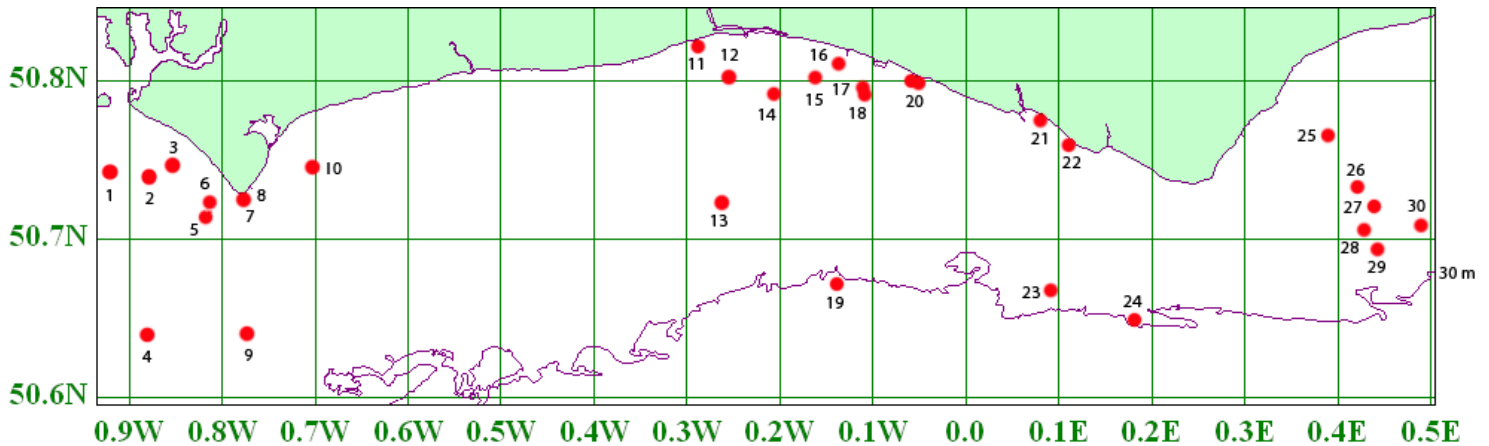


# Sussex Seasearch 2009

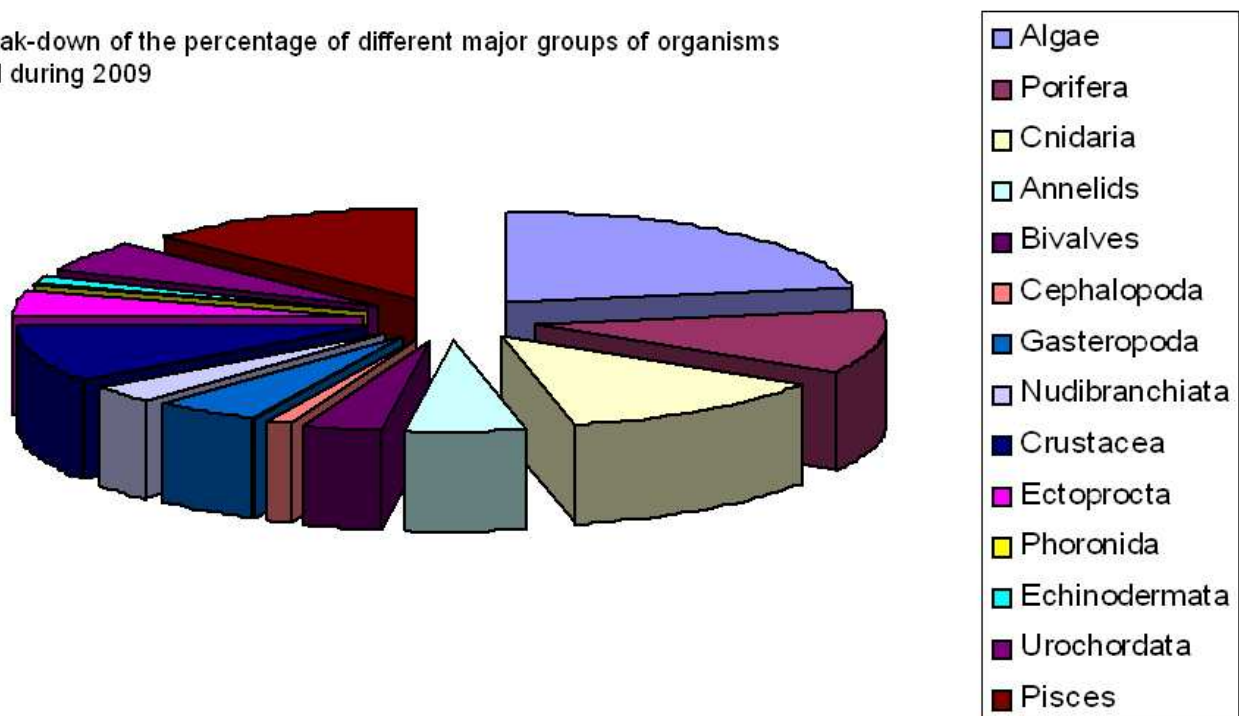
2009 was a considerable improvement on the previous year in terms of the numbers of dives and records made. First of all our thanks must go to the 61 divers who contributed the records. The 2009 season saw 70 dives on 30 sites, two of which were re-visits to Marine Sites of Nature Conservation Importance. 215 species were recorded covering 11 phyla (see Appendices for details). Of these 51 were Observer and 19 Surveyor dives.

