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Kent Seasearch Summary Report 2016



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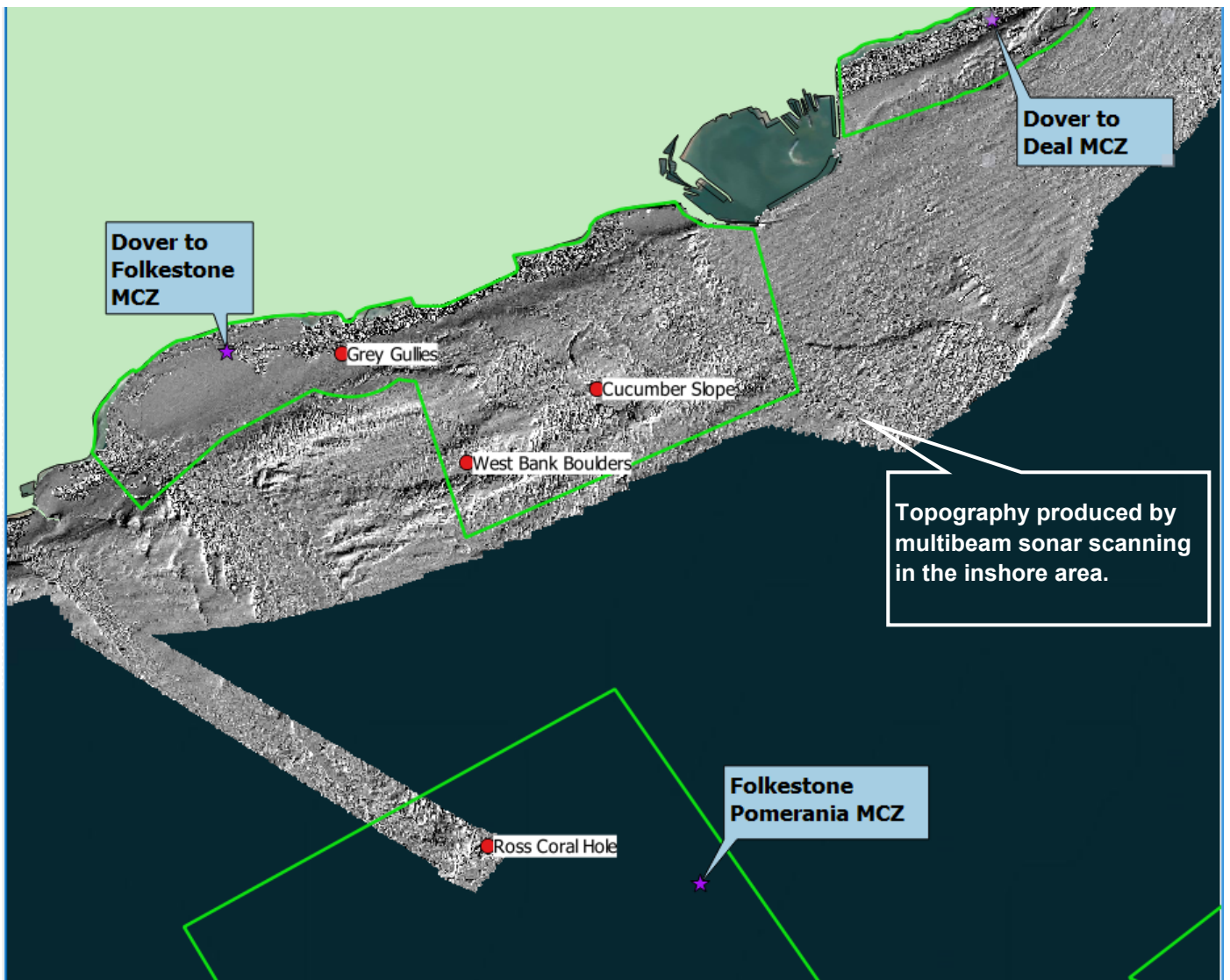


© Elaine Purse

Clockwise from top left: Hermit crab *Pagurus prideaux* with cloak anemone *Adamsia carcinopados* at West Bank Boulders; Kent Seasearch diver surveying West Bank Boulders; dragonet *Callionymus lyra* at West Bank Boulders; mating seaslugs *Coryphella lineata* at Grey Gullies.

