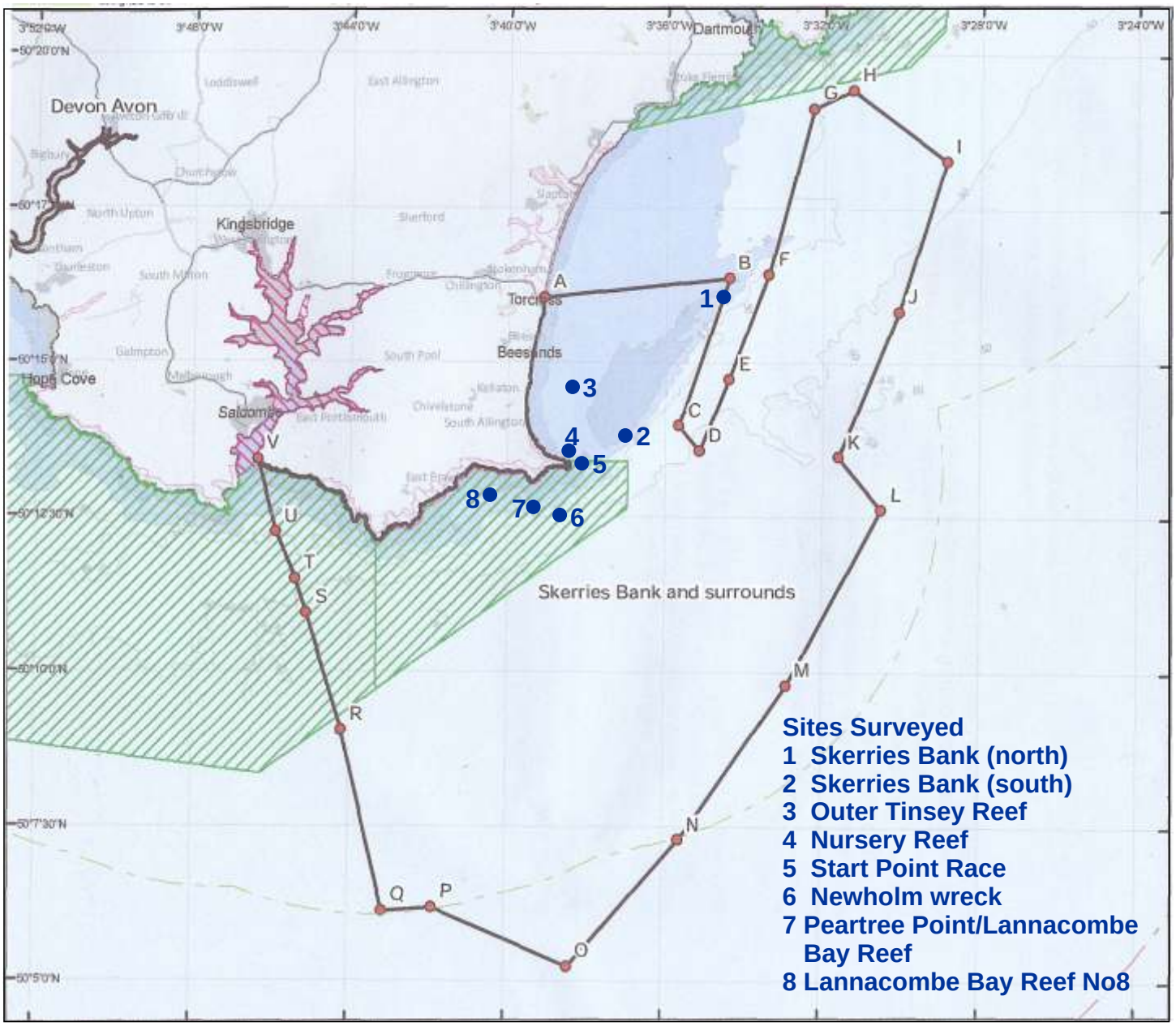
Skerries Bank and surrounds rMCZ, Devon

Seasearch Site Surveys 2012

This report summarises the results of surveys carried out in the recommended 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. Surveys were carried out both on the Skerries Bank itself and also on inshore reefs both north and south of Start Point.



