

National Marine Fisheries Service Alaska Fisheries Science Center

Research Brief

Annual Bottom Trawl Survey of the Eastern Bering Sea

May 24th - August 24th 2023



Who is conducting the research?

Scientists from the Alaska Fisheries Science Center will be leading the survey effort with participation from the Alaska Department of Fish & Game (ADF&G), International Pacific Halibut Commission (IPHC), and regional universities.

What is the research objective?

The objectives of this survey are to monitor the marine ecosystem of the eastern Bering Sea, produce fisheryindependent biomass and abundance estimates for commercially important fish and crab species, and collect other biological and environmental data for use in ecosystem-based fishery management.

What are you sampling and where?

We plan to sample bottom-dwelling fish, crab and other marine life on two chartered fishing vessels, *FV Alaska Knight* and *FV Northwest Explorer*, in the eastern Bering Sea from May through August 2024 (see map and Table). In total, we plan to sample 350 survey stations, conducting one 30-minute bottom trawl at each station. We also plan to conduct research on new survey gear and methodology, as part of a survey modernization effort.

What kind of gear will be used?

Sampling will be done using the 83/112 Eastern bottom trawl, which is much smaller and lighter weight than commercial fisheries trawls. The survey is based on sampling a systematic 20×20 nm grid using standardized techniques that have been consistently used since 1982. Scientists will sample 350 stations during daylight hours. All organisms caught will be identified to species and weighed. Fishes and crabs will be measured, sexed, and sampled for stomach contents and age structure. We also plan to take measurements of water column profiles at each trawl location using a trawl-mounted temperature and salinity probe.

How will the information be used?

The data will be used by scientists to track abundance and distribution trends of fish, crab, and other bottomdwelling marine species over time. Biological and oceanographic data will also be used in ecosystem modeling efforts conducted by AFSC and other scientists. All data will be made available to the public.

See timetable and station map on back

Schedule for the 2023 Eastern Bering Sea Shelf Survey

Begin survey mobilization in Dutch Harbor, AK	May 24th
Survey vessels depart Dutch Harbor, AK	May 27th
Survey operations begin	June 1st
Survey operations end	August 20th
Begin survey demobilization in Dutch Harbor, AK	August 22nd

* Tentative schedule as of Feb 1, 2024.

What is the current policy on COVID-19 and other illnesses?

- AFSC has adopted a general Fieldwork Illness Guidance Plan for 2024.
- COVID testing, SIP, and vaccination are no longer required.
- Masks, hand-washing, and social distancing during travel are recommended.
- Each survey vessel will have a contingency plan for handling onboard illnesses.

How do you plan to communicate research results?

- Initial results will be communicated to the BSAI Plan Team during their September 2024 meetina
- Survey data products will be made available to stock assessment scientists by October 1,2024
- NOAA Tech Memo summarizing survey results will be published in early 2025
- Haul-level catch data will be made available to the public on the Fisheries One Stop Shop: https://www.fisheries.noaa.gov/foss
- AFSC scientists will participate in various local and regional communication activities



Photo: International Year of the Salmon



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