

Mewstone ledges  
Sally Sharrock



Seahorse  
Mike Lawton

# Devon Seasearch 2007 Summary Report



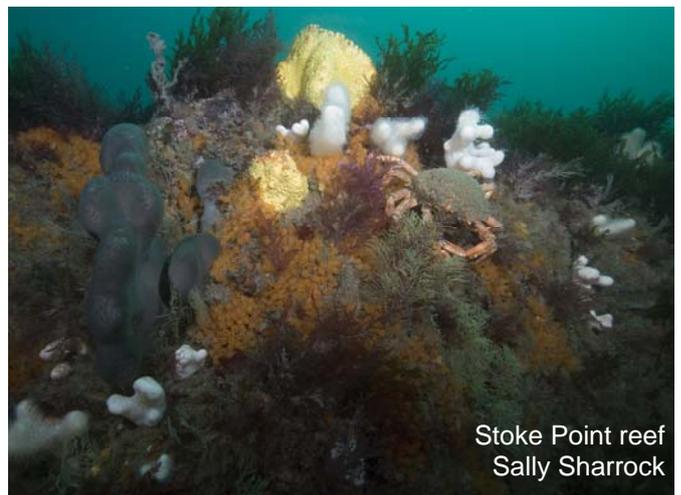
Basking shark  
Richard Yorke



Sunset cup coral  
Paul Aldersley



Crawfish  
Graham Bees



Stoke Point reef  
Sally Sharrock

**Devon Seasearch** has had a busy year. Despite difficult weather at times, most of the planned dives went ahead.

### Dives

Lyme Bay sites were surveyed both on a trip out of Exmouth and a trip out of Lyme Regis. A full report was prepared by Chris Wood and can be obtained from the Seasearch website.

Other surveys on the south Devon coast covered areas around Torbay, Salcombe, Bigbury Bay, Plymouth inshore sites and Plymouth offshore reef and drop off sites.

On the north coast a weekend trip to Lundy Island had perfect weather and excellent visibility whilst the planned trip to survey around Hartland Point was sadly blown out and will be rearranged for 2008.

In the past there has been some financial subsidy available to encourage surveys in less popular areas for which Seasearch has been grateful. Sadly this appears to be considerably reduced, hence the volunteers will in future have to pay the full price for the diving. It remains to be seen whether Seasearch will still be able to attract enough divers to fill boats to less popular and less well surveyed areas. It is still the intention to try and survey new or relatively little known areas in 2008.



Butterfish *Pholis gunnellus*  
Torbay - Sally Sharrock

### Courses

Observer courses were run in Bristol (for a group who usually dive in Devon), Tiverton, Torbay (2) and Plymouth (2). A joint Surveyor course was run with Cornwall at Hayle. A large number of training dives for the course members have been carried out, especially from Plymouth and around Torbay. These dives are designed to make sure those submitting forms can do so to a required standard and also to increase identification skills. Some divers were lucky to record seahorses on their first training dives at Babbacombe (photo front page). The new Marine Life guide was launched in the spring and has proved very popular and useful and most of the local dive shops are stocking it.

### Publicity and communication

Seasearch has been featured on local BBC and ITV television, in the local press and in a national diving magazine. Audiences at presentations have included local diving clubs, schools, Joint Services dive clubs, the general public, council members and the MP for South Hams. Seasearch has also been represented at Tamar Estuaries Consultative Forum, Wembury Advisory Group and Finding Sanctuary meetings and has liaised locally with the Devon Wildlife Trust and Natural England. A new Devon Seasearch website has been set up and regular newsletters have been sent to local Seasearch participants.

### Recording forms

A total of 222 recording forms from Lyme Regis to Rame Head have been submitted at the time of writing. Forms from sites west of Rame Head have been forwarded to Cornwall.

- 66 different sites were surveyed
- 57 volunteer divers submitted forms

Forms comprised

- 146 Observer forms
- 54 Surveyor forms
- 22 pink sea fan forms

Information from the forms is being input to Marine Recorder by a volunteer at the Devon Wildlife Trust Biodiversity Records Office. Recently Seasearch Survey forms have contributed to a report being prepared by consultants Royal Haskoning for Natural England concerning survey work for the area from Plymouth to Salcombe.

Summary reports follow for five areas, prepared from information on Devon forms.

