

**SAVOONGA**

**SCIENCE and TEK**

**Arctic Coastal & Marine  
Spatial Planning**

**The Role of the Arctic People**

**March 11, 2010**

# ***EXTREMES***

A large whale carcass is shown on the deck of a ship. The whale's body is dark and covered in a thick layer of blubber. The baleen is visible on the upper part of the whale's head. Several people are standing on the deck around the whale, providing a sense of scale. The background shows a clear blue sky and the ship's structure.

**longest lived (ca 150 yr)**

**very low body temperature (ca 92 F)**

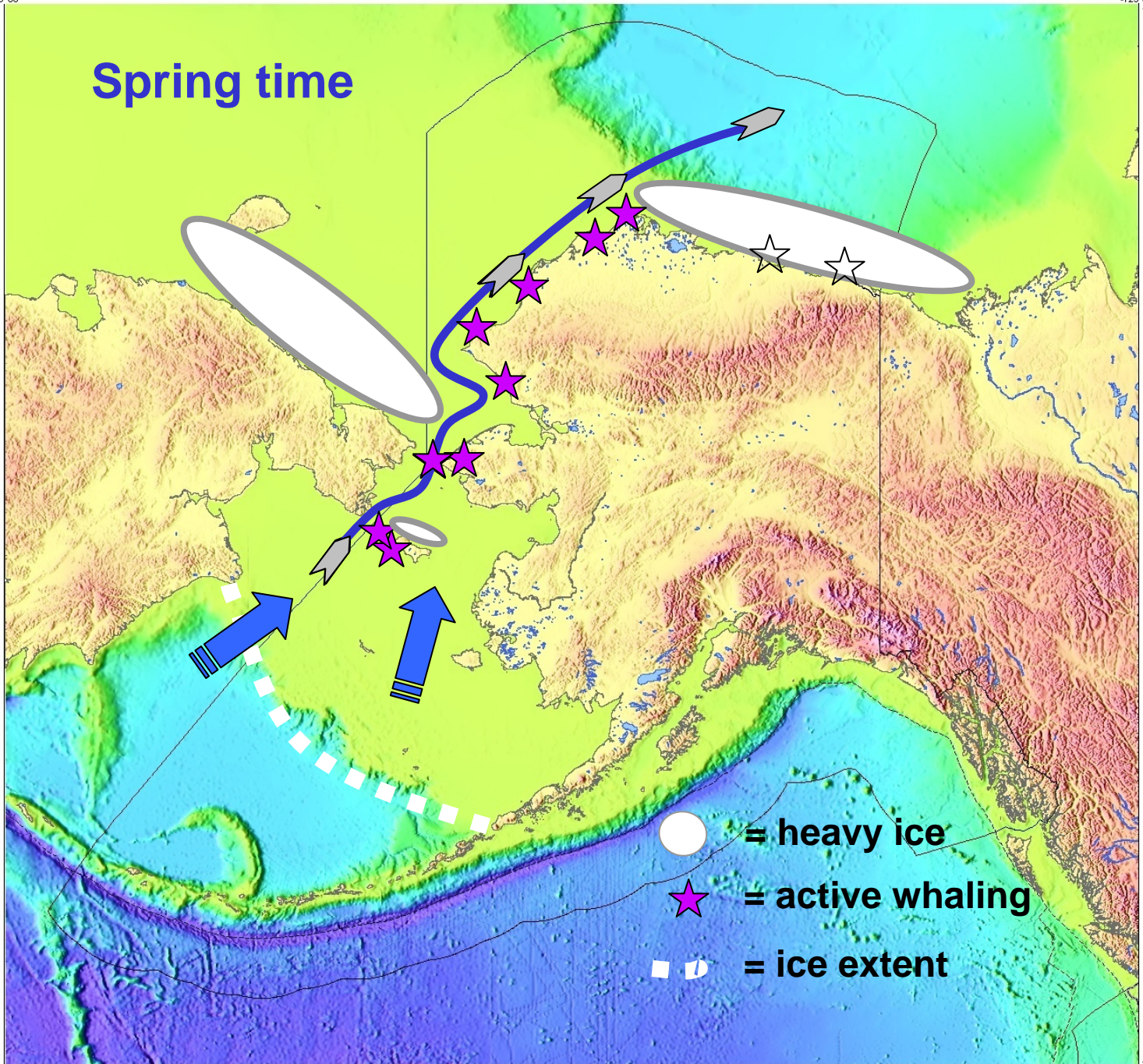
**longest baleen (~16 ft)**

**thickest blubber (skin) (35 inches)**

**latest age at sexual maturity (ca 20 yr)**

**best tasting**

# Spring time



165°00'  
75°00'

125°00'  
75°00'

