

Resiliency and Change for Arctic Peoples

2012 Arctic Ocean Ecosystem Workshop
Barrow, Alaska



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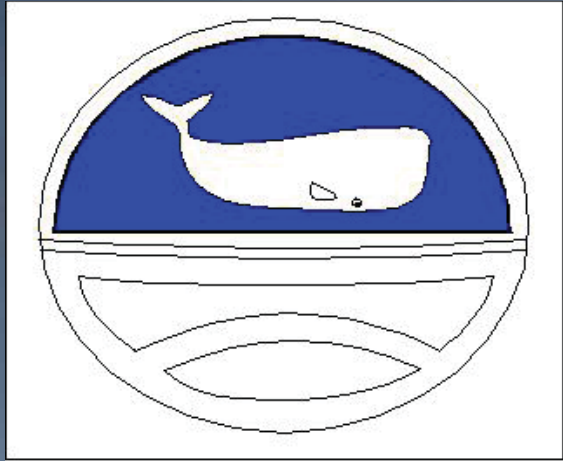
NSB Department of Wildlife Management

Formed because:

- Perception of low #s of bowheads, and
- Moratorium on bowhead whaling

An example of resiliency
of the people of the
North Slope





INTERNATIONAL
WHALING
COMMISSION



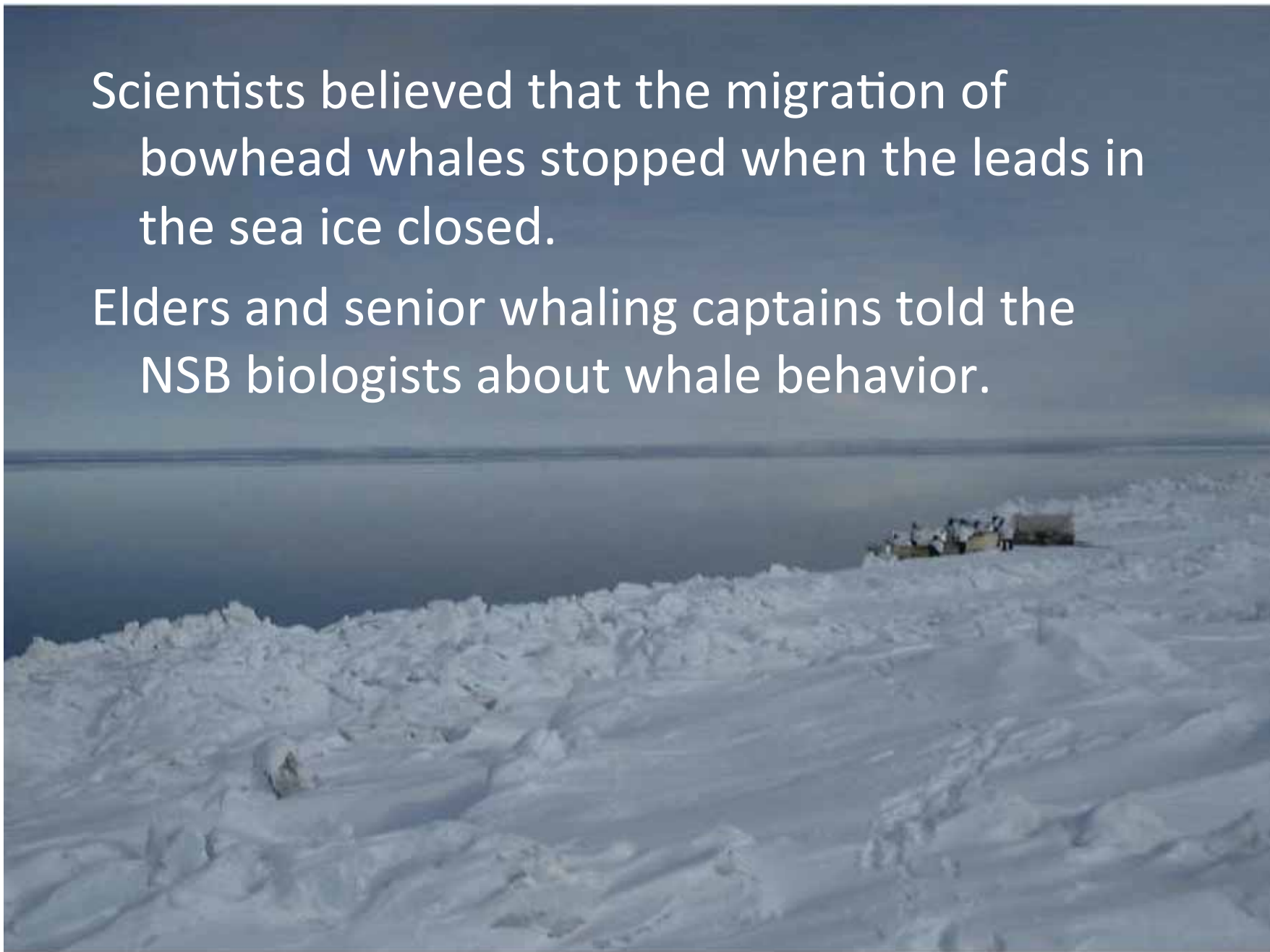
1977 Moratorium:

- Increased # of whales struck through 1970s.
- No reliable pop. estimates; possibly < 1000 animals
- IWC calls for moratorium
- Quota system established

- AEWC established
- Intense research initiated by the NSB with local funds

Scientists believed that the migration of bowhead whales stopped when the leads in the sea ice closed.

