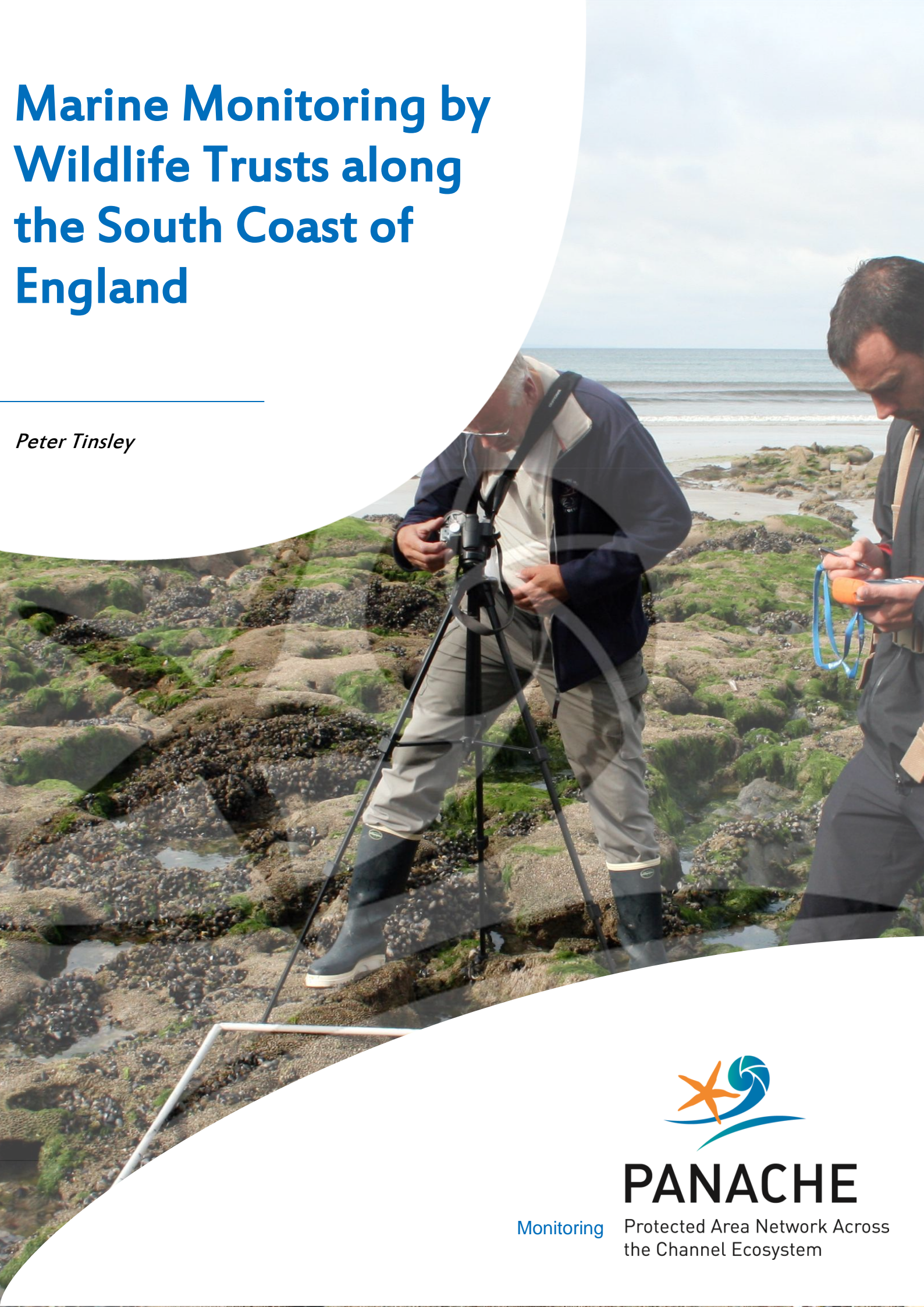


Marine Monitoring by Wildlife Trusts along the South Coast of England

Peter Tinsley



PANACHE

Monitoring

Protected Area Network Across
the Channel Ecosystem

Marine Monitoring by Wildlife Trusts along the South Coast of England Monitoring

Prepared on behalf of / Etabli par



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In the frame of / dans le cadre de



Work Package 2

Work quotation: Tinsley, P. 2013. Marine monitoring by Wildlife Trusts along the South Coast of England. Report prepared by the Dorset Wildlife Trust for the Protected Area Network Across the Channel Ecosystem (PANACHE) project. INTERREG programme France (Channel) – England (2007 – 2013) funded project, 24 pp.

