













# The SWME Annual Report

Observations & Science, People, and Making a Difference - The theme of the SWME Conferences

Bob Earll

**Talk summary** The objectives of this talk are:

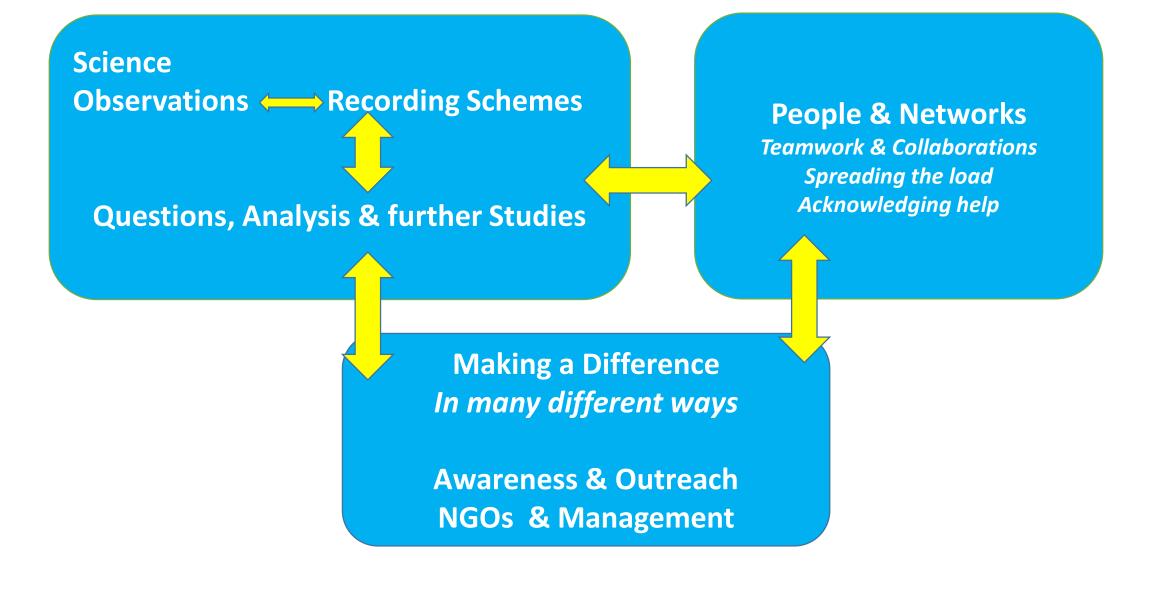
- 1. To describe the SWME Annual Report and what it is setting out to do
- 2. To explain the objectives of SWME in terms of
- Observations, recordings and science
- People and networks
- Using people and information to make a difference
- 3. To link these elements together
- 4. Thank lots of you for your support

#### South-West Marine Ecosystem Conference & Activities Objectives

The Objectives for the SWME conferences and activities have been developed with the delegates and were revised in 2017; they are as follows:

- 1. **Networking** Through the conferences, website and mailings **GDPR**
- 2. **Annual Events & Recording** To use the annual conference to record observation on ecological and oceanographic events
- 3. **Ecology of marine species** To promote research studies
- 4. **Management of south west marine ecosystems** to encourage strong relationships between policy makers and scientists and people making a difference
- 5. **NEW Marine Education and Outreach** To highlight marine education and outreach programmes in the south west.
- ... and to come together to celebrate being part of the SWME!

