

Chesil Beach and Stennis Ledges MCZ

Seasearch Site Surveys 2013

This report summarises the results of surveys carried out during 2013 by Seasearch divers in the newly-designated (November 2013) Chesil Beach and Stennis Ledges MCZ. 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, and to surveying undived sites within the area.

Physical Features of the Area

The Chesil Beach and Stennis Ledges MCZ is an inshore site of ca. 38km² running along Chesil Beach from Abbotsbury in the north to Weston on the Isle of Portland in the south, extending seawards to encompass the rocky reefs of Stennis Ledges (image below taken from jncc.defra.gov.uk/mczmap):



The site consists of both rocky ledges and massive boulders, supporting fragile reef species of pink sea fans, sponges and bryozoans, and subtidal mixed sediments which support a wide variety of marine life.

Features of the Marine Life

The rocks are densely covered with short animal turf (dominated by encrusting and cushion sponges, bryozoans and hydroids), while the large boulders at the southern end of Chesil Beach are densely covered in kelp. Crustaceans and molluscs are associated with the subtidal sediments and may occur in very dense aggregations at certain times of the year. Protected species such as the pink sea fans (*Eunicella verrucosa*) and native oyster (*Ostrea edulis*) have been reported at this site, as well as uncommon species such as Baillon's wrasse (*Symphodus bailloni*; more southerly

Lusitanian distribution), the Weymouth carpet coral (*Hoplangia durotrix*; nationally rare) and the branching sponge *Adreus fascicularis* (nationally scarce). Seasonal visitors such as grey triggerfish (*Balistes capriscus*) are regularly reported at sites along Chesil Beach.



Pink sea fan (*Eunicella verrucosa*) off Blacknor Point (screen grab from video).



The rare colonial Weymouth carpet coral (*Hoplangia durotrix*) was found on boulder overhangs at Chesil Cove.



Human Uses

Use of mobile bottom gear (trawls and dredges) in search of scallops has the potential to decimate reef habitats which are slow to recover. Further inshore, small-scale potting and recreational angling activities are attracted by the fish and crustacean populations; impacts in the form of lost fishing equipment (line, hooks, rope, pots) and other litter are often seen at sites along Chesil Beach. This litter, if stable and inert, can provide a useful substrate for marine life but has a more detrimental impact in terms of ghost fishing.

Benefits of Protection

The rocky reef habitat is characterised by high species diversity and the surrounding sediments 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, Alison Bessell, Amy Marsden, Nick Owen, Fiona Ravenscroft, Nigel Topham, Dawn Watson and Richard Yorke, and observation records made by Elspeth Berry, Jan Heath, Mark Hodgson, Kevin Jones, Barbara King, Christine Lissoni and Chris Stevens. Photos as credited; copyright is retained by the photographers. Seasearch would like to thank the volunteer divers for their records and also John Walker (“Miss Pattie”) for taking us to the Stennis Ledges site.

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.

