain sherds, small. |
| A/1734 | Round Rock, Isles of Scilly | Douro | 10 x brass slave manillas |
| A/1760 | Western Rocks, Isles of Scilly | Douro | Manillas - 2 x complete, 5 pieces. |

| Droit Number: | Exact Position Found: | Name of Wreck: | Description: |
|---|---|---|---|
| A/1831 | Gilstone Rock, Isles of Scilly | Association (HMS) | 1 x cannonball |
| A/1899 | Isles of Scilly | Cita | 1 x coathook |
| A/1936 | Isles of Scilly | Douro | 5 x slave tokens |
| A/1940 | Isles of Scilly | Douro | 2 x slave tokens |
| A/1943 | E of St Martins, Isles of Scilly | Unknown | 1 x pulley block, 1 x pitcher |
| A/2105 | N end of Bryher Island, Isles of Scilly | Poleire | 3 x bits brass tube |
| A/2202 | Western Rocks, Isles of Scilly | Duoro | 4 x brass manillas, 2 x glass beads, 1 x broken plate |
| A/2266 | Seven Stones, off Land's End | Rarau | 1 x bell |
| A/2346 | Isles of Scilly | Douro (1853) | 1 x agreas bead |
| A/2383 | St Agnes | Plympton | 1 x porthole |
| A/2412 | Isles of Scilly | Douro | 6 x broken manillas |
| A/2423 | Western Rocks, Isles of Scilly | Douro | 2 x manillas |
| A/2425 | Seven Stones Reef, off Land's End | Torrey Canyon | 1 x porthole, 1 x light base |
| A/2439 | Newfound Point, St Mary's, Isles of Scilly | Cita | 2 x hatch nuts |
| A/2448 | St Agnes, Isles of Scilly | Plympton | 1 x winch oiler |
| A/2584 | St Mary's Road, Isles of Scilly | Independza | nails & rivets |
| A/2624 | Off Isles of Scilly | Colossus/Brinkburn (HMS) | 1 x brass ring, 1 x copper ring |
| A/2639 | Isles of Scilly | Douro | 2 x slave manillas |
| A/2651 | Isles of Scilly | Douro | 2 x slave tokens |
| A/2662 | Outer Haycock, nr Annet, Isles of Scilly | Thomas W. Lawson | 1 x brass bracket from ship's binnacle. |
| A/2666 | Crebawethen, Western Rocks, Isles of Scilly | Douro | 6 x manilas, all approx 2.5" wide. |
| A/2675 | Off Isles of Scilly | Juno | Lead scupper |
| A/2680 | Off Western Rocks, Isles of Scilly. | Douro | Manillas, aggrirs (?), wooden shrave (part), knife handle (part). |
| A/2724 | Off Crebawethan Island, Isles of Scilly | Douro | 50 x manilas |

| Droit Number: | Exact Position Found: | Name of Wreck: | Description: |
|---|---|---|---|
| A/2861 | W St Mary's off Newfoundland Point, Isles of Scilly | Cita | 1 x thermometer |
| A/2907 | Back of the quay at St Agnes, Isles of Scilly | Not from Wreck | 1 x iron cannon (18th C) |
| A/2917 | Isles of Scilly | Douro | 2 x manillas, 10 x broken manillas |
| A/2920 | Broad Sound, Isles of Scilly | Hollandia | 7 x pieces pottery, 3 x pieces glass, 3 x pieces clay pipe |
| A/2921 | St Agnes, Isles of Scilly | Plympton | 1 x porthole |
| A/3089 | St Agnes, Isles of Scilly | Earl of Lonsdale | 3 x deadeyes |
| A/3108 | Gilstone, Western Isles of Scilly | Association (HMS) | 2 x cannonballs |
| A/3110 | Bishops Rock lighthouse, Isles of Scilly | Not from Wreck | 1 x pulleyblock, 10 x bottles, 1 x jar, various bits pottery, 1 x makers plate |
| A/3193 | Seven Stones Reef, off Land's End | Torrey Canyon | 1 x 2" flanged gate valve, bronze. |
| A/3206 | Isles of Scilly? | Primrose (HMS) | 1 x wood & brass pulley sheave with broad arrow. |
| A/3244 | Isles of Scilly | Not from Wreck | 1 x pipe, 1 x bronze musket barrel, 1 x porthole, 2 x sounding leads, 1 x bronze receptacle, 1 x granite grind wheel, 1 x granite cross |
| A/3245 | Isles of Scilly | Sussex | 2 x portholes, 1 x telegraph |
| A/3247 | Isles of Scilly | Schiller | 1 x porthole, 1 x fork, 2 x ladle, several x spoons, 1 x spar end, 1 x teapot, 1 x dinner bell, 1 x serviette ring, 1 x dish, Various bits & pieces |
| A/3248 | Isles of Scilly | Colossus (HMS) | a quantity of musket shot, 1 x pulley centre |
| A/3264 | off St Martins, Isles of Scilly | Embricos | 1 x pot water filter |
| A/3305 | outer Gilstone, Western Rocks, Isles of Scilly | Association (HMS) | 39 x coins (5 x sixpences, 15 x shillings, 3 x half crowns, 4 x crowns, 2 x 1 reale, 8 x 8 reales) |
| A/3307 | Blue Carn, St Mary's, Isles of Scilly | Brodfield | 1 x decklight lens, 1 x daisy ventilator |
| A/3311 | Round Rock of Crebewathen, Broad Sound, Isles of Scilly | Douro | 1 x bead, 16 x slave tokens |
| A/3314 | Lewis Rocks, Eastern Isles, Isles of Scilly | Gilmore | 1 x porthole light |
| A/3316 | Broad Sound, Isles of Scilly | Hollandia (VOC) | 3 x silver Ducatoons |

