



# Shoreline Habitat

The Habitat Type provides a simplified picture of the "look" of the unit overall, based on the detailed biophysical attributes that have been mapped. The Habitat Type category is a summary of the observations of both the unit's biological and geomorphological features.

Each Habitat Type has a definition that includes the typical substrate, wave exposure and biobands. For example, for the

Each Habitat Type has a definition that includes the typical substrate, wave exposure and biobands. For example, for the Semi-exposed, Immobile substrate Habitat Type, part of the definition of that class is a certain combination of the most likely biobands and indicator species present at a bedrock shoreline with no mobile sediment present.

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How is Habitat Type determined?  
Each Habitat Type has typical biological features (including both an indicator species list and typical associated biobands). To determine the Habitat Type, the biomes listed at the class above will be designated and described by the student groups as

To determine the Habitat Type, the biomapper looks at the along-shore Units as designated and described by the physical mapper, and 1.□records the observations of the biobands in the unit and looks for indicator species,

1. records the observations of the biosounds in the unit and looks for indicator species,
2. assigns a bio-(wave) exposure category,
3. reviews the physical mapped information, and

3.  reviews the physical mapped information, and
4.  assigns the Habitat Type that best describes the unit.

The Habitat Type is based on the whole unit and is similar to the physical mappers use of the 'Coastal Class' category, in that the

The fractal type is based on the which unit and is similar to the physical shape's description in the Coastal Zone Category, in that the detailed across-shore data are summarized into one attribute. The simplified category describes the features of the whole unit.

Habitat Type is a summary of the biophysical classification of the whole shore unit, based on:  
• the biotopes observed

- the biobands observed,
- the wave exposure as indicated by the bands, and

- the substrate types in the unit.

**Legend Definitions**  
CC - Coastal Classification number

Wave Exposure

**Wave Exposure**  
E - Exposed - Very high wave exposure, open ocean swells usually fetches >500km

**E** - Exposed - Very high wave exposure, open ocean swell can usually fetches 1-30cm.  
**VE** - Very Exposed - Extreme high wave exposure  
**SE** - Semi Exposed - High wave exposure, open shorelines, areas between fully exposed and more sheltered, usually fetches 50 to 500cm.

SE - Semi Exposed - High wave exposure, open shorelines, areas between fully exposed and more sheltered, usually fetches 50 to 500km  
P - Protected - Low wave exposure, sheltered inlets, usually fetches less than 10km  
SP - Semi Protected - Moderate wave exposure, partly sheltered, usually fetches 10-50km

SP - Semi Protected - Moderate wave exposure, partly sheltered, usually fetches 10-50km  
VP - Very Protected - Very low wave exposure, fetches < 1km, sheltered anchorages at heads of bays and inlets

VI - Very Protected - very low wave exposure, fetches < 1km, sheltered anchorages at heads of bays and inlets

MAJOR SUBSTRATE	BEDROCK/BOULDER	BEDROCK/BOULDER	BEDROCK/BOULDER	SAND & GRAVEL	SAND & GRAVEL	SAND/MUD	SEDIMENT	BEDROCK OR SEDIMENT
COASTAL CLASSES	1-20	1-23, 32, 33	1-23, 33	24, 25, 26, 32	24, 25, 26, 32	27, 28, 29, 30, 31	24 - 30	
EXPOSURE (EXP BIO)	SE	SP	P, VP	SP	P, VP	SP, P, VP	SE, E	VP, P, SP
HABITAT OBSERVED (HAB OBS)	3 *	4	5	6	7	8	9	10
upper	<i>Verrucaria</i>	<i>Verrucaria</i>	<i>Verrucaria</i>			marsh grasses & rushes	no visible macrobiota due to sediment mobility	tidal current dominated; may be a Protected wave exposure but shows an assemblage of indicator species from higher wave exposures.
	<i>Balanus glandula</i>	<i>Balanus glandula</i>	<i>Balanus glandula</i>	<i>Balanus glandula</i>	<i>Balanus glandula</i>	<i>Salicornia virginica</i>		
	<i>Fucus distichus</i>	<i>Fucus distichus</i>	<i>Fucus distichus</i>	<i>Fucus distichus</i>	<i>Fucus distichus</i>	<i>Balanus glandula</i>		
middle	<i>Semibalanus cariosus</i>	<i>Semibalanus cariosus</i>		<i>Semibalanus cariosus</i>		<i>Fucus distichus</i>		
		<i>Mytilus trossulus</i>	<i>Mytilus trossulus</i>	<i>Mytilus trossulus</i>	<i>Mytilus trossulus</i>	<i>Mytilus trossulus</i>		
		<i>Ulva/ Ulvaria spp.</i>	<i>Ulva/ Ulvaria spp.</i>	<i>Ulva/ Ulvaria spp.</i>	<i>Ulva/ Ulvaria spp.</i>	<i>Ulva/ Ulvaria spp.</i>		
mid/low	<i>Anthopleura elegantissima</i>	<i>Anthopleura elegantissima</i>						
	<i>Gelidium/Gastroclonium/ Leathesia/ Prionitis/ other bleached reds</i>	<i>Gelidium/Gastroclonium/ Leathesia/ Prionitis/ other bleached reds</i>		<i>Gelidium/Gastroclonium/ Leathesia/ Prionitis/ other bleached reds</i>				
		<i>Crassostrea gigas</i>	<i>Crassostrea gigas</i>	<i>Crassostrea gigas</i>	<i>Crassostrea gigas</i>			
		<i>Pisaster ochraceous</i>		<i>Pisaster ochraceous</i>				
lower	bleached coralline reds	bleached coralline reds						
		<i>Agarum sp.</i>		<i>Agarum sp.</i>				
		<i>Laminaria saccharina</i>	<i>Laminaria saccharina</i>	<i>Laminaria saccharina</i>	<i>Laminaria saccharina</i>			
	<i>Alaria spp.</i>							
	<i>Sargassum muticum</i>	<i>Sargassum muticum</i>	<i>Sargassum muticum</i> ***	<i>Sargassum muticum</i>	<i>Sargassum muticum</i> ***			
		<i>Microcladia/ Irideae type mixed filamentous and foliose reds</i>		<i>Microcladia/ Irideae type mixed filamentous and foliose reds</i>				
	<i>Lithothamnion</i>							

\* The SE (Semi-exposed) shoreline 'Habitat Observed' in the Strait of Georgia was observed to have the same species assemblage as the adjacent S (Sheltered) shoreline.

