

The table to the right shows how many species were recorded in each group and some of the most widely distributed species.

### Sponges

A wide diversity of sponges were recorded. Prominent amongst the larger sponges were the Boring sponge and Elephant hide sponge. A number of rarer sponges were found including the white *Thymosia guernei* (Inner East Rutt), the long orange fingers of *Adreus fascicularis* (Turbot Ground) - below; and the cup shaped *Axinella infundibuliformis* (Hilsea Point and South of Erme Mouth) which is more commonly



sponge, *Adreus fascicularis* CW

| Phylum                            | Common Name                | Number of Species | Common Species   |
|-----------------------------------|----------------------------|-------------------|--|
| Porifera<br><i>johnstonia</i>     | Sponges                    | 38                | Elephant hide sponge <i>Pacymatisma</i>                    |
|                                   |                            |                   | Golf ball sponge <i>Tethya</i>                             |
|                                   |                            |                   | Boring sponge <i>Cliona</i>                                |
|                                   |                            |                   | Yellow branching sponge <i>Axinella</i>                    |
|                                   |                            |                   | Dead men's fingers <i>Alcyonium</i>                        |
| Cnidaria<br><i>digitatum</i>      | Anemones, corals,          | 41                | Sea beard <i>Nemertesia antennina</i> and <i>N. ramosa</i> |
|                                   |                            |                   | Devonshire cup coral <i>Caryophyllia</i>                   |
| Platyhelminthes<br><i>smithii</i> | Flatworms                  | 1                 |  |
|                                   |                            |                   | Segmented worms  |
| Annelida<br><i>volutacornis</i>   | Crabs, lobsters, barnacles | 12                | Spiny spider crab <i>Maja</i>                              |
|                                   |                            |                   | Crustacea<br><i>squinado</i>                               |
| Bryozoa<br><i>diaphanum</i>       | Sea mats                   | 22                | Finger bryozoan <i>Alcyonidium</i>                         |
|                                   |                            |                   | Potato crisp bryozoan <i>Pentapora</i>                     |
| Phoronida<br><i>foliacea</i>      | Horseshoe worms            | 1                 |  |
|                                   |                            |                   | Echinodermata<br><i>caulata</i>                            |

### Bryozoans and Sea slugs

Sea mats were a very important component of the fauna on the offshore sites in particular. Amongst the larger species, colonies of Potato crisp bryozoans were common and smaller species such as *Cellaria* and *Crisia* were common or abundant at many sites.

There were a number of species of sea slug feeding on the bryozoans. *Limacia clavigera* was found on *Flustra foliacea* and *Acanthodoris pilosa* on *Alcyonidium*. Altogether 9 different sea slugs were recorded and



potato crisp bryozoan CW

### Starfish, Sea urchins and Sea cucumbers

All of these echinoderms were regularly reported and the spiny starfish, *Marthasterias glacialis*, was the only species recorded from every site. Three species of burrowing sea cucumbers



overgrown sea fan RH

### Crabs and Lobsters

Crabs and lobster were not common anywhere in the survey area. The spiny spider crab *Maja squinado*, was recorded most often (from 11 sites) but was never more than occasional in occurrence.

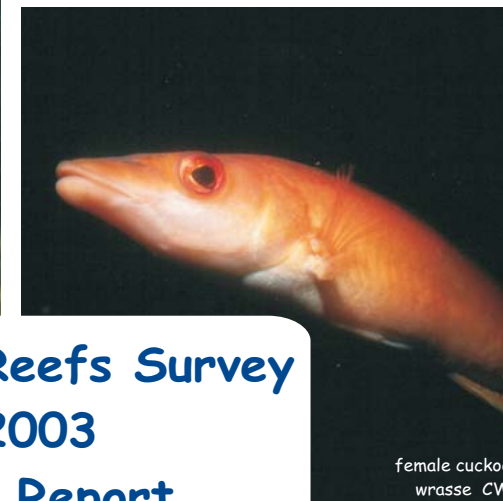
### Fishes

The most common fishes in the study area were wrasses with four species found at most sites (Ballan and Cuckoo wrasse, Rock cook and Goldsinny). Fishes from the cod family were also common with Pollack and Poor cod seen at a number of sites. Bib and Poor cod were abundant on the wreck of the Persier. Amongst the rarer fishes were Ling (Persier), Angler fish

