

Sussex Seasearch

Annual Report 2015

An underwater photograph showing a diver in silhouette against a very murky, greenish-brown water. The diver is wearing a full diving suit, including a mask, regulator, and fins. The water is extremely turbid, making it difficult to see details of the diver or the surrounding environment. A speech bubble is overlaid on the right side of the image.

Typical not-
too-bad
visibility for
Sussex!

The 2015 season was not the best in fact similar to of 2014, the weather and diving conditions were far from ideal. However, data obtained covered 20 sites including three not recorded before (Buffer Pontoon and the wrecks of SS FD Lambert (? there is doubt over the identity of this wreck see: <http://www.thediveforum.com/archive/index.php/t-16877.html>, and SS Lalen Mendi see <http://www.wrecksite.eu/wreck.aspx?80178>). This was unfortunate as we desperately need data to help support the the designations of the remaining MCZs put originally put forward, notably in the east, Beachy Head East (which includes the Royal Sovereign Shoals) and Selsey and the Hounds to the west. Hopefully we will be able to focus on these in 2016.

Sussex Seasearch dives undertaken in 2015 were:

Wrecks: *Indiana*
Clodmore
City of Brisbane
SS Lalen Mendis
Pentrych
Oceana
Steam trawler
SS FD Lambert

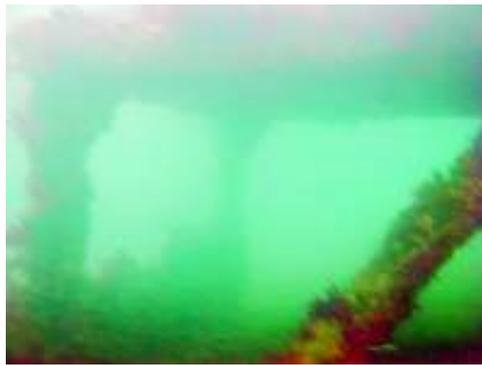
Seaford Ledges
 Brighton Marina training area (training dives)
 Anchor Lump
 SW Rocks
 Palace Pier Reef
 Gullies 250 m west of Brighton Marina harbour wall
 Seabed 2.5 miles SSW Brighton
 Mixon Hole
 Selsey Lifeboat Station* (two full surveys and several training dives)
 Inner Mulberry
 Outer Mulberry
 Buffer Pontoon

New site: Buffer Pontoon

This site consists of metal wreckage that formed part of a Mulberry Harbour *buffer pontoon* (for details on Mulberry Harbour construction and use see: <http://www.combine-dops.com/Mulberry%20Harbours.htm>) which was destined to be a roadway to the beach. The wreckage sits on a seabed of pebbles and sand with some clay exposed. The wrecked roadway consists of horizontal, vertical and inclined metal girders providing numerous surfaces for marine life. Its shallow depth means that it is largely covered in algae with areas of animal turf rich in sponges, squirts, etc. Deadman's fingers occur on the underside of some metalwork.

With the forth coming loss of the Life Boat Station this site and other inshore wrecks will provide new foci for survey work and the distribution of species.

