

Introduction

During the 58 Seasearch surveys carried out around Cornwall this year, 195 different species were identified including some real rarities such as the sunset cup coral on the Isles of Scilly, scarlet-and-gold cup corals off Bude and a seahorse off Rame Head.

Species Summary

Sponges:

Twenty-four sponge species were recorded during 2006. The most commonly recorded species were boring sponge (*Cliona celata*), crater sponge (*Hemimycale columella*), golf ball sponge (*Tethya aurantium*), elephant's hide sponge (*Pachymatisma johnstonia*), and breadcrumb sponge (*Halichondria panacea*). Shredded carrot-sponge (*Esperiopsis fucorum*), *Halichondria panacea*, *Polymastia mamillaris*, *Axinella dissimilis*, and *Haliclona viscosa* were also recorded. The more rarely recorded species included *Haliclona oculata*, *Halichondria bowerbankii*, *Microciona astrasanguinea*, *Myxilla incrustans*, *Oscarella lobularis*, *Scypha ciliata*, *Stelligera rigida* and *Axinella damicornis*.

Anemones, Corals, Hydroids and Jellyfish:

Twenty-five Cnidarian species were recorded this year. The most frequently recorded anemones were jewel anemone (*Corynactis viridis*) and elegant anemones (*Sagartia elegans*). More rarely reported anemones include the daisy anemone (*Cereus pedunculatus*) and the yellow-cluster anemone (*Parazoanthus axinellae*) and *Sagartiogeton lanceolatus*.

Hard corals recorded in most abundance were Devonshire cup corals (*Caryophyllia smithii*) and scarlet-and-gold cup corals (*Balanophyllia regia*). The very rare sunset cup coral (*Leptosammia pruvoti*) was recorded at Crow Sound off the Isles of Scilly. Soft corals recorded included deadman's fingers (*Alcyonium digitatum*), red fingers (*Alcyonium glomeratum*) and the pink sea fan (*Eunicella verrucosa*). Pink sea fans were recorded at 13 sites during Seasearch dives and 18 pink seafan surveys were conducted. The hydroid known as the antenna hydroid (*Nemertesia antennina*) was frequently recorded as was *Obelia geniculata*. No jellyfish were reported.

Crustaceans:

The most abundantly reported crustaceans of the 13 species recorded were the velvet swimming crab (*Necora puber*), spider crab (*Maja squinado*) and edible crab (*Cancer pagurus*). Rarely recorded crustaceans included the long-legged spider crab (*Macropodia rostrata*), the harbour crab (*Liocarcinus depurator*) and crawfish (*Palinurus elephas*). Lobster (*Homarus gammarus*), spiny squat lobster (*Galathea strigosa*) and *Galathea squamifera* were also recorded.

Phylum	Common name	Number of species	Common species
Anthophyta	Flowering Plants	1	Eelgrass.
Algae	Seaweeds	26	Cuvie, furbelows, brown fan weed, sea beech, dulse, coral weed.
Porifera	Sponges	25	Boring sponge, crater sponge, golf ball sponge, elephant's hide sponge, breadcrumb sponge.
Cnidaria	Anemones, corals, jellyfish and hydroids	25	Devonshire cup coral, jewel anemones, deadman's fingers, red fingers, pink sea fans, sea beard, elegant anemone, plumose anemone.
Annelida	Segmented worms	11	Double spiral worm, sand mason, strawberry worm.
Nemertea	Ribbon Worms	1	Football jersey worm.
Platyhelminthes	Flat worms	1	Candy-stripe flatworm.
Crustacea	Crabs, lobsters, prawns and barnacles	13	Velvet swimming crab, spider crab, edible crab, common lobster, spiny squat lobster.
Mollusca	Shells, sea slugs and cuttlefish	21	Yellow edged polycera, painted topshell, netted dogwhelk, orange clubbed sea slug.
Bryozoa	Sea mats and sea firs	10	Potato crisp bryozoan, sea mat, sea chevril.
Echinodermata	Starfish, brittlestars, urchins and sea cucumbers	14	Spiny starfish, Cotton-spinner, common sea urchin, common starfish, brown crevice sea cucumber.
Tunicates	Seasquirts	15	Club sea squirt, star seasquirt, gooseberry seasquirt, light-bulb seasquirt and white perforated sea squirt.
Pisces	Fishes	32	Ballan wrasse, goldsinny wrasse, pollack, rock cook, tompot blenny, leopard-spotted goby.
Total		195	

These survey dives were conducted as part of the national Seasearch Programme. Many volunteers took part in these surveys during 2006, too many to mention here but thanks to all involved. Seasearch is a volunteers' 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 Joana Doyle

Financial support for the for the production of this report and for data entry was provided by:



Molluscs:

Of the 21 mollusc species identified painted topshells (*Calliostoma zizyphinum*) and netted dogwhelks (*Hinia reticulata*) were the most common shells recorded. Nudibranchs recorded included yellow edged polycera (*Polycera faeroensis*), *Limaica clavigera*, *Coryphella lineata*, *Coryphella browni* and *Flabellina pedata*. Other species recorded included the cuttlefish (*Sepia officinalis*), queen scallops (*Aequipecten opercularis*), sea lemon (*Archidoris pseudoargus*) and the European cowrie (*Trivia monacha*).

