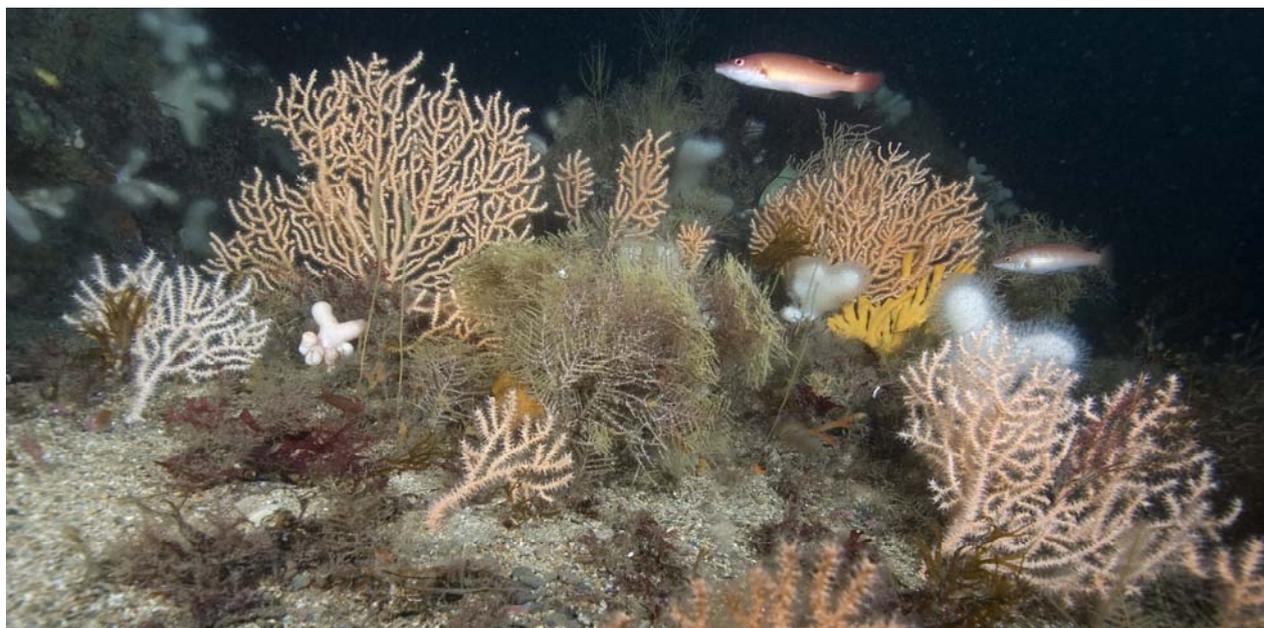


Devon 2011 Summary Report



Rich sponge and anthozoan turf, Fairylands, east of Plymouth

Report prepared by
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Introduction

Despite a reduced programme of organised Seasearch dives during 2011 the number of forms returned from Devon was almost the same as the previous year. A considerable number of divers are returning forms from their own dives – ‘any dive can be a Seasearch dive’ – which is most encouraging and there was also a good proportion from both Surveyor and Observer course participants with several divers completing their qualifications.

As usual the weather played a part in where and when Seasearchers were able to dive but sites covered the south coast of the county including Torbay, Dartmouth/Start Bay and out of Plymouth. Divers took part in the bioblitz event at Charton Bay near Lyme Regis organised by the Marine Biological Association. In addition independent divers returned forms from Lundy Island. As in previous years a popular series of 9 evening dives was conducted out of Plymouth. Habitat surveys were carried out in conjunction with the Coronation wreck project in Plymouth.

Not all the sites can be mentioned in detail but the report covers those with special or unusual features and gives a brief overview of the areas.

The publication of the new Seasearch Guide to Seaweeds of Britain and Ireland has helped to increase the number of seaweed species recorded and specialist courses in recent years has meant divers are recording a far greater number of species with good accuracy.

Recording Forms

At the time of writing a total of 76 Surveyor forms and 154 Observer forms have been received from Devon although some are from buddy pairs on Seasearch training dives. Surveyor forms are the most useful, usually giving several habitats for each site and a more comprehensive description and species list enabling biotopes to be assigned. The number of Observer forms reflects the interest still being generated with new divers – or indeed more experienced divers who are just new to Seasearch. The hope is that many of these divers will graduate up to Surveyor level in time.