Elders and senior whaling captains told the NSB biologists about whale behavior.





Harry Brower, Sr. and
Tom Albert, Sr.



Photo BILL HESS

Senior Whaling Captains:

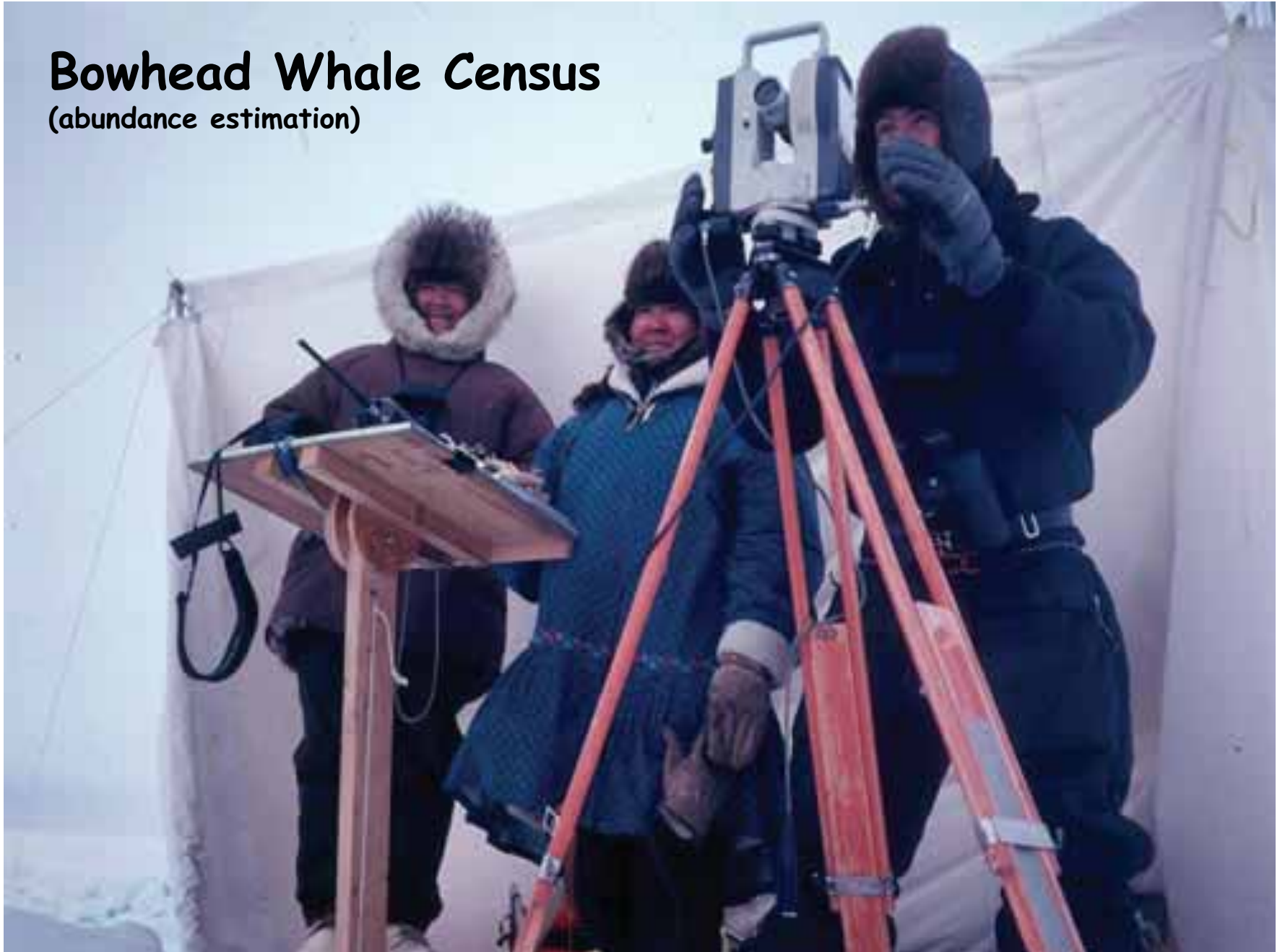
"I know you are trying to do a good job, but you're missing lots of whales! They swim under the ice and some travel way offshore beyond what you can see. So, figure out how to do it right...."