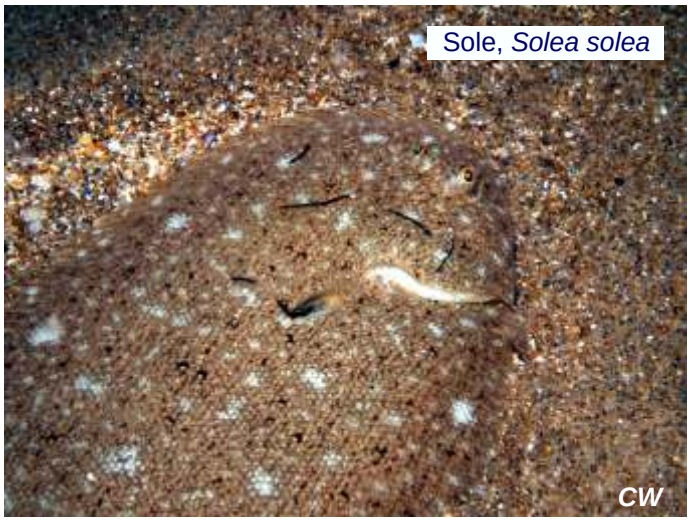
Physical features of the Area

The two main features of the area surveyed by Seasearch in 2012 were the Skerries Bank, an extensive sandbank which extends for about 8km north-east of Start Point and a variety of coastal and inshore rocky reefs both to the north and south of Start Point and around the point itself. The inshore area, especially close to Start Point, has strong tidal streams and can only be dived at slack water.

The rMCZ also includes substantial areas of offshore sediment. These were not surveyed by Seasearch, the closest records being made on the wreck of the Newholm which lies to the south of Start Point.

Skerries Bank (Sites 1 & 2)

The Skerries Bank is made up of sand dunes which are likely to be highly mobile in nature. These provide a habitat for mobile species such as rays, flatfish, sand stars and spiny spider and hermit crabs. Scallops were also recorded but only in low numbers. Beacause of the mobile nature of the sand there was little sign of burrowing animals and the only sessile animal were bryozoans and hydroids attached to the occasional small stones.



Flatfish, such as sole and plaice are often well camoflagued and may be partly covered in sand. Both are commercial species and commonly caught by bottom trawling

Most starfish are found on hard habitats. The sand star is adapeted to sandy sediments and can quickly bury itself for protection.

Blonde, spotted and thornback rays were all recorded in this habitat.

Both spiny spider crabs and hermit crabs are highly mobile animals and can survive in this unstable habitat. The hermit crab has a large parasitic anemone attached to its shell. This is a common alliance in southern England. The crab benefits from additional protection from predators due to the anemone's stinging tentacles and the anemone is moved around to sources of food. The shell is also covered in barnacles.

Tinsey Outer Reef (Site 3)

This is a low lying reef at a depth of 15m below chart datum, with steeply bedded rocks rising on about 1m from the surrounding muddy sand seabed. The reefs are broken up by patches of muddy sand. This is a relatively turbid habitat and the marine life reflects this with a turf of bryozoans, hydroids, sea squirtsd and sponges, but with no seaweeds.

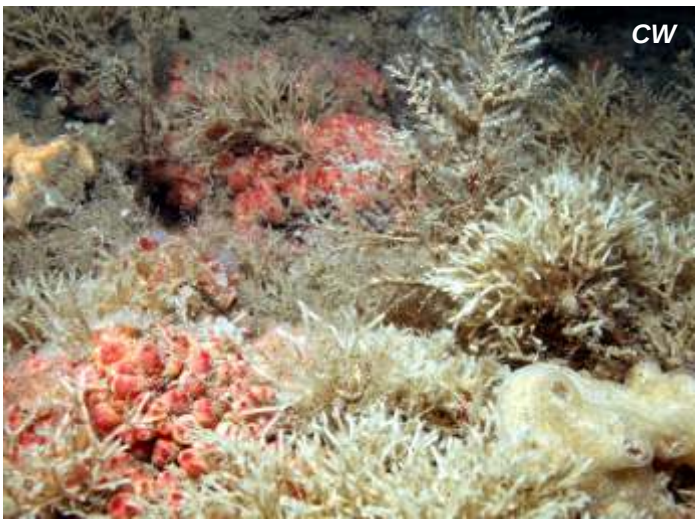
White-striped anemones, *Actinothoe sphyrodeta*

Amongst the animal turf there were a range of mobile species. Notable amongst these were a number of crab species, ranging from small spider crabs to larger edible and spiny spider crabs as well as a large number of velvet swimming crabs, three of which can be seen amongst dead men's fingers (a soft coral), anemones, hydroids, bryozoans and sea squirts.

