

Seasearch training

In 2010 we focused on training local divers to become Seasearch Observers to give them the opportunity to actively participate in conserving their local marine environment. 44 people took part in the Observer course and the following people went on to complete the training dives and gain their Observer qualification:

Emma Cunningham
Katie Downes
Justin Evans
Stef Middleton
Tony Milne
April Milne
Richard Morley
Simon Raithby



Seasearch dive training. Photo by Abby Crosby

Many more are close to completing the qualification. As well as the three Observer courses that were held over the summer we also ran a Seagrass Specialist course to teach divers how to survey this key nursery habitat which supports so many other species.

| Phylum | No. of species recorded |
|--|-------------------------|
| Seaweeds | 42 |
| Sponges | 25 |
| Cnidaria (sea anemones, corals, jellyfish) | 36 |
| Bryozoans (sea mats) | 18 |
| Worms | 14 |
| Molluscs (sea slugs, sea snails etc) | 33 |
| Echinoderms (Starfish, sea cucumbers, brittlestars, sea urchins) | 17 |
| Sea squirts | 15 |
| Fish | 44 |



Cornwall



www.seasearch.org.uk

Cornwall Seasearch - Summary report 2010



Bloody Henry starfish - Angie Gall



Spider crab in eelgrass - Steve Adams



Thornback ray - George Gall



Seasearch diver - Emily Priestley



Edible sea urchin - Angie Gall



Sea beech - Angie Gall

VMCAs

This year the focus of our surveys has been Cornwall's Voluntary Marine Conservation Areas and many of our Seasearch volunteers have come through our VMCA project Your Shore. VMCAs were established to facilitate access to Cornwall's diverse marine environment through inspiration and education. The Your Shore project is working with local communities, visitors and schools within each VMCA to inform them and engage them in valuing the marine environment. Seasearch surveys are an important part of this; bringing to light findings from the sub-tidal areas of the VMCAs which can be further shared with the community and used for conservation.



There are five VMCAs around our coast:

A gallery of Seasearch photos can be viewed on our website at www.cornwallwildlifetrust.org.uk

To get involved in Seasearch visit our website or email angie.gall@cornwallwildlifetrust.org.uk

These survey dives were conducted as part of the national Seasearch Programme. Many volunteers took part in these surveys during 2010, too many to thank individually but thanks to all involved. Seasearch is a volunteer underwater survey project for recreational divers to actively contribute to the conservation of the marine environment. For details of Seasearch visit www.seasearch.org.uk. For details of Seasearch in Cornwall visit www.cornwallwildlifetrust.org.uk.

This report has been prepared by Angie Gall.

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Main areas of Seasearch surveys during 2010

A total of 67 Seasearch dives were carried out this year in Cornwall which produced a total of 1413 species recorded.

Land's End

In August Marine Conservation Society divers surveyed 4 new sites from Newlyn. Stannock Rock off Lamorna had vertical walls and gullies dominated by dead men's fingers with spectacular narrow 'canyons' about 1m wide. The reef flattened out at 25m. Pink sea fans were present; mostly small and straggly but one with 3 of the rare sea fan anemones *Amphianthus dohrnii* on it. A reef off Merthen Point went down to 30m and also had sea fans present. A crawfish was seen here too. Two coastal sites were dived at Porthguarnon and below Treen Cliff. Both furbellows and dabberlocks, another exposed coast seaweed were found in the shallows and at the deepest point the low, vertical rock faces were dominated by erect bryozoans, featherstars and orange sea squirts.

We visited the Runnel Stone, this is a very exposed rocky pinnacle with furbellows at the top and a mixed kelp forest of curvie, golden kelp and furbellows. The vertical walls and lower horizontal faces were totally covered in anemones with jewels, elegant and plumose all abundant. Fish life was prolific with bass and mullet at the top, pollack, ballan wrasse, cuckoo wrasse and poor cod lower down. There was a large shoal of the rarely recorded horse mackerel, a Biodiversity Action Plan species.

The Lizard

Drawna Rock at Porthkerris is a rocky reef surrounded by sandy seabed and attracts shoals of large fish especially ballan wrasse *Labrus bergylta* and pollack *Pollachius pollachius*. The reef itself is covered in a range of encrusting sponges, anemones and Devonshire cup corals *Caryophyllia smithii*. Further offshore the Manacles reefs support diverse and colourful communities of branching sponges such as yellow staghorn sponge *Axinella dissimilis* alongside walls of jewel anemones *Corynactis viridis*, plumose anemones *Metridium senile* and deadmen's fingers *Alcyonium digitatum*.



