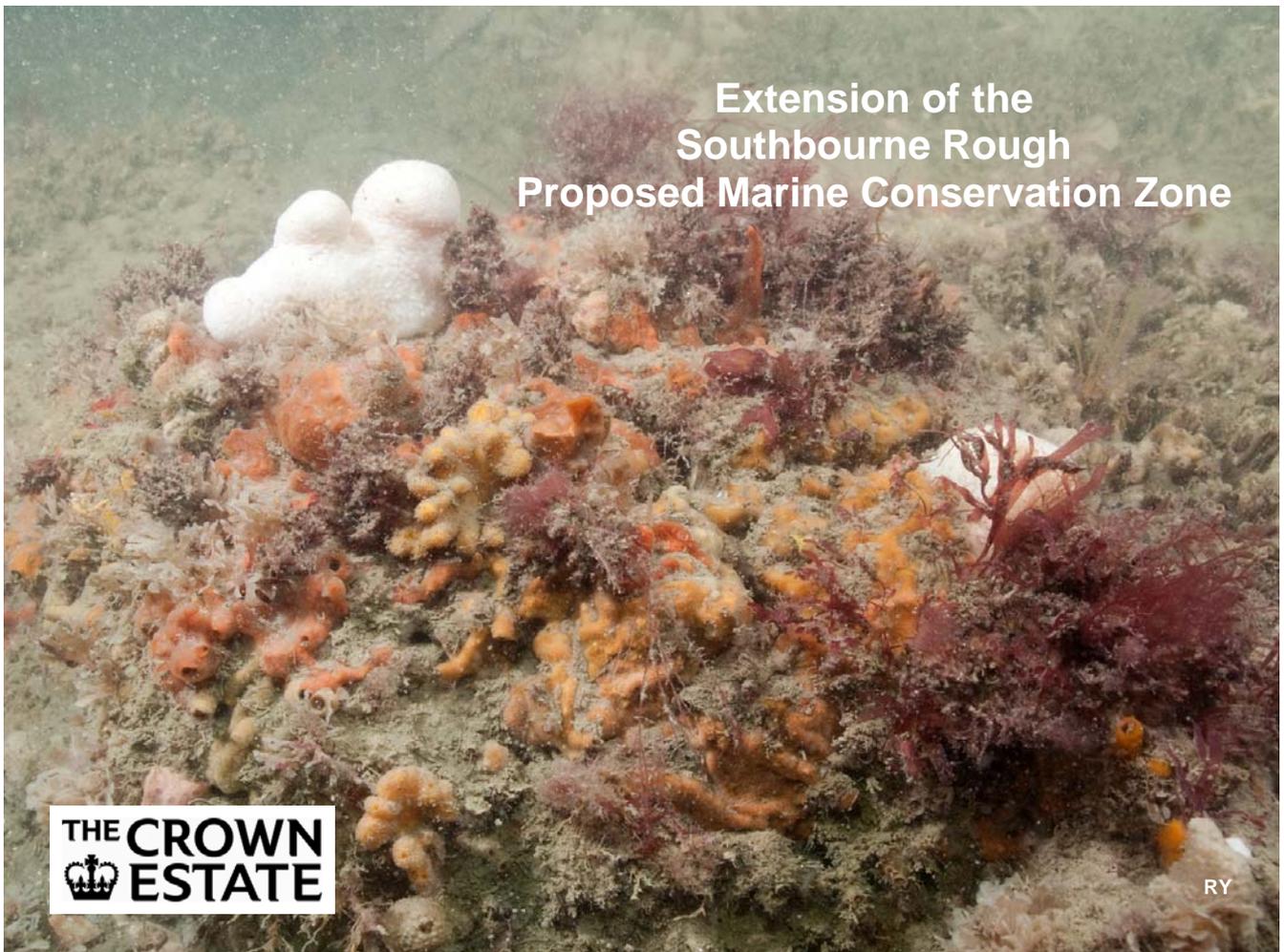


Extension of the Southbourne Rough Proposed Marine Conservation Zone

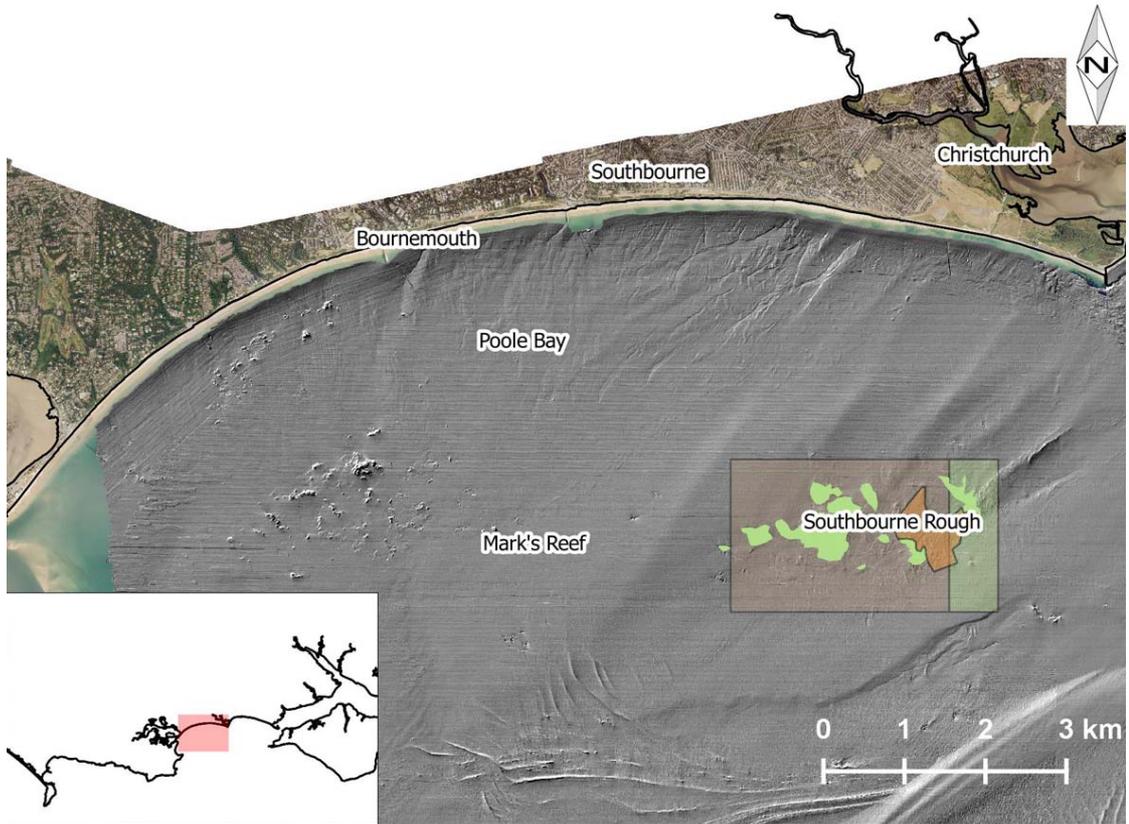


Southbourne Rough has been proposed as a Marine Conservation Zone (rMCZ) as part of Tranche 3 of the designation round. The sites and features to be selected were determined by a gap analysis of the marine protected area (MPA) network and included new sites as well as mobile species. Natural England presented the proposals for this rMCZ to local stakeholder groups in March 2017. Southbourne Rough in Poole Bay, Dorset with an area of about 0.6km² was proposed for the benefit of mobile species: specifically Black Bream (*Spondyllosoma cantharus*) which are known to nest on the moderate energy circalittoral bedrock reefs in the area.

Review of bathymetric data collected by the MCA for Poole Bay (2011 and 2012) indicates low lying rocky outcrops within the rMCZ boundary comprising an area of about 0.6km² at a depth of 11-14m below chart datum (bcd) (Figs 1 & 2). Our proposal is that these reefs should also be designated for circalittoral moderate energy rock and we suggest that this broadscale habitat should be included as a designated feature of the rMCZ. In addition there are more reefs indicated to the east (0.08km²) which should be included within the rMCZ requiring an eastward extension of the boundary by about 600m.

A dive arranged by Dorset Seasearch targeted a site on the reefs within the rMCZ in July 2017. Several other locations have been surveyed previously by Seasearch divers over a period of years (1995-2015). This report summarises the findings of the 2017 dive and based on this information together with historical data we recommend that reef features are included among the designated features of the rMCZ.





