



Devon Summary Report 2015



By Chris Webb

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Introduction

The volunteer support for Seasearch dives in Devon remained excellent and this came from both within and beyond the county. Twelve organised survey days were achieved from fifteen planned ones with the vagaries of funding reducing the dive program slightly. An Observer Course took place at Plymouth.

Seasearch data continues to play an important role in the management and further exploration of Marine Protected Areas. The Skerries Bank & Surrounds Marine Conservation Zone (MCZ) and the Special Areas of Conservation (SAC) again figured largely in organised dives. Hartland Point to Tintagel rMCZ and Bideford to Foreland Point 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 in the latter rMCZ. These two zones were designated in January 2016 so that Devon now has five MCZs.

Gaps in the coverage of Seasearch records were targeted again 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 MCZ's) remains a challenge. Another poorly surveyed area, the East Devon part of Lyme Bay (including the part closed to bottom trawling and Lyme Bay Reefs SAC) was, however, visited on one weekend.

Plymouth, on the other hand, as always provides access to a wide area of sites in Plymouth Sound, the Start Point to Plymouth Sound and Eddystone SAC and to Prawle Point (just within the Skerries Bank and Surrounds MCZ) and a large number of records result, especially from independent recorders. Other parts of the Skerries Bank and Surrounds MCZ and the Dartmouth SAC were well surveyed this year from Dartmouth. 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 five forms went to Cornwall Seasearch.



Areas Surveyed

Lyme Bay

We explored the lesser-known Devon part of the bay near Lyme Regis which is relatively less rugged. The DORIS side scan maps (courtesy of Dorset Wildlife Trust) suggested potential sites to explore and they proved to be very interesting. New sites in the West Tennants ledges revealed patches of large pink sea fans *Eunicella verrucosa* (photo below top left), in excellent condition with juveniles. This and other sites had the diverse sponge, cnidarian, bryozoan and ascidian turf, typical of Lyme Bay reefs. Along with dead men's fingers *Alcyonium digitatum*, occurred didemnid ascidians with sponge spider crabs *Inachus* sp (photo below top right) and tapered chimney sponges *Ciocalypta penicillus* with a serpulid worm (photo bottom right). Bedrock ledges, with under hangs, and broken into boulders and cobbles created a good variety of habitats.



The extensive Lane's Ground (photo above bottom left) had a 'lush' turf (good condition, thick in places and diverse) with notable abundance of juvenile pink sea fans and small potato crisp bryozoans *Pentapora foliacea*, reflecting good recovery from scallop dredging, now seven years on. The occurrence of older fans indicates little further damage. Although the seabed was small boulders and cobbles, the faunal list was more typical of bedrock. Excellent to see.

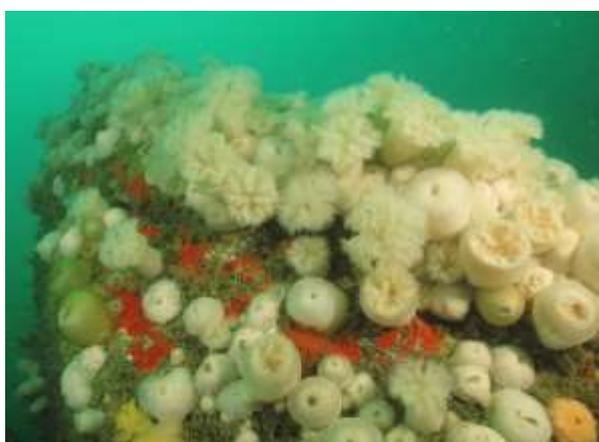
Torbay Reefs

Keen individuals submitted Observation forms for sites within the Torbay MCZ, so monitoring the previously surveyed sites. The popular shore dives of Brixham Breakwater Beach and Babbacombe Cove showed their varied seabeds and fauna in good condition. Slightly offshore rocks requiring some effort to reach included the tidal sites of Tucker Rock and Morris Rogue with their diverse sponge, cnidarian, bryozoan and ascidian faunas plus that fabulous anemone slant.

