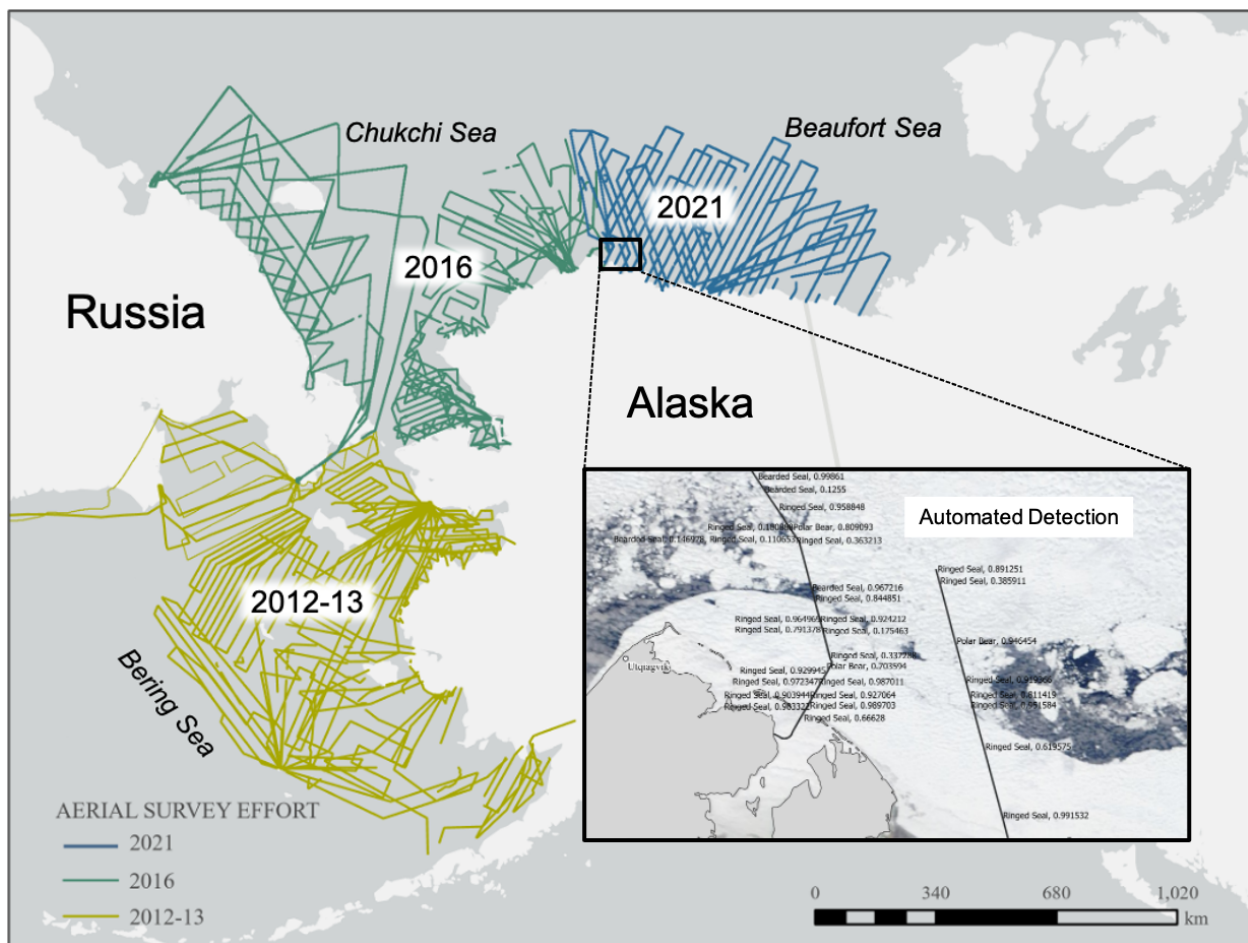


NOAA FISHERIES MARINE MAMMAL LABORATORY – MONITORING AND RESEARCH, 2021

ICE SEAL POPULATION ABUNDANCE – BERING, CHUKCHI, AND BEAUFORT SEAS

We wrapped up our survey of the southern Beaufort Sea on June 11, completing our first comprehensive survey for ice seals in Alaska waters (Bering Sea 2012-2013, Chukchi Sea 2016, Beaufort Sea 2021). The color and thermal images from the Beaufort Sea have been run through our automated detection process, yielding approximately 14,000 detections that we will now review by eye to check the accuracy of the species identification process. Thanks to improvements in the detection and species ID process, this is a much smaller task that we’ve been faced with after the previous surveys!



A key paper about the haul-out timing of bearded, spotted, and ribbon seals has been drafted, shared with co-authors at ADF&G and North Slope Borough DWM. Completion of this paper will allow us to move forward with the two main abundance manuscripts for the Bering and Chukchi seas in the near future.

A new paper about ringed seal habitat and lair emergence timing, based on our survey data from the Bering and Chukchi seas, has just been published from a collaboration with Jessica Lindsay, a PhD student at University of Washington:

Lindsay JM, Laidre KL, Conn PB, Moreland EE, Boveng PL. 2021. Modeling ringed seal *Pusa hispida* habitat and lair emergence timing in the eastern Bering and Chukchi Seas. *Endangered Species Research* 46:1-17. DOI: <https://doi.org/10.3354/esr01140>

MARINE MAMMAL LABORATORY – MONITORING AND RESEARCH PLANS, 2022

SAMPLING AND TAGGING ICE SEALS IN THE BERING SEA, SPRING 2022

After canceling our biennial vessel-based sampling and tagging survey in 2020 due to COVID restrictions, NOAA vessel support is confirmed for resuming this work for a period of about 2 weeks in April, 2022. Although this work is typically completed far from coastal communities, we will continue discussions with communities and organizations in the surrounding regions--particularly the Bering Strait Region--to coordinate our activities. We will continue working with Kawerak to identify an Alaska Native participant on the team and provide support for his/her participation.

A new component to be included in this monitoring is the use of small hand-launched drones to photograph seals on ice and measure their body condition (fatness) from the photographs.