| Droit Number: | Exact Position Found: | Name of Wreck: | Description: |
|---|---|---|---|
| A/3319 | Daisy Rock, western Rocks, Isles of Scilly | Jean Gougy | 2 x telegraph handles |
| A/3330 | Lethagus Ledges, SW St Agnes, Isles of Scilly | Plympton | 2 x keys, 2 x tiles |
| A/3331 | off Kettle Rock, NW end Tresco, Isles of Scilly | Poleire | 1 x bowl, 1 x ventilator, 1 x door knob |
| A/3366 | purchased from Antique Shop (for £450) | Hollandia | silver coin collection |
| A/3409 | Isles of Scilly | Zelda | 1 x piece porthole |
| A/3411 | Isles of Scilly | Bolina | 21 x ships pins |
| A/3432 | St Agnes Harbour | Not from wreck | 2 x lengths hardwood |
| A/3433 | Newfoundland Point, St Mary's, Isles of Scilly | Cita | 1 x propeller blade, 15 x coat hangers |
| A/3572 | Isles of Scilly? | Italia | 1x porthole back ring brass |
| A/3607 | Isles of Scilly? | Mando | 1x Porthole |
| A/3681 | Isles of Scilly | King Cadwallon | 1 x copper pipe |
| A/3717 | St Mary's, Isles of Scilly | Cita | 1x chrome plated machine dial (4" diam). Marked 21012. |
| A/3765 | Lethegus Reef, S of St Agnes, Isles of Scilly | Plympton | 1 x mast light casing |
| A/3766 | Hard Lewis Rocks, Isles of Scilly | King Cadwallon | 3 x oil cans |
| A/3771 | Seven Stones Reef, off Land's End | Torrey Canyon | 1 x porthole |
| A/3981 | Isles of Scilly? | Minnehaha | 1 x bronze bell letter. 1 x pulley wheel. |
| A/3982 | Isles of Scilly? | Delaware | 1 x yellow silk scarf. |
| A/3983 | Isles of Scilly? | Independeza / indipendenza | 1 x name board marked "Independeza" |
| A/3984 | Isles of Scilly? | Mando | 1 x Ship's wheel. 1 x Ship's lifebelt. 1 x metal deck fitting and inspection cover. |
| A/3985 | Isles of Scilly | Colossus (HMS) | 1 x handle from 3rd - 4th century Greek Vase. |
| A/3986 | Isles of Scilly? | TW Lawson | 1 x belaying pin. 1 x Captain's chair. |
| A/3987 | Isles of Scilly? | Longships | 1 x Hand bell. 1 x clock. |
| A/3988 | Isles of Scilly | Association (HMS) | 2 x bronze pulley wheel. 1 x bar of lead. 1 x piece of ship's bell. Selection of small items. 1x breech loading cannon. Several corroded coins. 1 x William II shilling (1697). 1 x PhilipV piece of two (1723). |

| Droit Number: | Exact Position Found: | Name of Wreck: | Description: |
|---|---|---|---|
| A/3989 | Isles of Scilly | Brinkburn | 1 x spoon. 1 x meat dish cover. |
| A/3990 | Isles of Scilly | Poleire | 1 x peloris. 1 x oval stainless steel plate. |
| A/3991 | Isles of Scilly | Thames | 1 x white tureen |
| A/3992 | Isles of Scilly | Romney (HMS) | Miscellaneous relics. |
| A/3993 | Isles of Scilly | Hollandia | 1 x brass reamer. 1 x brass sword guard. 2 x musket side panels. 1 x set of money weights. 3 x German money tokens. 1 x lead flowerpot. 1 x silver spoon. 1 x small bellarmine jar and mercury jug. |
| A/3994 | Isles of Scilly | Douro | 3 x manillas |
| A/3995 | Isles of Scilly | Torrey Canyon | 1 x porthole |
| A/3996 | Unknown | Various unknown | 1 x string of beads, other beads, 2 x gold rings. 1 x silver spoon. Pieces of eight, coins & buckles. Piece of copper, large cannonball, wooden pulley, lead shot, beam balance, sounding lead, brass dividers, pewter plate, copper bolt in timber. |
| A/3997 | Isles of Scilly | Serica | 1 x ruby glass lamp. |
| A/3998 | Isles of Scilly | Eagle (HMS) | 1 x ship's bell. |
| A/3999 | Isles of Scilly | Tabasco (Tobasco) | 1 x sounding lead. |
| A/4000 | Isles of Scilly | Rarau | 1 x porthole. |
| A/4001 | Isles of Scilly | Schiller | 1 x signal cannon. 1 x porthole. |
| A/4014 | Western Rocks, Bishop Rock | Falkland | 1 x porthole, 1 x letter 'N' |
| A/4142 | Isles of Scilly | Torrey Canyon | 1x brass hatch cover |
| A/4149 | Given by someone who had dived the 'slave token wreck' off the Isles of Scilly. | unknown [Douro?] | 2x slave tokens. |
| A/4192 | Isles of Scilly | Douro | 1x slave bangles |
| A/4193 | Isles of Scilly | Cita | 1x clamps |
| A/4197 | Seven stones reef, off Land's End | Fantee | 1x porthole |
| A/4246 | Western Rocks, Isles of Scilly | Association (HMS) | 6 x musket shot, 1 x cannonball |
| A/4249 | Crebawethan, Isles of Scilly | Castleford | 1 x porthole |
| A/4254 | Isles of Scilly | Minnehaha | 1 x steering wheel from model T ford |
| A/4317 | Isles of Scilly | Plympton or Hathor | 2x pressure gauges. |

