



OREGON SALMON COMMISSION

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OWEB I/A 207-904 CROOS
Collaborative Research on Oregon Ocean Salmon
Progress Report
Through February 15, 2008
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The CROOS project for 2007 is a continuation of the 2006 Pilot Project that was funded by OWEB. The collaborators include the Oregon Salmon Commission, Coastal Oregon Marine Experiment Station under Oregon State University, Oregon Sea Grant, National Marine Fisheries Services, Community Seafood Initiative, and Oregon Department of Fish & Wildlife. A coalition of fishermen and scientists are in the leadership roles.

Organizational meetings have been held to design and implement the project.

This progress report will document work accomplished to implement the program products and outcomes described in the Project Statement of Work.

1) Financial Assistance to Participating Salmon Fishermen

Fishermen were contracted to collect fin clips for genetic stock identification (GSI) analysis from most of their catch. Along with fin clips, fishermen collected scale samples, recorded the location, length, and depth of capture, and sea surface temperature. Each fish received a barcode tag for tracking.

Over 150 fishermen expressed interest with 145 contracts issued.

Six port liaisons were selected and contracted to assist fishermen in Brookings, Port Orford, Coos Bay, Winchester Bay, Newport, and Garibaldi.

Fishermen were trained to collect samples according to the established protocols.

During the 2007 project 93 fishermen have collected samples and received \$182,600.00. Each vessel received \$150 /day, \$50/day for one crew member and \$10 for each sample collected up to 20 samples per day.

2) Adjust and Improve Project Protocols

The OSC, working with contracted liaisons, fleet management and OSU Hatfield Marine Science Center laboratory personnel took suggestions from the 2006 CROOS project protocols and revised the 2007 protocols. Liaison protocols were established and distributed. Several telephone conference calls were held with liaisons during the early season to refine and create new fishermen and liaison protocol amendments. These protocols were continually revised to improve the process for sampling, downloading data, providing clearer communication, and making the connection between the fishermen and the laboratory more seamless.

Each fisherman was equipped with a handheld GPS unit to automate vessel track logging and to standardize some of the other recordkeeping protocols (the location and time of capture of each fish were recorded and stored electronically). Using these units eliminated the need to manually record this information on a paper log, which simplified the data recording duties of the fishermen, as well as expediting data entry in the laboratory.

Each port liaison collected fishermen samples, downloaded and reset their GPS units, disbursed supplies and equipment, coordinated and delivered (mailed) samples to the lab and facilitated communication with the fleet. The work of the liaisons greatly reduced the time required by the genetics laboratory to process samples and thus facilitated more rapid genotyping of the fish.

3) Expand GSI Data Collection and Analysis Coast-Wide

The 2006 CROOS project was limited to collection of samples from Florence to Cape Falcon (NOC – Northern Oregon Coast) due to management constraints that closed the Southern Oregon Coast (SOC) and the Klamath Management Zone (KMZ). The 2007 commercial salmon season consisted of more fishing opportunities along the entire Oregon coast. The project goal was to collect samples from along the entire length of Oregon from May through October, and determine the catch composition within certain main catch areas and time blocks specific to location (lat/long) and time.

The main catch areas will be the KOHM harvest areas:

OR/CA border to Humbug Mt. (KMZ)

Humbug Mt. To Florence (SOC)

Florence to Cape Falcon (NOC)

North of Falcon to OR/WA border

Time cells will be by calendar month

Chinook fishing on the Oregon Coast in 2007 was extremely poor and overall catch rates were lower than expected. The design plan was to sample 200 fish per harvest area per week focusing on the three areas South of Cape Falcon. Because fishing was so poor, the goal of 200 samples per harvest area per week was only met in 6 of the area/weeks and came close (196 fish) in a seventh.

4) Conduct GSI-based Salmon Management Simulation and Science/Management Analysis

The simulation and analysis along with the web site is being developed to a point that it will receive the analyzed data and display it for managers to view. Appropriate managers have been contacted to participate. The number of fish harvested was not enough of a sample to allow a management simulation and analysis during the 2007 season.