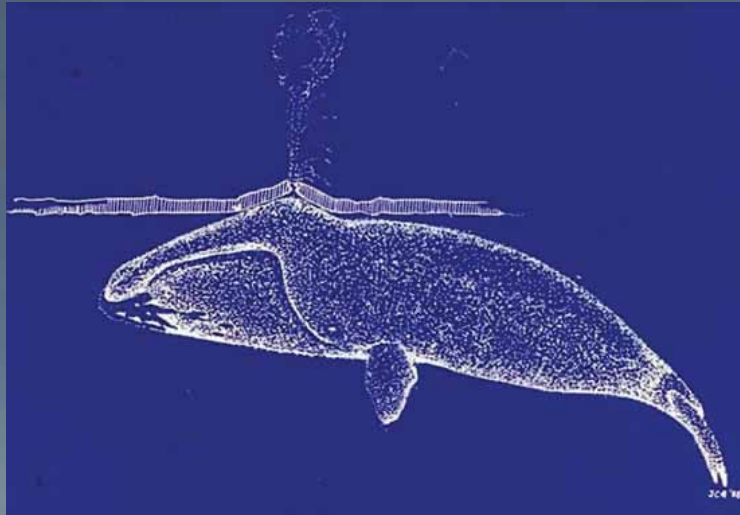


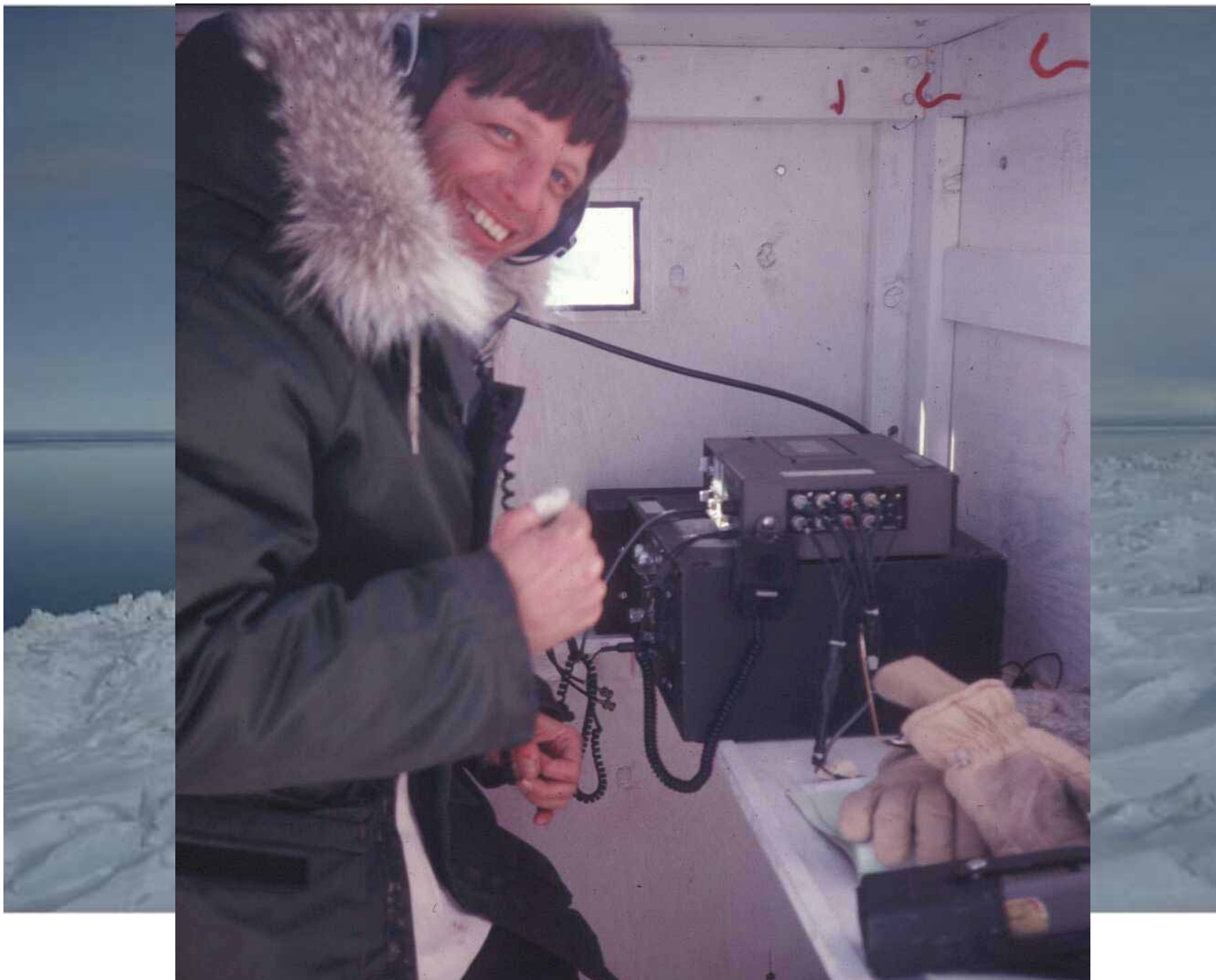


Bowhead Whale Census

(abundance estimation)



