



Kent Seasearch Summary Report 2014



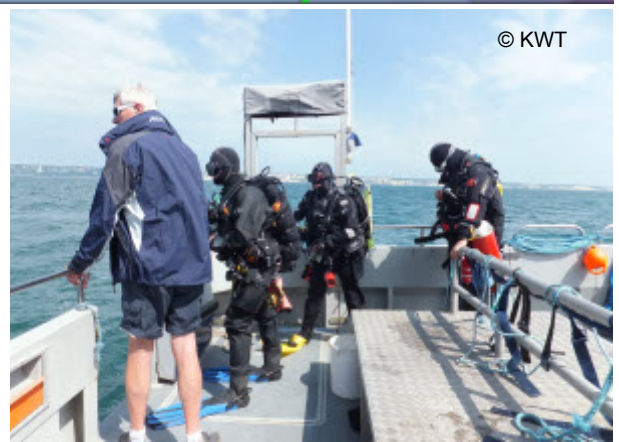
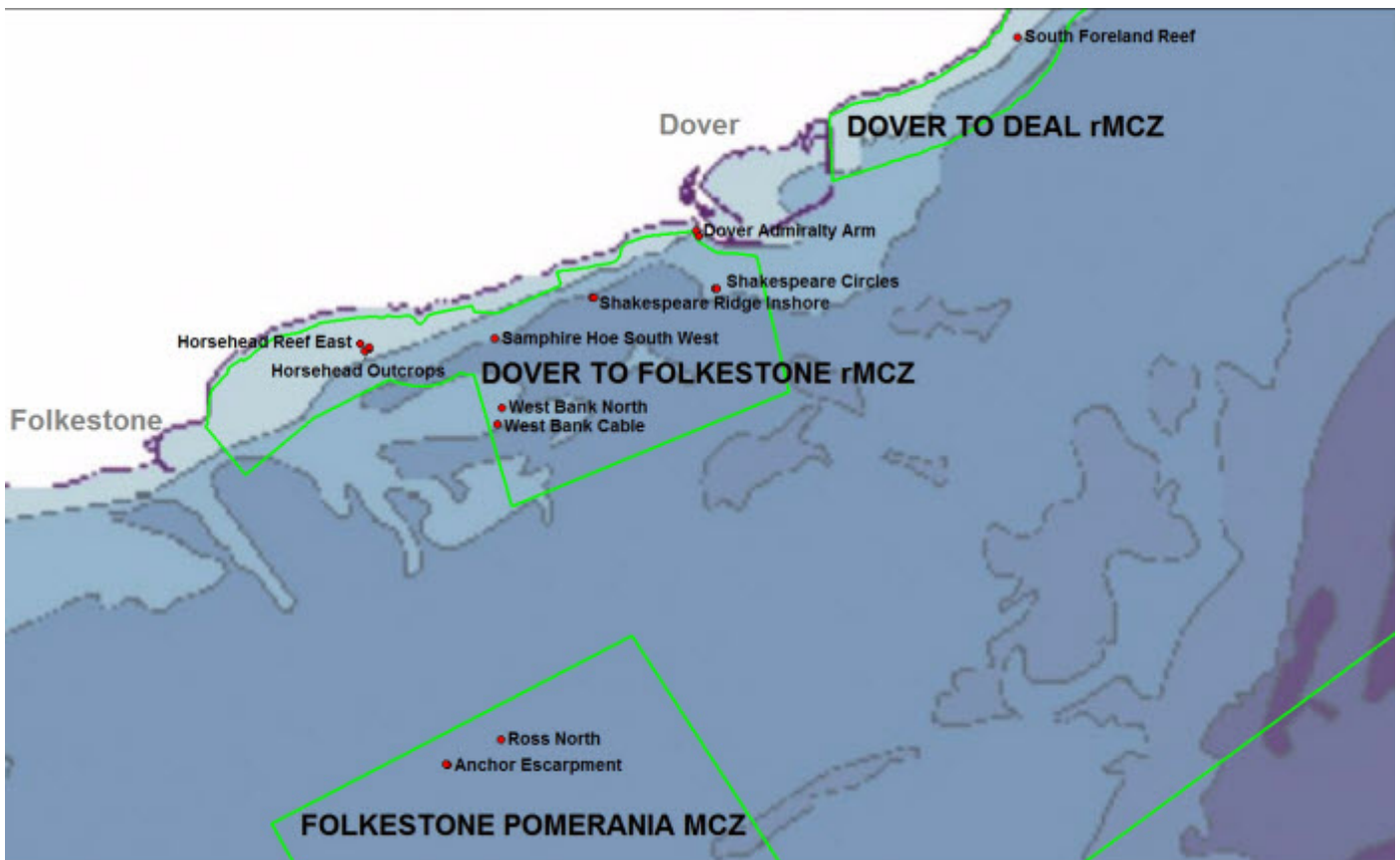
Kent Seasearch surveys in 2014

