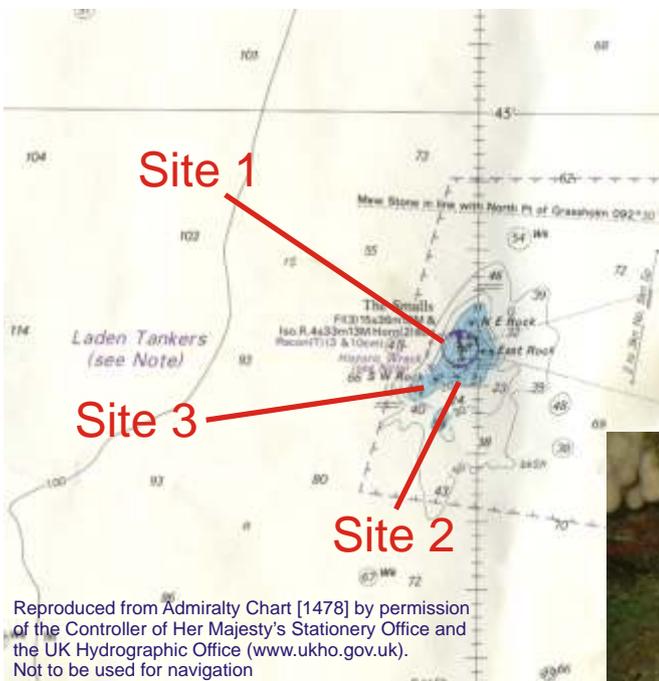
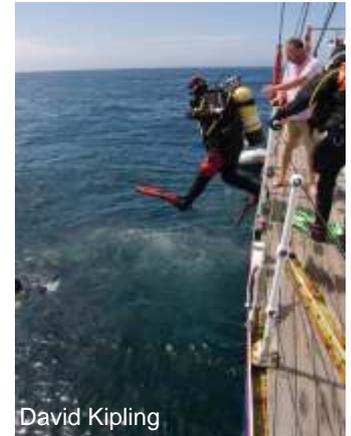


The Smalls and Grassholm August 2006

In August 2006 the vessel *Lo Entropy* was chartered to target locations around the Smalls and the island of Grassholm. There were 8 divers on board; 3 Seasearch Surveyors and 5 Seasearch Observers. 3 sites on the Smalls were dived, and one site on the north side of the island of Grassholm. A total of 16 dives were made with a maximum depth reached of 23m. A range of habitats were recorded including very exposed rocky reef (igneous rock) at the Smalls and mussel beds and deep gullies off the north side of Grassholm. Notable species included extensive expanses of *Alcyonium digitatum* at the Smalls, entire seabed covered by Caprellidae at the Smalls and Grassholm, abundant *Marthasterias glacialis*, and very friendly seals at the Smalls, *Halichoerus grypus*.



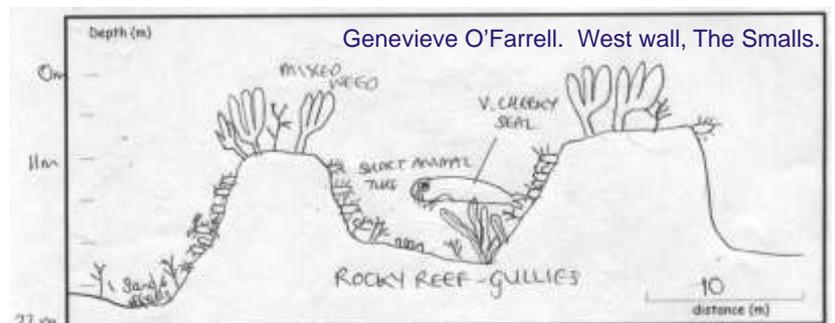
The Smalls - west of lighthouse. Site 1.

A rocky reef with a deep gully about 10m in depth from top of rock to seabed. Coarse sand and gravel at base of gully with mussel bed, *Mytilus edulis*, at base. Mixed red algae, *Alcyonium digitatum* and a variety of unidentified hydroids on sides of rock and *Urticina felina* common within the sediment substrate. Numerous crustacea species including *Cancer pagurus*, *Necor puber*, *Homarus gammarus*, and *Galathea strigosa* were recorded. Potato crisp bryozoan, *Pentapora foliacea* recorded at 18m. Some scattered metal wreckage.



The Smalls - south bay. Site 2.

A rocky reef habitat with wide gullies each to depth of about 5m. A dense forest of *Laminaria hyperborea* on horizontal upper surface of the reef. Gully sides dominated by dense mixed red algae and deadmen's fingers, *Alcyonium digitatum*. 1000's of Caprellidae covered every available surface with a large abundance of juvenile spiny starfish, *Marthasterias glacialis* also observed. The coarse sand and shell patches in between the gullies were characterised by the dahlia anemone *Urticina felina*. Very friendly seals, *Halichoerus grypus* accompanied the divers on each dive. Maximum depth at this site was 17m.