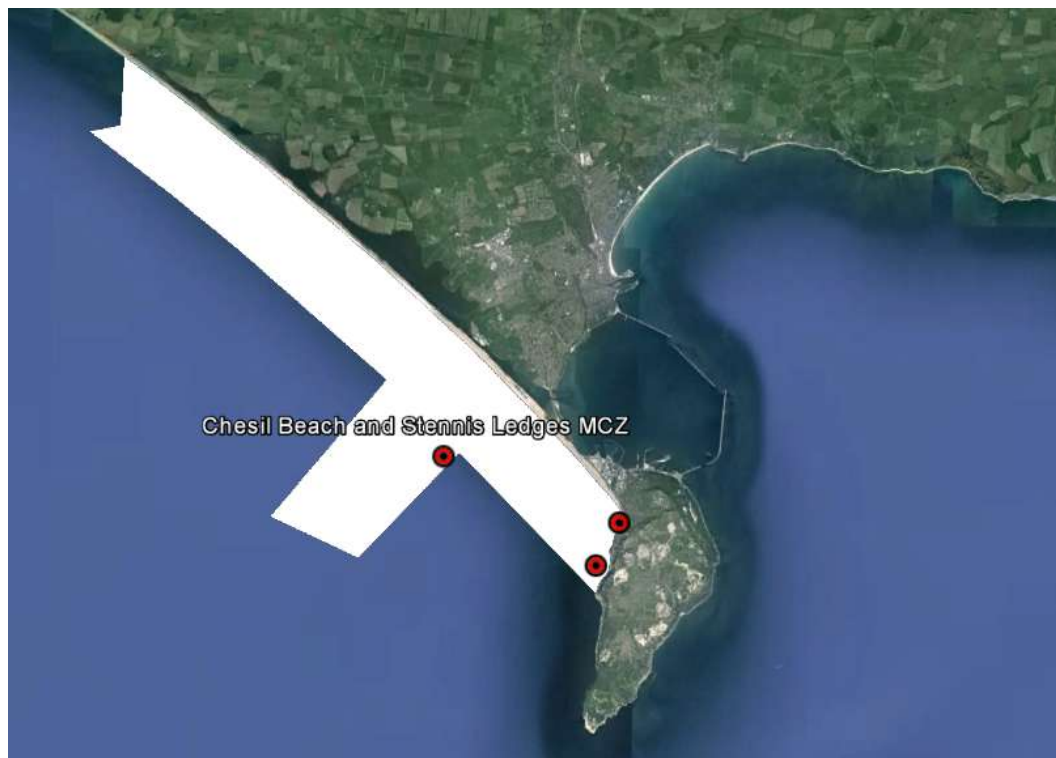
Designated features and management approach:

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

Species FOCI: Pink sea fan, *Eunicella verrucosa* (recover to favourable condition); native oyster, *Ostrea edulis* (recover)

