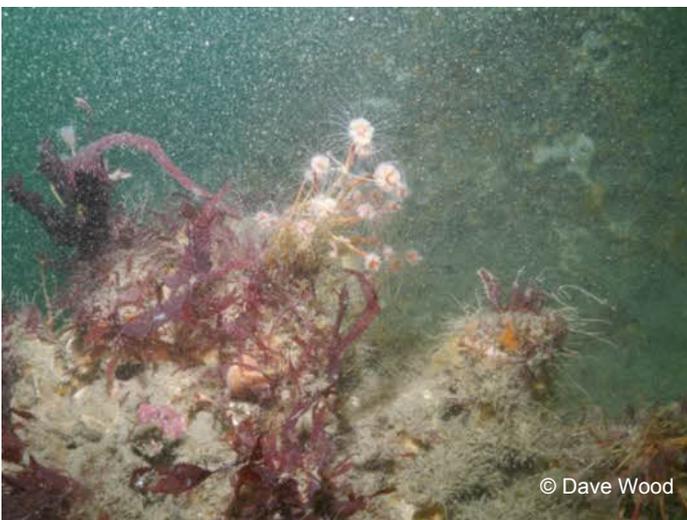




Kent Seasearch Summary Report 2013



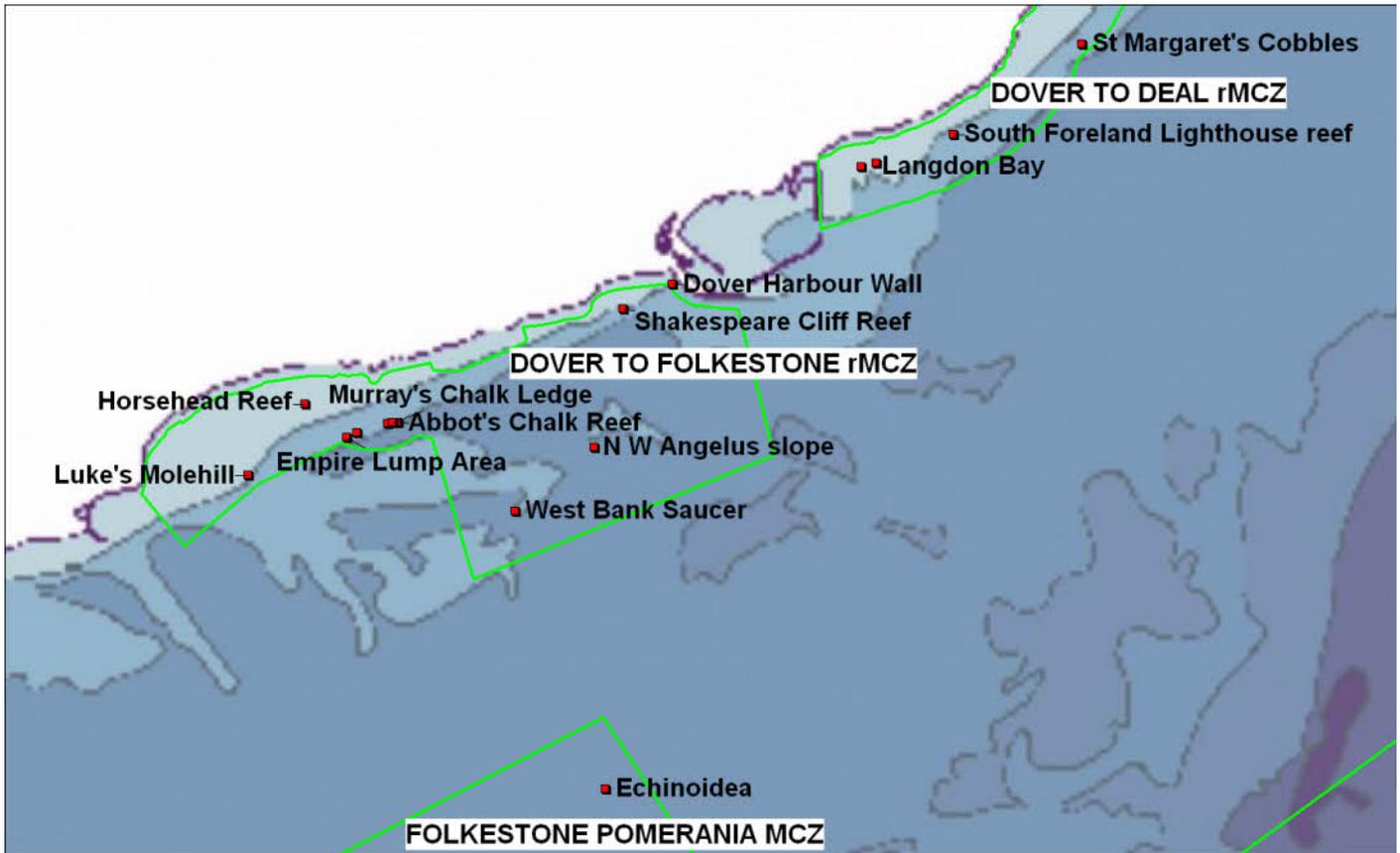
Kent Seasearch surveys in 2013

Kent Seasearch divers surveyed the seabed at 12 different locations and at depths from 6m to 28m. A total of 6 diving days were planned, and fortunately none had to be cancelled due to poor weather. A significant improvement on the previous year! Around **149** different species were identified, and a total of **1021** species records made. Most commonly recorded species was once again the common starfish, *Asterias rubens*, this year followed by *Tubularia indivisa*, *Urticina felina*, *Pagurus bernhardus*, *Flustra foliacea*, *Haliclona oculata*, and *Alcyonium digitatum*. All of the surveys took place at sites either recommended for or designated for protection as, Marine Conservation Zones, which are marked in green on the map.

Your living landscapes. Your living seas.



Kent Seasearch 2013 Surveys



Langdon Bay

51° 07.856N , 001° 21.344E

A site within the Dover to Deal recommended Marine Conservation Zone. An extremely rugged and uneven, piddock-bored chalk reef with raised areas and indistinct ridges and gullies. The site was very silty and exhibited significant wave surge influence. The top of the reef was characterised by large red algae including *Delessaria sanguinea* and sparse animal growth. The sides of the reef were covered in close animal turf including breadcrumb sponge *Halichondria panicea*, shredded carrot sponge *Amphilectus fucorum* and frequent oaten pipe hydroids *Tubularia indivisa*. There were also low lying areas of bare, scoured chalk with many piddock holes.



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Above: Egg whorls of the sea lemon *Archidoris pseudoargus*

South Foreland Lighthouse Reef

51° 08.109N , 001° 22.327E

