

Technical Appendix

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

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

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

Current proposal

The proposed MCZ and Reference Area are both tightly drawn around existing features shown on the chart. The Reference area covers the northern side of the Mixon Hole and the pMCZ covers the shallow reefs to the north and west of the Mixon Hole and the separate reef of The Hounds to the west as well as the surrounding seabed.

The features proposed for designation are:

Broad Scale Habitats: infralittoral rock with thin sands, thin mixed sediments, thin sandy sediments

Habitat FOCI: Peat and Clay exposures

Geology: Bracklesham Bay

Features within the area but NOT proposed for designation are:

Broad Scale Habitats: intertidal coarse/mixed sediments

Habitat FOCI: Common maerl (may not exist), Native oyster beds, Subtidal sands and gravels

Species FOCI (low mobility): Native Oyster

Species FOCI (high mobility): European Eel, Undulate Ray

Dive Details

Dive 1: 7th April 2012. The Hounds. Drift dive along reef using towed GPS. Habitat, species and photographic records. Surveyor Chris Wood Position from 50° 44.047N 00°49.670W to 50°44.155N 00°49.859W, Survey Form NT12/014

Dive 2: 22nd July 2012: The Hounds. Slack water dive at eastern end of the reef. Habitat, species and photographic records. Surveyor Chris Wood. Position 50° 44.095N 00°49.742W, Survey Form NT12/098

Dive 3: 9th September 2012. Mixon Hole. Three pairs of divers, recording at intervals along the north face. Habitat, species and photographic records with collection of algae for identification. . Surveyors Chris Wood, James Lucey, Charlotte Bolton, Fiona Ravenscroft, Belinda Vause & Chris Williams. Slight current running making impossible to swim to the westerly end of the hole.

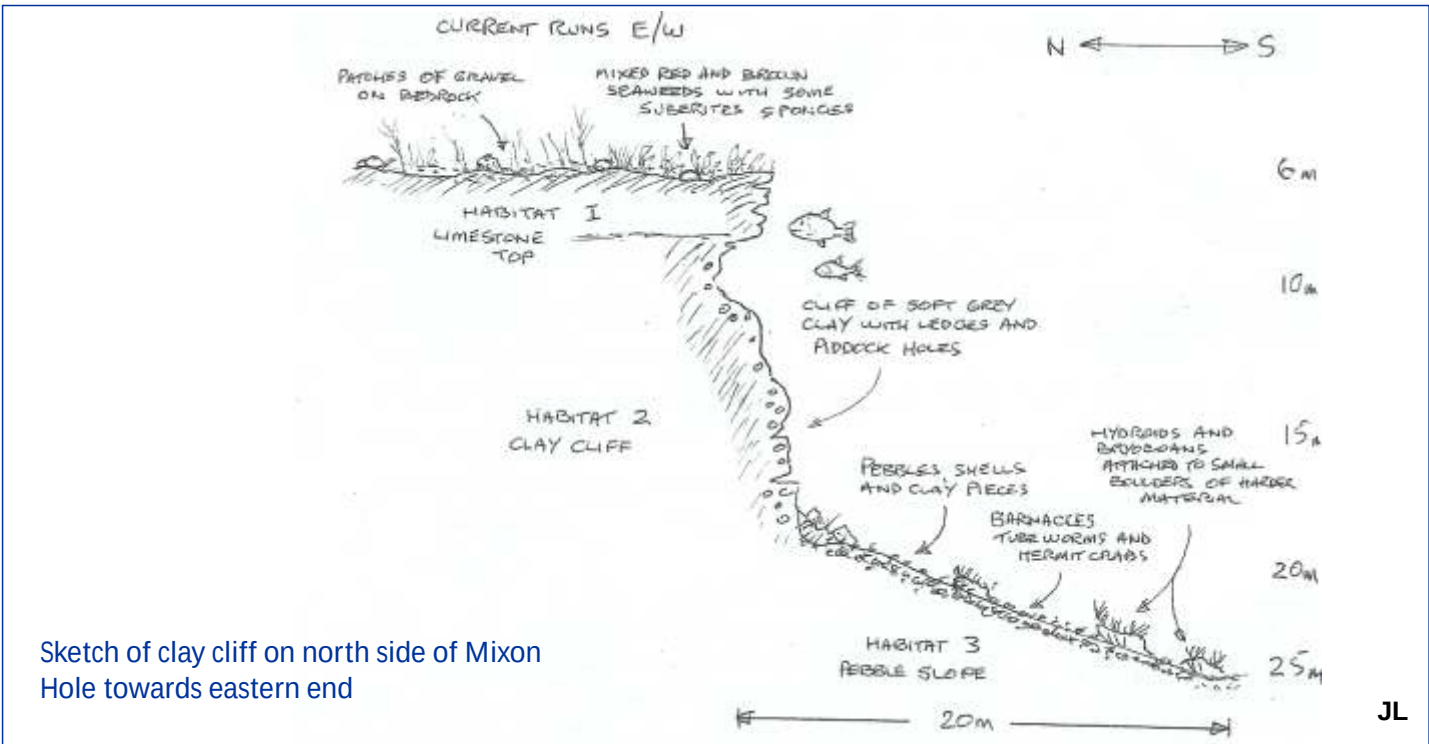
Positions West (CWo/BV) from 50° 42.276N 00°46.347W to 50°42.240N 00°46.375W, Survey Form NT12/186. Observation Form NT12/185.

