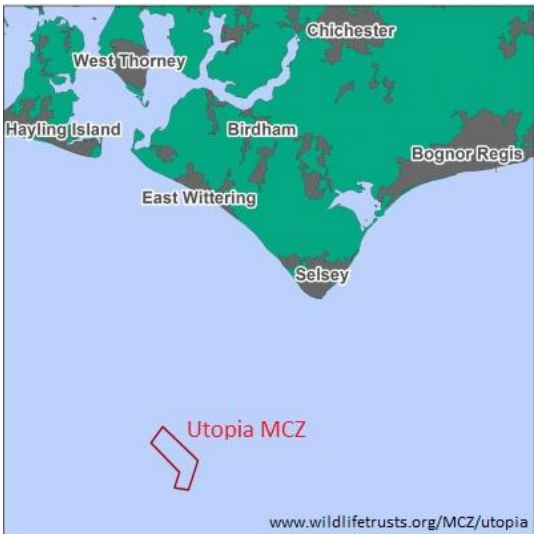
Utopia MCZ

Seasearch Site Surveys 2017

This report summarises the results of surveys carried out during 2017 by Seasearch divers in the Utopia Marine Conservation Zone (MCZ) which was designated in January 2016. The aim of the surveys was to continue to add detailed records of the habitats and species found within the area. Particular attention was paid to the Habitat and Species FOCI identified in the Ecological Guidance on the designation of MCZs[1] and subsequently reviewed by JNCC and Natural England at the request of Defra in 2014[2] [3].



The site is located in the East Solent within the area managed by the Sussex Inshore Fisheries and Conservation Authority (Sussex IFCA) who (at the time of writing) are consulting on its management; Seasearch data will inform that process now and on an ongoing basis.

Physical Features of the Area and Associated Marine Life

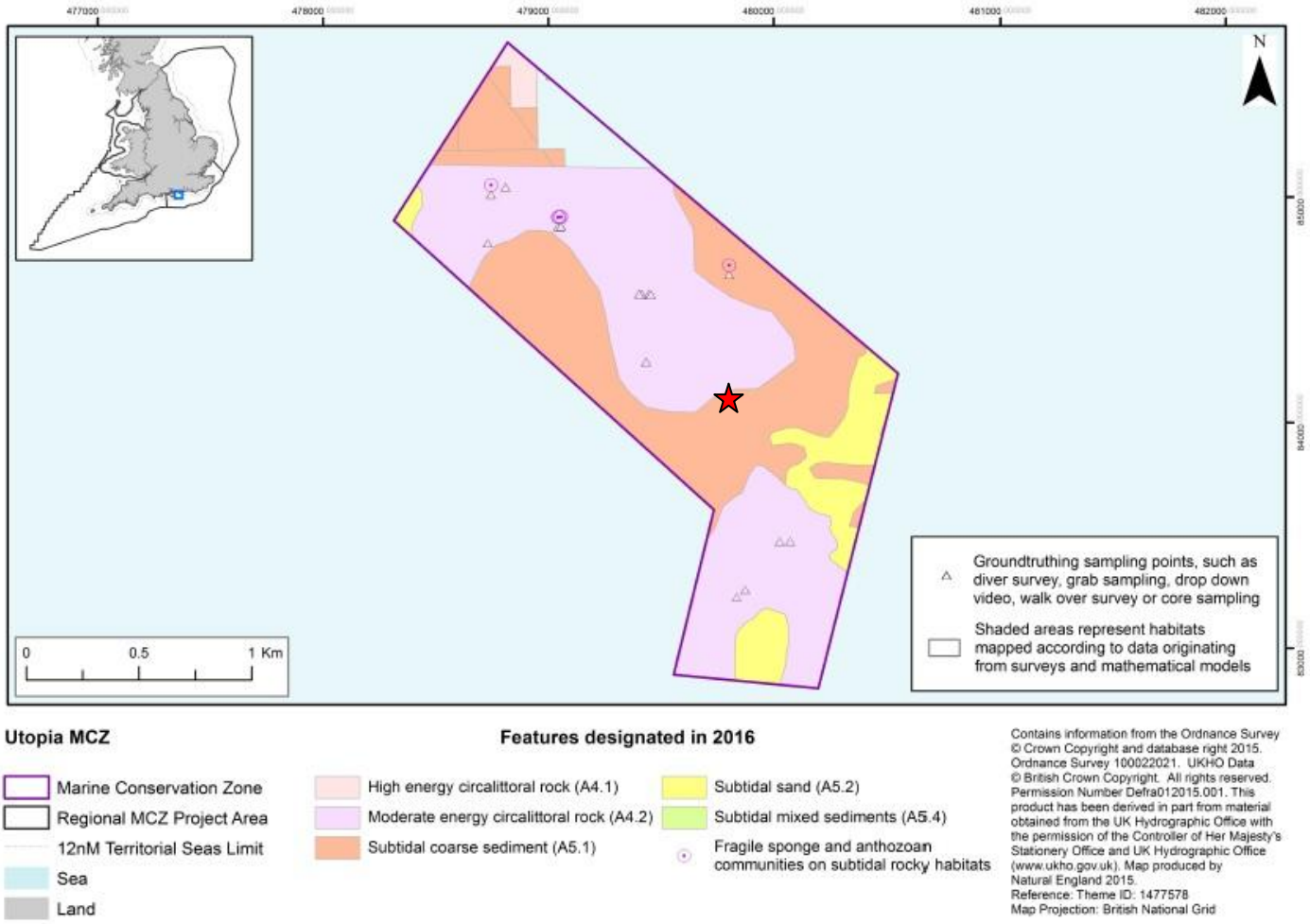
The Utopia MCZ site, located approximately 20km east of the Isle of Wight, contains an area of bedrock and boulder reef which is unusual in the sediment-dominated East Solent. It is named for the concentrations of tope (*Galeorhinus galeus*) and other shark species which use it as a breeding and nursery area, but the area also supports rich 'fragile sponge and anthozoan communities on subtidal rocky habitats', a feature which is rare in the Balanced Seas south-east region.

