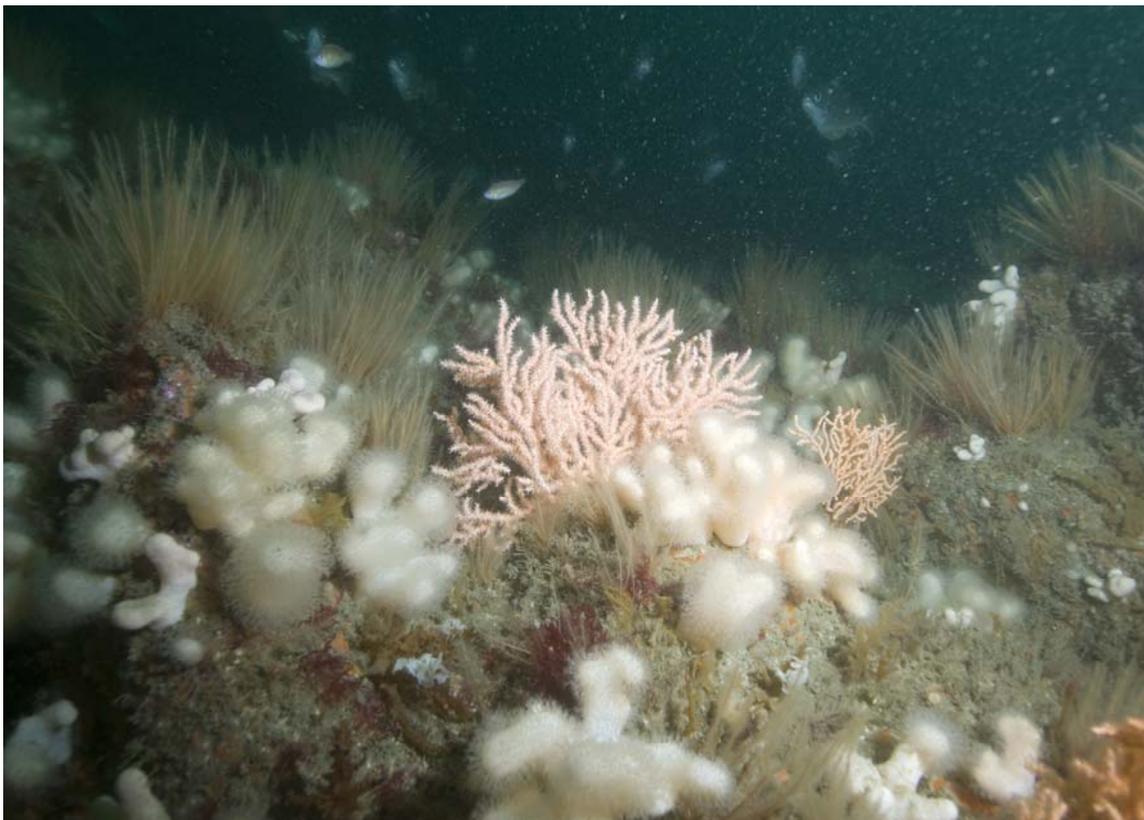




Devon 2008 Summary Report



**Report prepared by
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Introduction

2008 was a successful year in Devon. Dives were carried out at a wide selection of sites round the coast including some at new dive sites including recording of BAP species. Several courses were run and plenty of 'hands on' training took place which delivered a general raised standard of forms submitted and an impressive number of species recorded.

Early in the year a Seasearch Devon website was set up to give brief details about local Seasearch events including a diary page with updated dives and places available, a news page to report interesting records and events and a small photo page. Links to other sites, reports and downloadable forms are also included. The site has proved popular and helpful with local Seasearch divers and can be found at www.seasearchdevon.co.uk

The first organised dive of the year was on 1st March at Blackpool Sands with 19 divers attending. Subsequent dives included the areas of Lyme Bay, Exmouth, Torbay, Dartmouth, Bolt Tail, Plymouth, Hartland Point and Lundy Island. Organised dives finished on 8th December with a total of 25 diving survey days completed. In addition there were many evening and training dives and some forms received from individual dives. Only three Seasearch diving days were cancelled due to bad weather although visibility was sometimes a restricting factor as was dive time on the deeper sites.

