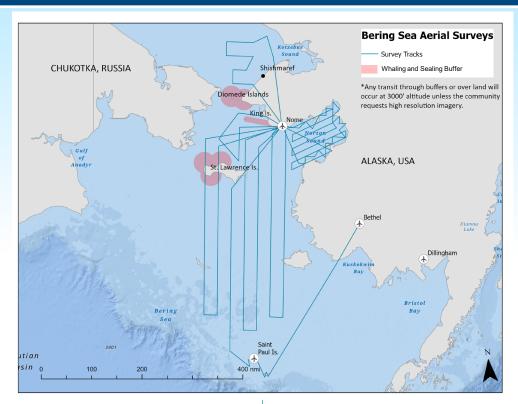
Research Brief

2024 Aerial Survey of Ice Seals in the Bering Sea

May/June 2024



Who is conducting the research?

Scientists from NOAA Fisheries' Alaska Fisheries Science Center and the University of Washington's Cooperative Institute for Climate, Ocean, and Ecosystem Studies will be conducting the research.

This project is included in the annual Alaska Ice Seal Research Plan which describes research priorities for ice-associated seals in Alaska, and was developed by the Alaska Native Ice Seal Committee's Co-management Working Group.

What is the objective?

To prepare for 2025 surveys to estimate the abundance of bearded, ringed, ribbon, and spotted seals in U.S. waters of the Bering, Chukchi, and Beaufort seas and to understand how these species are responding to changes in sea ice conditions. Aircraft and camera system capabilities will be tested in 2024. High resolution imagery of seals on sea ice will be collected with new cameras to prepare image processing software for the 2025 survey.

Where is the survey area and how are data collected?

Flights will occur over the Bering Sea out to the U.S. Exclusive Economic Zone (EEZ) and south to the typical extent of spring sea ice. A NOAA King Air aircraft will fly at an altitude of 1,000 feet and use cameras to collect color, thermal, and ultraviolet images of the sea ice. These images will be used to train machine learning algorithms to help identify animals on the sea ice.

All flights will avoid active subsistence hunting areas around coastal communities. Flights that transit a buffered hunting area will occur at an altitude of 3,000 feet. Flight lines will be modified to target sea ice using satellite imagery.

Why are the data important?

Preparation for the 2025 survey effort is critical to achieving an efficient survey effort and sound abundance estimates for these species. Survey results are needed to support sound planning and management decisions by agencies, and to conserve these species for the communities that rely on them as traditional resources.

See estimated timetable on back

Timetable. Proposed Operations for Aerial Surveys of Ice Seals in the Bering Sea, May/June 2024

Schedule for the 2024 Aerial Survey of Ice Seals in the Bering Sea

Survey team arrives	28 May
Survey operations begin	30 May
Survey operations end	12 June
Survey team departs	13 June

^{*} Tentative schedule as of April 2024.

What steps are you taking to prevent conflicts with subsistence hunting?

- Flights will not take place in active subsistence areas around communities. Any transit through an established hunting buffer will take place at 3000 ft.
- We will contact communities to discuss operations and communication plans.
- We will maintain a survey altitude of 1,000 feet (+/- 200 feet temporary variations).
- We will divert our flight path if any human activity is observed ahead of the aircraft.
- We will distribute daily flight plans with contact information for the field team
- We will work directly with communities to determine whether and how to do the project to ensure the safety and well-being of local communities and the survey team.

How do you plan to communicate survey results?

The Marine Mammal Laboratory will prepare a report summarizing the preliminary results of the survey. We will present that report to the public by participating in various local and regional outreach activities including webinars with communities and radio interviews.



Gina M. Raimondo U.S. Secretary of Commerce

Richard W. Spinrad Under Secretary of Commerce for Oceans and Atmosphere

Janet Coit Assistant Administrator for Fisheries

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www.fisheries.noaa.gov

Alaska Fisheries Science Center 7600 Sand Point Way NE Seattle, WA 98115





Michael Cameron, Program Leader **Erin Moreland,** Project Leader

Polar Ecosystems Program
Marine Mammal Laboratory Division
Alaska Fisheries Science Center
7600 Sand Point Way, NE
Seattle, WA 98115

Email: Michael.Cameron@noaa.gov Erin.Moreland@noaa.gov