Edible crab, *Cancer pagurus*

Also present in considerable numbers were two species of catshark, the lesser spotted catshark and nursehound. These are two of the most common small sharks in English waters, and appears in fish and chip shops as huss or rock salmon.

Small-spotted catshark, Scyliorhinus canicula



A rich animal turf of bryozoans, mostly *Cellaria sp.* and sea squirts, *Dendrodoa grossularia* and *Diplosomsa sp.*

The velvet swimming crab, Necora puber, below has its carapace and legs covered in barnacles. Many of the crabs seen were similarly adorded and it is possible that the numbers present mobile species present may mean that they were about to moult.

Velvet swimming crab, Necora *puber*

Nursehound, *Scyliorhinus stellaris*

Start Point (Sites 4 and 5)

The sites dived close to Start Point itself were both low lying rocky reefs subject to strong tidal streams. At Nursery Reef, just north of the point Nursery reef supported a wide variety of fish (11 species) and crsutaceans (8 species). The fish included juveline bib or pouting (photo right) and poor cod. The reef itself was covered in mussel spat which were providing food for a large population of common starfish (middle right). In the race off the point itself the reef was covered in a hydroid and anemone turf including many dahlia anemones, which prefer rock and gravel habitats. Crustaceans were common here too but we did not see any crawfish which are one of species identified for protection in this area, though the habitat was suitable for them.

Newholm wreck (Site 6)

This wreck lies in 35m of water south of Start Point in an area of strong currents. It was dominated by oaten pipe hydroids *Tubularia indivisa*, elegant anemones *Sagartia elegans* and plumose anemones *Metridium senile*. Fishes recorded included ling *Molva molva*, one of the species of conservation importance in the MCZ process.

Lannacombe Bay and Peartree Point Sites 7 and 8)

These reefs south of Start Point are less tideswept than others surveyed. In the shallows there are significant numbers of red seaweeds amongst a sponge and sea squirt dominated turf (right) whilst deeper down there are large numbers of dead mens fingers *Alcyonium digitatum*, white striped anemones *Actinothoe sphyrodeta* and potato crsip bryozoan *Pentapora foliacea*.
Pink sea fans (a species of conservation importance) are present here, one covered in cuttlefish eggs at the time of survey (below). The nationally rare sponge *Adreus fasicularis* was also present at the interface between rock and sand/gravel.

Benefits of Protection:

The area contains a variety of habitats and species, including a number of scarce/rare species. The current proposals for the MCZ do not envisage any changes in the existing management of fishing in the area and will therefore, at best only maintain the *status quo*.
We did not see any crawfish, *Palinurus elephas,* during this survey though it is the only species for which recovery is a conservation objective. This suggests that the current level of protection for this species will not lead to recovery and that something like the no take zone at Lundy is required, where crawfish have become more common since complete protection was achieved.

This report has been written by Chris Wood based on Seasearch Survey records made by Rob Adams, Rachel Coppock, Alec Jacobs, Martin Pratt, Sally Sharrock and Chris Wood, and Observation records made by Geraldine Hendricks. Photos by Rob Adams, Sally Sharrock and Chris Wood. Seasearch would like to thank the volunteer divers for their records and also Rick parker and Tony Hoile for taking us to the sites. Report published by Marine Conservation Society 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 as a Snapshot in Access format on request. It will also be made available on the National Biodiversity Network.