The Annual Report fully supports these objectives















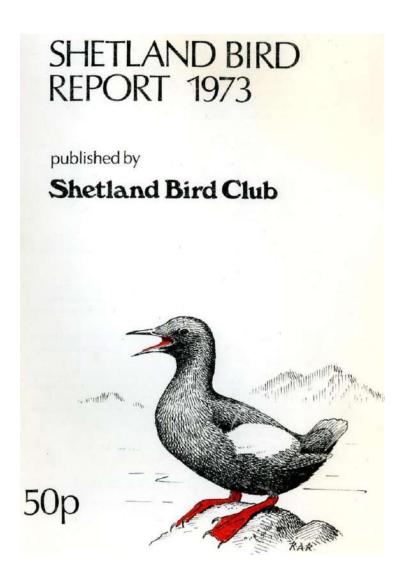


# **SWME Annual Report**

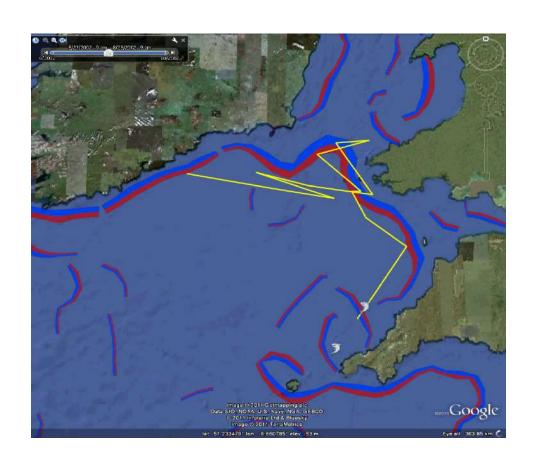
Nothing new. A very long tradition - My first encounter with organised birders

# **SWME Report inputs**

- From you Observation forms
- Speaker notes
- All sorts of other sources



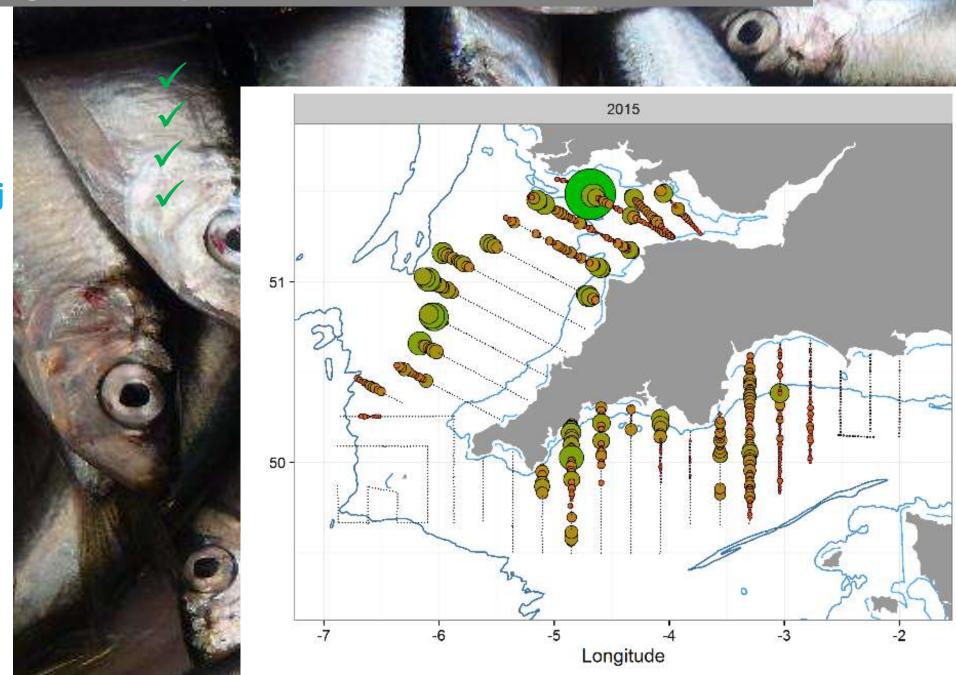
# The 'South-west' Basking shark tracked with GLS tag vs. fronts Peter Miller - PML



# **Small Pelagic Fish: sprat**

Where is the south-west?

Jeroen van der Kooij Cefas



# Science – Ecology - Arthur Tansley – 'The father of ecology'

'Every kind of scientific investigation has two stages the descriptive and the analytical.