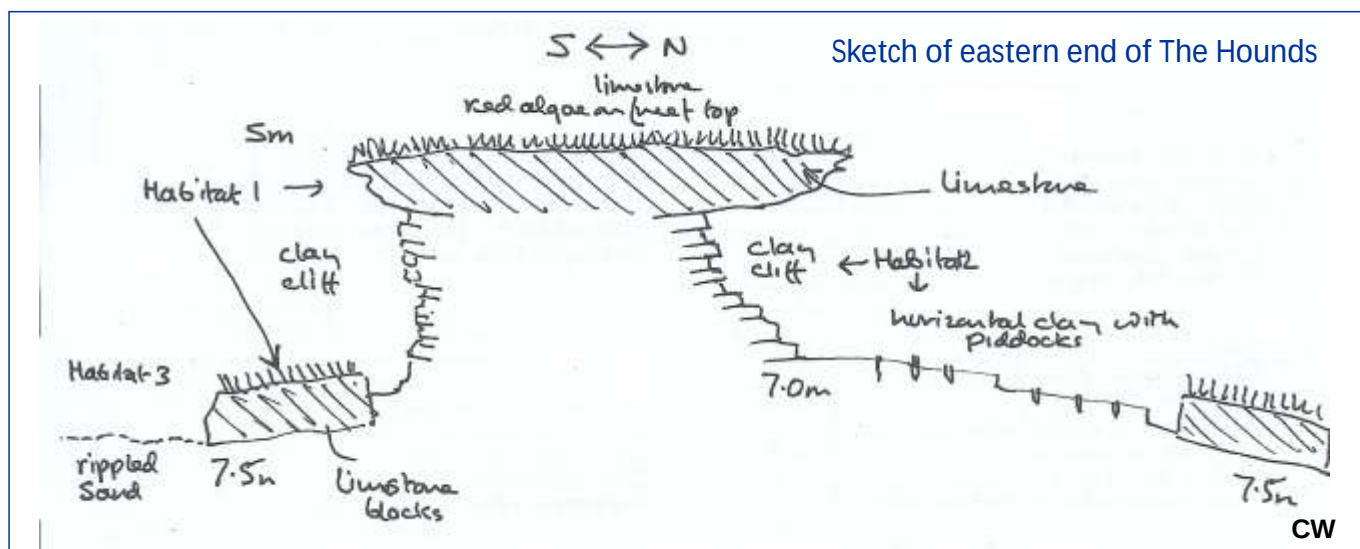
Centre (CB/FR) from 50° 42.282N 00°46.341W to 50°42.254N 00°46.361W Survey Form NT12/195.

East (JR/CWi) from 50° 42.300N 00°46.325W to east. Out position not accurately recorded. Survey Form NT12/204.

Dive 4: 9th September 2012. Mixon Hole. One pair of divers drifting along length of Hole. Observation level records made. Surveyor Tim Mapstone. Position not accurately recorded. Observation Form NT12/187.