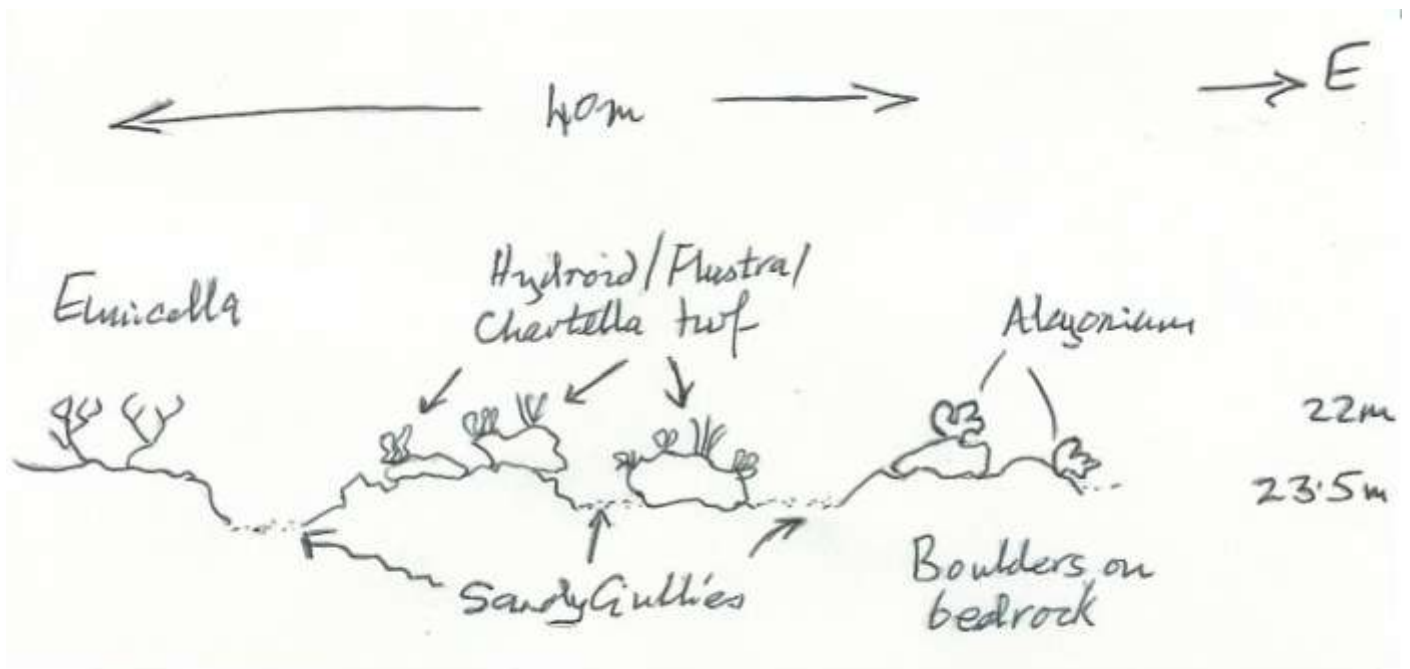
Dive details

Date	Site Name/Position	Surveyor(s)	Form(s)
17/05/2013	Chesil Cove 50.556 -2.448	Mike Sharland, David Green	NT13/085
09/06/2013	Stennis Ledges 50.571 -2.506	Lin Baldock, Elspeth Berry, Alison Bessell, James Lucey, Mark Hodgson, Kevin Jones, Nick Owen, Nigel Topham, Richard Yorke	DT13/047, DT13/098, DT13/142
14/07/2013	Chesil Cove 50.559 -2.449	Barbara King, Christine Lissoni	NT13/108
18/07/2013	Blacknor Point 50.549 -2.456	Chris Stevens, Jan Heath	NT13/044
03/09/2013	Chesil Cove 50.556 -2.448	Mike & Lesley Sharland	NT13/119
03/09/2013	Chesil Cove 50.559 -2.45	Dawn Watson	DT13/080
04/09/2013	Chesil Cove 50.559 -2.449	Dawn Watson, Amy Marsden	DT13/087
05/09/2013	Chesil Cove 50.559 -2.449	Dawn Watson	DT13/090