Beyond the MCZ (ENE of Hopes Nose), an intrepid surveyor provided the first record of the 'new' shipwreck MV Emsstrom (sunk in 2013) surveyed in poor vis with loose ship's gear (she was an accidental wreck so not 'cleaned up') and subsequent discarded anglers' gear. Two and half years on, the wreck is colonised by patches of a tall turf of cnidarians, mainly plumose anemones *Metridium senile* and dead men's fingers, and bryozoans, mainly finger bryozoans *Alcyonidium diaphanum*, with common feather stars *Antedon bifida*, a Norwegian topknot *Phrynorhombus norvegicus* and a free-swimming conger eel *Conger conger* for good measure.

Dartmouth Reefs

Three sites within the Dartmouth SAC sampled the variety of seabed in the small area around Froward Point. Each site proved to be complex requiring several forms to fully record. Nimble Rock was an undiscovered gem of a pinnacle (photo below left). Dramatic seaward walls dominated by plumose and jewel anemones *Corynactis viridis* with varied sponges, other cnidarians and sea squirts. The landward side dropped down to layered inclined bedrock, with many overhangs, with a rich fauna. Various gobies and dragonets swam amongst the dahlia anemones *Urticina felina* habiting the gravel gullies between the rock ridges. The pinnacle top had a school of bass *Dicentrarchus labrax* circling around the furbelows *Saccorhiza polyschides* forest. Scabbacombe Ledges proved to be equally rich with a diverse red algae community on top, and below, an emphasis on sponges and bryozoans, and the nudibranch predators of the latter. Light bulb sea squirts *Clavelina lepadiformis* were notably common with candy striped flatworms *Prostheceraeus vittatus* wandering all over them (photo right). Sharkham Pinnacle had the priority species native oyster *Ostrea edulis* (large specimens well camouflaged with encrusting life) and pink sea fans, providing attachment for catshark *Scyliorhinus canicula* egg cases, so typical of around Dartmouth.



Start Point to Prawle Point Reefs

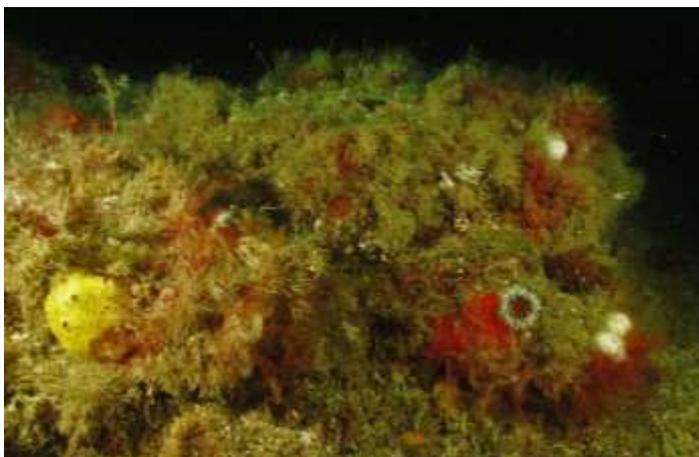
The Skerries Bank and Surrounds MCZ was well surveyed this year, given its wave and tidal exposure, and new positions added within the complex topography of the reefs. On the more sheltered side of Start Point was the fabulously rich Beesands Reef. All animal groups were well represented and the Survey form species list full. The turf had a certain redness, owing to large patches of the red ascidian *Distomus variolosus* (photos below), although this was just one of thirteen ascidian species recorded. As a series of parallel bedrock ridges, the site was an oasis in an otherwise sandy area and homed fifteen fish species. It also yielded rarities, such as Couch's goby *Gobius couchii* (photo lower right by Richard Yorke), and king scallops *Pecten maximus* between the bedrock ridges.



