Empowering Stewardship Innovation Through Research and Collaboration

ALFA'S FISHERY CONSERVATION NETWORK:

In 2009, the Alaska Longline Fishermen's Association (ALFA) launched a Fishery Conservation Network (FCN) that engages fishermen and scientists in marine research and conservation initiatives. ALFA FCN members identify issues of mutual concern, then collaborate with scientists and engineers to develop tools and information networks to address the concerns. The FCN combines the experiential knowledge and problem solving abilities of fishermen with the rigor and discipline of science to advance best fishing practices and promote sustainable fisheries.

CONTROLLING BYCATCH/MAPPING HABITAT

- Fishermen log catch and bycatch rates by set segment, verify total catch with ADFG fish ticket data, and provide this data to ALFA.
- Fishermen record seafloor bathymetry data and provide the data to ALFA.
- ALFA overlays seafloor bathymetry maps with bycatch rate data for individual fishermen. The overlay allows fishermen to visualize the sea floor structures that concentrate rockfish and to avoid these areas while efficiently harvesting target species.
- Areas with persistent high bycatch rates are identified and mapped; information is provided to fishermen.
- Using these maps, FCN members reduced rockfish bycatch over three years by 20% in their halibut target fishery and by 6% in their sablefish target fishery.

CATCH AND BYCATCH ACCOUNTING

FCN members participate in advancing Electronic Monitoring (EM) of catch and bycatch. ALFA's EM objective is to provide EM as an at-sea monitoring alternative for vessels that cannot physically accommodate an observer and where EM provides a less burdensome or costly alternative.

- The FCN engaged in an extensive pilot program to operationalize electronic monitoring on fixed gear halibut and sablefish boats in 2010 and 2011. In total, 41 trips, 158 sea days and 215 hauls were electronically monitored during the pilot program. Pilot program results include:
  - EM systems proved reliable and adaptable to a variety of vessel configurations.
  - EM data allowed species level identification for 94% of the fish harvested.
  - EM costs, including data analysis, were $198/sea day for Sitka vessels and $332/sea day for Homer vessels, suggesting remarkable cost savings when compared to the cost of a $1,000 observer day under the current restructured observer program.

ALFA is currently spearheading the EM fixed gear cooperative research effort, with FCN boats volunteering to carry EM systems to help develop the framework to support EM integration into the restructured observer program.

OTHER FCN PROJECTS

- Through a unique and durable collaboration called the Southeast Alaska Sperm Whale Avoidance Project (SEASWAP), FCN members work with marine scientists to understand Gulf of Alaska sperm whale depredation strategies and to develop deterrents to minimize interactions between longline gear and feeding whales.
- The FCN is also working improve the fleet's fuel awareness and efficiency, supporting installation of fuel flow meters and monitoring operational changes that reduce fuel use.

SALMON'S FUTURE PROJECTS

- ALFA's FCN projects have generated a wealth of data that is available to FCN members, marine scientists, and fishery managers.