Tompot blenny and mussels

Marine Conservation Society divers visited Craggan Rocks, a previously unsurveyed site just east of Lizard Head. This proved to be a much less scenic and diverse site compared to the much better known Manacles. It had a kelp forest of furbellows, typical of disturbed sites and reflecting the high level of exposure. There was a sparse faunal turf and sand was reached at 19m.

St Agnes

On the wave exposed north coast of Cornwall, St Agnes can only be dived when there is no swell. Marine communities are adapted to this exposure and include dense beds of mussels *Mytilus edulis* and hundreds of their predators the spiny starfish *Marthasterias glacialis*. Crustaceans such as edible crabs *Cancer pagurus*, spiny spider crabs *Maja squinado* and lobsters *Hommarus gammarus* were often recorded on survey dives. Over the clean sandy areas shoals of bass *Dicentrarchus labrax* and sandeels *Ammodytes* were seen. Club sea squirts *Morchellium argus* and strawberry anemones *Actinia fragacea* were commonly spotted on the rocky areas with double spiral worms *Bispira volutacornis* living in rocky crevices.



Horse mackerel. Photo by Chris Wood



Helford

The Helford Estuary supports beds of eelgrass *Zostera marina* which were surveyed several times in 2010 including once during the Seasearch seagrass specialist course which recorded the density of the beds along transects. The beds are very productive and support diverse worms such as eyelash worms *Myxicola infundibulum*, fish like greater pipefish *Syngnathus acus* and anemone species like snakelocks anemones *Anemonia viridis* are particularly noticeable. The non-native seaweeds wireweed *Sargassum muticum* and harpoon weed *Asparagopsis armata* are recorded in the beds and need to be monitored. Masked crabs *Corystes cassivelaunus* and other crab species are found in the seagrass and early in the year there are dense aggregations of breeding sea hares *Aplysia punctata*.



Divers surveying seagrass

Looe

At Talland Bay the rocky reef was surveyed as well as the sandy area next to it. Over the sand there were shoals of sandeels *Ammodytes* sp. and lesser weaverfish *Echiichthys vipera* and plaice *Pleuronectes platessa* were seen on the sandy bottom along with tube building sand mason worms *Lanice conchilega*. The rocky reef was shallow and covered with a profusion of seaweeds and wrasse and pollack *Pollachius pollachius* gathered close to the reef. Off Looe town beach there is an area of patchy seagrass *Zostera marina* of unknown extent. Initial surveys revealed that it is an important site for cuttlefish *Sepia officinalis* breeding as many small individuals and eggs were seen there. More extensive surveys are planned for 2011.



Lesser weaver fish

Fowey

Readymoney beach is just near the mouth of the Fowey estuary and is a popular site for rockpooling activities. We dived over the inter-tidal and shallow sub-tidal zone and recorded diverse seaweeds including towering thongweed *Himanthalia elongata* and sea beech *Delessaria sanguinea*. Small fish like goldsinney wrasse *Ctenolabrus rupestris* were found amongst the seaweeds and the nudibranch seaslug lined polycera *Polycera quadrilineata* was found in large numbers grazing on the sea mat on the kelps. Further offshore Seasearch divers surveyed several interesting sites such as Udder rock and Fields Reef where pink sea fans *Eunicella verrucosa* were growing in forests. On the wreck of the dredger Kantoeng off Fowey, divers recorded shoals of fish including bib *Trisopterus luscus*, pollack *Pollachius pollachius* and the occasional John Dory *Zeus faber*. At Porthpean near St Austell a seagrass bed *Zostera marina* was recorded and it supported large numbers of daisy anemones *Cereus pedunculatus* and the siphons of razor shells *Ensis* sp. buried beneath the sediment were recorded.



Seaweeds at Readymoney Cove

Falmouth

Divers recorded species found in the maerl beds in the mouth of the Fal estuary. Maerl is a hard, calcareous seaweed which forms beds that are a rare and important habitat. Brittlestar beds were also recorded amongst the cannonballs fired from Pendennis Castle. Thornback rays *Raja clavata* were spotted several times in this area. Around the corner closer to Castle Beach there is a rocky area where topknot *Zeugopterus punctatus* and tompot blennies *Parablennius gattorugine* were seen. Sea hares were found growing on the non-native seaweed wireweed *Sargassum muticum*. The tiny kaleidoscope stalked jellyfish *Halicystus auricula* was spotted attached to seaweeds. At Swanpool a John Dory *Zeus faber* was seen close inshore over the shallow seaweedy rocky area.



Dahlia anemone