

Northern Ireland North Coast Survey 2007



Phylum/sub-phylum	Common name	Number of species	Total records	Common species (number of records in brackets)
Porifera	Sponges	12	16	<i>Pachymatisma johnstonia</i> (3) – Elephant hide sponge <i>Hemimycale columella</i> (2) – Crater sponge
Cnidaria	Anemones, corals, hydroids, jellyfish	18	75	<i>Caryophyllia smithii</i> (15) – Devonshire cup coral <i>Alcyonium digitatum</i> (9) – Dead men's fingers <i>Actinothoe sphyrodeta</i> (8) – Fried egg anemone
Annelida	Segmented worms	6	14	<i>Lanice conchilega</i> (4) – Sand mason worm
Crustacea	Lobsters, crabs, barnacles	16	86	<i>Cancer pagurus</i> (14) – Edible crab <i>Necora puber</i> (13) – Velvet swimming crab
Mollusca	Shells, sea slugs, cuttlefish, octopus	13	34	<i>Calliostoma zizyphinum</i> (11) – Painted top shell <i>Ocenebra erinacea</i> (4) – Sting winkle
Bryozoa	Sea mats	9	29	<i>Membranipora membranacea</i> (6) – Kelp sea mat
Echinodermata	Starfish, urchins, sea cucumbers	8	46	<i>Echinus esculentus</i> (22) – Edible urchin <i>Asterias rubens</i> (22) – Common starfish <i>Crossaster papposus</i> (7) – Common sunstar
Tunicata	Sea squirts	15	49	<i>Clavelina lepadiformis</i> (9) – Lightbulb seasquirt
Pisces	Fishes	24	70	<i>Labrus bergyllta</i> (6) – Ballan wrasse <i>Centrolabrus exoletus</i> (5) – Rock cook
Other animal groups	Sea spiders, ribbon worms	2	2	<i>Lineus longissimus</i> (1) – Bootlace worm
Algae	Seaweeds	32	67	<i>Delesseria sanguinea</i> (21) – Sea beech <i>Laminaria hyperborea</i> (13) – Cuvie or Northern kelp
Total		155	488	



Small spotted catshark *Scyliorhinus canicula*



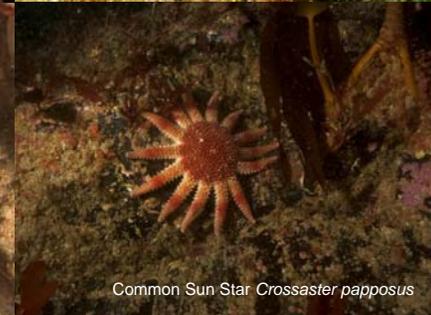
Recording on the Giant's Causeway



Colonial Sea Squirts



Velvet Swimming Crab *Necora puber*



Common Sun Star *Crossaster papposus*

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

Sponges were not very common, perhaps because the areas surveyed were relatively shallow and tended to be dominated by algae. **Anemones, Corals, Hydroids and Jellyfish** several species of hydroids were present at the survey sites. In some areas these were covered in sea slug (nudibranch) spawn.

Annelid worms two records were made of a the attractive double spiral worm *Bispira volutacomis*.

Crustaceans the spiny spider crab *Maja brachydactyla* was recorded from the Tun's bank site, this is a warmer water species and was recorded for the first time in Northern Ireland in 2006.

Molluscs on dives off the causeway in April several records were made of the sting winkle *Ocenebra erinacea* spawning. This mollusc produces masses of flattened yellow eggs.

Bryozoans the hornwrack *Flustra foliacea* and the square-end hornwrack *Securiflustra securifrons* were common in sandy areas. **Echinoderms** the northern starfish *Leptasteris muelleri* was recorded. This is a Northern Ireland Conservation Priority species and we are monitoring its distribution as it may be a good indicator of climate change.

Tunicates many species of colonial sea squirts were recorded, in some areas these were very abundant – completely covering bedrock and boulder surfaces. Species included the club head sea squirt *Aplidium punctum*, and the encrusting sea squirt *Synoicum incrustatum*.