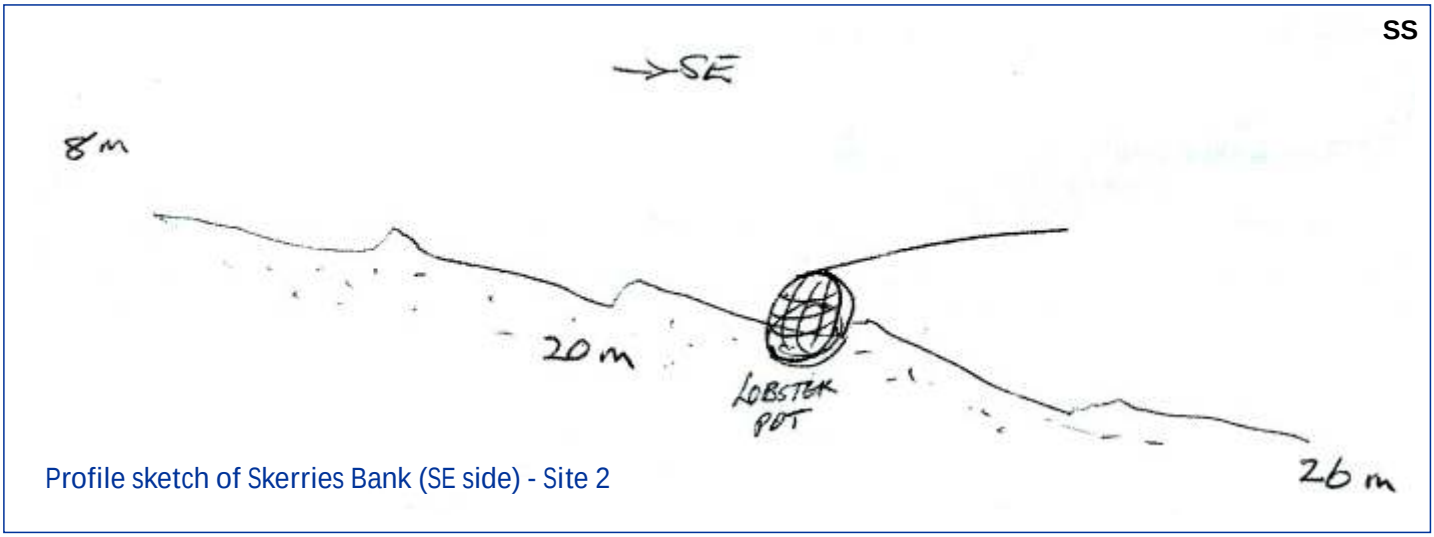
Current proposal

The features proposed for designation are:
Broad Scale Habitats: subtidal coarse sediment, subtidal mud, subtidal sand, moderate energy circalittoral rock, moderate energy infralittoral rock, high energy infralittoral rock, high energy intertidal rock, intertidal coarse sediment, intertidal mixed sediments, intertidal mud and intertidal sand and muddy sand. The objective is to maintain in favourable condition
Habitat FOCI: Intertidal under boulder communities - objective to maintain in favourable condition
Species FOCI: Pink sea fan *Eunicella verrucosa,* Short snouted seahorse *Hippocampus hippocampus* - objective to maintain in favourable condition
Crawfish/Spiny lobster *Palinurus elephas* - objective to recover to favourable condition

