The table to the right shows how many species in each Phylum were found and what the most common species were.

Sponges were very common, particularly on the cliffs at Farganlack point and the Arches. One of the most frequent was *Axinella infundibuliformis* which became known as the "prawn cracker sponge".

Anenomes, Corals, Hydroids and Jellyfish were also very common at Farganlack point and the Arches. Unusual species recorded include the pink deadmans finger *Alcyonidium hibernicum* which was found on the underside of the large arch at the Arches and the sea pen *Virgularia miriablis* which was recorded from Ancarragh bay.

Molluscs many species of Sea slugs were recorded, the most common being the lined Polycera *Polycera quadrilineata* and the Christmas tree sea slug *Dendronotus frondosus*.

Bryazoans in addition to the kelp sea mat, the jelly bryazoan *Alcyonidium diaphinum,* hornwrack *Flustra foliacea* and the stag's horn bryazoan *Porella compressa* were common.

Echinodermata the red cushion star *Porania pulvillis* was fairly common, particularly on the boulder slopes at the White Cliffs, this is relatively rare in the rest of Northern Ireland.

Phylum/sub-phylum	Common name	Number of species	Total records	Common species (number of records in brackets)
Porifera	Sponges	24	98	*Pachymatisma johnstonia* (18) – Elephant hide sponge *Axinella infundibuliformis* (14) – Prawn cracker sponge *Polymastia boletiformis* (13) – Hedgehog sponge
Cnidaria	Anenomes, corals, hydroids, jellyfish	37	208	*Caryophyllia smithii* (32)– Devonshire cup coral *Alcyonium digitatum* (30)– Dead men's fingers *Actinothoe sphyrodeta* (16) – Fried egg anenome
Annelida	Segmented worms	5	7	*Bispira volutacornis* (3) – Double spiral worm
Crustacea	Lobsters, crabs, barnacles	10	41	*Cancer pagurus* (19) – Edible crab *Necora puber* (6) – Velvet swimming crab *Hommarus gammarus* (6) - Lobster
Mollusca	Shells, sea slugs, cuttlefish, octopus	17	51	*Calliostoma zizyphinum* (10) – Painted top shell *Dendronotus frondosus* (7) – Christmas tree sea slug
Bryozoa	Sea mats	10	30	*Membranipora membranacea* (9) – Kelp sea mat
Echinodermata	Starfish, urchins, sea cucumbers	11	86	*Echinus esculentus* (22) – Edible urchin *Asterias rubens* (22) – Common starfish *Henricia* sp. (19) – Bloody Henry starfish *Porania pulvillis* (7) – Red cushion star
Tunicata	Sea squirts	8	26	*Ascidia mentula* (8) – Red sea squirt *Ascidiella aspersa* (5) – Fluted sea squirt
Pisces	Fishes	19	66	*Pollachius pollachius* (15) – Pollack *Labrus bergylta* (11) – Ballan wrasse *Ctenolabrus rupestris* (10) – Goldsinny wrasse
Aves	Birds	2	5	*Alca torda* (2) – Razorbill *Uria aalge* (3) - Guillemot
Algae	Seaweeds	11	61	*Delesseria sanguinea* (21) – Sea beech *Laminaria hyperborea* (13) – Cuvie or Northern kelp
Total		114	**679**	

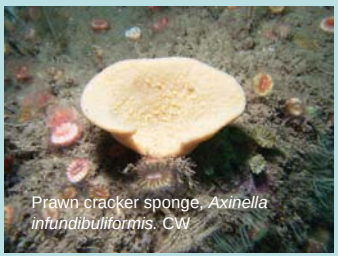
Sea squirts were not recorded very frequently. The most often recorded was the sed sea squirt *Ascidia mentula.* However the gooseberry seasquirt *Dendrodoa grossularia* was locally common in some areas of Farganlack point.

Fish Pollack were common with shoals being seen on several dives. Wrasse (including cuckoo, ballan and goldsinny wrasse) were also common at most sites

Birds were unusually seen on some of the dives. Guillemots and Razorbills nest on the cliffs on the north side of Rathlin and were spotted on several dives, normally diving down on the safety stops.

Algae due to the clear waters around Rathlin the algal zone extends deep, with red algae reaching 25-30m and kelp 20m. Common species were the sea beech *Delessaria sanguinea* and kelp *Laminaria hyperborea.*


Cushion star, *Porania pulvillis*. CG


Prawn cracker sponge, *Axinella infundibuliformis*. CW

JOINT NATURE CONSERVATION COMMITTEE

Surveyors taking part were: Keith Coombs, Fay Couceiro, Ray Drabble, Allan Goodwin, David Goodwin, Martin Lightfoot, Angela Read, Chris Wood. Also additional records from Maeve Edwards, Claire Goodwin, Anne Marie Mahon, Brian McIlroy, Paul Scott, Ronnie Snyder, Maia Taylor. Thanks to Al and Freda Wright of the Salutay for their hospitality.

