

# **Poole Rocks MCZ**

# **Seasearch Site Surveys 2015**

This report summarises the results of surveys carried out during 2015 by Seasearch divers in the Poole Rocks MCZ (designated in November 2013<sup>1</sup>). The aim of the surveys was to continue to add detail of the habitats and species found within the area. Particular attention was paid to the Habitat and Species FOCl<sup>2</sup> identified in the Ecological Guidance on the designation of MCZs<sup>3</sup>, and to surveying undived sites within the area. Bad weather (high winds) prevented us from diving this area with our usual frequency and unfortunately only one dive took place in this MCZ in 2015.

## **Physical Features of the Area**

The Poole Rocks MCZ site is an inshore site of *ca*. 4km<sup>2</sup> lying just to the east of the entrance to Poole Harbour (image below taken from jncc.defra.gov.uk/mczmap):



The site consists of several small patches of reef (exposed rugged ferruginous (iron-rich) sandstone bedrock surrounded by medium to large boulders) at depths of 6-11m bcd (below chart datum), rising to a height of 1-5m above the surrounding seabed of mixed sediment with cobbles and *Crepidula* beds. Unsurprisingly in sediment-dominated Poole Bay, the whole area is overlaid with a layer of silt which creates circalittoral conditions at infralittoral depths – there is a notable absence of kelp. After the storms of winter 2013/2014 the silting was noticeably heavier than usual; this situation seemed to have improved in 2015 with the reefs appearing more

<sup>&</sup>lt;sup>1</sup> http://www.legislation.gov.uk/ukmo/2013/18/pdfs/ukmo\_20130018\_en.pdf

<sup>&</sup>lt;sup>2</sup> http://jncc.defra.gov.uk/page-4527

<sup>&</sup>lt;sup>3</sup> http://jncc.defra.gov.uk/PDF/100705\_ENG\_v10.pdf

'normal' as the silt consolidates. There are many overhangs and deep crevices in and around the boulders, providing cover for crustaceans and the large shoals of fish in the area.

## **Features of the Marine Life**

The rocks are densely covered with short animal turf (dominated by encrusting and cushion sponges, foliose and twiggy bryozoans and hydroids) and foliose and filamentous red algae. Uncommon and/or protected species such as the native oyster (*Ostrea edulis*) and Couch's goby (*Gobius couchi*) are regularly reported within this area, albeit in small numbers, whilst solitary pink seafans (*Eunicella verrucosa*) have been recorded at similar habitats in Poole Bay. This is the easternmost reported occurrence of seafans, as relatively large mature individuals with little evidence of expansion as seen further west in Dorset. Large shoals of fish (usually bib, *Trisopterus luscus*, and pollack, *Pollachius pollachius*) are observed in the vicinity of the reefs, and various wrasse species (including Baillon's wrasse, *Symphodus bailloni*, a Lusitanean species that is now established in Dorset) build nests amongst the rocks. The seabed surrounding the patch reefs is comprised of soft, silty sediment usually covered to a greater or lesser degree by *Crepidula fornicata* beds of both live stacks of animals and dead/empty shells. Black bream<sup>4</sup> (*Spondyliosoma cantharus*) nests – areas of bedrock swept clean of the overlying silt, shells and gravel - are also frequently seen during the breeding season (generally April-May but temperature-dependent) just off the patch reefs.

