



Introduction The Alaska Fisheries Science Center (AFSC) of the National Marine Fisheries Service (NMFS), National Oceanic & Atmospheric Administration (NOAA), conducts research on marine mammals off the coasts of Alaska, Washington, Oregon, and California. Research projects focus on abundance, distribution, trends, life history, ecology, and behavior. Research results assist NOAA and other agencies in making science-informed decisions for sound management of marine resources. This document is intended to show research planned for the calendar year shown and thus some projects may change in scope and/or timing, or be canceled.

CETACEAN RESEARCH

Marine Mammal Passive Acoustic Recorders

Location Bering, Beaufort, and Chukchi Seas, and western Gulf of Alaska
Timing April, May, August, September
Funding NOAA; Alaska Ocean Observing System (AOOS), U.S. Navy; past funding for this project from the Bureau of Ocean Energy Management (BOEM), North Pacific Research Board (NPRB), and the Marine Mammal Commission
Project This project continues 15 years of passive acoustic monitoring in the Alaskan Arctic. Noise levels from anthropogenic sources are also monitored. Most moorings are located with oceanographic sensors. Collaborators include NOAA's Pacific Marine Environmental Lab and the Department of Fisheries and Oceans Canada
Contact Catherine.Berchok@noaa.gov

Cook Inlet Beluga Acoustic Monitoring

Location Eagle River (Knik Arm), central Cook Inlet, and Tuxedni Bay
Timing May, August – September
Funding JBER (Dept. of the Army), Hilcorp Alaska LLC., High Gold Mining
Project Echolocation loggers and adaptive resolution imaging sonar will be used in Eagle River to identify targeted prey by beluga, observe foraging behavior, and determine bathymetric features associated with areas of increased feeding concentration. Oil and gas platforms in mid-inlet are being instrumented with echolocation loggers and sound recorders to monitor noise and marine mammal presence. Beluga occurrence, habitat use, and soundscape characterization data is being collected in Tuxedni Bay.
Contact Paul.Wade@noaa.gov

Cook Inlet Beluga Biopsy Study

Location Cook Inlet
Timing August – September
Funding NOAA
Project A boat-based biopsy survey will be conducted to provide information on the sex, genetics, diet, and hormonal status of individual beluga whales. In collaboration with Group for Research and Education on Marine Mammals (GREMM) scientists, blubber samples will be collected using a darting gun. Photographs of each biopsied whale, and associated whales, will be taken and analyzed to identify individuals, which will be matched to the existing photo-ID catalog.
Contact Paul.Wade@noaa.gov

Cook Inlet Beluga Aerial Photogrammetry Study

Location Cook Inlet
Timing July – September
Funding NOAA
Project Photogrammetry surveys will be conducted to estimate age classes and an index of beluga calf production in late August/early September. A hexacopter uncrewed aircraft system equipped with a high-resolution camera will be used to photograph beluga groups. Individuals will be measured to provide blowhole to dorsal ridge lengths, and whales will be assigned to calf, juvenile, and adult age classes based on relative lengths.
Contact Paul.Wade@noaa.gov

Cook Inlet Beluga Aerial Surveys

Location Cook Inlet
Timing June
Funding NOAA
Project: A survey to determine abundance and trend will be conducted in early June 2024. Tracklines are flown along the entire coast north of Augustine Island and sawtooth tracklines cross the inlet. Distance sampling in strata in the Susitna Delta, Chickaloon Bay, and Trading Bay may be conducted in addition to or in lieu of the historic video sampling design.
Contact Kim.Shelden@noaa.gov

Eastern Bering Sea Beluga Abundance Survey

Location Norton Sound and Yukon Delta
Timing June
Funding ABWC and NOAA
Project: The EBS beluga stock resides in the vicinity of Norton Sound and the Yukon River Delta during the ice-free period from spring breakup to autumn freeze up. An aerial line-transect abundance survey of the Eastern Bering Sea beluga stock will be conducted in late June in 2024.
Contact Kim.Shelden@noaa.gov

