

The Herring Connection: A Key to Salmon Recovery



Using traditional knowledge and modern science to restore herring and protect salmon



Why Herring Matter

In the Salish Sea, the survival of salmon is closely tied to the health of Pacific herring. These small fish play a critical role in the marine ecosystem—not only as a vital food source for juvenile salmon and their predators, like harbor seals, but also as a species with deep cultural and economic significance.

A Decline Decades in the Making

In the Salish Sea, Pacific herring populations have been declining for decades, with several spawning stocks at a fraction of their historical numbers. Their decline poses a huge challenge for salmon recovery. Long Live the Kings is working with the Nisqually Indian Tribe, Port Gamble S'Klallam Tribe, and additional partners to understand and recover declining Puget Sound herring stocks.

Herring spawn in nearshore waters, where their eggs stick to marine plants such as eelgrass and kelp. Unfortunately, these critical habitats have been disappearing since the 1800s due to shoreline development, pollution, and rising ocean temperatures. Managers suspect that habitat loss, combined with water quality issues and increased predation, is driving herring declines.

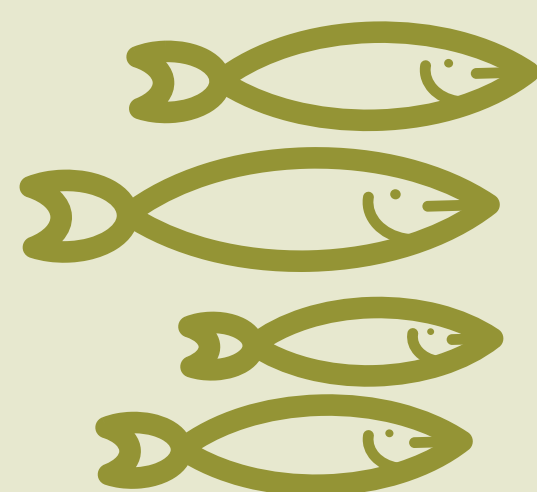


Traditional Knowledge, Modern Solutions

Coast Salish Tribes, First Nations, and Alaskan Natives have long used natural materials like cedar, hemlock, and kelp to collect herring eggs for traditional harvest. These materials mimic natural spawning surfaces, offering a sustainable method that benefits both people and fish. Today, we are working with the **Nisqually Indian Tribe** to adapt this time-honored approach as a potential tool to restore herring populations.

Science in Action

Beginning in 2021, our team started working with the Nisqually Indian Tribe and partners to better understand herring populations and test recovery strategies. Our research focuses on characterizing the spawn timing and genetics of local herring and testing supplemental spawning surfaces. We also look at herring diets and contaminant levels to offer insights into how pollution in the marine food web may impact not only herring but also salmon, orcas, and humans.



Our work with the Tribes and co-managers at WDFW is helping inform an ecosystem-level perspective on Puget Sound herring, and advance recovery of this key species to support salmon.



Our Partners



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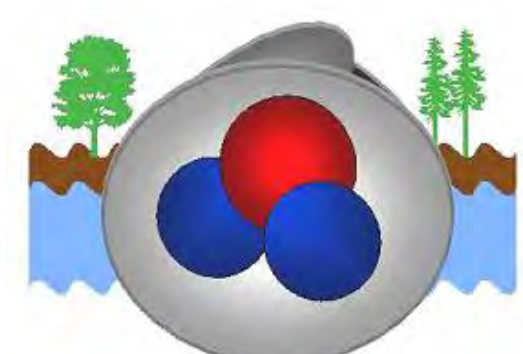
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