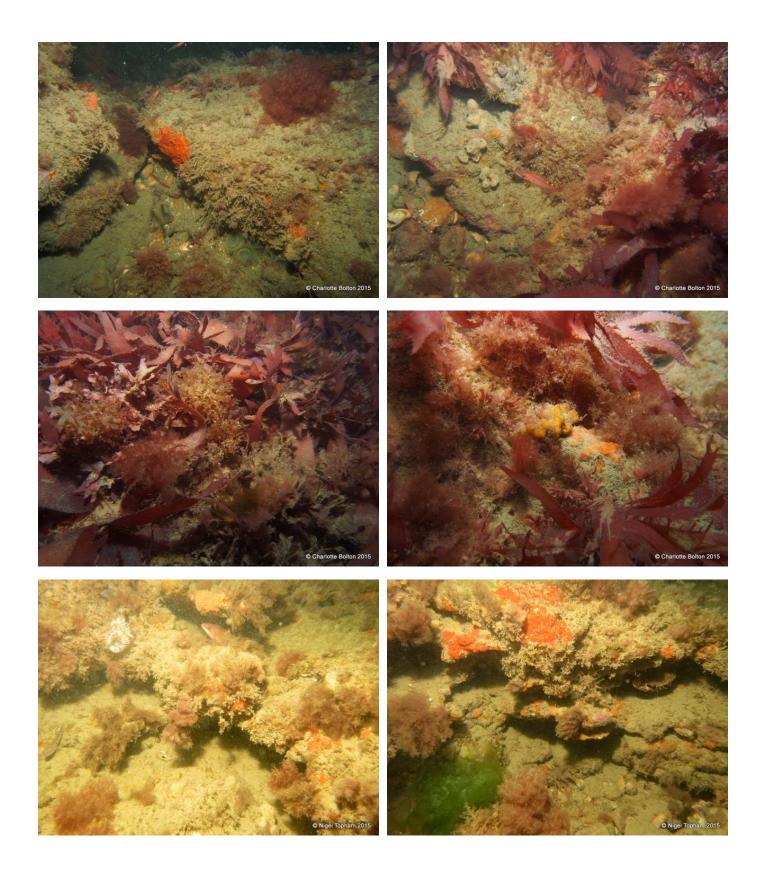
The biotope assigned to the patch reefs is IR.MIR.KR.XFoR ("Dense foliose red seaweeds on silty moderately exposed infralittoral rock") which is described as follows:

"Upward-facing surfaces of shallow, infralittoral bedrock and boulders in areas of turbid water dominated by dense red seaweeds, with the notable absence of kelp. The stable rock, which can be cobbles or boulders but is more typically bedrock, is usually silted. Individual species of foliose red seaweeds such as *Plocamium cartilagineum* or *Calliblepharis ciliata* often dominate. Other red seaweeds likely to be present include *Phyllophora crispa*, *Rhodymenia* holmesii, Halurus flosculosus, Cryptopleura ramosa, Hypoglossum hypoglossoides, Heterosiphonia *plumosa* and coralline crusts. The brown seaweed *Dictyota* dichotoma is sometimes present, although never abundant. This biotope does not generally occur below kelp park but rather occurs on shallow, silted rock on which kelp would normally grow in less turbid conditions. The fauna can be variable but is generally typified by the presence of silt-tolerant animals such as encrusting sponges, particularly *Dysidea* fragilis and Halichondria panicea, the hydroid *Tubularia indivisa*, bryozoan crusts and scattered *Sabellaria spinulosa* and *Balanus crenatus.*"

The habitat photos below show typical examples of this biotope in the Poole Rocks MCZ:



<sup>&</sup>lt;sup>4</sup> https://secure.toolkitfiles.co.uk/clients/25364/sitedata/files/Black\_Bream\_Report.pdf (Southern IFCA)

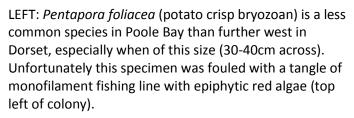


Note that the draft conservation advice<sup>5</sup> for the Poole Rocks MCZ alludes to "moderate energy **circalittoral** rock" (to maintain in favourable condition) under the broad-scale habitats<sup>6</sup> specified in the original designation order.

<sup>&</sup>lt;sup>5</sup> https://www.gov.uk/government/publications/conservation-advice-for-marine-conservation-zone-poole-rocks-fs14/poole-rocks-mcz-site-information-draft

<sup>&</sup>lt;sup>6</sup> http://jncc.defra.gov.uk/page-4527





BELOW RIGHT: A cast shell of a squat lobster tentatively identified as *Galathea strigosa* (the beautiful blue-striped one).

BELOW LEFT: A well-disguised *Maja squinado* – decorated with red weed and sponges to blend in with the reef.





ABOVE: The non-native tunicate *Styela clava* (leathery sea squirt) is now regularly recorded across Dorset. It is not always as visible as in this instance, generally sporting a thick covering of other squirts, hydroids *etc.* 



ABOVE: The brown algae *Sporochnus pedunculatus* was recorded on the reef – this photo really illustrates the 'common' name of woolly seed weed...