Cover photo: C. Lefeuve / Agence des aires marines protégées



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This publication is supported by the European Union (ERDF European Regional Development Fund), within the INTERREG IVA France (Channel) – England European cross-border co-operation programme under the Objective 4.2. "Ensure a sustainable environmental development of the common space" - Specific Objective 10 "Ensure a balanced management of the environment and raise awareness about environmental issues".

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Marine Monitoring by Wildlife Trusts along the South Coast of England

Suivi marin par les Wildlife Trusts le long de la côte Sud de l'Angleterre

ABSTRACT

Six Wildlife Trusts are established along the south coast of England, from Cornwall to Kent, all created between the late 1950s/early 1960s by concerned local people in response to a growing realisation that wildlife and the countryside were under threat. Each of them now has dedicated marine conservation staff and runs a "Living Seas" programme aimed at reversing the decline in marine wildlife. As well as campaigning for effective protection for marine species and habitats, the Trusts' staff and volunteers carry out a number of marine survey and monitoring projects, centered around two programs: Seasearch and Shoresearch.

In addition to Shoresearch and Seasearch, each of the Trusts involved in PANACHE is or has been involved in a number of other marine survey or monitoring projects

The Wildlife Trusts have successfully mobilised "citizen scientists" to collect information on the presence and extent of marine species and habitats and to identify and provide supporting evidence for important marine wildlife areas to inform the MPA site selection process.

KEYWORDS: Wildlife Trust, NGO, monitoring, survey, seasearch, shoresearch

RÉSUMÉ

Six Wildlife Trusts se sont établis le long de la côte Sud de l'Angleterre, entre la Cornouaille et le Kent, à la fin des années 50/début des années 60, par personnes se sentant concernées par la menaces pesant sur la vie sauvage et la campagne. Tous possèdent désormais du personnel dédié à la conservation du milieu marin et mènent un programme « Living Seas » qui vise à inverser la perte de biodiversité marine. En même temps qu'ils militent pour une protection efficace des espèces et habitats marins, les équipes des Trusts, et les volontaires, organisent des projets de suivi en mer, centrés sur deux programmes : Seasearch et Shoresearch.

A côté de ces deux programmes, chaque Trust impliqué dans PANACHE est (ou a été) impliqué dans plusieurs autres projets de suivi ou de surveillance liés au milieu marin.

Les Wildlife Trusts ont mobilisé avec succès des « citoyens scientifiques » pour collecter de l'information sur la présence ou l'étendue de certaines espèces et habitats marins et grâce à cela, informer et soutenir les efforts en matière de désignation des aires marines protégées.

MOTS-CLÉS : Wildlife Trust, ONG, suivi, surveillance, seasearch, shoresearch



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I. Introduction

There are 6 Wildlife Trusts established along the south coast of England, from Cornwall to Kent. All were established individually between the late 1950s/early 1960s by concerned local people in response to a growing realisation that wildlife and the countryside were under threat. Each Trust is an independent registered charity. Between them the South coast Wildlife Trusts have nearly 165,000 members

| Trust | Established | Membership | Nature reserves |
|--|-------------|------------|-----------------|
| Cornwall Wildlife Trust http://www.cornwallwildlifetrust.org.uk | 1962 | 14 000 | 55 (2000 ha) |
| Devon Wildlife Trust http://www.devonwildlifetrust.org | 1962 | 35 000 | 48 (1300 ha) |
| Dorset Wildlife Trust http://www.dorsetwildlifetrust.org.uk | 1961 | 25 000 | 42 (1200 ha) |
| Hampshire and Isle of Wight Wildlife Trust http://www.hwt.org.uk | 1962 | 27 000 | 46 (3300 ha) |
| Sussex Wildlife Trust http://www.sussexwildlifetrust.org.uk | 1961 | 33 500 | 30 (1800 ha) |
| Kent Wildlife Trust http://www.kentwildlifetrust.org.uk | 1985 | 30 000 | 60 (3000 ha) |

Table 1. Details of the six Wildlife Trusts on the south coast of England

The Trusts initially concentrated on acquiring land threatened by development and the intensification of agriculture to manage as nature reserves but also were able to deploy large numbers of volunteers to carry out practical conservation tasks and to undertake natural history recording. As early as the 1970s, some Trusts were developing an interest in the marine environment, though it would be another decade before there was any provision in UK law to establish Marine Nature Reserves. The rise in popularity of SCUBA diving around this time helped to awaken interest in marine wildlife and Trust members were beginning to document declines in some marine species and habitats that mirrored the changes happening on land, prompting them to call for protection of marine habitats. Each of the coastal Wildlife Trusts on the south coast now has dedicated marine conservation staff and runs a “Living Seas” programme aimed at reversing the decline in marine wildlife. As well as campaigning for effective protection for marine species and habitats, the Trusts’ staff and volunteers carry out a number of marine survey and monitoring projects. There are two national marine survey projects using volunteers – Seasearch and Shoresearch.