Seasearch is a volunteer underwater survey project for recreational divers to actively contribute to the conservation of the marine environment. Financial support for the project was given by the Environment and Heritage service Northern Ireland

This report was written by Claire Goodwin. Photos are by Claire Goodwin (CG) and Chris Wood (CW).

Environment & Heritage Service
www.ehsni.gov.uk

An Agency within the Department of the Environment
www.doeni.gov.uk

seasearch Northern Ireland

Rathlin Survey 4-9th June 2005


Survey participants – CG


Dead men's fingers - CG


The Arches – CG


Sponges – CG


Yellow cluster anemone – CG


Church Bay – CG

Between 5-9th June 2005 8 Divers took part in a five day Seasearch survey of Rathlin Island, based on the liveaboard the "Salutay". An additional day survey was carried out on the 30th July. A total of 8 sites were surveyed. The survey was part of concerted effort to obtain good baseline data for Rathlin, at the same time other teams from the Environment and Heritage Service Northern Ireland, Queens University Belfast and the Ulster Museum were carrying out separate surveys on the island's littoral and sublittoral sites. This summary report describes some of the sites surveyed and the plants and animals that were found.

Rathlin Island lies just over six miles north of the resort of Ballycastle, and 14 miles from the Mull of Kintyre, Scotland at the Northern entrance of the Irish Sea. Its position in this narrow entrance means that it is subjected to very strong tidal streams, in some cases over eight knots. It also has the deepest submerged cliffs in the United Kingdom, in places the cliffs on the North side of the island reach more than 200m in depth. Rathlin is designated as a Special Area of Conservation, partly for its rocky reef habitats. Several species not known to occur elsewhere in Northern Ireland have been previously recorded from here.

1 - Farganlac Point

Gently sloping bedrock with kelp forest, depth from 10.4-18.4m BCD. This changes abruptly into a vertical cliff face, the position of edge onto vertical face varies from 15-19 along its length and the sounded depth of the cliff was over 100m. The shallow slopes were covered with dense kelp *Laminaria hyperborea* interspersed with red algae such as sea beech *Delesseria sanguinea* and dulse *Palmaria palmata.* The vertical cliff face was covered with dense animal turf, parts were dominated by *Alcyonium digitatum*, others by gooseberry sea squirt and white sponge (*Dendrodoa grossularia/Clathrina coriacea*) community.

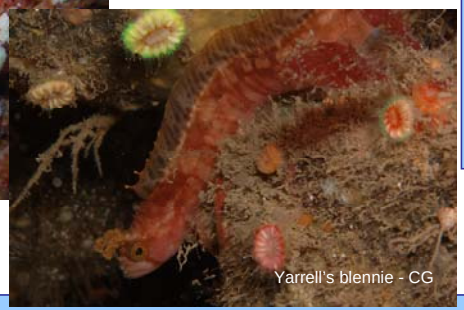
Goldsinny wrasse - CG

Stag's horn bryazoan - CW

2 -The Arches, Derginan point

Rocky reef wall, part of north wall of rathlin island, from 10-40m BCD surveyed but wall progresses down to 200m+. Two arches present, one at approx 25m and the other at about 35m. First arch measured approx 4m high and 8m wide, second about 2m high by 3m wide. Vertically zoned into three main habitats; 1) Kelp park from 9-17m BCD, 2) Boulders and rocky reef with abundant red alage (mainly sea beech *Delessaria sanguinea*), pink encrusting algae and animal turf (17-22m BCD). 3) Reef with a few boulders and two sea arches (22-30m BCD), animal turf dominant (dead men's fingers *Alcyonium digitatum*, anemones, hydroids and sponges). In all these habitats the cliff is almost vertically sloping. Both the white cluster anemone (*Parazoanthus anguicomus)* and the yellow cluster anemone (*Parazoanthus axinellae*) were recorded from this site, it is unusual to find both species together as the white cluster anemone is a northern species and the yellow cluster anemone has a more southerly distribution. The pink dead man's finger (*Alcyonium hibernicum*) was recorded on the underside of the arch, this is a rare species and is not often recorded, the only other Irish sites it is known from are Lough Hyne and Mulroy Bay. Unusually birds were recorded on a few forms; diving guillemots *Uria aalge* and razorbills *Alca torda* were observered by some surveyors during decompression stops.