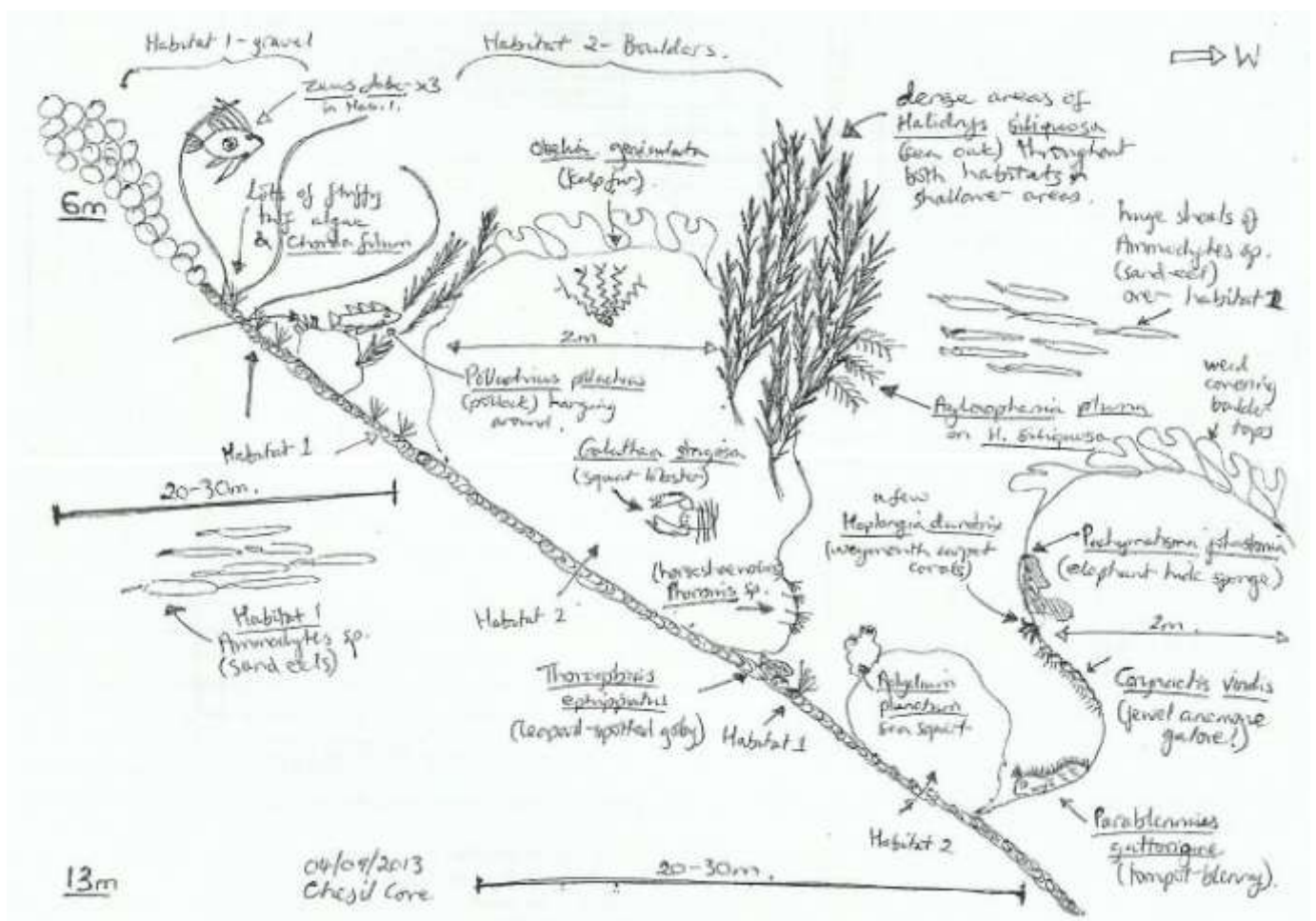


Habitat sketches

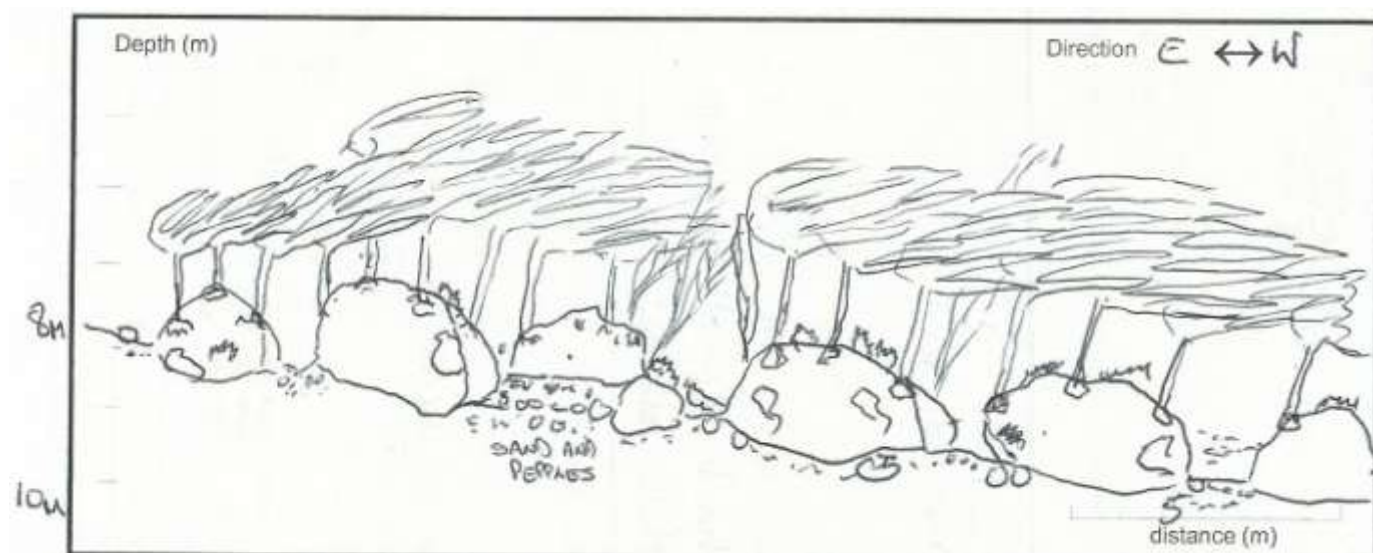
1. Stennis Ledges (DT13/098; Lin Baldock)



