



# Red Coralline

*Corallina vancouveriensis*

*Initially believed to be a coral-building animal and placed in the animal kingdom by Carl Linnaeus as Corallina officinalis.*

## WHERE IT'S FOUND

Coralline algae can thrive in most marine habitats, from depths as low as 350 feet to shallow tide pools.

## MEET THE SEAWEED

Unassuming, small in stature, and often overlooked, red coralline algae are bright spots of color in an otherwise-muted sea. Photons of light zip through the crystals of the algae's shell-like exterior, igniting red pigments deep within its cells to give the algae its rosy color.

To create their stiff, skeletal armor, coralline algae mineralize calcium carbonate. While this makes them difficult to eat and protects them from urchin predators, it also limits their growth. Unlike kelp, which can grow upwards of 40 feet in a few months' time, it can take five years for coralline algae to grow just five inches. Even so, these algae are often the first life to grow in a new area, providing a base for other intertidal species to flourish. To attract other invertebrates to join their new habitat, coralline algae emit a special chemical scent that wafts across the ocean waves.

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## OCEAN ACIDIFICATION

Calcifying algae and calcifying animals, such as corals, snails, and oysters, have a common concern: ocean acidification. In order to build up their tough shells, these organisms must extract calcium and carbonate ions from the waters around them. But when carbon dioxide is absorbed by the ocean, it quickly combines with water and the free-carbonate ions there (scientists believe that the oceans currently absorb 30-50% of the CO<sub>2</sub> produced by the burning of fossil fuel). This removes carbonate ions from action, preventing their use by shell builders. The detrimental effect of this phenomenon is well-documented on coral reefs.