Dives spanned from the far west (our thanks to Hampshire Seasearch and others divers) to the far east of the County, see below.



Site	Latitude	Longitude	Site	Latitude	Longitude
1 HMS A1 Submarine, Bracklesham Bay	50.741938	-0.919852	14 South West Rocks	50.791915	-0.208117
2 Bracklesham Bay, fossil beds	50.739215	-0.878151	15 King West Rocks	50.800529	-0.162256
3 Bracklesham Bay	50.73927	-0.876357	15 West Reef	50.800529	-0.162256
4 Barge 20243	50.63908	-0.880516	16 Palace Pier Reef to Anchor Lumps	50.811751	-0.135452
5 Bracklesham Bay, near 'The Streets'	50.716667	-0.814492	17 Brighton Marina Reef	50.794383	-0.111733
6 Bracklesham Bay, near 'The Streets'	50.721641	-0.812737	18 Measers Rocks (Mesors Rocks)	50.793796	-0.110183
7 Selsey Lifeboat Station	50.726031	-0.777173	19 Wreck: 'City of Waterford'	50.671064	-0.138117
7 Selsey Lifeboat Station	50.72693	-0.77715	20 Rottingdean beach	50.800581	-0.052937
8 Selsey E beach by Lifeboat station	50.726031	-0.777173	20 Rottingdean beach	50.801497	-0.056646
9 The Patch Landing Craft LCT	50.640357	-0.773344	21 Seaford: mid-beach	50.776808	0.0823919
10 Outer Mulberry	50.744419	-0.701847	22 Seaford Head	50.759633	0.112119
10 Outer Mulberry	50.745422	-0.701508	23 Wreck: 'T R Thompson'	50.667731	0.0912333
11 Off Widewater	50.823324	-0.289005	24 Wreck: 'Braunton'	50.647731	0.1807483
12 Wreck: 'Miown'	50.802751	-0.254798	25 Sovereign Shoals	50.732826	0.4216246
13 Wreck: 'Pentrych'	50.722413	-0.261454	26 Sovereign Shoals	50.764367	0.3886419
13 Wreck: 'Pentrych'	50.722745	-0.262618	27 Wreck: 'Gambri'	50.719898	0.4402857
14 South-west Rocks	50.791085	-0.206787	28 Wreck: 'Ocean'	50.704743	0.4289878
			29 Wreck: 'Heathpool'	50.69359	0.4443862
			30 Wreck: 'Hullington'	50.707623	0.4898252

A break-down of the percentage of different major groups of organisms found during 2009



Group	Number of species
Algae	44
Porifera: sponges	22
Cnidaria: hydroids, anemones, corals, jellyfish	26
Annelids: worms	11
Bivalves: clams	7
Gasteropoda: snails	10
Nudibranchiata: sea-slugs	6
Cephalopoda: cuttlefish, squid	2
Crustacea: prawns, crabs, lobsters	20
Ectoprocta: sea-mats, sea-moss	9
Phoronida: horseshoe worms	1
Echinodermata: starfish, sea urchins, sea cucumbers	3
Urochordata: tunicates, seasquirts	11
Pisces: fish	25
[see Appendix 1 for full list]	



Photo Michelle Legg  
Juvenile Squid, *Alloteuthis subulata*; At night Seaford Bay.



Photo Gerald Legg  
Masked Crab, *Corystes cassivelaunus*; Seaford Bay.

### Seaford off Mid-beach

The shingle of the beach falls drops steeply on to an area of rippled sand that leads into irregular patches of exposed chalk bedrock, old gullies, broken chalk (much anchor and fishing damage). Interspersed with this are pieces of wreckage – Seaford Bay is very heavily wrecked but the wrecks are largely broken-up. Some of the chalk is bare as the sediment comes and goes covering and uncovering the hard seabed and wreckage. Large patches of the sea squirt *Molgula manhatenensis* occur in some areas as does the Worm. In some places there are patches of the Ross Worm, *Sabellaria spinulosa*. Species found include:

*Heterosiphonia plumosa*  
*Chorda filum*  
*Calliblepharis ciliata*  
*Plocamium cartilagineum*  
*Fucus serratus*  
*Halichondria panicea*  
*Cereus pedunculatus*  
*Dynamena pumila*  
*Obelia geniculata*

*Sagartia troglodytes*  
*Sabellaria spinulosa*  
*Hinia reticulata*  
*Pholas dactylus*  
*Calliostoma zizyphinum*  
*Mytilus edulis*  
*Crepidula fornicata*  
*Pecten maximus*  
*Ensis ensis*

*Alloteuthis subulata*  
*Cellepora pumicosa*  
*Asterias rubens*  
*Molgula manhattensis*  
*Necora puber*  
*Liocarcinus depurator*  
*Cancer pagurus*  
*Pagurus bernhardus*  
*Balanus*

*Inachus phalangium*  
*Galathea squamifera*  
*Styela clava*  
*Aspitrigla cuculus*  
*Trisopterus luscus*  
*Parablennius gattorugine*  
*Pleuronectes platessa*  
*Dicentrarchus labrax*  
*Pomatoschistus microps*

### Seaford Head

This continues from the previous area of Seaford Bay. Chalk forms an important substrate for marine life in Sussex. It is exposed as inshore sublittoral gullies, and sublittorally as chalk reefs and areas of chalk bedrock overlaid with chalk, flint and other rubble. in Seaford Bay a series of chalk gullies and ridges run perpendicular to the coast from the Martello Tower at Seaford to Seaford Head and Hope Point. They extend from just above low