Fish many species of fish were recorded. Interesting records included a lump sucker *Cyclopterus lumpus* from Portrush harbour.

Algae many of the sites surveyed were shallow and at least partially covered in kelp forest. Red seaweeds were also present at several sites including the tooth weed *Odonthalia dentata* and the sea beech *Delesseria sanguinea*.



Sting Winkle *Ocenebra erinacea* laying eggs



Thanks to all the Seasearch members that took part: Orea Anderson, Lin Baldock, Thorsten Brabetz, Graham Day, Elena Deligianni, Sharon Doake, Ashley Douglas, Claire Goodwin, David Goodwin, Deirdre Greer, Melvyn Heath, Alasdair Kennedy, Michael Kerr, Paul McLwaine, Karen McKinstrey, Julia Nunn, Mark Patton, Ronnie Snyder, Conor Wilson and Chris Wood.

Seasearch is a volunteer underwater survey project for recreational divers to actively contribute to the conservation of the marine environment (see www.seasearch.org.uk for more information). Financial support for the project was given by the Environment and Heritage service Northern Ireland. This report was written by Claire Goodwin (thanks to Julia Nunn and Chris Wood for editorial comments). Photos are by Claire Goodwin and where specified Paul McLwaine.



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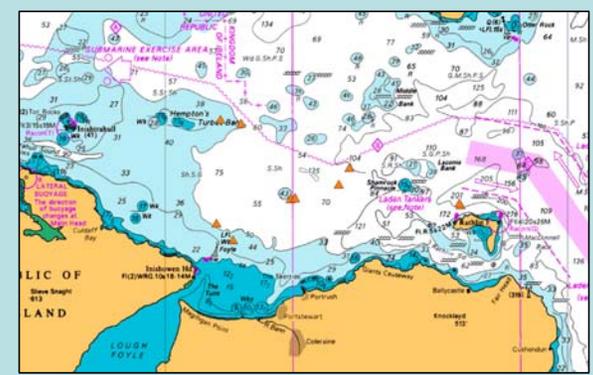
An Agency within the Department of the
Environment
www.doeni.gov.uk

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www.seasearch.org.uk

We surveyed several sites on the North Antrim Coast during 2007. The main survey target was the fan mussel *Atrina fragilis*. This rare mollusc is easily damaged by fishing and other disturbance, consequently very few surviving populations are currently known (the most recent records are from Devon and the West Coast of Scotland). There are historical records of this species from the area (see map right) and we found several dead fan shells during our 2006 Skerries survey, indicating they might still be present locally. We didn't find any fan mussels during this survey but one was found during the survey season on Rathlin by an EHS/Ulster Museum team – we were able to help with monitoring this as part of our Rathlin Island survey.

We also surveyed the underwater area of the Giant's Causeway World Heritage Site, Portrush Harbour (during the February Observer Course), and the Blue Pool as part of the Seasearch "Dive In" event.



Historical Fan Mussel Records (indicated by red triangles)



Masked crab *Corystes cassivelaunus*

Tuns Bank

We surveyed this area searching for fan mussels - there are historical records from nearby. Fairly flat seabed of fine, rippled sand, depth 11.5m. The sand was very mobile and divers were moved about by wave surge. Too mobile for colonisation by fan mussels! Very little life was apparent, but there were some interesting crustaceans including a very large spiny spider crab *Maja brachydactyla* and masked crabs *Corystes cassivelaunus*.



NW of Portstewart, boulder habitat

0.6 miles NW of Portstewart Harbour

Very slightly sloping seabed (20.7-22.6m surveyed). Mixed seabed of small boulders, cobbles and patches of shelly gravel and sand. Densely covered in hydroids (mostly *Nemertesia* spp.) and bryozoans (hornwrack *Flustra foliacea* and square-end hornwrack *Securiflustra securifrons*) with patches of the lightbulb seasquirt *Clavelina lepadiformis*. Squid eggs and a dogfish eggcase (mermaid's purse) were also recorded. Mats of tubes were present on top of sand areas - possibly caprellid amphipod tubes.