2. Chesil Cove (DT13/087; Amy Marsden)



3. Chesil Cove (NT13/085; Mike Sharland)



Sublittoral Habitats/Biotopes recorded

Description	MNCR 04.05 Biotope Code†	Location*
Infralittoral coarse sediment	SS.SCS.ICS	2
Sparse fauna on highly mobile sublittoral shingle (cobbles and pebbles)	SS.SCS.ICS.SSh	2
Mixed faunal turf communities	CR.HCR.XFa	2,3
<i>Flustra foliacea</i> and <i>Haliclona oculata</i> with a rich faunal turf on tide-swept circalittoral mixed substrata	CR.HCR.XFa.FluHocu	1
Circalittoral caves and overhangs	CR.FCR.Cv	2
Foliose red seaweeds on exposed lower infralittoral rock	IR.HIR.KFaR.FoR	2
Sediment-affected or disturbed kelp and seaweed communities	IR.HIR.KSed	2
<i>Laminaria saccharina</i> , <i>Chorda filum</i> and dense red seaweeds on shallow unstable infralittoral boulders or cobbles	IR.HIR.KSed.LSacChoR	2
<i>Halidrys siliquosa</i> and mixed kelps on tide-swept infralittoral rock with coarse sediment	IR.HIR.KSed.XKHal	2

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

* Sites are labelled as follows; 1 = Stennis Ledges; 2 = Chesil Cove; 3 = Blacknor Point

Species List

* Sites are labelled as follows; 1 = Stennis Ledges; 2 = Chesil Cove; 3 = Blacknor Point

‡ Abundance recorded on the SACFOR scale, plus P for 'present' if no abundance recorded (*i.e.* identification made from photograph during post-survey analysis).

Number of unique species recorded (not all to species level) = 167.

1. Foraminifera

Scientific name	Common name	Site*	Abundance‡	Notes
<i>Haliphysema tumanowiczi</i>		1	F	

2. Porifera (sponges)

Scientific name	Common name	Site*	Abundance‡	Notes
<i>Adreus fascicularis</i>		1	R	Nationally scarce species
<i>Amphilectus fucorum</i>	Shredded carrot sponge	1,2	O-P	
<i>Aplysilla rosea</i>		2	O	
<i>Axinella dissimilis</i>	Yellow staghorn sponge	3	R	
<i>Ciocalypta penicillus</i>	Tapered chimney sponge	1,2	O-R	
<i>Clathrina sp.</i>	Lace sponge	1,2	O-R	
<i>Cliona celata</i>	Boring sponge	1,2,3	F-O	
<i>Dercitus bucklandi</i>	Black tar sponge	2	F	
<i>Dysidea fragilis</i>	Goosebump sponge	1,2,3	F-P	
<i>Halichondria</i>		3	R	
<i>Halichondria panicea</i>	Breadcrumb sponge	2	F	
<i>Haliclona cinerea</i>		2	F-O	
<i>Haliclona oculata</i>	Mermaid's glove	1	P	
<i>Haliclona simulans</i>	Creeping sponge	1	O	
<i>Hemimycale columella</i>	Crater sponge	1,2	O	
<i>Hymedesmia paupertas</i>		2	F-R	
<i>Leucosolenia sp.</i>	Spiky lace sponge	1	O-P	
<i>Pachymatisma johnstonia</i>	Elephant hide sponge	1,2,3	O-R	
<i>Polymastia boletiformis</i>	Yellow hedgehog sponge	1	R	
<i>Polymastia penicillus</i>	Chimney sponge	1	P	
<i>Raspailia hispida</i>		2	R	
<i>Raspailia ramosa</i>	Chocolate finger sponge	2	O	
<i>Scypha ciliata</i>	Purse sponge	2	O	
<i>Stelligera rigida</i>		1,2	O	
<i>Suberitidae</i>		2	R	
<i>Tethya citrina</i>	Golf ball sponge	1,2	R	
Porifera indet. crusts	Encrusting sponges	2	F-O	