We must first know clearly what the phenomena are — the things or processes we propose to investigate; thus we must carefully observe and accurately record before we can proceed to find out how particular phenomena come about.'

A guide for beginners in the study of plant communities 1923

# Science

**Description** 

**Observations** 

**Recording Schemes** 



**Questions, Analysis & further Studies** 

## **Observations ... 2016**



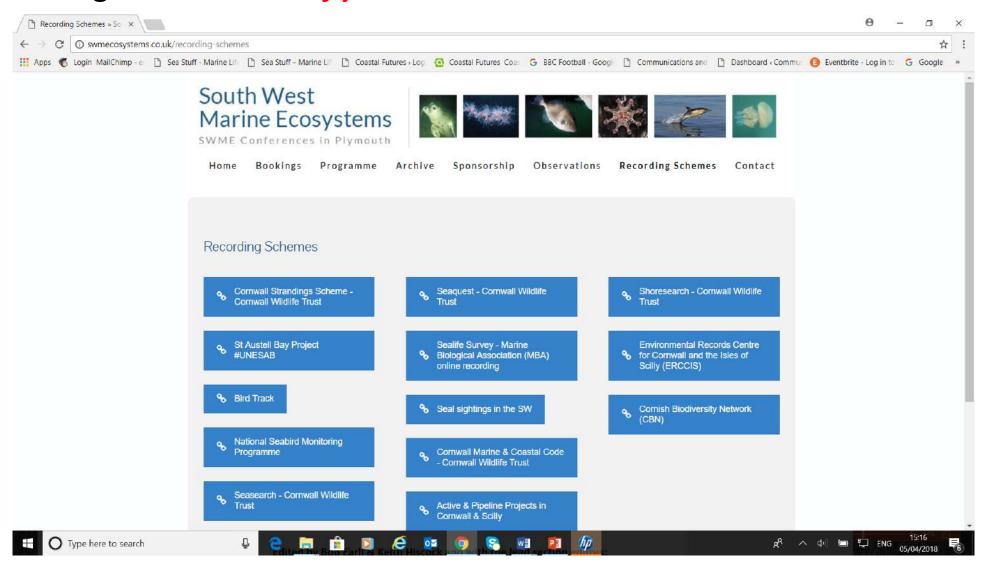




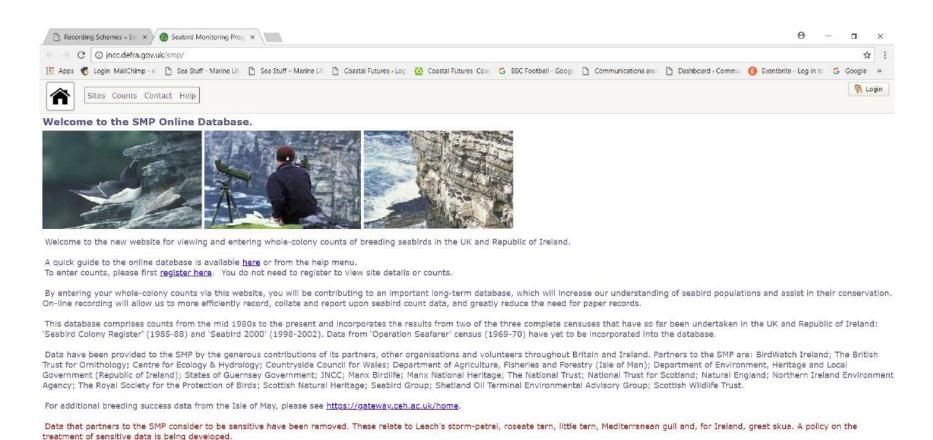


Photographers: Annabelle Lowe/Newquay Sea Safaris and Fishing, Keith Hiscock & Nigel Phillips