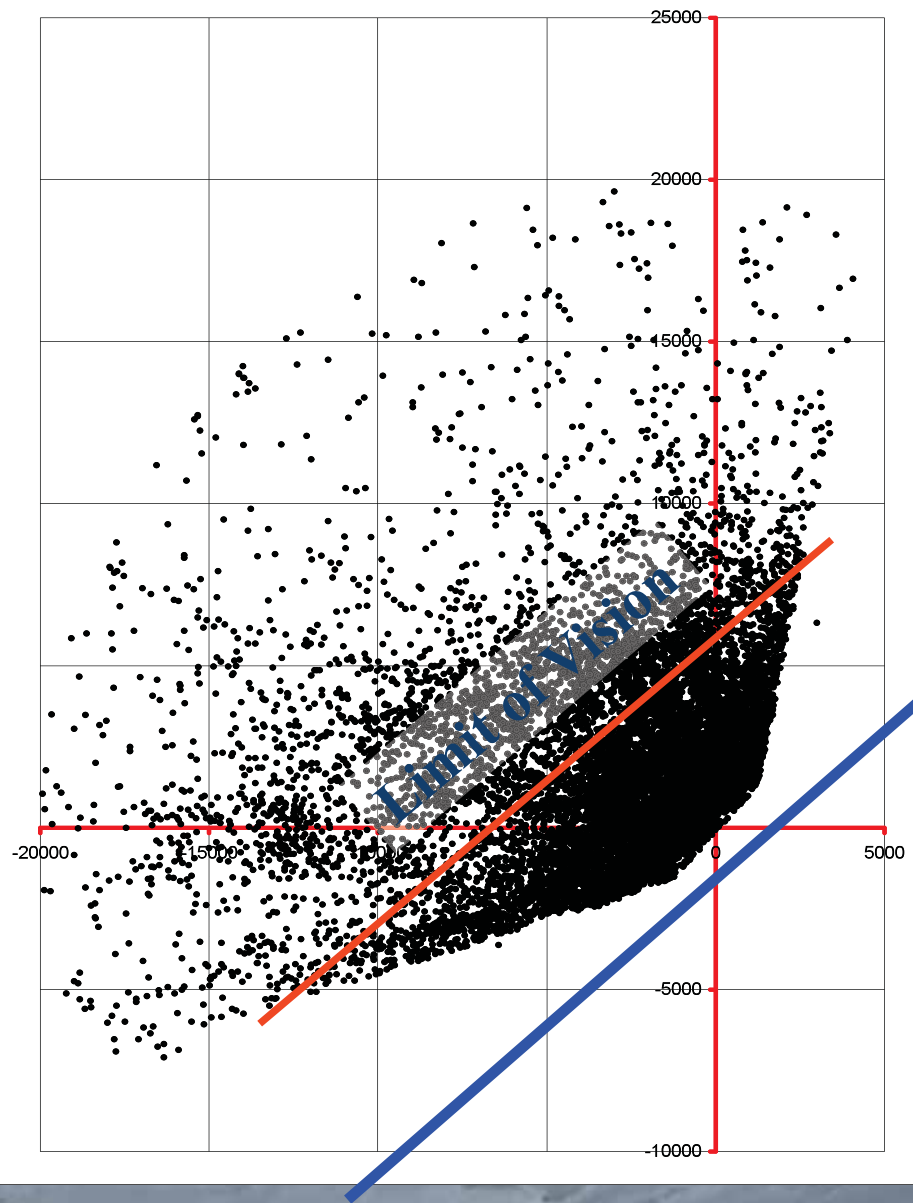




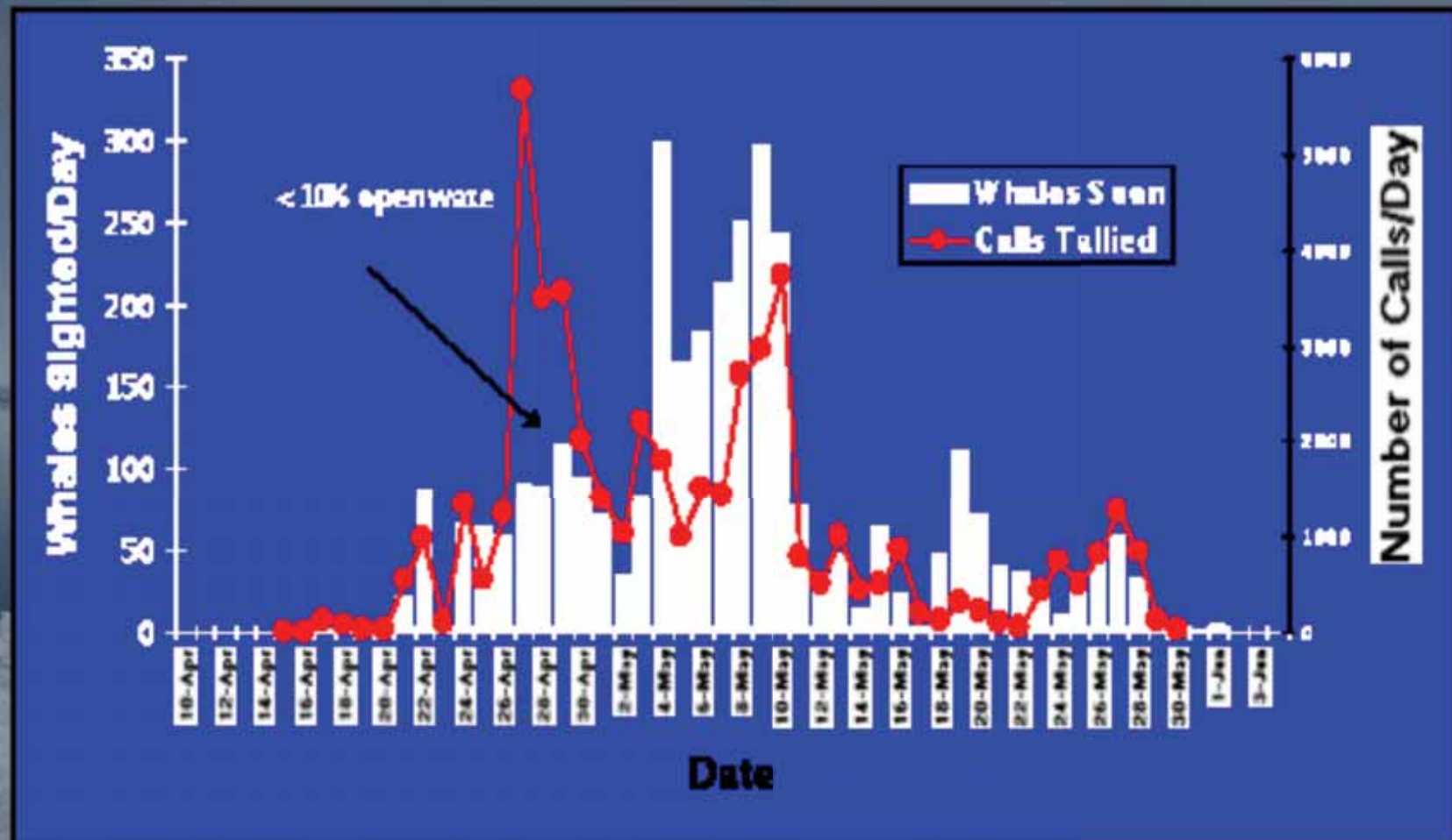


Acoustic Studies

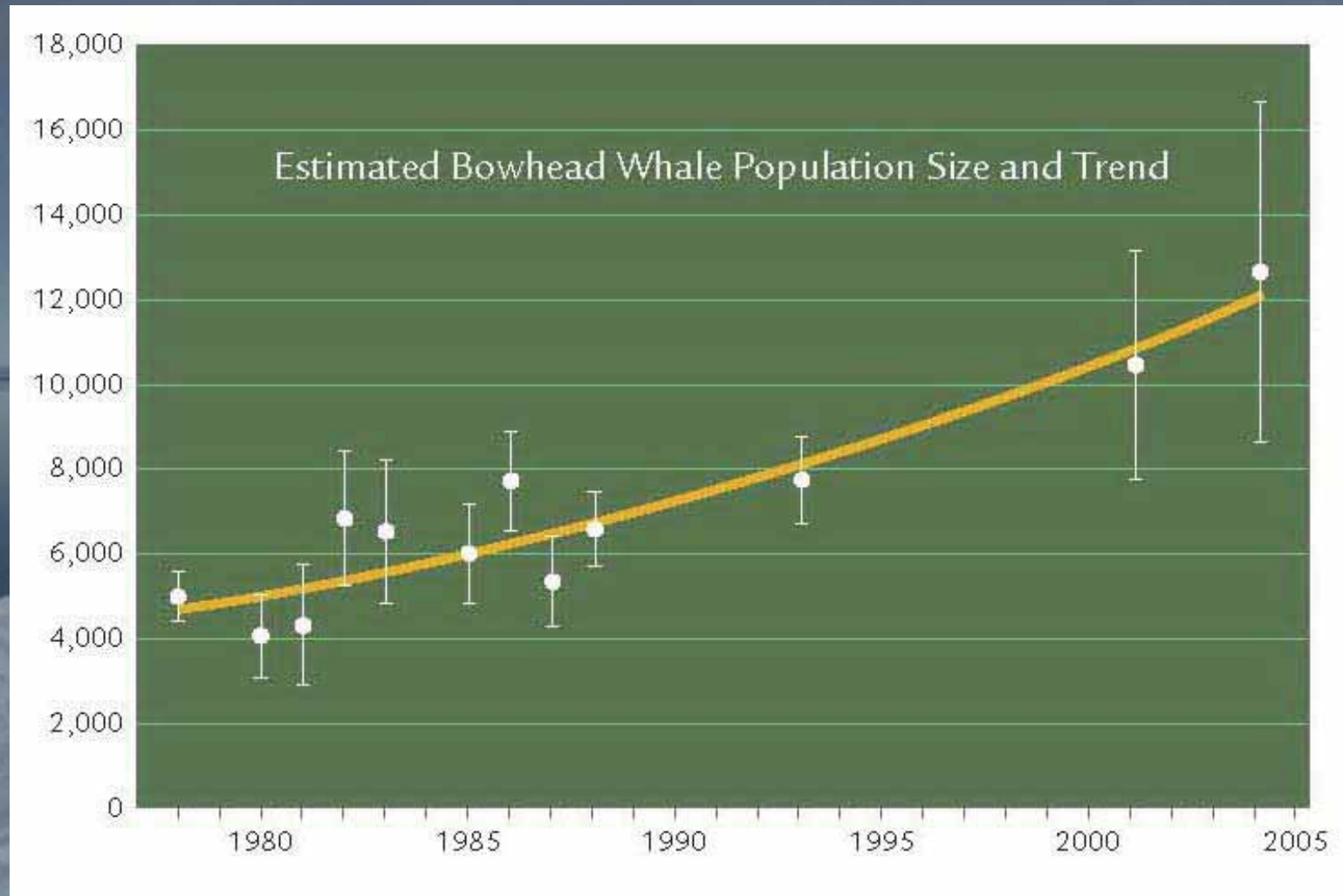
2001 Acoustic Locations



plot



