Bringing the "Oly" Oyster Back to Oregon's Coast

Project Location

South Slough National Estuarine Research Reserve, Oregon

Project Lead

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Targeted End Users and Products

- Project final report
- Peer-reviewed article: Quantifying the historic contribution of Olympia oysters to filtration in Pacific Coast (USA) estuaries and the implications for restoration objectives
- Peer-reviewed article (accepted for publication): The Olympia oyster: recent advances in natural history, reproductive biology, and barriers to population recovery.

Project Partners

- South Slough Reserve
- NOAA National Marine Fisheries Service Community-based Restoration Program
- Oregon State University Extension Service
- Oregon Institute of Marine Biology
- Oregon Sea Grant
- Oregon Department of Fish and Wildlife, Shellfish Program

About the Science Collaborative

The National Estuarine Research Reserve System's Science Collaborative supports collaborative research that addresses coastal management problems important to the reserves. Learn more at www.nerrs.noaa.gov.

Overview

Pint-sized with razor sharp edges, Olympia oysters once flourished along Oregon's rugged coast. Millions of them formed extensive beds that blanketed the tidal zones of places like Coos Bay and Yaquina bays, where they provided food and income for people and habitat for wildlife. In recent years, over-harvesting, development, sedimentation, pollution, dredging, and forest fires have all played a role in the dramatic decline of this native shellfish that, in many places, has become locally extinct. Bringing the "Oly" back is a priority for natural resource managers, scientists, shellfish farmers, and recreationists. In response, the South Slough reserve spearheaded a project to develop a science-based plan to restore Olympia oysters, which has been integrated into a state-wide shellfish initiative that will include additional research and restoration projects to help guide oyster recovery along Oregon's coast.

Project Benefits

- Researchers documented the breeding season, the period when embryos and larvae were brooded by adult oysters, the distribution of freeswimming planktonic larvae in the bay, and the factors that determine larval settlement, juvenile survival, and growth.
- Contributed to a number of state-wide decisions and programs, including
 the Oregon Shellfish Initiative, which facilitates restoration projects
 throughout the state; the Oregon Shellfish Task Force, which investigates
 opportunities to enhance and recover oyster populations; and the
 Department of Fish and Wildlife's decision to continue prohibition of
 recreational harvest of the Olympia to facilitate recovery.
- Since this project began, Oregon has added the Olympia to its
 Nearshore Conservation Strategy list of priority species, ensuring special consideration for the conservation and protection of the species in the future.



Project Approach

- Partnership building: The project established a community stakeholder group to work collaboratively and restore Olympia oysters to Coos Bay. Team members worked with the Olympia Oyster Restoration Advisory Committee to develop a comprehensive conservation and recovery plan for Olympia oysters along Oregon's coast.
- Stakeholder engagement: Graduate students from the University of Oregon
 conducted original research, and they collaborated with stakeholders to ensure
 the research met stakeholders' information needs and was shared through
 various outreach and education efforts including webinars and national academic
 conferences.
- Tech Transfer: The team expanded its regional impact and collaborated with Alaska's Kachemak Bay reserve to implement a technical transfer workshop focused on shellfish restoration and commercial cultivation of oysters.