| Nationally Rare and Scarce species                   |             |  |
|--|-------------|--|
| Species  | Designation | Where found                                  |
| Sponge <i>Adreus fascicularis</i>                    | rare        | Turbot Ground. Occasional                    |
| Sponge <i>Thymosia guernei</i>                       | scarce      | Inner East Rutt. Rare                        |
| Sponge <i>potato crisp bryozoan</i>                  | scarce      | S of Erme Mouth, S of Wells                  |
| Rock <i>Axinella damicornis</i>                      | scarce/BAP  | Burgh Island Pinnacle, Rare                  |
| Pink sea fan <i>Eunicella verrucosa</i>              | scarce/BAP  | Most offshore sites. Abundant on the Persier |
| Yellow cluster anemone <i>Parazoanthus axinellae</i> | scarce      | Hilsea Point only                            |
| Trumpet anemone <i>Aiptasia mutabilis</i>            | scarce      | South of Erme Mouth.                         |
| Frequent <i>Sea fan anemone</i>                      | rare/BAP    | Persier only. Rare                           |



diver and sea fan RH



female cuckoo wrasse CW

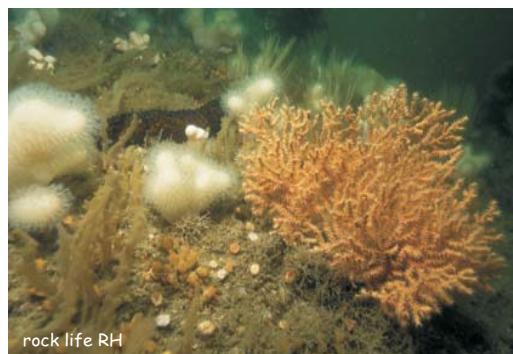
## South Devon Reefs Survey July 2003 Summary Report



thornback ray RH



hydroid, *Gymnangium montagui* CW



rock life RH



football sea squirt CW

This Seasearch survey was organised as a part of the Marine Conservation Society's Member's Dives Programme.

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Seasearch is a volunteer underwater survey project for recreational divers to contribute to the conservation of the marine environment. Financial support for the project during 2003 and for the production of this summary report has been

### Hilsea Point Rock

Hilsea Point is an unusual site in that it has many of the characteristics of the offshore reefs, but yet is very close inshore. The main feature is a deep and wide gully which has a rich animal turf on its sides. A number of unusual species are found here such as the Yellow cluster anemone, *Parazoanthus axinellae*, Red sea fingers, *Alcyonium glomeratum*, and a sea fir, *Gymnangium montagui*. There is a rich kelp forest of Cuvie (Sea kelp) and Furbelows on the top of the pinnacle. Underwater observations at this site began 50 years ago and relatively little has changed.



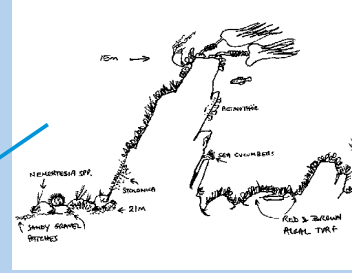
### Erme Mouth

This group of four shallower sites are all off the mouth of the River Erme and relatively close inshore. Site 3 is a rocky site on the west side of what is probably the original river channel. This has the widest diversity of animals recorded at any of the sites. This included 17

species of sponge and a number of species not seen at other sites, including the Trumpet anemone *Aiptasia mutabilis*, which was frequent. Edwards Rock was a plant dominated site where we recorded 35 different algal species, though the animal life was relatively limited.

### Wells Rock

The site at Wells Rock (Site 7) was south of the highest point and consisted of a series of rocky ridges with patches of cobbles, pebbles and coarse sand between them. There was a rich mixed algal and animal turf and



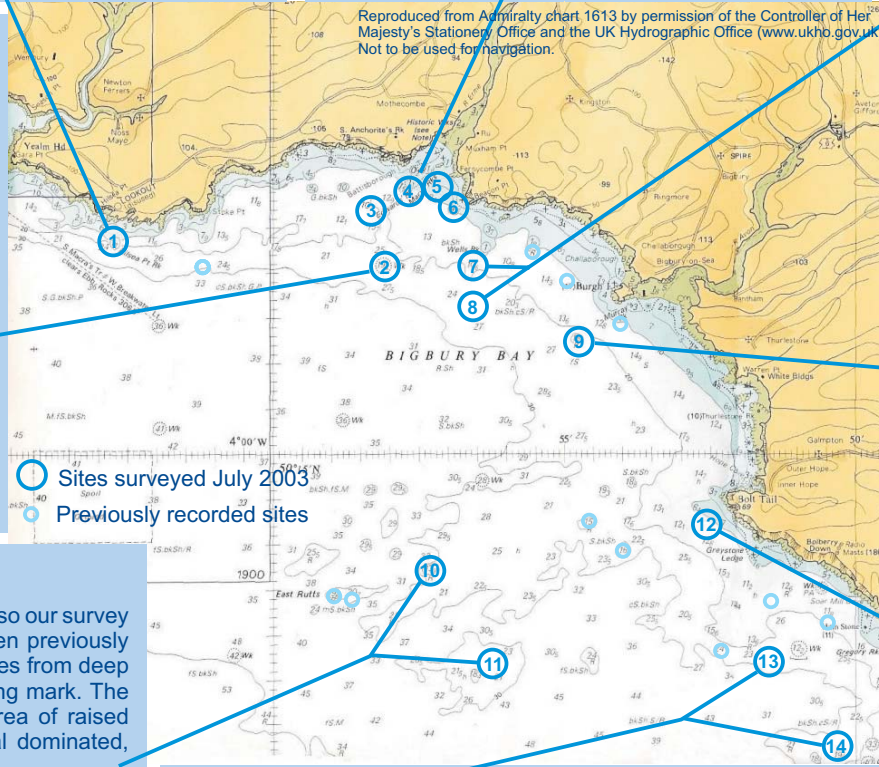
overall this site was the one with the highest diversity (89 species). The site further south (Site 8) was chosen because a survey in 1996 had reported it to have an exceptionally high density of Pink sea fans. Unfortunately that is no longer the case. Whilst there were still many sea fans present, numbers were not unusually high and they were in notably poor condition. Many colonies were extensively fouled or overgrown by bryozoans, ascidians and other animals and some were clearly dying back from the base. Other long lived species, such as the Potato crisp bryozoan, were present and the decline of the sea fans requires further study.