II. Seasearch

Seasearch is a national volunteer diving project coordinated by the Marine Conservation Society. The concept dates back to the mid 1980s when it was seen as a means of harnessing the enthusiasm and knowledge of the growing number of non-professional divers and was used to



Seasearch diver examining rocky reef © Matt Doggett

support the Marine Nature Conservation Review – a 10 yr UK-wide study of marine habitats by the statutory conservation bodies. In 2000/2001 Seasearch was re-launched nationally with a standard recording methodology and training programme.

2.1 Aims

To gather information on seabed habitats and associated marine wildlife in Britain and Ireland through the participation of volunteer recreational divers.

2.2 Objectives

- To encourage the participation of volunteer recreational divers in marine conservation through gathering data, particularly for areas where little data exists or where there is a conservation need,
- To provide training in recording skills to enable volunteer recreational divers to participate in Seasearch,
- To make quality assured Seasearch data available to partner organisations and the general public,
- To raise public awareness of the diversity of marine life and habitats in Britain and Ireland through the dissemination of information gathered and the identification of issues arising from it.

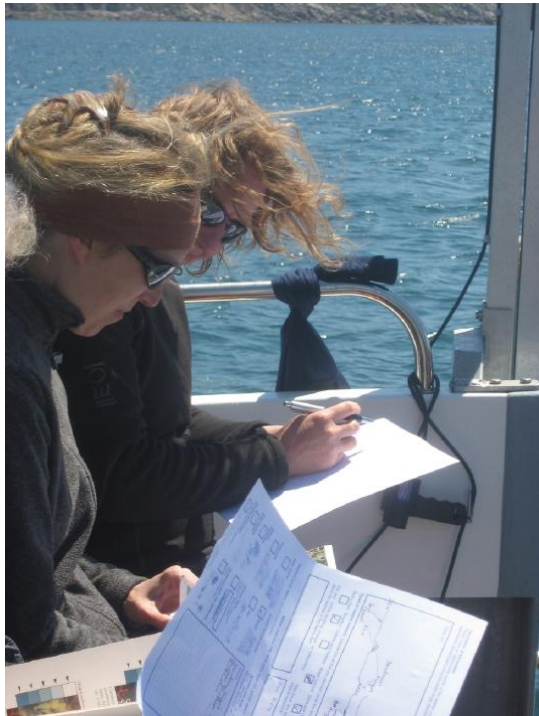


Seasearch diver examining rocky reef © Matt Doggett



With the recent designation of marine SACs and the promise of Marine Conservation Zones, the Seasearch Advisory Group is looking in to how Seasearch methodology can be modified to take on more of a monitoring role.

2.3 Wildlife Trust involvement



Filling in the Seasearch Survey form K

Dawson

Cornwall, Dorset, Hampshire/IOW, Sussex and Kent Wildlife Trusts have dedicated staff coordinating Seasearch activities within their county. Initially Seasearch diving concentrated on known dive sites, gathering baseline data but the Wildlife Trusts have increasingly been targeting new sites and most recently, providing information in support of Marine Protected Area designation (marine SACs and Marine Conservation Zones) Each local coordinator arranges both training and survey events, including chartering local diveboats.

Coordinators also collate and validate local Seasearch records, enter the data onto Marine Recorder (national marine species and habitat database) and pass records on to local records centres and the National Biodiversity Network (through the National Seasearch Coordinator.) The

Trusts are currently in discussion with Natural England over how best to adapt Seasearch to contribute to effective MPA monitoring.

As well as gathering important data, Seasearch provides a valuable awareness-raising function. It has developed a growing army of informed and concerned divers and the images they bring back from their dives can be used to generate interest among the wider public and galvanise support for marine conservation.



2.4 Methodology

Seasearch operates at three levels ¹:

Seasearch Observer

Divers attend a one-day course which includes an introduction to marine life, recognizing and classifying marine habitats, position fixing and how to fill in the Observation Form. This is a pre-requisite to becoming a Seasearch Surveyor.

Seasearch Surveyor

Participants attend a more in-depth training course over two days, covering a wider range of marine life and habitat classification and the use of the more detailed Seasearch Survey Form.

Seasearch Special Interest Courses

This covers a range of course from general marine life identification to advanced workshops on difficult groups such as bryozoans or ascidians. The local coordinator plays a key role in ensuring the reliability of the data collected by Seasearchers. He/she will usually be present on organised dives and will be familiar with the level of skill of individual Seasearchers. Their knowledge of local marine ecology is also useful when validating and verifying the records at the point of entering the data onto Marine Recorder.

