



# Devon Summary Report 2014



**By Chris Webb**

**Devon Seasearch Coordinator**

## Introduction

The volunteer support for Seasearch dives remained excellent and this came from both within and beyond the county. Nineteen organised survey days were achieved from twenty-nine planned ones. The winter storms that ran into spring gales and then the resulting exceptionally-poor underwater visibility caused the cancellation of early season trips.

Seasearch data continues to play an important role in the management or designation of Marine Conservation Zones (MCZs). The newly-designated MCZ's (of Torbay, Skerries Bank and Surrounds and Lundy) and Special Areas of Conservation (SAC) again figured largely in organised dives. Summary reports were submitted to Natural England for the first two MCZ's in February 2015. Bideford to Foreland Point rMCZ and Hartland Point to Tintagel rMCZ were included in the second tranche of sites on which Natural England delivered advice to the government. Thanks to the efforts of keen local divers, records were made for a report on the latter rMCZ submitted to Natural England also.

A review of the Seasearch records since 2005 revealed gaps in the coverage which were targeted this year and some fabulously rich and interesting new sites were discovered. The southern coast of the county was well covered but the need to survey the difficult-to-access north Devon coast (especially the two rMCZ's) remains a challenge for 2015. Another poorly surveyed area, the East Devon part of Lyme Bay (including the part closed to bottom trawling) was, however, visited on one weekend. Plymouth, on the other hand, as always provides access to a wide area of sites in Plymouth Sound, offshore to the Eddystone Area or eastwards to Bigbury Bay, The Bolt and Prawle Point (just within the Skerries Bank and Surrounds MCZ). These sites also fall within the Start Point to Plymouth Sound and Eddystone SAC. The nearby Hand Deeps, and Whitsand Bay wrecks and reefs (in the Whitsand and Looe Bay MCZ), further into Cornish waters, were also surveyed and seven forms went to Cornwall Seasearch.



## Areas Surveyed

### Lyme Bay

While the Dorset waters in the bay have some fabulously rich ledges, we explored the lesser known Devon part near Lyme Regis and were richly rewarded. The DORIS side scan maps (courtesy of Dorset Wildlife Trust) suggested potential sites to explore and one proved to be exceptional, the aptly named Beer Fans. Amongst the splendid pink sea fans *Eunicella verrucosa* was a rich sponge and sea squirt fauna with the scarce imperial anemone *Aureliania heterocera* and antler sponge *Adreus fascicularis* spotted. Another new site suggested by our local expert John, at Eastern Heads proved to be small but perfectly formed ledge systems with abundant life.



Other sites showed the recovery (post scallop dredging ban) or maintenance of abundant sea fan forests using data from our keen Pink Sea Fan Form recorders (in Chris Wood's report <http://www.seasearch.org.uk/downloads/SeaFanSurveyReport2014.pdf>). This shows the fans in excellent condition (highest in the South West) and not adversely impacted after the winter storms. Amongst the fans was a diverse turf to keep the surveyors, photographers and videographers busy.



## Torbay Reefs

Two weekends within the newly designated Torbay MCZ filled in gaps from earlier surveys and an article about the June trip was published in the MCS magazine (Autumn2014). The wealth of survey data obtained was submitted to Natural England and summarised in <http://www.seasearch.org.uk/downloads/Torbay%20MCZ%202014%20Seasearch%20Survey.pdf>.

With great weather topside, good visibility below and just enough tide to perk up the anemones and dead man's fingers, fabulously rich communities were enjoyed in the NE corner of the bay. Thatcher Rock has carpets of daisy anemones *Cereus pedunculatus*, common feather stars *Antedon bifida* and common brittlestars *Ophiothrix fragilis* on a rolling reef. Sites between Flat Rock and Hope's Nose were just anemone city too and in amongst that riot were diverse sponges, bryozoans and sea squirts.



The deeper Bream Rock proved to be a rich site dominated by a bryozoans and hydroids with a sponge and plumose anemone *Metridium senile* covered edge – an oasis in a plain of gravel. Sea slug spotters did well finding a large number of the critters munching away at all the sites.



Sites in the SW part of the bay including Berry Head and around Cod Rock were visited in July. The spectacular Berry Head Wall covered in sea squirts, sponges and plumose anemones seemed to have a crab guarding every patch. Cod Rock has a complex reef system with equally diverse habitats (challenging to biotope I'm told by Sally) including patches of *Cellaria spp.* bryozoans with *Sidnyum*

*elegans* sea squirts in the hollows, dahlia anemones *Urticina felina* on the sides and the UK's biggest sea slug, the dead man's finger sea slug *Tritonia hombergi* on the top (a Chris L spotting). The nearby Cod Rock Ledge and Mewstone have rugged topographies catching the tide and a huge biomass of anemones and feather stars resulting, plus the scarce scarlet-and-gold cup-coral *Balanophyllia regia* (thanks Mark). Fabulous indeed.



