

## Plymouth Reefs Weekend - 11<sup>th</sup> 12<sup>th</sup> June 2005

The aim of the weekend was to visit offshore reefs to the south west of Plymouth. A group of ten dived two reefs on the Saturday and a reef and wreck on the Sunday. The three offshore reef sites require calm weather, good visibility, slack water and divers who are good sailors! When those requirements are met, as they were for our trip, stunning diving is to be had.

At all sites some of the group carried out Seasearch surveys whilst others concentrated on sea fan surveys.

### Hand Deepes

This site is about 10 miles offshore, to the northwest of the Eddystone lighthouse.

Hand Deepes is a set of five pinnacles (or fingers, hence the name) rising to within 7m of the surface. The bedrock drops steeply with sheer walls, ledges and gullies to over 50m. In places there are large boulders.



Mixed turf at Hand Deepes.

The tops of the pinnacles are kelp covered and the walls below predominantly

covered in jewel anemones with an abundance of life including other anemones, hydroids, sponges and on the ledges and between boulders frequent sea fans. The fans were generally in good condition. Although an area well fished by sport fishermen and small commercial boats there was little evidence of fishing debris.



Walls covered with jewel anemones.

### Eddystone Reef

With the weather still calm there was the opportunity to dive the Eddystone reef for our second dive. Although slack water is required for most of this area, our skipper was able to drop us out of the current to the west of the lighthouse.

The reef top was at about 14m, kelp covered and then dropped with ledges and walls to below 30m. The walls were well covered in cnidarians and sponges with frequent sea fans. In one area there was an "amphitheatre" containing a small forest of sea fans. The fans were in good condition and little evidence of fishing debris.



Healthy sea fan forest on the Eddystone reef.

### Hatt Rock



Well covered bedrock at Hatt Rock

Hatt Rock lies about 10 miles south of Looe in Cornwall. As it is a two hour run out of Plymouth and needs slack water as well as being relatively deep it is not very often dived. This trip was blessed with flat seas and neap water slack affording the very best conditions. Visibility of 20m helped!

The pinnacle is approximately 600 square metres and rises to within 27m of the surface. The fairly flat top is capped with a kelp park and rich animal turf including sea fans. The reef edge falls in vertical walls with some ledges to below 50m.

The wall covering was predominantly very large jewel anemones with areas of plumose and elegant anemones, hydroids and sponges with *Haliclona viscosa* growing to unusually large specimens on the vertical surfaces. There were also several of the red cushion stars *Porania pulvillus* actively feeding on the many dead men's fingers, *Alcyonium digitatum* on which the false cowrie *Simnia patula* and its eggs were also in evidence.

### James Egan Layne

Although extensively dived there have been no Seasearch survey records from this wreck. The site is well known for its population of sea fans, which grow on the main structure of the wreck and also on smaller pieces of wreckage lying on the seabed a few metres distant. The water at this site is generally less clear than further offshore although on this occasion visibility was up to 10m around the outside of the wreck.



There is always a John Dory there!



Red cushion star *Porania pulvillus*



Anemones and sponge on the J E Layne

### Species summary:

The table shows the number of species recorded at each site from a total of seven forms. As with any diving survey there is a focus on the larger animals and plants that can be identified *in situ*. Cnidaria

Phylum	Common name	Number of species recorded at sites			
		Hand Deep	Eddystone Reef	Hatt Rock	James Egan Layne
Porifera	Sponges	3	6	3	3
Cnidaria	Anemones, corals, hydroids, jellyfish	13	10	13	9
Annelida	Segmented worms		2		2
Crustacea	Crabs, lobsters, barnacles	1	3	1	
Mollusca	Shells, seaslugs, cuttlefish	4	2	2	4
Bryozoa	Sea mats	3	2	1	1
Echinodermata	Starfish, urchins, cucumbers	5	7	6	3
Tunicata	Sea squirts	1			2
Pisces	Fish	6	8	8	13
Algae	Seaweeds	6	5	4	1

(especially anemones), echinodermata and fish are the most easily identified, thus feature prominently. However it would be correct to say that anemones were superabundant on the first three sites and sea fans common on all three sites.

### Sea fan survey summary

Site	Number of fans measured	<i>Tritonia nilsodneri</i>	<i>Amphianthus dohrnii</i>	Condition of fans
Hand Deep	28	none	none	good
Eddystone	24	few	none	good
Hatt Rock	10	few	1	good
James Egan Layne	24	few	none	Average and *
<b>Total</b>	<b>86</b>			

\* some with spindly growth form, die back at base and with fouling of mixed turf or purse sponges.

Surveyors taking part were: Chris Wood, Sally Sharrock, Mary & Roy Restell, Fiona Ravenscroft, Christine Harling and Jane Lilley. Thanks go to Dave Booker (Amoco) for dropping us on such excellent sites. Report and photographs by Sally Sharrock.

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