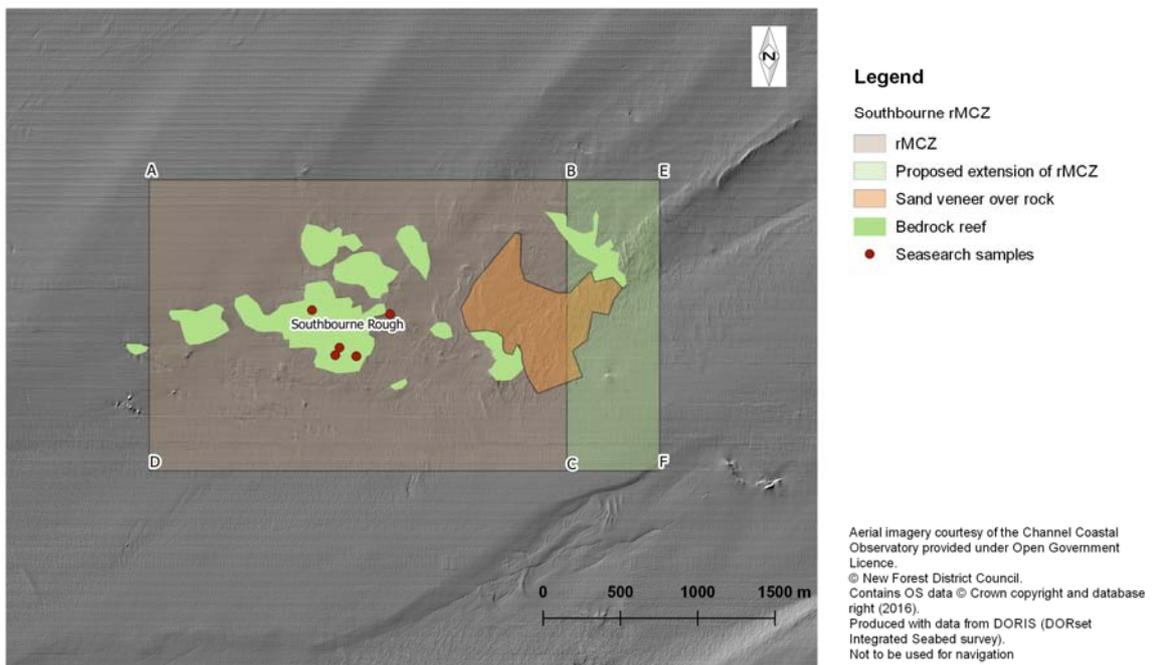
Legend

Southbourne rMCZ

- Sand veneer over bedrock
- pMCZ
- pMCZ Extension
- High Water Mark

Aerial imagery courtesy of the Channel Coastal Observatory provided under the Open Government Licence. © New Forest District Council. Contains OS data © Crown copyright and database right (2016). Produced data from DORIS (DORset Integrated Seabed survey). Not to be used for navigation

Figure 1
Location of Southbourne Rough rMCZ within in Poole Bay, Dorset



Legend

- Southbourne rMCZ
- rMCZ
- Proposed extension of rMCZ
- Sand veneer over rock
- Bedrock reef
- Seasearch samples

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Figure 2
Southbourne Rough rMCZ – detail of study location

The dive at Southbourne Rough was organised as part of the Dorset Seasearch project and took place on 29th July 2017. The reef comprised heavily silted, flat bedrock reef with rugged overhangs in places and deep fissures between the outcrops of rock. The reef fauna was dominated by a dense crust of the Ross Worm (*Sabellaria spinulosa*), with patches of foliose bryozoa (*Flustra foliacea* and *Chartella papyracea*). Other fauna was varied including a variety of sponge crusts as well as cushion forming sponge species such as *Dysidea fragilis*, *Tethya citrina* and *Hymeniacidon perlevis* together with branching forms such as *Stelligera rigida* and *Raspailia ramosa*. Large colonies of Dead Mens' Fingers (*Alcyonium digitatum*) were frequent together with a range of hydroids and occasional anemones.

The native oyster (*Ostrea edulis*) was recorded and two non-native species were present: the Leathery Sea Squirt (*Styela clava*) and the Slipper Limpet (*Crepidula fornicata*).