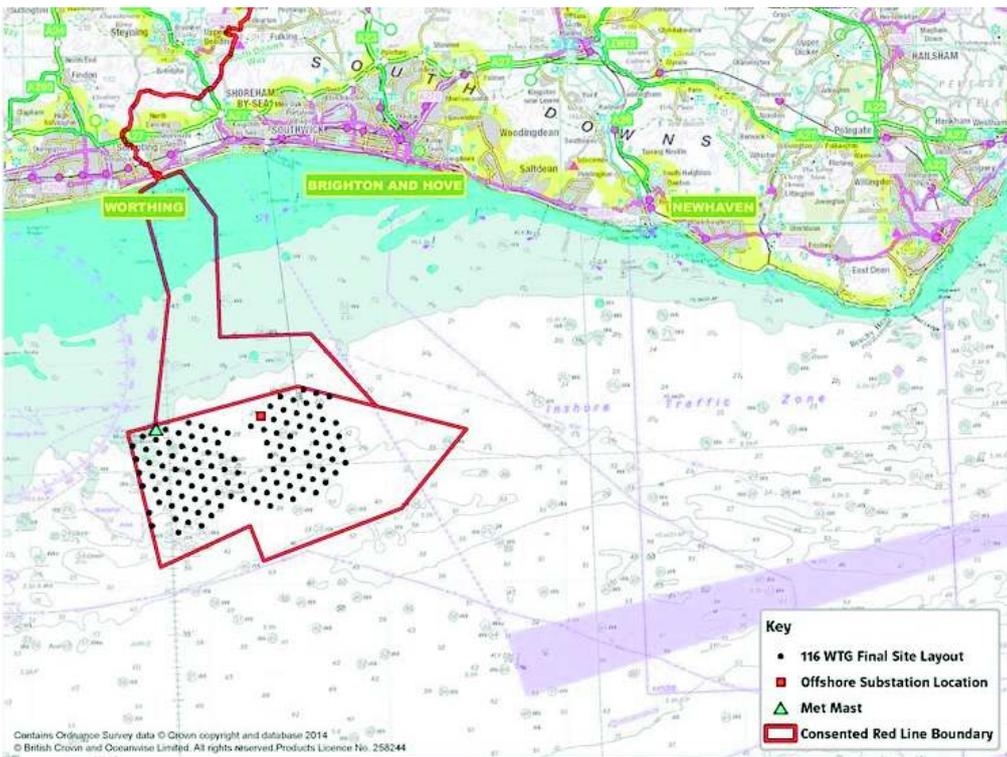
Images ©Michelle Legg





Courses

In April James Lucey taught a course in Brighton organised by Neil Watson where 12 people took part. For 2016 an Observer course is being arranged by Olle Åkesson for the 25/26th April 2016. For further details contact Olle: olleakesson@sussexwt.org.uk .



Rampion Wind Farm

The Rampion Wind Farm, the large offshore wind farm development by E.ON, under construction off the Sussex coast. It has a target capacity of 400 MW. Construction is expected to be completed in 2018. The first offshore foundation were laid in February.

There are proposals to survey the colonisation of the turbine foundations and have a community benefits fund which may be able to be used to this end. The undersea structures will certainly provide numerous niches for life and be of considerable benefit to the marine diversity off our coast.

See **e-on**

<https://www.eonenergy.com/About-eon/our-company/generation/planning-for-the-future/wind/offshore/rampion-offshore-wind-farm/project-information/offshore-layout>

Special species

A few 'new' species to the area were seen, all on the Selsey Life Boat Station: a stalked jelly fish *Haliclystus auricula*, the tunicates *Distomus variolosus* and *Lissoclinum perforatum*. These finds show just how significant this site is and it will be sadly missed when it is demolished hence the homage to the site, below..

***Selsey Lifeboat Station Development**

The redevelopment of the Life Boat Station progresses and at the time of writing this the steel-work for the new station was being erected (beginning of April 2016). Presumably, once this is complete the old station will be demolished but at present it still stands and is in use despite some damage from storm Katie on the 28th March. To keep up-to-date with developments visit the website: <http://www.selselylifeboats.co.uk/index.html>

A very rare and unusual find below the Life Boat Station was the almost complete tibia of a Pleistocene hippo (?). The adjacent Selsey East Beach is a Site of Special Scientific Interest (SSSI) (linked with Selsey West Beach and the Bracklesham Bay SSSI) This group form an important Quaternary site for a sequence of freshwater and estuarine deposits of Ipswichian Interglacial age. Evidence from the sediments and the pollen and microfaunas they contain, indicates rapid climatic amelioration at the beginning of the interglacial and a marine transgression at about -1.8m OD in pollen zone