2.5 Costs

Typically, each Trust dedicates 1-2 days of officer time per week to Seasearch (approx £10k) and will spend around £5k on boat charters and other expenses.

| Seasearchs forms per region - 2011 | | | |
|------------------------------------|--------|-------------------------|------|
| Cornwall | Dorset | Hampshire/isle of Wight | Kent |
| 156 | 205 | 85 | 25 |

Table 2. Seasearch forms per county from 2011 Seasearch report

¹ See <http://www.seasearch.co.uk>



III. ShoreSearch

Shoresearch is The Wildlife Trusts' volunteer recording scheme for species and habitats on the shore.

3.1. Aim

To build a baseline of data on the wildlife found on the shore, to help promote its conservation

3.2. Wildlife Trust involvement

Shoresearch was initiated by Kent Wildlife Trust and has since been adopted by other Trusts around the country. Cornwall, Dorset , Hampshire/Isle of Wight, Sussex and Kent Wildlife Trusts now have dedicated staff organising and coordinating Shoresearch activities in their respective counties.²



Shoresearch volunteers in Cornwall © Cornwall Wildlife Trust

² See DWT website (<http://www.dorsetwildlifetrust.org.uk/wellie-zone.html>) ; HIWWT website (<http://www.hiwwt.org.uk/pages/shoresearch.html>) ; SWT website (<http://www.sussexwildlifetrust.org.uk/livingseas/page00010.htm>) ; and KWT website (<http://www.kentwildlifetrust.org.uk/what-we-do/living-seas/shoresearch>)



3.3. Methodology

The methodology adopted for Shoresearch was developed by Kent Wildlife Trust, based on the approach used in Seasearch³. Each Trust organises a number of Shoresearch events annually, led by Trust staff or key volunteers (often renowned experts in intertidal ecology) and are open to the general public. Recording tasks are divided amongst those taking part and data from the whole group are pooled to complete a Shoresearch from for each site. Recording methods include a mixture of timed searches (for climate- sensitive species and introduced species, for example) , quadrats and semi-quantitative recording (Rare, Occasional, Common (ROC) scale). As with Seasearch, the awareness-raising aspect of the programme is seen as important.

3.4. Costs

Typically, each Trust dedicate 1-2 days per week of officer time (£5-10k) to Shoresearch and depends heavily on a number of key volunteers

³ For recording form please see <http://www.kentwildlifetrust.org.uk/sites/kent.live.wt.precedenthost.co.uk/files/marine%20recording%20form.pdf> and for species leaflet <http://www.kentwildlifetrust.org.uk/sites/kent.live.wt.precedenthost.co.uk/files/shoresearch-key.pdf>



IV. Individual Wildlife Trust marine monitoring programs

In addition to Shoresearch and Seasearch, each of the Trusts involved in PANACHE is or has been involved in a number of other marine survey or monitoring projects

4.1. Cornwall Wildlife Trust

4.1.1. Your Shore volunteer shore surveys

Cornwall Wildlife Trust has been recording the intertidal environment between 2010 and 2013 via the Your Shore project. Through this project, hundreds of public events were organised as well as volunteer training days and ad hoc surveys.



Participants on a Your Shore event © Cornwall Wildlife Trust

Data were often recorded in a simple species list for the location of the event or volunteer survey. All data were passed to the Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS) and uploaded into recorded by the ERCCIS data officer⁴.

For more information see <http://www.cornwallwildlifetrust.org.uk/livingseas/yourshore/>

4.1.2. Seaquest Netsafe (SQNS) Monitoring

Seaquest Netsafe obtained a more thorough understanding of our Cornish cetaceans via utilising the latest underwater acoustic monitoring devices (C-PoDs) to collect data on the presence and behaviour of cetaceans 24 hours a day, at seven sites around the coast including Whitsands Bay, St Austell Bay, Mounts Bay and off the Mannacles on the South Coast of Cornwall. These sites were also monitored by Cornwall Wildlife Trust volunteers using traditional land based survey methods. Data were recorded (both C-POD and land based sightings) from March 2009 – March 2012.

For more information see www.cornwallwildlifetrust.org.uk/livingseas/seaquest_netsafe

⁴ <http://www.erccis.org.uk/>



4.1.3. Seaquest Southwest

Seaquest Southwest is a long-standing project that has historically relied on volunteers and the general public sending Cornwall Wildlife Trust their records of sea sightings such as dolphins, whales and other marine wildlife. Sightings have been sent in via an on line recording form²² or, more recently, via effort based survey forms from trained volunteers. There has been a steady stream of data over the years which has provided a fantastic insight into the Cornish cetacean population. Data are stored at ERCCIS and shared nationally via Recorder and with other partner organizations such as Seawatch Foundation⁵.

The data are also summarized via twice yearly newsletters²⁴ to volunteers and CWT members.