| Droit Number: | Exact Position Found: | Name of Wreck: | Description: |
|---|---|---|---|
| A/4372 | Isles of Scilly | Association (HMS) | 1x king gvielmus III half crown 1607-silver. |
| A/4384 | Isles of Scilly | Douro | 2 x small copper horseshoe shaped metal objects - manillas. |
| A/4410 | Off Isles of Scilly | Association (HMS) | 12 x silver coins, 1 x fragment ships bell, 1 x plumb line & bob, 1 x bottle & cork, 4 x wicker baskets |
| A/4412 | Off Isles of Scilly | Hollandia | 1 x concretion in form of musket flint gun, 11 x lead ingots |
| A/4427 | Off Isles of Scilly | Eagle (HMS) | 1 x tile, 1 x musket trigger guard, 1 x pair dividers, 1 x lead ingot, 1 x sounding weight, 1 x spoon, 1 x lead bowl |
| A/4428 | Off Isles of Scilly | Prinses Maria | 1 x complete pewter bottle top |
| A/4430 | Off Isles of Scilly | Thames | various broken pottery fragments |
| A/4431 | Off Isles of Scilly | Douro | various manilla/slave tokens |
| A/4434 | Seven Stones, off Land's End | Torrey Canyon | 1 x light cover |
| A/4439 | Seven Stones, off Land's End | Rarau | Shipbuilders name plate, brass |
| A/4440 | Isles of Scilly | Poleire | China plate marked "Progress Shipping Co.", shipbuilder's name plate, oval, brass. |
| A/4441 | Western Rocks, Isles of Scilly | Susanna | Ship's rudder pintle, bronze. |
| A/4442 | Isles of Scilly | Juno | Sounding lead. Large ship's scupper pipe and flange. Galley hearth brick, triangular pan weights, wooden deadeye, ship's boiler valve, porthole, broken glass. |
| A/4445 | ? | Active | Brass plaque, writing illegible. Brass plaque labelled "Galley exhaust fan damper". |
| A/4447 | Isles of Scilly | Hathor | Scupper pipe scree, three-bar, brass. 3 x iron stone lumps, cargo, maked "D". |
| A/4449 | Round Rock, Isles of Scilly | Douro | Manillas, approx. 10. |
| A/4455 | Isles of Scilly | Cita | Large collection including - various Toyota car parts, assorted fridge magnets. Moulded sports trophies, men's shirts, trainers, M&S nightdresses, large collection of clothing, lifebelt, swimming pool chemical cleaner, kitchen scales, computer equipment. |
| A/4470 | Isles of Scilly | Colossus (HMS) | 12 x pistol shot, 12 x hull pin, 11 x musket balls, 1 x cannon gun apron, 2 x cannonballs, 1 x spun yarn plug, 2 x hull sheathing fragments, 1 x 'kettle' lifting eye/side plate, 1 x lead bar |
| A/4479 | Isles of Scilly | Hollandia | 3 x buckle, 18 x musket shot, lead shot, 2 x handle spigots, 1 x handle, 6 x pike staff ends, 13 x musket fittings, 1 x button, 2 x sword handle, nails, bricks, 2 x ingot, cutlery, 1 x sounding lead |
| A/4486 | Isles of Scilly | Zeelilie | quantity of porcelain sherds, 1 x brass artefact & chain |
| A/4489 | Isles of Scilly | Association (HMS) | 2 x pot sherd, 2 x sounding lead, 2 x hull pin, 2 x sections lead pipe, 5 x pulley block sleeve, 1 x plynth, 1 x weight, 1 x bell fragment, 1 x hull fragment, 1 x musket butt plate, 1 x trigger guard, 1 x brass artefact, 1 x lead container |
| A/4490 | Isles of Scilly | Princess Maria | 1 x pulley block sleeve & fragment, 2 x fragments ladies fan, 1 x bottle cap, 1 x hull timber fragment & pin |
| A/4496 | Isles of Scilly | Plympton | 1 x porthole, 1 x porthole clip |

| Droit Number: | Exact Position Found: | Name of Wreck: | Description: |
|---|---|---|---|
| A/4499 | Isles of Scilly | Italia | Pieces of coal, Walker brass fish log, keyhole plate cover, 6 x assorted brass artefacts, shell cases, portholes, Walker cherub speed/distance log instrument. |
| A/4517 | Western Rocks, Isles of Scilly | Brinkburn | Main steam operating wheel, brass. Emergency steering standard head, damaged, oiler valve, brass. |
| A/4520 | Off the Isles of Scilly | Eagle (HMS) | 6 x assorted glass and potter sherds. Concretion mould of a cannonball, assorted brass musket and pistol parts including trigger guards, throat-pipes, bayonet scabbard, butt plate etc. |
| A/4521 | Off the Isles of Scilly | Maipu | Pulley-block sleeve, lignum vitae wood. |
| A/4522 | Off the Isles of Scilly | Thames | Various pot sherds. |
| A/4523 | Off the Isles of Scilly | Torrey Canyon | 1 x tin of lifeboat emergency rations, 1 x name plate |
| A/4529 | Off the Isles of Scilly | Firebrand (HMS) | 1 x lead pipe & flange |
| A/4550 | Isles of Scilly | Enfant De Bretagne | 1 x binnacle cover |
| A/4559 | Isles of Scilly | Minnehaha | 1 x topmast head double clamp, 2 x shroud plates, 1 x wheel hub & 10 part spokes |
| A/4592 | Isles of Scilly | Blazer (HMS) | 8 x shellcases (bases & heads) |
| A/4593 | Old Town, Isles of Scilly | Brodfield | 1 x practice shell |
| A/4610 | Bishop Rock , Isles of Scilly | Unknown wreck | 1 x copper fragment, with knob - part of compass binnacle. |