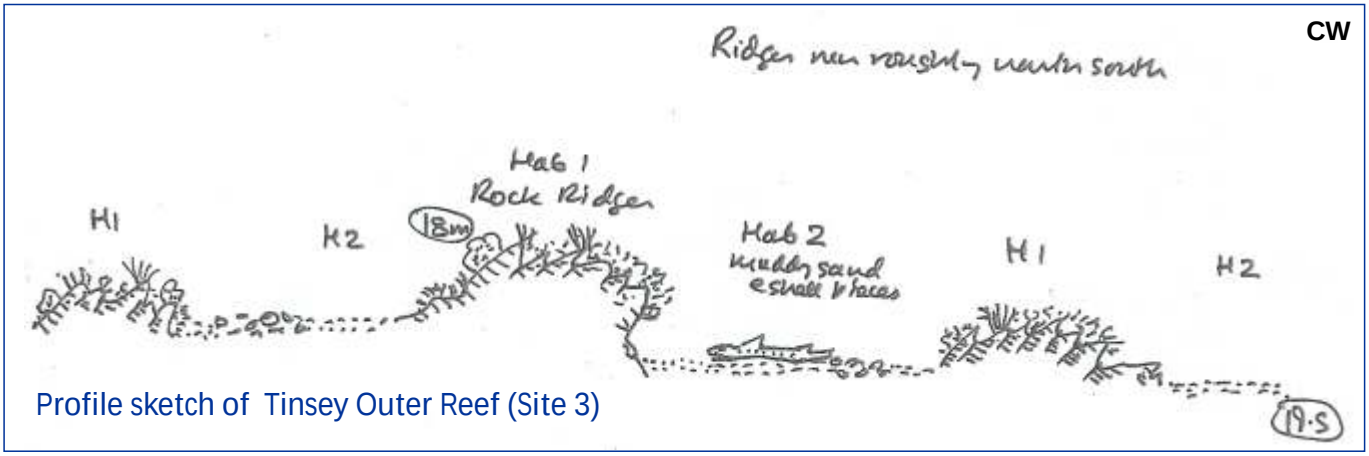
Dive Details

19th May 2012. Peartree Point (Site 7). Surveyor Geraldine Hendricks. Position 50° 12.665'N 03°39.135'W Observation Form NT12/114
30th May 2012: Start Point Race (Site 5). Surveyor Sally Sharrock. Position 50° 13.449'N 03°38.300'W, Survey Form DV12/039
30th May 2012: Newholm Wreck (Site 6). Surveyor Sally Sharrock. Position 50° 12.583'N 03°38.529'W, Survey Form DV12/038
28th July 2012: Nursery Reef (Site 4). Surveyors Sally Sharrock and group. Position 50° 13.500'N 03°38.571'W, Survey Form DV12/098
28th July 2012: Skerries Bank SE (Site 2). Surveyors Sally Sharrock and group. Position 50° 13.830'N 03°37.077'W, Survey Form DV12/097
29th July 2012: Lannacombe Bay Reef (Site 8). Surveyor Sally Sharrock. Position 50° 12.842'N 03°40.311'W, Survey Form DV12/099
12th August 2012: Skerries Bank N (Site 1). Surveyor Rob Adams. Position 50° 16.167'N 03°34.49411'W, Survey Form DV12/140
12th August 2012: Tinsey Outer Reef (Site 3). Surveyors Rob Adams, Rachel Coppock, Martin Pratt & Chris Wood. Position 50° 14.692'N 03°38.45311'W, Survey Forms DV12/141, DV12/143, NT/12 154
15th September 2012. Lannacombe Bay/Peartree Point (Site 7). Surveyor Alec Jacobs. 50° 12.665'N 03°39.353'W Survey Form DV12/174.

Habitat sketches



Profile sketch of Skerries Bank (SE side) - Site 2



Profile sketch of Tinsey Outer Reef (Site 3)

Sublittoral Habitats/Biotopes recorded

Description	MNCR 04:05 Code	Location
Very tide-swept faunal communities	CR.HCR.FaT	Start Point Race (Site 5)
Mixed faunal turf communities	CR.HCR.XFa	Outer Tinsey Reef (Site 3)
		Peartree Point/Lannacombe (Site 7)
Bryozoan turf and erect sponges on tide-swept circalittoral rock		
	CR.HCR.XFa.ByErSp	Lannacombe Bay Reef (Site 8)
Urticina felina and sand-tolerant fauna on sand-scoured or covered circalittoral rock		
	CR.MCR.EcCr.UrtScr	Lannacombe Bay Reef (Site 8)
Mytilus edulis beds with hydroids and ascidians on tide-swept exposed to moderately wave-exposed circalittoral rock		
	CR.MCR.CMus.CMyt	Nursery Reef, Start Point (Site 4)
Alcyonium digitatum and *Metridium senile* on moderately wave-exposed circalittoral steel wrecks		
	CR.FCR.FouFa.AdigMsen	Newholm wreck(Site 6)
Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)		
	SS.SCS	Start Point Race (Site 5)
Circalittoral coarse sediment	SS.SCS.CCS	Skerries Bank N & SE (Sites 1&2
		Newholm wreck(Site 6)
Neopentadactyla mixta in circalittoral shell gravel or coarse sand		
	SS.SCS.CCS.NMix	Lannacombe Bay Reef (Site 8)
Circalittoral muddy sand	SS.SSa.CMuSa	Outer Tinsey Reef (Site 3)
Circalittoral sandy mud	SS.SMu.CSaMu	Outer Tinsey Reef (Site 3)
Circalittoral mixed sediment	SS.SMx.CMx	Nursery Reef, Start Point (Site 4)