## Torbay Eelgrass Beds

At the end of the summer, the eelgrass beds in Fishcombe Cove and Beacon Cove were surveyed to maintain an annual on-going survey. In each a 5000 m<sup>2</sup> area was surveyed using 0.25 m<sup>2</sup> quadrats placed at 5m intervals along side transects from a 100m baseline. The percentage cover was estimated and the general condition of the eelgrass was observed (as healthy) at both sites. At Beacon Cove, the distribution was patchy, with cover ranging from 0 to 100%, while at Fishcombe Cove, the eelgrass grew in a strip about 25m wide. Along with the typical fine-sand fauna were cuttlefish *Sepia officinalis* and a snake pipefish *Entelurus aequoreus*.

## Start Point to Prawle Point Reefs

Two productive weekends, in April (organised by Rob Adams) and July, within the newly designated Skerries Bank and Surrounds MCZ provided much survey data submitted to Natural England and summarised in

<http://www.seasearch.org.uk/downloads/Skerries%20MCZ%202014%20Seasearch%20Survey.pdf>

The deeper sites, Prawle Gardens (photos below) and the reefs off Start Point, were stunning in both their abundance of dahlia anemones, feather stars and hornwrack *Flustra foliacea* and their diversity once you looked beyond the anemones...not always easy! Numerous species of sponges, other cnidarians and bryozoans occurred with abundant sand eels *Ammodytes spp.* schooling above the bright sand patches between the reefs. An unusual (for these southern waters) common sunstar *Crossaster papposus* clears a path through a field of feather stars (photo lower right). Rugged reefs with a real garden-like look indeed...fabulous!



Cherrick Rocks continued the bryozoan theme into shallower waters with finger bryozoans *Alcyonidium diaphanum* on low reefs alongside colourful sheets of orange sea squirts *Stolonica socialis*, red bryozoan crusts and white striped anemones *Actinothoe sphyrodeta*. Amongst the anemones were numerous sponge spider crabs *Inachus sp.* (photo over page, lower right). The deep gullies and vertical walls of Reliance Gulley were smothered in spiral *Bugula spp.*, finger and *Cellaria spp.* bryozoans, massive elephant hide sponges *Pachymatisma johnstonia* and varied hydroids.



## The Bolt to Bigbury Bay Reefs

Two weekends, in June and July, explored new sites east of Plymouth. Two fabulous sites off the Bolt area of South Devon were enjoyed in great visibility, the expansive Ascidian Acres and the rolling Bolt Hills - their names give the game away. The Acres were vast plains of orange sea squirts with light bulb sea squirts *Clavelina lepadiformis*, hornwrack and dead mans fingers *Alcyonium digitatum* amongst with schools of scad *Trachurus trachurus* above. A red gurnard *Aspitrigla cuculus* perches on the top of the low lying reef edges, home to jewel anemones *Corynactis viridis* below.



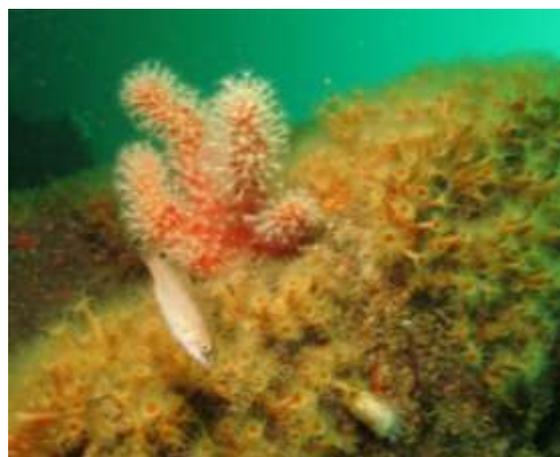
The Bolt Hills were a symphony in orange of sea squirts and various sponges, including stands of large specimens of staghorn sponge *Axinella dissimilis* on the sides of the gullies between large rounded reefs. The reefs were packed with hydroid, bryozoans and red seaweed life. The nationally scarce antler sponge pops up all around these sites - the more we look the more we see.



In Bigbury Bay, at Thurlestone Reef, cuttlefish, spotted ray *Raja montagui* and thornback ray *Raja clavata* (photo) were found amongst the gravel bottomed gullies. The gravel supported abundant sand mason worms *Lanice conchilega* and gravel sea cucumbers *Neopentadactyla mixta*. All the major faunal groups were well represented on the gully walls.



Parazoanthus Walls continued the orange theme in the form of yellow cluster anemones *Parazoanthus axinellae*, huge sheets in places, with plaice *Pleuronectes platessa* in other places on the adjacent sand. Spiral bryozoans formed large patches on the walls. Higher up the drop-off were dense schools of juvenile fish in amongst the kelp and red seaweeds.