Harbor Porpoise Monitoring

Location Auke Bay, Southeast Alaska
Timing May – August
Funding NOAA
Project: Visual and passive acoustic monitoring will occur in Auke Bay and a nearby control site to evaluate the behavioral response of harbor porpoise to acoustic deterrent devices (pingers) as a potential tool to mitigate bycatch in fisheries in Southeast Alaska.
Contact Kim.Goetz@noaa.gov

Cetacean Assessment in Behm Canal and Southern Clarence Strait

Location Southeast Alaska
Timing September – October
Funding U.S. Navy, NOAA
Project Cetacean occurrence, density, and distribution will be assessed using a vessel survey and passive acoustics.
Contact Robyn.Angliss@noaa.gov

IWC-POWER Survey

Location Southern Chukchi and eastern Bering Sea
Timing August – September
Funding International Whaling Commission, Govt. of Japan, NOAA
Project A visual line transect and passive acoustic survey will be conducted for large whales.
Contact Jessica.Crance@noaa.gov

For more information on marine mammal research conducted by the Alaska Fisheries Science Center please visit the Alaska Fisheries Science Center's Marine Mammal Laboratory website at: <https://www.fisheries.noaa.gov/about/marine-mammal-laboratory>

150°E

165°E

180°

Months in which fieldwork will occur (2024)		M	A	M	J	J	A	S	O
◆	Marine Mammal Passive Acoustic Recorders		✓	✓			✓	✓	
▲	Cook Inlet Beluga Acoustic Monitoring			✓			✓	✓	
○	Cook Inlet Beluga Biopsy Study						✓	✓	
○	Cook Inlet Beluga Aerial Photogrammetry Study				✓	✓	✓		
—	Cook Inlet Beluga Aerial Surveys				✓				
⊠	Eastern Bering Sea Beluga Abundance Survey				✓				
○	Harbor Porpoise Monitoring			✓	✓	✓	✓		
○	Cetacean Assessment in Behm Canal and Southern Clarence Strait							✓	✓
—	IWC-POWER Survey						✓	✓	
■	Bering Sea Ice Seal Aerial Surveys	✓	✓						
■	Surveys of Harbor Seals in Glacial Fjords				✓		✓		
○	Uncrewed Aerial Surveys of Harbor Seals in the Pribilof Islands			✓	✓	✓	✓	✓	
■	Vessel-based Studies of Ice-associated Seals		✓	✓					
📍	Steller Sea Lion Vessel-based Studies Remote Camera Install			✓					
—	Steller Sea Lion Vessel-based Studies in the Western and Central Aleutian Islands				✓	✓			
●	Steller Sea Lion Aerial Surveys (UAS)				✓	✓			
●	Steller Sea Lion Aerial Surveys				✓	✓			
○	Northern Fur Seal Vital Rates Studies						✓	✓	✓
○	Northern Fur Seal Population Assessment					✓	✓		
■	Uncrewed Surveys of Pinnipeds in the Aleutian Islands							✓	
●	Passive Acoustic Monitoring of Bearded and Ringed Seals in Kotzebue Sound				✓	✓	✓	✓	