Species List

Scientific Name	Common Name	Site	Abundance	Notes
Sponges				
Clathrina coriacea	lace sponge	3,4	R	
Leucosolenia sp.		5	O	
Scypha ciliata	purse sponge	6,8	F-O	
Oscarella lobularis		4	O	
Pachymatisma johnstonia	elephant hide sponge	7,8	O-R	
Dercitus bucklandi	black tar sponge	8	R	
Thymosia guernei	mashed potato sponge	8	R	nationally scarce
Tethya citrina	golf ball sponge	3,7,8	F-R	
Polymastia penicillus	chimney sponge	8	C-O	
Suberites sp.		3	R	
Suberites ficus	sea orange	3,6	O	
Suberites carnosus		3	R	
Adreus fasicularis		8	R	nationally rare
Stelligera rigida		8	R	
Cliona celata	boring sponge	3,7,8	F-R	

Scientific Name	Common Name	Site	Abundance	Notes
Axinella dissimilis	staghorn sponge	8	O-R	
Ciocalypta penicillus	tapered chimney sponge	7,8	O-R	
Halichondria panicea	breadcrumb sponge	3,4,7	O	
Halichondria bowerbanki		3,8	O-R	
Hymeniacidon perleve		3	F-R	
Hemimycale columella	crater sponge	3,4,5,6,8	F-O	
Iophon sp.		3	O	
Raspailia hispida		3	O	
Raspailia ramosa	chocolate finger sponge	3,7,8	O-R	
Haliclona fistulosa		8	R	
Haliclona oculata	mermaid's glove	3,8	O-R	
Haliclona viscosa		8	O	
Dysidea fragilis	goosebump sponge	3,4,8	O	
Amphilectus fucorum	shredded carrot sponge	1,3,4,5,6,8	F-O	
Porifera indet crusts.	various encrusting sponges	1,5,6,7	F-R	
Porifera indet.	unidentified sponges	5,6,7,8	O-R	
Cnidaria	Jellyfish, Hydroids, Anemones and Corals			
Chrysaora hysocella	compass jellyfish	1,2,3	O	
Hydrozoa	unidentified hydroids	3,5,7	C-R	
Tubularia indivisa	oaten pipe hydroid	3,5,6	A-O	
Hydractinia echinata		1	O	
Halecium halecinum	herring bone hydroid	3,8	O-R	
Diphasi pinnaster		3	O	
Sertularella gayi		3,8	O-R	
Sertularia sp.	squirrel's tail hydroid	1	F	
Nemertesia anteninna	antenna hydroid	3,4,5,7,8	C-R	
Nemertesia ramosa	branched antenna hydroid	3,4	O-R	
Aglaophenia sp.		5	F	
Gymnangium montagui	indian feathers hydroid	3,8	O-R	
Obelia geniculata	kelp fur	4	O	
Alcyonium digitatum	dead men's fingers	3,6,7	C-O	
Eunicella verrucosa	pink sea fan	7,8	O-R	BAP/FOCI species, nationally scarce
Cerianthus lloydii	burrowing anemone	3,7	O-R	
Epixoanthus couchii	sandy creeplet	4	R	
Isozoanthus sulcatus	peppercorn anemone	8	R	
Anemonia viridis	snakelocks anemone	4,8	O	
Urticina felina	dahlia anemone	3,5,6	A-R	
Diadumene cincta		5	R	
Metridium senile	plumose anemone	1,3,6	C-R	
Sagartia sp.		2	R	
Sagartia elegans	elegant anemone	2,5,6	A-R	
Sagartia troglodytes		1,3,4,5	F-R	
Cereus pedunculatus	daisy anemone	5,8	F-R	
Actinothoe sphyrodeta	white striped anemone	2,3,5,6,7,8	C-R	
Sagartiogeton undatus		1	R	
Calliactis parasitica	parasitic anemone	1,3	O-R	
Adamsia carcinopados	cloak anemone	1,2	F-O	
Peachia cylindrica		3	O	
Corynactis viridis	jewel anemone	3,5,7,8	F-R	
Caryophyllia inornata	southern cup-coral	4	R	nationally scarce
Caryophyllia smithii	Devonshire cup-coral	3,4,7,8	F-R	
Platyhelminthes	Flatworms			
Prostheceraeus vittatus	candy striped flatworm	8	R	

