



# ROSARIO BEACH

## NATURALISTS

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Marine Algae  
Field Guide

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# Brown Algae

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## Bull Kelp (*Nereocystis luetkeana*)

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**Tidal Zone:** Sub

**Identification/Adaptions:**

- A single long, thin stipe with large hollow bulbs at the ends.
- Blade is long, leaflike and can grow up to 3m in length. These blades provide the plant with both photosynthesis and nutrient absorption.
- Bull Kelp can grow up to 43m, with the stalk being 30m in length or more. The hollow upper part of the stalk is filled with gas, including carbon monoxide, which allow the stalks to float.



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## Rockweed (*Fucus distichus*)

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**Tidal Zone:** Mid to High

**Identification/Adaptions:**

- Grow to 8cm in length.
- Blades are broad, flat and gooey olive-brown with raised midribs.
- Holdfast is strong, but small, and the stipe is short.
- Swollen branch tips house reproductive structures that allow them to float along the surface which better helps photosynthesis to occur.



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## Sea Cabbage (*Hedophyllum sessile*)

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**Tidal Zone:** Mid to Low

**Identification/Adaptions:**

- Blades are wrinkled in wave-protected areas and smooth in more turbulent areas.
- Blade is scored in numerous places to resemble multi-bladed algae.
- No stipe, but has a holdfast composed of numerous short pencil thick *haptera*.
- Black Katy Chitons eat this species more than any other algae.



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# Green Algae

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## Green Ribbon (*Enteromorpha spp.*)

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**Tidal Zone:** High to Sub

**Identification/Adaptions:**

- Grows up to 10cm in width and can obtain lengths of over 30cm.
- Blades are ribbon or string-like and compressed of a tube two cell layers thick.
- Coloration is light yellow to dark green.
- Green Ribbon form dense free-floating mats in protected areas or grow attached to rocks, floats, or other algae.



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## Sea Lettuce (*Ulva Sp.*)

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**Tidal Zone:** High to Sub

**Identification/Adaptions:**

- Grows to be between 15cm to 91cm.
- Green in color.
- Sea Lettuce algae coats rocks with a nutritious algal film that is loved by grazing mollusks.
- Sea Lettuce algae is rich in iodine and some vitamins.



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# Red Algae

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## Encrusting Coralline Algae (*Corallina sp.*)

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**Tidal Zone:** Low to Sub

**Identification/Adaptions:**

- Grows to 1cm thick.
- Looks like a stony, pink crust.
- Encrusting Coralline Algae can be found on rocks, mollusk shells, and in tiny patches on blades of surf grass.
- Encrusting Coralline Algae is a slow growing species but can live up to 50 years.



## Splendid Iridescent (*Mazzaella splendens*)

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**Tidal Zone:** Mid to Sub

**Identification/Adaptions:**

- Grow to 20cm in length.
- Blade is broad, flattened, and thick.
- Coloration is green to purple to black.
- Under water, the blade of the Splendid Iridescent looks iridescent like the surface of a bubble or oil on water.
- The structure of a multilayered cuticle protects the blades from tearing, water loss, and grazing.



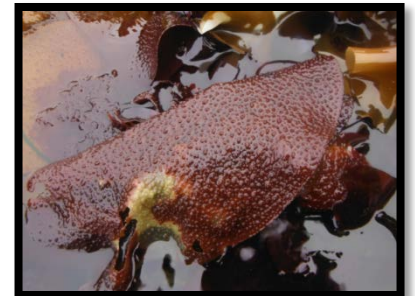
## Turkish Towel (*Mazzaella affinis*)

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**Tidal Zone:** Mid to Low

**Identification/Adaptions:**

- Grows to 81cm in length and 20cm in width.
- Coloration is reddish purple, dark or pale red, brownish, or yellow-green.
- The Turkish Towel is a single large blade from a short stipe covered with small bumps.
- The small bumps on the blade, called *papillae*, give it a towel-like texture.



## Turkish Washcloth (*Mastocarpus papillatus*)

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**Tidal Zone:** Mid to Low

**Identification/Adaptions:**

- Grow to 15cm in length.
- Blades are tough, small and dark.
- Coloration varies from red to purple to reddish-brown, nearly black, to yellowish brown.
- Turkish Washcloth grow in dense clusters which provide a cool, moist place for invertebrates
- Turkish Washcloth develop papillae (small bumps) when they are reproductive.
- Turkish Washcloth is known to enhance the immune system, reduce bacterial infections, and suppress the growth of viruses, including herpes, HIV, and influenza.

