

**Western Arctic Bowhead Whale Movements and Habitat Use throughout their Migratory Range:
2006–2009 Satellite Telemetry Results**

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In 2005, the Alaska Department of Fish and Game began a cooperative research project to study movements and habitat use of the western Arctic stock of bowhead whales (*Balaena mysticetus*). An important goal of the study is to describe how bowhead whale behavior is affected by industrial activity. In collaboration with the Alaska Eskimo Whaling Commission, the North Slope Borough, the Greenland Institute of Natural Resources, and the Department of Fisheries and Oceans Canada with funding from the Minerals Management Service, 44 satellite transmitters were placed on bowhead whales in Alaska and Canada between 2006 and 2009. The majority of the tags were deployed in waters near Point Barrow by Alaska Native subsistence whalers. A few tags have transmitted ~12 months allowing us to track individual bowhead whales throughout their complete annual migration in the Bering, Chukchi, and Beaufort seas. Tagging in consecutive years has allowed us to look at the variability in movements and the timing of migration among years. We have identified several areas of concentrated use throughout the range of bowhead whales, and have documented interactions with industrial activities. We plan to continue tagging in order to better understand annual variability in movements and to document additional behaviour relative to industrial activities. We will also consider oceanographic factors to better understand what influences the movements and foraging behavior of his stock of bowhead whales.

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