5) Design a Multi-Use “Real Time” Website

Upgrades have been made to the existing projectCROOS website. Domain registrations for projectCROOS.com, .net and.org were renewed.

During June a web design firm (Sparkplug) was hired.

Objectives were developed for the new website, and six user groups were identified that would be best suited to build the site for:

Fishermen

Fisheries Management

Scientists

Distributors and Processors

Retailers

Consumers and the General Public

One-on-one interviews and focus group meetings were conducted with the above groups.

Sparkplug conducted 12 one-on-one interviews with 12 fishermen.

Sparkplug and the Seafood Center Director participated in a bi-state meeting of scientists to identify opportunities and challenges with the database build.

A round table discussion for Oregon fishermen, scientists, and managers was organized to discuss each groups’ needs for the website and what they feel it should include.

The research phase of the development process is done, as the last of the focus groups and individual interviews with all of the key website user groups have concluded. With all of the research being completed, Sparkplug is now in the process of applying that information towards constructing a draft of a site map, which will outline all of the pages that will be included within the site and how they will be organized. Once the site map is completed and approved, Sparkplug will begin designing the homepage and the subpage templates, at which time they will begin incorporating content into the pages. In addition to the site map, they are also currently working with Bill Howe from CMOP to address the database and mapping/visualization components of the website and Bill's role in the development of the website.

The advisory group will meet and address a few critical items. First, reaching a consensus on the name, logo, etc. for the website, and second, reviewing Sparkplug's site map to ensure that it is consistent with the vision of the group. A draft of the site map should be completed by the week of March 24th.

6) Conduct Salmon Marketing Pilot Test Using Barcoding, Traceability and Website

The salmon marketing pilot test that was scheduled to be performed in either November or December, did not occur due to no product availability.

Diane Moody, Consumer Seafood Center, and Jeff Feldner, Oregon Sea Grant, met with representatives of three retail stores, Newman’s Fish Market, New Seasons, and Zupans to discuss the project and get their feedback on the proposed marketing pilot test.

The test would consist of presenting CROOS project tagged salmon, most probably in fillet form, to random customers in a prepared section of several retail fish markets in Oregon. The customer, as well as the retailer, would be asked to evaluate the appeal and desirability of these samples relative to the presence of the additional product information displayed on a computerized screen linked electronically to the individual sample’s bar code.

An example of how this could be done would be for the customer to be able to personally hold and operate the bar code scanning device, scan the bar code tag on the specific fish, and then look at a screen on the display case showing the CROOS data, including time and location

of capture, river of origin, and name of the vessel and/or fisherman who caught the fish. A picture of that vessel and/or fisherman could also be displayed.

The representatives of the retail markets expressed support for the project and were willing to assist with a pilot test. They offered suggestions as to what would work best in their store, and what their customers would be willing to do to participate. Specific test protocols will be developed to attempt to quantify customer as well as retailer preferences.

7) Collect and Integrate Oceanographic Information

Several boats were equipped with temperature dataloggers that were lowered and raised with the gear and record depth and temperature every 5 minutes. This information will be collated with the fishermen track logs to gain a better understanding of catch related to temperature and depth. The COAS glider research that was gathered will be linked with CROOS data.

Overall Observations

As this was our second year with the CROOS project, we were better prepared with the fishermen and liaison training and protocols, laboratory procedures, and overall project preparedness. The web site was one area that needed work to enable the data and information to be displayed accurately and confidentially for all sectors needing access. There was and still is significant progress with web site development.

2007 allowed us to sample fish south of Florence and begin getting a better coastwide perspective of the fishery. Despite liberal seasons though, the Chinook failed to show up and fishing was one of the poorest in memory.

The 2007 final report is being written and compiled and should be completed by the end of April. This will have more specific information about each part of the CROOS project.

Thank you OWEB for your support of this project.