Habitat sketches





Sublittoral Habitats/Biotopes recorded

Description	MNCR 04:05 Code	Location
barren rippled fine sand	SS.SSa.IFiSA	south-east of The Hounds
clay bedrock with horizontal surfaces and pitted cliffs up to 15m high	CR.MCR.SfR.Pid	The Hounds, southern end Mixon Hole north side
Limestone bedrock and boulders with mixed seaweeds and sponges	IR.MIR.KR.XFoR	The Hounds, northern end Mixon Hole, north side in shallows
Clay and limestone boulders, cobbles and Crepidula shells	CR.MCR.CFaVSCuSPH CR.MCR	part of bottom of Mixon Hole remainder of bottom of Mixon Hole

Species List

Scientific Name	Common Name	Site	Abundance	Notes
Sponges				
<i>Scypha ciliata</i>	purse sponge	M	R	
<i>Grantia compressa</i>	flattened purse sponge	H	C	on seaweeds
<i>Suberites ficus</i>	sea orange	H/M	O-F	amongst seaweeds
<i>Suberites carnosus</i>		M	R	
<i>Suberites massa?</i>		H	O	on clay
<i>Phorbastrium plumosum</i>		M	O	
<i>Amphilectus fucorum</i>	shredded carrot sponge	H/M	R-O	on clay and limestone
<i>Halichondria panicea</i>	breadcrumb sponge	H	O-F	widespread in the area
<i>Halichondria bowerbanki</i>		M	O	
<i>Hymeniacidon perlevei</i>		M	O	in bottom of Hole
<i>Halictolona cinerea</i>		H	O	amongst seaweeds
<i>Dysidea fragilis</i>	goosebump sponge	M	O	widespread in the area
<i>Porifera</i> indet.	various encrusting sponges	H/M	O-F	

Scientific Name	Common Name	Site	Abundance	Notes
Cnidariana	Hydroids & Anemones			
<i>Abietinaria abietina</i>		M	O	
<i>Amphisbetia operculata</i>		M	R	
<i>Hydrallmania falcata</i>	helter-skelter hydroid	H	R-O	
<i>Sertularella rugosa?</i>		M	O	
<i>Sertularia sp.</i>	squirrel's tail hydroid	M	R	
<i>Kirchenpaueria pinnata?</i>		M	P	
<i>Nemertesia anteninna</i>	antenna hydroid	M	O	
<i>Plumularia setacea</i>		H	F	
<i>Aglaophenia pluma</i>		M	O	on podweed
<i>Anemonia viridis</i>	snakelocks anemone	H/M	R-F	
<i>Urticina felina</i>	dahlia anemone	M	O	
Annelida	Segmented Worms			
<i>Filograna implexa</i>	vermicelli worm	M	R	on clay
<i>Salmacina dysteri</i>		M	R	on clay
<i>Pomatoceros sp.</i>	keel worm	M	O-C	
<i>Polydora sp?</i>		M	F	in clay
Crustacea	Barnacles, crabs and lobsters			
<i>Balanus sp.</i>	barnacles	M	R-C	
<i>Mysidacea</i>	mysid shrimp	H	F-O	
<i>Paguridae</i>	hermit crabs	H	R-F	
<i>Galathea squamifera</i>	squat lobster	H/M	R	
<i>Inachus sp.</i>	sponge spider crab	M	R-O	
<i>Maja squinado</i>	spiny spider crab	H	O	
<i>Cancer pagurus</i>	edible/brown crab	H/M	R-F	
<i>Ncora puber</i>	velvet swimming crab	H/M	R-F	
<i>Jassa falcata?</i>	tube dwelling amphipod	H	R-F	
Mollusca	Molluscs			
<i>Gibbula cineraria</i>	grey topshell	H/M	R-O	
<i>Calliostoma zizyphinum</i>	painted topshell	H/M	R-O	
<i>Crepidula fornicata</i>	slipper limpet	M	R-O	also many empty shells
<i>Triva arctica</i>	arctic cowrie	M	R	
<i>Ocenebra erinacea</i>	sting winkle	M	R	
<i>Buccinum undatum</i>	common whelk	H/M	R-O	on sand and rock features
<i>Hinia reticulata</i>	netted dog whelk	M	R	
<i>Archidoris pseudoargus</i>	sea lemon	H	R	eggs
<i>Mytilus edulis</i>	blue mussel	M	R	
<i>Ostrea edulis</i>	european oyster	H/M	R	BAP/FOCI species
<i>Gastrochaenia dubia?</i>		M	O	
<i>Pholas dactylus</i>	common piddock	H/M	F-C	boring in clay
<i>Barnea candida</i>		M	R	
<i>Sepia officinalis</i>	cuttlefish	M	R	
Phoronida	horseshoe worms			
<i>Phoronis hippocrepia</i>		H	O	
Bryozoa	sea mats and sea mosses			
<i>Alcyonidium diaphanum</i>	finger bryozoan	M	R	
<i>Crisia sp.</i>		M	O	
<i>Membranipora membranacea</i>	sea mat	M	O	
<i>Electra pilosa</i>	frosty sea mat	H/M	R-F	
<i>Flustra foliacea</i>	hornwrack	M	R-O	
<i>Bugula plumosa/turbinata</i>	spiral bryozoans	M	R	
<i>Parasmittina trispinosa</i>	encrusting bryozoan	H/M	R- F	
<i>Aetea anguinea</i>	snakes head coralline	M	R	
<i>Schizomavella linearis</i>		M	R-O	

