



**Kent**

**seasearch**



Anemones, Shakespeare Bay

Chris Wood



Painted goby  
*Pomatoschistus pictus*

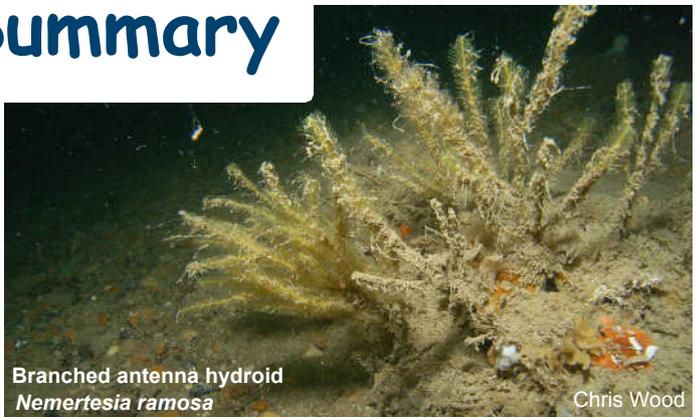
Andrew Openshaw

# Kent Seasearch 2007 Summary



Dahlia anemone  
*Urticina felina*

Andrew Openshaw



Branched antenna hydroid  
*Nemertesia ramosa*

Chris Wood



Sole  
*Solea solea*

Chris Wood



Queen scallop  
*Aequipecten opercularis*

Mike Cook



Burrowing anemone  
*Cerianthus lloydii*

Mike Cook

## Kent Seasearch surveys in 2007

Kent Seasearch divers surveyed the seabed at 14 locations during 2007, between June and September, during a summer which brought rough seas which cancelled many dives around the country. The dives ranged from the low intertidal to 30m deep, and took place at all times of the day between 8am to 8pm, in temperatures between 13°C and 19°C, and in visibility between 0.5 and 6m. 150 different species were recorded; the most commonly recorded was again the common starfish, followed by hermit crabs, dahlia and daisy anemones, hornwrack and finger bryozoan.

**1 Kentish Flats** 51.44611N 001.133997E

A generally flat and subtly varied seabed comprising mainly coarse sand, but with varying amounts of shell gravel, whole dead shells, occasional pebbles and stacks of slipper limpets, very occasional cobbles and small exposures of the underlying clay. The sand is smooth or slightly rippled in places, but elsewhere are broadly spaced ridges and hollows, with scattered anemones. A variety of mobile life includes hermit crabs and tiny spider crabs, while various bushy hydroids and bryozoans are attached to the larger stones and stacks of slipper limpets.

**2 Westgate Seabed**

51.4060N 001.32988E

A sandy seabed sloping gently from 8 to 11m deep, with ridges and ripples, and a slight dusting of clay in places. Occasional mobile species were recorded at this site, including several hermit crabs and brittlestars, in addition to a masked crab, pipefish and occasional blue jellyfish.

**3 Herne Bay Pier End**

51.37495 N 001.111574 E

The end of the old Herne Bay Pier now stands in isolation, no longer connected to the shore. At its base lie railings and other man-made debris on the seabed of gravel, pebbles and mud, where beds of mussels are predated by starfish. Barnacles and algae grow on the upper parts of the pier legs, while further down, the pier and surrounding debris are covered in sponges, anemones and sea squirts. To the west of the pier, daisy anemones are abundant, and tracks and holes in the clay sediment indicate the presence of other animals.

**4 Wear Bay Folkestone Warren**

51.09224 N 001.24101 E

A very flat sand and gravel seabed with some shell material, and an abundance of finger bryozoans with mating sea slugs and resultant egg whorls. All other life was sparse, but included sand mason worms and brittlestars.

