Marine Conservation Zones

The most significant occurrence during 2013 must be the designation of Marine Conservation Zones around the UK. Nationally, out of the 127 suggested only 31 were put forward and of these 27 designated which makes Sussex particularly fortunate in that three of these are along our coast.

Despite this apparent success the government's aim 'for the establishment of an ecologically coherent network' of marine sites fall short and we must continue to gather information on these and other sites.

2013 Surveys

As is all too common to Sussex diving the weather and conditions hampered dives, however a total of 57 dives were recorded of which 33 produced Observation forms and 24 Survey forms. Some of the forms were combined as they were carried out at the same time by pairs of divers, which invariably occurs at Selsey Lifeboat Station where Seasearch training dives take place. Of these 15 were from Sussex Seasearch organised dives and the remaining 42 from independent divers who submitted their data through Seasearch nationally.

Training

There were two Observer Courses planned in Sussex in 2013. The one in Brighton became a refresher day as there were insufficient new people to run a course. A second course was run in Selsey in July with five participants and James Lucey as tutor. Two of the participants, Ellie Taylor and Erica Stirett, went on to complete the Observer qualification and two others, Barbara King and Christine Lissoni, who attended a course in Worthing in 2012, also became Seasearch Observers during the year. Neil Watson who lives in Sussex has become a Seaearch Surveyor.

Beachy Head West

The renowned Sussex chalk cliffs extend as subtidal chalk gullies and reefs from Beachy Head to Black Rock, Brighton. Seaearch records have revealed a rich and diverse associated fauna taking advantage of the wide range of available niches. Notable amongst these are the beds of Blue Mussels, Mytilus edulis.

Kingmere

Lying off-shore between Worthing and Littlehampton further exposures of chalk including the chalk cliff of Worthing Lumps. In addition to the chalk various coarse sediments provide additional niches. Of note is the presence of Black Bream, Spondylosoma cantharus, which exploit the shallow sediment deposits to make their 'nests'.

Pagham

This site, not one covered by Seaearch, is an important site for Eel Grass, Zostera marina. This is one of the three sites in England where Defolin's Lagoon Snail, Caecum armoricum, occurs as well as the rare Lagoon Sand Shrimp, Gammarus insensibilis which also occurs in Widewater Lagoon, Shoreham.

Pagham

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In 2012 Erin Pettifer got off to an exciting start in her role as Marine Conservation Officer at Sussex Wildlife Trust (SWT). As a keen diver she became involved with Seasearch. Then in May 2013 she move to become the new Marine Protected Area Officer for the Sussex Inshore Fisheries Authority based in Shoreham and continues her interest in diving and recording.

Olle Åkesson, another enthusiastic diver, replaced Erin at the SWT as the Living Seas Officer and later took over the coordination of Seasearch in Sussex. His main responsibility is to help protect and conserve our valuable marine environment.
Specific dives were carried out on three of the, at the time, Recommended MCZs: Selsey & The Hounds, Kingmere and Beachy Head West (Royal Sovereign Shoals). Some images of these sites are provided below:

Unfortunately, neither Beachy Head West, which includes the Royal Sovereign Shoals, nor Selsey and the Hounds, made it through this time.
**Ampelisca in Sussex**

*Ampelisca* is a genus of amphipod crustacean that, like many amphipods, produces tubes in which to live (other examples can be found on the chalk reefs and amongst mussels [if you’ve ever dived for mussels on vertical surfaces you get covered in them as you harvest the mussels]. *Ampelisca brevicornis* occurs around much of the UK (see [http://www.marlin.ac.uk/speciesinformation.php?speciesID=2485](http://www.marlin.ac.uk/speciesinformation.php?speciesID=2485)) and in sufficient numbers produces mats or beds. In 2004 Dorset Seasearch (see [http://www.seasearch.org.uk/downloads/dorset2004report.pdf](http://www.seasearch.org.uk/downloads/dorset2004report.pdf)) published a record of this species in Poole Bay. During a dive on the submarine A1 Alison Mayor recorded the presence of *Ampelisca* on the surrounding seabed. This is the first record of this a mat of this species for Sussex and warrants further investigation as this is an unusual biotope. Within the JNCC biotope classification system (see [http://jncc.defra.gov.uk/page-1584](http://jncc.defra.gov.uk/page-1584)) *Ampelisca* species crop-up in a number of biotopes notable:

| SS.SSA.IFiSa.TbAmPo | Semi-permanent tube-building amphipods and polychaetes in sublittoral sand |
| SS.SMU.ISaMu        | Infralittoral sandy mud |
| SS.SMU.ISaMu        | *Ampelisca* spp, *Photis longicaudata* and other tube-building amphipods and polychaetes in infralittoral sandy mud. |
### Sites/Events
- Anchor Lump: 2
- Inner Mulberry: 1
- Jenny Ground: 1
- Kingmere Rocks: 1 combined
- Looe Gate: 2
- Mixon Hole: 2
- Outer Mulberry: 10
- Outer Mulberry, drift: 1 [over sediment]
- Royal Sovereign Shoals: 1
- Seaford Gullies: 1
- Selsey East Beach: 3
- Selsey Lifeboat Station: 9
- Worthing Lumps: 2
- Wreck: HM Submarine A1: 1
- Wreck: Indian: 1
- Wreck: Landing Craft: 3
- Wreck: Pancake: 2
- Wreck: Ramsgarth: 1
- Wreck: Steam Trawler: 2
- Wreck: Vale of Leven: 1