Two sites on the NE side of Start Point were very tidal and the fauna suitably more low lying. Encrusting sponges, bryozoans and ascidians dominated the tops of the bedrock ridges amongst mixed red algae. Small or flat anemones were significant on the ridge sides with abundant white striped anemones *Actinotheroe sphyrodeta* giving one site a certain twinkle (photo below upper left). Another site featured dahlia anemones (lower left) and daisy anemones *Cereus pedunculatus* amongst the very colourful didemnid ascidians (lower right). Priority species, such as plaice *Pleuronectes platessa* (upper right), were recorded in this eastern part of the MCZ.



The deeper Cherrick Reef, on the south side of Start Point, was complex with deep narrow jewel-anemoned gullies running out to low lying bedrock. On the latter occurred a rich bryozoan turf, including the monkey puzzle bryozoan *Omalesecosa ramulosa*, with anemones (dahlia, jewel) featuring in amongst the bryozoans (photo below left). Varied sponges and ascidians occurred in small numbers. Priority species included crawfish *Palinurus elephas* and lesser sandeels *Ammodytes tobianus* and a large bull huss *Scyliorhinus stellaris* was also spotted amongst the abundant feather stars (below right).



At Prawle Point South, at least four biotopes were recognised in this small area. Deep gullies merged into fields of orange sea squirts *Stolonica socialis*, finger bryozoans and antenna hydroids *Nemertesia antennina* dominating the upper bedrock. White striped anemones and red encrusting bryozoans covered the sides of the rock which led down to low rock, with gravel veneer, bearing its characteristic sponge and bryozoan fauna. Notably antler sponge *Adreus fascicularis* (nationally rare but increasingly locally spotted as we survey the area more) and the bryozoan *Eucratea loricata* were found. Large patches of gravel homed gravel sea cucumbers *Neopentadactyla mixta* and lesser sandeels. Matt Doggett's fabulous video <https://vimeo.com/135240962> shows another bull huss in these rich reefs. These parts of Cherrick Reef and Prawle Point, visited this year, proved quite different to the sites surveyed in 2014, reflecting the complex topography in this stretch of coast.



From this and other areas westward to Cornwall, a significantly large number of juvenile crawfish have been recorded by Seasearchers (Observation, Survey and online Crawfish forms). Reports (for 2014 and 2015) by other Devon divers have been collated by Keith Hiscock and show the same spread and abundance. Curiously sightings are rare for the offshore reefs. Perhaps this may indicate some green shoots of recovery in the inshore population although berried individuals have not been recorded by Seasearchers/other divers for many years.

The Bolt to Bigbury Bay Reefs

The offshore limestone East Rutts Pinnacle always provides an interesting alternative to the typical shale reefs of SW Devon. The variety of habitats within the reef produce great diversity and abundance of life, such as twenty-two sponge species, including four *Haliclona* species – it's very easy to fill a Survey form species list. Some of the deep narrow gullies that dissect the reef home rare sponges, like the mashed potato sponge *Thymosia guernei*, and pink sea fans bearing the sea fan anemone *Amphianthus dohrnii*. Seventy-one species alone were recorded in these gullies spanning all the major phyla.

The Reefs around the Persier wreck provide a popular and very scenic alternative to the metal. High jagged bedrock ridges create varied under hangs and deep gullies. *Alcyonium* species, yellow cluster anemones *Parazoanthus axinellae* and varied sponges and bryozoans provide colour on the upper rock while pink sea fans, including juveniles, occur on the lower rock. Steven's goby *Gobius gasteveni* was spotted in the gullies along with red mullet *Mullus surmuletus*.

The Old Erme River Bed Wall, at its notable *Parazoanthus* section (photo below left), hosts the pink sponge *Hexadella racovitzai* with the brittle star *Ophiopsila arenea* (photo below right).

The Louis Sheid wreckage sported native oysters. A small blue shark *Prionace glauca* was sighted off Bolt Head.



Stoke Point to Plymouth Sound

Keen individuals contributed forms from popular dive sites along this stretch of coast, including Fairylands and Hilsea Gully. Priority species spotted include juvenile crawfish (photo below top left) at five sites and anglerfish *Lophius piscatorius* at two sites.