Divers came from Devon and nearby counties and also from as far afield as London, Birmingham, Wales and Yorkshire. The number of dives we are able to run in Devon does reflect the fact that it is a very popular diving area.

2008 Specials

- Many records of pink sea fans including new recruits
- Sea fan anemones
- Sunset cup corals in Lyme Bay and at Lundy
- *Alcyonium hibernicum* in a shallow cave at Oddicombe, Torbay
- Crawfish at Lundy and off Bolt Tail
- Seahorse at Beacon Cove, Torbay
- Red band fish off Exmouth and both fish and burrows recorded at Lundy
- Yarrell's blenny on the Plymouth drop off and on the Scylla
- Possible Couch's (or Steven's) goby at Plymouth
- Stalked jellies on a newly recorded eelgrass bed at Wembury
- Anglerfish off Stoke Point

The Dive Sites

• Lyme Bay

Dives this year concentrated on areas that should now be protected and also on BAP species – in some cases on the same dive.

In April four sites were surveyed. West Tennants had a healthy population of sea fans *Eunicella verrucosa* on the upper section of the reef. The well known Sunset reef on Sawtooth Ledges had both sea fans and sunset cup corals *Leptopsammia*



Sea fan under displaced boulder

pruvoti, together with a diverse range of fauna including many sponges and anemones. The Heroine and Golden Cap sites both had sea fans recorded, again with a diverse range of sponges and bryozoans. In August a further two sites were surveyed in conjunction with divers from Plymouth University. Concrete Canon site just south of Lane's Ground was chosen as a possible monitoring site now the dredging ban had come into force. Here much fishing damage was recorded with boulders overturned and

fragile species such as potato crisp bryozoan *Pentapora foliacea* smashed. Western Sunset was also surveyed as this was a site known to have a good population of sea fans. Here the picture was mixed with many large healthy fans and a rich faunal diversity but also swathes where extensive fishing damage had been recently done (probably just before the ban came into force) with crushed sea fans, overturned boulders and much smothered fauna. These sites will be surveyed again in 2009 to see how they are recovering.

• Exmouth

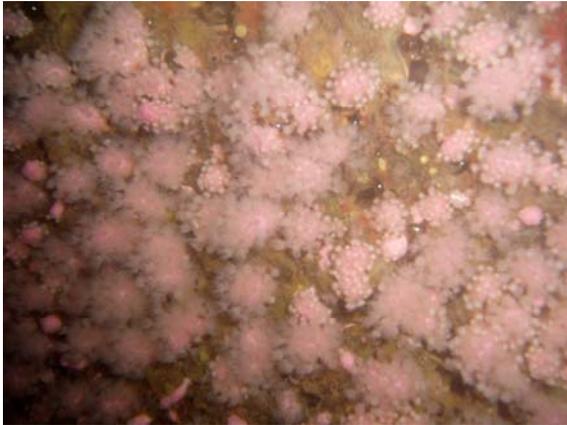
Poor visibility was again a feature for the Exmouth dives. The team surveyed a site that is recorded by Devon Wildlife Trust as having a maerl bed. None was found but numerous large Terebellid worm structures were recorded. These same worms were a feature at many sites along the south coast throughout the spring. Despite efforts to obtain a specimen for identification a specific ID still eludes us. A second site out of Exmouth which was reported to have the eelgrass *Zostera marina* was surveyed and whilst no eelgrass was found (it was considered to be too deep) red band fish *Cepola rubescens* were recorded. It is planned to survey a more likely shallow area further inshore off Dawlish in 2009 to ascertain whether there is eelgrass present.