90 species were recorded on this survey, an increase of 32 from the Seasearch survey the previous year. The main group that showed an increase in records were the molluscs with 8 species of nudibranch identified including *Acanthodoris pilosa*, *Polycera faeroensis*, *Aeolidea papillosa* and *Flabellina pedata*.

Other Phyla which also showed an increase were the Crustacea with groups such as Caprellidae and Cirripedia recorded but not to a species level and sponges, *Scypha ciliata* being a new species to add to the list. The table alongside shows both some unusual species recorded and also some more common ones. *Cancer pagurus* and *Homarus gammarus* were seen regularly on all dives.

Although not seen on any dive the large summer visitor to UK waters, *Mola mola*, the sunfish was observed at the surface in Camarthen Bay on our return to Burry Port.

Phylum/Class	Common Name	Number of species	Common name of some species recorded	Species
Porifera	Sponges	9	Yellow hedgehog sponge	<i>Polymastia boletiformis</i>
Cnidaria	Anemones, corals and hydroids	10	Boring sponge	<i>Cliona celata</i>
			Compass jellyfish	<i>Chrysaora hysocella</i>
			Cloak anemone	<i>Adamsia carciniopados</i>
Crustacea	Crabs, lobsters and shrimp	14	Dahlia anemone	<i>Urticina felina</i>
			Skeleton shrimp	Caprellidae
Mollusc	Snails, sea slugs and bivalves	14	Spiny squat lobster	<i>Galathea strigosa</i>
			Scorpion spider crab	<i>Inachus</i> sp.
			Blue-rayed limpet	<i>Helcion pellucidum</i>
Bryozoa	Sea mats	4	Sea hare	<i>Aplysia punctata</i>
			Lined polycera	<i>Polycera quadrilineata</i>
			Edible mussel	<i>Mytilus edulis</i>
Polychaeta	Bristleworms	3	Spiral bryozoan	<i>Bugula</i> sp.
			Potato crisp bryozoan	<i>Pentapora foliacea</i>
Platyhelminthes	Flatworm	1	Double spiral worm	<i>Bispira volutacornis</i>
			Spiral worms	<i>Spirorbis spirobis</i>
Pycnogonida	Sea spider	2	Candy striped flatworm	<i>Prostheceraeus vittatus</i>
			Sea spider	<i>Nymphonidae</i>
Echinodermata	Starfish, sea urchins and sea cucumbers	6	Sea spider	<i>Achelia species</i>
			Common sea urchin	<i>Echinus esculentus</i>
			Bloody Henry	<i>Henricia</i> sp.
Tunicata	Sea squirts	1	Common brittlestar	<i>Ophiothrix fragilis</i>
			Star sea squirt	<i>Botryllus schlosseri</i>
Pisces	Fish	14	Conger Eel	<i>Conger conger</i>
			Butterfish	<i>Pholis gunnellus</i>
			Cuckoo wrasse	<i>Labrus mixtus</i>
			Ling	<i>Molva molva</i>
			Sunfish	<i>Mola mola</i>
Algae	Seaweeds	12	Cuvie	<i>Laminaria hyperborea</i>
			Rainbow weed	<i>Drachiella spectabilis</i>
			Sea beech	<i>Delesseria sanguinea</i>
Total number of species		90		

The Smalls south west rock. Site 3.

South west rock is visible at low water and marks the end of a reef outwards from the lighthouse in a south westerly direction. Dives at this site were conducted at depths ranging between 16 and 20m. The igneous rock was initially covered in dense, short red algae and this changed abruptly to a dense coverage of *Alcyonium digitatum* and many thousands of Caprellidae. The only crawfish, *Palinurus elephas*, recorded on this trip was at this site. Large sandy and clean gravel areas between reef undulations gave little evidence of life.



Vicki Howe



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Grassholm - north

A rocky reef with steep sided gullies, boulders and cobbles covered in many worm casts. Rock surfaces covered by mixed red algae and some sponges and other sessile species such as *Alcyonium digitatum*, hydroids, *Corynactis viridis* and the sea squirt *Botryllus schlosseri*. Many clefts in the rock inhabited by crustacea such as *Cancer pagurus*, *Necora puber* and tompot blennies, *Parablennius gattorugine*. A patchy mussel bed, *Mytilus edulis*, intermingled with coarse clean gravel at base of reef and in areas between boulders. Again many thousands of Caprellidae covered every available surface.

Financial support for Seasearch in Wales has been given by:



Seasearch is a volunteer underwater survey project for recreational divers who wish to contribute to conserving the marine environment.

