

FY13 Coop Res Sablefish Progress Report

Summary

One Auke Bay Laboratories (ABL) cooperative research project was funded during fiscal year 2013 that incorporated two related components totaling \$226,500: the sablefish logbook program and the Alaska Fisheries Science Center's (AFSC) longline survey. The sablefish logbook program supports an ongoing collaborative project with the International Pacific Halibut Commission to collect and edit sablefish logbooks collected from fishermen at the docks. Funds dedicated to the AFSC longline survey supported overtime, travel, and supplies for scientists to participate in a three-month long survey of groundfish resources in Alaska and supported the survey's at-sea data collection program and the longline survey database.

Project Title: Sablefish Logbook Program

Project Description: Since 1997, Alaska Fisheries Science Center scientists, in cooperation with Alaska's longline industry, have been conducting a sablefish logbook program to create an index of sablefish abundance based on commercial fishery data. In the mid-1990's there was strong industry support to use fishery data in the sablefish stock assessment to supplement data collected by surveys and fishery observers. The North Pacific Fishery Management Council (NPFMC) currently endorses the use of sablefish logbook fishery data and directs sablefish stock assessment authors to use fishery catch rates for determining the apportionment of catch by management area. The majority of sablefish fishery data are derived from logbooks collected through the sablefish logbook program.

Unfortunately, NMFS does not have a dockside program to collect logbooks and to verify information from fishermen. Logbooks submitted directly to NMFS Enforcement can be difficult to interpret because of data omissions or incorrect data entry. The International Pacific Halibut Commission (IPHC) has an active dockside logbook collection program for the halibut fishery, which is open during the same dates as the sablefish fishery. The IPHC has found that using experienced samplers to interview fishermen dockside has increased logbook data quality and compliance by the halibut fleet.

Since 2004 NMFS has contracted the IPHC to collect logbooks, administer data quality controls, and enter sablefish logbook data electronically. Using an existing dockside program is much less expensive than an independent dockside program administered by NMFS and ensures high data quality. Additionally, sablefish logbooks are required for all vessels >60ft, but having a dockside presence to collect sablefish logbooks has greatly increased voluntary participation by vessels <60ft. This is important because before 2013, there was no observer coverage on vessels <60ft. In 2013 the NMFS observer program was restructured; one change was the addition of partial coverage of the <60 ft fleet. However, data from this new sampling plan will not be extensive enough to evaluate trends for some time and will not be as extensive as the logbook data. Therefore, the sablefish logbook program is essential for including fishery data in the sablefish stock assessment.

Project Results: The IPHC continues to collect sablefish logbooks through the 2013 fishing season through a contractual agreement between the IPHC and the AFSC for \$73,000. The logbook fishery data collected by the IPHC are used to compute catch rates for use in the sablefish assessment for apportionment of catch and as an index of abundance in the Alaska wide population model (Hanselman et al., 2012). Logbooks are collected in nine ports of landing in Alaska by IPHC port samplers. Besides collecting required logbooks from vessels >60 ft, a strong working relationship between the IPHC and fishermen has improved voluntary logbook participation by vessels <60 ft in recent years.

Accomplishments:

- A contract with the IPHC has been established to continue port sampling collection of sablefish logbooks.
- 57% of the total Individual Fishing Quota sablefish catch in Alaska was documented in logbooks collected by the IPHC.
- The annual number of longline sets recorded in the logbook dataset is five times the number of sets recorded by fishery observers (in 2011, 5,577 sets compared to 1,096).
- This year the IPHC incorporated new comment columns into the sablefish database that describe what issues there were with the data. This will help guide our use of the data.
- The logbook fishery data were used in the most recent sablefish stock assessment to create a fishery index of abundance for use in the model and were used in determining apportionment of quota among management regions.

The sablefish stock assessment can be found at:

Hanselman, D. H., C.R. Lunsford, and C. Rodgveller. 2012. Assessment of the sablefish stock in Alaska. In Stock assessment and fishery evaluation report for the groundfish resources of the GOA and BS/AI as projected for 2011. North Pacific Fishery Management Council, 605 W 4th Ave, Suite 306 Anchorage, AK 99501. <http://www.afsc.noaa.gov/refm/stocks/assessments.htm>

Description of any deviations from approved allocation of funds: None

Project Title: AFSC longline survey

Project Description: Since 1978, the U. S. National Marine Fisheries Service (NMFS), Alaska Fisheries Science Center (AFSC) has conducted annual longline surveys with Japan (Japan-U.S. cooperative longline survey, 1978-94) and alone (1987-present, domestic longline survey). For the Gulf of Alaska, the survey has annually covered the upper continental slope (1978-present) and selected gullies (1987-present). The survey samples the upper continental slope of the eastern Bering Sea (1982-94, since 1997) and the Aleutian Islands region biennially (1980-94, since 1996). Objectives of this survey are to determine the relative abundance and size composition of commercially important

groundfish species, determine migration patterns of sablefish, and determine the age composition of sablefish through otolith collections. Information collected during this survey is critical to conducting stock assessments of major groundfish species in Alaska.

The charter period is divided into six legs approximately two weeks in duration. Two NMFS scientists participate during each leg. A unique aspect of this survey is that the charter vessel retains most of the catch after the scientific data are recorded. This cost-recovery will pay for vessel operations, estimated at approximately \$1 million. However, requisite costs not included in vessel operations, such as staff overtime, travel, data processing, and supplies are not included in vessel operations and were requested in the longline survey cooperative research proposal.

Project Results: In 2013 the eastern Bering Sea and the Gulf of Alaska were surveyed. Survey operations were conducted using a chartered U.S. longline vessel, the *F/V Ocean Prowler* (Figure 1). The charter began on May 25 and ended August 28. A total of 86 stations were sampled.

For 2013, cooperative research funds were used to pay for operating costs associated with the longline survey. Funds were used to help purchase and maintain equipment and supplies, build longline gear for use on the survey, and support a contract to maintain the longline survey database and sea data collection system. Additionally, travel to and from the survey vessel and staff overtime while on the survey vessel were covered.

Data from the 2013 longline survey will be provided to stock assessment authors by October 1, 2013 for use in 2014 stock assessments. Researchers have detailed access to the database through a web-reporting tool maintained by the Pacific States Marine Fisheries Commission. Survey results from 2013 will be publicly available in December, 2013 via the AFSC longline survey webpage (http://www.afsc.noaa.gov/abl/mesa/mesa_sfs_lsd.htm). A cruise report for the 2013 survey will be completed by December, 2013 and available with previous cruise reports on the AFSC website: http://www.afsc.noaa.gov/ABL/MESA/mesa_sfs_ls.php.

Accomplishments:

- Eighty-six stations were sampled in the eastern Bering Sea and Gulf of Alaska in 2013.
- A survey database maintenance contract has been established with PSMFC to ensure continued access to survey data by the public and to researchers.
- A survey cruise report and the survey database will be publicly available in December, 2013.

Description of any deviations from approved allocation of funds: None

Figure 1. The Alaska Fisheries Science Center's longline survey contract vessel for 2013, *F/V Ocean Prowler*. The *F/V Ocean Prowler* is a 150ft Bering Sea freezer vessel.

