

MMS ENVIRONMENTAL STUDIES PROGRAM: ONGOING STUDIES

Region: Alaska

Planning Areas: Chukchi Sea

Title: Satellite Tracking of Walruses in the Chukchi Sea: The Planning Phase (AK-93-48-66)

MMS Information Need(s) to be Addressed: Large numbers of pinnipeds migrate through, and potentially occupy, areas of high oil and gas potential in the Chukchi Sea including habitat near the Burger Prospect. Pinnipeds may be affected in a variety of ways during all stages of oil and gas exploration, development, and production. This study explores the feasibility of conducting a cooperative project involving various state and federal agencies, and Native Alaskan subsistence hunters to study the movements and habitat use of walruses in the Chukchi Sea.

Total Cost: \$10,000

Period of Performance: FY 2008-2009

Conducting Organization: Alaska Department of Fish and Game

MMS Contact: [Chief, Alaska Environmental Studies Section](#)

Description:

Background Walruses are an important species for subsistence communities along the Bering and Chukchi Sea coastlines. Walrus meat is used for food, hides are used for boat skins, and ivory is used for artwork that provides cash for fuel, ammunition, and other needs. In recent years, spring sea ice, that is an important component of walrus habitat, has retreated more rapidly and to a greater extent in this region. Female walruses give birth in spring as they move northward with the ice. They use the sea ice as a platform for resting between feeding bouts and it is important for calves to be able to rest on ice near good shallow-water feeding areas for the females and sub-adults. With the changes in the extent and duration of the sea ice in summer the distribution of females and sub-adults may also be changing. Females with young calves may need to remain close to beaches where they can haul out and rest. During summer 2007, large numbers of walruses were hauled out on land between the villages of Point Lay and Wainwright. Many additional tens of thousands hauled out along the Chukchi coastline in Russia. In the future, less sea ice will likely make land haul-outs more important and feeding areas near those haul-outs of great importance. Updated information is needed on how walruses move through this region, where they haul out, and where they forage.

The Burger Prospect located offshore and northwest of the villages of Wainwright and Point Lay, has potentially strong renewed interest for oil and gas exploration and development and is located just south of Hanna Shoal. It is thus situated between winter habitat and potentially important summer feeding habitat on, and around, Hanna Shoal. Plans for geophysical exploration, field delineation, and development of production facilities and pipelines in that region are being developed and such activities may have consequences for pinniped movements

and habitat utilization, which in turn could further alter the availability of walruses and ice seals for subsistence by Natives in villages along the Northwestern Alaskan coastline. Identification of migration routes and high-use habitat areas is critical to assessment of potential impacts from oil- and gas-related industrial activities on pinniped populations and subsistence use by Alaskan Natives.

Objectives

- Determine the feasibility of and develop a consensus for cooperative study of the movements and habitat use of selected walruses in the Chukchi Sea Planning area.
- Develop recommendations for logistical approaches and technology to be used in studying movement and habitat use by walruses.

Methods This study is modeled on a cooperative study of bowhead whale distribution and movements that is currently supported by MMS. Review literature and existing data to make recommendations about logistics and technology that could support a walrus study. Meet with walrus experts in federal agencies, state agencies, and local communities to discuss potential cooperation and approaches. Hold discussions with Native walrus subsistence hunters in communities along the Chukchi Sea coastline to gauge and encourage interest in active involvement in undertaking a multi-year study of walrus movements and habitat use employing state of the art technology.

Current Status: Underway

Final Report Due: N/A

Publications Completed: N/A

Affiliated WWW Sites: <http://www.mms.gov/alaska/>

Revised Date: March 2008