Photo Gerald Legg

water to about 600m off shore. Those at Seaford Head are another of Sussex's Marine Sites of Conservation Importance, designated in 1995. Piddocks (*Pholas dactylus*) extensively bore into this soft rock making it easily damaged by boat anchors and trawling gear as their burrows considerably weaken the chalk. Wreckage of ships and other debris can be found caught in the gullies providing addition substrates for marine life. Typical species found include: anemones: Dahlia (*Urticina felina*) and Daisy (*Cereus pedunculatus*); sponges: Fleshy Sulphur (*Suberites carnosus*) (*Halichondria bowerbanki*) and Breadcrumb (*Halichondria panicea*). The Ross Worm (*Sabellaria spinosa*) covers some areas of the exposed chalk forming small reefs. Other areas of the chalk are covered in Edible Mussels (*Mytilus edulis*), the populations of which wax and wane. Common species include Netted Dogwhelk (*Hinia reticulata*) Edible Crabs (*Cancer pagurus*) Velvet Swimming Crabs (*Necora puber*)(very active at night) Prawns (*Palaemon serratus*), Hermit Crabs (*Pagurus bernhardus*) and the Squat Lobster *Galathea squamifera*.

Snakelocks Anemone, *Anemonia viridis*, of Widewater, Shoreham.

## Miown

Built in 1909 for Cardiff Coasters Ltd. she was a 379 ton steel steamship, that sank with a cargo of cement in 1914, en route from London to Bristol 1½ miles from Shoreham Harbour. She was blown apart to give a clear freeway to Shoreham harbour and is now one of the Sussex Marine Sites of Conservation Interest.

Brown or Edible Crab, *Cancer pagurus*, of Seaford

Photo Michelle Legg



Compass Jellyfish, *Chrysaora hyoscella* of Shoreham

## Selsey Life Boat Station

This well dived site forms an inshore oasis with a rich variety of life living on and below the Lifeboat Station pier piles. The pier piles themselves provide vertical substrates for attached animal and plant turf which varies and is zoned in relation to the depth and aspect (light). The seabed cover varies throughout the year with seaweeds becoming more prominent as the season progresses. Various pieces of debris provide addition niches for life. Early in the year Peacock Fan Worms (*Sabella pavonia*) are often prevalent. In the spring it is an important site for breeding Cuttle Fish (*Sepia officinalis*). Interesting species present include the European Cowry, *Trivia monacha*. Others:

<i>Chorda filum</i>	<i>Lanice conchilega</i>
<i>Calliblepharis ciliata</i>	<i>Calliostoma zizyphinum</i>
<i>Dilsea carnosa</i>	<i>Gibbula cineraria</i>
<i>Chondrus crispus</i>	<i>Crepidula fornicata</i>
<i>Dictyota dichotoma</i>	<i>Hinia reticulata</i>
<i>Heterosiphonia plumosa</i>	<i>Mytilus edulis</i>
<i>Amphilectus fucorum</i>	<i>Ostrea edulis</i>
<i>Suberites</i>	<i>Pholas dactylus</i>
<i>Spinularia spinularia</i>	<i>Venerupis Pagurus</i>
<i>Dysidea fragilis</i>	<i>Janolus cristatus</i>
<i>Cliona celata</i>	<i>Pecten maximus</i>
<i>Pachymatisma johnstonia</i>	<i>Carcinus maenas</i>
<i>Halichondria panicea</i>	<i>Homarus gammarus</i>
<i>Urticina felina</i>	<i>Pagurus bernhardus</i>
<i>Cereus pedunculatus</i>	<i>Galathea squamifera</i>
<i>Anemonia viridis</i>	<i>Porcellana platycheles</i>
<i>Hydrallmania falcata</i>	<i>Palaemon serratus</i>
<i>Prostheceraeus vittatus</i>	<i>Necora puber</i>
<i>Arenicola marina</i>	<i>Cancer pagurus</i>
<i>Bispira volutacornis</i>	<i>Maja squinado</i>
<i>Sabella pavonina</i>	<i>Electra pilosa</i>
<i>Aplysilla</i>	<i>Labrus bergylta</i>
<i>Janolus cristatus</i>	<i>Necora puber</i>
<i>Sepia officinalis</i>	<i>Cancer pagurus</i>
<i>Pomatoceros triqueter</i>	<i>Actinotrochae sphyrodeta</i>
<i>Filigraninae</i>	<i>Alcyonium digitatum</i>
<i>Arenicola marina</i>	



Photo Gerald Legg

## Outer Mulberry

This site, the wreck of a caisson destined to form part of the Mulberry Harbour on D-day, is another of Sussex's Marine Sites of Nature Conservation. Since its earlier surveys the distribution of the fauna has changed. The vertical concrete surfaces are covered in animal turf. Of particular note are Devonshire Cup-coral, (*Caryophyllia smithii*), a widely recorded species, Southern Cup-coral (*Caryophyllia inornata*) and Weymouth Carpet Coral (*Hoplangia durotrix*), both nationally rare species. Jewel Anemones (*Corynactis viridis*) abound. Other prominent cnidarians include Deadman's Fingers (*Alcyonidium digitatum*), Plumose Anemones (*Metridium senile*) and White Striped Anemones (*Actinotrochae sphyrodeta*). There is an abundance of fish.

For further information see:

<http://www.seasearch.co.uk/downloads/OuterMulberry2009.pdf>

Photo Gerald Legg



Silted chalk bedrock with Piddock, *Pholas dactylus*, holes, spatt of Edible Mussels, *Mytilus edulis* holes and eggs of a nudibranch; of Brighton.