## Lundy Island

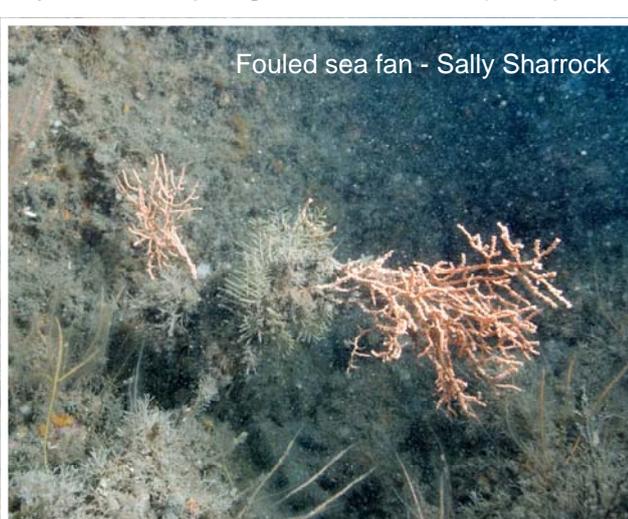
Seasearchers have returned a total of 7 Surveyor forms, 14 Observer forms and 4 pink sea fan forms from this year's trips. Records are from 7 sites - Battery Point (54 species recorded) and Long Roost (64) on the west side of the island and the Knoll Pins (81), Bob's Bump (74), Brazen Ward (41), MV Robert (34) and a single form from Gull Rock (16) on the east side. Highlights include sighting a young basking shark, seals both on the surface and underwater, sunset cup coral and crawfish recorded at two sites, an octopus at the Knoll Pins and abundant *Polycera faeroensis* nudibranchs on the thick growths of bryozoans.

Many sponges were recorded, some obviously thriving on the silty seabed. Mashed potato sponge *Thymosia guernii* was recorded on several sites as rare whilst yellow staghorn sponge *Axinella dissimilis* was frequent to abundant on most sites. Tapered chimney sponge *Ciocalypta penicillus* was recorded as common on the clean gravel and rock seabed conditions at Long Roost.

*Nemertesia antenina* was the only hydroid recorded as abundant. The solitary stalked hydroid *Corymorpha nutans* was found at Bob's Bump (photo above right). The pink sea fan *Eunicella verrucosa* was found at all sites except on the shallow dive at Gull Rock. Sea fan forms were completed at four sites totalling 32 fans measured. Only 3 sea slugs *Tritonia nilsodhneri* were found and no eggs. Many fans were fouled at the base with a mixed turf of hydroids, bryozoans, sponges and weeds (see photo left) and many had cat shark egg cases on them.



*Corymorpha nutans*  
Paul Aldersley



Fouled sea fan - Sally Sharrock

However most of the fouled ones appeared to have healthy upper growth. Devonshire cup coral *Caryophyllia smithii* was frequent to abundant on all sites except Gull Rock, *C. inornata* recorded on 3 sites and sunset cup coral *Leptopsammia pruvoti* at Bob's Bump and the Knoll Pins. As expected, anemones were recorded at all sites, jewel anemones *Corynactis viridis* being abundant. At the Knoll pins 10 species included policeman anemones *Mesacmaea mitchellii*, burrowing *Peachia cylindrica*, sandy creeplet *Epizoanthus couchii* and yellow and white cluster anemones *Parazoanthus axinellae*.

Crustacea were seen in small numbers at all sites. Young crawfish *Palinurus elephas* (photo

front page) were recorded at Battery Point and the Knoll Pins, opposite sides of the island. Molluscs included an octopus *Eledone cirrhosa* at the Knoll Pins. Of the seven species of nudibranch the yellow edged *Polycera faeroensis* was by far the most common, being abundant at long Roost. As it feeds partly on bryozoans this was not surprising as these were recorded on all sites with three species of *Bugula* – *turbinata*, *plumosa* and *flabellata* recorded as abundant in places. *Crisia spp* was also common to abundant.

Horseshoe worm *Phoronis hippocrepia* was recorded at Battery Point. The echinoderms spiny starfish *Marthasterias glacialis*, cotton spinner *Holothuria forskali* and common urchin *Echinus esculentus* were recorded on 5 sites with the gravel sea cucumber *Neopentadactyla mixta* recorded as rare at Bob's Bump. Only 6 species of tunicate were recorded with club head sea squirt *Aplidium punctum* abundant at Long Roost and surprisingly none of the four spotted sea squirt *Morchellium argus* recorded at all.