Kent Seasearch surveys in 2016

Kent Seasearch divers surveyed the seabed at 9 different locations and at depths from 5m to 30m. A total of 7 diving days were organised, but 4 were cancelled due to poor weather and one due to boat engine failure. Around **115** different species were identified, and a total of **606** biological records made. Of particular note this year was the discovery of a burrowing sea cucumber and one cup coral, both are new records for Kent. The most commonly recorded species was the common starfish *Asterias rubens*, followed by deadman's fingers *Alcyonium digitatum*, painted topshell *Calliostoma zizyphinum*, hornwrack *Flustra foliacea*, and antenna hydroid *Nemertesia antennina*. All of the organised surveys took place in Marine Conservation Zones (MCZs).



Dover to Folkestone MCZ

Cucumber Slope

51° 05.500N , 01° 17.827E

A mixed ground seabed with cobbles, pebbles, sand and shell, and occasional small boulders. The larger cobbles and pebbles supported bryozoans and hydroids including hornwrack *Flustra foliacea* and oaten pipe hydroids *Tubularia indivisa*. The brittlestar *Ophiura albida* along with the common starfish *Asterias rubens* were frequently observed. Of particular note was the record of a burrowing sea cucumber buried in the gravel. This was different to the crevice sea cucumber found by a Kent Seasearcher at Admiralty Arm, Dover Harbour in 2014, and is thought to be a first for Kent.



Top: Common starfish *Asterias rubens* at Cucumber Slope © Dave Wood

Above: Hydroids and anemones at Cucumber Slope © Chris Read

Left: The burrowing sea cucumber at Cucumber Slope (screenshot taken from video by Bryony Chapman)

Below left: Oaten pipe hydroids and sponges at Grey Gullies (screenshot taken from video by Bryony Chapman)



Grey Gullies

51° 05.751N , 01° 14.903E

Gullies and overhangs of grey 'marly' chalk covered in a mixed turf of hydroids, bryozoans and sponges, along with areas of coarse sand and gravel overlying the chalk. The upper edges of the gullies were covered with a dense fringe of oaten pipe hydroids *Tubularia indivisa* with antenna hydroids *Nemertesia antennina*. At the base of the gullies double spiral worm *Bispira volutacornis* nestled under overhangs next to lobsters *Homarus gammarus* and velvet swimming crabs *Necora puber*.



West Bank Boulders

51° 04.965N , 01° 16.342E

A particularly biodiverse site of gently sloping cobbles, pebbles and sand with scattered boulders. A wide variety of sponges, hydroids and bryozoans were recorded along with coral worms *Salmacina dysteri* and numerous hermit crabs, including the anemone hermit crab *Pagurus prideaux* with its cloak anemone *Adamsia carcinopados*. An extensive mat of amphipod (shrimp-like animals) tubes was recorded in the deeper part of the survey area.

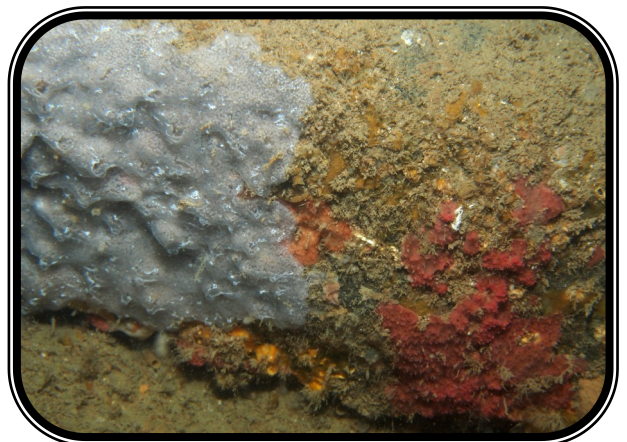
Clockwise from top left: Mat of amphipod tubes © Bryony Chapman; Hermit crab © Jason Armstrong; Queen scallop *Aequipecten opercularis* © Paula Young; Eyelash worm *Myxicola infundibulum* © Elaine Purse. All taken at West Bank Boulders.

