



# Seasearch 2009

## Skomer

### Marine Nature Reserve



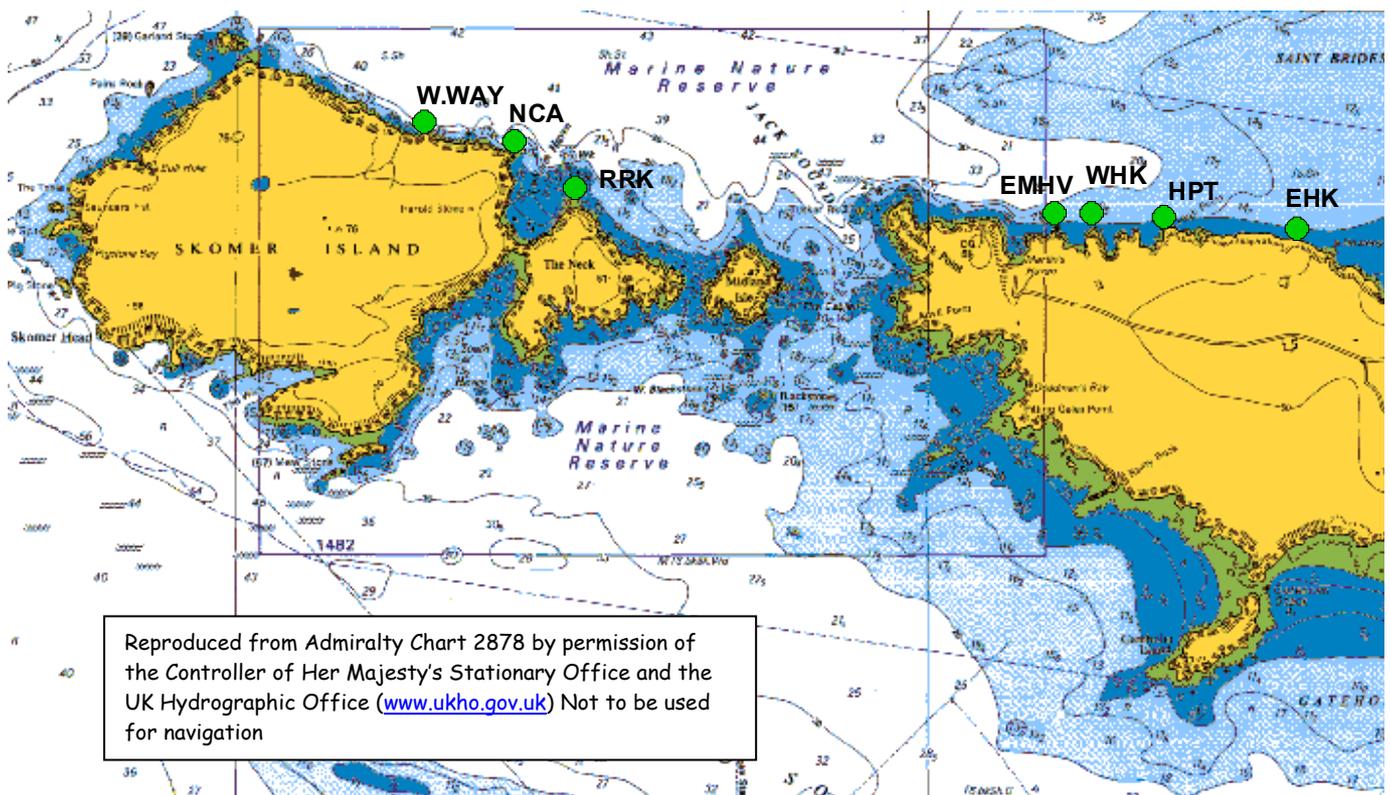
The Skomer Marine Nature Reserve (SMNR), surrounds Skomer Island, Middleholm and the Marloes Peninsula in Pembrokeshire. The coastline of the islands and peninsula is extremely rugged, it is indented with deep narrow inlets and bays, and around much of the coast high steep cliffs continue into the sublittoral so that deep water occurs very close to the shores. Marine life is particularly rich due to the high diversity of habitats available many of these habitats host uncommon communities, often with rare and unusual species.

The Skomer MNR area has been the subject of many sublittoral surveys by workers with a wide variety of expertise since the 1970's. The considerable survey effort has resulted in the nearshore environment of the MNR particularly around Skomer Island, being one of the most comprehensively surveyed areas of seabed in Britain. However there remain large areas, particularly the most hostile – the very deep and very exposed, which have been poorly explored and additionally areas along the north Marloes peninsula. The information contained in the many sublittoral reports from 1976 to 1985 was reviewed by Francis Bunker and Sue Hiscock (1987) and a habitat and species list compiled. This species list is supplemented by a further review and a collation of species records by Francis Bunker, Bernard Picton and Christine Morrow (1992). Although habitat and species records are considerable for the MNR, it has been identified by the MNR management plan that these need continued updating with new records.