Fish included the tompot blenny *Parablennius gattorugine* on all sites except Gull Rock and sand eels *Ammodytes tobianus* at the Knoll Pins. Seals and a small basking shark were seen around the Knoll Pins and again at Long Roost.

## Torbay and area

Inshore sites included Brixham, Beacon Cove, Babbacombe, Oddicombe and Watcombe Head whilst offshore sites were the Orestone, Shag Rock and the Galicia wreck. Many of these surveys have been part of Seasearch training dives for those recently completing courses.

A total of 29 Observer forms and 4 Surveyor forms were returned from this area.

Extensive mussel beds *Mytilus edulis* were recorded at the Orestone (photo below), whilst at



Babbacombe short snouted seahorses *Hippocampus hippocampus* were recorded (photo front cover) together with native oysters *Ostrea edulis*. A preliminary survey of caves at Oddicombe revealed an extensive patch of pink fingers *Alcyonium hibernicum* in shallow water. It is planned to survey this area of caves more thoroughly in 2008.

Seasearchers also assisted Torbay Coast & Countryside Trust with their surveys of the eelgrass beds *Zostera marina* around Torbay.

## Salcombe area

Two trips were organised to the Salcombe area to survey around Gammon Head and Prawle Point. Two pink sea fan forms, 9 Observer forms and 5 Surveyor forms were returned.

At **Gammon Head** divers were dropped either side of the headland and proceeded southwards. The terrain was mixed comprising rocky reef with gullies, some steep sided and some with more open shallow sloping sides, all with cobbles, boulders and sand bottom gradually opening southward to circalittoral upward facing bedrock. Below the kelp forest a good faunal turf existed with sponges and bryozoans. Sponges included mashed potato sponge *Thymosia guernii*, *Axinella damicornis* and *Hexadella racovitzai*. Pink sea fans *Eunicella verrucosa* were recorded as rare and there were occasional ginger tiny anemones *Isozoanthus sulcatus*. Bryozoans included the small monkey puzzle bryozoan *Omalosecosa ramulosa*. The sea squirt *Phallusia mammillata*, known to be common in Salcombe estuary but rarely seen west of Salcombe, was noted and trigger fish *Balistes carolinensis* were sighted briefly.



At **Prawle Point** the terrain was similar but with a stronger current despite slack water, with kelp forest to about 13m, below which short faunal turf covered the gully sides and any stable rock surfaces in the gully bottoms. The tapered chimney sponge *Ciocalypta penicillus* was recorded typically where the coarse gravel overlaid the edge of the bedrock. Feather hydroids were common and jewel anemones *Corynactis viridis* abundant which reflected the strong current conditions. Of the crustaceans only the velvet swimming crab *Necora puber* was recorded as occasional or common, the few other crustaceans recorded as rare including one sighting of crawfish *Palinurus elephas*. Lobster pots were also noted. The sea mats *Membranipora membranacea* and *Electra pilosa* were abundant on the algae and large shoals of sand eels *Ammodytes tobianus* were recorded.

## Bigbury Bay surveys

Sites in Bigbury Bay were a particular target this year. Recording forms were returned from 7 sites comprising 6 pink sea fan, 9 Observer and 11 Surveyor forms.

The wreck of the **Oregon** had a forest of healthy sea fans *Eunicella verrucosa* on the wreckage together with a variety of faunal turf. Sadly there were trawl furrows seen on the surrounding sediment sea bed right up to the wreck itself and the sediment was recorded as barren.

The wreck of the **Persier** is well known for its sea fan forest and this year the sea fan anemone *Amphianthus dohrnii* was recorded on some of the fans (picture above). The sea fans here were healthy and included a record of a white one. Occasional netting and fishing debris was retrieved, the site being a popular fishing site.

The nearby **Persier reef** was re-surveyed after a gap of several years and found to have a healthy mixed fauna with pink sea fans recorded as common on the bedrock.

Further inshore the shallower sites around **Wells Rock** had many echinoderms especially large urchins *Echinus esculentus* and provided a sighting of several trigger fish *Balistes carolinensis*.

At **St Anchorite's Rock reef** a rich variety of sponges was recorded including *Adreus fascicularis* together with dahlia anemones *Urticina felina* which are rare in this area.