All forms have now been input to Marine Recorder and biotopes added where possible. The biotope codes show a wide range of differing habitats both across the whole region and within smaller areas. The Marine Recorder files will be merged and uploaded to the national JNCC Gateway site in spring 2012.

The Dive Sites

Torbay Area

The area from Babbacombe southwards to Berry Head has a very diverse range of habitats and species. Finding Sanctuary has proposed an inshore Marine Conservation Zone following the coast from Babbacombe, around Torbay and to the south of Berry Head. Many of the dives were within this zone.

In 2010 a report and indistinct photograph was received from diver Terry Griffiths at Babbacombe of a possible sighting of the rare prawn *Periclimenes sagittifer*. Despite reference to experts the ID was



Periclimenes sagittifer

Photo Dan Bolt

uncertain. However this year he had further sightings and a clear photograph was received of the prawn in a host snakelocks anemone *Anemonia viridis* and the first official sighting of several of these prawns in Devon was confirmed. Cuttlefish *Sepia officinalis* and John Dory *Zeus faber* were also recorded at Babbacombe.

Further south at Blackhead pink sea fans *Eunicella verrucosa* were recorded in shallow water c 12m bsl.

Dives within Torbay itself included the Morris Rogue site which had extensive edible mussel *Mytilus edulis* beds interspersed with the non-native Wakame seaweed *Undaria pinnatifida* above anemone and sponge covered sloping rock. The silt covered site at the Orestone again had extensive anemone beds, both daisy *Cereus pedunculatus* and dahlia *Urticina felina*, with the site at Thatcher rock again similar. To the south of the bay a site off the north side of Berry Head had mussel beds on mixed sediment rather than rock interspersed with non-native slipper limpets *Crepidula fornicata*. Survey dives at the Ridge in the south west corner of the bay sadly recorded strings of cuttlefish pots, a legal way of catching them but both distressing for the divers to see and with a negative effect on egg laying and breeding. The CRESH project is trialling various artificial structures in the bay to encourage undisturbed egg-laying.

To the south of Berry Head occasional healthy pink sea fans were recorded at Mudstone Ledges with many crustacea sheltering in the fissured rock.

Biotopes included
 IR.MIR.KR.LhypT
 IR.MIR.KR.Lhyp.Pk
 IR.MIR.KR.XFoR
 CR.HCR.XFa.ByErSp
 CR.HCR.XFa.SpAnVt
 CR.MCR.CMus.CMyt
 CR.MCR.EcCr.UrtSc
 SS.SBR.SMus
 SS.SMu.CFiMu
 SS.SCS.CCS.NMix
 SS.SCS.CCS

Dartmouth and Start Bay

Shore dives early in the year at Hallsands gave everyone the chance to get into the water for a first dive of the year. The main feature recorded was edible mussel beds on the rock outcrops.

Dives at Middle Blackstone off the mouth of the Dart recorded edible mussel beds in shallow



Edible mussels amongst plumose anemones at Middle Blackstone

water with the bedrock below having diverse habitats of plumose anemones *Metridium senile*, dahlia anemones, large patches of featherstars *Antedon bifida* and at the base large beds of brittle stars *Othiothrix fragilis* and *O. nigra*.

Biotopes included
 IR.HIR.KSed.LsacSac
 IR.MIR.KR
 CR.MCR.CMus.CMyt
 CR.HCR.XFa.SpAnVt
 CR.MCR.EcCr.FaAlCr.Bri
 SS.SCS.CCS
 SS.SMu.CFiMu
 SS.SMx.CMx.OphMx
 SS.SSa.CFiSa

Bigbury Bay

Surveys included both wreck and reef dives. The wreck of the Persier is well known for its extensive pink sea fan forests. An unusual record was of Yarrell's Blenny *Chirolophis ascanii* which is only occasionally recorded along the Devon coast.

Offshore the Alternative Rutts was surveyed. This is a limestone outcrop with small pinnacles and gullies on the top falling away steeply to the west side, more sloping to the east. The top was characterised by an extensive golden kelp forest *Laminaria ochroleuca*, the sloping pitted rock covered with sponges, anemones and sea squirts and where the seabed levelled out sponges and pink sea fans formed the BAP habitat of fragile sponge and anthozoan turf with 14 species of sponge recorded amongst pink sea fans. Large football sea squirts *Diazona violacea* were also a distinctive feature.



