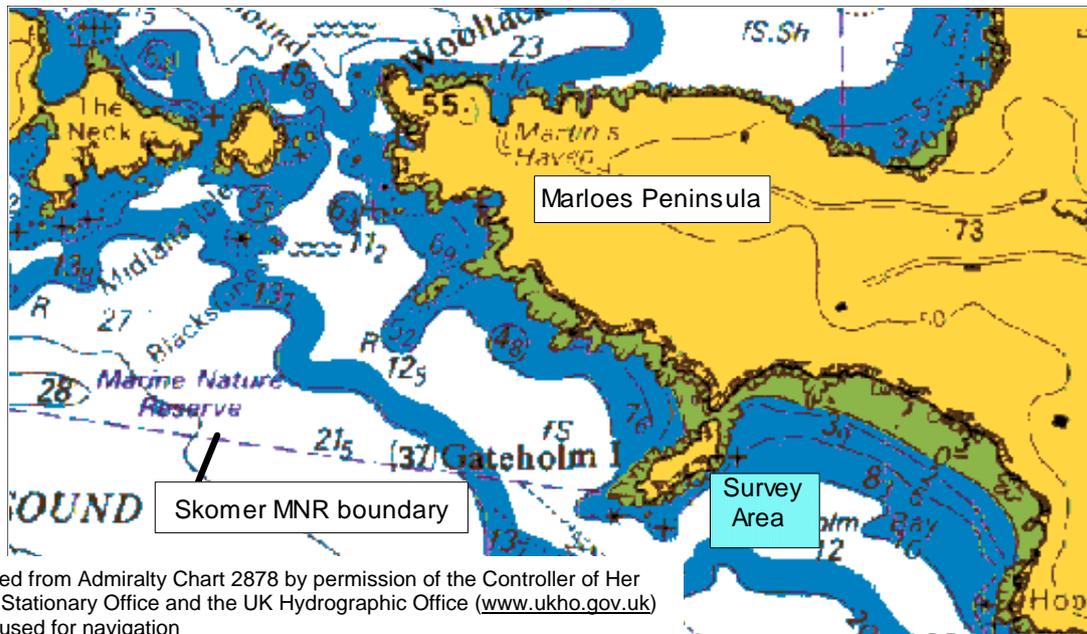
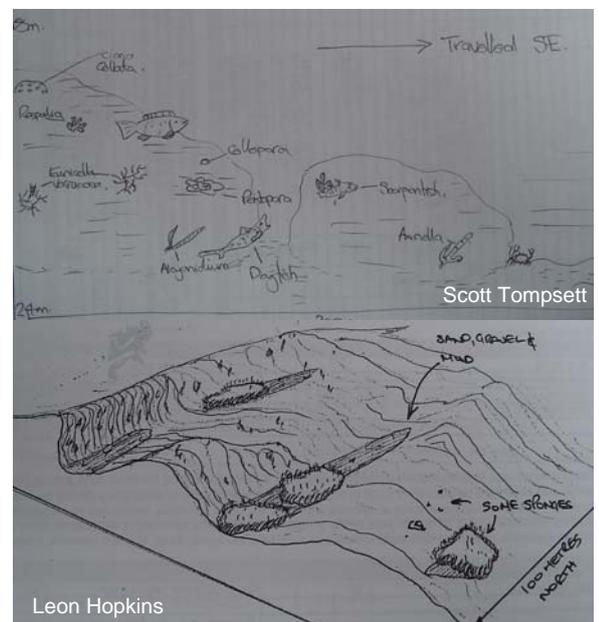


Gateholm Island is an old red sandstone island that forms the southeast corner of the Skomer Marine Nature Reserve. In July 2006 survey dives were organised by Kate Lock east of Gateholm, outside of the Reserve's boundary. The surveys aim was to assess the suitability of the site as a location where research could be completed, as the collecting of samples is restricted by byelaw in the Reserve. The island's waters and seabed lie within the Pembrokeshire Marine Special Area of Conservation.



In August a potato crisp bryozoan, *Pentapora foliacea* survey was completed at this site and at Watwick Point in the entrances of Milford Haven. Dr Joanne Porter, Aberystwyth University and Chiara Lombardi, a bryozoan specialist in Italy, led this research. At each site 20 colonies were measured and small samples collected. These measurements and samples will be analysed for growth and genetic studies, comparing to colonies collected in the Mediterranean.