*Tritonia nilsodhneri* eggs on *Eunicella verrucosa*. DK

The Skomer MNR is managed by a Countryside Council for Wales, and its dedicated team of marine scientists have established a programme of littoral, sublittoral and oceanographic monitoring. Included in the programme is an annual volunteer diving project, in 2009 this was the 'Territorial fish survey' and to support the survey Seasearch forms were completed for each site. A brief habitat description and notable species for North Castle NCA, Rye rocks RRK, High Point HPT and East Hook EHK are summarised in this report. Seasearch dives and forms were additionally completed during 2009 for West Waybench WWAY, East Martins Haven point EMHV and West Hook WHK sites.



**Nationally rare and scarce species along with current Welsh BAP/NERC Section 42 species and habitats were recorded in 2009:**



*Trapania tartenella* DK

- Seafan sea slug *Tritonia nilsodhneri*
- Pink seafan *Eunicella verrucosa*
- Mashed potato sponge *Thymosia guernei*
- Sponge crab *Dromia personata*
- Crawfish *Palinurus elephans*

The highlight was a new nudibranch record for Wales of *Trapania tartenella*. Photographed by David Kipling and record confirmed by Bernard Picton.

**Waybench West**

Steep rock walls up to 5m high, boulders and rugged rocky outcrops down to 30m below sea level. Kelp forest gave way to dense red seaweed cover on the rocks at around 8m and between 12 to 15m a dense animal turf of bryozoans and hydroids dominated. The rugged terrain provided a rich diversity of life, 8 species of hydroids were recorded including *Kirchenpaueria pinnata*, *Sertularella gayi* and *Aglaophenia tubulifera* and 9 bryozoan species including the potato crisp bryozoan *Pentapora foliacea*. Not surprisingly a high diversity of nudibranchs were recorded preying on the animal turf, 13 species were found including the national scarce sea fan sea slug *Tritonia nilsodhneri* on the pink sea fan *Eunicella verrucosa* and the two colour variations of the fried egg sea slug *Diaphorodoris luteocincta*.

Large numbers of sponge species were also found; the most notable being patches of the nationally scarce mashed potato sponge *Thymosia guernei*.



*Tritonia nilsodhneri* DK

The site was busy with territorial fish, in particular the colourful cuckoo wrasse *Labrus mixtus* and crustaceans were found in hidden in rock crevice and boulder areas.



*Diaphorodoris lucineata* and white variation RS



**East Martins Haven Point**

A rugged site of mini cliffs and ledges interspersed with boulders leading down to a plain of mixed sediments at 15m below sea level. The ledges were covered in red algae with sea beech *Delesseria sanguinea* and red fringe weed *Calliblepharis ciliata* found in abundance. Exposure to current influenced the animal turf found on the vertical rock surfaces. In the current exposed areas (north part of the reef) densely packed deadmans fingers *Alcyonium digitatum* covered the walls, preying on these the mollusc *Simnia patula* and deadmans fingers sea slug *Tritonia hombergi* were found feeding. In the slightly more sheltered areas a thick turf of bryozoans, ascidians and hydroids were found. The antenna hydroids, *Nemertesia antennina* and *N.ramosa* were common along with crispy threads *Crisia* sp. Light bulb seasquirt, *Clavalina lepadiformis* were common along with frequent encounters of the candy striped flatworm *Prosthecereus vittatus*. The rich turf provided food for a high diversity of nudibranchs, 10 species were recorded including the uncommon sea slugs *Doto hystrix* and *Favorinus branchialis*. Impressive were the large congregations of *Crimora papillata* feeding on the bryozoan turf *Chartella papyracea*.



Derelict scallop dredge KL

At the base of the reef (17.2m below sea level) was a mixed sediment slope and rammed up against the rocks a well encrusted derelict scallop dredge was found. The mixed sediment was made up of coarse sand, shell gravel and pebbles, burrowing anenomes and the gravel sea cucumber *Neopentadactyla mixta* were found with numerous gobies *Pomatoschistus* spp and dragonet *Callionymus lyra*.

## West Hook

A rocky reef undulating from 10 to 19m below sea level with occasional flat shelves and dips filled with sand and gravel. The steep walls were covered in a super abundance of deadman's fingers *Alcyonium digitatum* and antenna hydroids *Nemertisia antennina* interspersed with an abundance of Devonshire cup corals *Caryophyllia smithii* and the colourful jewel anemones *Corynactis viridis*; a single pink sea fan *Eunicella verrucosa* was recorded. The reef tops were rich in red seaweeds, in particular an abundance of the red fringed weed *Calliblepharis ciliata*, iris moss *Chondus crispus* and the feathery *Heterisiphonia plumosa*. The rugged terrain provided refuge for velvet swimming crabs *Necora puber*, lobsters *Homarus gammarus* and brown crabs *Cancer pagarus* to hide whilst large numbers of spider crabs *Maja squinado* were found on the open reef. More unusual were the sponge crabs *Dromia personata*, this crab carries out large chunks of the boring sponge *Cliona celata* and then sticks it on top of its head like a hat. At the base of the reef a mixed sediment seabed sloped away, here sand mason worm *Lanice conchilega* and king scallop *Pecten maximus* were observed.