### Wreck of the Persier

The Persier is a cargo vessel sunk in 1945. Today it is mostly low lying metal plates with occasional recognisable pieces of wreckage, such as the boilers.

In terms of marine life it is most notable for the dense 'forest' of Pink sea fans. There are at least 20 colonies per square metre and this is equivalent to the densest sea fan forests found elsewhere. Also present is the very rare Sea fan anemone, *Amphianthus dohrni*.

The wreck has a large fish population, which in numbers of fishes exceeds any of the reef sites in the area, though the diversity is not high. The most common species are Bib or Pouting and Poor cod. Also found are three other members of the cod family, Pollack, Ling and Cod itself.



### East Rutts

The East Rutts pinnacle is a well known site and so our survey looked at two others nearby which had not been previously surveyed. The Inner Rutts pinnacle (Site 10) rises from deep water to 13m and is a known angling and potting mark. The reef to the south-east (Site 11) is a domed area of raised bedrock. Both sites provide fairly open, animal dominated, habitats in clear offshore waters.

The Inner Rutts had the greatest diversity of sponge fauna of any site, including a number of uncommon species such as *Dercitus bucklandi*, *Thymosia guernei* and *Homaxinella subdola*. Other common species, typical of offshore sites, were sea beards *Nemertesia antennina* and *Nemertesia ramosa*, Pink sea fans, the Orange sea squirt *Stolonica socialis* and the Potato crisp bryozoan *Pentapora foliacea*. Also present at the Inner Rutts pinnacle was the Football sea squirt *Diazona violacea*, which is relatively rare in the English Channel (see photo overleaf). There were a few seaweeds on the shallower part of the Inner Rutts but no plants at all on the deeper site to the south east.

### South of Bolt Tail

These two sites are well offshore and surrounded by deep water. Both have stronger tidal streams than sites in Bigbury Bay and both have rich animal turfs. The Turbot Grounds is more varied with both low profile reefs on the boundary of the sand and also huge rocks with

vertical sides and seaweed dominated tops. The animal turf at Site 14 was dominated by hydroids and dead men's fingers. At the Turbot Grounds bryozoans were the dominant group (see pictures right) - the upper one with the sea slug *Crimora papillata* feeding on hornwrack. The most exciting record here was of a sunfish.



### Burgh Island Pinnacle

This is a jagged ridge of rock 4m high of almost vertical rock strata which contains many fissures and crevices. It is surrounded by flattish but equally fissured rock at a depth of 25m.

The top of the pinnacle at 21m is too deep for kelp but there are sparse red algae. However both this and the lower rock surfaces are animal dominated. On the pinnacle itself are many Dead men's fingers, a soft coral,

but the lower flat surfaces are covered in Sea beard, a hydroid, with bright orange Potato crisp bryozoans and sea squirts. There were occasional gullies in the flatter bedrock with flat angular cobbles in their bottoms. As at many sites the most common fishes were wrasses. Here Goldsinny, Rock cook, Ballan wrasse and Cuckoo wrasse were all frequently seen. The fissured bedrock also provided a home for conger eels.

### Bolt Tail

This site was at the edge of the rocky reefs extending out from Bolt Tail where they run into coarse sand at a depth of 17-20m. Shallower surfaces had a covering of kelp forest and there was a band of mixed plant and animal turf below. Upper surfaces in this band were dominated by seaweeds such as the Sea beech *Delessaria*, and brown algae such as *Dictyota*, *Dictyopteria* and *Desmarestia*. Vertical and shaded surfaces had a short animal turf in which bryozoans dominated but the orange sea squirt *Stolonica* was also common. The sand was barren with sand eels.