Portrush Harbour

Survey of north wall of Portrush Harbour. The maximum depth of the wall is 4m. The wall was composed of large stone blocks which were covered in barnacles and encrusting pink algae. There was much life in the crevices between the blocks including tompot blennies *Parablennius gattorugine*, lump sucker *Cyclopterus lumpus*, and spiny squat lobster *Galathea strigosa*. At the bottom of the wall there was a layer of soft, muddy, sediment. Many species of crab were present including velvet swimming crabs *Necora puber* and edible crabs *Cancer pagurus*. There was much litter at the site, including tyres, bottles, cans, fishing line, and lobster pots.



North West of the Giant's Causeway

Sloping limestone bedrock reef from 9-16m. Very steep to 14m, then flattened out slightly. Boulders and some sand and gravel were present at the base of the bedrock cliff, but this appeared quite mobile and little life was present. The many crevices on the bedrock face were inhabited by species such as the white crevice sea cucumber *Pawsonia saxicola* and the spiny squat lobster *Galathea strigosa*. The upper part of the reef was covered in *Laminaria hyperborea* kelp forest thinning out to kelp park on the lower slopes. Colonial seasquirts (*Synoicum incrustatum* and the four spotted squirt *Morchellium argus*) covered the reef surface. The volcano sponge *Haliclona viscosa* was very common, but was an odd beige colour rather than the usual purple-ish hue.

North of the Giant's Causeway

Site just offshore of Giant's Causeway. The seabed was composed of large boulders interspersed with patches of sand and gravel. The seabed was fairly flat (around 12.7m). Kelp park was present on the boulders together with mixed seaweeds (including toothed weed *Odonthalia dentata*). Animal life was fairly abundant including many colonial seasquirts (mainly the four spotted seasquirt *Morchellium argus*, the club headed seasquirt *Apidium punctum* and the colonial seasquirt *Synoicum incrustatum*). Little life was present in the sediment between the boulders, it appeared to be very mobile. Many sting winkles *Ocenebra erinacea* were present and spawning.

The Templemore

Steel wreck of the **Templemore** lying in Ballycastle bay on a sand, pebble and boulder seabed (between 16 and 17.6m). The upward facing surfaces of the wreckage were dominated by kelp and foliose red seaweeds. The vertical surfaces and overhangs were dominated by short animal turf. Two conger eels (*Conger conger*) were present in the wreck's boilers. Lobster pots and fishing tackle were present at the site.

Carrick-a-Rede rope bridge

Survey of east side of Carrick-a-Rede rope bridge island. Bedrock cliff from 7.2-12.7m BCD with boulders, cobbles, pebbles and sand at its base. Cliff covered in kelp forest (species *cuevia Laminaria hyperborea* and dabberlocks *Alaria esculenta*) with a species rich understory of red weeds. An area of fine, rippled mobile sand was present in shallower water (5.2-9.2m BCD). Some life present in sand and gravel including sand mason worms (*Larice conchilega*) and Dragonets (*Callionymus lyra*).



Diver North of the Giant's Causeway

Carrick-a-Rede Island, west side

Gently sloping bedrock reef from 4.2 to 19.2m in depth, slope faced north. Area of sand at base of reef and another small area at the top of the slope. Upper parts of reef covered in kelp forest (mainly sugar kelp *Laminaria saccharina*), deeper on the slope this thinned to kelp park. Four or five small spotted catshark (*Scyliorhinus canicula*) were present at the site.



The Blue Pool (PM)

The Blue Pool

This is a popular shore dive site behind Portrush Coastal Zone centre. There was a steep cliff down to 1.5m which leads onto a slope of boulders, cobbles, pebbles, sand and gravel. This sloped down to around 6m. Gullies were present in the bedrock. Lots of algae including kelp and green algae were present. Two very large long spined sea scorpions (*Taurulus bubalis*) were spotted. Quite a few other fish were recorded including sand eels *Ammodytes tobianus*, ballan wrasse *Labrus bergylta*, snake pipe fish *Entelurus aequoreus* and gobies. Much litter was present at the site (cans, glass bottles, plastic, scrap metal), all in areas close to shore.



Dead men's fingers *Alcyonium digitatum*



Colonial sea squirts *Synoicum incrustatum*