Kent Seasearch divers surveyed the seabed at 11 different locations and at depths from 8m to 28m. A total of 7 diving days were planned, but one was cancelled due to poor weather. Around **178** different species were identified, and a total of **785** species records made. Most commonly recorded species was once again the common starfish *Asterias rubens*, this year followed by velvet swimming crabs *Necora puber*, mermaid's glove sponge *Haliclona oculata*, antenna hydroid *Nemertesia antennina*, dead man's fingers *Alcyonium digitatum*, and hornwrack *Flustra foliacea*. All of the boat dive surveys took place in Marine Conservation Zones (MCZs) or recommended Marine Conservation Zones (rMCZs), which are marked in green on the map.



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Kent Seasearch 2014 Surveys



Dover Admiralty Arm

51° 06.852N , 01° 18.777E

A suitable site for a shore dive to give new Seasearch Observers some practical experience, and to allow some seasoned Seasearch divers to refresh their skills. The steeply stepped shingle shore gives way to a sandy seabed next to the harbour wall constructed of granite blocks. Mixed seaweeds including kelp *Laminaria digitata* extend down the wall to a depth of 7m. Feathery hydroids and bryozoans grow on the granite and various crustaceans including velvet swimming crabs *Necora puber* and edible crabs *Cancer pagurus* shelter within the crevices. Of particular interest was a crevice seacucumber. These animals have not previously been recorded in Kent.



Above: Crevice sea cucumber, undetermined species, at the base of the harbour wall

Dover to Folkestone rMCZ



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Above: Plumose anemone *Metridium senile* at Horeshead Outcrops

Horsehead Reef East

51° 05.802N , 01° 14.143E

A piddock-bored chalk reef that stands 1-2m high from the seabed. The shallower, horizontal surfaces were dominated by foliose and filamentous red algae, although not particularly dense. The vertical sides of the reef were covered in a close turf of very silty hydroids and bryozoans, and Horeseshoe worms *Phoronis sp.* were also seen. A small sample of sponges and bryozoans was taken during the dive and later microscope identification revealed this to include an encrusting sponge *Phorbas fictitius*, and the bryozoan *Scruparia ambigua*.



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Above right: Lightbulb seasquirts *Clavelina lepadiformis*

Above: The seaslug *Facelina auriculata*

Right: Oaten-pipe hydroids *Tubularia indivisa*
(All taken at Horsehead Outcrops)

Shakespeare Ridge Inshore

51° 06.186N , 01° 17.327E

One mile west of Dover Harbour, this site is a gently sloping, very silty, mix of sand, pebbles, cobbles and small boulders, with all hard surfaces covered in life. Sandmason worms *Lanice conchilega* were the dominant species seen in the sand, but in deeper areas, *Ophiura* brittlestars took over as the dominant species. Finger bryozoans *Alcyonidium diaphanum* were seen across the dive site.

