

BOEM ENVIRONMENTAL STUDIES PROGRAM: Ongoing Studies

Region: Alaska

Planning Area(s): Bering Sea, Chukchi Sea

Title: Abundance Estimates of Ice-Associated Seals: Bering Sea Populations that Inhabit the Chukchi Sea – Aircraft Support (AK-12-x10a)

BOEM Information Need(s) to be Addressed: BOEM needs reliable abundance estimates of ice-associated seal species for NEPA analysis and the future development of sound plans for management, conservation, and mitigation of potential environmental impacts from oil and gas activities and climate change. Improved monitoring of ice-associated seals is also fundamental for ensuring compliance with Federal management and regulatory mandates for stock assessments under the Marine Mammal Protection Act (MMPA) and establishing extinction risk assessments under the Endangered Species Act (ESA). Study findings will be used in pre-lease analyses and documentation for potential future Chukchi Sea lease sales, as well as post-sale NEPA analysis, review of EPs, DPPs and other reviews for post-sale and post-exploration BOEM decision making and mitigation.

Total Cost: \$460,000

Period of Performance: FY 2012-2014

Conducting Organization: USDOJ National Business Center

BOEM Contact: [Dr. Dan Holiday](#)

Description:

Background: Bearded, spotted, and ribbon seals, collectively referred to as ice seals, are key components of Arctic marine ecosystems and are important subsistence resources for northern coastal Alaska Native communities. These seals are protected under the MMPA and bearded seals are under consideration for listing through the ESA. More comprehensive abundance estimates for these ice-associated seals are needed to establish extinction risk assessments under the ESA and to ensure compliance with Federal management and regulatory mandates for marine mammals under the MMPA. Obtaining reliable abundance estimates for ice seals is also a key requirement for developing sound plans for response to potential environmental impacts of oil and gas activities and the impacts to ice seal populations due to climate change. The seals' geographic distributions are broad and patchy, and the extent, locations, and conditions of their sea ice habitats change rapidly.

Scientists at NOAA's National Marine Mammal Laboratory (NMML) have been collaborating with Russian colleagues to conduct synoptic aerial surveys of ice-associated seals in the Bering and Okhotsk Seas. This procurement provides logistics support for travel of NMFS staff conducting aerial surveys for ice seals (bearded, spotted, and ribbon seals) over the Outer Continental Shelf (OCS) areas of the Bering and southern Chukchi seas. In addition, the project allows for BOEM financial support toward contracting temporary staff to compliment the NMFS-NMML team and facilitate image processing and data analysis of high-resolution digital imagery and thermal output photography. A large volume of images and data are anticipated

from the surveys; annually these data files will be approximately 20 terabytes, including more than 1 million high-resolution photos.

Objectives: Obtain the necessary aircraft services (planes, fuel, maintenance, pilots, etc.) via Interagency Agreement between NBC-AMD and BOEM required by the study titled “Abundance Estimates of Ice-Associated Seals: Bering Sea Populations that Inhabit the Chukchi Sea – Logistics Support”

Methods: The USDOJ National Business Center’s Aviation Management Directorate will issue contracts to private companies to obtain the needed aircraft services.

Current Status: Ongoing

Final Report Due: N/A

Publications Completed: N/A

Affiliated WWW Sites: <http://www.boem.gov/akstudies/>

Revised Date: October 2012

ESPIS: Environmental Studies Program Information System

All *completed* ESP studies can be found here:

http://www.data.boem.gov/homepg/data_center/other/espis/espisfront.asp