Mewstone Ledges is a reef of jagged inclined strata. On the western side there is a distinct tall edge to the reef with deeper boulders and gravel extending further west. These boulders had a very rich sponge fauna along with varied cnidarians, bryozoans and ascidians (photo above top right) while the transition with the gravel features dahlia anemones (above lower left). Anglerfish, thornback ray *Raja clavata*, and John dory *Zeus faber* were spotted (above lower right). The bedrock ridges have scenic look, courtesy of dead men's fingers amongst sponges and ascidians (photo below). The shallower Mewstone Gulleys have a rich red algae flora with snakelocks anemones *Anemonia viridis*.



Plymouth Sound and Approaches

The area was well visited, from the rich Eastern Kings Wall at the top of the Sound to the spectacular Plymouth Dropoff in the south, and the marine life was typical of their location. At the former, hordes of feather stars migrate over the sponges, ascidians and cables bearing white striped anemones (photo lower left). New Rock, Panther Shoal and Outer Pier Cellars were similar reef and gully systems to Mewstone Gulleys with a diverse sponge fauna amongst the red weed. The shredded carrot sponge *Amphilectus fucorum*, amongst the sea beech *Delesseria sanguinea* (photo lower right) was common at New Rock.



The rugged Elk Reef, supports a rich fauna in its numerous habitats and in places is very scenic with colourful soft coral patches of dead men's fingers and red fingers *Alcyonium glomeratum*. The jagged, vertically-layered rock has numerous under hangs with the tiny pink fingers *A. hibernicum* (photo lower right), to complete the set. Other notables included the rare southern cup-coral *Caryophyllia inornata* and three-bearded rockling *Gaidropsaurus vulgaris*.



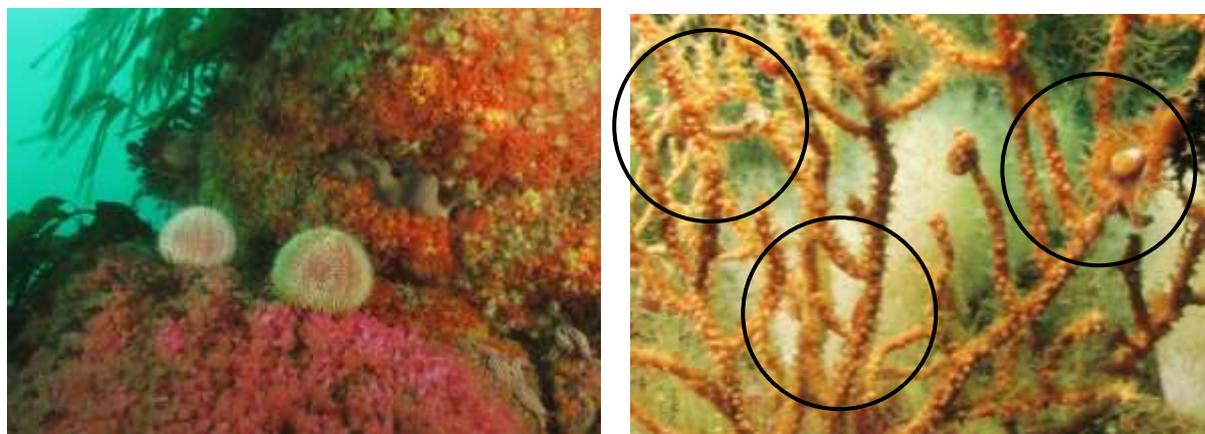
Eddystone Reef Area

This complex reef system of bedrock ledges, slopes and distinct pinnacles was well surveyed. The pinnacles tend to have sheer east-facing walls while the west sides are slopes with kelp and some urchin *Echinus esculentus* grazing. The kelp grows deep in the clearer waters offshore and includes forest kelp *Laminaria hyperborea*, golden kelp *L. ochroleuca* and furbelows. The dramatic walls usually reach 25-30m below CD and are typically dominated by jewel anemones and elegant anemones *Sagartia elegans* with dead men's fingers and sponges, notably purple volcano sponge *Haliclona viscosa* (photo below upper left). The ledges and the tops of deeper block-shaped bedrock/rounded boulders are dominated by encrusting pink algae, sponges, dead men's fingers, pink sea fans, jewel anemones and encrusting bryozoans (such as *Parasmittina trispinosa*) with some variation in the exact mix (photo below upper right). On the NE side of the reef area, varied hydroids also dominated the lower rock.