<i>Necora puber</i>	<i>Pollachius pollachius</i>
<i>Bugula</i>	<i>Trisopterus luscus</i>
<i>Flustra foliacea</i>	<i>Syngnathus acus</i>
<i>Alcyonidium diaphanum</i>	<i>Entelurus aequoreus</i>
<i>Bryozoa indet crusts</i>	<i>Labrus bergylta</i>
<i>Botryllus schlosseri</i>	<i>Labrus mixtus</i>
<i>Clavelina lepadiformis</i>	<i>Crenilabrus melops</i>
<i>Styela clava</i>	<i>Taurulus bubalis</i>
<i>Asterias rubens</i>	<i>Parablennius gattorugine</i>
<i>Pollachius pollachius</i>	<i>Gobiusculus flavescens</i>
<i>Trisopterus luscus</i>	<i>Spondylisoma cantharus</i>
<i>Dicentrarchus labrax</i>	<i>Pleuronectes platessa</i>
<i>Parablennius gattorugine</i>	<i>Pomatoschistus</i>
<i>Gobiusculus flavescens</i>	
<i>Spondylisoma cantharus</i>	
<i>Chelon labrosus</i>	
<i>Conger conger</i>	

## The Oceana

This P&O liner that was carrying a mixed cargo, including gold and silver bars the majority of which were salvaged, sank on the 5<sup>th</sup> March 1912 following a collision with the Pisague, a four-masted steel barque that was later towed to Dover. Like most wrecks off the Sussex coast she sits on a seabed of mixed ground. Of note was the Sea Cucumber *Neopentadactyla mixta*. Species found include:

*Scypha ciliata*

*Hemimycale columella*

*Dysidea fragilis*

*Actinothoe sphyrodeta*

*Tubularia indivisa*

*Corynactis viridis*

*Caryophyllia smithii*

*Hydroides*

*Alcyonium digitatum*

*Nemertesia antennina*

*Bispira volutacornis*

*Balanus*

*Crimora papillata*

*Aequipecten opercularis*

*Janolus cristatus*

*Cellepora pumicosa*

*Chartella papyracea*

*Bugula turbinata*

*Crisia*

*Flustra foliacea*

*Bryozoa indet crusts*

*Asterias rubens*

*Clavelina lepadiformis*

*Aplidium punctum*

*Dendrodoa grossularia*

*Diplosoma listerianum*

*Parablennius gattorugine*

*Trisopterus luscus*

*Pollachius pollachius*

*Ctenolabrus rupestris*

*Labrus bergylta*

*Labrus mixtus*

*Neopentadactyla mixta*

*Callionymus lyra*

Photo Gerald Legg



Sponge, ?*Myxilla encrustans* on cobble of Rottingdean Beach

## SS Heathpool

This British steam collier foundered on the 31<sup>st</sup> of March 1899 following a collision off the Royal Sovereign Light Vessel. It is covered in typical Channel wreck species but of note was Devonshire Cup Coral, *Caryophyllia smithii*; other species included:

*Dysidea fragilis*

*Corynactis viridis*

*Caryophyllia smithii*

*Tubularia indivisa*

*Nemertesia antennina*

*Actinothoe*

*Alcyonium digitatum*

*Bispira volutacornis*

*Flabellina pedata*

*Janolus cristatus*

*Flustra foliacea*

*Asterias rubens*

*Clavelina lepadiformis*

*Parablennius gattorugine*

*Ctenolabrus rupestris*

*Trisopterus luscus*

*Porifera indet crusts*

*Crimora papillata*



## Submarine: HMS/M A1

There are many 'firsts' for this submarine. She was the Royal Navy's first British-designed submarine, and their first to suffer fatal casualties. As the lead ship of the first British A-class of submarines and the only one to have a single bow torpedo tube she was in fact she sunk twice. First in 1904 when she became the first submarine casualty, with the loss of all hands, and then recovered only to be sunk again in 1911 whilst she was unmanned. She lies on a soft seabed ? in the Easter Solent just inside the area covered by Sussex Seasearch. The wreck was discovered in 1989 and is now a protected wreck and was dived as part of English Heritages survey work on historic wrecks.

Species found include:

*Ulva lactuca*

*Calliblepharis ciliata*

*Amphilectus fucorum*

*Dysidea fragilis*

*Porifera indet crusts*

*Suberites ficus*

*Prostheceraeus vittatus*

*Obelia*

*Metridium senile*

*Bispira volutacornis*

*Calliostoma zizyphinum*

*Crepidula fornicata*

*Pholas dactylus*

*Ostrea edulis*

*Palaemon serratus*

*Homarus gammarus*

*Necora puber*

*Maja squinado*

*Alcyonium digitatum*

*Nemertesia antennina*

*Hydrallmania falcata*

*Alcyonium digitatum*

*Thecacera pennigera*

*Flustra foliacea*

*Securiflustra securifrons*

*Bugula plumosa*

*Chartella papyracea*

*Bugula flabellata*

*Styela clava*

*Clavelina lepadiformis*

*Didemnidae*

*Aplidium punctum*

*Dendrodoa grossularia*

*Flustra foliacea*

*Styela clava*

*Parablennius gattorugine*

*Labrus bergylta*

*Trisopterus luscus*

*Gobius paganellus*

*Ctenolabrus rupestris*

*Pomatoschistus pictus*

*Conger conger*

*Trisopterus minutus*

*Solea solea*

*Trisopterus luscus*

*Solea solea*

*Labrus bergylta*



The wreck of HMS A1, Britain's first commissioned submarine is a designated historic wreck under the Protection of Wrecks Act 1973.