## 14.6 Contacts

### 14.6.1 List of research contacts

| Name | Material | Visit in person | Other |
|---|---|---|---|
| Historic Environment Service, Truro | Cwll & IOS HER | √ | |
| NMR, Swindon | Wreck Records | | e-mail, online search |
| UKHO, Taunton | Historic Charts<br>Survey Records<br>Archives | √ | |
| Public Record Office (The National Archive) | Archives | | Online search |
| Advisory Committee on Historic Wrecks | Site reports | | Online search |
| English Nature | Seabed survey & air photos | Copy of the seabed report and digitised air photos supplied by EN | |
| The Caird Library, National Maritime Museum, London | Secondary sources | | Online search |
| The Bartlett Library of the National Maritime Museum, Falmouth | Lloyds Register<br>Secondary Sources | √ | |
| The IOS Museum | Secondary Sources | √ | |
| The Cornish Studies Library Redruth | Secondary Sources | √ | |
| Cornwall Library Service | | Online search of Library Service catalogue + book ordering | |
| The Courtney Library, RIC, Truro | Secondary sources | √ | |
| The Cornwall Record Office, Truro | Archives | √ | |
| HER library | Secondary sources | √ | |

### 14.6.2 List of consultees

| Contact name | Organisation name | Contact position | Personal interview | Telephone |
|---|---|---|---|---|
| Colin Sturmer | Duchy of Cornwall | Land Steward | | √ |
| Philip Hygate | IOS Council | Chief Executive | √ | |
| Don Nicholass-McKee | IOS Council | Chief Planning Officer | √ | |
| Steve Watt | IOS Council | Maritime Officer | √ | |

| Contact name | Organisation name | Contact position | Personal interview | Telephone |
|---|---|---|---|---|
| Gill Arbery | IOS Council | Conservation Officer | √ | |
| Jane Buchanan | IOS Council | IAP Facilitator | √ | |
| Liz Davey | IOS Council | AONB Officer | √ | |
| Amanda Martin | IOS Museum | Curator | √ | |
| Sarnia Butcher | IOS Museum | Trustee | √ | |
| Richard Larn | IOS Museum | Trustee | √ | |
| Mike Gurr | IOS Wildlife Trust | Chairman | √ | |
| Dave Mawer | IOS Wildlife Trust | Senior Field Officer | √ | |
| Tim Allsop | St Martin's Diving School | Diver | √ | |
| Nick Johnson | HES, CCC | County Archaeologist | √ | |
| Simon Thorpe | HES, CCC | Planning Advice Officer | √ | |
| Steve Hartgroves | HES, CCC | HER Manager | √ | |
| Charles Thomas | Formerly Director of the Institute of Cornish Studies | Archaeologist & author | √ | |
| Jeremy Clitherow | English Nature | Conservation Officer | √ | |
| Roger Covey | English Nature | Maritime Officer | | √ |
| Sarah Manning | Countryside Agency | Countryside Officer | | √ |
| Peter Bowden | DEFRA | Team Leader | | √ |
| Ian Morrison | English Heritage | Inspector of Ancient Monuments | √ | |
| Vanessa Straker | English Heritage | Regional Archaeological Science Officer | √ | |
| Philip Rees | Hydrosearch | Marine Geologist | √ | |
| Kevin Camidge | | Marine Archaeologist | | √ |

## 14.7 Sources

### 14.7.1 Published sources and documents


Ashbee, P, 1982. Mesolithic Megaliths? The Scillonian Entrance-Graves: A New View. *Cornish Archaeol* **21**, 3-22

Ashbee, P, 1996. Halangy Down, St Mary's, Isles of Scilly, Excavations 1964-1977. *Cornish Archaeol* **35**, 9-201

Austin, K, 2001. *Victorian Titanic, The Loss of the Schiller in 1872*. Halsgrove

Berridge P and Roberts, A, 1986. The Mesolithic Period in Cornwall. *Cornish Archaeol* **25**, 7-34

Bird, S, 1991. *Mayday! Preserving Life from Shipwreck off Cornwall*. Ex Libris Pres, Bradford on Avon

Black, J, 2003. *HMS Colossus Designated Historic Wreck Site Archaeological Desk-Based Assessment*. Wessex Archaeology Report ref. 52600.02

Blaeu, W J, 1625. *The Sea-Mirror*. Amsterdam.