Folkestone Pomerania MCZ

Ross Coral Hole

51° 02.205N , 01° 16.580E

A site Kent Seasearchers have dived before, packed with a diversity of sponges and anemones as well as being one of the few sites in Kent where the potato crisp bryozoan is found (formerly known as ross coral, which explains the site name). This dive resulted in a record of a cup-coral *Caryophyllia sp.*—this has not been recorded in Kent before. Other interesting records included the sponges *Aplysilla rosea* and *Haliclona fistulosa*.



Above: The seasquirt *Diplosoma spongiforme* next to the sponge *Aplysilla rosea* at Ross Coral Hole © Charlotte Bolton

Below left: The sponge *Haliclona fistulosa* at Ross Coral Hole © Elaine Purse

Below: Cup-coral *Caryophyllia sp.* at Ross Coral Hole © Elaine Purse



Independent Seasearch survey dives

Sandgate beach

51° 04.366N , 01° 08.767E

A shore dive over a sandy seabed with many hermit crabs - one even hitching a ride on the back of a whelk. Other life observed included a sea potato *Echinocardium cordatum*, a masked crab *Corystes cassivelaunus*, and a greater pipefish *Syngnathus acus*.



Above left: A hermit crab hitches a lift on a whelk at Sandgate © Niina Bastaki



Above right: Sea potato *Echinocardium cordatum* at Sandgate © Niina Bastaki



Dover Harbour beach

51° 07.458N , 01° 19.250E

An area of chalk bedrock with shallow gullies and profuse seaweed cover. Numerous fish including bib *Trisopterus luscus* were observed, along with several gobies and a variety of wrasse including goldsinny wrasse *Ctenolabrus rupestris* and rock cook *Centrolabrus exoletus*.

SS Strathclyde

51° 05.633N , 01° 21.225E

Upper decks of the wreck were completely colonised by oaten-pipe hydroids *Tubularia indivisa* and the small orange anemone *Diadumene cincta*. Several amphipod tubes were seen - look closely at the photo above as some of their occupants were caught on camera!



HMHS Anglia

51° 03.270N , 01° 19.190E

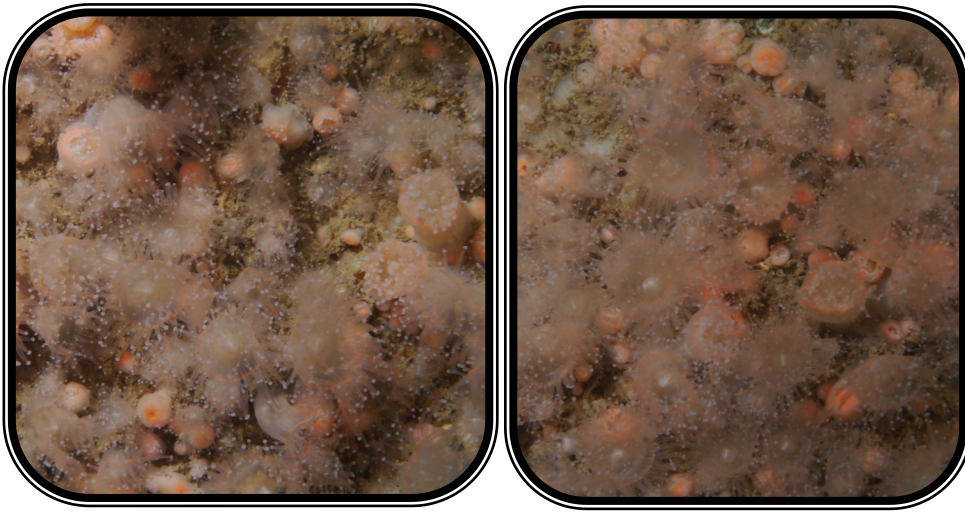
The wreck was completely covered in animal turf including sponges, anemones, hydroids and ascidians. Numerous amphipod tubes were present, along with their occupants. Bib *Trisopterus luscus* and poor cod *Trisopterus minutus* swam in shoals around the wreck.