For more information see http://www.cornwallwildlifetrust.org.uk/livingseas/seaquest_southwest

4.1.4. Marine Stranding Network

The Cornwall Wildlife Trust Marine Strandings Network is the official recorder for all marine strandings in Cornwall and consists of a team of over 100 volunteers who record all reported strandings. Volunteers have been collecting data on strandings for many years and we now have over 5000 records on our strandings database, the earliest dating back to 1308. The records are kept by the Strandings Coordinator and are shared with other organizations and nationally as part of the Cetacean Stranding Investigation Programme (CSIP).

4.1.5. Marine Disturbance Register

In response to the volume of contact from the public about disturbance of marine and coastal wildlife (primarily sea birds, seals and dolphins) by recreational businesses (such as coasteering companies, boat tour operators and kayaking organizations) CWT have set up a marine disturbance group which in turn has developed a 24 hotline for the public to report all disturbance events.

The hotline uploads the information into an online spreadsheet, which is analysed on a regular basis to monitor disturbance incidents and work towards preventing them.

4.1.6. Marine Invasives

The Investigate Invasives campaign aims to identify non-native invasive species that threaten the habitats and native wildlife of Cornwall and the Isles of Scilly.

This project fully integrates with all other marine orientated survey work including Seasearch and Shoresearch. Volunteers and members of the public are able to take part either by taking a Biological Recording Tutorial²⁷ and beginning to record what they see, or take part in the Settlement Panel Project²⁸ by deploying small panels from non-tidal moorings for 3 months and digitally recording colonization. Other aspects include surveying submerged structures for example marker/ mooring buoys and boat hulls when lifted for the winter or during routine maintenance and dive surveys on hard structures within marinas.

For more information see http://www.erccis.org.uk/invasivespecies/Investigate_Invasives_Marine

⁵ www.seawatchfoundation.org.uk



4.1.7. Looe Island long term shore monitoring of exposed and sheltered shores

Since 2003, Cornwall Wildlife Trust has been carrying out long term monitoring of the sheltered and exposed shores of Looe island. The objective of the survey work was to monitor sea level, exposure, and marine invasive over the years around the Island. The survey consists of a line transect for the sheltered shore and point survey for the exposed shore. Species are recorded either by percentage cover (algae, barnacles and sponges) or by count.

4.1.8. Looe Island seal surveys (LISPIP)

LISPIP is a collaborative project between the Looe VMCA Marine Volunteers, Cornwall Wildlife Trust and Cornwall Seal Group, which aims to discover the following information:-

- The sites used by seals in the sea and on land
- The seasonality of any seal sites
- The number of seals visiting the sites
- Information about the seals' age and sex classes and their nutritional / health status
- Links to other seal sites in Cornwall made by individual seals, using photo identification techniques.

This information will provide a more informed basis upon which conservation decisions can be made. Since 2008 data has been recorded on the Islands seal populations.

4.1.9. Looe, Fowey and Helford seagrass mapping

Cornwall Wildlife Trust and Looe Voluntary Marine Conservation Area volunteers conducted a seagrass survey with help from Plymouth University and Newquay College in 2011.



Volunteers learn about seagrass at Marwan village hall - © Cornwall Wildlife Trust

The aim of the seagrass surveys were to provide co-ordinated information on the current status of *Zostera marina* in the sub-tidal waters of East Looe and to produce an extent and density map of the eel grass bed. The procedure for mapping the eel grass bed involved the use of a Remote Operated Vehicle (ROV). The ROV was deployed from the boat at the start of a transect. A GPS reading was noted. The ROV was flown approximately one metre above the seabed and its 75m umbilical cord enabled the pilot a great deal of manoeuvrability to survey the eel grass, as the boat moved. All of the surveying was video recorded for later viewing verification. Similar surveys have been carried out in Fowey Estuary and Helford VMCA's

4.1.10. Helford Norman Holme shore surveys

In 2011, volunteer Rob Seebold carried out a repeat of the historic Norman Holme surveys. This involved attaching a line at a right angle from the High Water limit directly down to the Low Water limit, some 50 to 250m depending on site, placing a 50cm square at selected intervals 5m to 10m and listing all living animals and seaweeds within it and also taking photographs. The length of zones and the seaweeds, animals and substrates within them along the lines were also noted.