Borlase, W, 1756. *Observations on the Ancient and Present State of the Islands of Scilly*. Oxford

Bowley, RL, 1990. *The Fortunate Isles*. 8th edition, Bowley Publications Ltd, St Mary's

Bowley, RL, 2001. *Scilly at War*. Bowley Publications Ltd, St Mary's

Burns, B, Cunliffe, B and Sebire, H, 1996. *Guernsey: an Island Community of the Atlantic Iron Age*. Oxford University Committee for Archaeology Monograph **No 43**, Guernsey Museum Monograph **No 6**

Butcher, S A, 1978. Excavations at Nornour, Isles of Scilly 1969-83: The Pre-Roman Settlement. *Cornish Archaeol* **17**, 29-112

Butcher, SA, 2002. *Cist at Lunnon, St Mary's Isles of Scilly, April 2002*. Unpublished note held by CAU

Camidge, K, 2001, *Colossus Survey Report 2001*. Unpublished site report

Camidge, K, 2002. *Colossus Survey Report and Archive*. Digital format report

Chudleigh, D, 1992. *Bridge over Lyonesse*. Isles of Scilly Steamship Company

Clarke, JDG, 1954. *Excavations at Starr Carr: An Early Mesolithic Site at Seamer near Scarborough, Yorkshire*. Cambridge University Press

Coate, S, 1994. *The Problems of the Scillonian Entrance Graves: the Evidence Reconsidered*. Unpublished undergraduate thesis held by CAU

Collins, Captain G, 1693. *Great Britain's Coasting Pilot*. London. Fascimile of the 1753 edition by The Sudbrook Press, Prestwood Bucks

Collis, JR (ed) 2001. *Society and Settlement in Iron Age Europe. Actes de XVIIIe Colloque de l'AFFAF, Winchester 1994*. Sheffield Academic Press

Cooke, IM, 1993. *Mother and Son; The Cornish Fogou*. The Men-an-Tol Studio, Penzance

Cooke, J H, 1883. *The Shipwreck of Sir Cloudesley Shovel on the Scilly Islands in 1707*. IOS Museum Publication **No 6**

Cowan, Z, 2001. *Francis Frith's Isles of Scilly Photographic Memories*. Frith Book Co, Salisbury

Cowen, D. (1987) GIS versus CAD versus DBMS: What are the differences? *Photogrammetric Engineering and Remote Sensing* **54**: 1551-1555

Cunliffe, B, 1996. The Iron Age Burials of Guernsey in B Burns, B Cunliffe & H Sebire 1996, 83-116.

Cunliffe, B, 2000. *Facing the Ocean: the Atlantic and its Peoples 8000BC–1500AD*. Oxford University Press

Cunliffe, B, 2001. *The Extraordinary Voyage of Pytheas the Greek*. Allen Lane, The Penguin Press

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

Defoe, D, 1724. *A Tour of Great Britain*.

Durrell, L, 1960. *Reflections on a Marine Venus*. Faber and Faber Ltd, London

Edwards, G, 2002. The Archaeology of Shipwrecks, in A Davidson(ed) 2002, 87-94

Evans, CDR, 1990. *United Kingdom offshore regional report: the geology of the Western English Channel and its western approaches*. British Geological Society, London

Evans, J G, 1984. Excavations at Bar Point, St Mary's, Isles of Scilly, 1979-1980. *Cornish Studies* **11**, 7-32

Fenwick, V and Gale, A, 1999. *Historic Shipwrecks Discovered, Protected and Investigated*. Tempus Publishing

Fitzpatrick, AP, 2001. Cross-Channel exchange, Hengistbury Head, and the end of hillforts, in J R Collis (ed) 1001

Fowles, J, 1974. *Shipwreck*. Jonathan Cape, London

Friel, I, 2003. *The British Museum Maritime History of Britain and Ireland c400-2001*. British Museum Press

Fulford, M, Champion T, and Long A (eds), 1997. *England's Coastal Heritage: A survey for English Heritage and the RCHME*. RCHME and English Heritage Archaeological Report **15**

Gibson, FE, 1967. *Shipwrecks on the Isles of Scilly*.

Gibson, (FE), nd *c*1979. *Shipwrecks Around the Isles of Scilly*.

Gill, C, 1975. *The Isles of Scilly*. David & Charles, Newton Abbot

Grigson, G, 1977. *The Scilly Isles*. Duckworth, London

Handford S A (trans) 1951. Julius Caesar. *The Conquest of Gaul*. Penguin Books

Hawkins, A B, 1971. Sea-level changes around South-West England, *Colston Papers* **XXIII**, Bristol, 67-88

Heath, R, 1750. *A Natural and Historical Account of the Isles of Scilly*. Facsimile published in 1967 by F Graham, Newcastle on Tyne

Hencken, H O'N, 1932. *The Archaeology of Cornwall and Scilly*. Methuen & Co Ltd, London

Herring, P, 1994. The cliff castles and hillforts of West Penwith in the light of recent work at Maen Castle and Treryn Dinas, *CornishArchaeol* **33**. 40-56

Herring, P, 1998. *Cornwall's Historic Landscape: Presenting a method of historic landscape character assessment*. CAU, Truro

Hudston, S, 2000. *Islomania*. AGRE books, Bridport

Isles of Scilly Museum, 1973. *Robert Maybee, The Scillonian Poet*. IOS Museum Publication No **9**

Johns, C, 1995. *Great Porth Coast Protection Scheme, Bryher, Isles of Scilly: Results of Archaeological Recording*. CAU archive report

Johns, C, forthcoming. An Iron Age Sword and Mirror Burial and Iron Age/Romano British Settlement on Bryher, Isles of Scilly. *Cornish Archaeol*

Kirkham, G, 2003. *Hugh Town (Cornwall and Scilly Urban Survey: Historic Characterisation for regeneration)*. CAU, Truro

Land Use Consultants, 1996. *Isles of Scilly Historic Landscape Assessment and Management Strategy: For the Preparation of Countryside Stewardship and Other Grant Applications*. Report prepare by LUC in association with CAU for the Duchy of Cornwall in partnership with the countryside Commission and MAFF

Land Use Consultants 2002. *The Isles of Scilly: A landscape assessment of the Area of Outstanding Natural Beauty*. The Countryside Agency

Larn, R, 1993. *Shipwrecks of the Isles of Scilly*. Thomas & Lochar, Nairn

Larn, R (ed), 1999. *Ships, Shipwrecks and Maritime Incidents around the Isles of Scilly*. Isles of Scilly Museum Publication No **3**.