Also within the Dover to Deal recommended Marine Conservation Zone. A highly uneven and rugged chalk reef which was heavily piddock-bored. Gullies and ridges extended up to about 1.5m high, all covered in a mostly short turf, including encrusting and branching sponges such as goosebump sponge *Dysidea fragilis* and bryozoan and hydroid turf, including helter-skelter hydroid *Hydrallmania falcata*. Oaten pipe hydroids *Tubularia indivisa* were particularly apparent. There were clumps of foliose red algae on the shallower tops of the ridges, and one very large boulder, about 1.5m tall, with a smooth chalk upper surface and very heavily piddock-bored side, and newly broken off bright white chalk pieces on the reef nearby. Beyond the reef were some areas of scoured, horizontal, heavily piddock-bored chalk, overlain with patches of chalk and flint pebbles.

West Bank Saucer

51° 04.982N , 001° 16.842E

In the Dover to Folkestone recommended Marine Conservation Zone. A silty, mixed ground of mainly flint pebbles with some cobbles and outcrops or small boulders. Keelworms were evident on the pebbles and some of the cobbles. The larger cobbles and boulders were covered in a hydroid and bryozoan turf with clumps of hornwrack *Flustra foliacea*, antenna hydroid *Nemertesia antennina* and oaten pipe hydroids *Tubularia indivisa*.



© Paula Young

Top: *Cerianthus lloydii* at West Bank Saucer

Left: *Ophiura albida* at West Bank Saucer



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Abbots Chalk Reef

51° 05.666N , 001° 15.311E

In the Dover to Folkestone recommended Marine Conservation Zone, just out from Abbots Cliff to the west of Dover Harbour. The dive site consisted of grey, marly chalk reef outcrops standing approximately 1m high and a few metres across, all densely covered in a rich mix of hydroids, bryozoans, anemones and sponges, notably oaten pipe hydroids *Tubularia indivisa*, antenna hydroids *Nemertesia antennina*, plumose anemones *Metridium senile*, dead man's fingers *Alcyonium digitatum*, mermaid's glove sponge *Haliclona oculata* and hornwrack *Flustra foliacea*, above a dense short turf. Between the outcrops were small areas of bare grey chalk or mobile shelly gravel with significant amounts of broken Sabellaria tubes.