The broad scale habitats moderate- and high-energy circalittoral rock, subtidal coarse and mixed sediments and subtidal sand are listed as features of this MCZ (see map below[4]), all with a management approach of 'recover to favourable condition'[5]. The site of the survey dive is also indicated on the map.

In the north of the dog-leg-shaped site, the reefs stand *ca.* 1-2m above the surrounding seabed and display an epifaunal turf of sponges and anemones (as per the feature description; photo above left) while further south in the

[1] http://jncc.defra.gov.uk/page-4881
[2] See http://jncc.defra.gov.uk/pdf/20160512_MCZReviewFOCI_v7.0.pdf
[3] http://jncc.defra.gov.uk/page-7119
[4] Taken from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/492466/mcz-utopia-feature-map.pdf
[5] https://www.gov.uk/government/publications/marine-conservation-zones-utopia

MCZ the topography becomes less pronounced and the reef outcrops start to merge into the surrounding seabed of coarse sediment (comprising small boulders, cobbles and pebbles with a mud content of less than 10%). The site of the survey dive is also indicated on the map.



Survey Dive Details

The site, in the southern part of the MCZ (see map above), was chosen as an area that was previously unsurveyed and from the seabed topography displayed on the boat sounder equipment as being potentially interesting. Five buddy pairs were deployed in a radial distribution around the shot position to maximise survey coverage. Despite the visual appearance on the sounder, the seabed terrain was found to be fairly uniform in nature, consisting primarily of coarse sediment (cobbles and pebbles in a matrix of gravel and coarse sand with less than 10% mud) with occasional small boulders and bedrock outcrops. The faunal life was fairly typical of a tide-swept area of coarse sediment, comprising tough species such as keelworms (*Spirobranchus*), hornwrack (*Flustra foliacea*) and dahlia anemones (*Urticina felina*) which are known to be scour-tolerant. The rocky reef, small boulders and larger cobbles all supported a dense animal turf of sponges and sea-squirts, while both mobile life (fish and hermit crabs) and infauna (bivalves, annelid worms in protective tubes *e.g. Megalomma vesiculosum* and Sabellids) were recorded on (or in) the surrounding seabed.

