

PROJECT CROOS

Collaborative Research on Oregon Ocean Salmon

www.PacificFishTrax.org & www.ProjectCROOS.com

Project Summary (as of April 15, 2011)

Background

- ⇒ CROOS is an interdisciplinary partnership between the salmon troll industry and university, federal, and state agency scientists, marketers, educators and fishery managers.
- ⇒ The concept for this project emerged in 2005 during discussions with Oregon's Congressional delegation in developing approaches to address the Klamath salmon disaster.
- ⇒ Project initiated in 2006 with support from the Oregon Watershed Enhancement Board. The project is presently supported with a range of federal and state grants and contracts including Federal Klamath River disaster relief funds.
- ⇒ Sampling protocols developed in 2006 have produced three years of fine-scale fish distribution and fishing effort data to support long term ecosystem-based fisheries science and management.
- ⇒ Research work and sampling protocols provided the foundation for a broader project involving industry, agencies, and tribes along the entire West Coast. In 2007, Oregon, California and Washington projects united to form the West Coast Salmon Genetic Stock Identification Collaboration.

Project Goals and Objectives

- ⇒ **Prevent coast-wide fishing closures and enhance economic benefits to the salmon fishery and fishery-dependent coastal communities.**
- ⇒ Improve salmon management and avoid harvest of weak salmon stocks by identifying – in “real time” – movement and location of individual stocks and relationship with oceanographic conditions.
- ⇒ Support innovative market development for Oregon salmon through use of bar codes/digital technologies.
- ⇒ Effectively communicate project data and findings through www.pacificfishtrax.org, an interactive, “real time”, and “market driven” website for fishery managers, scientists, fishermen, consumers, marketers, educators, and the public.
- ⇒ Improve ecosystem-based fisheries management by making ecological, economic, and environmental information available to inform management decisions.

Organization

- ⇒ Leadership: The CROOS Group is composed primarily of fishermen and scientists. Partners include the Oregon Salmon Commission, Oregon State University, Oregon Sea Grant, National Marine Fisheries Service (NMFS) Northwest Fisheries Science Center, Community Seafood Initiative, and Oregon Department of Fish and Wildlife.
- ⇒ Additional coast-wide partners include the California Salmon Council, NMFS Southwest Fisheries Science Center, California Department of Fish and Game, Northwest Indian Fisheries Commission, Columbia River Inter-tribal Fish Commission, Washington Department of Fish and Wildlife and Washington Trollers Association.

Progress

- ⇒ Members of Oregon's fishing community, including Fishermen, fleet managers, and port-liaisons have received more than \$1,035,000 in compensation.
- ⇒ Since project inception, over 300 fishermen (vessel owners, fishermen and crew) representing 11 Oregon counties have participated in sampling protocols.
- ⇒ Pacific Fish Trax interactive “real time” website www.pacificfishtrax.org went online February, 2009.
- ⇒ Consumers are able to learn about the fishing industry and individual Oregon harvested, bar-coded salmon through the Pacific Fish Trax website “find your fish” feature.
- ⇒ In 2010, at-sea sampling and standardized data collection occurred along the west coast from May – September.
- ⇒ Two fishery-independent sampling designs were evaluated for use in pre-season test fisheries.

Future Actions

Long term funds for ocean research need to be a part of federal efforts to aid the fishery and improve management and science. Based on research findings, Project CROOS expects this project to help industry access healthy stocks, while protecting weak stocks, improve economic benefits, and foster future collaborative fisheries research. Partnerships with California and Washington support a Coast-wide integrated approach to salmon science, management, and marketing.

Figure 1. (a) Spatial distribution of West Coast Salmon Genetic Stock Identification Collaboration sampling from May through September, 2010. Black dots are individual Chinook salmon (n = 9,600) and fishing effort is shown as blue shading. A total of 4,500 fish were sampled by Oregon fishermen. To the right (b), catch per unit effort (CPUE) contour plots, where blue is low, neutral is green, and high is red, are shown for Sacramento Central Valley fall and Klamath River stocks encountered May through September. The difference between Central Valley and Klamath CPUE is shown to the far right.

