AERIAL SURVEYS FOR ICE SEALS & POLAR BEARS COMMUNITY CONSULTATION

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PURPOSE

Our goal is to estimate the abundance of ringed, bearded, spotted, and ribbon seals and understand how these animals are responding to changes in the Arctic. We provide this information to managers to inform their decisions. As the Arctic opens to more industrial activity, having current information about these species will help equip managers to make better decisions than they can if they are working with out of date information. This benefits communities by helping to ensure that sustainable populations are maintained for subsistence hunting activities. We also provide data to the U.S. Fish and Wildlife Service to help with their efforts to monitor polar bear populations. We recognize the importance of these species to coastal communities as a source of food and material to sustain cultural practices. It is our priority to work together to improve these survey efforts. We hope to have a productive conversation to help us better serve coastal communities of Alaska.

APPROACH

We fly aerial surveys in the spring when seals are hauled out on the ice to pup and molt. The surveys generally take place over 6 weeks (depending on weather). We survey at an altitude of 1,000-1,200 feet and collect imagery of the sea ice habitat below. We then count the seals on the ice and estimate the abundance of each species using information about sea ice coverage from satellites and information from tagged seals to account for the animals that are underwater during our survey.

It has taken almost 10 years to complete one survey of the Bering, Chukchi, and Beaufort seas. The timing and location of surveys is based on funding. These surveys are expensive to carry out and other research is put on hold during the years that we survey for ice seals.
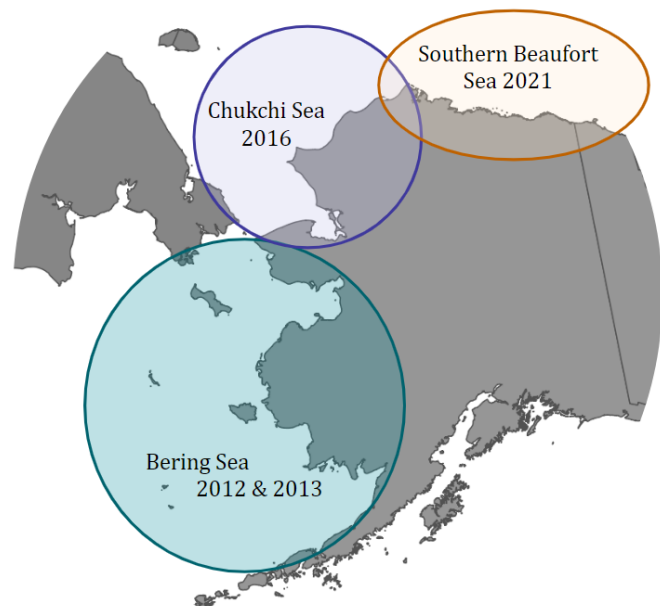
	Bering Sea	Chukchi Sea	Beaufort Sea
First survey effort	2012 & 2013	2016	2021
Anticipated schedule	2024	2026	2028

While we are surveying, we have a number of protocols to reduce our impact on the area. These include not surveying within 30 miles of communities, not flying near people in boats or on the ice, avoiding large groups of walrus and eiders, sending out daily flight plans and project updates, and stopping work if we receive any concerns or complaints. We would like to hear what works and what can be improved in these protocols.

IDEAS TO IMPROVE SURVEYS

Because these surveys cover such a large geographic area, we hope to maximize the amount of information that comes from the effort and consult with communities before making these decisions. We are interested in hearing what information would be helpful for communities either in real time or over time. Below are some of the ideas that we have been considering. What do you think about these ideas and what additional ideas do you have?

- **Faster airplane?** A faster plane would reduce the amount of time we're in a particular area and shorten the overall survey effort.
- **Fly higher?** We could invest in camera improvements that would allow us to fly at 2,000 ft instead of 1,000 ft. We would collect the same information we have now, but be farther away.
- **Increase image resolution?** We could invest in camera improvements that would allow us to see more at the altitude we currently fly. We could potentially collect information on bowhead whales, belugas, or foxes which is currently limited by the resolution of our cameras.
- **Provide sea ice imagery to communities in real time?** We could post sea ice imagery to the AAOKH network after a flight in an area that is of particular interest to help hunters plan.
- **Your ideas:** What changes would you like to see? What information would be helpful to communities?

We hope to identify ideas that can be incorporated before our next survey effort and use this information to help direct our long-term goals for these surveys.

Thank you for your time and consideration.