Terebellid worms with starfish

• Torbay

A series of dives has been carried out in Torbay to survey areas not frequently dived. Several of the survey sites included eelgrass beds. Other sites included shallow cave and cliff overhangs at Oddicombe where pink fingers *Alcyonium hibernicum* were recorded, a new shallow site at Black Head with sea fans and Beacon Cove where a spiny seahorse *Hippocampus guttulus* was found amongst the eelgrass. A series of evening dives was carried out on a site in the centre of the bay called The Ridge where a diverse fauna was recorded including many species of crustacean.



Pink fingers at Oddicombe

In 2009 it is planned to survey sites around Torbay which are frequently dived but not often recorded.

Local diver and caver Chris Proctor has been continuing his work on the fauna of the caves in the area, especially at Berry Head. One of the caves at Durl Head has southern cup coral *Caryophyllia inornata* above chart datum, and a rich sponge fauna including *Stelletta grubii*. There is also an extremely interesting sponge identified as *Geodia cydonium* which after DNA tests turns out to be not the common Mediterranean species known by that name but a very rare northern species, confusingly having the same name, but with only three other records. Chris's recent findings are not yet included in the current Seasearch data but he is currently producing a report on the caves in the Torbay area and obviously work will be ongoing.

• Dartmouth

Dives from Dartmouth covered sites at the southern end of Start Bay, sites close to the mouth of the Dart and sites to the north of Dartmouth. The more southern reefs off Hallsands and Beesands proved to be low lying rocky reef with rich sponge and anthozoan habitat mainly covered with abundant mussel *Mytilus edulis* spat. This spat was repeated on the sites nearer Dartmouth and may be due to the (now disused) mussel farm just to the south of the mouth of the Dart. Scabbacombe Head sites to the north were dived in October and recorded for the first time. Here at shallow sites there were many cat shark egg cases (both greater and lesser *Scyliorhinus stellaris* and *S canicula*), some newly laid, obviously a popular nursery area.

• Bolt Tail, Bigbury Bay & Plymouth

Sites accessed from Plymouth included the wreck of the Maine and several reefs around Bolt Tail, the Persier wreck in Bigbury Bay, reefs off Stoke Point, Hilsea Point and around the Mewstone plus the off-shore reefs of the Eddystone.

The Maine is in an area of strong currents and supports a varied hydroid and abundant bryozoan fauna. In sheltered areas on the wreck sea fans were recorded as well as many Devon cup corals *Caryophyllia smithii* and jewel anemones *Corynactis viridis*.

New sites off Bolt Tail found areas with rich hydroid cover in strong currents, sea fans in more sheltered pockets and a large crawfish *Palinurus elephas* at one site.

The wreck of the Persier has a well known sea fan forest which also supports sea fan anemones *Amphianthus dohrnii* on some fans. White cluster anemones *Parazoanthus axinellae* (or *anguicomis*?)



White cluster anemones on the Persier



Sea fan anemone on the Persier

together with small football sea squirts *Diazona violacea* have recently been recorded in one place and a reliable report of *Alcyonium hibernicum* has been verbally received but yet to be documented.

The reefs off Stoke Point and westwards past Hilsea have a rich and varied sponge fauna including the rare *Adreus fascicularis*. Angler fish *Lophius piscatorius* was recorded here together with thornback ray *Raja clavata*, bull huss *Scylliorhinus stellaris* and squid *Loligo vulgaris*. Sea fans, cup corals and soft corals also feature in records from this area.

At the western end of this area towards Gara Point a record of a rare Couch's goby *Gobius couchii* was received and initially confirmed in October. Subsequently it has been suggested it may be the even rarer Steven's goby *Gobius gasteveni* – the two are remarkably similar. Obviously a target area for 2009!

A previously unrecorded eelgrass bed in Wembury Bay was surveyed briefly. Unlike the other known beds in the Yealm, this bed is outside the



Couch's or Steven's Goby

sandbar and it appears healthy and extensive. There were also many stalked jellies *Haliclystus auricula* on the eelgrass.

