



NOAA FISHERIES

Alaska Fisheries
Science Center

Auke Bay
Laboratories
Division



MESA staff produce sustainable harvest recommendations for 14 groundfish stocks in Alaska, including shortraker rockfish.



MESA operates a longline survey in cooperation with a commercial fishing vessel to collect data on sablefish or black cod and several other species.

Marine Ecology and Stock Assessment Program

What We Do

The Marine Ecology and Stock Assessment (MESA) program supports NOAA's mission of responsible stewardship of the nation's ocean resources and habitats. Program activities are directly responsive to the North Pacific Fishery Management Council's (NPFMC) mandate to sustain Alaska's productive fisheries and healthy ecosystems. We conduct a large-scale longline survey of marine resources in the Bering Sea, Gulf of Alaska, and Aleutian Islands and produce quantitative assessments for commercially important groundfish stocks that inform harvest recommendations and management decisions. Our work contributes to the multi-billion dollar economic output of Alaska's groundfish fisheries that support over 100,000 full-time equivalent jobs.

Program three primary functions:

1. Conduct annual stock assessments to manage fisheries resources in Alaskan waters
2. Conduct an annual longline survey to assess the status of commercially important groundfish resources
3. Perform ecological research that informs stock assessments and improves fisheries management



Commercial longline fishing vessels in Sitka, Alaska. All photo credits: NOAA Fisheries



2024 Accomplishments

- Produced and presented 12 groundfish Stock Assessment and Fishery Evaluation (SAFE) reports to the North Pacific Fishery Management Council (NPFMC) in support of Alaska's multi-billion dollar groundfish fisheries
- Worked collaboratively with the Alaska fishing industry to redesign and optimize a cost-recovery longline survey that has been run consecutively for 45 years and is crucial for managing the 100 million dollar Alaska sablefish fishery
- Published 4 first-author peer-reviewed manuscripts and co-authored 9 journal manuscripts
- Served on Council review bodies, presented stock assessment advice, communicated results to stakeholders and Council members, and participated in setting annual harvest specifications for groundfish in the Bering Sea, Aleutian Islands, and Gulf of Alaska
- Provided analytical support for a Council motion to allow careful release of small, low-value, sablefish in the Individual Fishing Quota (IFQ) fishery
- Served as Science Advisor to the US delegation of the International Pacific Halibut Commission
- Successfully competed for external funding including:
 - North Pacific Research Board funded project that will determine Pacific sleeper shark age and maximum lifespan for use in stock assessment. Read about it here: <https://www.fisheries.noaa.gov/feature-story/determining-shark-ages-eye-lenses>
 - Postdoctoral project for a Management Strategy Evaluation (MSE) that will provide the Council with analyses of alternative sablefish harvest control rules
 - Project to implement an application of Artificial Intelligence for improving Electronic Monitoring of fishing activities
 - Postdoctoral project to explore use of dynamic structural modeling to link environmental/ecosystem predictors into stock assessments



Howard Lutnick
Secretary of Commerce

Vice Admiral Nancy Hann
Acting Under Secretary of Commerce
for Oceans and Atmosphere

Emily Menashes
Acting Assistant Administrator
for Fisheries

February 2025

www.fisheries.noaa.gov

OFFICIAL BUSINESS

National Marine
Fisheries Service

Alaska Fisheries Science Center
7600 Sand Point Way N.E.
Seattle, WA 98115-6349

2025 Preview

- Fund and execute a modernized 50-day Gulf of Alaska cost-recovery cooperative longline survey
- Provide updated longline survey abundance indices to stock assessment authors and the NPFMC for use in 2025 stock assessments
- Provide timely stock assessment documents and presentations to the NPFMC for setting 2026 groundfish quotas
- Finalize a cooperative research project with the sablefish IFQ fleet to examine alternative harvest control rules for presentation to the NPFMC
- Develop spatial stock assessment models for sablefish and Pacific cod that take into account connectivity and movement between interconnected basins in Alaska