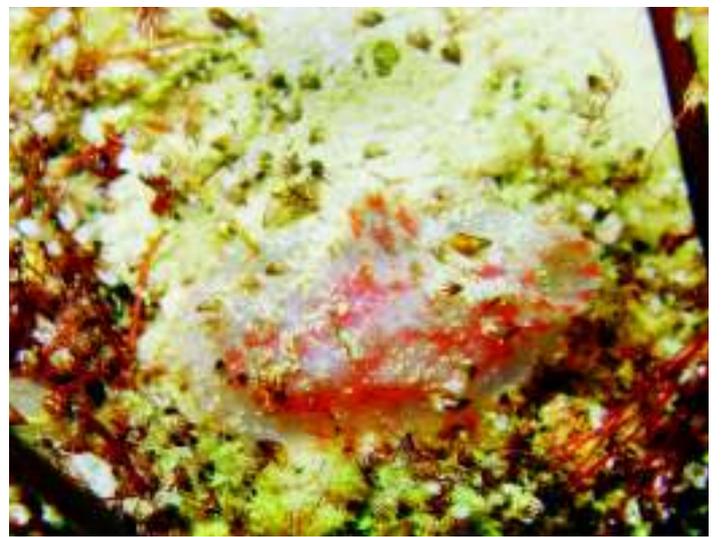
IIb. At Selsey West Beach raised beach deposits overlying the estuarine sediments extend up to 7m OD. The deposits at Selsey East Beach are of

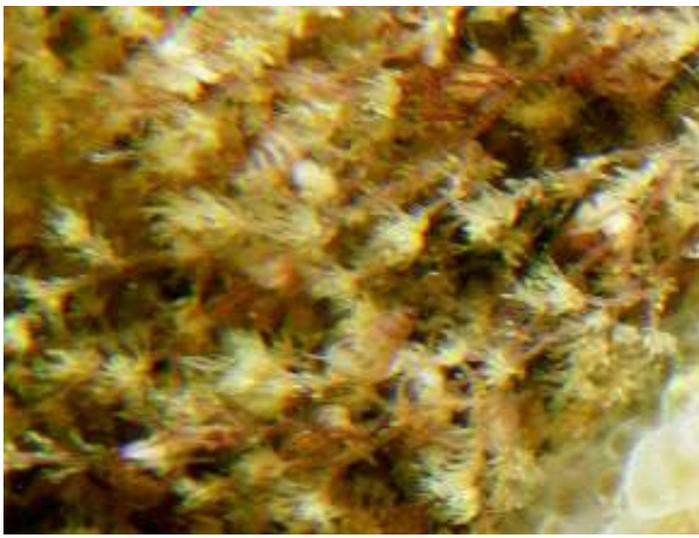
unique importance in providing Pleistocene vertebrate faunas from the very early part of the Ipswichian Interglacial. The faunas include beaver, straight-tusked elephant, an extinct rhinoceros *Dicerorhinus hemitoechus*, hippopotamus, horse and European pond tortoise. Much potential exists for vertebrate research at this locality particularly with regard to stratigraphy and pollen zonation.

Images ©Gerald Legg/Michelle Tebbs/chelififer.com

Life on a pier leg – Selsey Life Boat Station









Oceana

As one of the most heavily wrecked coasts Sussex wrecks provide havens – oases – amongst the relative deserts of sediments of sand, shingle and mixed ground. Species present vary with the depth of the wreckage. Any wreckage is rapidly colonised as is any hard substrate deposited in the sea.

