Kent Seasearch surveys in 2015

Kent Seasearch divers surveyed the seabed at 7 different locations and at depths from 8m to 29m. A total of 7 diving days were planned, but two were cancelled due to poor weather and an afternoon dive cancelled for the same reason. Around 150 different species were identified, and a total of 442 species records made. Most commonly recorded species was once again the common starfish *Asterias rubens*, this year followed by dahlia anemone *Urticina felina*, deadman’s fingers *Alcyonium digitatum*, oaten pipe hydroid *Tubularia indivisa*, and painted topshell *Calliostoma zizyphinum*. All of the surveys took place in Marine Conservation Zones (MCZs) or recommended Marine Conservation Zones (rMCZs), which are marked in green on the map.
This site was dived twice on the same day and the improved visibility on the second dive allowed the divers to better appreciate the site. Scattered wreckage lay over the seabed of small boulders, cobbles, pebbles and sand. Oaten-pipe hydroids (*Tubularia indivisa*) and sponges were the dominant life over the seabed, with sponges and anemones dominating the wreckage. Edible crabs (*Cancer pagurus*) were seen by several divers.

**Above right:** Anemones (*Diadumene cincta*) and seasquirts on the wreckage
West Bank Cable 2
51° 05.134N, 01° 16.252E

A very level and silty seabed of cobbles and pebbles. Patches of grey chalk bedrock, with piddock holes were exposed in places and lots of life was observed, including burrowing anemones (*Cerianthus lloydii*), dahlia anemones (*Urticina felina*) and plumose anemones (*Metridium senile*).

A bed of Ampelisca (approximately 2m x 2m) was observed, covered in ripples of very fine silty mud.

Above: A male velvet swimming crab (*Necora puber*) holds on to a female waiting for her to moult at West Bank Cable 2.

Tigress Reef
51° 06.370N, 01° 16.983E

One of the shallower dives undertaken this year, giving Seasearchers the opportunity to practice their seaweed identification skills.

Large boulders were covered in a mix of red algae and patches of sugar kelp (*Saccharina latissima*). The boulders stood on piddock bored, marly chalk with varying amounts of sediment cover. Few mobile species or sessile animals were observed here.

Above: Silty capsules of the amphipod Ampelisca

Angelus East
51° 05.487N, 01° 18.139E

This site lies approximately 1.5 miles south of Dover and comprises a fairly flat seabed of a few small boulders and mixed sediments with a covering of attached life including hydroids, bryozoans and anemones.

Several hermit crabs, tiny spider crabs and topshells were recorded including the painted topshell (*Calliostoma zizyphinum*). A few purse sponges (*Scypha ciliata*) were seen attached to cobbles. Squid and cuttlefish were also recorded.

Above: A hermit crab makes use of a tusk shell at West Bank Cable 2

Above: A hermit crab makes use of a tusk shell at West Bank Cable 2

© Paula Young
This site featured a predominantly flat terrain of pebbles, a few cobbles and boulders. Several species of bryozoan were recorded including *Vesicularia spinosa* and a species of *Cellaria*. Hydroids included the herring-bone hydroid (*Halecium halecinum*) and antenna hydroids (*Nemertesia antennina*). Seasquirts of the *Molgula* genus were recorded as were the reef building ross worm (*Sabellaria spinulosa*) and several hermit crabs.

An interesting site with low lying outcrops of chalk bedrock interspersed with coarse sand and mixed ground of pebbles, sand and shell fragments. Of particular note was the extensive cover of bushy bryozoans, later identified as *Cellaria fistulosa* together with an even smaller bryozoan *Celleporina decipens*. This was the first record of this species in Kent and a very exciting discovery.

Plenty of life was seen at this site which comprised rocky outcrops of the chalk platform with fine sand in between. Several sponges were recorded including the chocolate finger sponge (*Raspailia ramosa*) and the golf ball sponge (*Tethya citrina*). Six yellow edged polycera seaslugs (*Polycera faeroensis*) were observed within a surprisingly small area.

Above: The anemone *Actinothoe sphyrodeta* at Woods Reefs
Right: Chocolate finger sponge (*Raspailia ramosa*)
Seasearch Observer and Surveyor Courses
In May we ran our annual Seasearch Observer course at Reculver. Three divers new to Seasearch diving attended along with two others who had previously attended a course. Two of the participants joined us on Seasearch dives in Kent this year and one is currently furthering her diving qualification to join us in 2016.