Above: Painted top-shell *Calliostoma zizyphinum* with amphipods in tubes © Elaine Purse

Top right: The anemone *Diadumene cincta* on the wreck of the SS Strathclyde © Elaine Purse

Bottom right: Animal turf covering the HMHS Anglia © Elaine Purse



Wreck of the Mandovi

50° 57.300N , 01° 10.682E

Home to numerous tompot blennies *Parablennius gattorugine*, the dive on this wreck proved particularly noteworthy for the discovery of a colony of jewel anemones. This is the first confirmed record of this species in Kent.

Above: Jewel anemones *Corynactis viridis* on the wreck of the Mandovi in Kent © Dave Wood

New finds for Kent

Despite the challenging weather this season, Kent Seasearchers were still able to make some remarkable discoveries. Three taxa previously unrecorded in Kent were found by Kent Seasearch divers in 2016:

Burrowing Sea Cucumber

There are several species of sea cucumber known to live around the British Isles, and, prior to 2014, none had been recorded in Kent. In 2014 a Kent Seasearch diver photographed a crevice sea cucumber at the Admiralty Arm, Dover Harbour. It was not possible to identify this individual to species level as it was not possible to see the colour of the body from the photograph (a key feature to aid identification). In May 2016 within the Dover to Folkestone MCZ a burrowing sea cucumber was captured on film by Kent Seasearcher Bryony Chapman. It is thought to be the gravel sea cucumber *Neopentadactyla mixta*, but posting the photos on the Seasearch Identification Facebook page led to suggestions of other possibilities. Ultimately it was not possible to make a definitive identification from the video images.



Jewel Anemones, *Corynactis viridis*

These small and quite distinctive anemones are generally found off western shores of the UK but seem to be creeping further east. They have been recorded in Sussex, mostly on deeper water wrecks, but until now have not been confirmed as far east along the Channel as Kent. In August 2016 whilst undertaking a club dive on the wreck of SS Mandovi near Dymchurch, Kent Seasearch diver Dave Wood photographed a small patch of these pretty anemones on the side of the wreck.



Cup Coral

Of the twelve species of hard corals resident in UK waters, it is the Devonshire cup coral *Caryophyllia smithii* which is the most familiar to divers. Found around much of the coast it has been rarely encountered off south east and eastern coasts and no records have been found for it in Kent. However, in September 2016 a solitary cup-coral was photographed by Kent Seasearcher Elaine Purse within the Folkestone Pomerania MCZ. It was found on the side of a large boulder in an area with mixed animal turf of predominantly hydroids, bryozoans and erect sponges. The photo was uploaded to the Seasearch identifications Facebook page for confirmation. It was concluded that whilst it was likely to be the more common Devonshire cup coral *Caryophyllia smithii*, it had the appearance of the scarcer Southern cup coral *Caryophyllia inornata*. It was not possible to be certain of the species without closer examination, but as neither have been confirmed as present in Kent, it is still a first.



Training in 2016

Seasearch Observer Course

This year's Seasearch Observer course at Reculver in April was very well attended. Sixteen divers new to Seasearch diving came along and several signed up for Seasearch dives later in the season.