Only one record was received this year from the Plymouth drop off area with sea fans, yellow cluster anemones and sea fan anemones recorded but on this occasion no sunset cup corals. A series of dives in this area is already arranged for 2009 specifically to monitor sea fans and sunset cup corals.



Eelgrass in Wembury Bay

Healthy sea fans were recorded on two sites surveyed on the offshore Eddystone reef.

The Plymouth Sound area is used for many training dives. Sea fans on the breakwater and breakwater fort are regularly monitored and this year appeared healthy and with many small recruits. Just outside the breakwater there are records of sizeable patches of the southwest golden kelp *Laminaria ochroleuca*. A verbal record of a fanshell *Atrina fragilis* sighting in Cawsand Bay has been received from a reliable source but is yet to be verified.

• Hartland Point

Two trips were arranged to attempt to survey the area around Hartland Point. Only one dive was achieved and that in very poor underwater visibility, but large frequent clumps of potato crisp bryozoan together with frequent branching sponges indicate a probable fragile sponge and anthozoan community. This area is particularly difficult to dive due to local conditions and as such has very few records. However, dives will be planned for 2009 to attempt once again to get more information.

• Lundy Island

This year the trip to Lundy included a one day workshop based at Ilfracombe BSAC to improve identification skills, especially of Lundy species. Unfortunately the weather dictated dives on the east side of the island on all three Seasearch diving days.

On the rock and boulder areas sea fans, Devon cup coral *Caryophyllia smithii*, southern cup coral *C. inornata*, and sunset cup coral were all recorded together with sponge crab *Dromia personata*, tassel weed *Carpomitra costata*, and crawfish.

On the sediment areas red band fish were sighted together with abundant burrows – many more than in previous recent years. Several species of burrowing anemone included abundant *Cerianthus lloydii*, policeman anemones *Mesacmaea mitchellii* and carpets of daisy anemones *Cereus pedunculatus*.

Some dives were enlivened by playful Atlantic grey seals which did not improve the visibility!



Sunset cup corals, Knoll Pins, Lundy

Courses

With the changes to the Surveyor course (which is now more habitat weighted and with less ID content) it was felt that there was a place for an ID course for those who were already at Observer level but wishing to improve their skills. With this in mind, a one day Marine ID course was set up to run at Ilfracombe with two subsequent



Post dive recording session, Ilfracombe

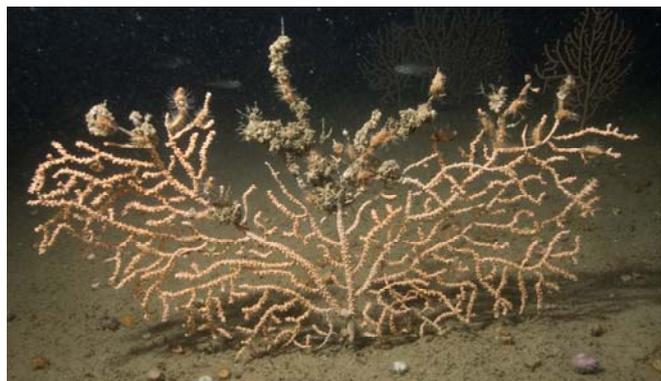
days diving at Lundy Island. The course emphasised the special Lundy species and was presented by Sally Sharrock and Dr Keith Hiscock. It proved very popular, with 24 participants. A similar course was run in Plymouth in August with emphasis on local species and algae.

A Surveyor course was run in early March for the Joint Services personnel at Fort Bovisand and another in late March for other divers. Four participants have so far qualified as Surveyors and have been very active. An Observer course in April and a Surveyor update in July both had a disappointing attendance. Five Devon divers have completed their Observer qualification this year.