## **Human Uses**

Potting and intensive angling activities are attracted by the fish and crustacean populations; impacts in the form of lost fishing equipment (monofilament line, hooks, rope, pots), ground tackle and other litter are often seen at this site. Potting accounted for 11% of the commercial activity (measured by gear type in Poole in 2012<sup>7</sup>; 4<sup>th</sup> most popular after gillnets (28%), beam trawls (19%) and otter trawls (16%)), while whelks, crabs and lobster were in the top three species landed (measured by weight and/or value). Whilst it is harder to extract local figures for recreational angling, the Sea Angling Report 2012<sup>8</sup> estimated that nationally there are almost 1 million people regularly engaged in this activity.

## **Benefits of Protection**

The rocky reef habitat is characterised by high species diversity. Local potting and angling activities would both indirectly benefit from an increased population of fish and crustaceans in this area. Southern IFCA byelaws<sup>9</sup> and other management measures such as minimum landing sizes afford a certain amount of protection but the Poole Rocks MCZ is not closed to bottom-towed gear at present.

## Acknowledgements

This report has been compiled by Charlotte Bolton (Dorset Seasearch Co-ordinator supported by Dorset Wildlife Trust) based on Seasearch survey records made by Lin Baldock, Charlotte Bolton, Josie Pegg and Nigel Topham. Photos as credited; copyright is retained by the photographers. Seasearch would like to thank the volunteer divers for their records and also Mike Markey of Poole Diving www.poolediving.co.uk) for taking us to the site.

Report published by Dorset Wildlife Trust (www.dorsetwildlifetrust.org.uk) for Seasearch (www.seasearch.org.uk).

<sup>&</sup>lt;sup>7</sup> https://secure.toolkitfiles.co.uk/clients/25364/sitedata/files/Fisheries\_Report.pdf (Southern IFCA, winter 2013). Full details on all UK fisheries statistics can be found at https://www.gov.uk/government/statistical-data-sets/uk-sea-fisheries-annual-statistics-2012.

<sup>&</sup>lt;sup>8</sup> http://webarchive.nationalarchives.gov.uk/20140108121958/http://www.marinemanagement.org.uk/seaangling/index.htm (archived content)

<sup>&</sup>lt;sup>9</sup> http://www.southern-ifca.gov.uk/byelaws

## **Technical Appendix**

This Appendix contains more detailed information about **Designated features and management approach:** the surveys undertaken and records made. It includes:

- dive details
- habitat sketches
- biotope list
- species list

The data have been validated, verified and entered into the Marine Recorder database by Charlotte Bolton. A copy of the data in Snapshot format is available on request, or it can be viewed on the NBN Gateway Interactive Map Tool (https://data.nbn.org.uk/imt/).

#### MR Survey Name:

"2015 Seasearch Survey of Poole Rocks MCZ" MR Survey Key: MRLRC015000000C

#### **Dive details**

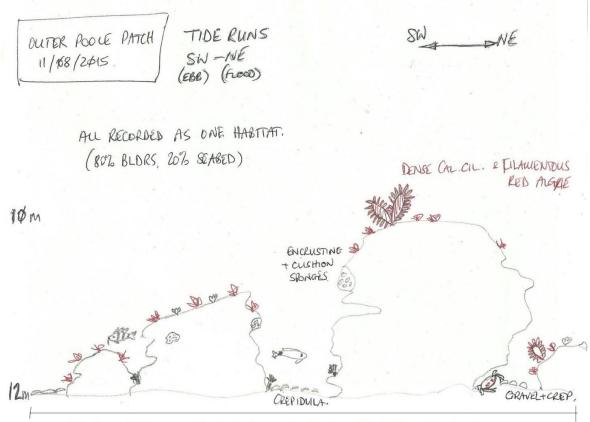
Broad Scale Habitats: Subtidal mixed sediments (maintain in favourable condition); moderate energy circalittoral rock (maintain).

Species FOCI: Native oyster, Ostrea edulis (SOCI\_22; recover to favourable condition); Couch's goby, Gobius couchi (SOCI\_12; recover).