Mixed faunal turf at Alternative Rutts

Biotopes included IR.HIR.KFaR.LhypR.Loeh
CR.HCR.XFa.SpAnVt
CR.HCR.XFa.ByErSp.Eun
SS.SCS.CCS

Stoke Point to Mewstone

The Hilsea gully area is well recorded so this year there was an effort to survey the pinnacles to the west of Hilsea Point running westwards into an area known locally as Fairylands. These pinnacles have a rich faunal turf of hydroid, sponge and anthozoans on the near vertical fissured sides with overhangs in places and are intersected by gullies with clean gravel and scoured rock bases giving a wide variety of habitats, illustrated by the varied biotopes listed below. Species of note included the rare yellow sponge



Endectyon delaubfaunensis

Biotopes included IR.HIR.KFaR.LhypR.Loeh
IR.HIR.KFaR.FoR
IR.HIR.KFaR.LhypR.Ft
CR.FCR.Cv.SpCup
CR.HCR.XFa.ByErSp.Eun
CR.HCR.XFa.CvirCri
CR.HCR.XFa.SpAntVt
SS.SCS.CCS

included the rare yellow sponge *Endectyon delaubfaunensis*, sponges *Hymedesmia paupertas* and mashed potato sponge *Thyrosia guernei*, pink fingers *Alcyonium hibernicum*, pink sea fans, Weymouth carpet coral *Hoplangia durotrix* and spotted ray *Raja montagui*. Thirteen species of weed were identified on the dives including golden kelp and a total of twentyone species of sponge.

Plymouth Sound and approaches

A large number of forms from this area are training forms for those who have attended Observer courses, especially marine biology students from Plymouth University. However, since the local species include pink sea fans, sea pens, several reasonably easily identified species of sponge, coral, anemone and hydroid the area is an ideal training ground. It is also one of the easiest places to organise dives from and this is reflected in the number of forms received and subsequently the variety of habitats – see the biotope list below.

Within the Sound golden kelp was recorded at Pier Cellars and wakame was recorded both on the Breakwater Fort and in Bovisand harbour. Seaweeds were collected for ID and training purposes from near Penlee Point resulting in 18 species being recorded on one dive. Pink sea fans on and around the Fort in shallow water continue to thrive and have had recent good recruitment and the slender sea pen *Virgularia mirabilis* is evident in the silt at the base. The eelgrass bed *Zostera marina* in Cawsand Bay was surveyed and appeared healthy with the stalked jelly *Lucernariopsis campanulata* recorded.

The Drop off dive sites have been well recorded in the past but are always popular and this year Steven's goby *Gobius gasteveni*, the pink sea fan anemone *Amphianthus dohrnii*, sunset cup coral *Leptopsammia pruvoti*, Weymouth carpet coral, the sponge *Endectyon*



Slender sea pen

delaubfaunensis and the sea fan false cowrie newly named *Simnia hiscocki* were all recorded at around 32m bsl. The Inner drop off sites are less frequently surveyed but can be equally rewarding with pink sea fans, pink fingers, yellow cluster anemones *Parazoanthus axinellae* and Weymouth carpet coral all identified on dramatic upended ridges of stratified rock.



Simnia hiscocki Photo Keith Hiscock

Pink sea fans have previously been recorded at Elk Reef and this year pink fingers were added to the list for this site. Records of this tiny species have become more common recently. It is hard to say

whether they are in fact becoming more common or whether the recorders are getting better at spotting them, usually tucked away in a shaded crevice or overhang.

Seasearch rarely dives upriver at Cremyll Shoal in the Tamar but the mixed sediment and very tidal site is species rich with Steven's goby and native oyster *Ostrea edulis* being recorded among varied burrowing anemones, glass bottles and china plates!

And sadly at Penlee Point, one of our Seasearchers noted a discarded gill net with many dead crabs and birds.

Biotopes included IR.MIR.KR
 IR.MIR.KR.LhypTX
 IR.MIR.KR.LhypT
 IR.HIR.KSedSac
 CR.FCR.FouFa
 CR.HCR.XFa

CR.MCR.EcCr
 CR.HCR.XFa.ByErSp.Eun
 CR.HCR.XFa.SpAnVt
 CR.FCR.CvSpCup
 SS.SMp.SSgr.Zmar
 SS.SCS.CCS.PomB
 SS.SMu.CFiMu
 SS.SCS.CCS
 SS.SSa.CFiSa

Eddystone

Records included healthy reefs with kelp forest and faunal turf below with jewel anemones *Corynactis viridis* dominant in many places, pink seafans frequent or common and the Indian feather hydroid *Gymnangium montaguui* recorded as frequent. At one site both ling *Molva molva* and sunfish *Mola mola* were recorded.



