

Cochological Society & Porcupine Field Meeting,

5 May 2004

1. Shore work by Lin Baldock

A field meeting combined with the Porcupine Marine Natural History Society was held to visit sites along the Dorset coast in May 2004: Cochological Society members greatly outnumbered dilatory Porcupines.

The first site visited was to the shore at Osmington Mills (Grid Ref: SY735817) on a somewhat inclement day. This site had a variety of habitats: rocky ledges

and deep intertidal pools, boulders on rock and gravel, and a freshwater stream runs across the shore. An unremarkable list of marine molluscs was made. Sites visited on subsequent days were:

- **Peveril Point in Swanage.** This is a boulder beach with low rock ledges and deep intertidal pools. Strong currents run across the ledges at high tide (Grid Ref SZ042787).
- **Chapman's Pool.** This site was visited in the morning with the hope of finding *Osilinus lineatus*, last recorded here by John Hawthorne in 1962. The beach has varied habitats:

Low flat ledges, in places interspersed with huge boulders. The whole area is subject to rapid cliff erosion and is therefore often rather muddy. Jan Light instigated a search for *Paludinella littorina* and the group did find *Ovatella myosotis*, a good indicator species for *Paludinella*, in likely looking habitat among limestone boulders embedded in silty, gravely sediment around high water mark. However, neither *P. littorina* nor *O. lineatus* made an appearance. (Grid Ref: SY956767)
- **Lulworth Cove.** The low water at Lulworth Cove was caught in the early afternoon. Again Jan Light made off to a shallow cave searching for *P. littorina*, but with no success. The other mollusc records produced nothing unusual. (Grid Ref: 5Y824798)
- **Golden Cap.** An isolated stretch of rocky shore (huge limestone boulders on flat mudstone bedrock with shallow intertidal pools) on a predominantly

pebble/shingle coast provides one of the most easterly vibrant populations of *Osilinus lineatus* in Dorset. *Barnea parva* was an interesting find in the intertidal mudstone.

- **The West Fleet.** A brief visit was made to the west Fleet near Langton Herring to collect examples of several lagoonal species: *Cerastoderma glaucum*, *Rissoa membranacea* and *Hydrobia* species. (Grid Ref: SY6088 13).

A dredging trip was arranged from Lyme Regis using 'Miss Pattie', a local fishing boat skippered by John Walker. A Day grab generously loaned by Fugro GEOS was used to collect samples of muddy, sandy sediment and a pipe dredge borrowed from Dr Ken Collins based at the School of Ocean and Earth Science at Southampton University allowed us to collect coarser sediments of maerl and pebbles. The CS had the boat for the Saturday which proved rather rough with a strong northwesterly wind only allowing us to work close inshore and making the handling of the grab and dredge hard and hazardous work. A classic site for *Paludinella* at Beer Head in Devon was viewed from a distance while we had lunch on the boat in the welcome calm of Beer Roads.

Julia Nunn, wearing her Porcupine hat, also came out on the boat on the Sunday, a mirror calm day after the near gale of the day before, and collected sub-tidal samples for their mollusc fauna.

Please may I remind all participants that I really do want your records from your visit, and should you have no objection, I will pass all records on to the appropriate wildlife trust: Dorset or Devon.

2. Dredging out of Lyme Regis in May 2004 by Jan Light and Celia Pain

"Northwesterly 4 to 5, locally 6 2 to 3 later

As a shipping forecast for a group of 8 cochologists with dredging in mind, this prognosis was hardly appealing. Quite apart from the comfort of members of the

dredging group, the handling of heavy equipment in rocky conditions requires skill and great care. The skipper of 'Miss Pattie', John Walker, assured us that we would be able to work in the forecast conditions, albeit staying inshore. He could give no assurances, however, on the performance of our sea legs! So in wind and intermittent drizzle we steamed out of Lyme Regis harbour towards our first sampling station. Our dredging equipment had been borrowed by Lin Baldock and consisted of a Day Grab borrowed from Fugro GEOS and a pipe dredge loaned by Dr Ken Collins of the School of Ocean and Earth Science, Southampton University. The Day Grab has a simply designed frame to keep the equipment level on the sea bed and two triggers to operate the release of the collecting buckets. A pipe dredge is simply a length of robust metal pipe with a sealed end, which is hauled along the seabed and fills with sediment as it is towed. Both pieces of equipment were used although at a number of stations the rocky seabed failed to yield a loose sediment sample, and in the end the pipe dredge showed itself to be more productive.

