

Lyme Bay Rocky Reefs - Seasearch Survey Dives 4th May 2014

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Background:

The Lyme Bay reefs are popular targets for recreational divers, recreational anglers, commercial fishing activities and scientific study. Public access to the Maritime and Coastguard Agency (MCA) bathymetric survey data in Lyme Bay has enabled us to augment the DORIS map and plan our Seasearch dives¹ to target *previously unsurveyed* areas of rocky reef within the Lyme Bay and Torbay Special Area of Conservation (SAC) and newly-designated Chesil Beach and Stennis Ledges Marine Conservation Zone (MCZ). The primary aim was to augment existing evidence to support conservation advice via Natural England and Defra to the Southern Inshore Fisheries and Conservation Authority (SIFCA) who manage activities within the area. With this in mind, and following on from the historically severe storms during the winter 2013-2014, Dorset Wildlife Trust subsidised a boat charter from West Bay with two specific objectives: to survey reef features in the north-western part of the MCZ for which there are no previous records (indicated by a star symbol on the map below), and to look for winter damage (washed-out, normally attached marine life (sea fans and branching sponges or sediment-burrowing species), over-turned boulders *etc.*) on an unsurveyed reef within the closed area (indicated by a diamond symbol on the map), and the aforementioned MCZ reef.

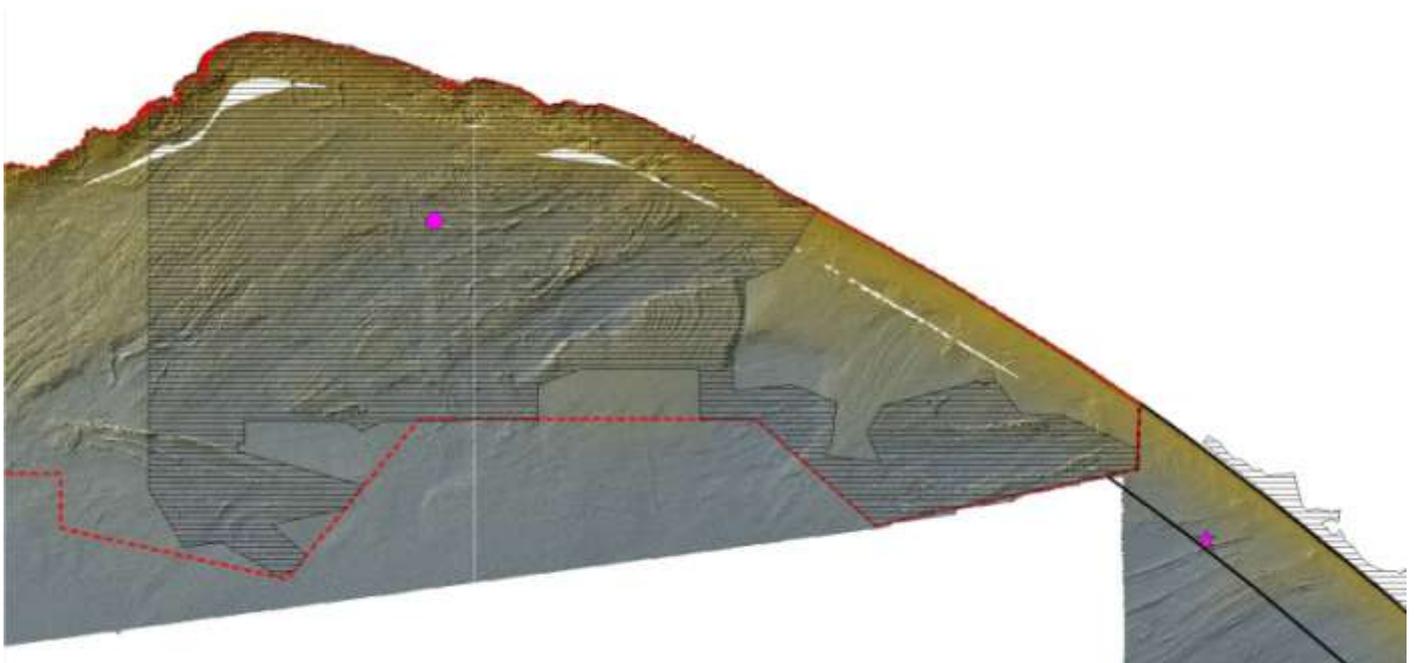


FIGURE 1: Bathymetric map of Lyme Bay, showing the Lyme Bay Special Area of Conservation (SAC) outlined in red, the Chesil Beach & Stennis Ledges Marine Conservation Zone (MCZ) outlined in black, and the two dive sites (purple symbols). The hatching within the SAC indicates the area closed to bottom-towed fishing gear under the SIFCA byelaw introduced at the beginning of 2014².

¹ http://www.dorsetwildlifetrust.org.uk/dorset_seasearch.html

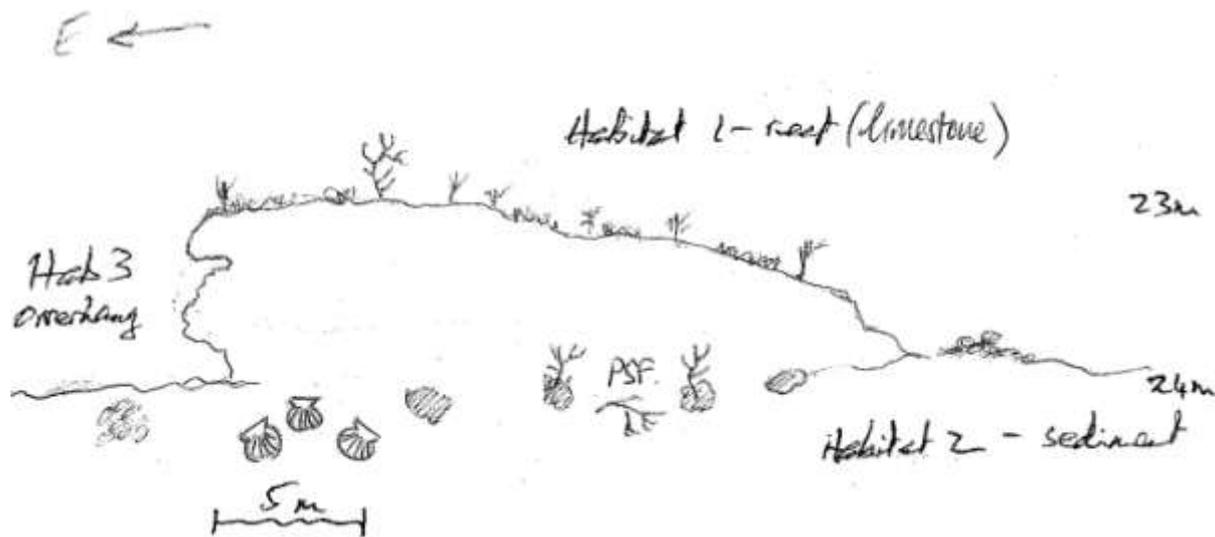
² See <http://www.southern-ifca.gov.uk/wp-content/uploads/2014/01/BYELAW-Bottom-Towed-Fishing-Gear-Byelaw-For-Website.pdf> for more information.