## Rye Rocks



A bedrock reef jutting out from the eastern end of North Haven. Steep walls between 3-5m in height step out with large ledges 2 to 3m wide dropping from 5m down to 40m below sea level. The walls face in multiple directions therefore a high diversity of species are found from those that thrive in strong currents to those that are more suited to current sheltered conditions. In abundance were deadmans fingers *Alcyonium digitatum* and the antenna hydroids *Nemertisia antennina* and *N. ramosa*. Frequently recorded were pink seafan *Eunicella verrucosa* and a single record of the nationally rare seafan seaslug *Tritonia nilsodhneri*. Sponges included yellow staghorn sponge *Axinella dissimilis* and the nationally scarce

mash potato sponge *Thymosia gurnei*. Many of the ledges were covered in silty sediments where burrowing animals were found like the gravel seacucumber *Neopentodactyla mixta* and numerous leopard spotted gobies *Thorogobius ephippiatus*. A highlight was a new record for Wales of the nudibranch *Trapania tartanella*.



## North Castle

A bedrock and boulder reef found at the western point of North Haven. Steep rock walls and boulder slopes are found providing a rugged terrain for a high diversity of species. In the shallow areas kelp forest comprised of sugar kelp *Laminaria saccharina* and furbelows *Saccorhiza polyschides* which gave way to a rich red seaweed meadow interspersed with the brown fan weeds *Dictyota dichotoma* and *Dictyopteris membranacea*. In the deeper areas animal turf dominates with hydroids, bryozoan and sponges. Finger bryozoan *Alcyonidium diaphanum* were common and with it the associated nudibranch *Ancanthodoris pilosa*. The pink seafan *Eunicella verrucosa* was recorded and an abundance of Devonshire cup coral *Caryophyllia smithii* covered the rocks. The boulder slopes provided refuge for crustaceans and territorial fish, 5 species of wrasse were recorded along with the recognisable tompot blenny *Parablennius gattorugine* and the scorpion fish *Taurulus bubalis*.



## East Hook



At 10m below sea level low rocky out crops were found with small and large boulders between, the rocks were heavily overgrown with red algae in particular the redfringe weed *Calliblepharis ciliata*, red comb weed *Plocamium cartilagenium* and the feathery *Heterosiphonia plumosa*. Bryozoans were also common especially the spiral bryozoans *Bugula spp* and crispy threads *Crisia spp* along with the antenna hydroids *Nemertisia antennina* and *N. ramosa*. The boulders provided home to many small crustacean species, long legged spider crab *Macropodium spp*, Leach's spider crab *Inachus sp* and common prawns *Palaemon serratus*. Also hidden in the boulders a curled octopus *Eledone cirrhosa* was spotted.

In the deeper areas offshore the reef gave way to a sediment slope mad up of a combination of shell gravel to fine sand patches where numerous painted gobies *Gobiusculus flavescens* were observed.

## High Point

A gentle sloping rock between 10 to 12 metres below sea level was covered in foliose red seaweed with thick coverage of frosty sea mat *Electra pilosa*, occasional potato crisp bryozoan *Pentapora foliacea* and the boring sponge *Cliona celata*. From 12m to 16m the reef then forms a steep vertical drop festooned in bryozoan and hydroid turf, extensive patches of the bryozoan *Chartella papyracea* were found with clusters of the nudibranch *Crimora papillata*. The red sea squirt *Ascidia mentula*, brown crevice cucumber *Aslia lefevrei* and crustaceans were found in crevices. A single pink sea fan *Eunicella verrucosa* was recorded.

A mixed sediment plane was found at the base of the cliff, fine silty sand with frequent cobbles. King scallops *Pecten maximus* were found close to the base of the cliff including a small 1 year old. The pebbles were encrusted in keel worm *Pomatoceros triqueter*, hydroids and barnacles with occasional small potato crisp bryozoans *P. foliacea*.



All Seasearch data is entered into the Marine Recorder database and available on the JNCC NBN Gateway. Seasearch forms were completed by: Ross Bullimore, Blaise Bullimore, Ken Evans, Sarah Bowen, David Kipling, Simon Ward, Kerry Lewis, Emma Kenyon, Erin Smyth, Winter Doto, James Bull, Carolyn Waddell, Simon Jones, Bob Jones, Tomos Parker, Ann Smith, Phil Hodgson, Vicki Billing, Pete Mowatt, Jane Mowatt, Gill Seels, Sheena Davies. Report prepared by Kate Lock. Photos: David Kipling (DK), Rob Spray (RS) and Kate Lock (KL).

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

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