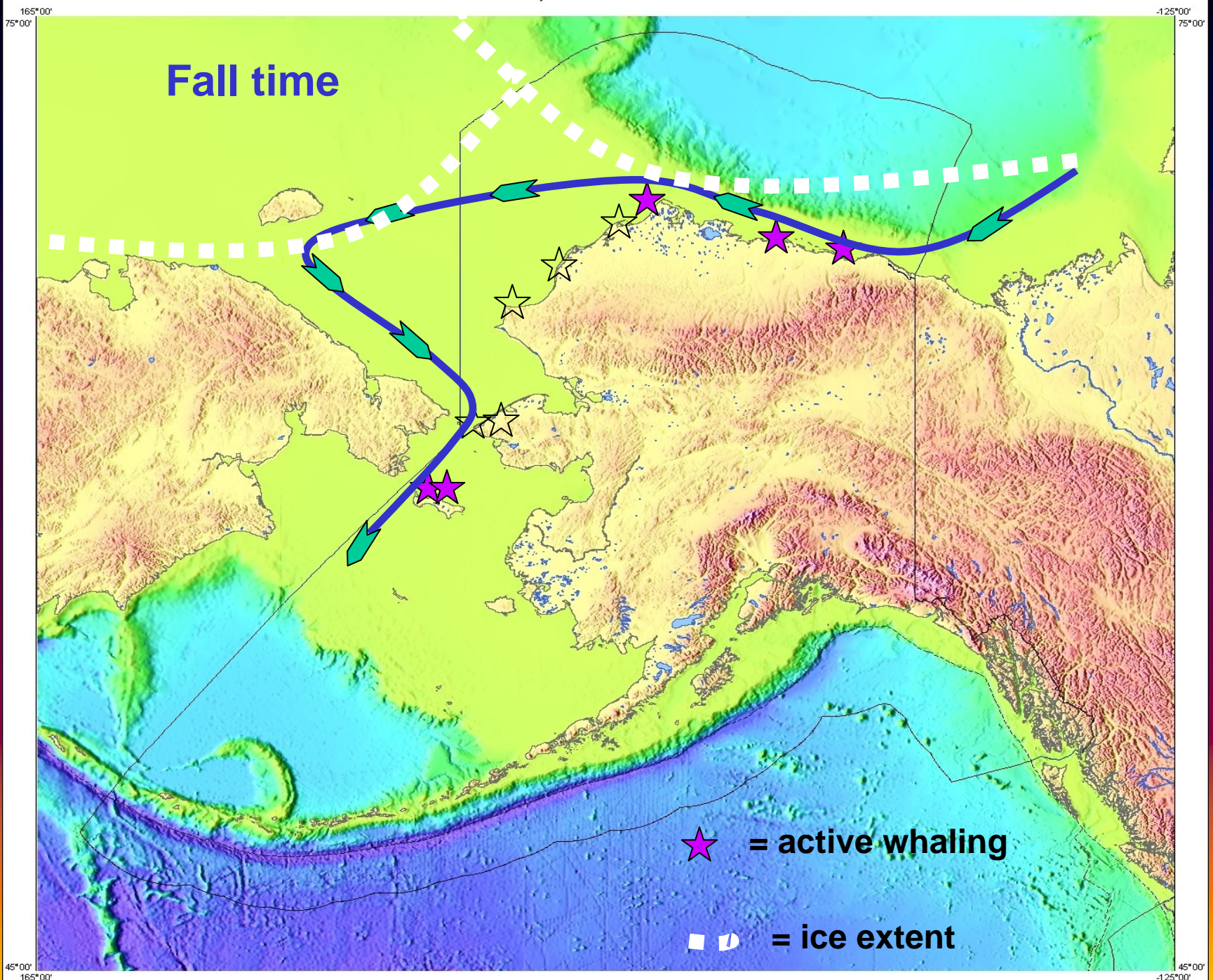
45°00'  
165°00'

45°00'  
125°00'

Fall time

★ = active whaling

▣ = ice extent



# Traditional Knowledge of the Bowhead Whale (*Balaena mysticetus*) around Saint Lawrence Island, Alaska

George Noongwook<sup>1</sup>, Henry P. Huntington<sup>2</sup>, and John C. George<sup>3</sup>

1. Alaska Eskimo Whaling Commission and Native Village of Savoonga, P.O. Box 81 Savoonga, AK 99769, USA
2. 23834 The Clearing Dr., Eagle River, AK 99577, USA
3. North Slope Borough Department of Wildlife Management, P.O. Box 69, Barrow, AK 99723, USA