**5 West Bank, Folkestone**

51.07377 N 001.27568 E

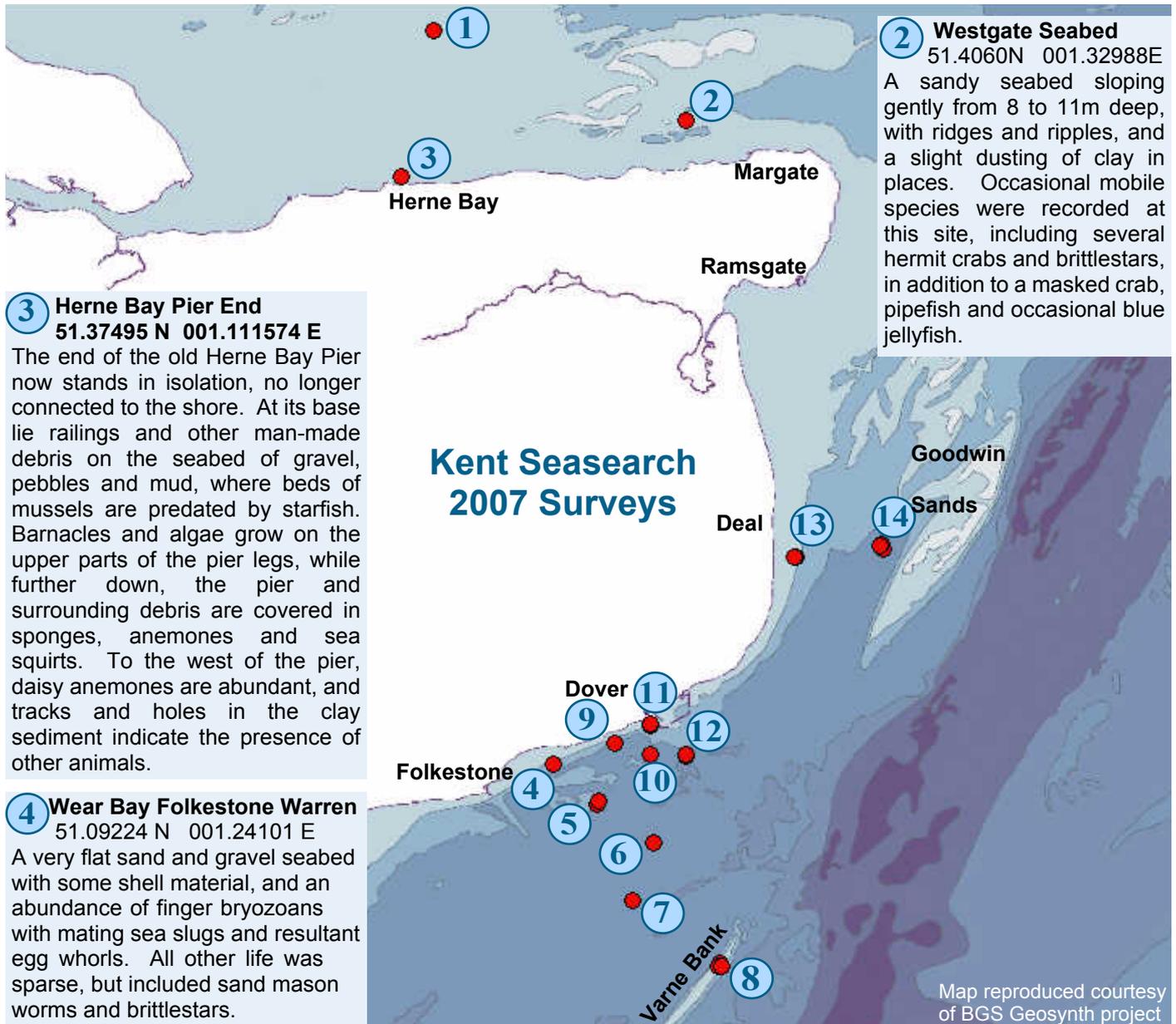
An extensive flat seabed at 25m, of stone and shell gravel, pebbles and cobbles, and with a sparse turf of hydroids and bryozoans. Frequent small spider crabs (*Inachus*), gobies, small scallops, starfish and sea urchins (*Psammechinus miliaris*). Small boulders scattered across this area, and small patches of ross worm, support a more diverse attached life, including plumose anemone, hornwrack and small sponges. Here, a colony of the potato crisp bryozoan was found, the first confirmed record of this delicate colonial animal in Kent.



