

Walking Kelp

Pterygophora californica

Prefix ptera (meaning “wings”) refers to the blades that grow straight out horizontally from its stipe.

WHERE IT’S FOUND

Walking kelp live in the shallow waters along North America’s Pacific Coast, often forming the understories of bull kelp and giant kelp forests.

MEET THE SEAWEED

Thick, leathery brown blades grow like wings off of the walking kelp’s rigid stipe. Sporting one of the stiffest stipes among the kelps, this seaweed can easily be mistaken for driftwood when it washes ashore – birds even use it for nests! Although walking kelp are not plants, they do share a similarity with trees: their stipes have countable growth rings that tell the age of the algae. Most walking kelp survive between 15-20 years, a ripe old age for kelp.

Walking kelp grows in both deeper and shallower waters. In shallow waters, the holdfasts of the walking kelp might first attach to a stone that is heavy enough to keep the young kelp rooted to the ocean floor. As the kelp grows, the cobbles it is fastened to begin to bob and move in the shifting surf. Observing this, Indigenous peoples described the kelp as “walking” along the sea floor, giving it its common name.

KELP FORESTS, OTTERS, and URCHINS

Scientist Jane Watson has spent over three decades researching the links between kelp and sea otters. In 1989, Watson established multiple dive sites along the west coast of Vancouver Island to count and monitor urchins and marine algae. Through her research, Watson found that sites without otter populations were dominated by urchins, but otherwise barren, with little or no brown algae. Conversely, places with a healthy otter presence were kelp-dominated ecologies; in these forests, walking kelp were the most common brown algae. This illustrates the importance of balance within the *trophic cascade*, an ecological phenomenon in which the addition or removal of top predators in a food chain can dramatically affect an entire ecosystem.