A **Stoke Bay** survey recorded the mashed potato sponge *Thymosia guernei* whilst the dramatic tide swept gullies off **Stoke Point** were found to have a rich mixed fauna of sponges, cnidaria, hydroids and tunicates on the bedrock with clean gravel gully bottoms where gravel sea cucumbers *Neopentadactyla mixta* were recorded. Large shoals of sand eels *Ammodytes tobianus* were also found here.



Sea fan anemones  
Persier  
Sally Sharrock

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## Plymouth sites

Sites out of Plymouth were surveyed both as targeted sites and also as more random dives mainly for Seasearch training. The records returned were therefore very mixed reflecting the less experienced trainees and those more experienced Seasearchers who return Surveyor forms, including some professional marine biologists.

Sponge rich sites off **Heybrook Bay** in 10 to 15m have proved useful for training and extremely interesting for the large variety of sponge species in an area previously not well recorded.

Inshore reef sites to the east of Plymouth from Gara Point to Hilsea Point are always popular and have historically been well recorded so this year the range was extended to cover areas other than the traditional dive sites, in particular to the east of **Hilsea Point**. These sites have strong currents and provide a rich variety of fauna in the steep sided gullies.

Sites on the deeper **drop off** due south of Plymouth are part of an on-going survey and provided more records of sunset cup coral *Leptopsammia pruvoti*, Weymouth carpet coral *Hoplanguia durotrix*, Southern cup coral *Caryophyllia inornata* and the rare pink finger *Alcyonium hibernicum* plus a single record of crawfish *Palinurus elephas* and sightings of the rarely recorded lace bryozoan *Reteporella* sp. The large numbers of pink sea fans were generally healthy although at one site they had heavy tunicate fouling. A single record from off-shore **West Rutts**, a site not often surveyed, found healthy sea fans, a single football sea squirt *Diazona violacea*, but a remarkable absence of branching and cushion sponges.



Sunset cup coral &  
Weymouth carpet coral  
Allen Murray

## Summary

The table gives details of the numbers of species recorded in each phylum from certain areas. Consideration needs to be given to the fact that all the recorders are volunteer divers and most are amateur rather than professional marine biologists. Habitat classification is also an important part of the recording exercise for the purposes of allocating biotopes.

The figures for Lundy Island and Salcombe are based on a small number of dives, those for Torbay mainly from shore dives and from trainee seasearchers, whilst those for Bigbury Bay and Plymouth give a more comprehensive picture of the variety of species to be found in Devon waters.

Phylum	Lundy Island	Torbay	Salcombe	Bigbury Bay	Plymouth
Algae	14	20	14	10	31
Porifera	18	9	22	25	30
Cnidaria	30	24	14	21	31
Annelida	5	8	7	6	9
Crustacea	9	14	7	6	14
Mollusca	19	17	8	11	17
Bryozoa	13	3	13	10	14
Echinodermata	12	9	6	10	15
Tunicata	6	8	10	10	17
Pisces	19	20	16	11	24
Angiospermae		1			1
Mammalia	1				

It is difficult interpreting data from records for a single year. Increases or decreases in populations may simply be due to different sites surveyed, time of year or experience of recorders. However there are usually some instances which stand out. The recorded sea temperature remained relatively high during the winter months of early 2007 compared to the previous year. There were more records of trigger fish than from previous years - all adults, no breeding population has yet been confirmed. An amberjack, another southern species, was recorded in open water off Lundy Island. This autumn many strings of colonial medusae were seen in local waters, the siphonophore *Apolemia uvaria*, a southern species which is very occasionally found in these latitudes. There were also more sightings of seahorses (possibly due to better publicity), crawfish (rarely recorded in recent years, so good news) and recruitment of infant pink sea fans appears to have been good with many 5 to 10cm high specimens found amongst existing populations.



*Apolemia uvaria*  
Sally Sharrock

Sites surveyed in 2007 can be seen on Google Earth by following instructions at [www.seasearch.org.uk](http://www.seasearch.org.uk) and details from recording forms will in due course join the information from previous years on the national database which can be accessed at [www.searchnbn.net](http://www.searchnbn.net)

It is impossible to mention by name all those who support the Devon effort but Seasearch would like to thank all the divers who took part and returned forms and thanks also go to the boat skippers for their skill and patience.

Seasearch is a volunteer underwater survey project for recreational divers to contribute to the conservation of the marine environment. Financial support for the project during 2007 and for the production of this report has been given by English Nature and The Environment Agency. This report has been prepared by the Seasearch Coordinator for Devon, Sally Sharrock.



Marine  
Conservation  
Society