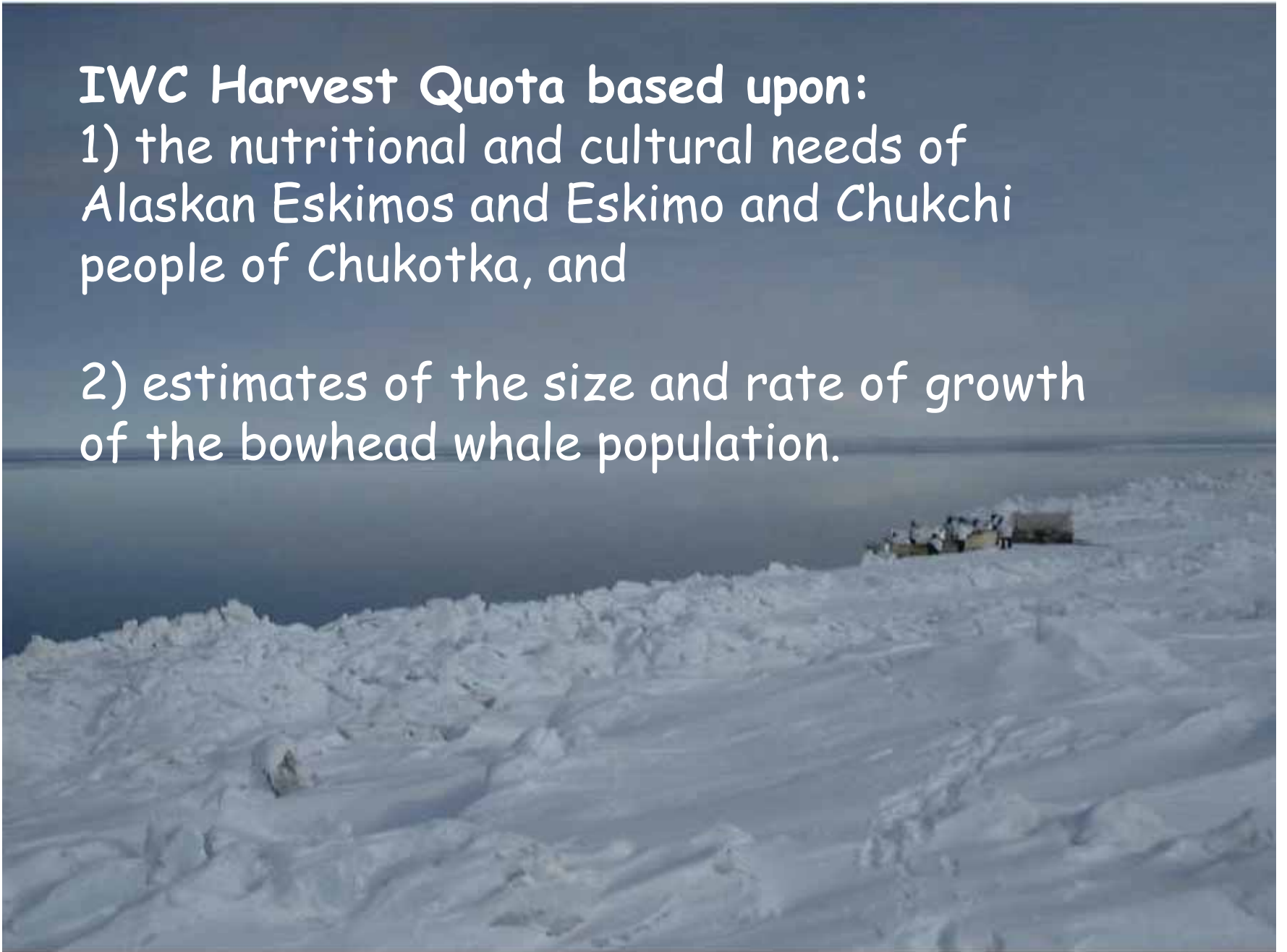
Population Size and Trend



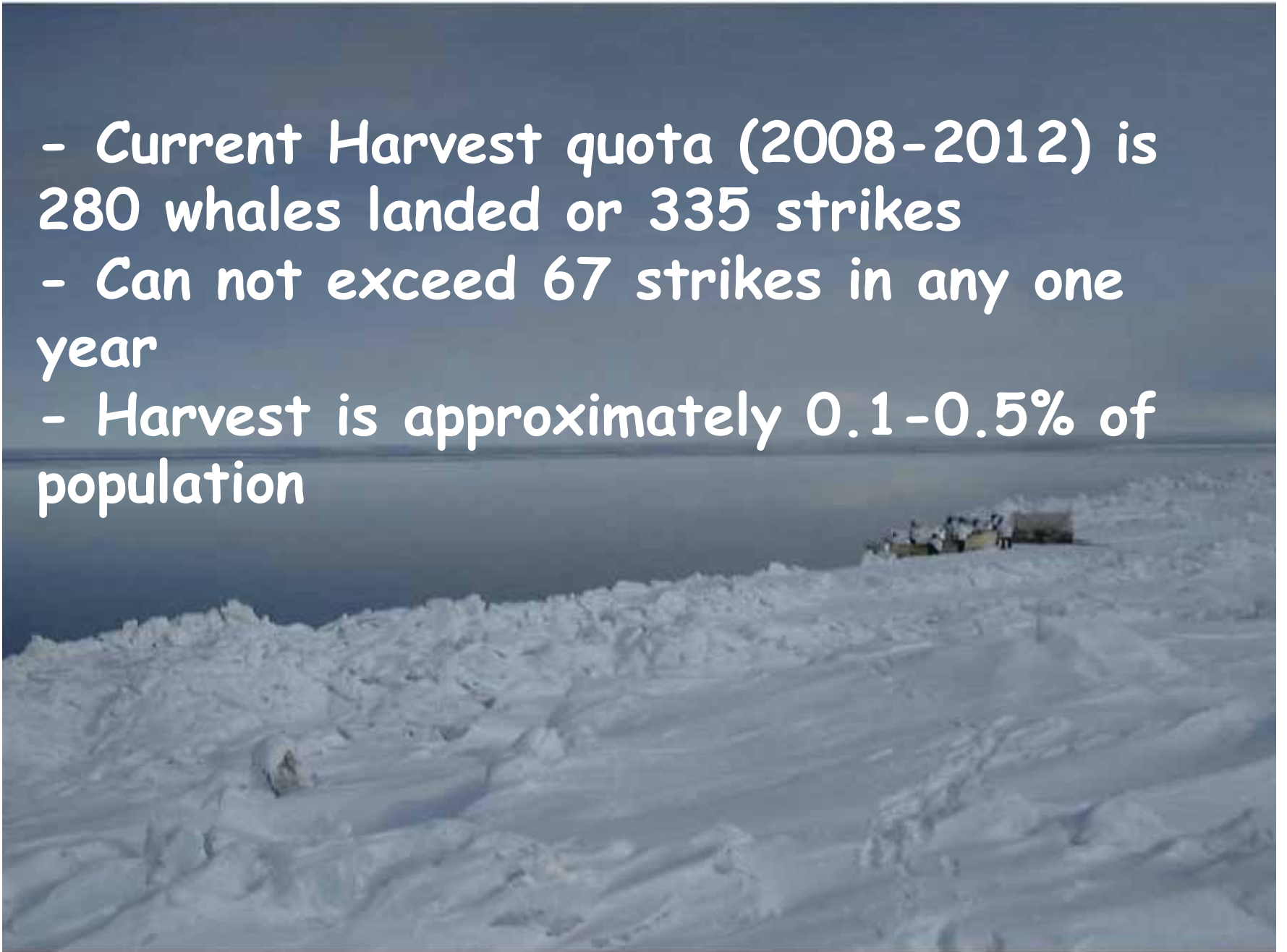
IWC Harvest Quota based upon:

1) the nutritional and cultural needs of Alaskan Eskimos and Eskimo and Chukchi people of Chukotka, and

2) estimates of the size and rate of growth of the bowhead whale population.



- Current Harvest quota (2008-2012) is 280 whales landed or 335 strikes
- Can not exceed 67 strikes in any one year
- Harvest is approximately 0.1-0.5% of population





Senior whaling captains David Leavitt and Arnold Brower, Sr., at whaling camp. (Photo credit: Craig George)



