Five Reasons to Protect Kelp

Undersea forests that sequester carbon, support fisheries, and protect shorelines are dying at alarming rates.

The kelp forest is one of the most productive ocean ecosystems on Earth, supporting a greater diversity of plants and animals than almost any other marine habitat. Giant kelp and bull kelp also play an important role in protecting coastal areas in California, Oregon, and Washington... and helping to sustain the fishing and tourism economy.

Along the West Coast, however, bull kelp has been decimated as warming ocean waters led to an outbreak of sea star wasting disease that all but eliminated this crucial purple urchin predator. As a result, the urchin population exploded and consumed vast swaths of the kelp forest. In the past six years, more than 90% of the bull kelp in Northern California has disappeared. Here are five services that kelp forests provide to nature and people, demonstrating why we need to work to restore and protect kelp.

1. Absorb carbon dioxide

Kelp and other types of marine vegetation absorb an estimated 20 times more carbon dioxide per acre than forests on land, making it a powerful force in storing this persistent greenhouse gas and mitigating the effects of climate change. In addition, studies suggest that kelp sequesters more carbon than all other marine plants combined.

2. Shelter sea life

Kelp forests provide food, nursery areas, and shelter—including protection from predators and storms—for hundreds of commercially and recreationally important fish species as well as West Coast marine wildlife.
3. Protect the shoreline
Nearshore kelp forests serve as a buffer against waves, a particularly valuable function during the storms that frequently batter the West Coast. Kelp also helps to prevent coastal erosion and filter pollutants from the water.

4. Support coastal economies
Kelp forests provide vital habitat for red abalone and red urchins, which are prized by fishermen, along with other important species such as rockfish and cabezon.

5. Fuel the food web
Kelp forests are an important part of the marine food web, absorbing nutrients such as nitrogen from the water and making them available to a variety of species that feed on their leaves (blades).

This, along with kelp’s role in mitigating the impacts of climate change, nurturing fish and wildlife, and supporting coastal economies, makes kelp protection and restoration vital to the future of Oregon’s nearshore marine environment.


The Audubon Society of Lincoln City is working with local communities and other stakeholders to safeguard habitats where kelp and other marine vegetation thrive. Join us in supporting the Oregon Ocean Policy Advisory Council’s efforts to conserve our rocky shores.

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