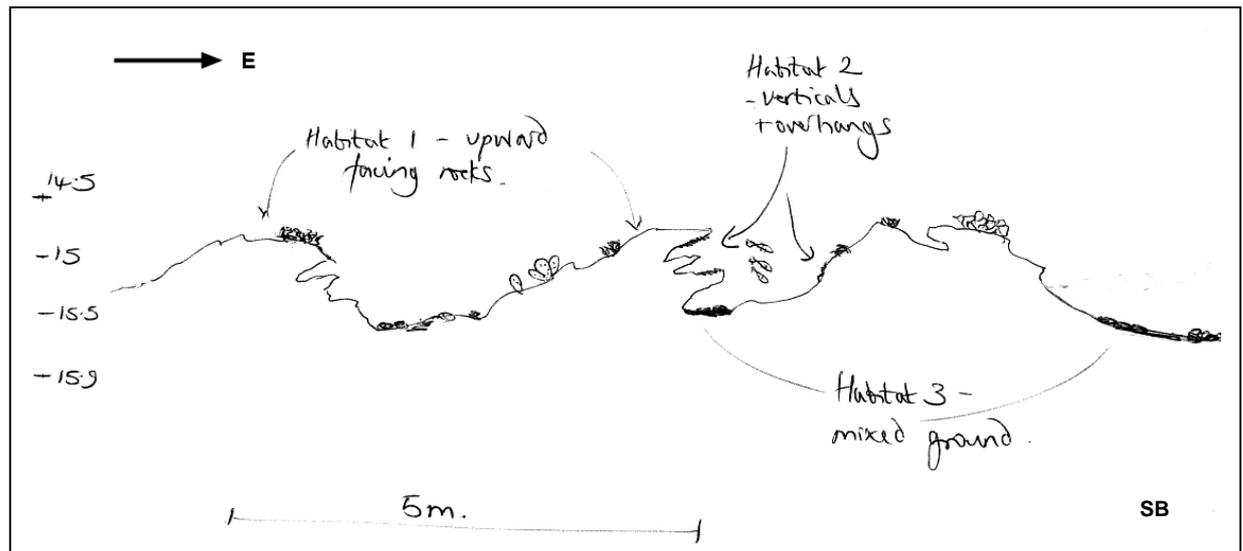


Figure 3 Southbourne Rough – reef profile east from the shot

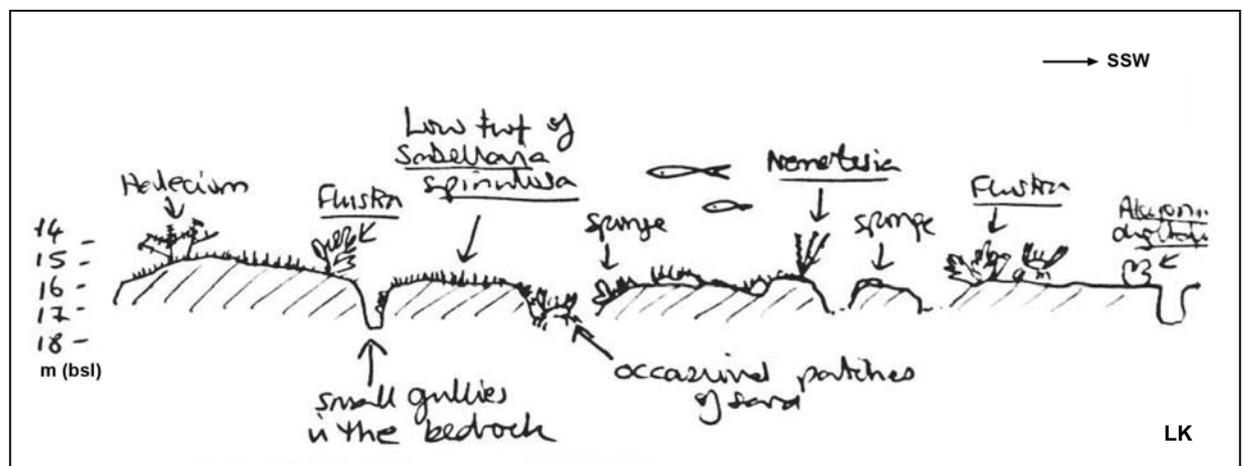


Figure 4 Southbourne Rough – reef profile south southwest from the shot

As Figs 3-5 show the aspect of the reef was variable with more rugged terrain with deep overhangs east from the shot location while to the southwest and south the reef was much flatter with narrow fissures and areas of coarser sediment between the reef outcrops. The seabed surrounding the reef was predominantly muddy sand.