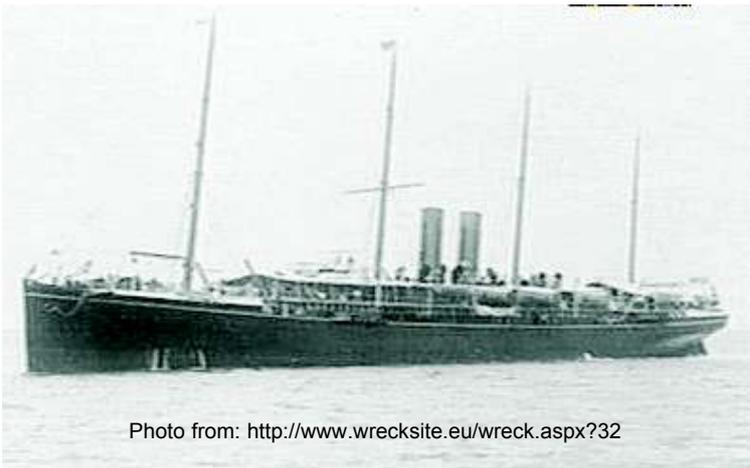


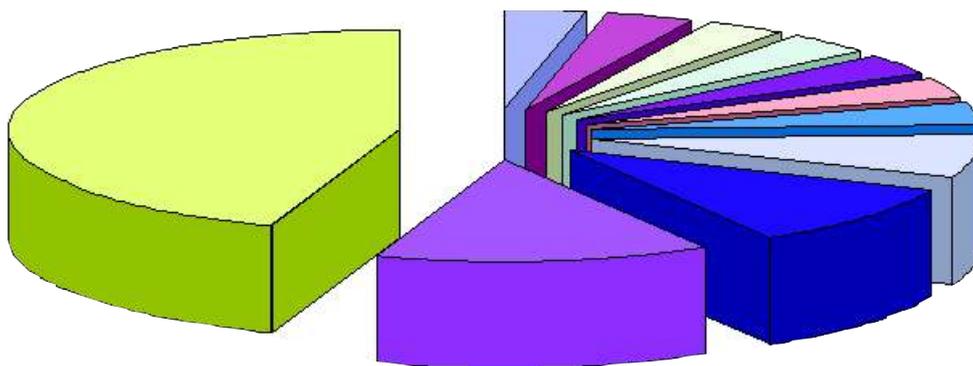
Photo from: <http://www.wrecksite.eu/wreck.aspx?32>

One of the many wrecks is the *Oceana*, sunk after collision with the *Pisagua* on 16th March 1912 (for more see [https://en.wikipedia.org/wiki/SS_Oceana_\(1887\)](https://en.wikipedia.org/wiki/SS_Oceana_(1887)))

Image ©Graham Jackman



Proportions of biotopes recorded



- Mixed faunal turf communities
- Piddocks with a sparse associated fauna in sublittoral very soft chalk or clay
- Infralittoral fouling seaweed communities
- Silted kelp communities (sheltered infralittoral rock)
- Moderate energy littoral rock
- Crepidula fornicata* with ascidians and anemones on infralittoral coarse mixed sediment
- Sabella pavonina* with sponges and anemones on infralittoral mixed sediment
- Moderate energy circalittoral rock
- Soft rock communities
- Sublittoral mixed sediment
- Circalittoral fouling faunal communities (wrecks, piers etc)

SW Rocks constitute part of a sequence of chalk reefs which includes Looe Gate and Ship rock, Marine Sites of Nature Conservation Importance (mSNCIs) (non-statutory sites identified due to the occurrence of special interest features (habitats, flora, fauna, unusual geology or geomorphology). In the case of these sites, their submerged chalk reefs and associated biological communities. SW Rocks occurs 4.5 km SW of Hove 50° 47.6'N; 0° 12.5'W. For further information see <http://www.seasearch.co.uk/downloads/Sussex%20Chalk%202010.pdf>

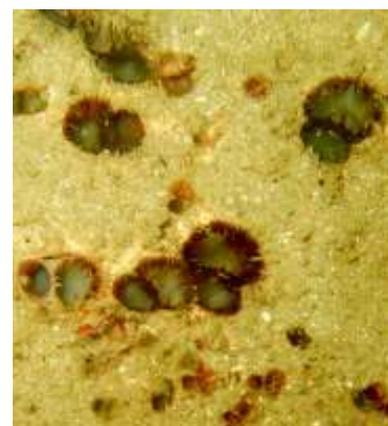
It consists of 270m of vertical north-facing chalk cliff reaching 2m above the seabed and undercut at its base. The cliff face and upper surface are densely covered in marine life: red algae, sponges and bryozoans. The many piddock holes provide homes for many organisms, including burrowing sea cucumbers found in 1990 (not seen



Biotopes

The predominant substrates recorded include metal and concrete, chalk, sandstone, clay, sand and mixed ground. Each of these supports a number of biotopes characterised by their faunal and floral assemblages.