#### Recording schemes – and if your scheme isn't on this list let me know



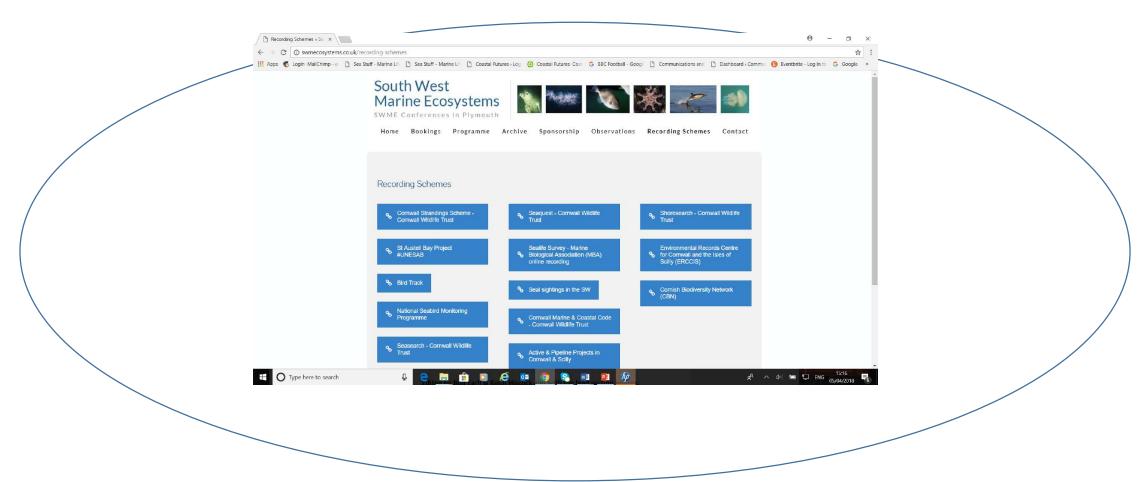
#### Click on the Blue Links and it goes to your site





# Lots of different projects and recording schemes We need to know who is doing what because ....

What do you do if you are on 'Any project' (e.g. Seasearch) in Dorset – and see a humpback whale - who do you report it to?



