Sussex Seasearch
Summary Report 2018

Seasearchers aboard Mulberry Diver

Diving at Waldrons Reef

Sea-slug romance!
2018 at a glance...

West Sussex Seasearch locations:

A total of 21 Seasearch forms were received for the Sussex Seasearch region, mostly covering shallow depths of around 10m. The deepest area surveyed was 17.4m on the Sovereign Shoals in East Sussex.

Diving days were arranged out of Selsey, in both April and May (the latter being for training dives for new Observer trainees), and out of Eastbourne to survey in the Beachy Head East proposed Marine Conservation Zone.

Approximately 169 taxa were identified from a total of 538 records. The most commonly recorded species was the common starfish, Asterias rubens (22 records), followed by the painted top shell, Calliostoma zizyphinum (16 records), and dead man’s fingers, Alcyonium digitatum (15 records).

East Sussex Seasearch locations:
**Mollusca:** Approximately 21 species (65 records), including painted top shell, *Calliostoma zizyphinum*, blue mussel, *Mytilus edulis*, and common whelk, *Buccinum undatum*.

**Algae:** Approximately 21 species (56 records), including red rags, *Dilsea carnosa*, eyelash weed, *Calliblepharis ciliata*, and the red seaweed, *Heterosiphonia plumosa*.

**Cnidaria:** Approximately 20 species (83 records), including dead man’s fingers, *Alcyonium digitatum*, snakelocks anemone, *Anemonia viridis*, and dahlia anemone, *Urticina felina*.

**Crustacea:** Approximately 19 species (71 records), including edible crab, *Cancer pagurus*, common spider crab, *Maja brachydactyla*, and velvet swimming crab, *Necora puber*.

**Porifera:** Approximately 19 species (61 records), including shredded carrot sponge, *Amphilectus fucorum*, goosebump sponge, *Dysidea fragilis*, and chimney sponge, *Polymastia penicillus*.

**Tunicata:** Approximately 19 species (39 records), including sea grapes, *Molgula* sp., leathery sea squirt, *Styela clava*, and star ascidian, *Botryllus schlosseri*.

**Pisces:** Approximately 18 species (51 records), including ballan wrasse, *Labrus bergylta*, small-spotted catshark, *Scyliorhinus canicula*, and tompot blenny, *Parablennius gattorugine*.

**Bryozoa:** Approximately 18 species (50 records), including hornwrack, *Flustra foliacea*, ross coral, *Pentapora foliacea*, and Bugula sp.

**Annelida:** Approximately 8 species (29 records), including double-spiral worm, *Bispira volutacornis*, ross worm, *Sabellaria spinulosa*, and keel worm, *Spirobranchus* sp.

**Echinodermata:** Approximately 5 species (31 records), including common starfish, *Asterias rubens*, bloody Henry starfish, *Henricia* sp., and brittlestar, *Ophiura albida*. 
2018 marked 30 years since the first Seasearch dives took place, and celebrations took place up and down the country!

Whilst the first Seasearch dives happened back in Scotland in 1988, Sussex was not too far behind, with the first dives in the district being undertaken in April 1992. Our 30th birthday celebrations took the form of revisiting these original dive sites!

**The Hounds Reef, Selsey (Selsey Bill & The Hounds pMCZ)**

50°44.05N, 00°49.83W

The bedrock is composed of limestone, with boulders and mixed seabed types, providing plentiful recesses and overhangs. The site had dense coverings of mixed red algae and mixed animal turf on the hard surfaces. Notably, sea squirts, sponges, bryozoans and hydroids.

**Right:** Various sponges amongst other animal turf and red seaweed.

**Waldrons Reef**

50°44.21N, 00°38.21W

Sandstone reef with many large boulders. Top surfaces covered in encrusting pink and foliose red algae.

Animal turf was prevalent on vertical surfaces; sponges were notably abundant but other encrusting life, such as various bryozoans, were also present.