Plate 1: General views of the seabed topography and associated marine life. Boulders support an animal turf of sea squirts, encrusting bryozoans and sponges topped with a fringe of hornwrack (*Flustra foliacea*) while tough scour-tolerant species such as dahlia anemones (*Urticina felina*), the bushy hydroid *Amphisbetia operculata* and the non-native sea squirt *Styela clava* were all recorded

Plate 2: Charismatic mobile life – tiny clingfish, *Diplecogaster bimaculata* (top left), Baillon's wrasse, *Sympodus bailloni* (top right) and cuttlefish*, Sepia officinalis* (centre right), common brittlestar, *Ophiothrix fragilis* and common starfish, *Asterias rubens* (centre left), sponge spider crabs, *Inachus* sp. (above left) and hermit crab, *Pagurus* sp. (above right).

Plate 3: Visually-evident infaunal life of the coarse sediment – fan worm *Megalomma vesiculosum* (left) and unidentified bivalve siphons (right)

Acknowledgements

This report has been compiled by Charlotte Bolton of the Marine Conservation Society, based on Seasearch survey records made by Charlotte Bolton, Bryony Chapman, Matt Ferguson, Bill Hughes and Cathryn Quick, and Seasearch Observation records made by Chris Bohea and Mike Rushworth. Photos as credited; copyright is retained by the photographer.

Seasearch would like to thank the volunteer divers for their records and also Dave Wendes of Wight Spirit Diving Charters (wightspirit.co.uk) for taking us to the site.

The funding received from The Crown Estate specifically for focused surveys in potential Tranche 3 MCZ sites is gratefully acknowledged. Without this funding it is unlikely that these survey dives in the East Solent would have taken place.

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

Technical Appendix

This Appendix contains more detailed information about the surveys undertaken and records made. It includes:
- dive details
- biotope list
- species list

The data have been validated, verified and entered into the Marine Recorder database by Lin Baldock. It is available in Snapshot format on request.

MR Survey Name:
"2017 Hampshire Seasearch Utopia MCZ"
MR Survey Reference: MRLRC0180000000B

Recommended features recorded on these dives:

Broad Scale Habitats: High energy circalittoral rock (A4.1); Subtidal coarse sediment (A5.1).

Habitat FOCI: Fragile sponge and anthozoan communities on subtidal rocky habitats.

Dive details

Date	Site Name	Surveyor(s)	Form(s)
29/08/2017	South Utopia MCZ, East Solent	Chris Bohea, Charlotte Bolton, Bryony Chapman, Matt Ferguson, Bill Hughes, Jane Maddocks, Jess Mead, Cathryn Quick, Mike Rushworth, Hugh Waite	5 survey forms, 2 observation forms

Sublittoral Habitats/Biotopes recorded

Description	MNCR 15.03 Biotope Code†	EUNIS code‡
Flustra foliacea, small solitary and colonial ascidians on tide-swept circalittoral bedrock or boulders	CR.HCR.XFa.FluCoAs.SmAs	A4.1342
Circalittoral coarse sediment	SS.SCS.CCS	A5.14
Pomatoceros triqueter with barnacles and bryozoan crusts on unstable circalittoral cobbles and pebbles	SS.SCS.CCS.PomB	A5.141

† The Marine Habitat Classification for Britain & Ireland (v15.03): jncc.defra.gov.uk/marinehabitatclassification .
‡ See jncc.defra.gov.uk/page-3365 and links within; also eunis.eea.europa.eu/habitats-code-browser.jsp .

Species List

No. of unique taxa recorded (not all to species level) = 83

1. **Porifera (sponges)**

Scientific name	Common name	Notes
Porifera	Sponges	Branching & massive
Porifera indet. crusts	Sponge crusts	
Dysidea fragilis	Goosebump sponge	
Tethya citrina	Golfball sponge	
Halichondria (Halichondria) panicea	Breadcrumb sponge	
Hymeniacidon perlevis		
Raspailia (Raspailia) ramosa	Chocolate fingers sponge	

Polymastia boletiformis	Hedgehog sponge	
Polymastia penicillus	Chimney sponge	
Suberites ficus	Sea orange	

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

Scientific name	Common name	Notes
Urticina felina	Dahlia anemone	
Adamsia carciniopados	Cloak anemone	
Actinothoe sphyrodeta	Sandaled anemone	
Cereus pedunculatus	Daisy anemone	
Sagartia troglodytes		
Alcyonium digitatum	Dead man's fingers	
Cerianthus lloydii		
Hydrozoa		
Halecium halecinum	Herringbone hydroid	
Nemertesia antennina	Antenna hydroid	
Amphisbetia operculata		
Sertularia argentea		

3. Annelida (segmented worms)

Scientific name	Common name	Notes
Sabellaria spinulosa	Ross worm	
Megalomma vesiculosum		
Sabella pavonina	Peacock worm	
Salmacina/Filograna	Coral worms	
Serpulidae		
Spirobranchus sp.	Keelworm	
Lanice conchilega	Sand mason worm	
Bispira volutacornis	Double-spiral worm	

4. Crustacea (crabs, lobsters, barnacles)

Scientific name	Common name	Notes
Cancer pagurus	Edible/common/brown crab	
Necora puber	Velvet swimming crab	
Inachus sp.	Sponge spider crab	
Macropodia sp.	Long-legged spider crabs	
Paguridae	Hermit crabs	
Pagurus sp.	Hermit crabs	
Pagurus prideaux	Anemone hermit crab	
Pisidia longicornis	Long clawed porcelain crab	
Cirripedia	Barnacles	

5. Mollusca (snails, bivalves, nudibranchs)

Scientific name	Common name	Notes
Bivalvia	Bivalves	Siphons only
Aequipecten opercularis	Queen scallop	
Sepia	Cuttlefish	

Scientific name	Common name	Notes
Sepia officinalis	Cuttlefish	And eggs
Calliostoma zizyphinum	Netted dog whelk	
Gibbula	Topshell	
Gibbula cineraria	Grey topshell	
Crepidula fornicata	Slipper limpet	Non-native species
Euspira nitida	Necklace shell	Eggs
Trivia	Cowrie	
Buccinum undatum	Common whelk, buckie	
Ocenebra erinaceus	Sting winkle, tingle	
Nassarius reticulatus	Netted dog whelk	Now *Tritia reticulata*
Doto sp.		

6. Bryozoa (sea mats/mosses)

Scientific name	Common name	Notes
Bryozoa indet. crusts	Encrusting bryozoans	
Pentapora foliacea	Ross coral, potato crisp bryozoan	
Cellepora pumicosa	Orange pumice bryozoan	
Flustra foliacea	Hornwrack	
Alcyonidium diaphanum	Finger bryozoan	

7. Echinodermata (echinoderms)

Scientific name	Common name	Notes
Asterias rubens	Common starfish	
Psammechinus miliaris	Green sea urchin, shore urchin	
Ophiothrix fragilis	Common brittlestar	
Ophiura albida	White-flecked sand brittlestar	

8. Tunicata (sea squirts)

Scientific name	Common name	Notes
Didemnidae		
Didemnum maculosum		
Diplosoma spongiforme	Sponge sea squirt	
Molgula sp.		
Pyura sp.		
Botryllus schlosseri	Star sea squirt	
Dendrodoa grossularia	Gooseberry sea squirt	
Distomus variolosus	Baked bean sea squirt	
Polycarpa scuba		
Styela clava	Leathery sea squirt	Non-native species
Tunicata		Turf

9. Pisces (fish)

Scientific name	Common name	Notes
Diplecogaster bimaculata	Clingfish	
Parablennius gattorugine	Tompot blenny	

Scientific name	Common name	Notes
Callionymus sp.	Dragonet	
Gobiidae	Gobies	
Gobius paganellus	Rock goby	
Pomatoschistus sp.	Sediment gobies	
Pomatoschistus pictus	Painted goby	
Ctenolabrus rupestris	Goldsinny	
Symphodus bailloni	Baillon's wrasse	Southern species
Taurulus bubalis	Long-spined sea scorpion