Above and Left: © Crown copyright, photo taken by

Wessex Archaeology For More information go to:

<http://splash.wessexarch.co.uk/projects/archaeological-services-in-support-of-the-protection-of-wrecks-act-1973>



## The Pentrych

Another Sussex site the wreck of this British steamer laden with coal lies in 25m on a seabed of sand and gravel. Although broken up she still looks like a ship with prominent big boilers and the stern and bow sections standing 5m proud of the seabed, complete with anchor. She was sunk on the 18<sup>th</sup> April 1918 by UB 40 (that also sunk another Sussex site, the Clodmor 3<sup>rd</sup> May 1971) commanded by Karl Dobberstein In June 2005 one of the blades was covered in a carpet of Jewel Anemones *Corynactis viridis*, a once rarely seen species in our Sussex waters that appears to be increasing its range East. Like most wrecks, fish life is prolific, with Wrasse, Bass and Pollack, and even Cod seen.

## Off Widewater, Shoreham

Along the coast west of Brighton the shingle beaches lead into areas of sand and sand and gravel that extend about 100 m from low water. There are then irregular-shaped areas of exposed or partly exposed chalk bedrock covered in chalk boulders, cobbles, flints interspersed with sand and shingle (they appear as the darker areas against the greenish of the sand in aerial images). This habitat is rich in seaweeds with extensive growth of *Chorda filum* and many others providing a rich habitat for a variety of invertebrates and fish.

*Plocamium cartilagineum*  
*Heterosiphonia plumosa*  
*Dilsea carnosa*  
*Sargassum muticum*  
*Calliblepharis ciliata*  
*Ulva lactuca*  
*Enteromorpha*  
*Dictyota dichotoma*  
*Chorda filum*  
*Halichondria panicea*  
*Cliona celata*  
*Hymeniacion perleve*  
*Anemonia viridis*  
*Urticina felina*  
*Cereus pedunculatus*  
*Anemonia viridis*  
*Hydrozoa*  
*Sabellaria spinulosa*  
*Pomatoceros triquetra*  
*Ostrea edulis*  
*Pholas dactylus*  
*Mytilus edulis*

*Gibbula cineraria*  
*Crepidula fornicata*  
*Hinia reticulata*  
*Pagurus bernhardus*  
*Balanus balanus*  
*Palaemon serratus*  
*Necora puber*  
*Hyas araneus*  
*Liocarcinus holsatus*  
*Carcinus maenas*  
*Cancer pagurus*  
*Galathea squamifera*  
*Bryozoa*  
*Asterias rubens*  
*Botryllus schlosseri*  
*Dendrodoa grossularia*  
*Molgula manhattensis*  
*Ammodytes*  
*Crenilabrus melops*  
*Anguilla anguilla*



Photo Michelle Legg



Photo Gerald Legg

Tunicate, *Ascidia mentula* in broken fossil flint sponge; of Seaford Bay

## Sandstone Reefs and the Royal Sovereign Shoals

The Shoals cover an area a little over 28 square km and MCS records show that 14 habitat types have been recorded here in and around the sandstone reefs. It is one of the sites that should have special marine protection.

*Plocamium cartilagineum*  
*Heterosiphonia plumosa*  
*Catenella caespitosa*  
*Calliblepharis ciliata*  
*Heterosiphonia plumosa*  
*Delesseria sanguinea*  
*Dictyota dichotoma*  
*Amphilectus fucorum*  
*Dysidea fragilis*  
*Scypha ciliata*  
*Nemertesia antennina*  
*Halichondria panicea*  
*Suberites carnosus*  
*Polymastia penicillus*  
*Hemimycale columella*  
*Sertularia argentea*  
*Hydroides*  
*Sertularia argentea*  
*Aglaophenia pluma*  
*Alcyonium digitatum*  
*Chrysaora hysoscella*  
*Bispira volutacornis*  
*Pomatoceros*  
*Cancer pagurus*  
*Maja squinado*  
*Balanus*  
*Necora puber*  
*Hinia reticulata*  
*Crimora papillata*

*Mytilus edulis*  
*Pecten maximus*  
*Gibbula umbilicalis*  
*Crepidula fornicata*  
*Aequipecten opercularis*  
*Calliostoma zizyphinum*  
*Polycera*  
*Cellepora pumicosa*  
*Bryozoa indet crusts*  
*Flustra foliacea*  
*Electra pilosa*  
*Pentapora foliacea*  
*Asterias rubens*  
*Clavelina lepadiformis*  
*Apidium punctum*  
*Diplosoma listerianum*  
*Molgula manhattanensis*  
*Diplosoma spongiforme*  
*Dicentrarchus labrax*  
*Parablennius gattorugine*  
*Trisopterus luscus*  
*Ctenolabrus rupestris*  
*Labrus bergylta*  
*Labrus mixtus*  
*Callionymus lyra*  
*Pomatoschistus microps*  
*Thorogobius ephippiatus*  
*Scyliorhinus canicula*

Other sandstone reefs occur to the west of the County. Here in the spring, off Selsey Bill, Lump-suckers, *Cyclopterus lumpus* can be found breeding.

The soft rock is home to short animal turf with hydroids, bryozoans colonial sea squirts. Clumps of *Pentapora foliacea* were also found.