60°N

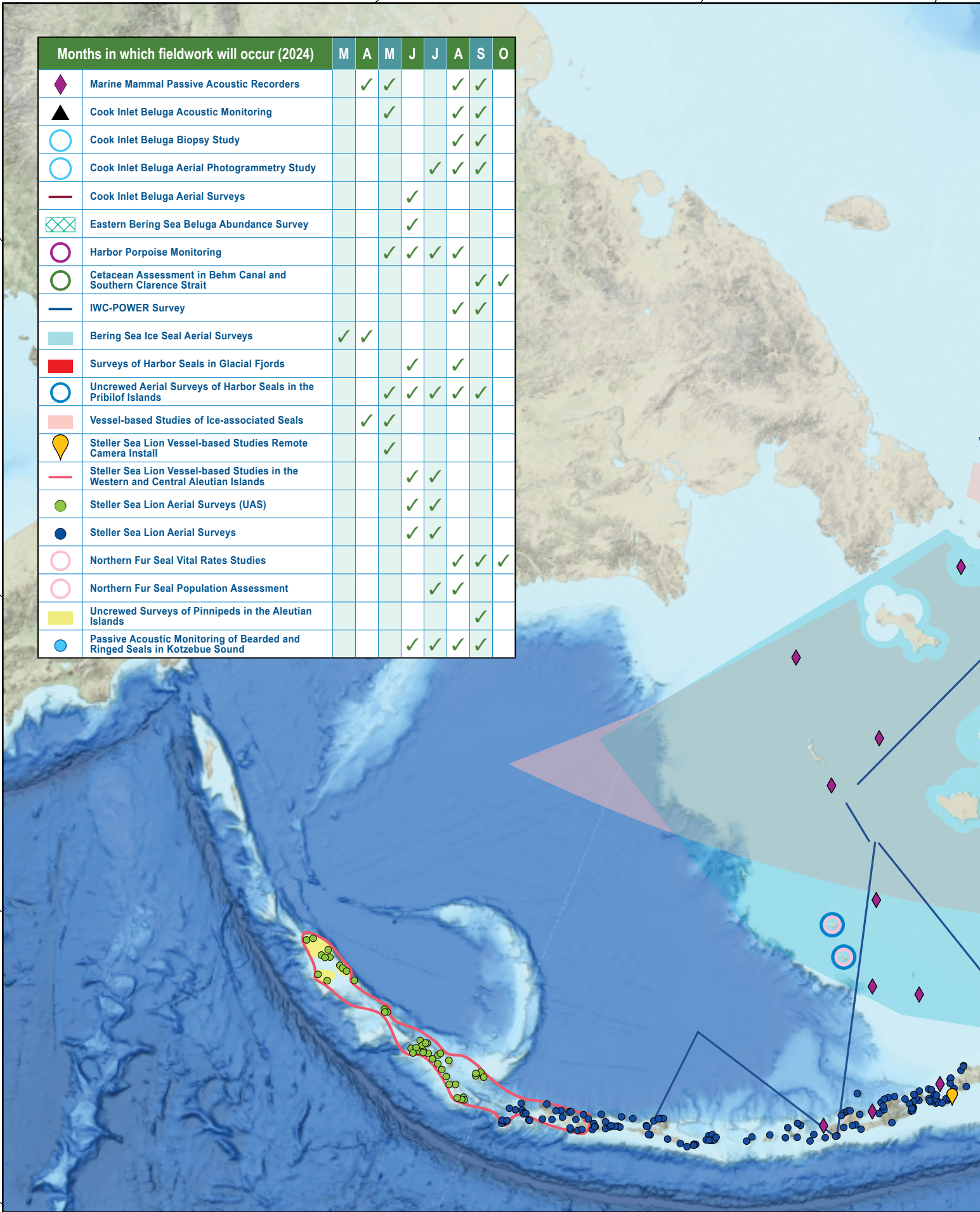
55°N

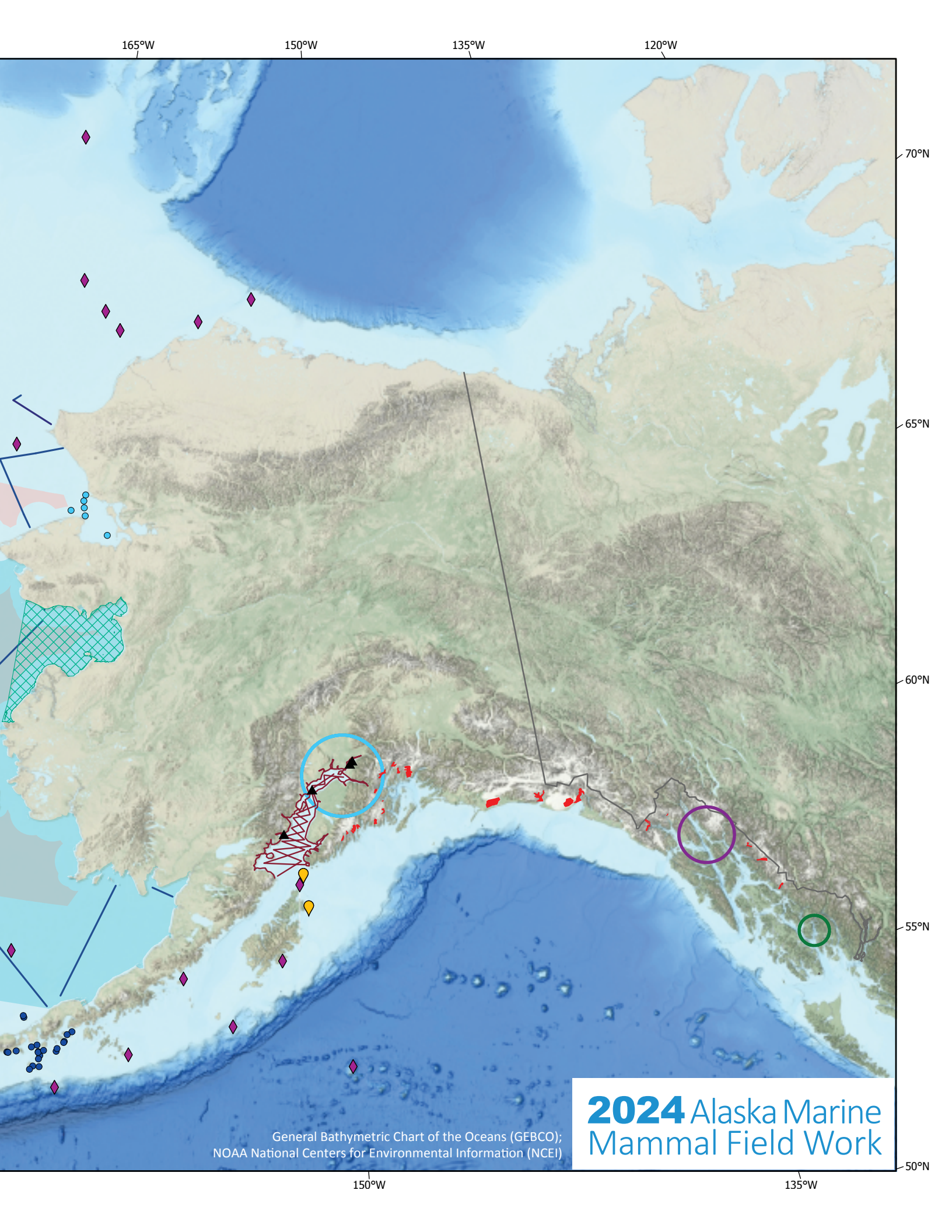
50°N

45°N

180°

165°W





General Bathymetric Chart of the Oceans (GEBCO);
NOAA National Centers for Environmental Information (NCEI)

2024 Alaska Marine Mammal Field Work

PINNIPED RESEARCH

Bering Sea Ice Seal Aerial Surveys

Location Bering Sea out to the EEZ and to the southern sea ice extent
Timing March – April
Funding NOAA
Project Multispectral aerial surveys will be flown over the sea ice habitat of the Bering Sea. Imagery will be used to detect and classify the species of animals on the sea ice to estimate abundance for ribbon, spotted, bearded and ringed seals. Survey flights will maintain a 30 mile buffer around the communities of Gambell, Savoonga, Little Diomedea, and Wales during spring whaling.
Contact Michael.Cameron@noaa.gov

Surveys of Harbor Seals in Glacial Fjords

Location Glacial fjord habitats in Prince William Sound, Gulf of Alaska, and Southeast Alaska
Timing June and August
Funding NOAA
Project We will conduct aerial surveys for harbor seals using a NOAA Twin Otter aircraft over glacial fjord habitats in Prince William Sound, Gulf of Alaska, and Southeast Alaska. These surveys will collect visual and infrared imagery of harbor seals resting on ice floes within the fjords.
Contact Michael.Cameron@noaa.gov