# It's People that make SWME

Volunteers - Citizen Science & Multiple skills & Action

600+ SWME meeting attendees since 2014

70+ organisations at each meeting



Not including, west Wales, France, Ireland

# Cornwall Seal Group – Amazing CSG volunteers ...

Photos: Sue Sayer



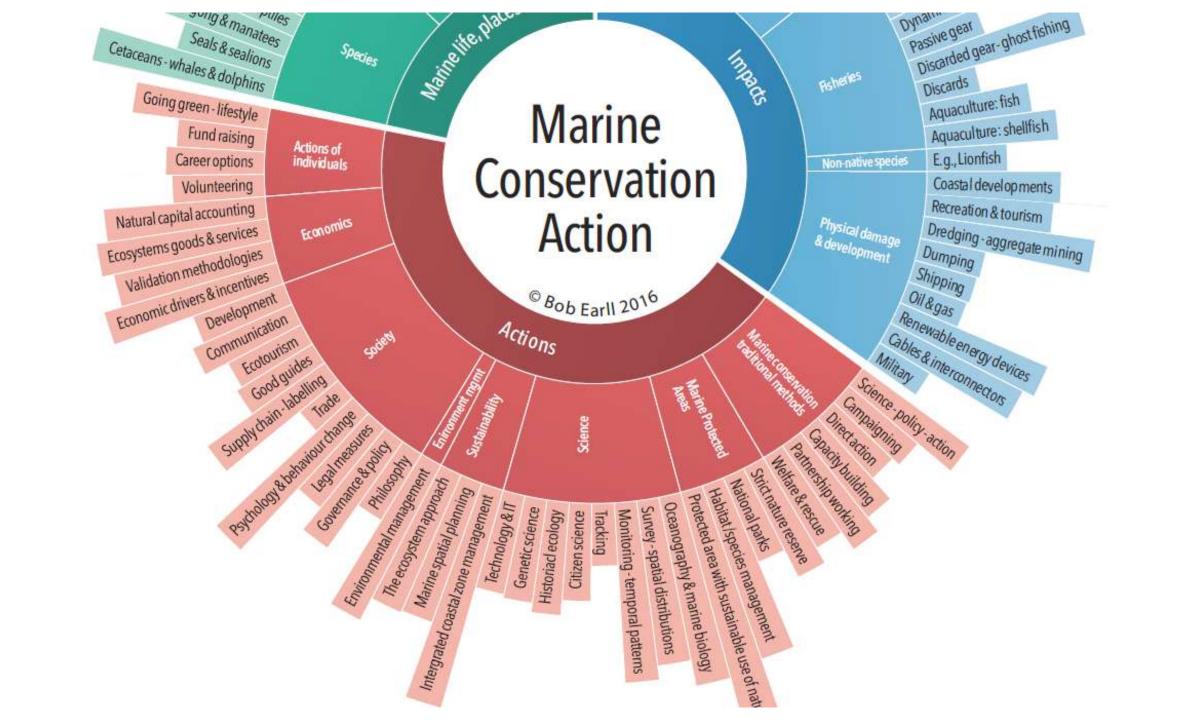
# Making a difference

How many of you think there are steps we can take, and that you can participate in, that help to protect the marine environment?

Science - Information is helpful but on its own it's not enough ...

Lots of different people with different skills – disciplines - are needed to make the difference

- Public awareness Outreach, education
- NGO style activities with freedoms that implies
- Managers of all sorts NE, IFCAs, MMO etc
- Lots of disciplines communicators, campaigners, welfare specialists, legal, economic expertise etc., etc



#### SWME Annual Report Editors and Teams ... spread the load and collect more information

#### Editorial Group - Bob Earll, Keith Hiscock & Richard White

**Background Oceanography & Western Channel Observatory Tim Smyth** 







The seashore & seabed Keith Hiscock

Fish & Reptiles Doug Herdson



Plankton observations
Angus Atkinson



**Cetaceans Colin Speedie, Dan Jarvis** & Duncan Jones

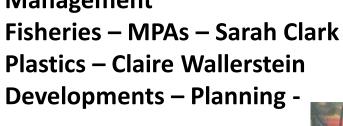




Seals **Sue Sayer** 



Management Fisheries – MPAs – Sarah Clark **Plastics – Claire Wallerstein** 





Marine & Coastal birds **Alex Banks** 







# **Humpback – South Devon 2017 – Observation from 2017**



# 1. Describing the 'normal' patterns of events

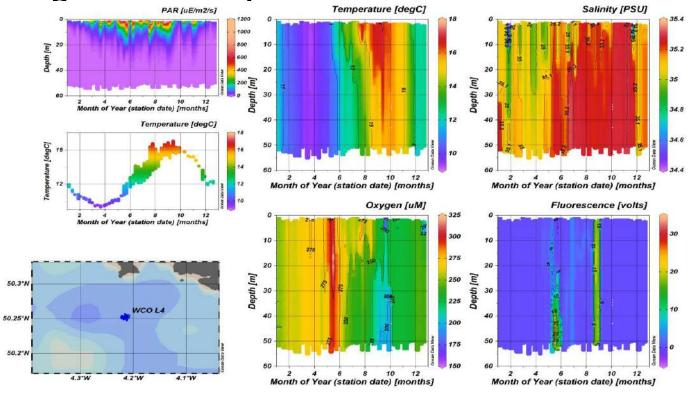


Figure 2: Conditions throughout the water column at station L4 during 2016 from 50 individual profiles taken using a rosette sampler with multi-parameter "CTD", deployed from the RV Plymouth Quest. Image PML

