# YNU Marine and Coastal Section Report of 2011 Field Meetings



Paula Lightfoot p.lightfoot@btinternet.com

### **Scarborough Bioblitz**

2<sup>nd</sup> to 4<sup>th</sup> June 2011

The Scarborough Bioblitz was a resounding success! Around a hundred experts came from all over Yorkshire and from as far afield as Wales, Scotland and the south coast of England to record Scarborough's wildlife. Over 1,100 members of the public joined the surveys and visited the Environment Fair in the Spa. The event generated great publicity with articles in the local press, TV and radio.

Over 600 records of marine and coastal species were made during intertidal surveys, dive surveys and examination of a fishing vessel's catch. These included records of 34 protected or BAP priority species.



The group with the most species recorded was seaweeds (67 species) followed by crustaceans (46) and molluscs (40).

Some interesting finds included:

- Lumpsucker *Cyclopterus lumpus* a large, lumpy fish which grows up to half a metre long. Lumpsuckers usually inhabit deep waters below 50 metres, but they migrate to shallow waters to spawn. Males guard the eggs and have modified fins forming a 'sucker' to help them cling on to the rocks. They are not rare, but this is a good sized fish to find in a rock pool!
- The goose barnacle *Scalpellum scalpellum* collected by the fishing vessel M.F.V. Provider. This species has a predominantly south-westerly distribution, with very few records from the East coast. In the Middle Ages, people believed that barnacle geese hatched from goose barnacles!
- The sea slug *Jorunna tomentosa* a yellowish brown sea slug with a velvety texture that feeds on sponges. There are no records of this species from the Scarborough area yet on the NBN Gateway, although there are paper records dating from 1911.

Click here to see photos of the Scarborough Bioblitz activities and interesting finds.

#### **Spurn National Nature Reserve**

Saturday 18<sup>th</sup> June

Despite the ominous weather forecast, there was excellent attendance at this meeting and it proved to be a very interesting day. Everyone met in the Blue Bell Tea Rooms for a briefing from Yorkshire Wildlife Trust Warden Andy Gibson, then split into groups to survey different parts of the peninsula according to their interests. Seven members opted to walk the 4 mile stretch along the seaward side of Spurn to record marine and coastal wildlife. First we searched the strandline for hydroids, bryozoans, mollusc shells, egg cases and drift seaweed, then as the tide receded we moved to the lower shore to explore the groynes and tide pools for living creatures.

A total of 47 species were recorded, including 14 seaweeds, 10 molluscs, 7 hydroids, 5 bryozoans (colonial 'moss animals') and 4 crustaceans.

We collected a good haul of shark and skate egg cases (also known as mermaids' purses) from the strandline, as shown in the photograph below.



Egg cases collected at Spurn. Clockwise from top: two thornback ray (Raja clavata), three starry skate (Amblyraja radiata) and eleven small spotted catshark (Scyliorhinus canicula) egg cases.

Of particular interest were the egg cases of the starry skate (*Amblyraja radiata*), an IUCN red list species. Starry skate are a deep water species and their egg cases are rarely found washed up on beaches. The Shark Trust have been collecting egg case records since 2003 and now have a database of over 26,000 records, but only 93 of these are of starry skate. The dredging and shipping activity offshore from Spurn might cause these egg cases to be churned up and then washed up, especially after stormy weather. According to the Shark Trust's database, there is one other record of starry skate egg cases from Spurn in 2008.

Exploring the groynes and shore defences at low tide was fascinating, as these structures provide the only bit of hard substrate in an otherwise extensive area of sand – perfect habitat for sessile creatures like barnacles and mussels, and the mobile animals which feed on them. Sadly, one groyne post had become thickly entangled with fishing line which had trapped around 20 crabs. We freed those that were still alive, and notified the Warden so that the rest of the fishing line could be removed as soon as possible – this was too large a job for us with our one small pen knife!



Live and dead shore crabs (Carcinus maenas) and edible crabs (Cancer pagurus) entangled in fishing line on a groyne.

At the end of the day, everyone met again over tea and cakes in the Blue Bell Tea Rooms and each group told the others about the wildlife they had recorded and the highlights of the day. It was evident from these reports that Spurn has something to offer for every kind of wildlife enthusiast, from birds and botany to bizarre plant galls and vicious-looking assassin flies!

#### South Landing, Flamborough and Boggle Hole, Robin Hood's Bay

Saturday 6<sup>th</sup> and Sunday 7<sup>th</sup> August

YNU members spent a rainy August weekend at Flamborough and Boggle Hole to take part in the East Coast Seaweed Survey organised by Rob Spray and Dawn Watson of <u>Seasearch</u>. The aim of the event was to coordinate an intensive survey of key sites along the east coast from Essex to Northumberland, involving UK specialists and local enthusiasts in both shore-based and diving surveys.