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Above left:
Plumose
anemones
*Metridium
senile* at
Abbots
Chalk Reef



© Paula Young

Right: the
seaslug
*Facelina
auriculata*
at Abbots
Chalk Reef

St Margaret's Cobbles

51° 08.864N , 001° 23.945E

A site within St Margaret's Bay and within the Dover to Deal recommended Marine Conservation Zone. A level, but rugged and uneven seabed of very low-level outcropping chalk, cobbles and pebbles, and quite silty. The substrate was stable enough to support a varied, although not particularly dense turf of hydroids including oaten pipes hydroids *Tubularia indivisa*, bryozoans including hornwrack *Flustra foliacea*, and sponges including mermaids glove *Haliclona oculata* and breadcrumb sponge *Halichondria panicea*. Several anemones were also present including the elegant anemone *Sagartia elegans* and dahlia anemone *Urticina felina* as well as many common starfish *Asterias rubens*.

Below right:
the sun
sets on a
Kent
Seasearch
dive



© Paula Young



© Paula Young

Above: A diver surfaces after a lovely dive

Below: Hermit crab



KWT

Murray's Chalk Ledge

51° 05.697N , 001° 15.349E

An extensive area of sand mason worm *Lanice conchilega* bed/reef with a side carved away to show it standing about 15cm and up to 30cm tall above a pebbly/gravel seabed. Further offshore, to the south east, the *Lanice conchilega* was intermingled with, and fell away to, a pebbly gravel seabed lying on chalk between the upstanding chalk reef outcrops. These outcrops had a dense cover of sponges, hydroids and bryozoans, including the antenna hydroid *Nemertesia antennina* and the breadcrumb sponge *Halichondria panicea*.

Right:
Fan
worms at
Murray's
Chalk
Ledge



© Dave Wood



© Dave Wood

Above left: Velvet swimming crab



© Elaine Purse

Above right: Painted topshell

Shakespeare Cliff Reef

51° 06.632N , 001° 18.147E

A survey of the edge of the chalk reef below Shakespeare Cliff in Shakespeare Bay. Large boulders lay close together supporting a very dense hydroid, bryozoan and sponge turf, mixed with red algae on the tops. Spiral bryozoans *Bugula* spp. were commonly seen and light bulb sea squirts *Clavelina lepidiformis* were frequently found too. Between and beyond the boulders were areas of horizontal chalk with a light dusting to a thin layer of silty sand with live piddocks and piddock holes. Other areas had flint pebbles and cobbles, gradually diminishing in size into a continuous layer of mobile sand further out into the bay. Here the only life apparent were hermit crabs.

Luke's Mole Hill

51° 05.215N , 001° 13.407E

A gently sloping and undulating silty gravel and pebble seabed. Mobile, but colonised by numerous sand mason worms *Lanice conchilega*, finger bryozoan *Alcyonidium diaphanum* and the burrowing anemone *Cerianthus lloydii*. Mobile life consisted mostly of common starfish *Asterias rubens* and the brittlestar *Ophiura albida*, as well as a few common whelks *Buccinum undatum* and hermit crabs *Pagurus bernhardus*.

NW Angelus Slope

51° 05.512N , 001° 17.827E

A north-south sloping seabed of coarse gravel mixed with shell fragments and patches of Sabellaria. Boulders up to 1m high covered in tall and short animal turf such as plumose anemones *Metridium senile* and elegant anemone *Sagartia elegans*.

Empire Lump Area

51° 05.541N , 001° 14.657E

A level seabed of silty sand, broken shells and pebbles. Numerous brittlestars *Ophiura albida* and hermit crabs *Pagurus bernhardus*. Hydroids and bryozoans present, but limited attached life.

Echinoidea

51° 02.762N , 001° 18.087E

A level seabed at 26m below sea level, comprising mostly of pebbles with some small cobbles, each with several keel worms and dead men's fingers *Alcyonium digitatum*, which together gave a whitened appearance across the seabed. Occasional clumps of hornwrack *Flustra foliacea* and robust feather hydroids, a few branching sponges, and white striped anemone *Actinothoe spirodeta*. A thin cover of silt-covered coarse sand lay between larger stones, with a few scattered dahlia anemones *Urticina felina*. The site was notable for the numerous common brittlestars *Ophiothrix fragilis*, (which were mostly found wrapped around the dead men's fingers) and green sea urchins *Psammechinus miliaris* (with shell camouflage). Hermit crabs were also numerous, along with a variety of other attached and mobile species.