## 2. Marking Major Events and their effects

#### 2013-14 Storms, Wash outs, PIB bird wreck 2014, 2016-17 common dolphins, etc

Photographers: Gerd Masselink Keith Hiscock & Jersey RSPB







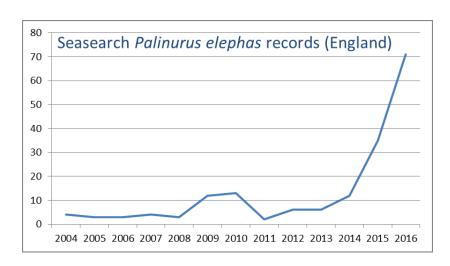
## 3. Highlighting significant population changes

#### **Trends**

Spiny lobsters, Seasearch and fisheries data

Graph: Charlotte Bolton,

Image: Geoff Huelin.





Barrel jellyfish population explosion

Photo: Keith Hiscock





# 3. Highlighting significant population changes

**Relative status** ... of some of our charismatic species .e.g. Basking shark, sunfish, bottle nose dolphins, harbour porpoises



Managing Recovery Seabird recovery after rat eradication programmes on Islands
Photo: Keith Hiscock



#### 5. Remarkable sightings – the start of patterns

Mounts Bay

Ed Hurst

#### Lost? 'One swallow ...'



Dalmatian Pelican in Cornwall, 2016



Photo: Bowhead whale in

Unknown, enigmatic species known as the "Pringle", recorded during early 2016 at the Plymouth L4 and E1 PML

#### From very unusual to regular



Tuna 2012 -2013 A novelty – to 2017 so regular a study by Tom Horton – Exeter University

# 5. Acting as a focus for interest – publishing provides a point around which observations grow





People .... Bringing interested people together ... start to document important populations

6. Posing Questions – making the links .... What is happening to basking shark sightings ... anything in the plankton? Coincides with Tuna doing well?

Seaquest figures	2011	2012	2013	2014	2015	2016	2017
Basking sharks	76	419	237	72	34	28	low?
Ocean sunfish	160	264	289	84	163	154	

# 6. Posing Questions – making the links ....



What food is it that makes Manx shearwaters fly to Lyme Bay to feed?

Will we ever see the seabed – scyphistoma stage – of barrel jellyfish?

Spiny lobsters ... what is it over the last 5 or 6 years in terms of the Plankton / oceanography that have seen their numbers grow – one good year?

St Piron's crab – Episodic recruitment in 2016?

Image: Keith Hiscock

# 7. Telling stories

Seawatching - Manx Shearwaters ....

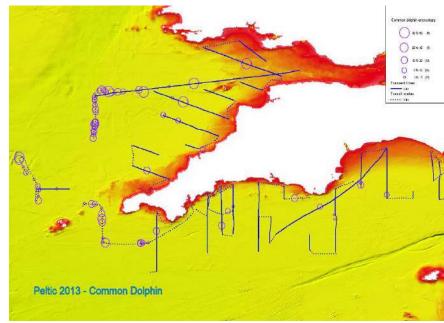
Nothing ..... usual suspects, herring gulls, shags etc

Then in an hour 400+ Manx Shearwaters fly past ... Wow!

Where are they going too? Lyme Bay ... Where have that number of birds come from .....Welsh

islands?