Larn R & B, 1995. *Shipwreck Index of the British Isles Vol 1*. Lloyd's Register of Shipping, London

Linzey, R, 2000. *Fortress Falmouth: A Conservation plan for the historic defences of Falmouth Haven*. English Heritage

Llewellyn, S, 2000. *Hell Bay*. Arch, Tresco

Mathews, W H, 1922. *Mazes and Labyrinths*.

McBride, P and Larn, R, 1999. *Admiral Shovell's Treasure and Shipwreck in the Isles of Scilly*. Troutbeck Press, Mabe

Morris, R, 1969. *Island Treasure: The Search for Sir Cloudesley Shovell's Flagship 'Association'*. Hutchinson, London

Morris, R, 1979. *HMS Colossus: the Story of the Salvage of the Hamilton Treasures*. Hutchinson, London

Nance, RM 1924. Troy Town. *JRIC* **21**, 261-279

Nance, RM 1963. *A Glossary of Cornish Sea-words*. Federation of Old Cornwall Societies

Neal, DS ms. *Draft report on the 1970/1 excavations at East Porth, Samson*. Unpublished ms

Noall, C, 1972. *Cornish Seines and Seiners: a history of the pilchard fishing industry*. Bradford Barton, Truro

'Norm', nd *c*1977. *Divers of Scilly*.

Over, L, 1987. *The Kelp Industry in Scilly*. IOS Museum Publication **No 14**

Owoc, MA, Adovasio, JM, Illingworth, J, Greek, M and Manske, K, 2003. *Perishables and Pots in Later Prehistory: Unravelling a Distinctive Scillonian Cultural Tradition*. Lecture presented at the 68th Annual Meeting of the Society for American Archaeology, Milwaukee, Wisconsin

Parkes, C, 1990. *Fieldwork in Scilly: March 1990: Early Batteries on The Garrison, St Mary's*. CAU, Truro

Quinnell, H, 1986. Cornwall during the IronAge and Roman Period. *Cornish Archaeol* **25**, 111-134

Quinnell, H, nd. *Isles of Scilly Costal Erosion Project 1989-93: The Pottery and Other Significant Artefacts from Sites with Recorded Stratigraphy*. CAU Archive report

Ratcliffe, J, 1989. *The Archaeology of Scilly: An assessment of the resource and recommendations for its future*. CAU, Truro

Ratcliffe, J, 1991. *Lighting Up the Past in Scilly: Archaeological Results from the 1985 Electrification Project*. ICS and CAU, Truro

Ratcliffe, J, 1993. *Fieldwork in Scilly 1991 and 1992*. CAU, Truro

Ratcliffe, J, 1994. *Fieldwork in Scilly July 1994*. CAU, Truro

Ratcliffe, J and Johns, C, 2003. *Scilly's Archaeological Heritage*. Twelveheads Press, Truro

Ratcliffe, J and Johns C, forthcoming. *St Agnes Coast Protection Scheme, Isles of Scilly: Archaeological Recording*. CAU, Truro

Ratcliffe, J and Parkes, C, 1989. *Fieldwork in Scilly: March 1989. Recording work at cliff-face sites on Samson and St Agnes*. CAU, Truro

Ratcliffe, J and Parkes, C, 1990. *Fieldwork in Scilly: September 1989*. CAU, Truro

Ratcliffe, J and Sharpe, A, 1990. *Fieldwork in Scilly Autumn 1990*. CAU, Truro

Ratcliffe J and Straker, V, 1996. *The Early Environment of Scilly*. CAU, Truro

Ratcliffe, J and Straker, V, 1997. The changing landscape and coastline of the Isles of Scilly: recent research. *Cornish Archaeol* **36**, 74-76

Ratcliffe, J and Straker, V, 1998. *Old Town Bay Coast Protection Scheme, St Mary's, Isles of Scilly: Results of Archaeological Recording*. CAU, Truro

RCHME 1995. *Thesaurus of Monument Types: A standard for use in archaeological and architectural recording*. RCHME and English Heritage

Savage A, 1983. *The Anglo-Saxon Chronicles*, Guild Publishing, London

Scaife, RG, 1984. A History of Flandrian Vegetation in the Isles of Scilly: Palynological Investigation of Higher Moors and Lower Moors Peat Mines, St Mary's. Cornish Studies **II**, 33-47

Scarre, C, 2001. A Pattern of Islands: The Neolithic Monuments of North-West Brittany. *European Journal of Archaeology* Vol **4(3)**, 141-358

School of Legal Studies 2003. *English Heritage Marine Archaeology Legislation Project*. University of Wolverhampton

Selwood, EB, Durrance, EM and Bristow, CM (eds), 1998. *The Geology of Cornwall*. University of Exeter Press

Sobel, D and Andrews WJH, 1998. *The Illustrated Longitude*. Fourth Estate, London

Rogers, B, nd *c*1969. *Diver's Report: Excavation of HMS Association, Sank 1707*. Lyonesse Salvage Co Ltd, Scilly