Dive 1

Site: Try Reef, Lyme Bay SAC

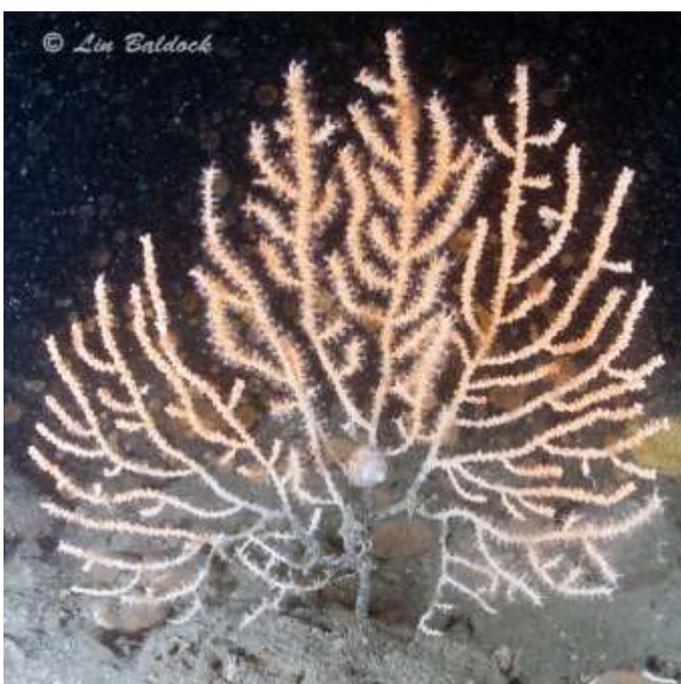
Position (WGS84): 50° 41.560'N 002° 50.979'W

Depth (relative to chart datum): -21m to -22m



Low-lying reef of pitted limestone with overhangs interspersed with areas of mixed muddy sediment with cobbles and small boulders. The reef supported a diverse epifauna dominated by tunicate and hydroid turf and erect sponges; towards the eastern end, the rock was undercut with a different biological community (mostly encrusting sponges, with occasional *Caryophyllia inornata*) on the overhangs. The surrounding seabed was fairly level sediment scattered with scallop (*Pecten maximus*) shells and detached/damaged sea fans (*Eunicella verrucosa*). The latter were recorded as frequent at this site, including unbranched specimens (4-5cm high), with many buried in soft silty sediment, showing loss of living tissue at the base of the stem (presumably scoured back to the skeleton by the action of sediment over the winter) or detached completely.

Plate 1 contains a selection of images showing sea fans in various states of damage or disrepair:



