

Return of the NATIVES

Olympia Oysters for Fisherman Bay



A single transfer of native Olympia oysters to Fisherman Bay was authorized in June 2013 for education and research purposes only. One of the questions to be addressed is whether the transplanted oysters are able to reproduce enough to form a “reef”. Another is whether larval oysters from elsewhere in the Salish Sea (identified genetically) show up on the reef. And lastly, if a reef begins to form, will native oysters re-colonize the rest of Fisherman Bay? What will be the effects?

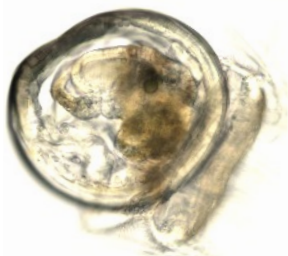
Be part of it!

You can be part of this experiment if you have a home somewhere along the shorelines of Fisherman Bay. Get one strong plastic mesh shellfish bag (we can provide you with a free one), fill it with a bucketful of sun-bleached oyster shells, and stake it down at the low end of the inter-tidal zone (about -3.0 feet). Check it every summer for tiny oyster spat (they’ll be thin and flat) and tell us what you find!

Even if you do not have a shoreline home, you can help by joining our Fisherman Bay email list (write to kwiaht@gmail.com) and working with us to keep contaminants out of the bay.

Donations are always welcome, especially to help us involve local high school students in oyster genetics and building an underwater “oyster cam” to monitor reef ecology!

Native oyster reefs once abounded throughout the Salish Sea, offering a nursery habitat for crabs, shrimps, and juvenile fish, including herring, and rockfish. But commercialization, dredging, logging and sawmills made them nearly extinct by the 1910s.



Native “Olymp

Coast Salish villages prized and protected the oyster reefs, from which they harvested and traded boatloads of smoky dried shellfish for centuries. After 1850 Euro-American settlers shipped thousands of barrels of Salish Sea oysters to Seattle and San Francisco. But the reefs quickly succumbed to overharvesting, pollution from sawmills and dredging of bays for shipping. By the 1930s, native oysters had been replaced by shellfish farms with a larger, faster-growing type of oyster introduced from Japan, *Crassostrea gigas*, still the basis of the commercial business today. Relic populations of natives continued to decline until concerted efforts began to save and restore them in the 1990s. As part of these efforts, native oysters from Shoal Bay were used to re-stock Fidalgo Bay near Anacortes. Then the last native Lopez oysters disappeared.

Ostrea lurida, the Olympia oyster of the Salish Sea, is native cousin of the European flat oyster *Ostrea edulis*. Both are “brooding” oysters that prefer to live below the lowest tides. They have two sexes, and in warm summer months the males release milt (sperm) which females filter from the water to fertilize the eggs they have kept safely inside their shells. After the eggs hatch, the tiny larval oysters are held for another 2-3 weeks inside the mother’s shell, sharing her food, until they are almost ready to build shells of their own. Then the larvae are released, and within hours have settled: close to their parents, if not directly upon them!

“Olympia” Oysters for Fi



Fisherman Bay once had native oyster reefs. The fossil remains of a reef were found beneath Port Stanley Lagoon.

Native oysters brood so that their young settle nearby and help form a reef while introduced Pacific oyster larvae drift for weeks on tides and currents, scattering widely before they settle.



sherman Bay

Losing the ancient oyster reefs of the Salish Sea probably had a significant adverse impact on the abundance and resilience of herring populations, as well as rockfish and salmon.

Oysters are also widely regarded as a tool for improving water quality. As filter feeders, they process huge volumes of water each day for algae and plankton. Oysters accumulate contaminants and algal toxins. Toxics that do not break down chemically, such as metals, are buried in the growing reef. Sadly, this also means that oysters from polluted waters are unsafe to eat. But if we work to reduce toxic inputs from roads and sewage, we can enjoy clean water *and* oysters ... someday!

This privately funded experimental and educational project has been approved by the Washington Department of Fish and Wildlife.

Partners and friends

Jim and Birte Falconer • Dr. Paul Dinnell (Shannon Point Marine Center) • Skagit County Marine Resources Committee • Jennifer Romo (Lopez Island High School) • Tim Clark (San Juan County Land Bank)

A program of



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