**6 Wreck of Anglia**

51.05598 N 001.319801 E

As with many of the wrecks around Kent, the metal structures of this war grave support a dense cover of hydroid and bryozoan turf (mostly oaten pipe hydroids) and anemones (mostly the orange *Diadumene cincta*, but also some large plumose anemones). Large numbers of bib swim in and around the wreckage, while tompot blennies sit in small crevices, and gobies dart about on the surrounding sand and gravel seabed. The Anglia has several other typical wreck inhabitants including painted topshell, velvet swimming crab, edible and hermit crabs, along with antenna hydroids and starfish.



**7 Granite Block Wreck** 51.02721N 001.305085E

Little remains of this wooden shipwreck other than its cargo of large oblong granite blocks (about 2m long), which now lie in a small pile on the 30m deep seabed, standing about 1.5m tall. This provides a habitat for various hydroids and anemones, including oaten pipe hydroids, dahlia anemones, small white anemones and the orange *Diadumene cincta*. A little cuttle, and a *Flabellina* sea slug were seen, along with a variety of fish, including a conger eel, bib, pollack, cod and ballan wrasse. Few crustaceans were recorded at this site, but an edible crab was recorded, infested with the parasitic barnacle, *Sacculina*. On the surrounding mixed ground seabed, the larger pebbles and cobbles also support several hydroids and bryozoans, including hornwrack, finger bryozoan and the antenna hydroid.

**8 Varne Bank (North)** 50.9969N 001.37493E

The Varne Bank is an extensive sand bank running down the middle of the Dover Strait. At the survey site, the bank undulated between 10-13m, and comprised medium-grained sand, with only a few pebbles and broken shell fragments. The very mobile sand forms into waves and ripples, steps and ledges, and silt collects in small depressions. The sparse life recorded here was restricted to hermit crabs (mostly in dogwhelk shells), gobies, starfish and sandeels.



Kitting up to dive on the Varne Bank

**9 Shakespeare Bay** 51.10309N 001.287582E

Close to shore in the bay between Dover Harbour and Samphire Hoe, at about 2m below extreme low tide level, is an area of very large chalk boulders with deep crevices and overhangs. Under the boulders is a chalk platform, heavily bored by bivalve piddocks, and with scattered large red algae, and a patchy cover of sand, readily shifted by wave surge and currents. Close in to shore are scattered kelps of 3 species, with red, green and brown algae growing on and around them, collections of tiny blue-rayed limpets graze on their fronds, and a common eel was spotted breaking the cover they provide. Beyond the kelp zone, red seaweeds grow on the tops of the boulders, and sponges, hydroids and sea mats grow on the shaded sides.

**Boulder on Shakespeare Bay Reef**



Chris Wood

**10 Shakespeare Bay Reef** 51.09845N 001.315819E

Further out into Shakespeare Bay, in around 25m of water, the chalk platform and chalk boulders continue, in places forming series of small steps and ledges, and in places covered with a mix of sand, pebbles and cobbles. Small mounds of sandy tubes have been created by colonies of ross worms. The greater depth provides insufficient light for any seaweed growth, but the exposed chalk is all heavily bored by piddocks and there is a turf of attached animals including several types of anemones, bryozoans, and sea squirts, along with starfish, and a variety of large and small crabs, bib and wrasse.