Metal and concrete wreckage provides niches for a large number of diverse species, followed by soft rock and sediments.

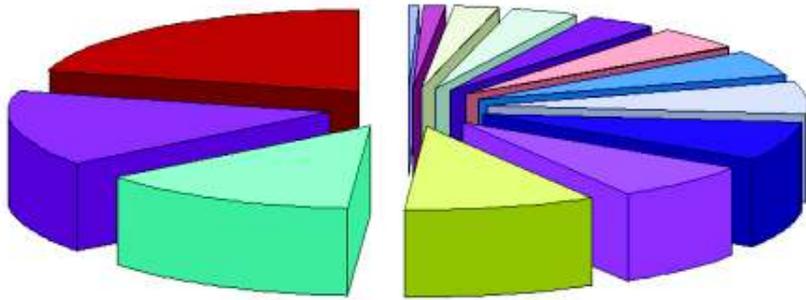


SW Rocks

since but not because they are not there still). This is the only record of this species in the eastern Channel.



Proportions of records for each major group for 2015



Species Recorded

Elasmobranchia (rays, sharks)

Scyliorhinus canicula
Cephalopoda (squid, cuttlefish, octopus)

Sepia officinalis

Nudibranchia (sea slugs)

Aeolidia papillosa
Doris pseudoargus
Flabellina pedata
Acanthodoris pilosa
Limacia clavigera
Thecacera pennigera
Janolus cristatus

Echinodermata (starfish, urchins)

Asterias rubens
Psammechinus miliaris

Bivalvia (clams)

Pholas dactylus
Mytilus edulis
Crassostrea gigas
Ostrea edulis
Aequipecten opercularis
Pecten maximus

Gastropoda (snails)

Calliostoma zizyphinum
Gibbula cineraria
Aplysia fasciata
Crepidula fornicata
Rissoa parva
Buccinum undatum
Nucella lapillus
Nassarius reticulatus

Annelida: Polychaeta (bristle worms)

Arenicola marina
Aphrodita aculeata
Bispira volutacornis
Sabella pavonina
Serpulidae
Filograna
Hydroides
Spirobranchus triqueter
Spirorbis
Lanice conchilega

Tunicata (squirts)

Clavelina lepadiformis
Didemnum coriaceum
Didemnum maculosum
Diplosoma listerianum
Diplosoma spongiforme
Lissoclinum perforatum
Trididemnum cereum
Aplidium proliferum
Aplidium punctum
Ascidia mentula

Asciidiella aspersa
Ciona intestinalis
Perophora listeri
Molgula manhattensis
Botryllus schlosseri
Dendrodia grossularia
Distomus variolosus
Styela clava

Bryozoa, Ectoprocta (sea-mats)

Bryozoa indet crusts
Pentapora foliacea
Bugula
Bugula flabellata
Bugula plumosa
Bugula turbinata
Cellaria
Cellepora pumicosa
Chartella papyracea
Flustra foliacea
Membranipora membranacea
Reteporella
Crisia
Crisia eburnea
Tubulipora

Algae

Dictyota dichotoma
Fucus serratus
Halidrys siliquosa
Chorda filum
Laminaria hyperborea
Ulva lactuca
Rhodophycota indet. (non-calc. crusts)

Delesseria sanguinea

Corallina officinalis
Dilsea carnosus
Furcellaria lumbricalis
Chondrus crispus
Gigartina pistillata
Polyides rotunda
Scinaia furcellata
Palmaria palmata
Plocamium cartilagineum
Rhodymenia pseudopalmata
Rhodophyceae (red algae)