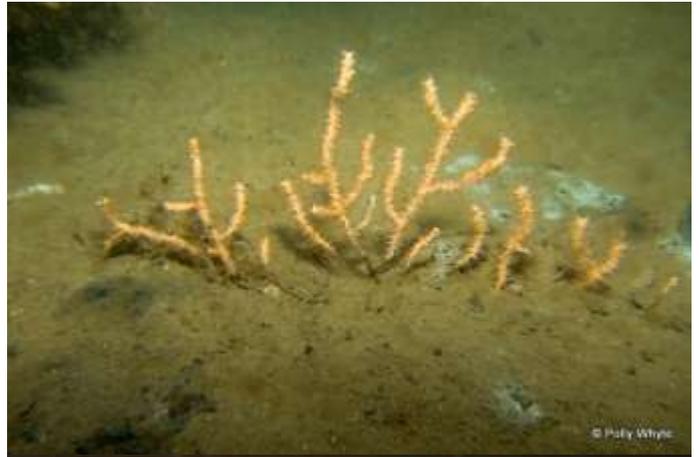


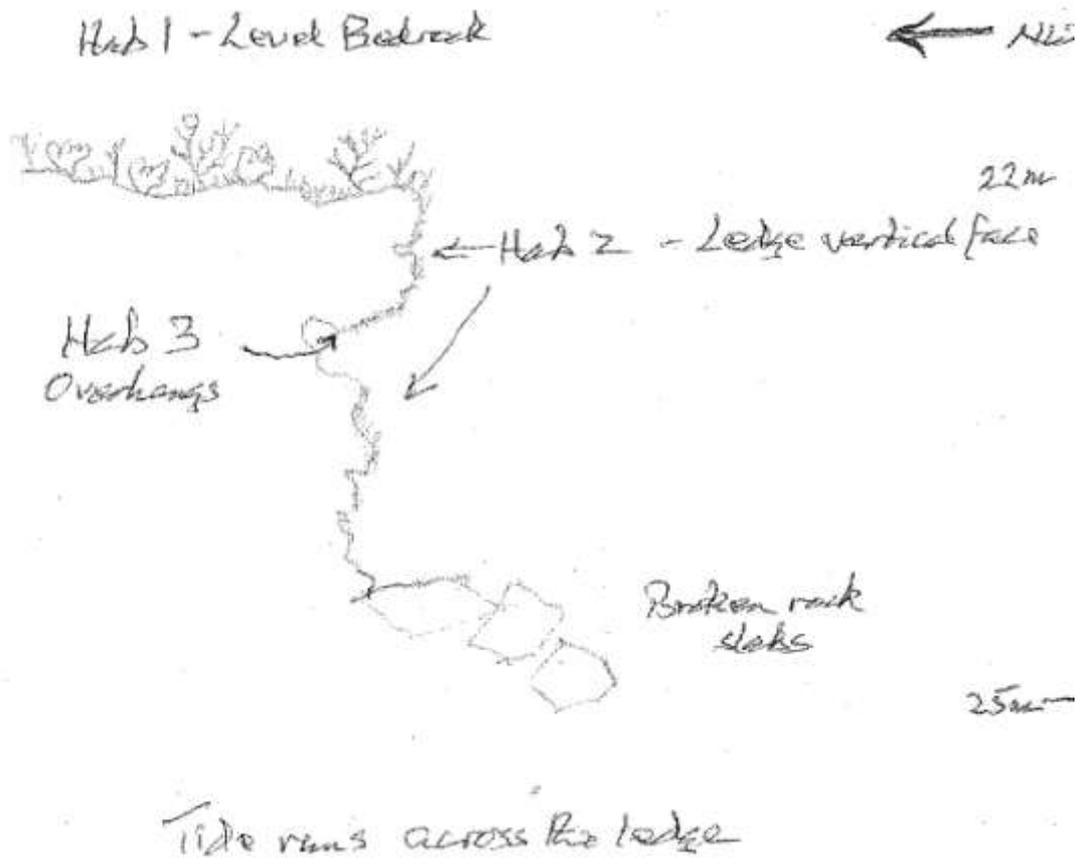
PLATE 1: Images of damaged sea fans (*Eunicella verrucosa*) on Try Reef

Dive 2

Site: Slim's Ledge, Chesil Beach & Stennis Ledges MCZ

Position (WGS84): 50° 37.441'N 002° 35.434'W

Depth (relative to chart datum): -21m to -23.5m



Vertical 2m-high reef wall of horizontally-layered, fissured and pitted bedrock, with a level 'top' and broken rock slabs at the base of the wall. Overhangs contained common *Caryophyllia inornata* (a nationally rare species) and occasional *Corynactis viridis* (jewel anemones), with encrusting sponges and bryozoa, whilst the top of the reef was dominated by *Alcyonium digitatum* (dead man's fingers) and erect sponges with some seafans; the latter were generally much sturdier and healthy in appearance (see Plate 2) than those at Try Reef, despite there being evidence of potting in the vicinity and some damage attributed to winter storms (see Plate 3). The overall impression was of a reef in much better condition than that dived in the morning.



PLATE 2: Healthy sea fans (*Eunicella verrucosa*) at Slim's Ledge (within the Chesil Beach & Stennis Ledges MCZ)



PLATE 3: Some sea fan damage seen at Slim’s Ledge (albeit to a far lesser extent than at Try Reef)

Acknowledgements

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Seasearch is a partnership between the Marine Conservation Society (MCS), The Wildlife Trusts, statutory nature conservation bodies and others, co-ordinated nationally by MCS and co-ordinated and delivered locally in England by Wildlife Trust and MCS local co-ordinators. For more information on Seasearch and to see all of the partners involved nationally, please visit www.seasearch.org.uk or email info@seasearch.org.uk

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