Top right: The diversity of life at Echinoidea

Above: A common brittlestar hugs a dead man's finger

Left: Blue mussels at Horsehead Reef

Below left: Sabellaria and sponge life at Horsehead Reef



Horsehead Reef

51° 05.793N , 001° 14.103E

Chalk reef outcrop up to 1.5m high stretching for approximately 100mx25m, surrounded by a flat seabed with silty cobbles, pebbles and shells lying over the chalk bedrock and the scattered boulders. The reef top was dominated by large red algae and the sides were covered in a close turf of sponges, hydroids and bryozoans. This was a heavily silted site, close inshore where conditions are rarely suitable for a survey. On this dive, conditions were reasonable enabling a good survey to be undertaken. The presence of *Sabellaria*, blue mussels *Mytilus edulis* and native oyster *Ostrea edulis* on the subtidal chalk was of particular interest.

Independent Seasearch survey dives

Dover Harbour Wall

51°06.840N , 001° 18.780E

An additional record of the life on the outer face of Dover Harbour's Admiralty Arm wall with crevices between blocks harbouring a variety of crustaceans and providing a firm substrate for red algae to grow. Cobbles and pebbles at the base of the wall, transitioning into sand.



Above: Anemones found around the Kent coast

Far left: A happy Kent Seasearcher

Left: A greater pipefish *Syngnathus acus*

U109 submarine

51°03.720N , 001° 14.140E

The submarine lies on a seabed of silty sand and gravel at 28m depth. Of particular note were the abundant common starfish *Asterias rubens*, cuckoo wrasse *Labrus mixtus* and large crustaceans.

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

Marine algae (seaweeds) - Approximately 20 species, including *Delessaria sanguinea* (sea beech), *Calliblepharis ciliata* (red fringe weed) and *Halurus equisetifolius* (sea mare's-tail)

Porifera (sponges) - 12 species, including: *Haliclona oculata* (mermaid's glove sponge), *Suberites* (sea orange sponge), and *Halichondria panicea* (breadcrumb sponge).

Cnidaria (jellyfish, corals and anemones) - Approximately 20 species, including: *Urticina felina* (dahlia anemone), *Alcyonium digitatum* (dead man's fingers), *Nemertesia antennina* (antenna hydroid), *Hydrallmania falcata* (helter-skelter hydroid) and *Actinothoe sphyrodeta* (white striped anemone).

Ctenophora (sea gooseberries, comb jellies) - 3 species, including *Pleurobrachia pileus* (sea gooseberry).

Annelida (polychaete worms) - 10 species, including: *Lanice conchilega* (sand mason worm), and *Sabellaria spinulosa* (rossworm).

Pycnogonida (sea spiders) - 1 species.

Crustacea (barnacles, prawns, crabs and lobsters) - Approximately 18 species, including: *Pagurus bernhardus* (hermit crab), *Necora puber* (velvet swimming crab), and *Liocarcinus depurator* (harbour crab).

Mollusca - 30 species, including: *Callistoma zizyphinum* (painted topshell), *Mytilus edulis* (blue mussels), and *Archidoris pseudoargus* (sea lemon).

Bryozoa (sea mats) - Approximately 12 species, including: *Flustra foliacea* (hornwrack), *Cellepora pumicosa* (pumice bryozoan), and *Alcyonidium diaphanum* (finger bryozoan).

Echinodermata (starfish and sea urchins) - Approximately 6 species, including: *Asterias rubens* (common starfish), and *Psammechinus miliaris* (shore urchin).

Chordata (sea squirts) - 4 species, including: *Clavelina lepadiformis* (lightbulb sea squirt) and *Dendrodoa grossularia* (gooseberry seasquirt).

Chordata (fish) - Approximately 15 species, including: *Cyclopterus lumpus* (lumpsucker), *Parablennius gattorugine* (tompot blenny), *Callionymus lyra* (common dragonet), and *Scyliorhinus canicula* (lesser spotted catshark/dogfish).

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

2013 Kent Seasearch Divers: Jason Armstrong, David Bamford, Pauline Brown, Lesly Conroy, Mike Cook, Andrew Duff, Sharon Meadows, Elaine Purse, Kay Skinner, Dave Wood, Luke Wyndham, Paula Young, Bryony Chapman and Fiona White.

Extra thanks to Elaine Purse, 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 the Neptune crew for all their help getting us to and from the dive sites, in and out of the water, and simply for always being jolly.



Training in 2013

We ran 2 Observer courses last year with 10 divers taking part in the April course run at Reculver, and a further 8 taking part in the November course kindly hosted by Underwater Studios Dive Club in Basildon. Many thanks to Kelly Russell for organising this.

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).

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