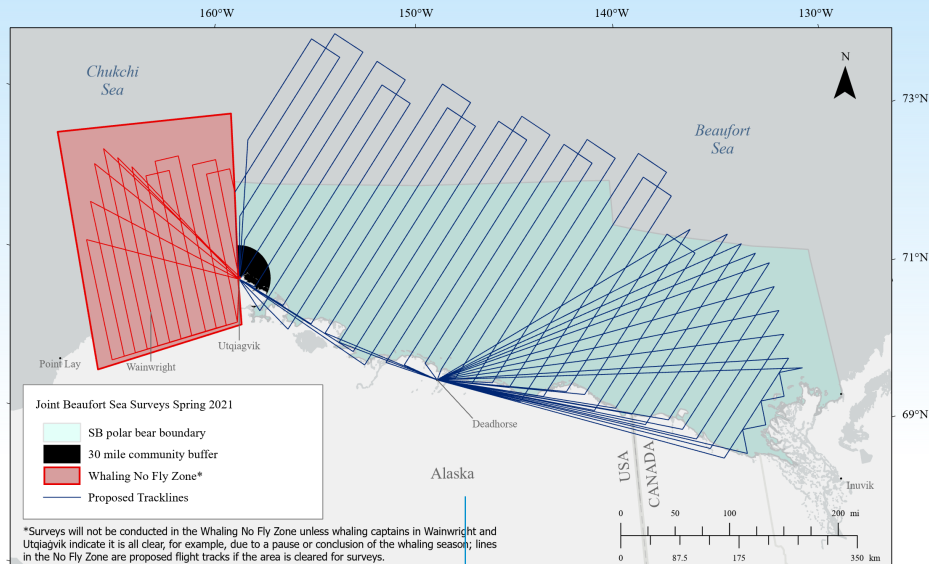




Aerial Survey for Seals and Polar Bears in the Beaufort Sea

April 17 – June 14, 2021



Who is conducting the research?

Scientists from NOAA Fisheries' Alaska Fisheries Science Center. The U.S. Fish and Wildlife Service provides support for inclusion of polar bears.

What is the survey objective?

NOAA Fisheries marine mammal biologists plan to conduct an aerial survey to count ringed and bearded seals in the U.S. waters of the Beaufort Sea. They also will count polar bears for the U.S. Fish and Wildlife Service and the U.S. Geological Survey to support an independent estimate of abundance for the Southern Beaufort polar bear sub-population, which extends into the Chukchi Sea.

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

Based in Deadhorse and Utqiagvik, surveys will extend out to the U.S. EEZ and throughout the Southern Beaufort polar bear subpopulation boundary. Track lines are flown as spread out in time and space as possible to avoid clustering in one area. One day a flight may survey the Canadian Beaufort, and the next flight will survey to the west

of Deadhorse. The NOAA Twin Otter 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?

Currently there are no reliable estimates of ringed and bearded seal abundance or trends in the Beaufort Sea. Survey results are critical to support sound planning and decisions by agencies and the communities that rely on these traditional resources.

Collaboration among federal agencies reduces the amount of survey effort needed to complete this work. Scientists are able to obtain simultaneous assessments of the seals and their primary predator, polar bears. Polar bear survey data will be provided to the U.S. Fish and Wildlife Service and U.S. Geological Survey to strengthen population assessments and to help inform local, state, national and international policy makers regarding conservation of the species and its habitat.

See timetable on back

Schedule for the 2021 Seal/Polar Bear Survey

Team Shelter In Place begins	March 25th
Begin weekly testing (continues throughout project)	April 5th
Survey preparation in Seattle	April 8th
Survey team mobilization in Deadhorse	April 16th
Survey operations begin	April 17th
1 st crew swap (following 14 day Shelter in Place and testing)	May 8-10
2 nd crew swap (following 14 day Shelter in Place and testing)	May 22-25
Survey operations end	June 12th
Demobilization in Anchorage	June 14th

* Tentative schedule as of April 2021. Survey completion date is dependent on persistence of sea ice.

What steps are you taking to prevent conflicts with bowhead whale hunting?

- Ensuring no flights take place that could potentially disrupt the bowhead migration route in the northern Chukchi Sea.
- Working with whaling captains to determine if/when there are opportunities to survey the northern Chukchi Sea when whaling teams are not on the ice or when whaling activities have concluded for the season.
- Contacting community whaling leaders 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 including field team contact number.
- 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.

What steps are you taking to prevent the spread of COVID-19?

- Adopting additional COVID-19 mitigation protocols, used successfully to implement 2020 North Slope Borough bowhead whale surveys and NOAA harbor seal surveys, including pre-survey quarantine and weekly testing.
- Following CDC, State of Alaska, and local guidelines; maintaining a team “bubble” and having minimum contact with people outside the bubble

How do you plan to communicate survey results?

We will send a report of our survey activities to the tribal offices along the coast in the study area within 30 days after the survey. We also will be participating in various local and regional outreach activities including webinars with communities and radio interviews.



Peter Boveng Polar Ecosystems Program Leader
Erin Moreland Survey project Leader
Marine Mammal Laboratory Division
Alaska Fisheries Science Center
7600 Sand Point Way, NE
Seattle, WA 98115



Email: nmfs.afsc.mml.sealsurvey@noaa.gov
Tel: 907-412-0396



U.S. Secretary of Commerce
Gina M. Raimondo

Under Secretary of Commerce for
Oceans and Atmosphere & NOAA
Administrator

Richard W. Spinrad

Assistant Administrator for Fisheries

Janet Coit

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1315 East-West Highway
SSMC 3, F/SF, Room 13362 Silver
Spring, MD 20910