## **TEK surveys indicated:**

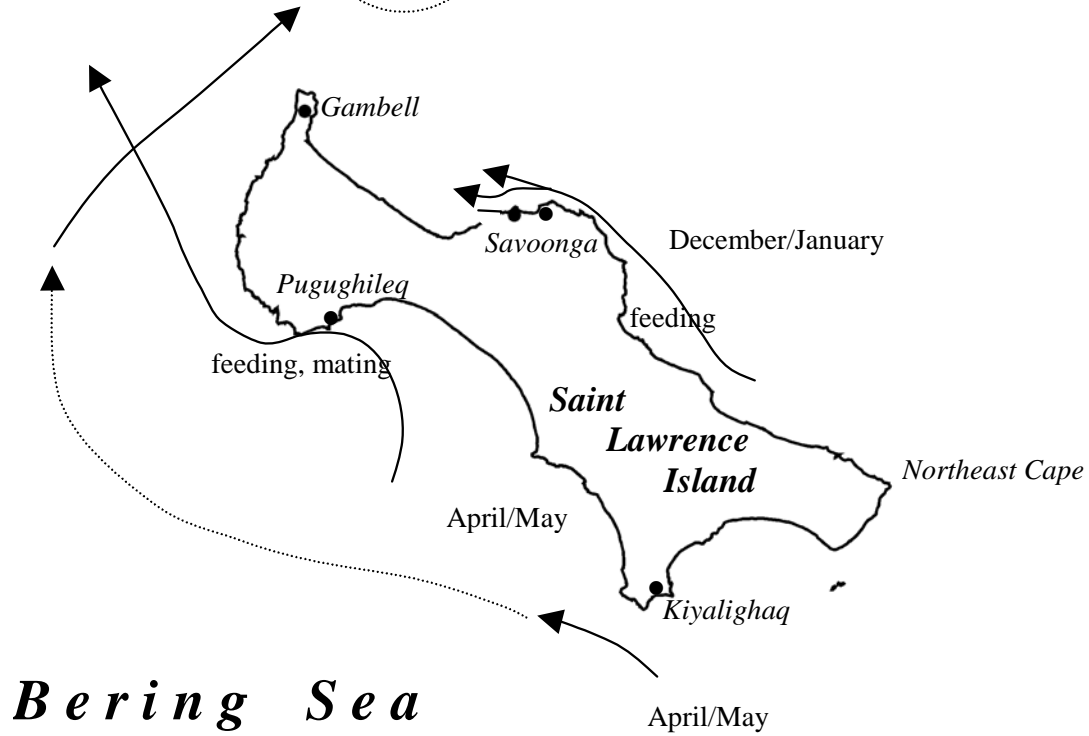
- **2 migratory routes near SLI recognized**
- **Changes in abundance and distribution over time (increasing population, fall sightings)**
- **Most whales migrate west of SLI in spring and fall**
- **Identified feeding area east of Savoonga**
- **Increasing numbers of “ingutuks” or sub-adults**
- **Identified “staging area” north of SLI**