3. Cnidaria (anemones, hydroids, corals)

Scientific name	Common name	Site*	Abundance‡	Notes
<i>Abietinaria abietina</i>		1,2	O-P	
<i>Actinothoe</i>	Fried egg, sandaled	2	R	

Scientific name	Common name	Site*	Abundance±	Notes
<i>sphyrodeta</i>	anemone			
<i>Aglaophenia pluma</i>		1,2	F-P	
<i>Aglaophenia tubelifera</i>		1	O	
<i>Alcyonium digitatum</i>	Dead men's fingers	1,3	O	
<i>Anemonia viridis</i>	Snakelocks anemone	2	C-O	
<i>Caryophyllia inornata</i>	Southern cup coral	2	P	Nationally rare species
<i>Caryophyllia smithii</i>	Devonshire cup coral	1,2	F-P	
<i>Corynactis viridis</i>	Jewel anemone	2	F	
<i>Epizoanthus couchii</i>	Sandy creeplet	1	F	
<i>Eudendrium</i> sp.		1,2	F-P	
<i>Eunicella verrucosa</i>	Pink sea fan	1,3	O-R	Species FOCI, WACA, BAP/NERC species, nationally scarce.
<i>Gymnangium montagui</i>	Indian feathers hydroid	1,2	R	
<i>Halecium</i> sp.		1	O	
<i>Halecium halecinum</i>	Herringbone hydroid	1,2	O-P	
<i>Halopteris catharina</i>		1	O	
<i>Hoplangia durotrix</i>	Weymouth carpet coral	2	O-R	Nationally rare species.
<i>Hydrallmania falcata</i>	Helter-skelter hydroid	1	F-P	
<i>Kirchenpaueria</i> sp.		1	O	
<i>Nemertesia antennina</i>	Antenna hydroid	1,2,3	C-P	
<i>Obelia geniculata</i>	Kelp fir	2	F-P	
<i>Plumularia setacea</i>		1,2	F-R	
<i>Sertularella gayi</i>		1	O	
<i>Urticina felina</i>	Dahlia anemone	2	O	

4. Platyhelminthes (flat worms)

Scientific name	Common name	Site*	Abundance±	Notes
<i>Prostheceraeus vittatus</i>	Candy striped flat worm	3	R	

5. Annelida (segmented worms)

Scientific name	Common name	Site*	Abundance±	Notes
<i>Bispira volutacornis</i>	Double spiral worm	1,2	F-R	
<i>Chaetopterus</i> sp.	Parchment worm	1	R	
<i>Lanice conchilega</i>	Sand mason worm	1	P	
<i>Pomatoceros</i> sp.	Keel worms	2	C-F	
<i>Sabellaria spinulosa</i>	Honeycomb worm	1	F	
Sabellidae	Bristleworms	1	O	
Serpulidae	Bristleworms	2	O	

6. Crustacea (crabs, lobsters, barnacles)

Scientific name	Common name	Site*	Abundance±	Notes
Amphipoda		1	C	
<i>Boscia anglica</i> (now <i>Megatrema anglicum</i>)	Cup coral barnacle	1,2	R-P	

Scientific name	Common name	Site*	Abundance‡	Notes
<i>Cancer pagurus</i>	Edible, brown crab	2,3	O-R	
<i>Carcinus maenas</i>	Shore crab	2	C	
<i>Cirripedia</i>	Barnacles	2	F	
<i>Galathea strigosa</i>	Blue striped squat lobster	2	F-R	
<i>Homarus gammarus</i>	European lobster	2,3	R	
<i>Maja squinado</i>	Common spider crab	2,3	O-R	
Mysidacea		2	O	
<i>Necora puber</i>	Velvet swimming crab	1,2	O-R	
Paguridae	Hermit crabs	1	R	
<i>Pagurus sp.</i>	Hermit crab	2	F	