4.2. Dorset Wildlife Trust



Image from DORIS drop-camera survey - Dorset Wildlife Trust

4.2.1. DORIS

DORset Intergrated Seabed study (DORIS) was a collaborative project involving Dorset Wildlife Trust, Maritime and Coastguard Agency and Channel Coastal Observatory. Over 800km² of seabed were surveyed in 2009 using high resolution multibeam sonar . A follow-up ground-truthing survey using drop-camera transects and grab-sampling in 2010 enabled the production of a detailed seabed habitat map. The detailed seabed topography produced also allowed precise targeting of Seasearch dives over specific features, increasing the efficiency of the survey and adding to the enjoyment of those participating

For more information see <http://www.dorsetwildlifetrust.org.uk/doris.html>

4.2.2. Welly Zone Project

The Welly Zone project is Dorset Wildlife Trust's version of Shoresearch, but with a few additional features. In addition to the regular Shoresearch surveys, volunteers have taken part in strandline surveys on sediment shores and recorded bats feeding over strandlines. This project runs from 2011 to 2014.

4.2.3. Biodiversity Action Plan studies

Through a small project grant fund, Dorset Wildlife Trust funded a number of projects between 2000 and 2005 using volunteer divers to survey species 10 and habitats of particular biodiversity importance – Biodiversity Action Plan species and habitats. This has included seagrass surveys in Weymouth Bay and Portland Harbour, maerl surveys in Poole Bay, Sabellaria spinulosa surveys in Poole Bay, seafan (*Eunicella verrucosa*) survey on Worbarrow Reefs and surveys of black bream nests (*Spondylus cantharus* in Purbeck.

4.2.4. Dolphin sightings

Dorset Wildlife Trust has supported regular effort-based dolphin watches at Durlston Country park, near Swanage. The Durlston Marine Project⁶ also collates ad hoc sightings of marine mammals and other large marine animals in Dorset.

4.2.5. Marine biodiversity database

Dorset Wildlife Trust, in conjunction with the Dorset Coast Forum, funded the development of an MS Access based marine species and habitat database, which was then populated with a number of historic datasets. This was later superseded by the development of Marine Recorder – a national database. All Dorset records were transferred to Marine Recorder and are hosted by the Dorset Environmental Records Centre.

For more information please see <http://www.derc.org.uk/marine/marine.htm>

⁶ Durlston Marine Project : <http://www.durlston.co.uk/index.php?id=92>

4.3. Hampshire/Isle of Wight Wildlife Trust

4.3.1. Solent Seagrass project

Starting in 2006, the Solent Seagrass project aims to map all seagrass habitat in the Solent and monitor changes in extent and condition.

The results are being used to inform the management of seagrass beds in the Solent. The surveys have been carried out by staff, key volunteers and consultants using a variety of techniques including divers counting shoots, towed video and intertidal mapping on foot with hand-held GPS.

Over 600ha have been mapped to date and the data have been used towards reporting on European Marine Site condition, as the basis for the introduction of a byelaw in Portsmouth Harbour and for the development of a voluntary code of conduct among mobile gear fishermen. Data were also used in the process to identify Marine Conservation Zones.

Since 2006, Hampshire/Isle of Wight Wildlife Trust has spent approx £300k on this project.

For more information please see <http://www.hiwwt.org.uk/pages/seagrass.html>

4.3.2. Solent seal project

The aim of the Solent Seal Project was to better understand the seal population in the Solent and identify important areas for local seals. The project ran between 2009 and 2011 and involved WT staff, key volunteers and consultants. The project utilised various techniques to survey and monitor the seal populations including visual counts at haul-outs, a public sightings scheme, photo-identification and GPS-tagging of a number of individuals. The results have been used to inform Environmental Impact Assessments and were used in the process to identify Marine Conservation Zones.



Harbour seal with satellite tag - Hampshire Wildlife Trust

Total cost of project – approx £100k

For more information please see <http://www.hiwwt.org.uk/pages/solent-seals-project.html>

4.4. Kent Wildlife Trust

4.4.1. Thanet Coast Special Area of Conservation intertidal monitoring

A baseline survey of this MPA was undertaken shortly after designation in 1997. The condition of the reefs and sea-caves were re-evaluated in 2001, 2005 and 2011 – the later surveys highlighting the potential impact of nonnative species, especially *Sargassum muticum* and *Crassostrea gigas*. Since 2005, Kent Wildlife Trust's Shoresearch programme carried out many surveys within the SAC, contributing many new species records and confirming the presence of *Sabellaria spinulosa* reefs – a habitat feature of conservation importance.

Kent Wildlife Trust staff have been part of the survey team for the past two statutory SAC monitoring surveys, including producing GIS habitat maps of selected sections of the shore to compare with previous maps.



White Ness study site looking from the low shore across *Rhodothamniella* mounds to the chalk cliffs

© Kent Wildlife Trust

Complementary to the 2005 monitoring study commissioned by Natural England, Kent Wildlife Trust's Shoresearch volunteers successfully tested a detailed 5m resolution biotope mapping technique. The technique was found to be promising, though labour-intensive and it was suggested this could be a valuable technique in assessing the extent of *Caulacanthus okamurae* – a potentially damaging non-native species. This demonstrates that a large number of non-specialist volunteers can produce credible, scientifically valid data on a scale that a small number of professional surveyors would not be able to match.