**Left:** A bloody Henry starfish amongst the animal turf.
Seaweed ID Course
April

This year we were happy to host Lin Baldock, Dorset Seasearch coordinator and seaweed expert, here in Sussex for a weekend of seaweed identification.

Lin gave a fantastic course which included a trip down to the shore, practical ID sessions and a pressings workshop. Thanks Lin!

Left: Pressing red seaweeds collected from the shore at Cuckmere Haven.

Seasearch Observer Course
May

This year we had a brilliant Observer course with nine new trainees and three Seasearchers who took the course as a refresher.

Many thanks to Cath for hopping over the boarder from Hampshire to run the course for us!

Right: Seasearch trainees hard at work!
Six of our new trainees followed up their Observer course by joining us for two dives in Selsey the following day, joining tutor Cath and two qualified Seasearch volunteers.

**The Far Mulberry**
50°44.73N, 00°42.23W

This reef has formed around the remains of the Mulberry Harbours, which have been underwater for over 60 years.

**Right:** Sketch of dive, G. Petchell-Balchin

**The Park ‘Selsey Drift’**
50°43.76N, 00°42.65W

This shallow drift dive was undertaken from approx. south-west to north-east.

Typically the seabed was quite mixed, mostly made up of cobbles and pebbles, with areas of exposed rocks and sand. Sea urchins were spotted in the sand and gravel; various anemones and crabs were also seen.

**Left:** Sketch of site, R. Mowat
Two dives were arranged within the Beachy Head East proposed Marine Conservation Zone (pMCZ) in July. This site has was under consultation for designation in the third tranche of MCZs at the time of survey. The area was therefore targeted by Sussex Seasearch to provide up-to-date species and habitat data.

**Bexhill Mussel Garden**

50°45.93N, 00°27.10E

Mostly fine undulating sand with scattered cobbles, boulders and occasional patches of exposed bedrock.

Patches of Ross worm, *Sabellaria spinulosa*, were present in the area (a feature of the pMCZ). Many communities of animal turf were present, including sponges, bryozoans and sea squirts (notably *Molgula*).

Mobile life was generally quite scarce, with examples including common starfish, cuttlefish and gobies.

Above: Patch of Ross worms, *Sabellaria spinulosa*.

Royal Sovereign Shoals
50°44.89N, 00°23.68E

A rocky reef habitat of low and rugged reef, with patches of sand / gravel / cobbles in between. The reef itself features numerous fissures, wide gullies and overhangs.

The hard substrates provide habitat for various animal turf dominated by hydroids, bryozoans and sponges. Some red algae was present on the top surfaces of the reef, notably *Rhodomenia holmsei*.

Mobile life included bib, gobies, blennies, and various species of crab.

**Above:** Mixed animal turf on the vertical surface of the reef.

**Left:** A velvet swimming crab, *Necora puber*, hides under the reef!

**Below:** The group after a fantastic day!
Many thanks to all those who took part in Seasearch in Sussex in 2018:

Additional thanks to all those who kindly shared their images and footage.

Many thanks to skippers Steve Johnson (Channel Diving) and Steve Frampton (Mulberry Divers) for their help, knowledge and expertise - and for their support of the project.

Sussex Seasearch 2019...

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<th>Location</th>
<th>Activity</th>
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<tbody>
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<td>Saturday 24th April</td>
<td>Kingmere MCZ area</td>
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<tr>
<td>Saturday 11th May</td>
<td>Seasearch Observer course</td>
<td>Classroom course</td>
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<tr>
<td>Sunday 12th May</td>
<td>Mixon Hole Sluice Rocks</td>
<td>Qualifying dives for Observer course</td>
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<td>Wednesday 10th July</td>
<td>Rampion Windfarm area</td>
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<tr>
<td>Saturday 27th August</td>
<td>Mixon Hole</td>
<td>FULLY BOOKED</td>
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Keep in touch...

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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. Seasearch in Sussex is coordinated by Sussex Wildlife Trust.

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