7. Mollusca (snails, bivalves, nudibranchs)

Scientific name	Common name	Site*	Abundance‡	Notes
<i>Calliostoma zizyphinum</i>	Painted topshell	1,2	O	
<i>Coryphella lineata</i>		1	R	
<i>Crimora papillata</i>		1	O	
<i>Doto sp.</i> (eggs)		1	P	
<i>Euspira catena</i>	Necklace shell	2	O	
<i>Flabellina pedata</i>	Violet nudibranch	1,2	R	
<i>Gastrochaena dubia</i>		1,2	C-R	
<i>Gibbula cineraria</i>	Flat topshell	2	C-O	
<i>Goniodoris nodosa</i>		3	R	
<i>Hinia incrassata</i>	Thick-lipped netted dog whelk	1	R	
<i>Limacia clavigera</i>	Orange-clubbed nudibranch	2	R	
<i>Nucella lapillus</i> (eggs)	Dog whelk	2	O	OSPAR species
<i>Ocenebra erinacea</i> (eggs)	Oyster drill, sting winkle, tingle	1	P	
<i>Pecten maximus</i>	King scallop	1	R	
<i>Polycera faeroensis</i>		1	R	
<i>Tritonia nilsodhneri</i>	Pink sea fan nudibranch	1	R	Nationally scarce species.

8. Bryozoa (sea mats/mosses)

Scientific name	Common name	Site*	Abundance‡	Notes
<i>Alcyonidium diaphanum</i>	Finger bryozoans	1	R	
<i>Bicellariella ciliata</i>		1	R	
<i>Bugula flabellata</i>	Spiral bryozoan	2	F	
<i>Bugula plumosa</i>	Spiral bryozoan	2	F-O	
<i>Cellaria sp.</i>		1,2	F-O	
<i>Cellepora pumicosa</i>	Orange pumice bryozoan	1,2	F-P	
<i>Chartella papyracea</i>		1,2	F-P	
<i>Crisia sp.</i>	White claw sea moss	1,2	F	
<i>Disporella hispida</i>		2	F	
<i>Electra pilosa</i>	Frosty sea mat	2	O	
<i>Flustra foliacea</i>	Hornwrack	1,2,3	C-O	Indicator species
<i>Nolella sp.</i>		1	O	

Scientific name	Common name	Site*	Abundance‡	Notes
<i>Pentapora foliacea</i>	Ross coral, potato crisp bryozoan	1	R	
<i>Plagioecia patina</i>		2	O	
<i>Schizomavella linearis</i>		1,2	O-P	
<i>Scrupocellaria</i> sp.		2	C	
<i>Scrupocellaria scruposa</i>		2	F	
Bryozoa indet. crusts	Encrusting bryozoans	1,2	F-R	

9. Phoronida (horseshoe worms)

Scientific name	Common name	Site*	Abundance‡	Notes
<i>Phoronis</i> sp.	Horseshoe worms	2	C-O	

10. Echinodermata (starfish, sea cucumbers)

Scientific name	Common name	Site*	Abundance‡	Notes
<i>Asteria rubens</i>	Common starfish	1	R	

11. Tunicata (sea squirts)

Scientific name	Common name	Site*	Abundance‡	Notes
<i>Aplidium punctum</i>	Club-head sea squirt	2	O	
<i>Ascidia virginea</i>	Pink-edged sea squirt	2	F	
<i>Ascidiella aspersa</i>	Fluted sea squirt	2	O	
<i>Botryllus schlosseri</i>	Star sea squirt	2	F	
<i>Clavelina lepadiformis</i>	Lightbulb sea squirt	2	O	
<i>Dendrodoa grossularia</i>	Gooseberry sea squirt	2	F	
<i>Diplosoma spongiforme</i>		2	O	
<i>Lissoclinum</i> sp.		2	O	
<i>Lissoclinum perforatum</i>	White perforated sea squirt	1,2	O-R	
<i>Morchellium argus</i>	Four-spotted sea squirt	2	F-O	
<i>Perophora listeri</i>	Dwarf sea squirt	2	O	
<i>Polycarpa</i> sp.		1	R	
<i>Pyura</i> sp.		2	O	
<i>Pyura microcosmos</i>		2	O	
<i>Sidnyum elegans</i>		2	F	