Indian feather hydroid

Biotopes included

IR.HIR.KFaR.LhypFa
 CR.HCR.XFa.CvirCri
 CR.HCR.XFa.ByErSp.Eun
 SS.SCS.CCS

Lundy Island

Observer forms from Lundy Island were returned from independent divers covering the popular sites. No organised Seasearch dives were undertaken but it is planned to re-survey some of the pink sea fan sites in 2012.

Lyme Bay Bioblitz

Dives at Charton Bay to the west of Lyme Regis were undertaken by a team of Seasearch volunteers as part of the 24hour Bioblitz. The table below shows the numbers of species recorded and some of special interest.

Species	Number recorded	Species of note
Sponges	21	
Cnidarians	19	Trumpet anemone <i>Aiptasis mutabilis</i>
Worms	10	Horseshoe worm <i>Phoronis hippocrepia</i>
Crustacea	17	Lobster <i>Homarus gammarus</i>
Molluscs	18	Slipper limpet <i>Crepidula fornicata</i>
Bryozoans	9	
Echinoderms	4	Burrowing cucumber <i>Thyone roscovita</i>
Sea squirts	14	Gas mantle squirt <i>Corella parallelogramma</i>
Fish	15	Triggerfish <i>Balistes capriscus</i>
Seaweeds	31	
Total species	158	

Coronation Wreck recording

Several dives were conducted on the Coronation wreck to help assess the habitats and species present. Generally it was found that the site was species poor with no upstanding sponges or hydroids, no pink sea fans and a general silt cover. It was felt that the site had been affected by something, most likely 'dribble' from the dumping barges on the way to the

dump site, or less possibly heavy silt outflow from Plymouth Sound. Comparison dives were conducted to the west of the protected wreck site where pink sea fan recruits were found on rock and gravel cones in the sediment, possibly fish nests. This area also had a heavy layer of silt which didn't look right considering the wave action. The findings were duly reported to the Coronation Wreck Project to help with their ongoing work.

BAP Habitats and species

The table below gives details of where certain BAP species were recorded.

Species name	Common name	Where recorded in 2011
<i>Amphianthus dohrnii</i>	Seafan anemone	Plymouth Drop off
<i>Eunicella verrucosa</i>	Pink seafan	Torbay Dartmouth Bigbury Bay Plymouth area
<i>Lucernariopsis cruxmelitensis</i>	Stalked jellyfish	Cawsand Bay, Plymouth
<i>Leptopsammia pruvoti</i>	Sunset cup coral	Plymouth
<i>Ostrea edulis</i>	Edible oyster	Cremyll Shoal, Plymouth
<i>Molva molva</i>	Ling	Eddystone
<i>Zostera marina</i>	Eelgrass	Cawsand Bay, Plymouth Brixham

Training

A Marine ID course for improvers was held in Plymouth in March, tutor Sally Sharrock. This course aims to help divers increase their ID skills before they go on to the Surveyor course.

A Surveyor course was held in Plymouth, tutor Sally Sharrock. Several of the participants have now gained their qualification.

Observer courses were held during the year in Plymouth, tutor Kat Brown.

Other projects

Devon Seasearch worked with the Devon County MCZ group of Finding Sanctuary in the early part of the year.

Input has also been given to the DEFRA funded project to monitor the Lyme Bay closed area and it is hoped this will continue.

A presentation was given in north Devon to the Coastwise group to illustrate the habitats and species that they have in their local proposed MCZ area.

Acknowledgements

Seasearch is a volunteer underwater survey project for recreational divers to contribute to the conservation of the marine environment. Devon Seasearch is successful because a large number of people give their time and expertise freely. Financial support for the project in Devon during 2011 has been given by the Marine Conservation Society and Global Ocean.

Thanks go to all those Seasearch divers who have completed and sent in forms and to all the skippers who have ensured we had safe and enjoyable diving. Thank you also to Rob Adams and Chris Webb who have acted as dive organisers and to Kat Brown who took on the role of coordinator for much of the year.

Photos in this report are by Sally Sharrock unless otherwise credited.

This is a summary report of the year's activities. Exact dive positions, more in-depth details of habitats or the species recorded can be obtained on request from the author sally.sharrock@btopenworld.com