Echinoderms:

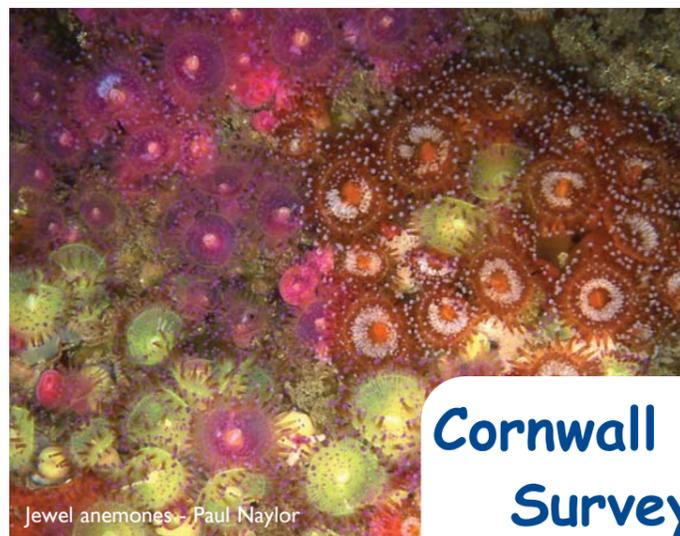
Of the 14 species recorded, the spiny starfish was most abundant (*Marthasterias glacialis*) followed by the cotton spinner (*Holothuria forskali*) and the common sea urchin (*Echinus esculentus*). The common starfish (*Asterias rubens*), the shore urchin (*Psammechinus miliaris*) and the beautiful crevice sea cucumbers (*Aslia lefevrei* and *Pawsonia saxicola*) were also recorded.

Fishes:

Ballan wrasse (*Labrus bergylta*), rock cook (*Ctenolabrus exoletus*), pollack (*Pollachius pollachius*) and tompot blenny (*Parablennius gattorugine*) were the most commonly recorded fish species. More unusual species recorded included the seahorse (*Hippocampus* sp.), black-faced blenny (*Tripterygion delaisi*), long-spined sea scorpion (*Taurulus bubalis*), fifteen-spined stickleback (*Spinachia spinachia*), the snake pipefish (*Entelurus aequoreus*), sea bass (*Dicentrarchus labrax*) and cod (*Gadus morhua*).



Cornwall



Jewel anemones - Paul Naylor



Light bulb squirts - Frank Gloystein

Cornwall Seasearch Surveys 2006 Summary Report



Okenia elegans - Frank Gloystein



Sand eels - Paul Naylor



Plaice - Steve Trehwella



Leopard Spotted Goby - Paul Naylor

St Agnes

Two Seasearch dives were carried out around St. Agnes both at Bawden's Rock. The habitats recorded were predominantly rocky wall, rocky reef and boulders on sand/gravel.

A string of lobster pots was noted on the reef. Fish species recorded included the leopard-spotted goby, pollack (*Pollachius pollachius*), long-spined sea scorpion (*Taurulus bubalis*), lemon sole and butterfly. The most abundantly recorded crustaceans include the edible crab (*Cancer pagurus*), velvet swimming crab and spider crab (*Maja squinado*). Molluscs reported included the painted topshell (*Calliostoma zizyphinum*), the pink sea fan nudibranch (*Tritonia nilsodhneri*), sea lemon and *Flabellina pedata*. In the Cnidarian family, red fingers (*Alcyonium glomeratum*), pink sea fans (*Eunicella verrucosa*), yellow-cluster anemone (*Parazoanthus axinellae*) and *Sagartiogeton undatus* were recorded here. Pink sea fan surveys were also carried out off Bawden's Rock during 2006.



Yellow cluster anemone - Frank Gloystein

North Cornwall

Four survey dives were carried out in North Cornwall at Penally Hill cove, Boscastle harbour entrance and Smugglers Cave and Foot Cove both near Boscastle harbour. Dominant habitats surveyed were rocky reefs with gullies and boulders, caves and sandy seabed. One of the most interesting findings here was the abundance of the scarlet-and-gold cup coral (*Balanophyllia regia*), a rare species which is confined to the extreme south and west of the British Isles. It grows in crevices, gullies and on rock faces from low water mark down to about 25m. Also recorded in abundance were Devonshire cup corals (*Caryophyllia smithii*), brown crevice sea cucumber (*Aslia lefevrei*), fried egg anemone (*Actinothoe sphyrodeta*), the boring sponge (*Cliona celata*), crater sponge (*Hemimycale columella*), spider crabs (*Maja squinado*), velvet swimming crabs (*Necora puber*), spiny starfish (*Marthasterias glacialis*), ballan wrasse (*Labrus bergylta*) and leopard spotted goby (*Thorogobius ephippiatus*).