The survey area was between 18-24m bsl. Rocky areas ranged from tall outcrops up to 6m in height to large expanses of low-lying rocks and boulders 1-2m high. Between the rocks sand and gravel filled gullies were found between 1-2 m wide. In the southern and eastern edges of the reef the rock gave way to sand and pebbles with occasional small boulders. The rocks were festooned in bryozoan and hydroid turf and erect sponges were prominent. Crevices are busy with fish and crabs along with the crevice dwelling cucumbers and tubeworms.



The table on the right shows how many species were recorded in each group, some of the species of interest and some of the most frequently recorded.

Sponges A wide diversity of sponges were recorded including 2 nationally scarce species: Brain sponge *Axinella damicornis* and mashed potato sponge *Thymosia guernei*. Also notable were records of the chimney sponge *Polymastia pencillus* and the yellow staghorn sponge *Axinella dissimilis*,



Anenome, Corals, Hydroids & Jellyfish

Four pink sea fans, *Eunicella verrucosa* were recorded, all were tangled with dog fish eggs. There was a single record of a cluster of yellow cluster anemones *Parazoanthus axinellae*.

Phylum	No of species	Common Species and species of interest
Porifera (Sponges)	16	Yellow staghorn sponge <i>Axinella dissimilis</i> Brain sponge <i>Axinella damicornis</i> Mashed potato sponge <i>Thymosia guernei</i>
Cnidaria (Anenomes, Corals)	14	Pink sea fan <i>Eunicella verrucosa</i> Yellow cluster anenome <i>Parazoanthus axinellae</i>
Hydroids, jellyfish		
Annelida (Segmented worms)	3	Spiral tube worm <i>Bispira voluticornis</i>
Crustacea (Crabs, lobster, barnacles)	6	Lobster <i>Homarus gammarus</i> Edible crab <i>Cancer pagurus</i>
Mollusca (Shells, sea slugs)	10	Nudibranch <i>Achanthodoris pilosa</i> King scallop <i>Pecten maximus</i>
Bryozoa (Sea mats)	10	Potato crisp bryozoan <i>Pentapora foliacea</i>
Echinodermata (Starfish, sea urchins)	7	Spiny starfish <i>Marthasterias glacialis</i> White crevice sea cucumber <i>Pawsonia saxicola</i>
Sea cucumber)		
Tunicata (Sea squirts)	5	Orange seasquirt <i>Stolonica socialis</i>
Pisces (Fishes)	9	Ballan wrasse <i>Labrus bergylta</i> Cuckoo wrasse <i>Labrus mixtus</i>
Algae (Seaweeds)	10	Red seaweed <i>Callophyllis laciniata</i> Red seaweed <i>Kallymenia reniformis</i>
TOTAL SPECIES	90	



Crabs and Lobsters These were not common although commercial species the edible crab and lobster were recorded in very low numbers.

Molluscs Six nudibranch species were recorded including two *Achanthodoris pilosa* on a finger bryozoan, *Alcyidium diaphranum*. In a sandy patch between rock gullies a single king scallop, *Pecten maximus* was seen.



Starfish, Sea urchins and Sea cucumbers

The common urchin was occasionally seen, the spiny starfish *Marthasterias glacialis* and the common sunstar, *Crossaster papposus* were both recorded.

The crevice dwelling cucumbers *Pawsonia saxicola* and *Aslia lefeveri* were regularly found in rock crevices.

Bryozoans Many of the typical rocky reef bryozoans were frequent or common, these include the twiggy bryozoan *Cellaria sp.* and the spiral bryozoan *Bugula spp.* The potato crisp bryozoan, *Pentapora foliacea* was occasionally found.

Fishes The ballan wrasse *Labrus bergylta* and cuckoo wrasse *Labrus mixtus* were observed cruising around the reef. The dragonet *Callionymus lyra* was found in the sandy and pebble gullies between the reefs.

Divers taking part in the surveys were: Stephen Bound, Kerry Lewis, Blaise Bullimore, Ross Bullimore, Kate Lock, Sheena Davies, Leon Hopkins, Scott Tompsett, Rebecca Gaille, Annette Lister, Kathe Keirle, Ian Williams, Mandy John, Keith Hiscock, Chiara Lombardi, Joanne Porter, Simon Ward, Erin Smyth.

Report prepared by Kate Lock. Photos and sketches by Kate Lock, Keith Hiscock, Leon Hopkins and Scott Tompsett. Full survey results and species list available on the JNCC NBN Gateway.

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

Financial support for the project during 2006 has been given by:

