

Poole Rocks recommended MCZ

Seasearch Site Surveys 2012

This report summarises the results of surveys carried out in the proposed MCZ by Seasearch divers during 2012. The aim of the surveys was to add detail of the habitats and species found within the area to support the designation process. Particular attention was paid to the Habitat and Species FOCI identified in the Ecological Guidance on the designation of MCZs.

Physical Features of the Area

The Poole Rocks recommended MCZ site is an inshore site of ca. 4km² lying just to the east of the entrance to Poole Harbour (image below taken from www.mczmapping.org):



The site consists of several small patches of reef (exposed rugged sandstone bedrock surrounded by medium to large boulders; see below left – photo copyright James Lucey) at depths of 6-11m, 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 site is overlaid with a layer of silt (see right – photo copyright John Parkin) which creates circalittoral conditions at

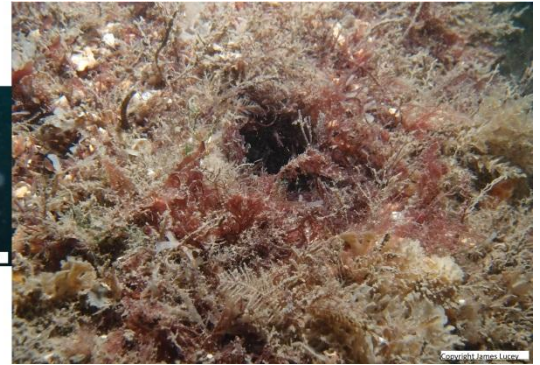


infralittoral depths. There are many deep crevices in and around the boulders, providing cover for crustaceans and the large shoals of fish in the area, which have attracted human activities such as potting and angling.

Features of the Marine Life

The rocks are densely covered with short animal turf (dominated by encrusting and cushion sponges, bryozoans and hydroids) and filamentous red algae. Uncommon and/or protected species such as the native oyster (*Ostrea edulis*) and Couch's goby (*Gobius couchi*) have been reported at this site, whilst solitary pink sea fans (*Eunicella verrucosa*) have been recorded at similar habitats in Poole Bay.

Large shoals of fish (bib, *Trisopterus luscus*, and pollack, *Pollachius pollachius*) are usually observed in the vicinity of the reef, and various wrasse species (including Baillon's wrasse, *Symphodus bailloni*, a Lusitanian species that is rare in the English Channel) build nests amongst the rocks (see above right – photo copyright James Lucey).



Above: Large shoals of bob (*Trisopterus luscus*) are often seen on the rugged reefs at Poole Rocks (photo copyright Matt Doggett)

Below: The native oyster (*Ostrea edulis*), a Biodiversity Action Plan and FOCI species, is regularly recorded at Poole Rocks (photo copyright Polly Whyte)



Above: The nationally scarce nudibranch (sea slug) *Trapania pallida* was recorded at Poole Rocks patch reefs in September 2012 (photo copyright Richard Yorke)

Below: The rugged reef provides many hiding places for crustaceans such as the European lobster (*Homarus gammarus*) (photo copyright Matt Doggett)





Human Uses

Potting and angling activities are attracted by the fish and crustacean populations; impacts in the form of lost fishing equipment (line, hooks, rope) ground tackle (anchors; see top left – photo copyright Richard Yorke) and other litter (see bottom left – photo copyright Richard Yorke) are often seen at this site. This litter can provide a substrate for marine life such as the soft coral *Alcyonium digitatum* (dead men's fingers; see right – photo copyright Andy Marsh).



Benefits of Protection

The circalittoral rocky reef habitat is characterised by high species diversity and the surrounding sediments of Poole Bay provide an important nursery ground. Local potting and angling activities would both indirectly benefit from an increased population in this area.

Acknowledgements

This report has been compiled by Charlotte Bolton of the Dorset Wildlife Trust based on Seasearch survey records made by Lin Baldock, Matt Doggett, James Lucey, Andy Marsh, Nick Owen, Fiona Ravenscroft, Polly Whyte, Richard Yorke, and observation records made by John Parkin, Richard White and Nigel Topham. Photos by Matt Doggett, James Lucey, Andy Marsh, John Parkin, Polly Whyte and Richard Yorke, as credited in the accompanying text. 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 sites.

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

Technical Appendix

This Appendix contains more detailed information about the surveys undertaken and records made. It includes:

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

The data has been entered into the Marine Recorder database and is available in Snapshot format on request.

Current proposal:

The features proposed for designation are:

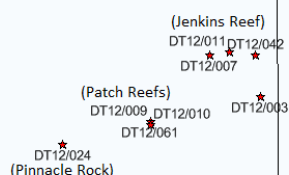
Broad Scale Habitats: Subtidal mixed sediments, subtidal sand, moderate energy circalittoral rock

Species FOCI: Native oyster, Couch's goby

Dive details

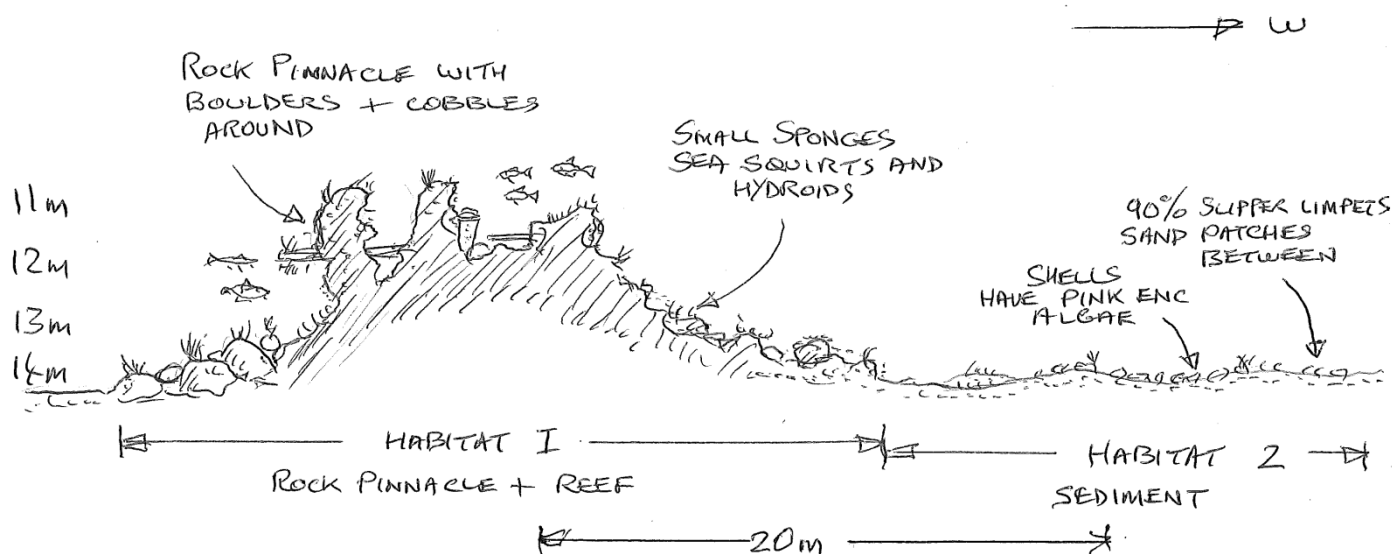
Date	Site/Position	Surveyor(s)	Form(s)
20/5/2012	Poole Rocks	Lin Baldock, Andy Marsh, Nick Owen, John Parkin, Fiona Ravenscroft, Richard White, Polly Whyte, Richard Yorke	DT12/003
19/6/2012	The Pinnacle	James Lucey	DT12/024
08/09/2012	Patch reefs	Polly Whyte, Matt Doggett, Emma Collins, Richard Yorke, Nigel Topham, Richard White, Andy Marsh	DT12/009, DT12/010, DT12/061
09/09/2012	Jenkins Reef	Lin Baldock, Polly Whyte, Richard Yorke, Nigel Topham	DT12/007, DT12/011, DT12/042

Poole Rocks rMCZ boundary

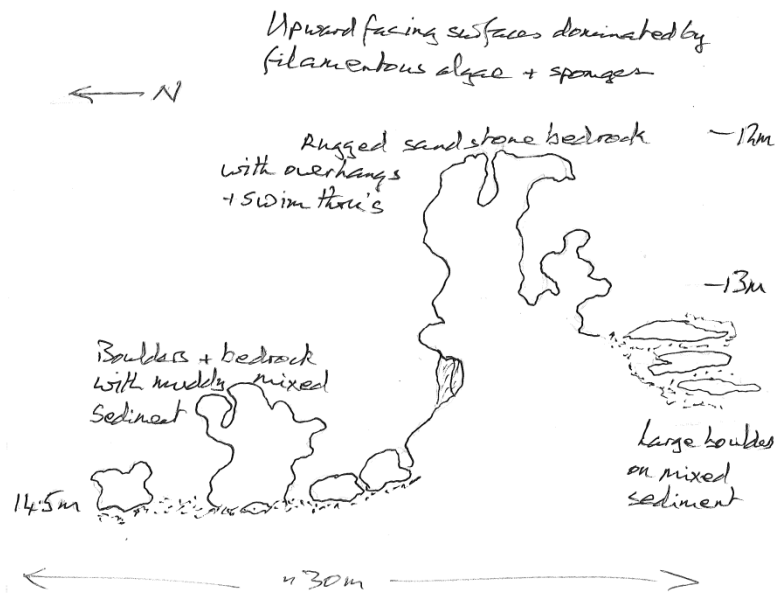


Habitat sketches

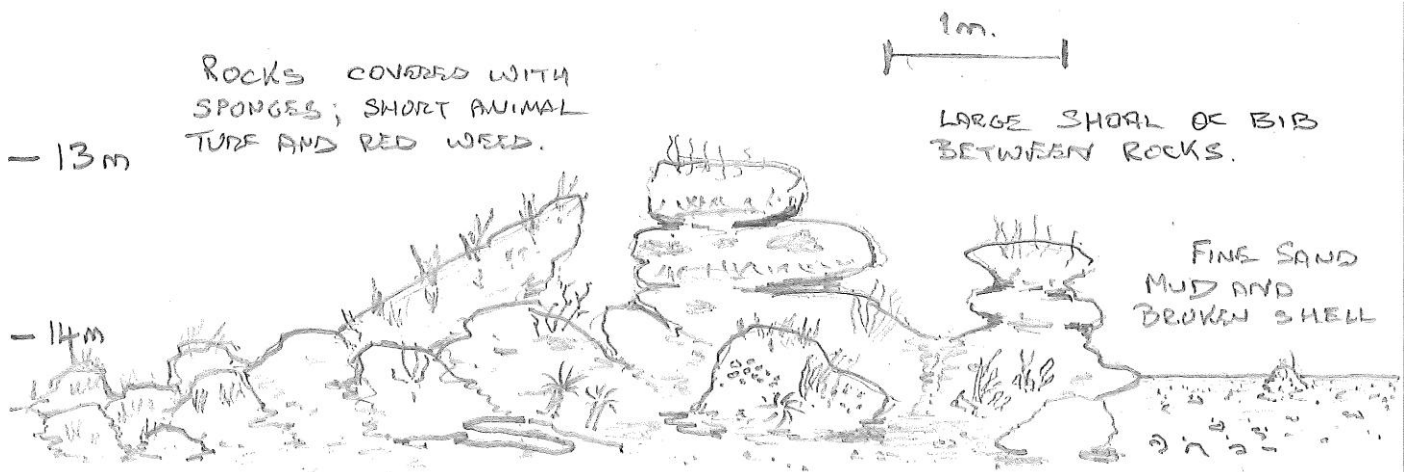
1. Pinnacle Rock (DT12/024; James Lucey)



2. Jenkins Reef (DT12/042; Lin Baldock)



3. Patch Reefs (DT12/061; Andy Marsh)



Sublittoral Habitats/Biotopes recorded

Description	MNCR 04.05 Biotope Code†	Location
Circalittoral mixed sediment	SS.SMx.CMx	Pinnacle Rock, Patch Reefs
Mixed faunal turf communities	CR.HCR.XFa	Poole Rocks
Flustra foliacea on slightly scoured silty circalittoral rock	CR.MCR.EcCr.FaAlCr.Flu	Patch Reefs (N.B. The Poole version of this biotope lacks the echinoderms)
Flustra foliacea, small solitary and colonial ascidians on tide-swept circalittoral bedrock or boulders	CR.HCR.XFa.FluCoAs.SmAs	Pinnacle Rock
Dense foliose red seaweeds on silty moderately exposed infralittoral rock	IR.MIR.KR.XFoR	Jenkins Reef, Patch Reefs

† The Marine Habitat Classification for Britain & Ireland (v04.05): jncc.defra.gov.uk/marinehabitatclassification

Species List

* Sites are labelled as follows; 1 = Poole Rocks (20/5/2012); 2 = Pinnacle Rock (19/6/2012); 3 = Patch Reefs (08/09/2012); 4 = Jenkins Reef (09/09/2012)

‡ Abundance recorded on the SACFOR scale, plus P for 'present' if no abundance recorded.

1. Porifera (sponges)

Scientific name	Common name	Site*	Abundance‡	Notes
<i>Amphilectus fucorum</i>	Shredded carrot sponge	2,3,4	C-O	
<i>Ciocalypta penicillus</i>	Tapered chimney sponge	3	R	
<i>Cliona celata</i>	Boring sponge	3	O	
<i>Dercitus bucklandi</i>	Black tar sponge	4	R	
<i>Dysidea fragilis</i>	Goosebump sponge	All	C-R	
<i>Hemimycale columella</i>	Crater sponge	All	C-O	
<i>Hymeniacidon perleve</i>		1,3	C-R	
<i>Leuconia</i> sp.		4	R	
<i>Microciona</i> sp.		1,3	O/P	
<i>Pachymatisma johnstonia</i>	Elephant hide sponge	2,3,4	O-R	
<i>Polymastia penicillus</i>	Chimney sponge	4	R	
<i>Pseudosuberites</i> sp.		4	O	
<i>Stelligera rigida</i>		1,3	O-R	
<i>Stylostichon plumosum</i>		4	F	
<i>Tethya citrina</i>	Golf ball sponge	1,2,3	O-R	
Porifera indet. crusts	Encrusting sponges	All	C-O	

2. Cnidaria (anemones, hydroids, corals)

Scientific name	Common name	Site*	Abundance‡	Notes
<i>Actinothoe sphyrodeta</i>	Fried egg, sandaled anemone	2,4	O-R	
<i>Alcyonium digitatum</i>	Dead men's fingers	2,3,4	R	
<i>Caryophyllia inornata</i>	Southern cup coral	4	R	Nationally rare species
<i>Caryophyllia smithii</i>	Devonshire cup coral	4	R	
<i>Hydrozoa</i> (feathery)		3,4	C-F	
<i>Isozoanthus sulcatus</i>	Ginger tiny or peppercorn anemone	1, 4	R	
<i>Kirchenpaueria Nemertesia antennina</i>	Antenna hydroid	4	R	
<i>Nemertesia antennina</i>		1,3	O-R	
<i>Nemertesia ramosa</i>	Branched antenna hydroid	3	O	
<i>Sarcodictyon roseum</i>		1,3,4	O	
<i>Sertularella</i> sp.		3	R	
<i>Sertularella polyzonias</i>		1	F	

<i>Urticina felina</i>	Dahlia anemone	2	R	
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3. Annelida (segmented worms)

Scientific name	Common name	Site*	Abundance±	Notes
<i>Bispira volutacornis</i>	Double spiral worm	2,4	F-R	
<i>Chaetopterus variopedatus</i>	Parchment worm	1	R	
<i>Pomatoceros</i> sp.	Keel worms	4	O-R	
<i>Sabella pavonina</i>	Peacock, feather duster worm	3	R	
<i>Terebellidae</i>		3,4	R	

4. Crustacea (crabs, lobsters, barnacles)

Scientific name	Common name	Site*	Abundance±	Notes
<i>Balanus balanus</i>	Greater acorn barnacle	4	O	
<i>Cancer pagurus</i>	Edible, brown crab	All	F-R	
<i>Cirripedia</i>	Barnacles	2,3,4	C-R	
<i>Galathea squamifera</i>	A squat lobster	4	R	
<i>Galathea strigosa</i>	Blue striped squat lobster	1,2,4	F-R	
<i>Homarus gammarus</i>	European lobster	3	O-R	
<i>Maja squinado</i>	Common spider crab	2,3	F-O	
<i>Necora puber</i>	Velvet swimming crab	2,3,4	C-R	
<i>Paguridae</i>	Hermit crabs	3,4	O-R	
<i>Pagurus bernhardus</i>	Common hermit crab	4	R	
<i>Pagurus cuanensis</i>	Hairy clawed hermit crab	4	R	
<i>Palaemon serratus</i>	Common prawn	2	O	

5. Platyhelminthes (flat worms)

Scientific name	Common name	Site*	Abundance±	Notes
<i>Prostheceraeus vittatus</i>	Candy striped flat worm	4	R	

6. Mollusca (snails, bivalves, nudibranchs)

Scientific name	Common name	Site*	Abundance±	Notes
<i>Archidoris pseudoargus</i>	Sea lemon	2	R	
<i>Buccinum undatum</i>	Edible whelk, buckie	2,4	O-R	
<i>Calliostoma zizyphinum</i>	Painted topshell	2,3,4	O-R	
<i>Crepidula fornicata</i>	Slipper limpet	All	A-O	Non-native species
<i>Diodora graeca</i>	Keyhole limpet	1,4	R	
<i>Flabellina pedata</i>	Violet sea slug	2	R	
<i>Hinia incrassata</i>	Thick-lipped netted dog whelk	1	P	
<i>Hinia reticulata</i>	Netted dog whelk	1,2,3	O-R	
<i>Nucella lapillus</i>	Dog whelk	3,4	O-R	OSPAR species
<i>Ocenebra erinacea</i>	Oyster drill, sting winkle, tingle	1,4	R	
<i>Ostrea edulis</i>	Native/European oyster	All	O-R	OSPAR / Biodiversity Action Plan (BAP) / FOCI species

Scientific name	Common name	Site*	Abundance±	Notes
<i>Pectinidae</i>	Scallops	3	R	
<i>Polycera quadrilineata</i>	Lined polycera	3	R	
<i>Sepia officinalis</i>	Common cuttlefish	2,3	O-R	
<i>Trapania maculata</i>		3	R	Nationally rare
<i>Trapania pallida</i>		3,4	R	Nationally scarce
<i>Tritonia lineata</i>		1,3,4	F-R	

7. Phoronida (horseshoe worms)

Scientific name	Common name	Site*	Abundance±	Notes
<i>Phoronis hippocrepia</i>	Horseshoe worm	2	R	

8. Bryozoa (sea mats)

Scientific name	Common name	Site*	Abundance±	Notes
<i>Bicellariella ciliata</i>		4	P	
<i>Bugula</i> sp.		2,3	O, P	
<i>Bugula flabellata</i>		3	R	
<i>Chartella papyracea</i>		1,3,4	C-O	
<i>Electra pilosa</i>	Frosty sea mat	2	R	
<i>Flustra foliacea</i>	Hornwrack	All	C-O	Indicator species
Bryozoa indet. crusts	Encrusting bryozoans	1,3,4	O	Orange

9. Echinodermata (starfish, sea cucumbers)

Scientific name	Common name	Site*	Abundance±	Notes
<i>Pawsonia saxicola</i>	White crevice, gherkin sea cucumber	1, 4	R	
<i>Thyone</i> sp.		4	R	

10. Tunicata (sea squirts)

Scientific name	Common name	Site*	Abundance±	Notes
<i>Ascidia mentula</i>	Red sea squirt	1,3,4	R	
<i>Ascidia aspersa</i>	Fluted sea squirt	1	R	
<i>Botrylloides leachi</i>		3	R	
<i>Botryllus schlosseri</i>	Star sea squirt	3	O-R	
<i>Clavelina lepadiformis</i>	Lightbulb sea squirt	2,3,4	O-R	
<i>Dendrodoa</i> sp.		3	R	
<i>Dendrodoa grossularia</i>	Gooseberry sea squirt	2, 4	C-R	
<i>Didemnidae</i>		4	O	
<i>Distomus variolosus</i>	Baked bean sea squirt	1	R	
<i>Lissoclinum perforatum</i>	White perforated sea squirt	4	R	
<i>Molgula</i> sp.		3	R	
<i>Polycarpa pomaria</i>		1,4	O-R	
<i>Polycarpa scuba</i>	Teapot sea squirt	1	R	
<i>Styela clava</i>	Leathery sea squirt	1,2	R	Non-native species

11. Pisces (fish)

Scientific name	Common name	Site*	Abundance±	Notes
<i>Balistes carolinensis</i>	Trigger fish	4	R	Summer visitor
<i>Blenniidae</i>	Blennies	4	O	

Scientific name	Common name	Site*	Abundance‡	Notes
<i>Callionymus</i> sp.	Dragonet	2,4	O-R	
<i>Centrolabrus exoletus</i>	Rock cook	4	O-R	Global IUCN Red list ("least concern")
<i>Conger conger</i>	Conger eel	1,2	R	
<i>Ctenolabrus rupestris</i>	Goldsinny	All	C-O	Global IUCN Red list ("least concern")
<i>Gobius niger</i>	Black goby	All	F-R	
<i>Gobius paganellus</i>	Rock goby	1	R	
<i>Gobiusculus flavescens</i>	Two-spot goby	2,4	O	
<i>Labrus bergylta</i>	Ballan wrasse	All	F-R	Global IUCN Red list ("least concern")
<i>Labrus mixtus</i>	Cuckoo wrasse	All	O-R	Global IUCN Red list ("least concern")
<i>Parablennius gattorugine</i>	Tompot blenny	1,3,4	R	
<i>Pollachius pollachius</i>	Pollack	1,4	O-R	
<i>Pomatoschistus</i> spp.	Sand gobies	2	F	
<i>Pomatoschistus pictus</i>	Painted goby	3	F	
<i>Scyliorhinus canicula</i>	(Common, lesser spotted) dogfish, sandy dog, small spotted cat shark, rough hound	1,2	O-R	Global IUCN Red list ("least concern")
<i>Symphodus bailloni</i>	Baillon's wrasse	1,2	R	Lusitanian species, uncommon in English Channel; Global IUCN Red list ("least concern")
<i>Symphodus melops</i>	Corkwing wrasse	1,2,3	F-R	Global IUCN Red list ("least concern")
<i>Syngnathus acus</i>	Greater pipefish	2	R	
<i>Thorogobius ephippiatus</i>	Leopard spotted goby	All	O-R	
<i>Trisopterus luscus</i>	Bib, pout, pouting	All	A-O	
<i>Trisopterus minutus</i>	Poor cod	3	F-O	Global IUCN Red list ("least concern")

12. Algae (seaweeds)

Scientific name	Common name	Site*	Abundance‡	Notes
<i>Brongniartella byssoides</i>	Brongniart's thread weed	3,4	O-R	
<i>Calliblepharis ciliata</i>	Beautiful eyelash, red fringed weed	1,3,4	F-R	
<i>Callophyllis laciniata</i>	Beautiful fan weed	3	R	
<i>Cladophora</i> sp.	Green branched weeds	3	R	
<i>Corallinaceae</i> (crusts)	Coralline algae	1,3,4	F-O	
<i>Corallinales</i> (crusts)	Coralline algae	2	C	
<i>Cryptopleura ramosa</i>	Fine-veined crinkle weed	3,4	O-R	
<i>Cystoclonium purpureum</i>	Purple claw weed	3	R	
<i>Dasya</i> sp.		4	R	
<i>Dictyota dichotoma</i>	Divided net weed, brown fan weed	2	R	

Scientific name	Common name	Site*	Abundance‡	Notes
<i>Griffithsia corallinoides</i>	Mrs Griffith's coral weed	4	R	
<i>Halidrys siliquosa</i>	Sea oak (brown), pod weed	2	R	
<i>Heterosiphonia plumosa</i>	Siphoned feather weed	3,4	F-O	
<i>Pleonosporium borneri</i>		4	A	
<i>Plocamium cartilagineum</i>	Cock's comb, red comb weed	3,4	O-R	
<i>Polysiphonia</i> sp.	Siphon weeds	3,4	O-R	
<i>Pterothamnion plumula</i>	Bushy feather weed	4	F	
<i>Rhodymenia ardissoni</i>	Spiky rose weed	4	R	
<i>Rhodymenia holmesii</i>	Holmes's rose weed	4	O	
<i>Saccorhiza polyschides</i>	Furbelows	2	R	
<i>Ulva lactuca</i>	Sea lettuce	3	O	

Dorset Wildlife Trust (DWT), Brooklands Farm, Forston, Dorchester, Dorset, DT2 7AA; Tel: 01305 264620; Fax: 01305 251120. Registered Charity No. 200222. For more information about DWT, our work and the Seasearch project, please visit www.dorsetwildlifetrust.org.uk or email seasearch@dorsetwildlifetrust.org.uk

Seasearch is a national project involving volunteer sports divers in marine biological surveys. The project is co-ordinated in Dorset by DWT and nationally by the Marine Conservation Society on behalf of the Seasearch Steering Group. 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 DWT would like to acknowledge the support and funding received for Dorset Seasearch from the Marine Conservation Society.