



Discovering Barrow Research

The North Slope Borough Department of Wildlife Management Summer 2011 Fisheries Internship

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Introduction

The North Slope Borough Department of Wildlife Management (DWM) is tasked with providing sustainable harvests and monitoring populations of fish and wildlife across the North Slope of Alaska.

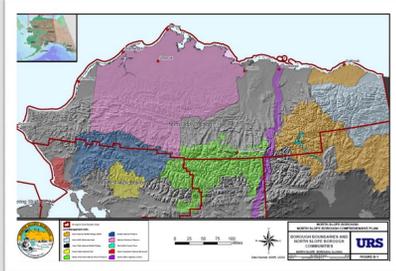


Fig.1. North Slope Borough Map

My second summer field season in Barrow was spent working with the DWM. During the previous summer I spent a month in Barrow interviewing fishermen and building rapport in the community¹. This summer I was able to make more community ties and to also become a member of the summer research team for the DWM. The following is an overview of several projects I was involved in this summer.

Fisheries Studies

The abundance, run timing, and age class structure of several fish species is monitored by a fyke net in the North Salt Lagoon near Barrow. A crew of three or four goes out to enumerate and gather lengths of the fish caught in the fyke net. Several individual Least Cisco from each size range are taken back to the laboratory in order to sample otoliths, gonad condition, and weight.



Fig. 2. Local fisherman and I with his catch.

Net counts were done by interns on a regular basis to calculate fishing effort. The location of each net was marked using GPS and fishermen provided the DWM with catch records, length of nets, and mesh sizes for additional data analysis. I will be using the net survey data to calculate fishing effort for a chapter of my thesis.



Fig. 3. Interviewing a local fisherman.

In addition to scientific sampling methods I was able to conduct nine interviews, and several informal sessions with Elson Lagoon fishermen. My focus was on the motivation for fishing, youth involvement in fishing efforts, and how fish is shared.

Seal Tagging

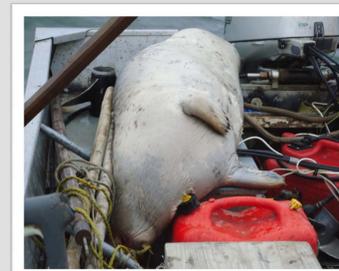


Fig. 4. Molting Ringed seal with satellite tags

In order to understand seal migration patterns and diving behavior seals were tagged with two satellite transmitters. One transmitter placed on the top of the head gave diving information. A second transmitter placed on the flippers gave location information whenever the seal hauled out onto sea ice or beaches.

Subsistence Sampling

Disease and contaminants are concerns for people of the North Slope. Animals harvested are sampled using histology and necropsies which can monitor the safety of consuming subsistence catches.



Figs. 5 and 6. Bearded seal catch and necropsy.

BOWFEST

Movement and feeding activity of Bowhead and other marine mammals is monitored by local observers in their whaling boats.



Fig. 7. Local whaler watching for blows.

Conclusions

The DWM embraces Traditional Ecological Knowledge and holds it at an equal footing with their scientific approaches to understanding issues and answering questions. Through my interactions with fishermen and hunters during my internship I was able to build rapport. As a result of local fishermen associating me with the DWM and gaining a reputation and trust, I conducted nine more interviews to be included as part of the dataset I will be drawing upon for my thesis. Along with additional interviews I was able to develop a chapter to my thesis which is of interest to myself and to the DWM.

Acknowledgements

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