

BEST PRACTICES



Oysters...Nature's Water Filter

For 18 years Dan Mazur and a group of dedicated local volunteers have been planting oyster seeds in South Puget Sound. But they are not doing this for personal consumption of culinary delights. They are planting oysters to help clean-up our beautiful estuary!

Oysters play an important ecological role in Puget Sound by acting as natural water purifiers. That's because they are filter-feeders. As they pump water through their gills, they trap particles of food as well as nutrients and suspended particles in the water. Oysters remove nutrients from the water by consuming and incorporating the nitrogen and phosphorus into their tissue and shells.

The Olympia Oyster Seed Planting Project has worked with private shoreline property owners in Eld, Totten, Budd and Henderson inlets to help restore the number of oysters in our region. This year they will plant between 25,000-50,000 seeds with the help of roughly 25 volunteers.

Neighbors along East Bay have come together in support of this project, and many neighbors have allowed the project to plant along their beaches. The project currently focuses on about 10 Puget Sound neighborhoods. It is so inspiring what can happen when the community works together!

Just one oyster can filter up to 50 gallons of water a day!

Nitrogen and sediment from human activities can cause big problems for Puget Sound. Sediments that enter storm drains carry pollutants like oil, metals and excess nitrogen from fertilizers. Pet waste left on the ground as well as unmaintained on-site septic systems leach nutrients and bacteria that end up in the Sound. This results in algae blooms and reduced oxygen levels in the water. It can even lead to dead zones, and aquatic wildlife like salmon need adequate dissolved oxygen levels to survive!

There are many ways we can all help protect Puget Sound and the beautiful creatures that depend on clean water:

- When necessary, use organic slow-release fertilizers.
- Maintain your on-site septic system. Consider pumping it every 3 years.
- Sweep your driveway regularly and dispose of waste and sediments in the garbage.



- Bag and trash your pet's waste every time.
- Volunteer to plant oyster seeds!

For more information on oyster seed planting and to connect with the Olympia Oyster Seed Planting Project, visit: [facebook.com/OlympiaOysterSeedPlantingProject](https://www.facebook.com/OlympiaOysterSeedPlantingProject).



1 – Sujata Karki and Ravi Karkimazur prepare mesh bag for seed oysters.
2 – Sujata Karki prepares mesh bag for seed oysters. Bags need to close securely to keep predators out. The metal rod will be used to secure the bag on the beach.
3 – Sujata Karki and Ravi Karkimazur prepare mesh bag for seed oysters.



4 – Sujata Karki, Ravi Karkimazur and Dan Mazur head down to the beach at East Bay to plant oyster seeds.
5 – Dan Mazur inspects mesh bags containing Pacific Oysters. Each bag is seeded with at least 100 oysters.
6 – Sujata Karki, Ravi Karkimazur and Dan Mazur inspect mesh bags containing Pacific Oysters. Bags are planted for several years before mature oysters are released to the beach to continue their life cycle.



7 – Dan Mazur opens a mesh bag with young Pacific Oysters while Ravi Karkimazur looks on.



8 & 9 – Ravi Karkimazur shows off a handful of this year's Pacific Oysters, ready for seeding.



10 – Sujata Karki and Ravi Karkimazur count young Pacific Oysters which will be placed in the mesh bags.



11 – Sujata Karki and Ravi Karkimazur prep young Pacific Oysters which will be seeded on the beach at East Bay in Olympia.



12 – Ravi Karkimazur getting ready to plant Pacific Oysters on the beach at East Bay. The oysters will help filter contaminants out of the water.



13 – Ravi Karkimazur getting ready to plant Pacific Oysters on the beach at East Bay.



14 – Ravi Karkimazur shakes the mesh oyster bag to distribute the oysters so that they can grow larger.



15 – Dan Mazur explains the Oyster seeding process.



16 – Sujata Karki shows off two mature Pacific Oysters.



17 & 18 – Dan Mazur holding a Pacific Oyster (left) and native Olympia Oyster (right). The Olympia oyster prefers a wetter environment and lives lower on the beach.

Oysters feed by filtering algae from the water, ultimately removing nutrients from the water, which, in excess, can degrade the aquatic environment. A single adult oyster can filter more than 50 gallons of water a day.



19 – Sujata Karki placing mesh bags filled with young Pacific Oysters on the beach at low tide. A metal rod is inserted in the mud to anchor the bag to the beach.



20 – Sujata Karki retrieves a bag of Olympia Oysters from the beach at East Bay.



21 – Sujata Karki shows off a handful of mature Olympia Oysters. *The native oyster is much smaller than the Pacific Oyster which is commonly cultivated by NW oyster Farmers.*



22 – Sujata Karki plants mesh bags filled with oysters on the beach at East Bay.



23 – Sujata Karki surveying mesh bags filled with oysters at East Bay in Olympia. *Seeded beaches can have a dozen or more bags of oysters. Once the oysters mature, they will be released on the beach where they were seeded.*

24 – Dan Mazur holds a mature Pacific Oyster which is at least 8 years old. *Mature oysters can filter up to 50 gallons of water per day.*



25 & 26 – Volunteers from Olympia Oyster Seed Planting Project have been planting oysters on Thurston County beaches for 18 years. Over 260 shoreline property owners have participated in having oyster bags planted on their beaches.



27 & 28 – Mature Pacific Oysters are almost ready to be released on the beach at East Bay.

Oysters are kept in bags on the beach for several years in order to protect them from predators, such as Moon Snails and Sea Stars.



29 – Oysters on the beach at East Bay, south of Squaxin Park.

Oysters within Budd Inlet are not safe to eat and have been planted for environmental reasons. One mature oyster can filter 50 gallons of water, helping to remove toxics from Thurston County's marine waters.

Source: Stream Team News, Fall 2023
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