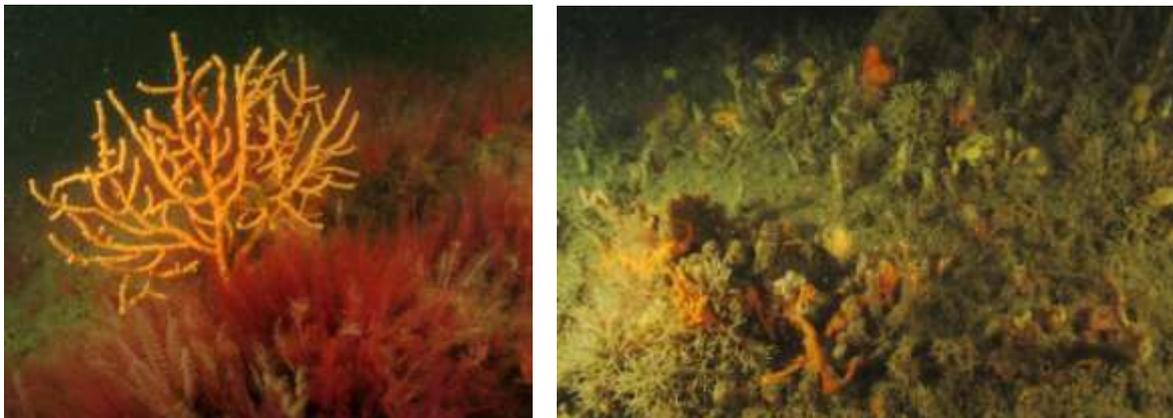
## Stoke Point to Plymouth Sound

Keen individuals contributed forms from popular dive sites along this stretch of coast. Several sites revealed considerable movement of sand during the winter storms, including Hilsea Gulley and the Glen Strathallen site (also sites further east at Start Point). At the Mewstone Ledges, movement of small gully boulders and cobbles was suggested as much less life was recorded at the bottom of some of these gullies. Sea fans wrapped up in discarded netting were noted amongst the Glen Strathallen wreckage (photo left by Sally Sharrock) (and at Thurlestone Reef). Elsewhere on the Mewstone the fans appeared to be in their usual good state (photo right), perhaps more protected.



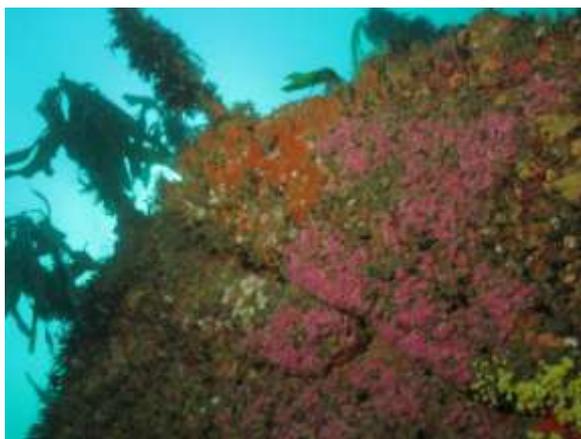
At Seafan Reef, west of the Mewstone, many fans were recorded including juveniles although detached fans and sponges were found in the disturbed gully bottoms too. This reef also delighted the surveyors with rarities such as Weymouth carpet coral *Hoplangia durotrix*, pink soft coral *Alcyonium hibernicum* and tadpole fish *Raniceps raninius* in the deep underhangs of the inclined reef system. On the gully floor, a lobster *Homarus gammarus* devouring a dying starry smooth hound *Mustelus asterias* was videoed by Sally. The Breakwater fort sea fans were in good condition and bearing the false cowrie *Simnia hiscocki* and many slugs. At the deeper (32m plus) Dropoff, the abundant fans were looking well with some juveniles and sea fan anemones *Amphianthus dohrnii*. Overall, the general impression of seafan condition was good despite the winter ravages.

Mallard Shoal, in Plymouth Sound, was surveyed as part of the Bioblitz event run by the Marine Biological Association, and this was a rich site dominated by diverse sea squirts, bryozoans, cnidarians and sponges with abundant feather stars higher up and sea fans at all levels.



## Eddystone Reef Area

The extensive, complex reef system around the Eddystone and north to the Mammaries was further explored and rewarded us with more stunning reefs in great visibility. The typical fauna of varied sponges, cnidarians and echinoderms suggested that the marine life seemed unaffected by the winter storms. Sea fans remained in good condition and abundance with many carrying their associated guests of anemones, sea slugs and false cowries. The priority species ling *Molva molva* is often found in the area.