**11 Dover Harbour Admiralty Arm** 51.11352 N 001.315078 E

This popular shore dive follows the outside of Dover Harbour's Admiralty Arm, a wall of granite blocks, stepped out towards the base. Cobbles and pebbles run down steeply beside the wall, and meet a seabed of fine sand, with pockets of exposed chalk bedrock and some stone waste from the wall's construction. The stable wall, with its many gaps and crevices between the blocks and at the base, harbours a great variety of life. So far Seasearchers have recorded: 2 sponge species, 4 hydroids, 6 worms, 10 crustaceans, 7 molluscs, 3 bryozoans, 1 echinoderm, 1 seasquirt, 13 fish and 4 seaweed species. Please continue to send in records to add to the overall list for this site!

**Anemones by The Groove**



Mike Cook

**12 The Groove Area** 51.09867N 001.343205E

Adjacent to the approaches to Dover Harbour's western entrance is a flat area of mixed sediment seabed at about 24m, with chalk boulders of varying sizes scattered at about 4m intervals. The boulders are bored by piddocks, and covered with a turf of animal life including dead man's fingers, anemones and encrusting sponges.

**Common starfish in Trinity Bay**



Mike Cook

**13 The Downs, Goodwin Sands** 51.19594N 001.423002E

A flat seabed of muddy sand, gravel and pebbles, at around 15m. Through the very poor visibility experienced during this survey, a few patches of ross worm were recorded, along with occasional anemones (dahlias and small white anemones), starfish, brittlestars, finger bryozoans, dead man's fingers, and a several crabs.



Painted topshell on finger bryozoan on The Downs, Goodwin Sands

**14 Trinity Bay, Goodwin Sands** 51.20216N 001.489193E

A flat mixed ground seabed at 24m, comprising loose sand, mud, shells and small pebbles. Life recorded here was mostly limited to frequent hermit crabs, and occasional anemones, starfish and spider crabs. Some areas had a turf of hydroids and bryozoans, and a crust or small mounds of ross worm tubes had formed in places.

**Numbers of species recorded in each phylum, and species most commonly recorded in each group.**

**Sponges** - 15 species, including: *Dysidea fragilis* (Goosebump sponge); *Suberites spp.* (Sea orange sponges); *Halichondria bowerbanki*; *Scypha ciliata* (Purse sponge); *Esperiopsis fucorum* (Shredded carrot sponge).

**Cnidaria (jellyfish, corals and anemones)** - 24 species, including: *Cyanea lamarckii* (Blue lion's mane jellyfish); *Nemertesia antennina* (Antenna hydroid); *Tubularia indivisa* (Oaten pipe hydroid); *Hydrallmania falcata* (Helter-skelter hydroid); *Alcyonium digitatum* (Dead men's fingers); *Urticina felina* (Dahlia anemone); *Cereus pedunculatus* (Daisy anemone); *Metridium senile* (Plumose anemone); *Actinothoe sphyrodeta* (White anemone); *Diadumene cincta* (Orange anemone).

**Annelida (polychaete worms)** - 6 species, including: *Lanice conchilega* (Sand mason worm); *Sabellaria spinulosa* (Ross worm); *Pomatoceros triqueter* (Keel worm); *Bispira volutacornis* (Double spiral worm).

**Crustaceans** - 19 species, including: *Pagurus bernhardus* (Hermit crab); *Macropodia* (Long legged spider crab); *Necora puber* (Velvet swimming crab); *Cancer pagurus* (Edible crab).

**Molluscs** - 25 species, including: *Calliostoma zizyphinum* (Painted top shell); *Pholas dactylus* (Piddock); *Crepidula fornicata* (Slipper limpet); *Mytilus edulis* (Common mussel).

**Bryozoans (sea mats)** - 9 species, including: *Alcyonidium diaphanum* (Finger bryozoan); *Flustra foliacea* (Hornwrack); *Vesicularia spinosa* (A feathery bryozoan); *Bugula plumosa* (A spiral bryozoan); *Pentapora foliacea* (Potato crisp bryozoan / ross).