The rare nudibranch *Discodoris rosi* was spotted at several reefs in the area (photo above lower left by Jan Davies) and seems to be making further inroads into the Southwest's waters. Priority species such as anglerfish (photo above lower right) and ling *Molva molva* are regularly spotted here.

North of the Eddystone Reefs is the Mammaries Reef, with dramatic pinnacles, gullies and deeper ledges and the fauna is generally similar. Some of the pink sea fans are well occupied by their typical inhabitants (photo below right) – nudibranch *Tritonia nilsodhneri* (left), false cowrie *Simnia hiscocki* (centre) and anemone (right).



North Devon and Lundy

Keen individuals contributed Observation forms from varied, popular and revisited sites on Lundy Island, which revealed no obvious change in flora and fauna from previous years. In the then recommended Bideford to North Foreland MCZ, two sites were surveyed during the filming of <http://www.boatstories.co.uk/every-dive-is-an-adventure.html> organised by Ilfracombe BSAC. Eastaway Rock, a small pinnacle in moderately strong tide, was dominated by oaten pipe hydroids *Tubularia indivisa* (with amphipods *Dyopodos porrectus*) and barnacles at the top becoming bryozoan and ascidian turf deeper with notably large dog-whelks *Nucella lapillus*.

Priority Species

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

Priority Species		Areas where recorded
<i>Amphianthus dohrnii</i>	sea fan anemone	Eddystone Area, Plymouth Sound, Bigbury Bay
<i>Eunicella verrucosa</i>	pink sea fan	Most areas
<i>Leptopsammia pruvoti</i>	sunset coral	Lundy
<i>Palinurus elephas</i>	crawfish	Plymouth Sound to Bigbury Bay, Skerries MCZ
<i>Ostrea edulis</i>	native oyster	Bigbury Bay, Dartmouth
<i>Lophius piscatorius</i>	anglerfish	Eddystone Area, Mewstone to Stoke Point
<i>Pleuronectes platessa</i>	plaice	Skerries MCZ
<i>Molva molva</i>	ling	Eddystone Area
<i>Ammodytes tobianus</i>	lesser sandeel	Mewstone to Stoke Point, Skerries MCZ
<i>Solea solea</i>	sole	Lyme Bay

Recording Forms

63 Survey forms, 43 Observation forms, 6 Pink Sea Fan forms and 6 Crawfish forms have been received for Devon sites - a total of 118 forms. The Observation and Survey forms have been entered into the Marine Recorder database by Sally, whilst the Pink Sea Fan forms and Crawfish forms go into separate databases. All 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 53% of the forms, very similar to 2014 and so maintaining the significant increase from 2013, especially as these require a greater effort by the Surveyor. 11 Surveyors and 5 Observers contributed.

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 wholly on the contributions of volunteer divers. Wonderful citizen science indeed. Several keen individuals continue to embrace the ‘any dive can be a Seasearch dive’ philosophy and submit numerous forms independently. Thanks to Chris Wood and Sally Sharrock for liaison with Ilfracombe BSAC and Boat Stories and so getting Survey records from North Devon, to Keith Hiscock for his crawfish observations summary and Sally Sharrock for data entry and advice.

Our very helpful charter skippers also deserve much appreciation. Danny Daniels and Dave Handley of Discovery Divers Plymouth, Tony Hoile and Will Mason of Falcon II from Dartmouth and Rob King of Blue Turtle 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. Discovery Divers also provided the venue for the Observer Course.



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