Whelk, *Buccinum undatum*, feeding; Shoreham.

## SW Rocks

The SW Rocks are a continuation of a chalk exposure that runs as a ledge parallel with the coast, one to just over four metres in height. The fissures on the top of the ledge are home to a variety of typical Sussex reef species. Cod, *Gadus morhua*, are reported to be found 'sleeping' during the day in crevices in the vertical face.

<i>Corallina officinalis</i>	<i>Plocamium cartilagineum</i>
<i>Nemertesia antennina</i>	<i>Palmaria palmata</i>
<i>Tethya aurantium</i>	<i>Chondrus crispus</i>
<i>Bispira volutacornis</i>	<i>Enteromorpha</i>
<i>Cliona celata</i>	<i>Bryopsis plumosa</i>
<i>Conger conger</i>	<i>Polysiphonia</i>
<i>Labrus bergylta</i>	<i>Halurus</i>
<i>Trisopterus luscus</i>	<i>Dynamena pumila</i>
<i>Ctenolabrus rupestris</i>	<i>Electra pilosa</i>
<i>Parablennius gattorugine</i>	<i>Membranipora membranacea</i>
<i>Cancer pagurus</i>	<i>Gibbula cineraria</i>
<i>Homarus gammarus</i>	<i>Bispira volutacornis</i>
<i>Gracilaria gracilis</i>	<i>Mytilus edulis</i>
<i>Laminaria digitata</i>	<i>Necora puber</i>
<i>Laminaria saccharina</i>	
<i>Pholis gunnellus</i>	

Dahlia Anemone, *Urticina felina*, attached to chalk bedrock off Seaford Head.

## City of Waterford

built in 1921 the City of Waterford sank on the 14th April 1949 following a collision in thick fog with a Greek freighter. She sits on a sandy sea bed and is covered in a variety of typical wreck species the most noticeable of which are Deadman's Fingers, *Alyconium digitatum* and a variety of anemones. Those recorded include:

<i>Prostheceraeus vittatus</i>	<i>Aplidium punctum</i>
<i>Polycera faeroensis</i>	<i>Clavelina lepadiformis</i>
<i>Thorogobius ephippiatus</i>	<i>Asterias rubens</i>
<i>Parablennius gattorugine</i>	<i>Cancer pagurus</i>
<i>Blenniidae</i>	<i>Tubularia indivisa</i>
<i>Ctenolabrus rupestris</i>	<i>Alcyonium digitatum</i>
<i>Pollachius pollachius</i>	<i>Caryophyllia smithii</i>
<i>Conger conger</i>	<i>Corynactis viridis</i>
<i>Trisopterus luscus</i>	<i>Actinothoe sphyrodeta</i>



Photo Michelle Legg

## HM Tawler Gambri

Sunk by a mine off the Royal Sovereign Light Vessel, 18<sup>th</sup> January 1918 that had been laid by UC-71 commanded by Ernst Steindorff.

The wreck sits on a seabed of sand and gravel and has a rich covering of life including the usual wreck fish, *Trisopterus luscus*, *Labrus bergylta*, *Labrus mixtus*, *Ctenolabrus rupestris*, and *Scyliorhinus canicula*. Three species of Sea Slug were recorded: *Janolus cristatus*, *Crimora papillata* and *Coryphellaolycera faeroensis*. Of note, the Potato Crisp Bryozoan *Pentapora foliacea* was found. Other species present on and around the wreck included four species of anemone notable amongst which was the Jewel Anemones, *Corynactis viridis* which is turning up more often in Sussex, and the Spiral Fan-worm, *Bispira volutacornis*. Only four identified species of sponges were found: *Hemimycale columella*, *Amphilectus fucorum*, *Scypha ciliata* and *Polymastia penicillus*. Unidentified Brittle Stars were also seen.

Colonial tunicate, *Aplidium punctatum*, amongst mixed weeds, hydroids etc; of Newhaven.

## Bracklesham Bay

This shallow bay is dominated by a soft seabed. Several wrecks including the A1 Submarine and Patch Landing Craft.

### Patch Landing Craft

This is a Second World War casualty, lying upside down in 18m of water and broken into 3 sections. It is covered in short animal turf and kelp including:

<i>Laminaria</i>	<i>Cereus pedunculatus</i>
<i>Ctenolabrus rupestris</i>	<i>Blenniidae</i>
<i>Alcyonium digitatum</i>	<i>Cancer pagurus</i>
<i>Rhodophyceae</i>	<i>Nemertesia antennina</i>
<i>Amphilectus fucorum</i>	<i>Bryozoa</i> indet crusts



Photo Gerald Legg

## Some other Wrecks

Various other wrecks were surveyed including the following. These hosted a variety of life typical of the area.

### T.R. Thomson

The 3,538-ton T.R. Thompson now lies in 34mts of water with her bows to the east and partially buried. Her super-structure has collapsed, and the highest point is the stern, which is 7mts proud. She is upright with a bad break almost halfway along her length. A good spot for lobsters

### The Miown

Also known as the 'cement wreck' as she was carrying a cargo of cement, the Miown sunk during a gale in 1914.

### Braunton

This 4,575-ton British merchantman ship was torpedoed on the April 17<sup>th</sup> 1916. She had a cargo of shells and shell cases. She lies in 36m with her bow and stern intact, but listing about 60 degrees on her port side and lies with her bows to the west, but her highest point of the wreck is her stern.