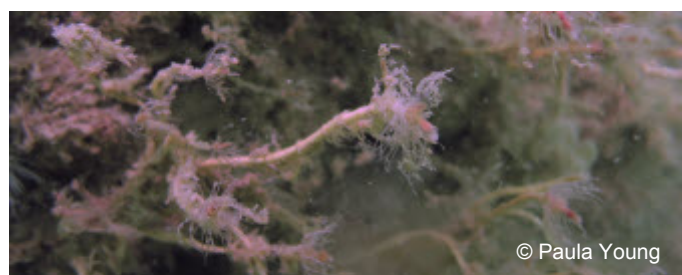


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Horsehead Outcrops

51° 05.753N , 01° 14.318E

A shallow site approximately 4 miles to the west of Dover Harbour with outcrops of chalk bedrock and large boulders densely covered in hydroid and bryozoan turf. Between these were patches of very pitted, piddock-bored, grey chalk bedrock with very little life attached. Elsewhere there was a thick layer of very soft, silty sand over a hard surface. The whole site was very silty. Antenna hydroids *Nemertesia antennina* and oaten pipe hydroids *Tubularia indivisa* were frequently observed as were plumose anemones *Metridium senile* and the elegant anemone *Sagartia elegans*.



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Above: A hermit crab peers from beneath its shell

Below right: Nudibranchs *Flabellina lineata* at West Bank Cable

West Bank Cable
51° 05.138N , 01° 16.086E
 A survey of the seabed marked on the charts as being over a cable route. A mixed seabed with boulders, cobbles and pebbles interspersed with silty sand. Plenty of hydroids and bryozoans were growing on the hard rock surfaces, some with nudibranchs feeding on them. Several anemones and crustaceans were spotted amongst this animal turf including the anemone *Diadumene cincta*, *Inachus* crabs and hermit crabs *Pagurus bernhardus*.



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West Bank North
51° 05.278N , 01° 16.145E
 A gently sloping seabed of cobbles, pebbles and occasional large boulders. There were a few patches of mud with some casts, but the majority of life was seen on the mixed ground. The branched antenna hydroid *Nemertesia ramosa* was commonly seen along with the herring bone hydroid *Halecium halecinum*. Several species of anemones were seen in good numbers including dahlia anemone *Urticina felina*, *Diadumene cincta*, and plumose anemones *Metridium senile*.



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Left: The anemone *Cerianthus lloydii*

Below right: A dahlia anemone, *Urticina felina*

Shakespeare Circles
51° 06.373N , 01° 19.131E
 A site close to where the ferries anchor during rough weather. The seabed comprised a mix of boulders through to pebbles and sand. A very diverse collection of marine life was seen including bryozoans such as *Cellapora pumicosa*, sponges such as the breadcrumb sponge *Halichondria panacea*, and a number of different crustaceans and molluscs. Of particular note at this site was the variety of seasquirts seen including Gooseberry seasquirts *Dendrodoa grossularia*, and red seasquirts *Ascidia mentula*.

Samphire Hoe SW
51° 05.874N , 01° 16.027E
 A site a short way out from the Samphire Hoe platform between Dover and Folkestone. A very level seabed with a mix of cobbles, pebbles, gravel and sand with patches of the chalk bedrock exposed in places. The bedrock was quite pitted with piddock holes, some occupied by live piddocks. Feather hydroids dominated, along with finger bryozoan *Alcyonidium diaphanum* and various species of anemones including the white striped anemone *Actinothoe sphyrodeta* and the burrowing anemone *Cerianthus lloydii*.



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Dover to Deal rMCZ

South Foreland Reef

51° 08.603N , 01° 23.180E

A really pretty site of rocky reef outcrops of chalk bedrock with sand between. The reef provides a home for a diversity of life from red seaweeds on the reef tops, chimney sponge *Polymastia penicillus*, and oaten pipe hydroids *Tubularia indivisa*, through to crabs and lobsters sheltering in crevices and dogfish *Scyliorhinus canicula* resting on the seabed. Of particular note was a group of horesehoe worms *Phoronis hippocrepi*.



