

Padstow Bay and surrounds (rMCZ38) Evidence Review

Region	Finding Sanctuary	
Site Name/number	Padstow Bay and surrounds rMCZ FS38	
ENG Features present and proposed for inclusion within MCZ designation	BSH	<ul style="list-style-type: none"> • High energy intertidal rock • Moderate energy intertidal rock • Intertidal coarse sediment • Intertidal sand and muddy sand • Intertidal mud • High energy infralittoral rock • Moderate energy infralittoral rock • High energy circalittoral rock • Moderate energy circalittoral rock • Subtidal coarse sediment.
	Habitat FOCI	-
	Species FOCI	<ul style="list-style-type: none"> • <i>Eunicella verrucosa</i> • <i>Haliclystus auricula</i> • <i>Lucernariopsis cruxmelitensis</i> • <i>Palinurus elephas</i> • <i>Arctica islandica</i>.
ENG Features present but not proposed for inclusion within MCZ designation	BSH	-
	Habitat FOCI	<ul style="list-style-type: none"> • Subtidal sands and gravels.
	Species FOCI	-
Non-ENG Features (Geological/geomorphological)		<ul style="list-style-type: none"> • <i>Tursiops truncates</i> • <i>Fulmarus glacialis</i> • <i>Uria aalge</i> • <i>Fratercula arctica</i> • <i>Alca torda</i> • <i>Rissa tridactyla</i>.

Evidence Summary – data provided by Regional MCZ Projects

Feature	Evidence Summary	Key Sources
High energy intertidal rock	Presence and extent based on predicted modelled polygon data from MESH and MB0102. No data points available. Aerial imagery provided by CCO	MESH and MB0102 CCO
Moderate energy intertidal rock	Presence and extent based on predicted modelled polygon data from MESH and MB0102. No data points available. Point data from NE geo-referenced photographs for MCZ feature specific studies. Aerial imagery provided by CCO	MESH and MB0102 CCO NE

Intertidal coarse sediment	Presence and extent based on predicted modelled polygon data from MESH and MB0102 No data points available. Point data from NE geo-referenced photographs for MCZ feature specific studies. Aerial imagery provided by CCO	MESH, MB0102 CCO NE
Intertidal sand and muddy sand	Presence and extent based on predicted modelled polygon data from MESH and MB0102. No data points available. Aerial imagery provided by CCO	MESH and MB0102 CCO
Intertidal mud	Presence and extent based on predicted modelled polygon data from MESH and MB0102 No data points available. Aerial imagery provided by CCO	MESH, MB0102 CCO
High energy infralittoral rock	Presence and extent based on predicted modelled polygon data from MESH/UKSeaMap and data points from MESH.	MESH/UKSeaMap
Moderate energy infralittoral rock	Presence and extent based on predicted modelled polygon data from MESH/UKSeaMap and data points from MESH.	MESH/UKSeaMap
High energy circalittoral rock	Presence and extent based on predicted modelled polygon data from MESH/UKSeaMap and data points from MESH.	MESH/UKSeaMap
Moderate energy circalittoral rock	Presence and extent based on predicted modelled polygon data from MESH/UKSeaMap and one data point from MESH.	MESH/UKSeaMap
Subtidal coarse sediment	Presence and extent based on predicted modelled polygon data from MESH/UKSeaMap and one data point from MESH. Parent feature data points available.	MESH/UKSeaMap
<i>Eunicella verrucosa</i>	Presence and extent based on data points from Regional project FS data from MB0102	Regional project FS data from MB0102
<i>Haliclystus auricula</i>	Presence and extent based on one data point from Cornwall Wildlife Trust Regional Projects - FS data.	Regional Projects – FS (Cornwall Wildlife Trust)
<i>Lucernariopsis cruxmelitensis</i>	Presence and extent based on data points from Regional Projects - FS and MB0102.	Regional Projects - FS and MB0102
<i>Palinurus elephas</i>	Presence and extent based on one data point from MB0102, one data point from Regional Projects - FS	MB0102, Regional Projects – FS
<i>Arctica islandica</i>	Presence and extent based on one data point from Regional Projects – FS.	Regional Projects - FS