**Echinoderms** - 3 species: *Asterias rubens* (Common starfish); *Ophiura albida* (Sand brittlestar); *Psammechinus miliaris* (Green sea urchin).

**Chordata (sea squirts)** - 6 species, including: *Clavelina lepadiformis* (Light bulb sea squirt); *Styela clava* (Leathery sea squirt); *Molgula sp.*

**Chordata (fish)** - 25 species, including: *Scyliorhinus canicula* (Lesser spotted dogfish); *Trisopterus luscus* (Bib); *Parablennius gattorugine* (Tompot blenny); *Pomatoschistus minutus* (Sand goby); *Labrus bergylta* (Ballan wrasse); *Callionymus lyra* (Common dragonet); *Thorogobius ephippiatus* (Leopard spotted goby).

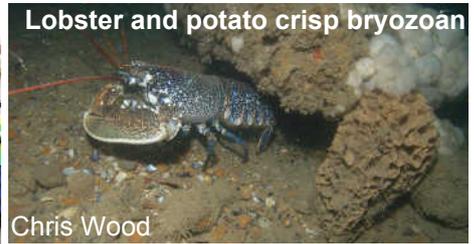
**Algae** - 15 species, including: *Calliblepharis ciliata* (Red fringe weed); *Chondrus crispus* (Carrageen / Irish Moss); *Plocamium cartilagineum* (Red comb weed); *Palmaria palmata* (Dulse); *Dictyota dichotoma* (A brown alga); *Laminaria saccharina* (Sugar kelp / Sea belt); *Laminaria digitata* (Kelp / Oarweed); *Sargassum muticum* (Wireweed); *Ulva lactuca* (Sea lettuce); *Bryopsis plumosa*.

**Special records for 2007**

Kent Seasearch divers continued to find and record areas of seabed where exposed **chalk reef** and boulders support a richer diversity of life than can survive on surrounding sediment-dominated seabeds. Reef formations of the **ross worm**, *Sabellaria spinulosa* were also recorded in various locations during the year. Although delicate structures, these provide a more stable environment for other life to survive, including delicate spider crabs, anemones and shrimps.



Dave Wood, Chris Wood, Lesly Conroy



Chris Wood

Kent Seasearch divers have made tentative records of the **potato crisp bryozoan** (ross), *Pentapora foliacea*, in previous years, but in August when the National Co-ordinator, Chris Wood joined us, he found and photographed a fine colony at West Bank, off Folkestone, proving its presence this far east along the Channel.



Seasearch Surveyors in Brighton Marina

**Training in 2007**

A total of 29 divers undertook the Observer courses held in Maidstone, Canterbury and Essex, and nine successfully completed the weekend Surveyor course held jointly by Kent and Sussex Seasearch, with course survey dives on the chalk reefs off Brighton.



Fish ID course with Frances Dipper (far right)

26 divers attended the Kent and Sussex Fish ID course given by Frances Dipper in Hastings.

**Thank you!** Huge thanks to all the Seasearchers who undertook the surveys and submitted a total of 38 forms for Kent dives in 2007, over half of which were the more detailed Survey forms. We are all grateful to Dave Batchelor and the crew of Neptune for looking after us so well on many of the Seasearch dives.



Jason Armstrong

**2007 Kent Seasearch**

**divers:** Andrew Devlin, Brian Stockwell, Chris Wood, David Wood, Emma Rosen, Ian Barrie, Jason Armstrong, Jon Bramley, Judith Bodkin, Julie Lintunen, Kay Skinner, Lesly Conroy, Mark Hewins, Mike Cook, Paul Hymers, Stefanie Buell, and Tim O'Hare.

Seasearch is a national volunteer survey project for recreational divers to support conservation of marine life. Kent Seasearch is run by Kent Wildlife Trust. We are grateful for a contribution towards the 2007 programme from Natural England, Environment Agency and Joint Nature Conservation Committee, via National Seasearch.