Right: Close-up of hornwrack *Flustra foliacea*. Look closely, you can just see the tentacles of the tiny colonial animals

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Folkestone Pomerania MCZ



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Top left: A club seasquirt *Morchellium argus* at Ross North

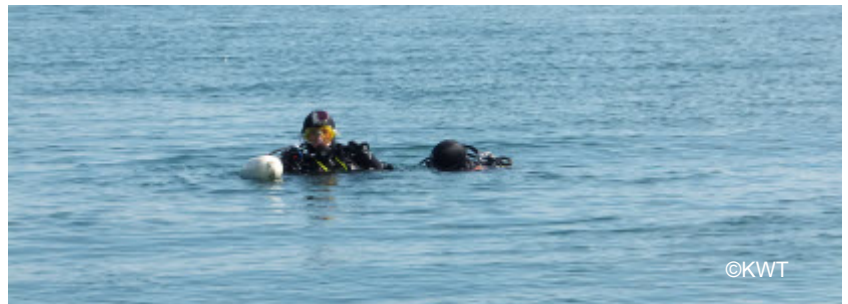
Right: Divers prepare to descend

Below: Dover sole *Solea solea*, home at Ross North, Dover

Anchor Escarpment

51° 02.184N , 01° 15.493E

10Km south west of Dover Harbour, a gentle escarpment comprising a silty mix of bedrock, boulders and cobbles with shelly sand in between. Here our divers discovered an old 3m long anchor, covered in animal life dominated by plumose anemones *Metridium senile*. The surrounding seabed hosted several sponge species, including sea orange *Suberites ficus*, anemones and deadman's fingers *Alcyonium digitatum*, and bryozoans including *Vesicularia spinosa*.



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Ross North

51°02.411N , 01° 16.255E

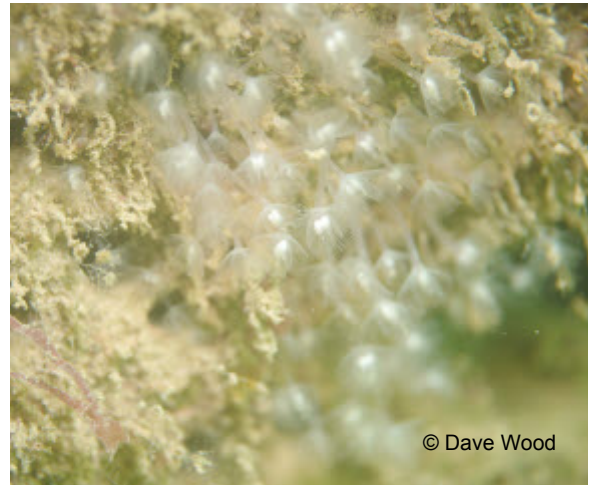
A low lying rocky reef with many crevices harbouring tompot blennies *Parablennius gattorugine*, interspersed with silty cobbles, pebbles and sand. Sandmason worms *Lanice conchilega*, and common starfish *Asterias rubens* were present here, and several seasquirts were observed on the hard surfaces of the reef, including the club seasquirts *Morchellium argus* and *Aplidium punctum*.

Independent Seasearch survey dives

Admiralty Arm Outer Wall

51°06.808N , 01° 18.822E

A dive along the stone harbour wall, with many crevices providing a home for velvet swimming crabs *Necora puber*, lobsters *Homarus gammarus* and edible crabs *Cancer pagurus*. Goosebump sponge *Dysidia fragilis* was seen growing on the wall and horseshoe worms *Phoronis hippocrepia* and double spiral worms *Bispira volutacornis* were recorded. A variety of fish were seen including bib *Triopterus luscus*, leopard spotted gobies *Thorogobius ephippiatus*, and rock gobies *Gobius pagaellus*.