8. Making a difference – Human Activities – documenting events

& pushing for change

'NGOs' Strandings -> Pingers CWT & Nick Tregenza





**Management** .... Wrasse fishery, MCZs, MPAs, Fisheries. IFCAs, NE, MMO etc

Image: Keith Hiscock



# 8. Making a difference – Human Activities – documenting events &

pushing for change

#### **Balloon releases**

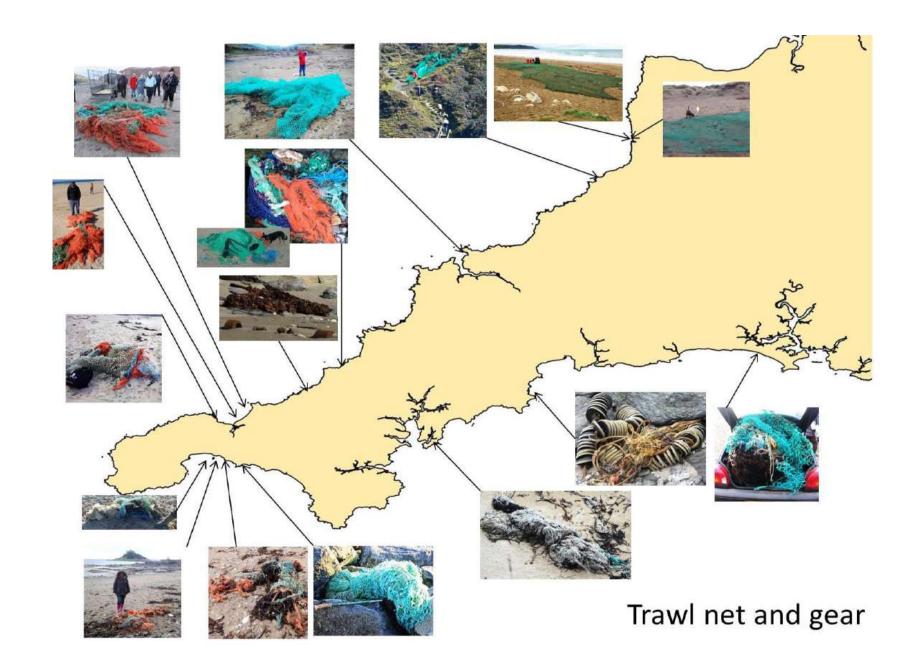
Claire Wallerstein Cornish Plastic Pollution Coalition writing to organisations

Nurdles – South West Water





#### Discarded fishing gear - Cornwall Seal Group Research Trust - images Sue Sayer



#### 9. Opportunities and unknowns in 2017

- **US marine fauna and flora in Cornwall David Fenwick** ... Two and half pages of mainly American marine life (Florida) mainly on marine litter floating across the Atlantic .. Carefully identified and corroborated with world experts ... amazing
- Cornwall Seal Group Research Trust Annual Report ... Sue Sayer's seal section has been the longest in the report for the 3 years ... 8 pages ... Does CSGRT produce an annual report? This could be it!!
- Who record's the South West's Seabirds? Nigel Phillips Bob Earll Alex Banks -> Sophy Allen
- Strandlines & Beaches In every section of the report

#### **Conclusions**

SWME = Science + People + Making a Difference

9 Reasons why it is useful to produce an Annual Report & probably lots of others ...

Observations for 2017 – that Humpback whale ...















# **Humpback – South Devon 2017 – Observation from 2017**



#### **ANNUAL REPORTS - SOUTH-WEST MARINE ECOSYSTEMS IN 2015**

Observations reported at the South-West Marine Ecosystems meeting in 2016 and other sources

Edited by Keith Hiscock and Bob Earll with the lead section editors:

Tim Smyth, Angus Atkinson, Keith Hiscock, Doug Herdson, Sue Sayer, Tom Horton, Sarah Clark

and the Seaquest ad hoc sightings report appended









**Sightings:** *Stephanopyxsis palmeriana*, a diatom which has been absent from the western English Channel for more than a decade, reappeared in net samples at the end of March and persisted for the rest of the year. Image: Claire Widdicombe, PML **Unusually high abundances:** Barrel jellyfish *Rhizostoma octopus* (and other jellyfish species). Image: Keith Hiscock **Fisheries** Anchovy – Engraulis – high numbers, Doug Herdson, **Range extensions:** Anemone prawn *Periclymenes sagittifer* at Babbacombe (first recorded in Britain at Swanage in 2007). Image: Keith Hiscock