4.4.2. Dover Intertidal Chalk Survey

Between 2009 and 2011, Kent Wildlife Trust undertook a survey of the chalk platform either side of Dover Harbour, between Folkestone and Deal, involving recording the extent and character of biotope zones down the shore along transect lines approximately 500m apart. At selected sites quadrat surveys were also undertaken, providing more quantitative data of species presence and abundance. Surveys were undertaken at a total of 16 sites by the Kent Wildlife Trust marine officer with two experts from the Natural History Museum covering fauna and flora. Many of these sites are not easily accessible and not suitable for volunteer groups, but Shoresearch volunteers assisted with the surveys at the more accessible sites. Data was entered into Marine Recorder, and a full report was produced, including a comparison of the results with previous surveys in the area and similar surveys of chalk exposures in Sussex and Thanet.

4.4.3. Habitat mapping from ground-truthed Multibeam and Backscatter survey

Kent Wildlife Trust contributed funding and Seasearch ground-truth data, photographs and video footage to a Channel Coastal Observatory⁷ project which was surveying a 1km strip around the southeast coasts. Funding secured by Kent Wildlife Trust enabled an expanded area around Dover to be surveyed, covering the whole extent of the recommended MCZs either side of Dover Harbour. The National Oceanographic Centre processed the data and produced a habitat map to EUNIS Level 3. The multibeam data also helps to enable diving surveys to target features of potential interest.

⁷ <http://www.channelcoast.org/>



V. Wildlife Trusts and Marine Protected Area Site Selection

5.1. Voluntary Marine Nature Reserves

In the late 60s/early 70s, the Wildlife Trusts were beginning to show an interest in the marine environment and were recognising a need for protection, though there was no provision for statutory protection until the passing of the Wildlife and Countryside Act in 1981. An article in the journal of the Devon Naturalist's Trust (as Devon Wildlife Trust was then known) in 1969 suggested the need for a marine reserve around Lundy Island in the Bristol Channel, partly in response to concerns about recreational divers taking seafans and crawfish but also due to the rich underwater wildlife revealed as SCUBA diving became widespread. The Lundy Voluntary Marine Reserve was established by the Lundy Field Society in 1971 and subsequently became England's first (and only) Marine Nature Reserve before becoming the Lundy Marine Conservation Zone in 2011.

In 1974 Dorset Wildlife Trust (then the Dorset Naturalist's Trust) published the results of a study of the nature conservation value of Dorset's shores. The report recommended a number of marine nature reserves be established but there was no national legislation to enable this. Two years later the first Dorset Underwater Survey carried out in conjunction with Dorset County Council, showed that the biological richness extended below the low water mark and helped strengthen the call for protected areas in the marine environment.

In 1978 Dorset Wildlife Trust called a public meeting to float the idea of a Voluntary Marine Nature Reserve around Kimmeridge Bay – one of the sites suggested in the earlier report. As a voluntary reserve, there would be no statutory restrictions – rather this was a means of highlighting the special nature of the site and encouraging visitors and users to respect the wildlife. The Trust has continued to interpret and study the site until the present day. The offshore waters are now part of the Studland to Portland reefs candidate SAC and a small part of the shore near Kimmeridge was among 127 recommended Marine Conservation Zones put forward in 2012.





Map of VMCAs in the south of England - Contains Ordnance Survey data © Crown copyright and database right 2011

1 Looe VMCA

5 Polzeath VMCA

2 Fowey Estuary VMCA

6 Purbeck Marine Wildlife Reserve

3 Helford River VMCA

7 Durlston Marine Research Area

4 St Agnes VMCA

8 Seven Sisters VMCA

There was an expectation that a number of Marine Nature Reserves would be designated following the passing of the Wildlife and Countryside Act in 1981 but it became clear by the late 1980s that no new sites were likely to be designated in England following the establishment of Lundy MNR in 1986. In response to this, there was an increased interest in Voluntary Marine Conservation Areas (VMCAs), including 5 set up in Cornwall. Between 2009 and 2012 Cornwall Wildlife Trust worked with these initiatives under the “Your Shore” project, during which over 400 volunteers were trained in activities including shore surveys and dive surveys and volunteer led marine conservation groups were set up for each VMCA.

5.2. Marine Sites of Nature Conservation Importance

Seasearch has been especially active in Sussex since the 1990s and the data collected by volunteer divers was used to identify a number of marine Sites of Nature Conservation Importance (mSNCIs). These are non-statutory designations identified to highlight the presence of special interest features (biodiversity or geomorphology). Similar designations are used on land (Sites of Nature Conservation Interest or County Wildlife Sites) to highlight important or vulnerable features to the local authorities. 12 mSNCIs were adopted in 1996 and a further 12 were added in 2010.