12. Pisces (fish)

Scientific name	Common name	Site*	Abundance‡	Notes
Ammotyidae	Sand eels	2	A-P	
<i>Callionymus</i> sp.	Dragonets	1,2	C-P	
<i>Callionymus reticulatus</i>	Reticulated dragonet	2	F	
<i>Centrolabrus exoletus</i>	Rock cook	2,3	F-O	
<i>Crenilabrus bailloni</i> (also nest)	Baillon's wrasse	1,3	P	Lusitanian species, uncommon in English Channel
<i>Crenilabrus melops</i>	Corkwing wrasse	2,3	C-R	
<i>Ctenolabrus rupestris</i>	Goldsinny	1,2	F-P	

Scientific name	Common name	Site*	Abundance‡	Notes
<i>Dicentrarchus labrax</i>	Bass	2	F	
<i>Gobiusculus flavescens</i>	Two-spot goby	2	C-F	
<i>Labrus bergylta</i>	Ballan wrasse	2,3	C-P	
<i>Labrus mixtus</i>	Cuckoo wrasse	1,3	O-R	
<i>Mullus surmuletus</i>	Red mullet	2	O	
<i>Parablennius gattorugine</i>	Tompot blenny	2,3	C-R	
Pleuronectiformes		2	R	
<i>Pollachius pollachius</i>	Pollack	2	C-F	
<i>Pomatoschistus</i> spp.	Sand gobies	2	F	
<i>Solea solea</i>	Sole, Dover sole	3	R	
Teleostei	Fry	2	C	
<i>Thorogobius ephippiatus</i>	Leopard spotted goby	2	F-O	
<i>Trisopterus luscus</i>	Bib, pout, pouting	2	O	
<i>Zeus faber</i>	John Dory	2	O-R	

13. Algae (seaweeds)

Scientific name	Common name	Site*	Abundance‡	Notes
Rhodophyceae	Red seaweeds	1,2,3	C-R	
Rhodophycota indet. (non-calcareous crusts)		2	O	
<i>Calliblepharis ciliata</i>	Beautiful eyelash, red fringed weed	2	F	
<i>Chondrus crispus</i>	Irish moss, carragheen	2	F	
<i>Corallina officinalis</i>	Common coral weed	2	O-P	
Corallinaceae (crusts)	Coralline algae	2	A-O	
<i>Dilsea carnosa</i>	Red rags	2	O	
<i>Griffithsia devoniensis</i>	Mrs Griffiths' Devon weed	2	R	
<i>Plocamium cartilagineum</i>	Cock's comb, red comb weed	2	O	
<i>Rhodymenia holmesii</i>	Holmes' rose weed	2	P	
Phaeophyceae	Brown seaweeds	2	C	
<i>Chorda filum</i>	Mermaid's tresses, bootlace weed	2	C-F	
<i>Cystoseira</i> sp.	Bushy wracks	2	C	
<i>Dictyota dichotoma</i>	Divided net weed, brown fan weed	2	F	
<i>Halidrys siliquosa</i>	Sea oak (brown), pod weed	2	C-P	
<i>Laminaria</i> sp.	Kelp	2	O-P	
<i>Saccorhiza polyschides</i>	Furbelows	2	F-O	
<i>Sargassum muticum</i>	Jap weed, wireweed	2	P	Non-native species
<i>Taonia atomaria</i>	Dotted peacock weed	2	F-O	

Scientific name	Common name	Site*	Abundance‡	Notes
<i>Cladophora</i> sp.	Green branched weeds	2	O	
<i>Ulva</i> sp.		2	P	

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 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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