

MMS ENVIRONMENTAL STUDIES PROGRAM: ONGOING STUDIES

Region: Alaska

Planning Area: North Aleutian Basin

Title: Distribution, Abundance, and Habitat Use of North Pacific Right Whales (AK-07-x13)

MMS Information Need(s) to be Addressed: The *Final Outer Continental Shelf Oil and Gas Leasing Program 2007-2012* (USDOJ, MMS, 2007) considers a North Aleutian Basin (NAB) oil and gas lease sale for 2011. The proposed sale area (or areas adjacent) supports very important commercial and subsistence fisheries, provides habitat to numerous marine mammals, and is an important migration and staging area for internationally important waterfowl. Marine mammal species known to occur in or near the NAB include the listed Endangered or Threatened North Pacific right whale, fin whale, humpback whale, and Steller sea lions; the recently delisted gray whale; and the sea otter, which is proposed for listing. The study described here will provide information that was identified by the Alaska OCS Region as a highly time-sensitive and important decision-applicable information need for proposed oil and gas leasing. Information obtained is planned to be used in Section 7 Endangered Species Act consultation, for enhancing compliance with provisions of the Marine Mammal Protection Act and for pre- and post-sale NEPA/EIS analysis, documentation, and mitigation of potential effects of OCS exploration and development.

Actual Costs: \$3,000,000

Period of Performance: FY 2007-2010

Conducting Organization: NMFS, NMML

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

Description:

Background The eastern population of the North Pacific right whale (*Eubalaena japonica*) is arguably the rarest stock of whales anywhere in the world. Right whales throughout the North Pacific were drastically reduced by commercial whaling beginning in 1835, and the remnant eastern population was almost wiped out by illegal Soviet catches in the 1960's. Today, the surviving population likely numbers fewer than 100 whales, although little is known of its abundance, movements and current habitat use. Because of its endangered status under the Endangered Species Act (and designated as "critically endangered" by the IUCN), the eastern North Pacific right whale is among the highest priorities for recovery efforts by NOAA Fisheries. Historical data as well as recent observations confirm that the NAB lease-sale area is used by right whales for at least the period May-September; although it is generally assumed that the animals migrate out of the area during winter, this is based on very little information and has never been confirmed. It is also assumed that right whales occupy the NAB area to feed upon copepods, but oceanographic and foraging ecology studies of the region are lacking.

Objectives

- Estimate seasonal distribution, abundance and movement patterns in and adjacent to the lease sale area.
- Characterize right whale habitat, foraging behavior, health, and prey distribution.

Methods

Activities will be coordinated with other programs (e.g. Bering Ecosystem Study [BEST], North Pacific Research Board's Integrated Ecosystem Research Program) so these relatively small-scale observations can be put into the broader context of conditions and processes occurring over the Bering Sea. Integrated ship-based research activities will provide information on right whale ecology and behavior at various spatial scales. Specifically, methods to be used include:

1. Fixed-winged aircraft and ship-based surveys (focused in lease sale and adjacent area)
2. Acoustic and satellite tagging of individual whales (lease sale area and critical habitat)
3. Ship-based passive acoustic methodology to locate whales for tagging and observation
4. Passive acoustic methodology for year-round monitoring of presence and relative abundance (lease sale area, critical habitat, and potential migration routes from Bering Sea).
5. Biopsy samples of right whales will be taken during tagging operations for analysis of genetics, pollutants and diet. In addition, samples of copepods will be taken during oceanographic operations to establish a baseline for contaminants in right whale prey prior to oil and gas development activity.

Current Status:

Field work was undertaken during July, 2007 from the NOAA ship R/V Oscar Dyson and a chartered fishing vessel. Aerial survey and oceanographic sampling objectives were not undertaken due to the late award of the contract. No right whales were seen or heard during the July cruise in the critical habitat area. That was attributed to the presence of cold water and, relatedly, limited prey in that area.

Final Report Due: September 2010

Publications Completed: None

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

Revised Date: March 2008