

Bull Kelp

SNOHOMISH COUNTY MARINE FACT SHEET

Bull kelp (*Nereocystis leutkeana*) is a species of large brown algae native to Puget Sound. Beach combers are familiar with this species as the long, smooth bull whips wash up on beaches. The stalk can grow to be 120 feet long and leads to an air-filled bulbous float with long leafy blades. The opposite end of a kelp stalk is a disc-shaped, root-like structure that clings to rocky seafloor bottoms. Bull kelp often grows in dense patches, called "kelp forests," in the rocky sub tidal. Often these forests are visible by their bulbs and fronds floating on the surface. Bull kelp can be found off the coast from Southern California to the Aleutian Islands in Alaska.

Did you know?

Bull kelp can grow up to two feet per day!

An underwater forest

Bull kelp is known as the fastest growing seaweed in the world. During the spring, summer, and early fall, bull kelp grows rapidly and in dense patches to form underwater forests. These forests provide shelter and habitat for a myriad of species. Small invertebrate isopods feed off the blades, and plankton take refuge in these calmer waters. Fish such as juvenile salmon, rockfish, and forage fish hide in the kelp forests, feasting on the variety of smaller species. Mussels, urchins, shrimp and crabs often hide at the base of kelp stalks. Herring, a species of forage fish, spawn in kelp forests, with eggs attaching to kelp blades. These forests are choice resting spots for seabirds, waterfowl, and sea otters.



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Threats

In Puget Sound, there are concerns about declining bull kelp abundance. It is unclear what has caused these declines, but a few likely factors include:

- **Storm water** can impact kelp by introducing contaminants into the near-shore. Toxic pollutants such as petroleum products are known to lower photosynthetic rates in kelp.
- **Sedimentation** increases in the near-shore when upstream erosion occurs. These increased sediment deposits make it difficult for kelp sporophytes to take hold to colonize in rocky areas. Sedimentation also increases water turbidity and lowers photosynthetic productivity.
- **Grazing** on kelp by marine critters like urchins can be devastating when grazer populations are too large.



Local protection efforts

The Northwest Straits Commission and MRCs are collaborating to conduct annual kelp surveys. These surveys aim to locate and measure density and size of bull kelp beds from the water's surface.

Resources

- Northwest Straits Commission Factsheet
- Puget Sound Nearshore Partnership Technical Report 2007-05, Kelp and Eelgrass in Puget Sound, Thomas F. Mumford Jr.

How you can get involved

The MRC is a citizen-based volunteer committee appointed by the Snohomish County Council. It is one of seven county-based MRC's, which conduct restoration, conservation, and education projects with diverse partners and community members to meet performance benchmarks.