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Above right: Horseshoe worms *Phoronis hippocrepia*; **Below left:** Leopard spotted goby *Thorogobius ephippiatus*; **Below centre:** Double spiral worm *Bispira volutacornis*; **Below right:** Common lobster *Homarus gammarus*



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Training in 2014

Seasearch Observer Course

In April we ran our annual Seasearch Observer course at Reculver, this time attended by 6 people, all of whom were new to Seasearch diving. To give attendees the opportunity to practice what they had learned, we arranged a shore dive the following day. Newly trained Seasearch Observers came along and joined 3 more seasoned Kent Seasearch divers brushing up their skills and dusting off their kit ready for the new dive season.



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Sponges and other animal turf

We also hosted a specialist workshop focusing on sponges, hydroids and bryozoans. Some of our regular Seasearchers joined several other enthusiastic volunteers to examine samples under the microscope and start to get to grips with these tricky groups.

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

Marine algae (seaweeds) - Approximately 12 species, including *Laminaria digitata* (kelp), *Calliblepharis ciliata* (red fringe weed) and *Desmarestia ligulata* (Desmarest's flattened weed)

Porifera (sponges) - Approximately 20 species, including: *Haliclona oculata* (mermaid's glove sponge), *Halichondria panicea* (breadcrumb sponge), and *Raspailia ramosa* (chocolate finger sponge)

Cnidaria (jellyfish, corals and anemones) - Approximately 29 species, including: *Nemertesia antennina* (antenna hydroid), *Alcyonium digitatum* (deadman's fingers), *Actinothoe sphyrodeta* (white striped anemone), *Urticina felina* (dahlia anemone), and *Sagartia elegans* (elegant anemone)

Platyhelminthes (flatworms) - 1 species, *Prostheceraeus vittatus* (candy striped flatworm)

Annelida (polychaete worms) - Approximately 10 species, including: *Lanice conchilega* (sand mason worm) and *Bispira volutacornis* (double spiral worm)

Pycnogonida (sea spiders) - 1 record

Crustacea (barnacles, prawns, crabs and lobsters) - Approximately 21 species, including: *Necora puber* (velvet swimming crab), *Cancer pagurus* (edible crab), and *Pagurus bernhardus* (hermit crab)

Mollusca - Approximately 30 species, including: *Callistoma zizyphinum* (painted topshell), *Pholadidae* (piddocks), and *Trivia monacha* (European cowrie)

Bryozoa (sea mats) - Approximately 20 species, including: *Flustra foliacea* (hornwrack), *Alcyonidium diaphanum* (finger bryozoan) and *Bugula spp.* (spiral bryozoans)

Phoronida (horseshoe worms) - 1 species, *Phoronis hippocrepia*

Echinodermata (starfish and sea urchins) - Approximately 5 species, including: *Asterias rubens* (common starfish), and *Ophiura albida* (brittlestar)

Chordata (sea squirts) - Approximately 13 species, including: *Clavelina lepadiformis* (lightbulb sea squirt), *Dendrodoa grossularia* (gooseberry sea squirt) and *Aplidium punctum* (club sea squirt)

Chordata (fish) - Approximately 17 species, including: *Ctenolabrus rupestris* (goldsinny), *Parablennius gattorugine* (tompot blenny) and *Thorogobius ephippiatus* (leopard spotted goby)

A great big thank you! To all the divers who took part in the Kent Seasearch dives, and who undertook Seasearch surveys independently on their own dives.

2014 Kent Seasearch Divers:

Pauline Brown, Kim Cole, Lesly Conroy, Roger Danks, Andrew Duff, Becca Korda, Roger People, Elaine Purse, Chris Read, Kay Skinner, Dave Wood, Luke Wyndham, Paula Young, Bryony Chapman and Fiona White.

Extra thanks to Pauline Brown, Dave Wood and Paula Young for sharing all their dive photos.

And finally, many thanks to Chris Webb and Tom at Mutiny Diving, and to Dave Batchelor and Glyn from Neptune for all their help getting us to and from the dive sites, in and out of the water, and simply for always being jolly.

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, and from Biodriven, and European Cross-border Co-operation Programme INTERREG IV A France (Channel)-England, co-funded by the ERDF.

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