Taylor, S R, 2004. *Dolphin Town Playing Field, Tresco, Isles of Scilly: Archaeological Watching Brief*. CAU, Truro

The Coastguard Agency 1995. *The History of HM Coastguard*. The Coastguard Agency, Southampton

Thomas C, 1985. *Exploration of a drowned landscape: archaeology and history of the Isles of Scilly*. Batsford, London

Thomas, C, 1988. The Context of Tintagel: a new model for the diffusion of post-Roman Mediterranean imports. *Cornish Archaeol* **27**, 7-25

Thomas DM (ed), 1970. *The Granite Kingdom – Poems of Cornwall*. Bradford Barton, Truro

Troutbeck, J, 1796. *A Survey of the Ancient and Present State of the Scilly Islands*. Sherborne

Weatherhill, C, 1985. The Ships of the Veneti. *Cornish Archaeol* **24**. 163-169

Whitfield, HJ, 1852. *Scilly and its Legends*. FT Vibert, Penzance. Facsimile reprint by Llanerch Publishers, Felinfach

Wigglesworth, A, 1994. *People of Scilly*. Alan Sutton, Stroud

### 14.7.2 Strategic, policy and programme documents

Arbery, G, 2002. *The Isles of Scilly Heritage and Culture Strategy*. Consultation Draft

Aspen Burrow Crocker Ltd, 1997. *Council of the Isles of Scilly Shoreline Management Plan* (2 vols).

Buchanan, J, 2003. *St Mary's Quay, Isles of Scilly Stage 1: Technical Investigations and Appraisals Business Plan Executive Summary*. A Route Partnership Project prepared by the Council of the Isles of Scilly.

Camidge, K, 2002a. *Colossus Project Design 2002*. Unpublished site report

Camidge K, 2003. *Colossus Project Design for Stabilisation Trials*. Report for English Heritage

Council of the Isles of Scilly, December November 1989. *The Isles of Scilly Structure Plan Proposed First Alteration Draft for Consultation*

Council of the Isles of Scilly, December 1995. *The Isles of Scilly Local Plan First Alteration Draft for Deposit*

Davey, L. 2003. Planning a Bright Future: The *Isles of Scilly Area of Outstanding Natural Beauty Draft Management Plan 2004 - 2009*.

DCMS, 2004. Protecting our Marine Historic Environment: Making the System Work Better. Department for Culture, Media and Sport

Dean, M, Lawrence, M, Liscoe, S, Oxley, I and Wood, A, 2000. *Protected Wrecks: Guidance Notes for Divers and Archaeologists*. Archaeological Diving Unit, University of St Andrews, Fife

English Heritage, 1999. *A Brief for Rapid Coastal Assessment Surveys (June 1999*).

English Heritage, October 2002. *Historic Environment Records: Benchmarks for Good Practice.*

Fisher Associates, 2002. *"Moving On" Transport Strategy for the Isles of Scilly: Final Report.*

Harvey, A, 1999. *Defence of Britain Project (Cornwall and Isles of Scilly)*. Held by CAU

Hooley, D, 1993. *Prehistoric field system at Bar Point, St Mary's, PRN 7483*. Monuments Protection Programme: Report on site reviewed under MPP and for which scheduling is not recommended

Hooley, D, 1993. *Round cairn at Pendrathen, St Mary's*, *PRN 7485.01*. Monuments Protection Programme: Report on site reviewed under MPP and for which scheduling is not recommended

Hooley, D, 1993/99. *Smuggler's cache at Pendrathen, St Mary's*, *PRN 7640*. Monuments Protection Programme: Report on site reviewed under MPP and for which scheduling is not recommended

Hooley, D, 2001. *Iron Age to Romano-British fogou on Peninnis Head, St Mary's: Monument Notification Description*. EH Inspection Visit Report

Hooley, D, 2003. *Catching the Tide: Inter-tidal and Maritime Characterisation Project Design Consultation Draft*. English Heritage

Johns, C and Tapper, B, 2003. *Rapid Coastal Zone Assessment for the Isles of Scilly: Revised Project Design*. CAU, Truro

Munro C and Nunny, R, 1998. *Isles of Scilly habitat and biotope mapping survey*. English Nature Research Reports **No 276**

Morrison, I, 2003. *Brief for the Rapid Coastal Zone Assessment for the Isles of Scilly*. English Heritage

Roberts, P and Trow, S, 2002. *Taking to the Water: English Heritage's Initial Policy for The Management of Maritime Archaeology in England*. English Heritage

### 14.7.3 Historic maps and charts

Ordered by date:

| Date | Held at | Reference | Shelf No | Surveyor | Title |
|---|---|---|---|---|---|
| *c*1585 | Copy in 'The Scillonian, no **122** | n/a | n/a | Capt John Davis | Les Sorlinges |
| 1691-8 | UKHO | B888 | Historical Press | Capt Greenvile Collins | The Isles of Scilly |
| *c*1708 | PRO | n/a | n/a | Edmund Gostello | A Map of the Islands of Scilly Showing all the Rocks and Ledges with the Soundings & Barings And y Exact Places where the *Association*, *Eagle Rumney* & *Firebrand* were Lost. |
| 1772 | UKHO | 642 | Ik | Mackenzie | Part of the coast of Cornwall in the English Channel |
| 1779 | UKHO | B327a | Oh | A Tovey & N Ginver | A New Chart of the Islands of Scilly with their Soundings Channels and Sailing Marks |
| 1789 | UKHO | L48 | Qe | Capt Salisbury | Unknown |
| 1792 | UKHO | 637 | 1g | G Spence | Survey of Scilly |
| 1792 | UKHO | 671 | 13k | G Spence | Tide Table, Scilly |