The focus was on collecting, identifying and pressing seaweeds, a group which is under-recorded on the east coast, but we also recorded a wide range of wildlife including sponges, nudibranchs and rockpool fishes.



Neap tides and onshore winds meant that access to the lower intertidal zone was limited. Nevertheless, the YNU recorded 63 species at South Landing and 72 species at Boggle Hole.



YNU members and Seasearch surveyors compare notes on the shore (left). The Youth Hostel at Boggle Hole, whose classroom we used as a lab for species ID and seaweed pressing (right)

## Skinningrove, Cleveland

Saturday 3<sup>rd</sup> September

This was a joint meeting with the Conchological Section, whose members recorded not only the marine molluscs of the rocky shore but also terrestrial molluscs found on the surrounding sand dunes and vegetation. Highlights of the day included the tiny but very pretty sea slug *Goniodoris nodosa*, several specimens of which were found under stones in rock pools as the tide receded, and the strikingly iridescent blue rayed limpet, *Patella pellucida* which was found on the fronds of kelp on the lower shore.



The nudibranch Goniodoris nodosa (left) and blue rayed limpet Patella pellucida (right) recorded at Skinningrove

# Sunday 9<sup>th</sup> October: Flamborough North Landing

Ten volunteers braved the strong winds and the early start to carry out a <u>Shore Thing</u> survey to collect data for the Marine Biological Association on particular species which are indicators of climate change. We didn't find any of the target species during the 20 minute timed search, but recorded a great diversity of species during the transect survey.



Figure 1 Recording species in quadrats on the upper shore at North Landing

With its interesting mix of horizontal and vertical bedrock surfaces, crevices and boulders, tall cliffs and caves, North Landing has a great variety of red seaweeds, such as the very pretty and aptly named soft feather weed, *Plumaria plumosa*.



Red seaweed Plumaria plumosa collected at North Landing

Other interesting finds at North Landing included a tiny juvenile sea hare, *Aplysia punctata*, and the soft coral dead men's fingers, *Alcyonium digitatum*, which must have been dislodged from rocks in deeper water and washed up on the shore due to the strong winds.

Finally, while leaving North Landing we saw a weasel running across the road carrying its prey, a small rodent – the record has been passed to the YNU mammal recorder.

## Sunday 16<sup>th</sup> October: Flamborough South Landing

We arrived at South Landing to find the site already buzzing with naturalists of the ornithological variety – birders who had travelled from miles around to catch a glimpse of a rare visitor, the red-flanked bluetail, *Tarsiger cyanurus*, which had been ringed there that morning. Sadly, we didn't see this rare bird, but we had a very enjoyable afternoon carrying out a <u>Shore Thing</u> survey for the MBA.

Our efforts during the 20 minute timed species search were rewarded by finding one of the target species, the honeycomb worm, *Sabellaria alveolata*. These worms build tubes from sand or shell fragments glued together with mucus. This species has a predominantly westerly distribution, so records from the Yorkshire coast are especially interesting. The honeycomb worm tubes recorded at South Landing consisted of small, scattered patches, but the tubes can be densely aggregated forming reefs several metres across and a metre deep. These reefs are a priority habitat in the Biodiversity Action Plan.



Tubes of the reef-building honeycomb worm, Sabellaria alveolata

We went on to carry out three transect surveys, recording the percentage cover or number of species in four quadrats per transect at the upper shore, middle shore and lower shore.



Heads down, recording species in quadrats on the middle shore at South Landing

#### Sunday 30th October: Castle Rocks south of Cayton Bay, Scarborough

YNU members love a challenge and getting to this site certainly presented us with one! However, navigating the steep path from the cliff top and the long scramble over large boulders was worth the effort, because this extremely diverse site was an excellent location for our last meeting of the year.

Species recorded included three types of sea slugs *Jorunna tomentosa*, *Berthella plumula* and *Archidoris pseudoargus*, or sea lemon. Two grey seals, *Halichoerus grypus*, were observed as they rested on the rocks of the lower shore. With its extensive, deep rock pools and crevices, this site had an interesting diversity of Echinoderms, including shore urchins *Psammechinus miliaris*, common urchins *Echinus esculentus*, common starfish *Asterias rubens* and two species of brittle star.



Common urchin Echinus esculentus in a rock pool (left). YNU members exploring the diversity of Cayton Bay (right)

At low tide we carried out a timed species search for the MBA's Shore Thing target species and found one of them, the brown seaweed *Halydris siliquosa*, known as sea oak.

A highlight of the visit was watching peregrine falcons, Falco peregrinus, mobbing seagulls on the cliff face.

We ended the day with a late lunch at <u>Redcliffe Farm Cafe</u> during which we held the Marine and Coastal Section's AGM and planned our field meetings for 2012.