5.3. Special Areas of Conservation

In 2006 the search began for a number of additional marine SACs around Britain to complete the UK's contribution to the Natura 2000 network. The original area of search included a large area of the western end of the Channel where the target features were reefs and sea-caves. This was narrowed down to a number of proposed sites – this included the Lizard Point pSAC, the Land's End and Cape Bank pSAC and the Lyme Bay and Torbay reefs pSAC and the Studland to Portland reefs pSAC. Each of these proposals relied to some extent on data provided by volunteer divers through the Seasearch programme but the latter two specifically listed Seasearch and other Wildlife Trust coordinated subtidal surveys as supporting scientific documentation.. Dorset Wildlife Trust contributed a further layer of supporting data through the DORIS (DORset Integrated Seabed study) project which involved a large scale multibeam survey with drop camera and grab-sampling for ground-truthing. This significantly improved the understanding of the extent of reefs in and around the site and led to the site boundary being altered to better reflect the distribution of the feature.

5.4. Marine Conservation Zones (MCZs)

On the south coast of England the Wildlife Trusts have been involved in two regional MCZ site selection processes – Finding Sanctuary in the west and Balanced Seas in the east. Through their involvement with public science projects such as Seasearch and Shoresearch and other marine survey and monitoring programmes, the Trusts were well placed to provide information on species and habitats (on intertidal and inshore sites, at least) during the early stages of the selection process and were able to deploy survey resources to individual sites at relatively short notice to support/ strengthen evidence for sites as the proposed network developed. Evidence of the presence and/or extent of MCZ features proved to be a critical issue once the final network of recommended sites was compiled, with the majority of recommended MCZs being put on hold pending better evidence. In the response to the recent consultation on the first tranche of sites to be designated, the Trusts were able to provide a significant amount of additional supporting evidence.

Additionally, the large workforce of volunteers involved in Seasearch and Shoresearch were spurred on by the opportunity of contributing to a significant marine conservation gain and many became supporters of the MCZ campaign.



VI. The Wildlife Trusts and future MPA Monitoring

Marine survey and monitoring is difficult and expensive but adequate monitoring is essential if management of MPAs is to be effective. The Wildlife Trusts are well placed to offer a significant contribution to the monitoring of Marine Protected Areas along the Channel coast. Each Trust has at least one full-time staff member with marine survey expertise and experience. The Trusts have a strong volunteer base, including SCUBA divers, among which are several local experts in marine taxonomy. The Trusts have a history of collecting data on marine species and habitats, managing marine data and producing sound scientific reports. The Wildlife Trusts have successfully mobilised “citizen scientists” to collect information on the presence and extent of marine species and habitats and to identify and provide supporting evidence for important marine wildlife areas to inform the MPA site selection process. The same approach could be adapted to answer specific monitoring questions. Many of the same concerns apply about data credibility and can be addressed using adequate training of volunteers, careful setting of tasks in line with the needs of the management authorities , use of geo-referenced photographs and a robust verification system to check submitted records.



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PANACHE

Protected Area Network Across
the Channel Ecosystem

PANACHE is a project in collaboration between France and Britain. It aims at a **better protection** of the Channel marine environment through the **networking** of existing marine protected areas.

The project's five objectives:

- **Assess** the existing marine protected areas network for its ecological coherence.
- **Mutualise** knowledge on monitoring techniques, share positive experiences.
- **Build** greater coherence and foster dialogue for a better management of marine protected areas.
- **Increase** general awareness of marine protected areas: build common ownership and stewardship, through engagement in joint citizen science programmes.
- **Develop** a public GIS database.

France and Great Britain are facing similar challenges to protect the marine biodiversity in their shared marine territory: PANACHE aims at providing a **common, coherent and efficient reaction**.

PANACHE est un projet franco-britannique, visant à une **meilleure protection** de l'environnement marin de la Manche par la **mise en réseau** des aires marines protégées existantes.

Les cinq objectifs du projet :

- **Étudier** la cohérence écologique du réseau des aires marines protégées.
- **Mutualiser** les acquis en matière de suivi de ces espaces, partager les expériences positives.
- **Consolider** la cohérence et encourager la concertation pour une meilleure gestion des aires marines protégées.
- **Accroître** la sensibilisation générale aux aires marines protégées : instaurer un sentiment d'appartenance et des attentes communes en développant des programmes de sciences participatives.
- **Instaurer** une base de données SIG publique.

France et Royaume-Uni sont confrontés à des défis analogues pour protéger la biodiversité marine de l'espace marin qu'ils partagent : PANACHE vise à apporter **une réponse commune, cohérente et efficace**.

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