Two Kent Seasearch divers attended the Surveyor course run in Hampshire at the end of May and are now well on their way to completing the required dives to become qualified Seasearch Surveyors.

Fish identification workshop
In June we teamed up with Sussex Wildlife Trust at Brighton Sealife Centre to run a fish identification workshop. This was led by Dr. Frances Dipper author of British Sea Fishes and co-author of Marine Fishes of Wales & Adjacent Waters, and proved extremely popular. Seasearchers and other interested participants learned what to look for when trying to identify fish, and were able to examine the preserved specimens brought along by Frances as well as the live fish in the multitude of tanks at the centre.

Hydroid and bryozoan workshop
We also hosted a specialist workshop focusing on the identification of hydroids and bryozoans. Some of our regular Seasearchers joined several other enthusiastic volunteers to examine samples under the microscope and get a feel for which species can be identified in the field, and which require closer examination under a microscope.

Left: Divers prepare to start their survey
Above from top: Identifying fish at Brighton Sealife Centre; a tompot blenny - one of the more easily identifiable fish; studying hydroids and bryozoans under the microscope.
Number of species recorded in each phylum, and the species most commonly recorded in each group.

<table>
<thead>
<tr>
<th>Phylum</th>
<th>Number of species</th>
<th>Species Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine algae (seaweeds)</td>
<td>Approximately 23</td>
<td><em>Saccharina latissima</em> (sugar kelp), <em>Calliblepharis ciliata</em> (beautiful eyelash weed), <em>Palmaria palmata</em> (dulse)</td>
</tr>
<tr>
<td>Cnidaria (hydroids, anemones, corals and jellyfish)</td>
<td>Approximately 17</td>
<td><em>Tubularia indivisa</em> (oaten pipe hydroid), <em>Nemertesia antennina</em> (Antenna hydroid), <em>Urticina felina</em> (dahlia anemone), <em>Cerianthus lloydii</em> (burrowing anemone), <em>Alcyonium digitatum</em> (deadman’s fingers)</td>
</tr>
<tr>
<td>Annelida (polychaete worms)</td>
<td>Approximately 7</td>
<td><em>Lanice conchilega</em> (sand mason worm), <em>Bispira volutacornis</em> (double spiral worm), <em>Spirobranchus triqueter</em> (keel worm)</td>
</tr>
<tr>
<td>Crustacea (barnacles, amphipods, prawns, crabs and lobsters)</td>
<td>Approximately 15</td>
<td><em>Pandalus montagui</em> (humpback prawn), <em>Necora puber</em> (velvet swimming crab), <em>Cancer pagurus</em> (edible crab), <em>Pagurus bernhardus</em> (hermit crab)</td>
</tr>
<tr>
<td>Mollusca</td>
<td>Approximately 19</td>
<td><em>Callistoma zizyphinum</em> (painted topshell), <em>Pholadidae</em> (piddocks), <em>Aequipecten opercularis</em> (queen scallop)</td>
</tr>
<tr>
<td>Bryozoa (sea mats)</td>
<td>Approximately 15</td>
<td><em>Flustra foliacea</em> (hornwrack), <em>Alcyonidium diaphanum</em> (finger bryozoan), <em>Cellapora pumicosa</em> (orange pumice bryozoan)</td>
</tr>
<tr>
<td>Echinodermata (starfish and sea urchins)</td>
<td>Approximately 5</td>
<td><em>Asterias rubens</em> (common starfish), <em>Ophiura albida</em> (brittlestar)</td>
</tr>
<tr>
<td>Chordata (sea squirts)</td>
<td>Approximately 9</td>
<td><em>Corella eumyota</em> (orange-tipped sea squirt), <em>Ascidia mentula</em> (red sea squirt), <em>Ascidia aspersa</em> (fluted sea squirt)</td>
</tr>
<tr>
<td>Chordata (fish)</td>
<td>Approximately 10</td>
<td><em>Scyliorhinus canicula</em> (smallspotted catshark), <em>Trisopterus minutus</em> (poor cod), <em>Parablennius gattorugine</em> (tompot blenny)</td>
</tr>
</tbody>
</table>

A great big thank you! To all the divers who took part in the Kent Seasearch dives during 2015.

2015 Kent Seasearch Divers:
Roger Danks, Elaine Purse, Dave Wood, Matt Hurley, Paula Young, Chris Read, Simon Panteny, Jason Armstrong, Fiona White and Bryony Chapman.

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