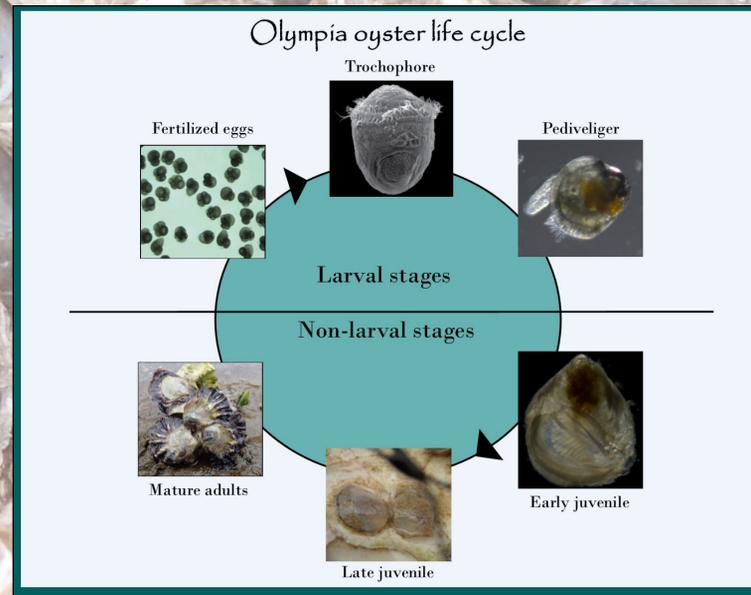


OLYMPIA OYSTER

The Salish Sea's Native Oyster

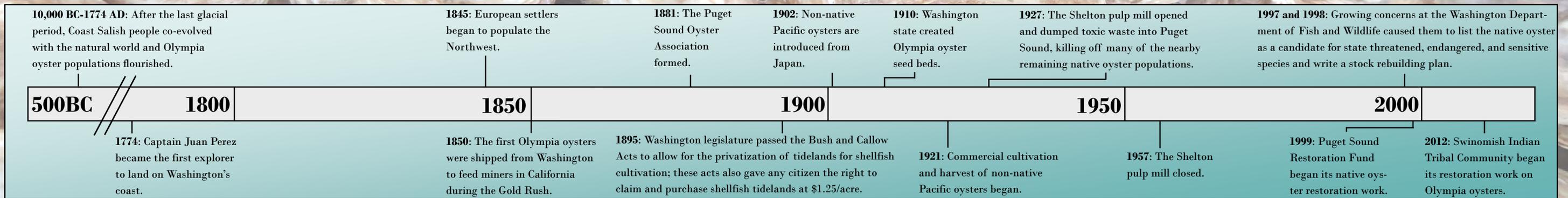
OLYMPIA OYSTER BIOLOGY

- **Distribution:** Native oysters can be found from southeast Alaska to Baja California. Restoration efforts supplement many of the populations currently found in California, Oregon, and Washington.
- **Habitat:** Olympia oysters are found along beaches in protected bays, inlets, and lagoons where temperature, pH, and salinity remain relatively constant.
- **Feeding habits:** Oysters filter seawater over their gills to extract phytoplankton and other nutrients, which are then diverted to the stomach for digestion.
- **Predators:** Humans, crabs, river otters, snails, and worms prey on native oysters.
- **Reproduction:** This typically occurs in the Salish Sea between April and August. Individuals can switch between male and female sexes and a single oyster can undergo 1.5 reproductive cycles in a year. Females hold the fertilized eggs (up to 300,000) in their shell for 14-16 days in a process called brooding.
- **Life history:** As the larvae develop in females they change from younger trochophores to older pediveliger larvae. Upon release from their mother, these larvae swim freely in the water for 1-3 weeks while searching for the proper settlement substrate. Refer to the diagram on the right for images of these fascinating life history stages.



Pictured here are young Olympia oysters known as "set cultch." They are growing on a Pacific oyster shell. Look closely at this image and you can easily see the size difference between the two species. Washington Department of Fish and Wildlife requires a minimum size of 2.5 inches on *all* oysters to be gathered, preventing most Olympia oysters from being harvested. Olympia oysters take three to four years to reach an average adult size of 1.4-2.0 inches.

HISTORY



SHELL MIDDENS

What are shell middens?

Shell middens (also known as shellmounds or kitchen middens) are deposits associated with current or historic shorelines that contain meal remnants of past inhabitants. These middens contain thousands to millions of discarded shells as well as animal bones, artifacts, and sometimes plants. The high alkalinity of the shell's chemistry results in the excellent preservation of many midden materials, enabling archaeologists to study subsistence practices from pre-European contact times. Shell middens can range in size and density; one especially large midden exists in Namu, British Columbia that is 29.5 feet deep and 10,000 years old. Most middens look similar to the shellmound in the photograph to the right, which is located within traditional Swinomish harvest grounds.



Harvested Olympia oysters in Washington state



Tribal Facts:

The Coast Salish people love to say that "when the tide is out, the table is set." Indeed, the Swinomish people have depended on shellfish as a food source for the last ten thousand years. One of the many shellfish species that were vital to us were oysters. Referred to as "klok klok" in our Coast Salish Lushootseed dialect, oysters played an important role in our traditional diet and culture. Because we only harvested shellfish when they were needed, Olympia oyster populations flourished under our subsistence practices prior to the arrival of European settlers.