A sponge workshop with Bernard Picton and Dr Claire Goodwin was held in Plymouth in conjunction with the Marine Biological Association, using facilities both there and at Fort Bovisand. This proved very popular, with 18 participants attending. All these courses reflected the aim to get more recorders up to Surveyor level and also to generally improve ID skills which has been reflected in the quality of forms and number of species recorded.

Other projects

Whitsand Bay is in Cornwall but often accessed from Plymouth. The area contains the wreck of the Rosehill with extensive sea fan forests and where sea fan anemones are being monitored with photographs taken at varying intervals. Three fans in particular are being studied, the most fouled one shown here. The anemones are thriving at the expense of the sea fan which although growing at the accepted rate of 1cm per year at the edges is being eaten away in the centre. It is hoped to write up an interim report shortly although the monitoring would appear to be progressing towards long term – the anemones already seem to be much more long-lived than we originally thought!



Rosehill survey sea fan with anemones

Various dives on the Scylla have continued with species monitoring. This year there were records of Yarrell's blenny *Chirolophis ascanii* which is usually regarded as a more northerly species (it was also recorded on the Plymouth drop off). The pink sea fans recruited last year appear to be growing well especially where they don't suffer from diver damage and a 2008 crop of new recruits has also appeared. Other life is 'blooming' including unlikely records of dahlia anemones *Urticina felina* on the upper deck, more red fingers *Alcyonium glomeratum*, abundant featherstars



Young sea fans on the Scylla

Antedon bifida at certain times of the year and more varied fish life including nesting Corkwing wrasse *Crenilabus melops* and grey mullet *Chelon labrosus*.

The Scylla was featured on BBC Autumn Watch with Kate Humble.

Other Seasearch activities in Devon have included talks and presentations to groups of divers, clubs and the general public.



Dahlia anemones on the deck of the Scylla

Species summary

This table lists the Biodiversity Action Plan species recorded, together with those nationally rare and scarce or uncommon species.

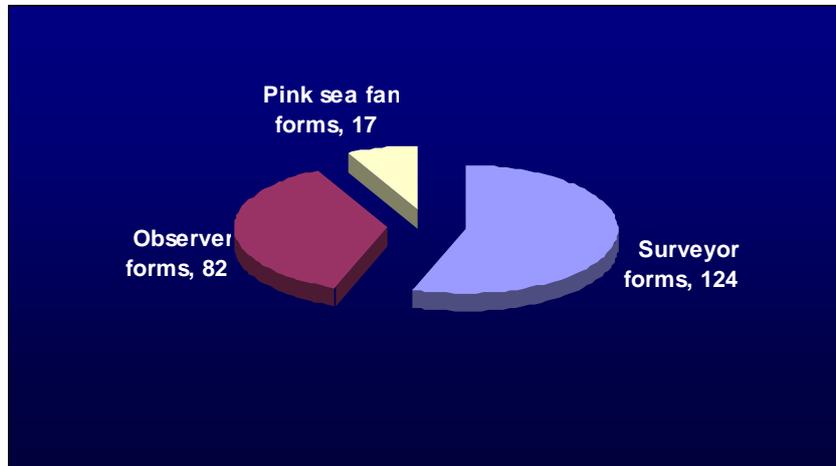
	BAP species	Common name	Nationally rare & scarce or locally uncommon species	Common name
Porifera			<i>Adreus fascicularis</i> <i>Thymosia guernei</i> <i>Axinella damicornis</i>	Mashed potato sponge
Cnidaria	<i>Eunicella verrucosa</i> <i>Amphianthus dohrnii</i> <i>Leptopsammia pruvoti</i> <i>Haliclystus sp</i>	Pink sea fan Sea fan anemone Sunset cup coral Stalked jelly	<i>Parazoanthus axinellae</i> <i>Caryophyllia inornata</i> <i>Alcyonium hibernicum</i>	Yellow cluster anemone Southern cup coral Pink fingers
Crustacea	<i>Palinurus elephas</i>	Crawfish		
Mollusca			<i>Okenia elegans</i>	Elegant sea slug
Echinodermata			<i>Asterina phylactica</i>	Small cushion star
Tunicata			<i>Diazona violacea</i>	Football sea squirt
Pisces	<i>Gadus morhua</i> <i>Lophius piscatorius</i> <i>Pleuronectes platessa</i>	Cod Anglerfish Plaice	<i>Myoxocephalus scorpius</i> <i>Chirolophis ascanii</i> <i>Gobius couchi</i> <i>Cepola rubescens</i>	Short spined seascorpion Yarrell's blenny Couch's goby Red band fish
Algae	<i>Lithothamnion coralloides</i>	Maerl	<i>Laminaria ochroleuca</i> <i>Carpomitra costata</i>	Golden kelp Tassel weed
Angiospermae	<i>Zostera marina</i>	Eelgrass		