*Chukotka, Russia*

Staging  
area in  
May/June

80 kilometers/50 miles

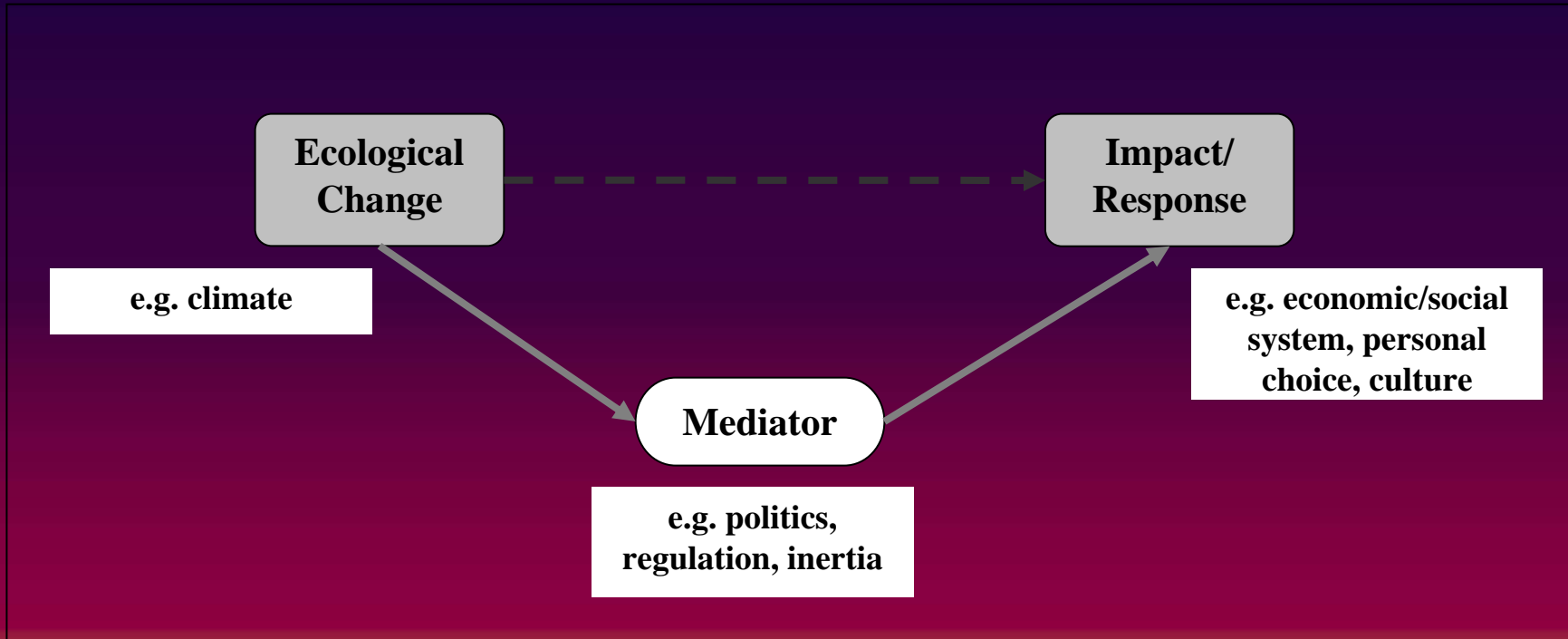


*Bering Sea*



**Staging Area North of Gambell**

# Mechanism Connecting Change to Impact



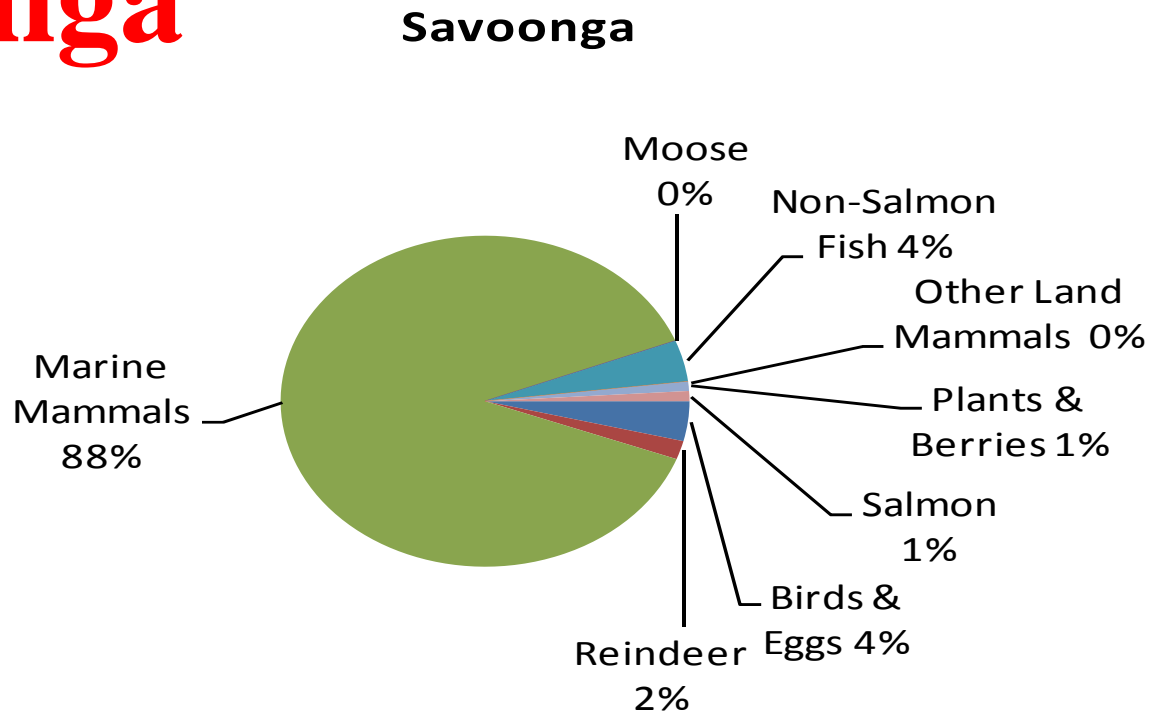
# Angyaq



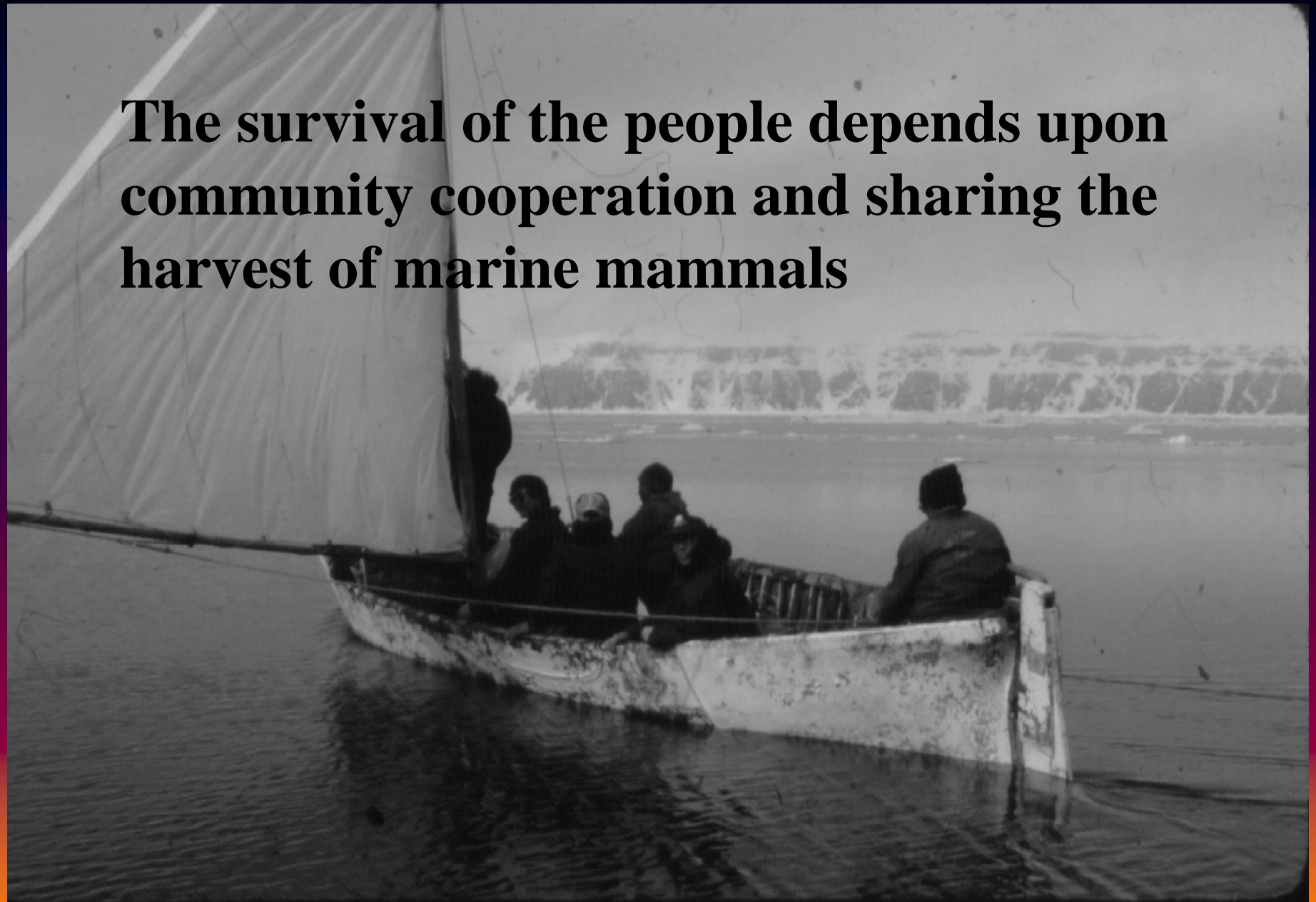
**The Native people of Savoonga forever relies on marine mammals for food and other domestic needs and will continue this tradition**