Date	Site/Position (WGS84)	Surveyor(s)	Form(s)
11/8/2015	Outer Poole Patch 50° 41.406'N 001° 52.658'W	Lin Baldock, Charlotte Bolton, Josie Pegg, Nigel Topham	DT15/067

#### Habitat sketches

1. Outer Poole Patch (Charlotte Bolton; DT15/067) (N.B. Depths shown on the sketch are bsl – below sea level - not corrected to Chart Datum).



ca. 10m (moved ~50m over entire 60min dive, moving into last of flood tide to edge of reef

Description	MNCR 15.03 Biotope Code <sup>+</sup>
Dense foliose red seaweeds on silty moderately exposed	IR.MIR.KR.XFoR
infralittoral rock	

<sup>+</sup> The Marine Habitat Classification for Britain & Ireland (v15.03): <u>incc.defra.gov.uk/marinehabitatclassification</u>

#### **Species List**

No. of unique taxa recorded = 66

#### 1. Porifera (sponges)

Scientific name	Common name	Notes
Amphilectus fucorum	Shredded carrot sponge	
Dysidea fragilis	Goosebump sponge	
Hemimycale columella	Crater sponge	
Hymeniacidon perlevis		
Pachymatisma johnstonia	Elephant hide sponge	
Porifera indet. crusts	Encrusting sponges	
Stelligera rigida		

### 2. Cnidaria (anemones, hydroids, corals)

Scientific name	Common name	Notes
Caryophyllia inornata	Southern cup coral	
Caryophyllia smithii	Devonshire cup coral	
Sarcodictyon sp.		
Sertulariidae		

#### 3. Annelida (segmented worms)

Scientific name	Common name	Notes
Bispira volutacornis	Double spiral worm	
Serpulidae		

#### 4. Crustacea (crabs, lobsters, barnacles)

Scientific name	Common name	Notes
Cancer pagurus	Edible, brown crab	
Galathea ?strigosa (cast shell)	Blue striped squat lobster	
Homarus gammarus	European lobster	
Maja squinado	Spiny spider crab	
Necora puber	Velvet swimming crab	

#### 5. Mollusca (snails, bivalves, nudibranchs)

Scientific name	Common name	Notes
Anomiidae	Saddle oysters	
Buccinum undatum	Edible whelk, buckie	
Crepidula fornicata	Slipper limpet	Non-native species
?Doris pseudoargus (eggs)	Sea lemon (eggs)	
Facelina auriculata		
Flabellina pedata	Violet sea slug	
Gibbula cineraria	Grey topshell	
Nassarius reticulatus	Netted dog whelk	
Ostrea edulis	Native/European oyster	OSPAR / Biodiversity Action Plan

Scientific name	Common name	Notes
		(BAP) / FOCI species
Tritonia lineata		
Veneroidea (indet.)		

## 6. Bryozoa (sea mats)

Scientific name	Common name	Notes
Bryozoa indet. crusts	Encrusting bryozoans	
Chartella papyracea		
Disporella hispida		
Electra pilosa	Frosty sea mat	
Flustra foliacea	Hornwrack	Indicator species
Pentapora foliacea	Ross coral, potato crisp bryozoan	

## 7. Tunicata (sea squirts)

Scientific name	Common name	Notes
Ascidia mentula	Red sea squirt	
Clavelina lepadiformis	Lightbulb sea squirt	
Styela clava	Leathery sea squirt	Non-native species

## 8. Pisces (fish)

Scientific name	Common name	Notes
Callionymus reticulatus	Reticulated dragonet	
Ctenolabrus rupestris	Goldsinny	
Gobius niger	Black goby	
Labrus bergylta	Ballan wrasse	
Labrus mixtus	Cuckoo wrasse	
Parablennius gattorugine	Tompot blenny	
Pollachius pollachius	Pollack	
Sympodus melops	Corkwing wrasse	
Thorogobius ephippiatus	Leopard spotted goby	
Trisopterus luscus	Bib, pout, pouting	

## 9. Algae (seaweeds)

Scientific name	Common name	Notes
Desmarestia sp.	Desmarest's weeds	
Dictyopteris polypodioides	Netted wing weed	
Sporochnus pedunculatus	Woolly seed weed	
Chlorophyta	Green algae	
Ulva lactuca	Sea lettuce	
Aglaothamnion tenuissimum		
Bonnemaisonia hamifera (Trailliella	Bonnemaison's hook weed	Non nativo species
phase)		Non-native species
Brongniartella byssoides	Brongniarts's thread weed	
Calliblepharis ciliata	Beautiful eyelash, red fringed weed	
Chondria dasyphylla	Diamond cartilage weed	
Corallinaceae (crusts)	Coralline algae	
Cryptopleura ramosa	Fine-veined crinkle weed	
Drachiella heterocarpa	Callused Drachiella	
Plocamium sp.		
Rhodophyllis divaricata	Leafy rose weed	

Scientific name	Common name	Notes
Spondylothamnion multifidum	Whorled bush weed	

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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 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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