| Date | Held at | Reference | Shelf No | Surveyor | Title |
|---|---|---|---|---|---|
| 1792 | UKHO | 674 | 15e | G Spence | Maritime Survey of Scilly |
| 1792 | UKHO | 700 | Dd | G Spence | Maritime Survey of Scilly [1796 copy by Walker?] |
| 1792 | UKHO | 702 | Dc | G Spence | Trig. Of Scilly, Lands End & Lizard |
| 1792 | UKHO | 702 | Dc | G Spence | Maritime Survey of Scilly |
| 1792 | UKHO | 702a | 38d | G Spence | Maritime survey of Scilly |
| Nd | UKHO | 742 | Di | Unknown | Scilly Isles |
| 1800 | UKHO | 688 | 51b | G Spence | Torbay & part of Scilly Isles |
| 1803 | UKHO | B312 | Dk | Heather | New and Improved Chart of the Isles of Scilly |
| 1808? | UKHO | 728 | Dk | G Spence | Scilly Isles with proposed roadstead for man of war |
| 1808 | UKHO | 28a | 13i | G Spence | Scilly Isles with proposed roadstead for man of war inside St Mary's |
| 1808 | UKHO | 790 | Dd | McKenzie / G Spence | England, Wales and Scilly !sles |
| nd | UKHO | 811 | England Folio 4 | Capt M White | Chart of New Grimsby Harbour |
| nd | UKHO | 836 | O1 | Capt M White | Position of Seven Stones from Mudge's Trigomy Survey |
| nd | UKHO | L4911 | Qb | Unknown | The Scilly Isles |
| 1847 | | | | | Tithe map for the Isles of Scilly (St Mary's) & Tresc*o* (microfiche copy at CAU) |
| 1860-3 | UKHO | D7043 | 13i | Capt Williams | Scilly's depth soundings |
| 1862 | UKHO | D6366 | 6d | Capt Williams | Scilly's and the Seven Stones |
| 1862 | UKHO | D6364 | Qg | Capt Williams | St Mary's Pool |
| 1862 | UKHO | D6365 | Oh | Capt Williams | St Mary's Town [Hugh Town] |
| 1863 | UKHO | D7042 | Ih | Capt Williams | Scilly's depth soundings round south sheet |
| 1863 | UKHO | D7041 | Ih | Capt Williams | Scilly's depth soundings round North Star including seventres |
| 1863 | UKHO | D7044 | 31b | Capt | Scilly's and Seven Stones |

| Date | Held at | Reference | Shelf No | Surveyor | Title |
|---|---|---|---|---|---|
| | | | | Williams | |
| 1863 | UKHO | A2039 | 40e | Imray & sons | Scilly's and Seven Stones |
| 1889 | OS | | | | *25 Inch Map* First Edition (microfiche copy at CAU) |
| 1897 | UKHO | B6241 | Oi* | Capt Maxwell | St Mary's pool |
| 1898 | UKHO | B6825 | 11n | Capt Maxwell | St Mary's Road |
| 1898 | UKHO | B6826 | 16m | Capt Maxwell | St Mary's Road |
| 1904 | UKHO | 9774 | 12h | Capt Maxwell | Western Approaches to Broadside Scilly Isles |
| 1908 | OS | | | | *25 Inch Map* Second Edition (microfiche copy at CAU) |
| 1983 | UKHO | 883 | Dl | | Isles of Scilly, St Mary's and the Principal Offshore Islands |

#### 14.7.4 Websites

http://www.gibsonsofscilly.co.uk/page2.html

http://www.mcagency.org.uk/row/enforcement.htm

http://www.silverquick.net/cornwall/waterside/DivingFarWest.html

historical-studies.ncl.ac.uk/SALT

www.ios-aonb.info

#### 14.7.5 Aerial photographs

Aerial Photographs Used:

O. G. S. Crawford Frame 291, B&W Oblique 29.01.1926

O. G. S. Crawford Frames 214-5, 16-24, B&W Oblique 29.07.1926

Ordnance Survey Flight 041/081-110, 130-192 B&W Vertical 25.04.1975

Ordnance Survey Flight 164/1-124 B&W Vertical 06.08.1976

Ordnance Survey Flight 107/1-11 B&W Vertical 01.08.1977

Ordnance Survey Flight 108/12-91 B&W Vertical 01.08.1977

CAU Flight 14 B&W Oblique 09.09.1987

CAU Flight 14 Colour Slide Oblique 09.09.1987

English Nature Colour Orthophoto, Vertical 1996

Aerial Photographs we were unable to use:

GX10262, B&W Vertical 17.10.1940

GX12043, B&W Vertical 01.12.1940

RAF Sortie WLA/22, B&W Vertical 16.08.1942

RAF Sortie 540/43, B&W Vertical 22.05.1948

RAF Sortie 540/170, B&W Vertical 24.03.1949

UK Hydrographic Survey (MOD), 700 photos, B&W, Vertical 1973, 1974.

CUCAP, Flights RC8/KNCK, RC8/KNCL 170 photos July 1990

*Fig 87 Wooden figurehead from the SS Thames, wrecked in 1841, at the top of the Neptune Steps in Tresco Abbey Gardens (photo: CCC)*

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