# 2005-2006 Resource Harvest Percentages,

## Savoonga



**The survival of the people depends upon  
community cooperation and sharing the  
harvest of marine mammals**



Hauling up a bowhead whale  
using a block and tackle.



Photo by Craig George



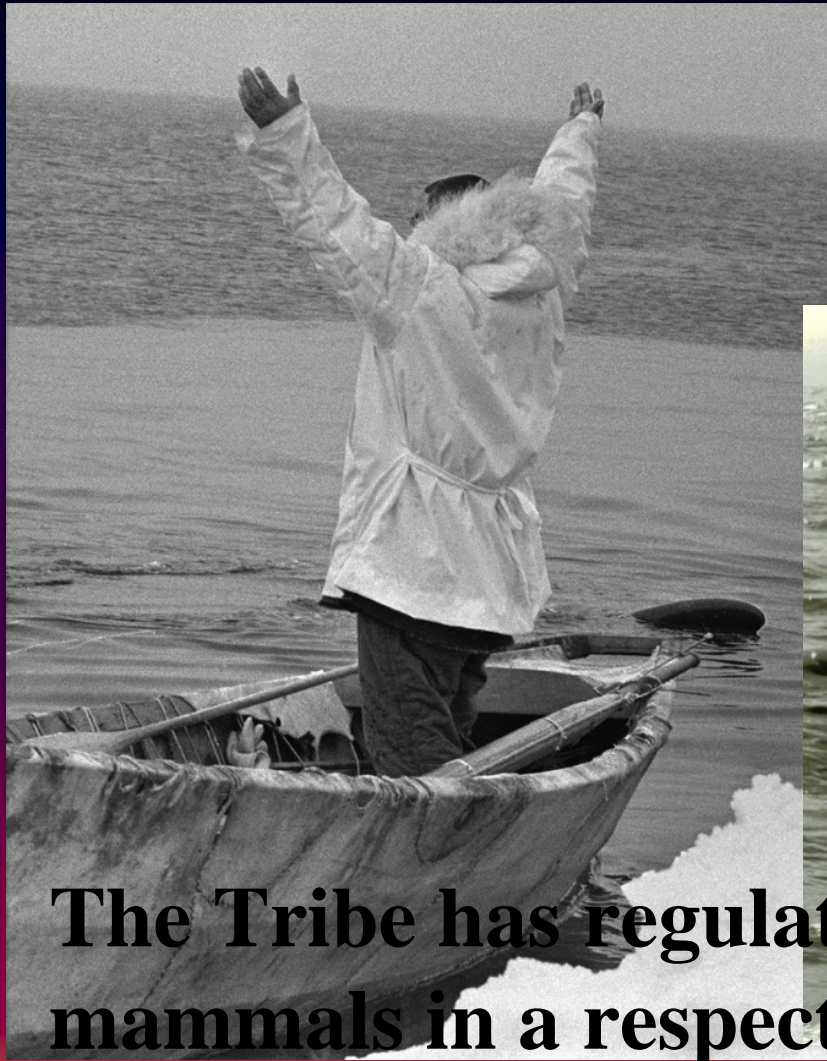
Photo by Gay Sheffield

# THREATS TO MARINE MAMMALS

- Fishing / Shipping / Tour ship Industry
- Ship Strikes
- Entanglements
- Resource Development
- Oil Spills
- Killer Whale predation
- Disease