Scientific Name	Common Name	Site	Abundance	Notes
Annelida	Segmented Worms			
Terebellidae indet.	unidentified ribbon worm	8	O	
Eupolymnia nebulosa		4	R	
Lanice conchilega	sand mason worm	1,3,4,6,8	O-R	
Bispira volutacornis	double spiral worm	3,4,7,8	O-R	
Myxicola infundibulum	eyelash worm	8	R	
Sabella pavonnina	peacock worm	4	R	
Pomatoceros sp.	keel worm	2,4,8	F-R	
Filograna implexa	vermicelli worm	8	R	
Spirorbis spirorbis	spiral worm	8	R	
Pycnogonida	Sea Spiders			
Pycnogonidae	unidentified sea spider	4	R	
Crustacea	Barnacles, crabs and lobsters			
Cirripedia.	barnacles	1,3,4,8	C-R	
Boscia anglica	parasitic barnacle	3	R	
Caprellidae	caprellid shrimp	4	F	
Crangon crangon	brown shrimp	3	R	
Homarus gammarus	lobster	3,6	R	
Paguridae	hermit crabs	3,8	O	
Pagurus bernhardus	common hermit crab	1,2,3,4,5,7	F-R	
Pagurus prideaux		1,2	F-O	
Galathea squamifera	squat lobster	4	R	
Maja squinado	spiny spider crab	all	C-R	
Inachus sp.	sponge spider crab	2,3,4,7,8	O-R	
Inachus phalangium	sponge spider crab	7	P	
Macropodia sp.	scorpion spider crab	1,2,3	O-R	
Cancer pagurus	edible/brown crab	all	C-R	
Necora puber	velvet swimming crab	3,4,5,8	A-O	
Mollusca	Molluscs			
Calliostoma zizyphinum	painted topshell	8	R	
Crepidula fornicata	slipper limpet	3	O-R	
Triva monacha	european cowrie	4,8	R	
Ocenebra sp.	sting winkle	4	O	
Buccinum undatum	common whelk	3	R	
Hinia reticulata	netted dog whelk	1,3	F-R	
Acanthadoris pilosa		8	R	
Polycera sp.		4	R	
Archidoris pseudoargus	sea lemon	3,5	C-R	
Janolus cristatus	crystal sea slug	2,4	R	
Flabellina pedata	violet sea slug	4,6	R	
Mytilus edulis	blue mussel	2,3,4,5	S-R	
Pecten maximus	king scallop	1,3,8	O-R	
Sepia officinalis	cuttlefish	1,3,4,7,8	O-R	
Loligo sp.	squid	3	R	
Bryozoa	sea mats and sea mosses			
Crisia sp.	white claw sea moss	3,4,7,8	A-R	
Alcyonidium diaphanum	finger bryozoan	1,3,7,8	A-R	
Alcyonidium parasiticum		3	R	
Vesicularia spinosa		1	R	
Electra pilosa	frosty sea mat	1,8	O-R	
Flustra foliacea	hornwrack	3	O	
Carbasea carbasea		3	O-R	
Chartella papyracea		3,4,8	F-O	