## North Devon and Lundy

The winds scuppered plans to survey sea fan condition and recruitment on the west side of Lundy but the Knoll Pins and Gannet Rock provided an interesting substitute. Both sites have a rich sponge and cnidarian fauna with the sponges *Homaxinella subdola* and *Iophon* sp. at the sloping, stepped rock base of the former site. At the Outer Knoll Pin, priority species present include crawfish *Palinurus elephas* and the well-known sunset cup coral *Leptopsammia pruvoti* patches, showing signs of establishment by young corals. Rarities spotted included the policeman anemone *Mesacmaea mitchelli*, the teddy bear crab *Dromia personata* and the monkey puzzle bryozoan *Omalesecosa ramulosa*. Rarities at Gannet Rock included a tope *Galeorhinus galeus* while the resident grey seal *Halichoerus grypus* population were in abundance, including one unfortunate one with a damaged eye enthusiastically following us round the site.



Seven other sites around the island were revisited and observed by independent divers whose records reveal the continuing diversity of the island’s habitats and life.

Members of Appledore SAC surveyed sites in the Hartland Point to Tintagel rMCZ and their records submitted to Natural England in a report by Chris Wood, with reference to priority species (<http://www.seasearch.org.uk/downloads/Hartland%20to%20Tintagel%20rMCZ%202014%20Seasearch%20Survey.pdf>). The teddy bear crab was also spotted here and adds to the few records of this westerly species along this North Devon coast. Other sites off North Devon were also observed by this club.

## Priority Species

With its two coastlines, Devon has a great variety of priority (formerly BAP) species and habitats and these are listed below:

Priority Species		Areas where recorded
<i>Amphianthus dohrnii</i>	sea fan anemone	Eddystone Area, Plymouth Sound & Approaches
<i>Eunicella verrucosa</i>	pink sea fan	All areas
<i>Leptopsammia pruvoti</i>	sunset coral	Lundy
<i>Palinurus elephas</i>	crawfish	Bigbury Bay, North Devon, Lundy
<i>Ostrea edulis</i>	native oyster	Torbay
<i>Pleuronectes platessa</i>	plaice	Bigbury Bay, Torbay, Lyme Bay
<i>Molva molva</i>	ling	Eddystone, Lyme Bay
Priority Habitats		Areas where recorded
seagrass beds		Torbay

## Recording Forms

76 Survey forms, 43 Observation forms and 22 Pink Sea Fan forms have been received for Devon sites - a total of 141 forms. The Observation and Survey forms have been entered into the Marine Recorder database by Sally, whilst the Pink Sea Fan forms go into a separate database. Both data sets appear on the National Biodiversity Network website <https://data.nbn.org.uk>. The Survey form contains much more data and so they give a more comprehensive view of the site, its habitats and allow a biotope code to be assigned to each habitat. In Devon, Survey forms represent 54 % of the forms which is a significant increase (11 % points) from last year especially as these require a greater effort by the Surveyor. 19 Surveyors and 7 Observers contributed and the majority of these came from Seasearch-organised trips although a noticeable amount came from several independent enthusiastic people.



## Acknowledgements

Huge thanks go to all those Seasearchers who have supported the trips and completed and returned forms. Their keen eye underwater and dedication afterwards have made the survey activities a great success – Seasearch relies on the contributions of volunteer divers.

Our very helpful skippers also deserve much appreciation. Danny Daniels and Dave Handley from Discovery Divers Plymouth, Tony Hoile and Laurie Fraenkel from Dartmouth, Rick Parker from Torquay, Andrew Bengey from Ilfracombe and Rob King from Lyme Regis. Their extensive site knowledge and good humour have taken us to some fabulous sites and returned us safely - this is greatly appreciated, especially when hunting for new sites with the echosounder. Valuable site information was provided by John Walker too.

My thanks go to Paul Aldersley, who represented Seasearch at the Bioblitz event at Batten Bay, and to Keith Hiscock and Plymouth Sound BSAC, for spaces on their boat during the event. I am grateful to Sally Sharrock (Lundy), Rob Adams (Dartmouth) and Richard Dean (Plymouth) who have organised and run trips in 2014. There is a big demand for organised dives and it is much appreciated that these people have helped out, and continue to help out. Thanks also to Appledore SAC members who provided data for the MCZ designation process. Thanks again to Sally for helpful advice.

Sadly this year, we lost an experienced and highly valued member of our team. Mary Restell was a longstanding contributor to many surveys in Devon and beyond. Enthusiastically, she took on whatever was asked of her – from seagrass to sea fans, Mary certainly had a keen eye for spotting the critters. Mary was much loved by her fellow Seasearchers and will be sorely missed on our trips.

Seasearch in Devon has been supported financially in 2014 by:



Data entry to the Marine Recorder database was supported by:

