Western Arctic Bowhead Whale Movements Throughout Their Migratory Range
2006–2009 Satellite Telemetry Results

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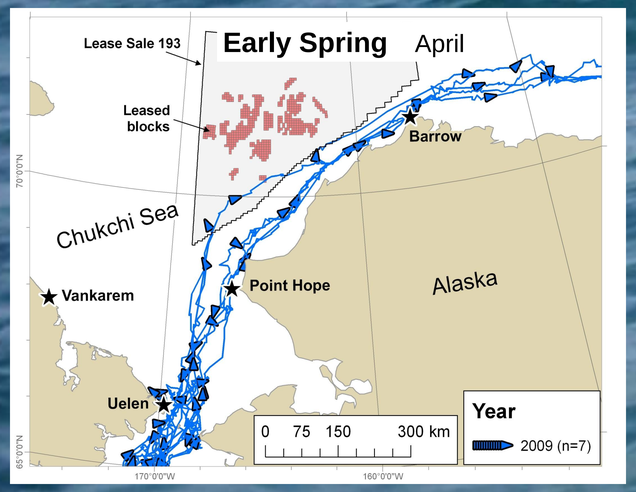
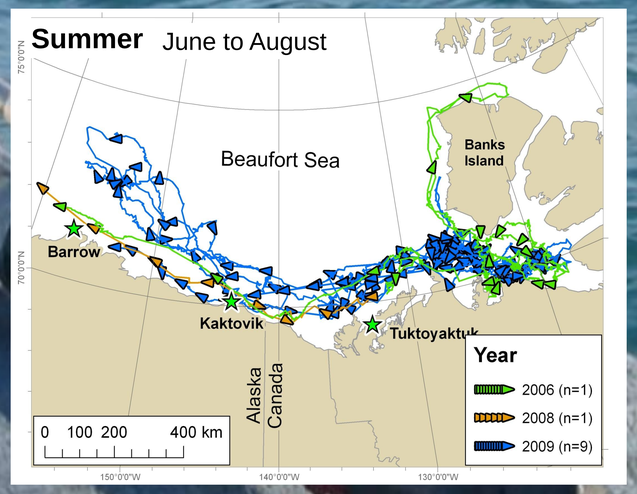
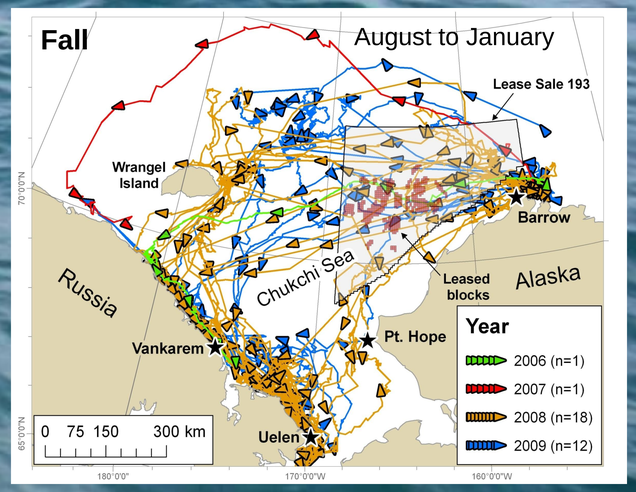
INTRODUCTION. In 2005, the Alaska Department of Fish and Game began a cooperative research project with the Alaska Eskimo Whaling Commission and others to study movements and habitat use of the western Arctic stock of bowhead whales (*Balaena mysticetus*).

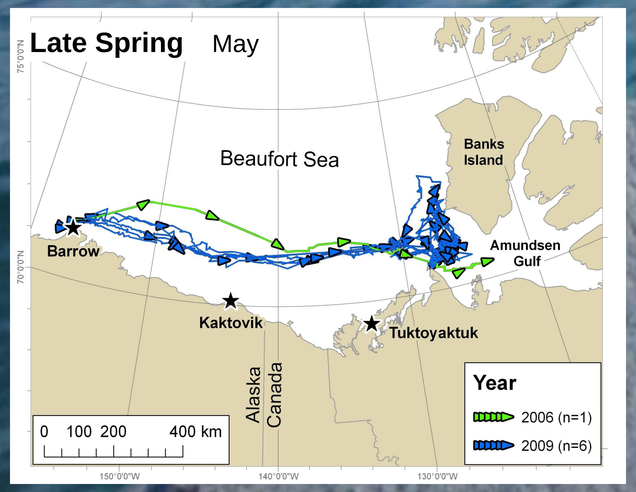
METHODS. Between 2006 and 2009, 44 satellite transmitters were placed on bowhead whales in Alaska (n=35) and Canada (n=9). The majority of the tags were deployed in waters near Pt. Barrow by Alaska Native subsistence whalers and the others were deployed near Tuktoyaktuk Canada and near the Alaska-Canada border.

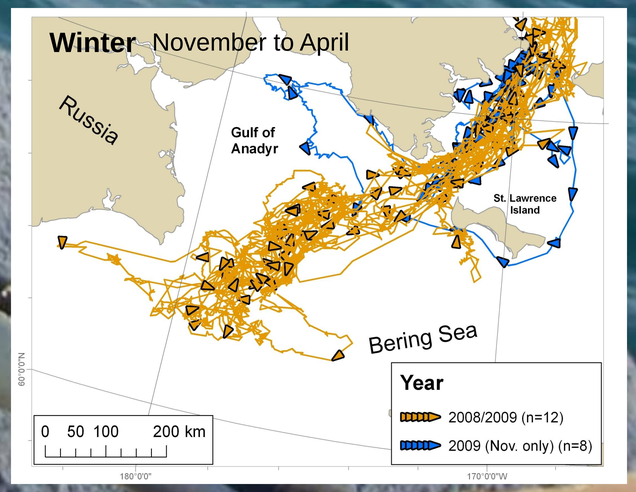
RESULTS. Tags have lasted an average of >6 months. Two tags lasted >12 months, and two others ~10 months, allowing us to track individual bowhead whales throughout their complete annual migration in the Bering, Chukchi, and Beaufort seas. Tagging in consecutive years has allowed us to look at the variability in movements and the timing of migration among years.











SUMMARY. Once the ***Early spring*** migration began, tagged whales travelled almost directly through the Chukchi Sea mostly between the southern boundary of oil and gas lease sale area 193 and shore. Once past Point Barrow (***Late Spring***) they travelled directly through the Beaufort Sea to Amundsen Gulf, Canada. ***Summer*** movements occurred across the entire Beaufort Sea and included two whales that traversed the Beaufort Sea four times in the same season instead of the usual two. All tagged whales passed through lease sale area 193 after leaving Barrow in the ***Fall*** and most spent weeks along the northern Chukotka coast before entering the Bering Sea. ***Winter*** movements were concentrated in the western Bering Sea from Bering Strait to the ice edge. The success of this project demonstrates what can be accomplished when Alaska Native subsistence hunters and scientists work together.

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