Thirteen stations were sampled, 4 by grab and 9 by dredge. Whilst some yielded several litres of sediment, others yielded only a few rocks and cobbles. Each sample was divided between the group, and smaller samples were kept as a unit and allotted amongst the participants. Some large rocks with epifauna were scraped and brushed in buckets of seawater in order to remove the colonising epifauna, including organisms which were cemented. These residues were also set aside in containers to take ashore. No sorting took place on board 'Miss Pattie' although once the sediment samples were emptied into large plastic boxes they were briefly examined for evidence of macrofauna, of which there was very little. The gravels were all very homogenous consisting mainly of dead shell, fragments of coralline algae known as maerl, all stained orange-brown and lithogenics. There was hardly any evidence of living

maerl although the skipper, a scuba diver, had attempted to site us over known beds of living coralline algae. As the day progressed, the weather deteriorated and far from easing to a sea state of 2 to 3, our skipper informed us at one point that we were working in conditions approaching force 7. Nevertheless it is to everyone's credit, or perhaps good fortune, that there were no casualties to seasickness! Some members of the dredging party still have their sorting to do, so analysis of the sediments is 'in progress', however two of us have sorted enough samples to recognise a consistent picture of the micro-malacofauna of these gravels, see table below. The trip was memorable for the way in which the group (Lin Baldock, Ron Boyce, Rosemary Hill, John Llewellyn Jones, Jan Light, Julia Nunn, Celia Pain, Steve Wilkinson) persisted with the difficult conditions of a pitching boat, and worked cooperatively, distributing samples or parts of samples amongst participants and setting aside some material for those who had not risked the sea conditions. Nearly all the material the sampling equipment delivered to the boat was taken, bagged and labelled; only the mud haul was sub-sampled and the residue shovelled back overboard. This characterises the Society's responsible and thorough approach to dredging because the opportunity to obtain offshore seabed samples is infrequent, and has resulted in some interesting records for micro-species.

We have combined our records to give a preliminary profile of the assemblage of smaller mollusc species living in the gravels. Nearly all these were living in at least some of the gravel samples sorted so far, but only shells of *Tornus subcarinatus* have been found:

Emarginula rosea

Odostomia unidentata

Dikoleps cutleriana

Brachystomia eulimoides

Dikoleps pusilla

Brachystomia scalaris (formerly *Skenea nitens*)

Skenea serpuloides

Chrysallida decussata

Obtusella intersecta

Chrysallida indistincta

Pusillina inconspicua

Partulida spiralis

Caecum glabrum

Ondina divisa

Caecum imperforatum

Modiolarca tumida

Tornus subcarinatus

Kellia suborbicularis

Mangelia coarctata

Semieicycina nitida

Raphitoma linearis

Mysella bidentata

Odostomia plicata

Epilepton clarkiae

Odostomia turrata

Goodallia triangularis

Whilst none of the species in the list above is uncommon, several (*Dikoleps cutleriana*, *D. pusilla*, *Obtusella intersecta*, *Caecum* spp. *Chrysallida* spp., *Ondina divisa*, *Epilepton clarkiae*) are more usually recorded as empty shells from samples of beached shellsand. The nomenclature follows the Mollusca list in the Ulster Museum and Marine Conservation Society Marine Directory which is the dictionary upon which the marine mollusc database in the Recorder 2002 computer programme is based. (The Society's marine mollusc database has now been converted to Recorder 2002 from RECORDIT). As other participants complete the analysis and identification of their samples. their records will be checked for incorporation into the lists for the dredging trip which will then be added, together with the shore records obtained during the field meeting, to the Society's computer database and those of the Dorset and Devon Wildlife Trusts.



Chapman's Pool, Dorset



Searching the crevice fauna habitat on the upper shore at Chapman's Pool.



Falling tide at Chapman's Pool



Chalk caves supporting *Paludinella littorina*



Finding *Barnea parva* at Golden Cap, Dorset



Scraping epifauna off the dredged cobbles



Discussing the dredged samples



Steve Wilkinson and Lin Baldock guiding the grab

All photos in this article were taken by Ron Boyce, Rosemary Hill and Lin Baldock