Scarlet-and-gold cup corals - Sally Sharrock

Penzance and Lands End (and St. Ives and Portreath)

Only two areas were surveyed here. Logan's Rock is a rocky reef with sand gullies extending down to 25m. In Lamorna Cove the survey area included the harbour wall, boulders and cobbles and sand. Some of the more common species encountered include deadman's fingers, jewel anemones, common sea urchins (*Echinus esculentus*), spider crabs, spiny starfish, Antenna hydroids (*Nemertesia antennina*), pollack and ballan wrasse. Lesser sandeels (*Ammodytes tobianus*) and greater pipefish (*Syngnathus acus*) were also recorded at Lamorna Cove.

Isles of Scilly

Thirteen sites were surveyed during the Seasearch 2006 week including 7 sites which had not previously been surveyed. Sites surveyed included King Cadwallan, Gugh reef, Menawethan, Flat Ledge NE St. Martins, S. Gilstone Reef and Higher Ridge Crow Sound. The dominant habitat type was rocky reef but boulders, sand and caves were also recorded. The most notable record was for a new location of sunset cup corals (*Leptosammia pruvoti*) at Higher Ridge, Crow Sound. Many sponges were recorded including *Axinella damicornis*, *Polymastia boletiformis* and *P. mamillaris*. Scarlet-and-gold cup corals (*Balanophyllia regia*), Devonshire cup corals (*Caryophyllia smithii*) and red fingers were also recorded. A summary report for this survey is available to download from the website www.seasearch.org.uk



Red fingers - Frank Gloystein



The Lizard and Manacles

Three survey dives were carried out around the Manacles. Sites surveyed included the Volnay wreck, the Mohegan wreck and Brod's Mound. Common species recorded include cuckoo wrasse (*Labrus mixtus*), ballan wrasse (*Labrus bergylta*), goldsinny wrasse (*Ctenolabrus rupestris*), poor cod (*Trisopterus minutus*), deadman's fingers, Devonshire cup corals, jewel anemones, potato crisp bryozoan (*Pentapora foliacea*), sea urchins, spiny starfish, and common starfish. Rarer species recorded included lobsters (*Homarus gammarus*), pink sea fans and conger eel (*Conger conger*).

Falmouth and Helford

The eelgrass (*Zostera* sp.) at the mouth of St. Mawes harbour and the maerl beds in the vicinity were surveyed. The eelgrass was situated on a sloping sand and gravel bed reaching a maximum of 6m. Snakelock's anemones (*Anemonia viridis*) were extremely abundant on the stems of the eelgrass. In the clear sand patches between the eelgrass *Megalomma vesiculosum* and peacock worms (*Sabella pavonina*) were found in abundance. The red algae, *Asparagopsis armata* was also recorded in abundance. The daisy anemone (*Cereus pedunculatus*), *Cerianthus lloydii* anemone and *Laomeda angulata* hydroids were also seen. Cuttlefish (*Sepia officinalis*), greater pipefish (*Syngnathus acus*), snake pipefish (*Entelurus aequoreus*) and pollack were all recorded amongst the eelgrass. A yacht was anchored right in the middle of the eelgrass bed. The maerl bed was at 6.5-8 metres depth. The maerl bed site was characterised by maerl (*Phymatolithon calcareum*), sand and mixed ground, a lot of kelp and mixed seaweeds. The tube anemone *Cerianthus lloydii* was very abundant, as were hermit crabs (*Pagurus bernhardus*), sea beard hydroids, *Obelia geniculata* hydroids, peacock worms and *Sagartiogeton undatus* anemones. Species recorded in less abundance included long-legged spider crabs (*Macropodia rostrata*), queen scallops (*Aequipecten opercularis*) and the strawberry worm (*Eupolymnia nebulosa*).



Seahorse - Steve Trehwella

South East Cornwall

Nine survey dives were undertaken between Dodman Point and Rame Head including the St. Austell Bay area, Fowey and Looe. The dominant habitat type was rocky reef, but other habitats recorded included large boulders, sand & gravel and cobbles. Sites surveyed were the James Egan Lane, Eddystone Rocks, HMS Scylla, Wreck of Naid, Queener Point Reef, Sherbettery Reef, Talland Bay, Tregantle Reef, the Rosehill, Rame Head and the Ranneys off Looe Island. Common species recorded were Kelp species (*Laminaria digitata* and *L. hyperborea*), red algae species, deadman's fingers (*Alcyonium digitatum*), edible crab and spiny squat lobster (*Galathea strigosa*), cotton spinner (*Holothuria forskali*) and brown crevice sea cucumbers (*Aslia lefevrei*), starfish species and the antenna hydroid. Some of the more unusual sightings included pink sea fans at Udder Rock near Looe, where they had not previously been reported from and a seahorse at Rame Head. Devonshire cup corals were also recorded occasionally. Some recent pink sea fan damage was noted at Tregantle Reef.



Eelgrass & Snakelock's anemones - Keith Hiscock