### Species

#### Porifera, Sponges
- Amphilectus fucorum: 22
- Antho dichotomus: 1
- Cliona celata: 10
- Dysidea fragilis: 22
- Granitella compressa: 1
- Halichondria bowenvanki: 2
- Halichondria panicea: 7
- Halichondria sp.: 2
- Haliclonia oculata: 4
- Haliclonia simulans: 6
- Hemimycate colluma: 5
- Leucosolenia variabilis: 1
- Microciona atrasanguineus: 2
- Myxilla rosea: 2
- Myxilla sp.: 1
- Pachymatisma johnstonina: 2
- Phorbas fisticous: 1
- Polymastia sp.: 1
- Polymastia boletiformis: 1
- Porifera indet crusts: 14
- Porifera indet: 2
- Raspalia ramosa: 2
- Scyphia cielifa: 2
- Scyphia elegans: 1
- Suberites carnosus: 8
- Suberites fucus: 24
- Tethya aurantium: 4

#### Cnidaria SeaFirs, Anemones, Softcorals, Corals
- Actinia equina: 4
- Actinotus sp.: 26
- Adamia carpinicoides: 1
- Aglaophenia pluma: 7
- Alcyonium digitatum: 25
- Anemonia viridis: 35
- Cereus pedunculatus: 14
- Cerianthus lloydii: 2
- Clava multicornis: 1
- Clytia hemisphaerica: 1
- Clytia palauensis: 1
- Corynactis viridis: 9
- Diadumene cincta: 1
- Halecium halecinum: 2
- Hydralimacia falcata: 3
- Hydroids indet.: 22
- Laomedea angulata: 1
- Metridium senile: 4
- Nemertesia antennina: 10
- Nemertesia ramosa: 1
- Obelia geniculata: 6
- Sagartia troglodytes: 2
- Sertularia rugosa: 1
- Sertularia argentea: 2
- Sertularia cupressina: 2

#### Species
- Tubularia indivisa: 15
- Amphipoda: 1
- Barnacles, Prawns, Crabs, Lobster
- Ciona intestinalis: 2
- Collectanea: 1
- Cryptonomea: 1
- Crustacea, Amphipods, Barnacles, Prawns, Crabs, Lobster
- Dysidea fragilis: 22
- Echinoderms
- Halichondria: 1
- Halichondria bowerbanki: 1
- Halichondria panicea: 1
- Halichondria sp.: 1
- Haliclonia oculata: 1
- Haliclonia simulans: 1
- Hemimycate colluma: 1
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- Sertularia cupressina: 2

### Major Substrata

#### Major Biotopes

#### Major Groups: % of Records

#### Infralittoral fouling seaweed communities: IR.FIR.fou,
- Moderate energy circalittoral rock: CR.MCR,
- Features of circalittoral rock: CR.FCR,
- Sublittoral mixed sediment: SS.SMX,
For 2014

We are planning to:

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2. Revisit the two rejected rMCZs, Beachy Head West and Selsey and the Hounds in order to gather additional data to support their recommendations for their future designation.

3. Set up a monitoring programme for Looe Gate/SW Rocks chalk complex. Brighton Marina Divers are keen to do this. Despite its relatively small size this is a significant site.

3. Olle will be arranging Seasearch dives and has an Observer Course planned for February 2014. As this Newsletter is late in going out the ‘has’ is now ‘had’! The course went really well with six people completing the theory sessions. He is currently looking at dates for a day so they can do the dives and hopefully a joint surveyor course with Hampshire & Isle of Wight later this year. For surveys Olle is looking at borrowing club RIBs and doing shore dives as it appears that there is not quite enough interest/enthusiasm to fill a hardboat.

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Trisopterus minutus
Zeugopterus punctatus
Algae: Rhodophyta, Reds
Brongniatella byssoides
Calliblepharis ciliata
Ceramium cimbricum
Ceramium secundatum
Chondrus crispus
Corallina officinalis
Cryptopleura ramosa
Delesseria sanguinea
Desmarestia aculeata
Dilsea camosa
Erythrodichia carnea
Halarachniun lignatum
Heterosiphonia plumosa
Phyllophora pseudoceranoides
Placacium cardilagineum
Rhodophyta indet.
Rhodophyta indet.(non-calc.crusts)
Rhodophyllis divaricata
Algae: Chromophycota, Browns
Chorda filum
Desmarestia aculeata
Dictyota dichotoma
Fucus serratus
Halidrys siliquosa
Laminaria indet.
Laminaria digitata
Laminaria hyperborea
Laminaria saccharina
Phaeophyceae indet.
Pilayella littoralis
Saccorhiza polyschides
Sargassum muticum
Scytosiphon lomentaria
Taonia atomaria
Algae: Chlorophycota, Greens
Ulva lactuca

Despite difficulties in assigning biotopes (see jncc.defra.gov.uk/marinehabitatclassification) approximately 57% of those recorded were circalittoral rock (CR), 26% infralittoral rock (IR) and 17% sublittoral sediment (SS).

Contact Information
Seasearch: http://www.seasearch.org.uk/
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National Co-ordinator, Chris Wood: chris@seasearch.org.uk
Sussex Co-ordinator: Olle Åkesson, Living Seas Officer, Sussex Wildlife Trust, Woods Mill, Henfield, Shoreham Road, Henfield, West Sussex BN5 9SD; olleakesson@sussexwt.org.uk

Biotope

Bryozoan: Disporella hispida
©Gerald Legg

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