Description of New Evidence Identified by MB0116 project

Evidence Description	Source	Feature
County_Cornwall_Scilly_MCZ	SW_Habitat_Mapping_BAP	Intertidal coarse sediment Intertidal mud
North_Cornwall_legend_Apr_16_2010_MCZ	SW_Habitat_Mapping	Intertidal coarse sediment Intertidal mud
Data points	SeaSearch	<i>Eunicella verrucosa</i>
Data points	Marine Recorder - MBA	<i>Eunicella verrucosa</i> <i>Palinurus elephas</i> <i>Arctica islandica</i>

Evidence That Could Not Be Acquired by MB0116 project

Evidence Description	Source	Feature
Compilation of all survey data carried out in the area. Exact content unknown.	ERCCIS (Cornwall Wildlife Trust)	<i>Padina pavonica</i> and other unknown features
Rock and thin sediment.	British Geological Society	Broadscale habitats
Geo-referenced photographic evidence	NE	High energy intertidal rock

Confidence Assessment undertaken by MB0116 project

Feature	Presence	Extent	Condition	Boundaries (site)
High energy intertidal rock	High	Moderate	Low	Low
Moderate energy intertidal rock	Moderate	Low	Low	
Intertidal coarse sediment	Moderate	Moderate	Low	
Intertidal sand and muddy sand	High	High	Low	
Intertidal mud	Low	Low	Low	
High energy infralittoral rock	Low	Low	Low	
Moderate energy infralittoral rock	Low	Low	Low	
High energy circalittoral rock	Low	Low	Low	
Moderate energy circalittoral rock	Low	Low	Low	
Subtidal coarse	Low	Low	Low	

sediment				
<i>Eunicella verrucosa</i>	Moderate	Moderate	Moderate	
<i>Haliclystus auricula</i>	Low	Low	Low	
<i>Lucernariopsis cruxmelitensis</i>	Low	Low	Low	
<i>Palinurus elephas</i>	Low	Low	Low	
<i>Arctica islandica</i>	Low	Low	Low	

The confidence assessment for 'High energy intertidal rock' was based on the confirmation of the feature being present through the aerial photography, because the existing evidence was lacking feature or parent feature points and the polygon data had a MESH score of less than 58, therefore the presence was assessed as 'high'. The photograph coverage was greater than 50% of the feature polygon and so was assessed as 'moderate'.

A 'moderate' score for the presence of the 'Moderate energy intertidal rock' feature because, although the MESH score was less than 58 and there were no feature points overlapping the feature polygon, the aerial photography confirmed the presence over part of the feature polygon. This coverage however was less than 50% therefore the extent score was 'low'.

A 'moderate' score for the presence of 'Intertidal coarse sediment' because, although the MESH score was less than 58 and there were no feature points overlapping the feature polygon, the aerial photography confirmed the presence over part of the feature polygon. This coverage however was greater than 50% therefore the extent score was considered to be 'moderate'.

The confidence assessment for 'Intertidal sand and muddy sand' was based on the confirmation of the feature being present through the aerial photography, because the existing evidence was lacking feature or parent feature points and the polygon data had a MESH score of less than 58, therefore the presence was assessed as 'high'. The photograph coverage was greater than 90% of the feature polygon and so was assessed as 'high'.

The confidence assessment for 'Intertidal mud', 'Moderate energy circalittoral rock', 'Moderate energy infralittoral rock', 'High energy circalittoral rock', and 'Subtidal coarse sediment' all resulted in a 'low' score for presence and extent since there were no validation data points agreeing with/ validating the polygon data.

The confidence assessment for 'High energy infralittoral rock' resulted in a 'low' score for presence since the polygon data had a low MESH score (<58) and 5/13 (38%) feature (A3.1) data points agreeing and overlapping with feature polygon. A confidence score of 'moderate' was recorded for extent as the sample data did not cover greater than 50% of the feature. However, the confidence score assigned to extent was reduced to 'low' to reflect the low confidence score assigned to the presence of this feature.

A 'moderate' score was obtained for both presence and extent of *Eunicella verrucosa* since there were over 20 records; 11 records of which are <12 years old; and all collected by specialists.

'Low' scores were obtained for both presence and extent of *Haliclystus auricula*, *Lucernariopsis cruxmelitensis*, *Palinurus elephas*, and *Arctica islandica* since all data points were collected more than 12 years ago.

The condition assessment for all the features was based on a Vulnerability Assessment. *Eunicella verrucosa* scored a 'moderate' confidence score as there was overlap with benthic trawling. The remaining features could not be improved beyond a 'low' confidence score. The confidence assessment in the boundary of the site was classified as low primarily because the overall confidence in the extent of the respective BSH was determined as 'low'.