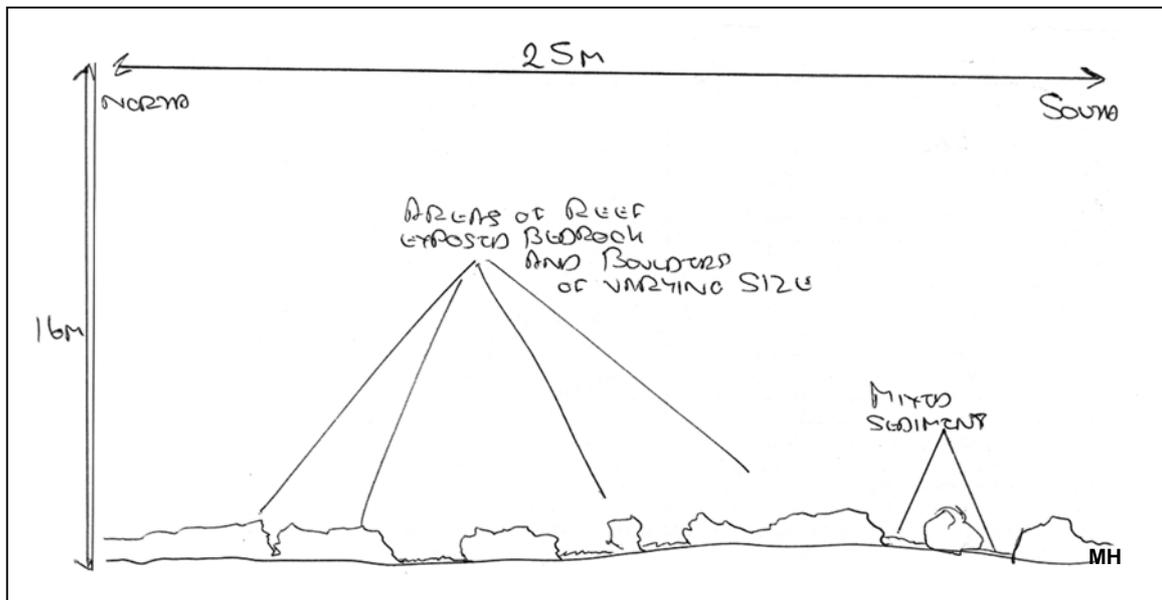


Figure 5 Southbourne Rough – reef profile south from the shot

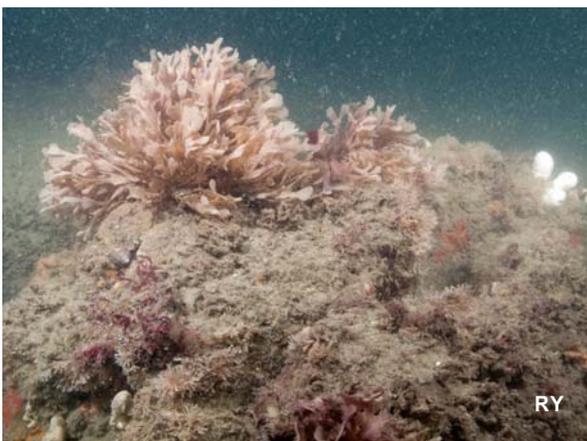


RY



DK

Left: Ross worm crust (*Sabellaria spinulosa*). **Right:** Detail of Ross worm crust



RY



RY

Left: Hornwrack (*Flustra foliacea*). **Right:** Miscellaneous colourful sponge crusts

This survey of one the Southbourne Rough patch reefs recorded the following biotopes present over an area greater than 25m².

Circalittoral Rock

CR.HCR.XFa Mixed faunal turf communities

CR.MCR.CSab.Sspi.ByB *Sabellaria spinulosa* with a bryozoan turf and barnacles on silty turbid circalittoral rock

Circalittoral sediment

SS.SSA.CMuSa Circalittoral muddy sand

SS.SMx.CMx Circalittoral mixed sediment

Conclusions

We consider that the rocky reef system known as Southbourne Rough should be designated for moderate energy circalittoral rock broadscale habitat in addition to the highly mobile species (Black Bream) already put forward as a designated feature of the rMCZ. Additionally we recommend that the boundary of the rMCZ should be extended east by about 600m to include other reefs likely to support similar habitats. The coordinates for this extension are points E and F in the table below and are shown in Figure 2.

Point	Latitude (WGS84)	Longitude (WGS84)
B	50° 41.486'N	001° 46.576'W
C	50° 40.461'N	001° 46.581'W
E	50° 41.485'N	001° 46.066'W
F	50° 40.460'N	001° 46.071'W

We recommend that these reefs are included as a designated feature of the Southbourne Rough rMCZ as Moderate Energy Circalittoral Rock (EUNIS code: A4.2). We also advocate extending the boundary of the rMCZ some 600m to the east to include additional reef features.

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 the partners involved nationally, please visit www.seasearch.org.uk