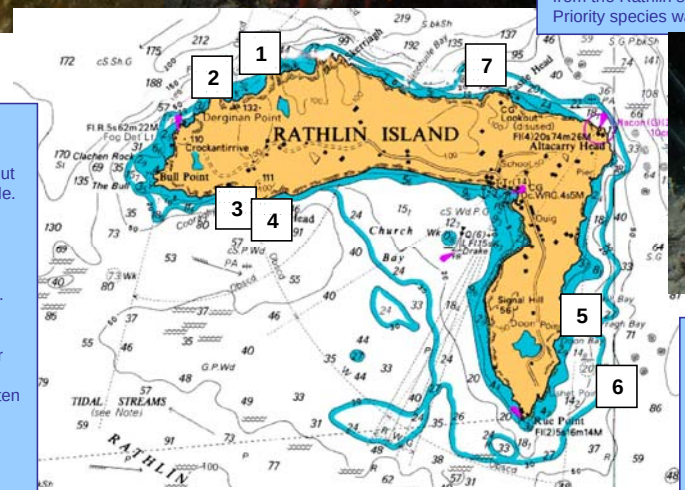
Gooseberry sea squirt and white sponge community- CW



Yarrell's blennie - CG

3 - Boulder slope, white cliffs

Steep boulder slope from 8.5 to 31.5m BCD. Zoned by depth into three habitats; 1) Dense kelp forest *Laminaria hyperborea* (8.5-15.5m BCD) with mackerel *Scomber scombrus* shoaling in the water column. 2) Kelp park (15.5-23.5m BCD) with urchins (*Echinus esculentus*) and starfish. 3) Animal dominated (23.5-31.5m BCD), mainly hydroids and sponges such as the prawn cracker sponge *Axinella infundibuliformis* and the antenna hydroid *Nemertesia antennina*. In all habitats sea squirts were quite common (including the red squirt *Ascidiella aspersa,* and the fluted squirt *Ascidia mentula*). There were many fish present including goldsinny *Ctenolabrus rupestris,* pollack *Pollachius pollachius,* and Yarrell's blenny *Chirolophis ascanii.*



Above – chart of Rathlin, sites are indicated by numbers

4 -East of Black Head

Boulder slope. Upper part 7-14m BCD covered in kelp forest, several species of kelp present (*Laminaria hyperborea, L.digitata*, *L.saccharina, Sacchoriza polyschides*). Lower parts of the slope (14-29m BCD) encrusted with bryazoans, hydroids, sea squirts and sponges, common species included the helter skelter hydroid *Hydrallmania falcata,* finger bryazoan *Alcyonidium diaphanum* and the stalked tube sponge *Haliclona urceolus.*

Crustaceans such as the spiny squat lobster *Galathea strigosa* and the common lobster *Hommarus gammarus* were present in crevices between boulders.

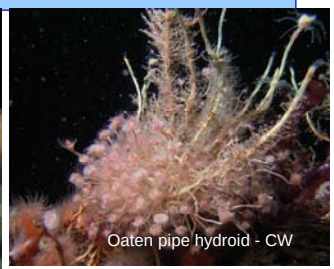
Bird diving- CW

7 - West of Castle Head

North facing rocky reef. In some areas a flat plateau at approx 18m BCD with dense kelp forest then vertical cliff from 18m to 21m BCD, in others gently sloping bedrock terraces between 14 and 22m. In a few areas the bedrock continued to 29m. Dense cover of *Laminaria hyperborea* gradually thinning to kelp park with red seaweeds at 22m. From 21m to depth of approximately 40m (taken from sounder on boat) substrate changes to a boulder cobble and pebble slope at approx slope angle of 30 degrees.Boulders covered in red algal turf, mainly sea beech *Delessaria sanguinea* with animla turf such as dead men's fingers *Alcyonium digitatum* and fried egg anemone *Actinothoe sphyrodeta* also abundant.

Several species of nudibranch were recorded from this site; *Dendronotus frondosus, Coryphella browni, Polycera quadrilineata, Eubranchus tricolor,* and *Flabellina pedata.* This was the only site from the Rathlin survey which the crawfish, *Palinurus elephas,* a Northern Ireland Conservation Priority species was recorded at.

Sponges - CW



Oaten pipe hydroid - CW

6 - Lochgarry

The Lochgarry is a 265 foot passenger vessel that was wrecked in a storm on Torr point in 1942, whilst on its way to pick up soliders. It lies upright on the seabed, the wreckage between 23 ad 31m BCD and the surrounding boulder and sand seabed reaches to 33m BCD. The wreck is covered with abundant short and tall animal turf including oaten pipes hydroids (*Tubularia indivisa* and *T.larynx* pictured above), plumose anemones (*Metridium senile*) and Dead men's fingers (*Alcyonium digitatum*). There is also abundant fish life with one of the most common species being pollack (*Pollachius pollachius*). The Seabed around the wreck is made up of cobbles, pebbles, boulders and sand, many of the large boulders have abundant hydroid, bryazoan and sponge cover.

Long spined sea scorpion - CG

5 - Ancarragh bay

Large rocky boulder reef from 18-23m, sand/mixed ground area surrounding reef from 23m-28m. Boulders covered with kelp park. Mixed ground area composed of boulders, sand and cobbles. Some sediment with life apparent and tall animal turf on boulders. Kelp forest (*Laminaria hyperborea*) on reef and patches of kelp park, mainly (*Laminaria sacchoriza*), on the surrounding sediment. Notable species recorded were sea pens (*Virgularia miriablis) which* were present in the sediment; the purple sunstar *Solaster endeca,* which is a comparatively rare in Northern Ireland; and an Angler fish (*Lophius piscatorius).*