Climate Variability, Bowhead Whale Distributions, and Iñupiat Subsistence Whaling: 2005 Field Work

Overview

The bowhead whale has been hunted by native communities along the Arctic coasts of Alaska for centuries. Whaling provides an important subsistence food and is an integral part of the Iñupiat culture. Bowhead whales are found near coastal communities during spring and fall migrations between overwintering grounds in the Bering Sea and summering grounds in the Canadian Arctic. In light of the recently observed changes in climate in the Arctic, we designed a project to identify how climate variability could impact the Alaska coastal ocean, bowhead whale migration patterns, and the success and resilience of the Iñupiat whaling tradition.

The project focuses on Barrow, AK and involves oceanographic field sampling, biological and physical ocean modeling, retrospective analysis, and synthesis of local knowledge. The project coordinates closely with local community entities in Barrow, in particular the Barrow Whaling Captains Association and the North Slope Borough Department of Wildlife Management and is uniquely linked to Alaskan Native whaling practicies in a changing Arctic climate.

Communication with the Local Community

In January, Carin Ashjian was invited to attend the Barrow Whaling Captains Association Annual Meeting. She described the past year's field work for the Captains and received approval of the Association for the next year's work. The Barrow Whaling Captains are very supportive of science and concerned about the potential impacts of climate change on their whaling success, in particular the much earlier retreat of sea ice from the coast during the spring and summer of recent years.