Porifera (sponges)

Porifera indet crusts
Leucosolenia
Sycon ciliatum
Pachymatisma johnstonia
Dysidea fragilis
Cliona celata
Polymastia boletiformis
Suberites carnosus
Suberites ficus

Axinella dissimilis
Halichondria (Halichondria) panicea

Hymeniacion perlevis
Haliclona (Haliclona) similans
Amphilectus fucorum
Hemimycale columella
Clathria (Microciona)
Raspailia (Raspailia) ramosa

Cnidaria (seafirs, anemones, corals)

Anemonia viridis
Urticina felina
Diadumene cincta
Metridium senile
Actinothoe sphyrodeta
Cereus pedunculatus
Sagartia elegans
Sagartia troglodytes
Alcyonium digitatum
Corynactis viridis
Caryophyllia (Caryophyllia) smithii

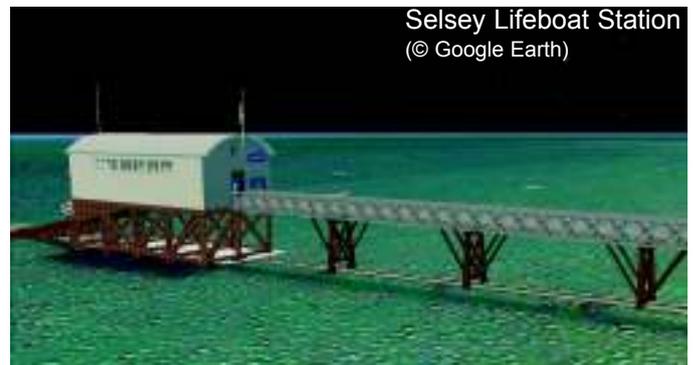
Tubularia indivisa
Aglaophenia pluma
Clytia hemisphaerica
Obelia geniculata
Halecium halecinum
Nemertesia antennina
Plumularia setacea
Hydrallmania falcata
Sertularella
Sertularella gaudichaudi
Sertularia
Rhizostoma pulmo
Chrysaora hysoscella
Haliclystus

Crustacea (crabs, lobsters, prawns, hoppers, Amphipoda species
Jassa species

Cancer pagurus
Inachus dorsettensis
Macropodia tenuirostris
Maja squinado
Homarus gammarus
Pagurus bernhardus
Palaemon serratus
Liocarcinus depurator
Necora puber
Carcinus maenas
Perforatus perforatus

Teleostei (bony fish)

Anguilla anguilla
Conger conger
Gadus morhua
Pollachius pollachius
Trisopterus luscus
Trisopterus minutus
Lipophrys pholis
Parablennius gattorugine
Callionymus lyra
Gobius niger
Gobius paganellus
Gobiusculus flavescens
Pomatoschistus
Pomatoschistus minutus
Pomatoschistus pictus
Thorogobius ephippiatus
Ctenolabrus rupestris
Labrus bergylta
Labrus mixtus
Symphodus melops
Dicentrarchus labrax
Pholis gunnellus
Spondylusoma cantharus
Pleuronectes platessa
Zeugopterus punctatus
Agonus cataphractus
Taurulus bubalis
Zeus faber



Selsey Lifeboat Station
(© Google Earth)

Thank You All

Our thanks to those who took part in 2015: Brian Bailey, Christine Bohea, David Brander, Dawn Moss, Evan Thomas, Gerald Legg, Glenn King, Graham Jackson, Hilary Ryan, Hugh Waite, Jackie O'Dowd, Leanne Collinson, Liam Beckett, Lois Nippard, Lorna Nye, Mark Harrison, Michelle Legg, Neil Watson, Nigel Macnab, Olle Åkesson, Paul Jackman, Roxana Preston, Sarah McKenzie, Zöe Sylvester.