The table below shows the total number of species recorded in each phylum together with some of the most common species.

Phylum	Number of species recorded	Common species	Common name
Porifera Sponges	56	<i>Axinella dissimilis</i> <i>Hemimycale columella</i> <i>Pachymatisma johnstonia</i>	Staghorn sponge Crater sponge Elephant hide sponge
Cnidaria Anemones, corals, hydroids	49	<i>Nemertesia spp</i> <i>Alcyonium digitatum</i> <i>Metridium senile</i> <i>Corynactis viridis</i> <i>Caryophyllia smithii</i>	Sea beard Dead men's fingers Plumose anemone Jewel anemone Devonshire cup coral
Annelida Segmented worms	18	<i>Pomatoceros spp</i> <i>Terebellidae indet</i>	Keelworm Terebellid worm
Crustacea Crabs, lobsters, barnacles	37	<i>Necora puber</i>	Velvet swimming crab
Mollusca Shells, sea slugs	51	<i>Calliostoma zizyphinum</i>	Painted topshell
Bryozoa Sea mats	23	<i>Pentapora foliacea</i> <i>Membranipora membranacea</i>	Potato crisp bryozoan Sea mat
Echinodermata Starfish, urchins, sea cucumbers	20	<i>Marthasterias glacialis</i> <i>Echinus esculentus</i>	Spiny starfish Edible urchin
Tunicata Sea squirts	29	<i>Stolonica socialis</i>	Orange sea squirt
Pisces Fish	42	<i>Pollachius pollachius</i> <i>Labrus bergylta</i> <i>Ctenolabrus rupestris</i>	Pollack Ballan wrasse Goldsinny
Mammalia Mammals	1	<i>Halichoerus grypus</i>	Atlantic grey seal (Lundy only)
Algae Seaweeds	41	<i>Laminaria hyperborea</i>	Cuvie/forest kelp
Angiospermae Eelgrass	1	<i>Zostera marina</i>	Eelgrass
Total species	368		

Forms

The target in Devon for 2008 was to have at least 50% of returned forms as Surveyor forms. At the time of writing there are 223 forms logged from Devon (covering the area from eastern Lyme Bay to Rame Head in the west) and the target has been exceeded. The types of record are shown in the chart below.



Hopefully we can keep the momentum up in Devon in 2009!

Acknowledgements

Seasearch is successful because a large number of people give their time and expertise freely. Thanks go to all those Seasearchers who have completed and sent in forms. Especial thanks go to Dr Keith Hiscock, Ilfracombe Sub Aqua Club, Discovery Divers at Fort Bovisand, Aquanauts in Plymouth, Chris Webb & Dominic Flint for their particular input and all the skippers who have put us in the right places for our dives and, more importantly, picked us up afterwards!

Photographs in this report by Sally Sharrock and John Hepburn.

Seasearch is a volunteer underwater survey project for recreational divers to contribute to the conservation of the marine environment. Financial support for the project in England during 2008 has been given by Natural England and The Environment Agency.