Due to the closure of Shakespeare beach for repairs to the nearby railway line, we were unable to arrange our usual post-course shore dive. However, one of our Seasearch divers has found another suitable location for a shore dive which we plan to use in 2017.



Seaweed identification workshop

Ten algae enthusiasts came along for our identification workshop led by algae expert Ian Tittley. Participants were taken through the finer points of seaweed identification and introduced to some of the green, brown and red seaweeds we encounter around the Kent coast. As an added bonus participants were able to try seaweed pressing and departed with their own piece of seaweed art.



Clockwise from top: Kent Seasearch Observer Course class of 2016; learning to identify seaweeds; algae samples neatly labelled.

Number of species recorded in each phylum and the species most commonly recorded in each group.

Porifera (sponges) - Approximately 19 species, including: chocolate finger sponge *Raspailia ramosa*, goosebump sponge *Dysidia fragilis*, mermaid's glove *Haliclona oculata*, and shredded carrot sponge *Amphilectus fucorum*.

Cnidaria (hydroids, anemones, corals and jellyfish) - Approximately 21 species, including: deadman's fingers *Alcyonium digitatum*, antenna hydroid *Nemertesia antennina*, dahlia anemone *Urticina felina*, and oaten pipe hydroid *Tubularia indivisa*.

Annelida (polychaete worms) - Approximately 7 species, including: double spiral worm *Bispira volunticornis*, rossworm *Sabellaria spinulosa*, and peacock worm *Sabella pavonina*.

Crustacea (barnacles, amphipods, prawns, crabs and lobsters) - Approximately 16 species, including: hermit crab *Pagurus bernhardus*, edible crab *Cancer pagurus*, and velvet swimming crab *Necora puber*.

Mollusca - Approximately 19 species, including: painted topshell *Calliostoma zizyphinum*, queen scallop *Aequipecten opercularis*, and crystal seaslug *Janolus cristatus*.

Bryozoa (sea mats) - Approximately 12 species, including: hornwrack *Flustra foliacea*, finger bryozoan *Alcyonidium diaphanum*, potato crisp bryozoan *Pentapora foliacea* and *Chartella papyracea*.

Echinodermata (starfish, sea urchins and sea cucumbers) - Approximately 6 species, including: common starfish *Asterias rubens* and the brittlestar *Ophiura albida*.

Chordata (seasquirts) - Approximately 7 species, including: *Diplosoma listerianum* and the club seasquirt *Morchellium argus*.

Chordata (fish) - Approximately 18 species, including: goldsinny *Ctenolabrus rupestris*, smallspotted catshark *Scyliorhinus canicula*, and bib *Trisopterus luscus*.

A great big thank you! To all the divers who submitted Seasearch forms and who signed up to and took part in the Kent Seasearch dives during 2016.

2016 Kent Seasearch divers:

Simon Panteny, Roger Danks, Luke Wyndham, Elaine Purse, Dave Wood, Chris Read, Anna Read, Pat McMaster, Jason Armstrong, Daniel Woodgate, Steph Butcher, Corinne Sarjeant, Paula Young, Rik Girdler, Charlotte Bolton, Bryony Chapman and Fiona White.

Extra thanks to Dave Wood, Elaine Purse, Chris Read, Jason Armstrong, Charlotte Bolton and Paula Young for sharing their dive photos.

And finally, many thanks to Dave Batchelor and Glyn from Neptune, and to Chris Webb and Tom from Maverick for all their help getting us to and from the dive sites, in and out of the water, and looking after us.



Seasearch is a partnership between the Marine Conservation Society (MCS), The Wildlife Trusts, statutory nature conservation bodies and others, co-ordinated nationally by MCS and co-ordinated and delivered locally in England by Wildlife Trust and MCS local co-ordinators. Kent Seasearch is run by Kent Wildlife Trust (KWT).

We are very grateful for contributions from Natural England via National Seasearch.

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Kent Wildlife Trust is the leading conservation charity for Kent and Medway. Charity No. 239992