



Restoring Resilient Native Oysters

from Baja California
to British Columbia





What are Olympia oysters?

The Olympia oyster is native to western North America. Oyster beds were once much more extensive along this coast, where they were harvested for millennia and formed a key part of healthy coastal ecosystems. These oysters are smaller, grow more slowly, and don't disperse as far as the commercial, non-native Pacific oysters, which creates unique challenges for restoration of Olympia oysters.

What do Olympia oysters do?

Oyster beds can help protect shorelines and improve water quality by filtering water. The beds built by oyster shells also provide critical habitat for small fishes and invertebrates, which in turn provide food for larger fishes and shore birds.



What are the threats to Olympia oysters?

Oysters have declined world-wide, largely due to human activities including overharvesting and loss of habitat. Sedimentation can bury them, and run-off from the land can kill them due to low salinity and oxygen. Non-native snails also kill Olympia oysters by drilling into their shells. Future climate related changes in temperature, salinity and acidification will stress these oysters and reduce their populations.



Why protect and restore Olympia oysters?

The Olympia oyster has been part of coastal ecosystems of the North American West Coast for millennia, providing food and cultural value to people, supporting the local food web including birds and fishes, and protecting shorelines and improving water quality. Olympia oyster populations have declined dramatically across its historic range from British Columbia to Baja California. Our goal is to conserve and rebuild their populations to maintain the cultural and ecosystem benefits for future generations.

How do we restore Olympia oysters?

Rebuilding lost habitat is an essential step for ensuring healthy oyster populations. This can be done by enhancing natural populations with appropriate hard substrate or adding new oysters grown in hatcheries. Reducing numbers of non-native predators is another key approach to allowing populations to rebuild.



Who is restoring Olympia oysters?

Throughout its range from Mexico to Canada, scientists are studying Olympia oysters, and restoration projects are underway to increase habitat and oyster numbers. In fact, scientists, restoration practitioners and conservationists have formed the Native Olympia Oyster Collaborative (NOOC), a network of people engaged in restoring, enhancing, and conserving populations of this species. To learn more about their efforts, and view examples of restoration projects along the entire West Coast of North America, please visit: <https://olympiaoysternet.ucdavis.edu/>



What is Happening Locally?

OLYMPIA OYSTER PROJECTS IN ELKHORN SLOUGH

- » Olympia oysters are at high risk of going regionally extinct in Elkhorn Slough, due to small adult population size and frequent reproductive failure
- » The Elkhorn Slough National Estuarine Research Reserve, in partnership with the Elkhorn Slough Foundation, is committed to conserving and restoring oysters in this estuary
- » Restoration aquaculture is being used to support populations, with hatchery-raised juveniles outplanted to the estuary
- » Clusters of gaper clam shells are provided as habitat for the oysters to mimic the natural clusters formed by Olympia oysters

Photos, top to bottom: hatchery raised oysters are outplanted in clusters (photo: Erin Garcia)

Clam shell with hatchery raised oysters attached at community outplanting event (photo: Chela Zabin)

Large, healthy oysters on clam shell six months after outplanting (photo: Adrienne Frisbee)