### The Hullington

This ship wreck lies on the seabed at 30m. Some sections of the hull and boilers relatively intact. Large shoal of Bib, *Trisopterus luscus* and Pollock, *Pollachius pollachius*, occur around the wreck together with Lobsters, *Homarus gammarus* and Brown or Edible Crabs, *Cancer pagurus*, hiding in holes. As with many of the wrecks there are abandoned lobster pots and fishing line snagged up on it.

### Species found on the wrecks

<i>Dysidea fragilis</i>	<i>Ostrea edulis</i>	<i>Chartella papyracea</i>
<i>Hemimycale columella</i>	<i>Phoronis</i>	Encrusting bryozoans - various
<i>Dysidea fragilis</i>	<i>Lanice conchilega</i>	<i>Asterias rubens</i>
<i>Tubularia larynx</i>	<i>Bispira volutacornis</i>	<i>Diplosoma listerianum</i>
<i>Nemertesia antennina</i>	<i>Homarus gammarus</i>	<i>Clavelina lepadiformis</i>
<i>Actinothoe sphyrodeta</i>	<i>Cancer pagurus</i>	<i>Aplidium punctum</i>
<i>Nemertesia antennina</i>	<i>Necora puber</i>	<i>Pollachius pollachius</i>
<i>Caryophyllia smithii</i>	<i>Balanus balanoides</i>	<i>Trisopterus luscus</i>
<i>Sertularia argentea</i>	<i>Janolus cristatus</i>	<i>Trisopterus minutus</i>
<i>Actinothoe sphyrodeta</i>	<i>Crimora papillata</i>	<i>Parablennius gattorugine</i>
<i>Diadumene cincta</i>	<i>Pecten maximus</i>	<i>Conger conger</i>
<i>Alcyonium digitatum</i>	<i>Alcyonidium diaphanum</i>	<i>Ctenolabrus rupestris</i>
<i>Bispira volutacornis</i>	<i>Bugula</i>	<i>Parablennius gattorugine</i>
<i>Cancer pagurus</i>	<i>Flustra foliacea</i>	<i>Thorogobius ephippiatus</i>
	<i>Cellepora pumicosa</i>	



Photo Michelle Legg

Mysid Shrimp, *Leptomysis* species, at night Seaford Head.



Photo Gerald Legg

Colonial squirts and other animal turf on mixed ground off Worthing

**Appendix 1  
Species Recorded**

*Acrochaetiaceae*  
*Actinia equina*  
*Actinothoe sphyrodeta*  
*Aequipecten opercularis*  
*Aglaophenia pluma*  
*Aglaothamnion*  
*Alcyonidium diaphanum*  
*Alloteuthis subulata*  
*Ammodytes*  
*Amphilectus fucorum*  
*Amphilepis*  
*Anemonia viridis*  
*Aplidium punctum*  
*Aplysilla*  
*Arenicola marina*  
*Asparagopsis armata*  
*Aspitrigla cuculus*  
*Asterias rubens*  
*Balanus balanus*  
*Bispira volutacornis*  
*Botryllus schlosseri*  
*Bryopsis plumosa*  
*Bryozoa indet crusts*  
*Buccinum undatum*  
*Bugula flabellata*  
*Bugula plumosa*  
*Bugula turbinata*  
*Calliblepharis ciliata*  
*Callionymus lyra*  
*Calliostoma zizyphinum*  
*Cancer pagurus*  
*Carcinus maenas*  
*Caryophyllia inornata*  
*Caryophyllia smithii*  
*Catenella caespitosa*  
*Cellepora pumicosa*  
*Centrolabrus exoletus*  
*Ceramium species*  
*Cereus pedunculatus*  
*Cerianthus lloydii*  
*Chelon labrosus*  
*Chlorophyceae*  
*Chondria capillaris*  
*Chondrus crispus*  
*Chorda filum*  
*Chrysaora hysoscella*  
*Ciocalyptra penicillus*  
*Ciona*  
*Cladophora pellucida*  
*Cladophora rupestris*  
*Cladostephus spongiosus*

*Clathrina clathrus*  
*Clavelina lepadiformis*  
*Cliona celata*  
*Conger conger*  
*Corallina officinalis*  
*Corynactis viridis*  
*Coryne muscoides*  
*Coryphella*  
*Crenilabrus melops*  
*Crepidula fornicata*  
*Crimora papillata*  
*Crisia*  
*Cryptopleura ramosa*  
*Ctenolabrus rupestris*  
*Delesseria sanguinea*  
*Dendrodoa grossularia*  
*Diadumene cincta*  
*Dicentrarchus labrax*  
*Dictyota dichotoma*  
*Didemnidae*  
*Dilsea carnosia*  
*Diplosoma listerianum*  
*Diplosoma spongiforme*  
*Dynamena pumila*  
*Dysidea fragilis*  
*encrusting algae indet.*  
*Ensis ensis*  
*Entelurus aequoreus*  
*Enteromorpha*  
*Enteromorpha linza*  
*Erythrotrichia carnea*  
*Filigraninae*  
*Flabellina pedata*  
*Fustra foliacea*  
*Fucus serratus*  
*Furcellaria lumbricalis*  
*Gadus morhua*  
*Galathea caespitosa*  
*Galathea strigosa*  
*Gibbula cineraria*  
*Gibbula umbilicalis*  
*Gobius niger*  
*Gobianthus lloydii*  
*Gobiusculus flavescens*  
*Gracilaria gracilis*  
*Halichondria*  
*Halichondria bowerbanki*  
*Halichondria panicea*  
*Haliclona oculata*  
*Halidrys siliquosa*  
*Halurus equisetifolius*  
*Halurus flosculosus*  
*Hemimycale columella*  
*Heterosiphonia plumosa*

