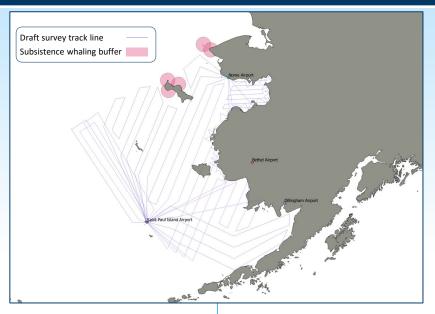
Research Brief

Aerial Survey for Ice Seals in the Bering Sea

May, 2024



Who is conducting the research?

Scientists from NOAA Fisheries' Alaska Fisheries Science Center and the Cooperative Institute for Climate, Ocean, and Ecosystem Studies.

We would like to collaborate with coastal communities of the Bering Sea to identify Alaska Native subsistence hunters who can participate with us on the survey flights.

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, Co-management Working group.

What is the survey objective?

NOAA Fisheries marine mammal biologists plan to conduct an aerial survey to count ribbon, spotted, ringed, and bearded seals in the U.S. waters of the Bering Sea. The goals are to estimate the abundance of these species and understand how they are responding to changes in the sea ice conditions.

Where is the survey area and how are the data collected?

Based in St Paul and Nome, the surveys will extend out to the U.S. EEZ and to the southern extent of the sea ice. Surveys will avoid active subsistence hunting areas around coastal communities. Survey flights are spread out in time and space to avoid clustering in one area.

The NOAA King Air will fly at an altitude of 1000 feet and carry cameras to collect color, thermal, and ultraviolet images of the sea ice. Machine learning algorithms will help identify animals in the images.

Why are the data important?

The Bering Sea was last surveyed for seals in 2013. Survey results are critical to support sound planning and decisions by agencies and the communities that rely on these traditional resources.

See timetable on back



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

- Flights will not take place in active subsistence areas around communities.
- Working with whaling captains to determine if/when there are opportunities to survey when whaling teams are not on the ice.
- Contacting communities to discuss operations and communication plans.
- Maintaining survey altitude 1000 feet (+/- 200ft temporary variations).
- Diverting from the flight track if any human activity is observed ahead.
- Distributing daily flight plans with contact information for the field team.
- Working directly with communities to determine whether and how to do the project to ensure the safety and well-being of local communities and survey team.

How do you plan to communicate survey results?

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



U.S. Secretary of Commerce Gina M. Raimondo

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