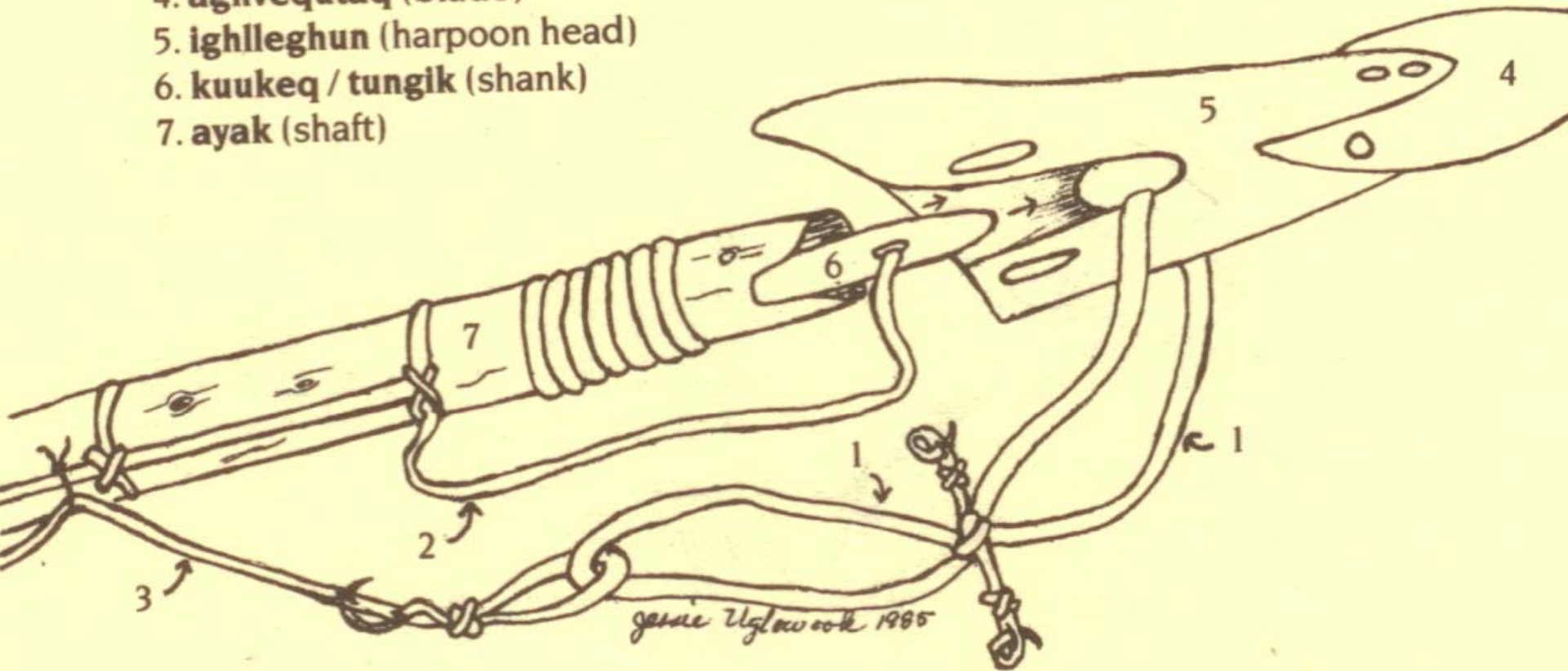


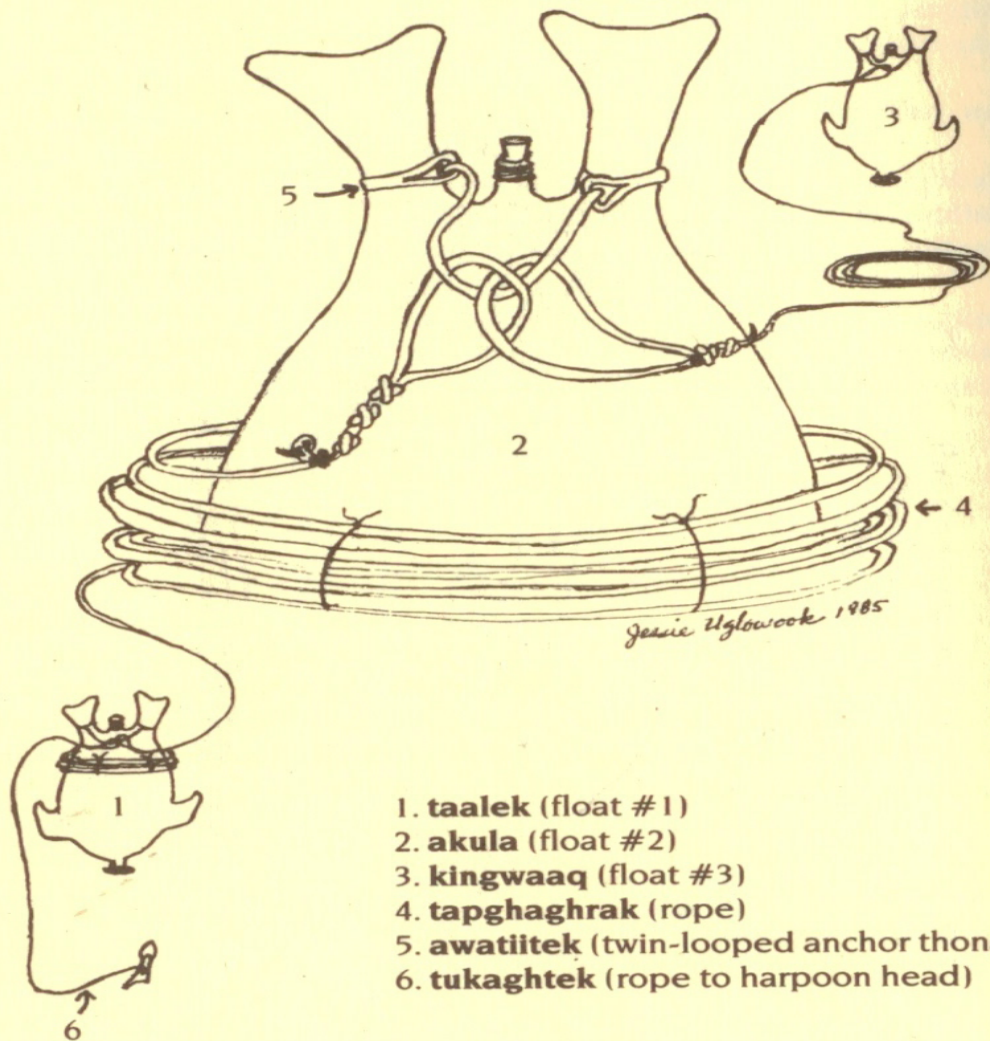




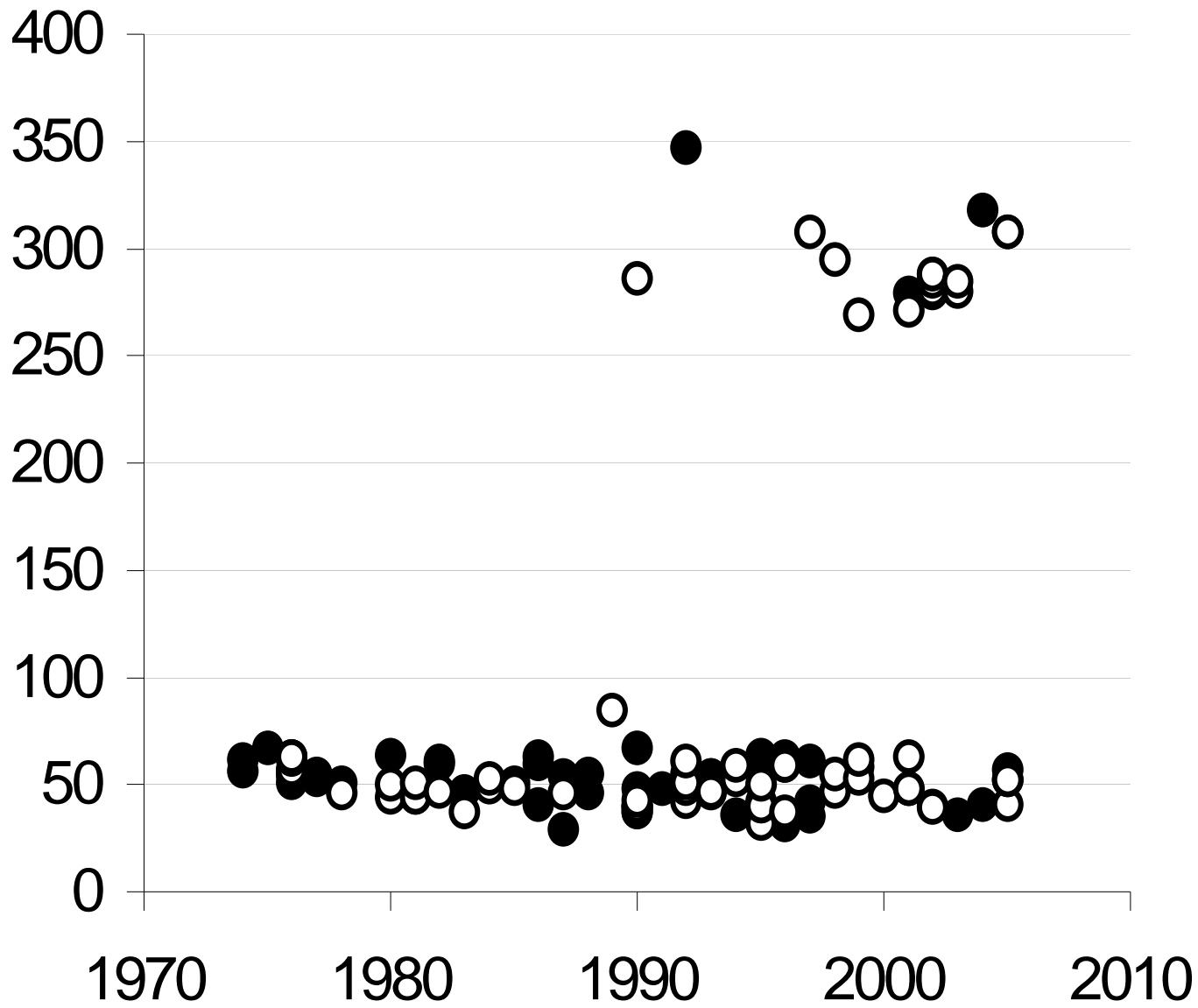
**The Tribe has regulated the taking of marine mammals in a respectful & non-wasteful manner (Consistent with MMPA & Constitution & By-laws of the Native Village of Savoonga 1934)**

1. tukaghsiiq (rope holding harpoon head)
2. aghsi (rope between shank and shaft)
3. qaluuku (dangling end of the aghsi)
4. aghvequtaq (blade)
5. ighlleghun (harpoon head)
6. kuuqeq / tungik (shank)
7. ayak (shaft)

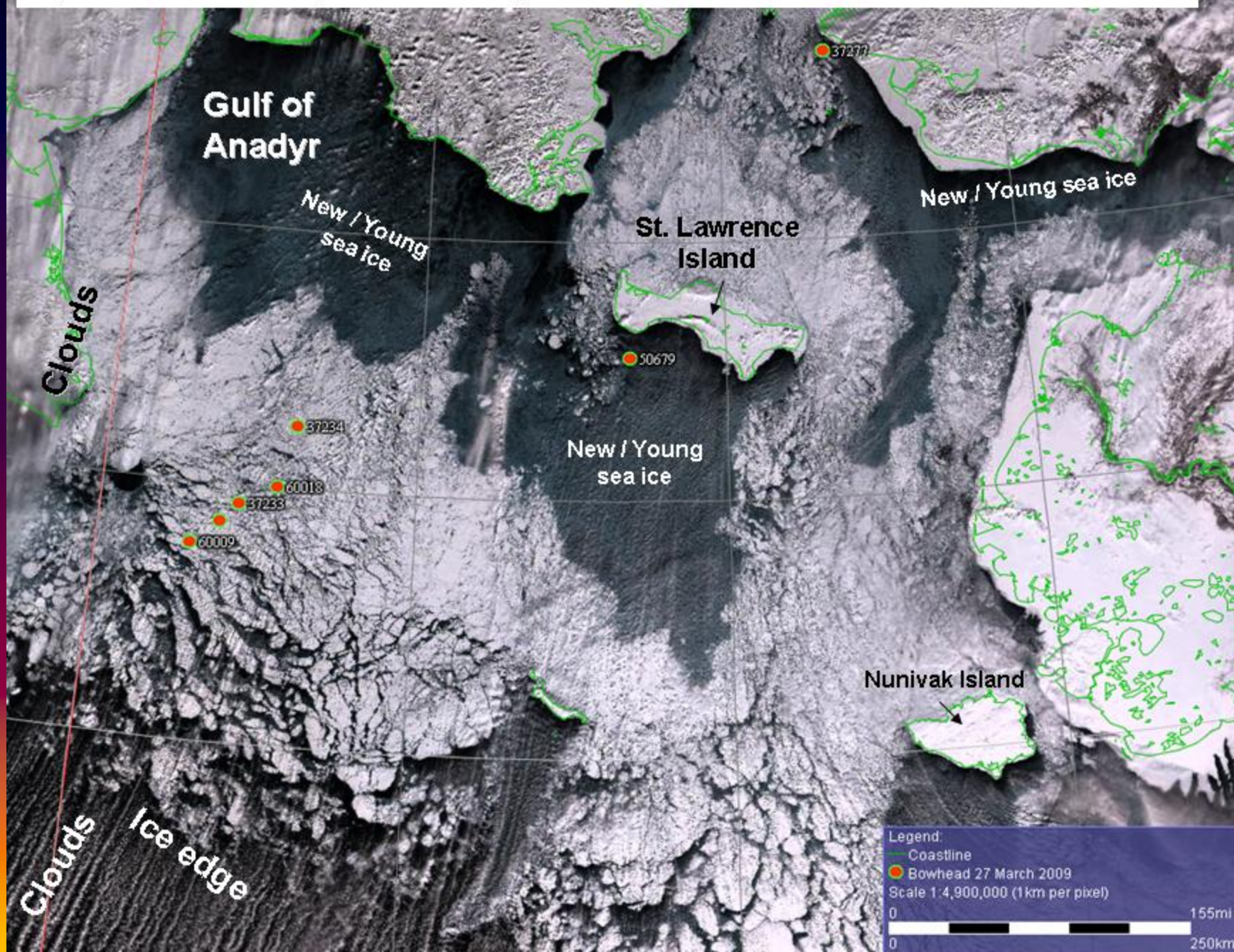








**Bowhead locations and MODIS sea ice image for 27 March 2009.** For more information, visit:  
<http://www.wildlife.alaska.gov/index.cfm?adfg=marinemammals.bowhead>



# ACKNOWLEDGMENTS

- **AEWC Staff, Captains and Crews**
- **Barrow Whaling Captains Association**
- **Savoonga Whaling Captains Association**
- **North Slope Borough, Mayor; Wildlife Department, Craig George, Cheryl Rosa, Robert Suydam, et.al.**
- **Mayor's Office, North Slope Borough**
- **Zeh, University of Washington**
- **Givens, Colorado State University**
- **NOAA/NMFS**
- **ADF&G, Lori Quakenbush, Gay Sheffield, et.al.**
- **University of Alaska**
- **Bickham, Texas A&M**
- **BP and Conoco-Phillips**

*Igansiqanaghalek!*