Scientific Name	Common Name	Site	Abundance	Notes
Bugula flabellata	spiral bryozoan	3,4	F-R	
Bugula plumosa	spiral bryozoan	5,8	O	
Bugula turbinata	spiral bryozoan	3,5	O-R	
Cellaria sp.		3,7,8	A-R	
Cellaria fistulosa		3	O	
Porella compressa	staghorn bryozoan	4	O	
Pentapora foliacea	potato crisp bryozoan	4,7,8	F-R	
Cellepora pumicosa	pumice bryozoan	3	R	
Omalosecosa ramulosa	monkey puzzle bryozoan	8	O	
Bryozoa indet. crusts	encrusting bryozoans	3,4,5,6,8	F-O	
Phoronida	Horseshoe worms			
Phoronis hippocrepia	horseshoe worm	3	R	
Echinodermata	Starfish, sea urchins and sea cucumbers			
Antedon bifida	common featherstar	4,6,7	F-R	
Luidia ciliaris	seven armed starfish	7,8	O-R	
Astropecten irregularis	sand star	1	O	
Henricia oculata	bloody henry starfish	7,8	O-R	
Asteria rubens	common starfish	all	C-R	
Marthasterias glacialis	spiny starfish	7,8	O-R	
Ophiothrix fragilis	common brittlestar	1	R	
Ophiura ophiura	sand brittlestar	3	R	
Echinus esculentus	common sea urchin	6	O	
Neopentadactyla mixta	gravel sea cucumber	8	F	
Pawsonia saxicola	white crevice sea cucumber	4,8	O-R	
Aslia lefeveri	brown crevice sea cucumber	4,5,8	F-R	
Tunicata	Sea Squirts			
Tunicata sp.	unidentified sea squirt	3	F	
Clavelina lepadiformis	light bulb sea squirt	4,8	F-O	
Pycnoclavella sp.		8	R	
Morchellium argus	pink club sea squirt	1	F	
Sidnyum elegans		3	F-O	
Didemnum sp.		3,4,8	F-R	
Didemnum maculosum		3	C	
Diplosoma sp.		3,4,5,8	C-R	
Diplosoma listerianum		3	C-F	
Diplosoma spongiforme	sponge sea squirt	3	C-F	
Lissoclinum perforatum	perforated sea squirt	8	R	
Phalluisa mammillata	giant sea squirt	8	R	
Styela clava	leathery sea squirt	3,8	R	non-native species
Dendrodoa grossularia	gooseberry sea squirt	3	C-F	
Distomus variolosus	baked bean sea squirt	3,8	C-R	
Stolonica socialis	orange sea squirt	3,7,8	C-R	
Botryllus schlosseri	star sea squirt	4	R	
*Botrylloides leach*i		3,4	F-R	
Pisces	Fishes			
Scyliorhinus canicula	lesser spotted catshark	2,3,7,8	O-R	
Scyliohinus stellaris	nursehound	3,4,5	O-R	
Raja brachyura	blonde ray	2	O	
Raja clavata	thornback ray	1,2,8	O-F	BAP/FOCI species
Raja montagui	spotted ray	2	R	OSPAR/FOCI species
Molva molva	ling	6	R	BAP/FOCI species
Pollachius pollachius	pollack	6,8	O-R	
Trisopterus luscus	bib/pouting	4,7,8	F-R	
Trisopterus minutus	poor cod	4	F	

Trigla lucerna	tub gurnard	1	R	
Taurulus bubalis	long spined sea-scorpion	3,4,5,8	R	
Ctenolabrus rupestris	goldsinny wrasse	6,7,8	R	
Labrus bergylta	ballan wrasse	4,8	O	
Labrus mixtus	cuckoo wrasse	7	F	
Echiichthys vipera	lesser weever	2	R	
Parablennius gattorugine	tompot blenny	4,7	R	
Pholis gunnellus	butterfish	4,5,6	R	
Ammodytes sp.	sand eel	1,2,8	A-R	
Hyperoplus lanceolatus	greater sand eel	1	O	
Callionymus lyra	dragonet	1,2,3,4,8	F-O	
Gobiusculus flavescens	two spot goby	4,8	F-R	
Pomatoschistus sp.	small unidentified goby	1,3	F-O	
Pomatoschistus pictus	painted goby	4,8	F-O	
Thorogogius ephippiatus	leopard spotted goby	4,6,7	R	
Pleuronectes platessa	plaice	1,2,3,4,8	R	BAP/FOCI species
Solea solea	sole	1	R	BAP/FOCI species
Algae	Seaweeds			
Rhodphycota indet.	various red seaweeds	3,4,5,8	C-O	
Calliblepharis ciliata	fringe weed	7	F-O	
Dilsea carnosa	red rags	8	R	
Halarachnion ligulatum	sea spider weed	3	O	
Stenogramme interrupta	papery fan weed	3	R	
Delessaria sanguinea	sea beech	5	O	
Dictyopteris membranacea	netted wing weed	4,8	O	
Dictyota dichotoma	brown fan weed	4,8	O	
Desmarestia sp.		4	O	
Saccorhiza polyschides	furbellows	4,5,8	O-R	
Ulva lactuca	sea lettuce	3	R	
encrusting algae indet.	pink encrusting algae	5,8	O	