*Hinia reticulata*  
*Homarus gammarus*  
*Hoplangia durotrix*  
*Hyas araneus*  
*Hydrallmania falcata*  
*Hymeniacion perleve*  
*Hypoglossum hypoglossoides*  
*Inachus*  
*Inachus phalangium*  
*Jania rubens*  
*Janolus cristatus*  
*Labrus bergylla*  
*Labrus mixtus*  
*Laminaria digitata*  
*Laminaria saccharina*  
*Lanice conchilega*  
*Leucosolenia*  
*Limacia clavigera*  
*Liocarcinus*  
*Liocarcinus holsatus*  
*Lipophrys pholis*  
*Lithothamnion*  
*Macropodia*  
*Maja squinado*  
*Membranipora membranacea*  
*Metricidium senile*  
*Molgula manhattensis*  
*Morchellium argus*  
*Mytilus edulis*  
*Myxicola infundibulum*  
*Necora puber*  
*Nemertesia antennina*  
*Nemertesia ramosa*  
*Neopentadactyla mixta*  
*Nucella lapillus*  
*Obelia geniculata*  
*Ocenebra erinacea*  
*Ophiura*  
*Ostrea edulis*  
*Pachymatisma johnstonia*  
*Pagurus bernhardus*  
*Palaemon longirostris*  
*Palaemon serratus*  
*Palmaria palmata*  
*Parablennius gattorugine*  
*Pecten maximus*  
*Pentapora foliacea*  
*Phaeophyceae*  
*Pholas dactylus*  
*Pholis gunnellus*  
*Phoronis*  
*Pisidia longicornis*  
*Pleuronectes platessa*  
*Plocamium cartilagineum*

*Pollachius pollachius*  
*Polycera faeroensis*  
*Polydora*  
*Polymastia boletiformis*  
*Polymastia penicillus*  
*Polysiphonia*  
*Pomatoceros triqueter*  
*Pomatoschistus*  
*Pomatoschistus microps*  
*Pomatoschistus pictus*  
*Porcellana platycheles*  
*Porifera indet crusts*  
*Porphyra umbilicalis*  
*Prostheceraeus vittatus*  
*Pseudosuberites fallax*  
*Raja undulata*  
*Raspailia ramosa*  
*Rhodophyceae*  
*Rhodymenia holmesii*  
*Sabella pavonina*  
*Sabellaria spinulosa*  
*Sagartia troglodytes*  
*Salmacina dysteri*  
*Sargassum muticum*  
*Schmitziella endophloea*  
*Scyliorhinus canicula*  
*Scypha ciliata*  
*Securiflustra securifrons*  
*Semibalanus balanoides*  
*Sepia officinalis*  
*Sertularia argentea*  
*Solea solea*  
*Spermothamnion repens*  
*Sphaerococcus coronopifolius*  
*Spinularia spinularia*  
*Spondylisoma cantharus*  
*Stelligera rigida*  
*Styela clava*  
*Suberites carnosus*  
*Suberites ficus*  
*Syngnathus acus*  
*Taurulus bubalis*  
*Tethya aurantium*  
*Thecacera pennigera*  
*Thoracica*  
*Thorogobius ephippiatus*  
*Tripterygion delaisi*  
*Trisopterus luscus*  
*Trisopterus minutus*  
*Tubularia indivisa*  
*Tubularia larynx*  
*Ulva lactuca*  
*Urticina felina*  
*Venerupis*

**Appendix 2 Surveyors**

Alison Ross, Amanda Ford, Amy Dale, Andy Goddard, Bryony Chapman, Chris Boddington, Chris Carter, Chris Wood, D K Banks, Dave Moss, David Banks, David Kennedy, Dominic Smith, Dougal Hutchinson, Ellie Taylor, Emily Maher, Emma Scott, Ewan Ferguson, Frank Elgar, Frankie Carroll, Gareth Hamilton-Fletcher, Georgia Conolly, Gerald Legg, Gordon Bird, Hannah Theakston, Jake Bonfield, James Lucey, Jim Harvey, John Baldwin, John Hayes, Jon Bramley, Kaisa Muhonen, Kelly Everitt, Larry Hughes, Leena Wilson, Mandy Parker, Mark Card, Martin McQuay, Matt Doggett, Michelle Allen, Michelle Legg, Mike Trussler, Neil Watson, Nick Shemmans, Nicola Walker, Paul Bunting, Paul Dupret, Paul Grant, Paul Williams, Paula Grant, Polly Whyte, Ray Drabble, Robert Smith, Robin Smith, Sarah McKenzie, Scott O'Brian, Shaun Avis, Steff Buell, Tavia Bentley, Toni Bates, Yvette Knight

**Appendix 3: Habitats**

Type	%
Artificial:	
Metal	21
Concrete	18
Chalk reef	7
Chalk gullies	4
Sandstone reef	4
Rocky reef	12
Clay	1
Sand	1
Mixed, sand, shingle, cobbles	30
Mixtures of clay, sand, gravel, boulders	1
Soft mud	1

Sussex Seasearch is run by a small committee of representatives of local organisation with an interest in the marine environment. We are grateful for the facilities offered by Brighton & Hove City Council's Booth Museum of Natural History, Brighton for maintaining the database and dealing with the incoming data. For further information contact the Sussex Seasearch Coordinator, Chris Williams Christian.Williams@naturalengland.org.uk