Scientific Name	Common Name	Site	Abundance	Notes
Tunicata	Sea Squirts			
<i>Molgula</i> sp.		H	F	
<i>Diplosoma spongiforme</i>		H/M	R-O	
<i>Didemnum maculosum</i>		M	R	
<i>Lissoclinum perforatum</i> ?	perforated sea squirt	M	R	
<i>Dendrodoa grossularia</i>	gooseberry sea squirt	M	R-O	
<i>Perephora listeri</i>		M	R	
Pisces	Fishes			
<i>Scyliorhinus canicula</i>	lesser spotted catshark	H/M	R-F	
<i>Pollachius pollachius</i>	pollack	H	R	
<i>Trisopterus luscus</i>	bib/pouting	H/M	R-F	
<i>Taurulus bubalis</i>	long spined sea-scorpion	H	R	
<i>Labrus bergylta</i>	ballan wrasse	H/M	R-F	
<i>Crenilabrus melops</i>	corkwing wrasse	H/M	R-F	
<i>Parablennius gattorugine</i>	tompot blenny	H/M	R-O	
<i>Lipophrys pholis</i>	shanny	M	R	
<i>Gobiusculus flavescens</i>	two spot goby	M	R-C	
<i>Gobius niger</i>	black goby	H/M	R-F	
<i>Pomatoschistus pictus</i> ?	painted goby	M	R	
<i>Gobiidae</i> indet.	various small gobies	M	O-F	
<i>Callionymus</i> sp.	dragonets	M	R	
<i>Cyclopterus lumpus</i>	lumpsucker	H	R	nesting
<i>Balistoides capricus</i>	grey triggerfish	M	R	
Algae	Seaweeds			
<i>Jania rubens</i>	slender beaded coral weed	H	F	
Corallinaceae	encrusting pink algae	M	R-O	
<i>Calliblepharis ciliata</i>	fringe weed	M	O-F	
<i>Dilsea carnosa</i>	red rags	H/M	O	
<i>Chondrus crispus</i>	caragheen	H/M	O-F	
<i>Polyides rotundus</i>	discoïd fork weed	H/M	O	
<i>Gracilaria bursa-pastoralis</i>	shepherd's purse wart weed	M	O-F	
<i>Plocamium cartilagineum</i>		H/M	R-A	
<i>Ceramium</i> sp.	banded pincer weed	M	O	
<i>Halurus equisetifolius</i>	sea horsetail	H/M	F-O	
<i>Halurus flosculus</i>	Mrs Griffith's little flower	M	O-F	
<i>Heterosiphonia plumosa</i>	siphoned feather weed	M	O	
<i>Cryptopleura ramosa</i>	fine-veined crinkle weed	M	O	
<i>Delessaria sanguinea</i>	sea beech	M	R	
<i>Halopithys incurvus</i>	red sea pine	M	O	
<i>Polysiphonia</i> sp.	siphon weed	H	A	
<i>Sphondylothamnion multifidum</i>	whorled bush weed	M	O	
<i>Rhodophycota</i> indet.	various red seaweeds	H/M	A	
<i>Cladostephus spongiosus</i>	hairy sponge weed	M	R-O	
<i>Dictyota dichotoma</i>	brown fan weed	M	R-O	
<i>Desmarestia ligulata</i>	desmarest's flattened weed	H	R	
<i>Laminaria hyperborea</i>	forest kelp	H/M	R-O	
<i>Laminaria digitata</i>	oarweed	M	R	
<i>Saccarhina latissima</i>	sugar kelp	H/M	O	
<i>Saccorhiza polyschides</i>	furbellows	M	R	
<i>Halidrys siliquosa</i>	podweed	M	R	
<i>Sargassum muticum</i>	wireweed (japweed)	H/M	R-F	invasive species