Uncrewed Aerial Surveys of Harbor Seals in the Pribilof Islands

Location St. Paul, St. George and Otter Islands
Timing May - September 2024
Funding NOAA
Project Surveys for harbor seals will be conducted using a small uncrewed aircraft system (sUAS) in the Pribilof Islands in an effort to support an image-based, community approach to monitoring this isolated harbor seal stock. Surveys will be both land- and boat-based and will leverage UAS expertise and local knowledge from the communities of St. Paul Island and St. George Island.
Contact Michael.Cameron@noaa.gov

Vessel-based Studies of Ice-associated Seals

Location Bering Sea, ice edge zone
Timing April – May
Funding NOAA
Project Ribbon, spotted, and bearded seals will be tagged with satellite-linked transmitters and sampled to monitor their abundance, health, foraging ecology, and habitat requirements. Small boats based on a chartered vessel will access the seals on the ice floes, and a small uncrewed aircraft system (sUAS) will collect images.
Contact Michael.Cameron@noaa.gov

Steller Sea Lion Vessel-based Studies Remote Camera Install

Location Western Gulf of Alaska
Timing May
Funding NOAA
Project A chartered vessel will be used to access Steller sea lion rookeries in the WGOA. Scientists will download images and install remote cameras to collect images of sea lions on these long term study sites.
Contact Tom.Gelatt@noaa.gov

Steller Sea Lion Vessel-based Studies in the Western and Central Aleutian Islands

Location Western and Central Aleutian Islands
Timing June – July
Funding NOAA
Project To estimate demography and movements of Steller sea lions, direct and indirect (from remote camera installations) observations of sea lions will be made in the Aleutian Islands west of Adak, Alaska. An uncrewed aerial system will be used to supplement crewed aircraft aerial surveys to obtain sea lion counts for determining abundance and distribution.
Contact Tom.Gelatt@noaa.gov

Steller Sea Lion Aerial Surveys

Location Eastern and Central Aleutian Islands and Gulf of Alaska
Timing June – July
Funding NOAA
Project High-resolution aerial photographic surveys of Steller sea lions will be conducted in the Gulf of Alaska using crewed aircraft. Time series of counts dating from the mid-1970s are used to track overall and regional trends in population abundance to monitor recovery of the endangered western population.
Contact Tom.Gelatt@noaa.gov

Northern Fur Seal Vital Rates Studies

Location Pribilof Islands
Timing August – October
Funding NOAA
Project University of Washington employees temporarily hired under the Cooperative Institute will be working with MML staff and volunteers to spend up to 10 weeks on St. Paul and St. George Islands collecting observations of previously marked northern fur seals. This data will be used for studies of northern fur seal demography and vital rates. In late fall, a cohort of pups and adult females will be tagged.
Contact Tom.Gelatt@noaa.gov

Northern Fur Seal Population Assessment

Location Pribilof Islands
Timing July – August
Funding NOAA
Project A crew of scientists will use mark-recapture techniques to assess northern fur seal population abundance. Counts will be conducted in early July of adult male fur seals on both Pribilof Islands.
Contact Tom.Gelatt@noaa.gov

Uncrewed Surveys of Pinnipeds in the Aleutian Islands

Location Western Aleutian Islands
Timing September
Funding NOAA
Project A medium-range, fixed-wing uncrewed aircraft system (UAS) based at Eareckson Air Station, Shemya Island, will be used to survey Steller sea lion and harbor seal sites in the western Aleutian Islands. Our goals are to evaluate the feasibility of transitioning to uncrewed aerial surveys of pinnipeds in remote parts of Alaska, to reduce risks to NOAA personnel and aircraft, and to advance the application of beyond visual line-of-sight UAS operations in the U.S.
Contact Michael.Cameron@noaa.gov

Passive Acoustic Monitoring of Bearded and Ringed Seals in Kotzebue Sound

Location Kotzebue Sound
Timing June – September
Funding NOAA, Species Recovery Grants to Tribes
Project Using passive acoustic monitoring to describe year-round spatiotemporal distribution of bearded seals and ringed seals and their relationship to ice concentration in Kotzebue Sound.
Contact Manuel.Castellote@noaa.gov