Bowhead Longevity Story

Indirect Age Estimates

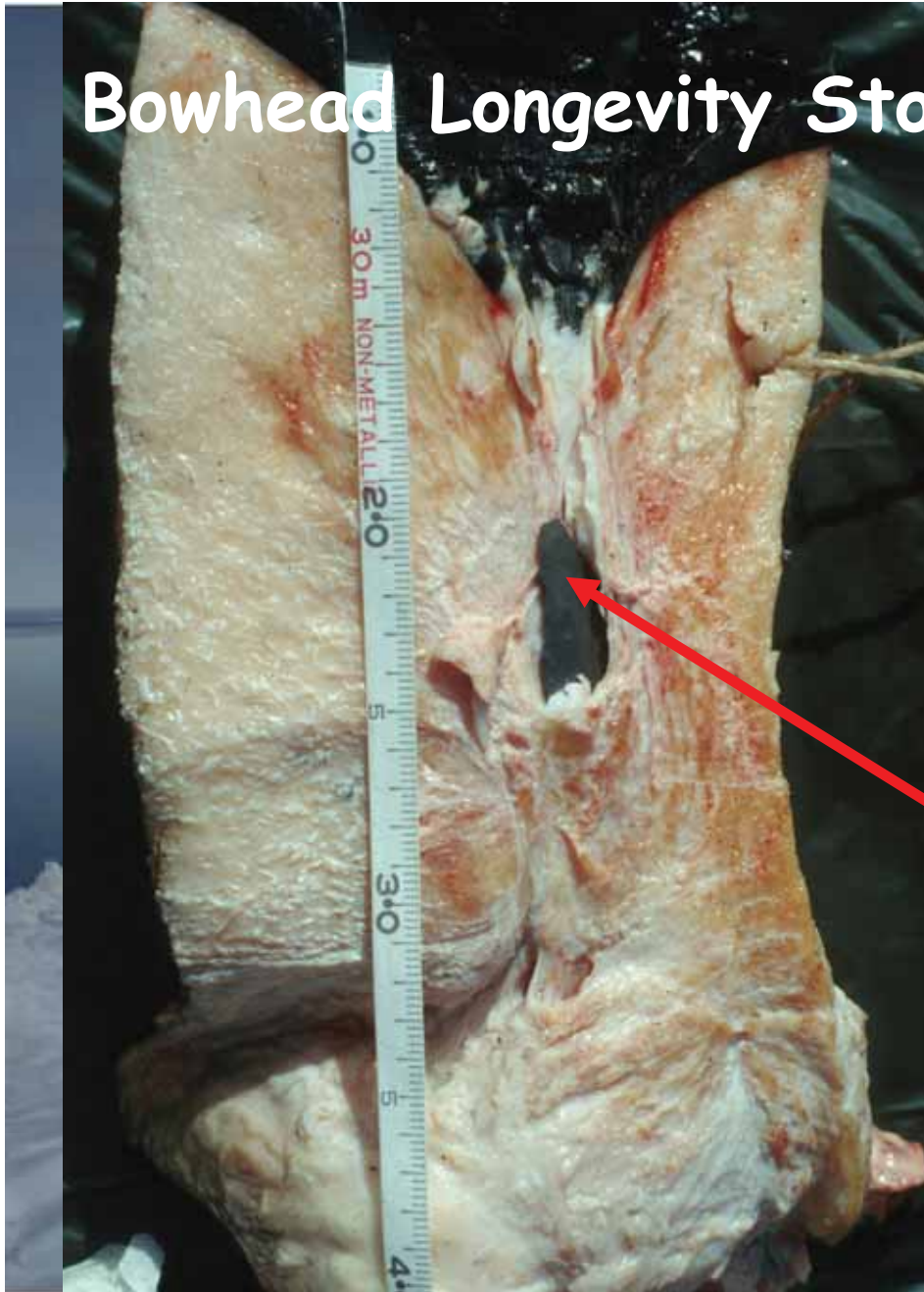


Photo:
Bill Hess



Recovery of old Yankee weapons



**Complete Ebenezer Pierce 1885
patent bomb lance (New Bedford
Whaling Museum accession
number 1988.10).**



**Unassembled E.P. 1879 “bomb lance”
fragment (from whale 07B8 captured,
male 15 m, at Barrow, Alaska, in May,
2007)**

Age Estimation

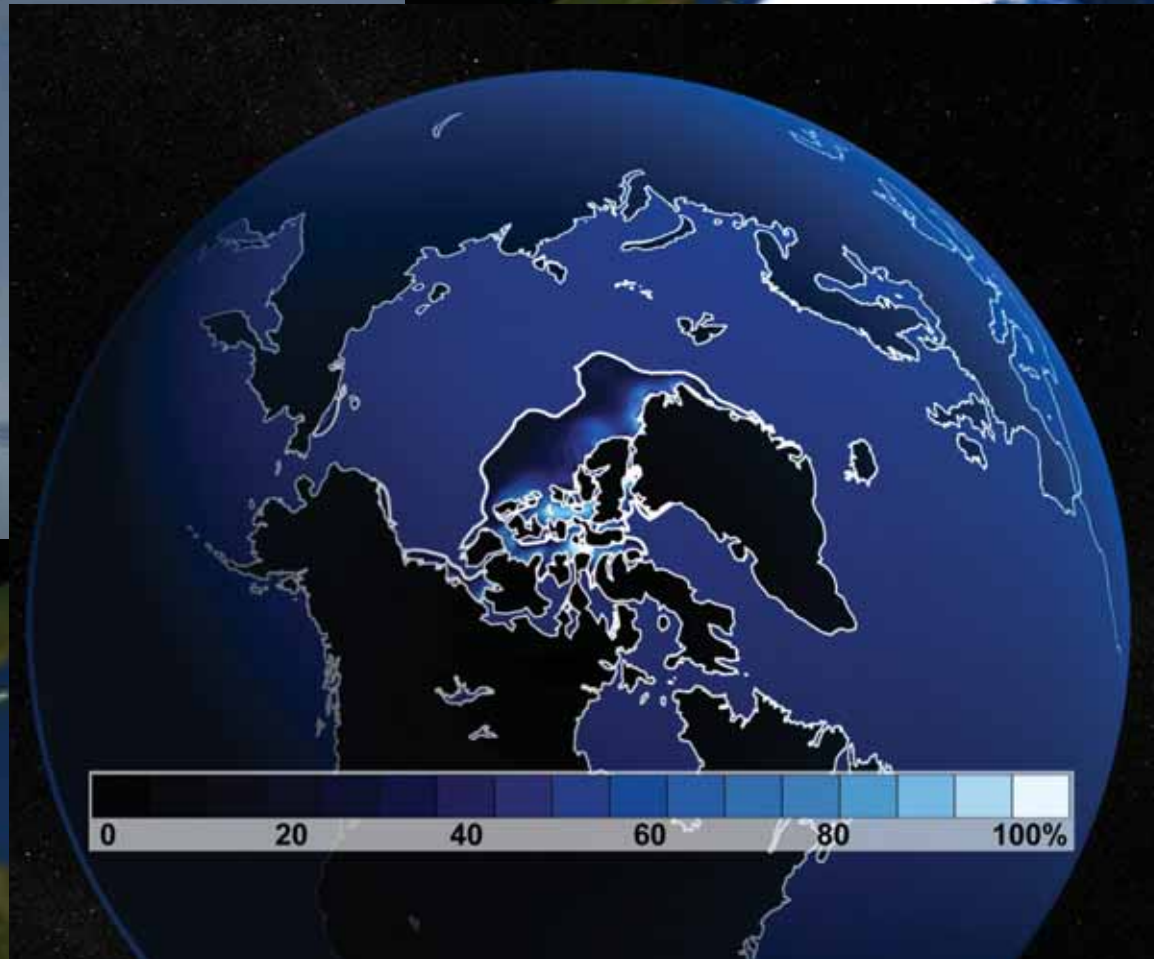


The Arctic is changing:

- Environmental
- Human use



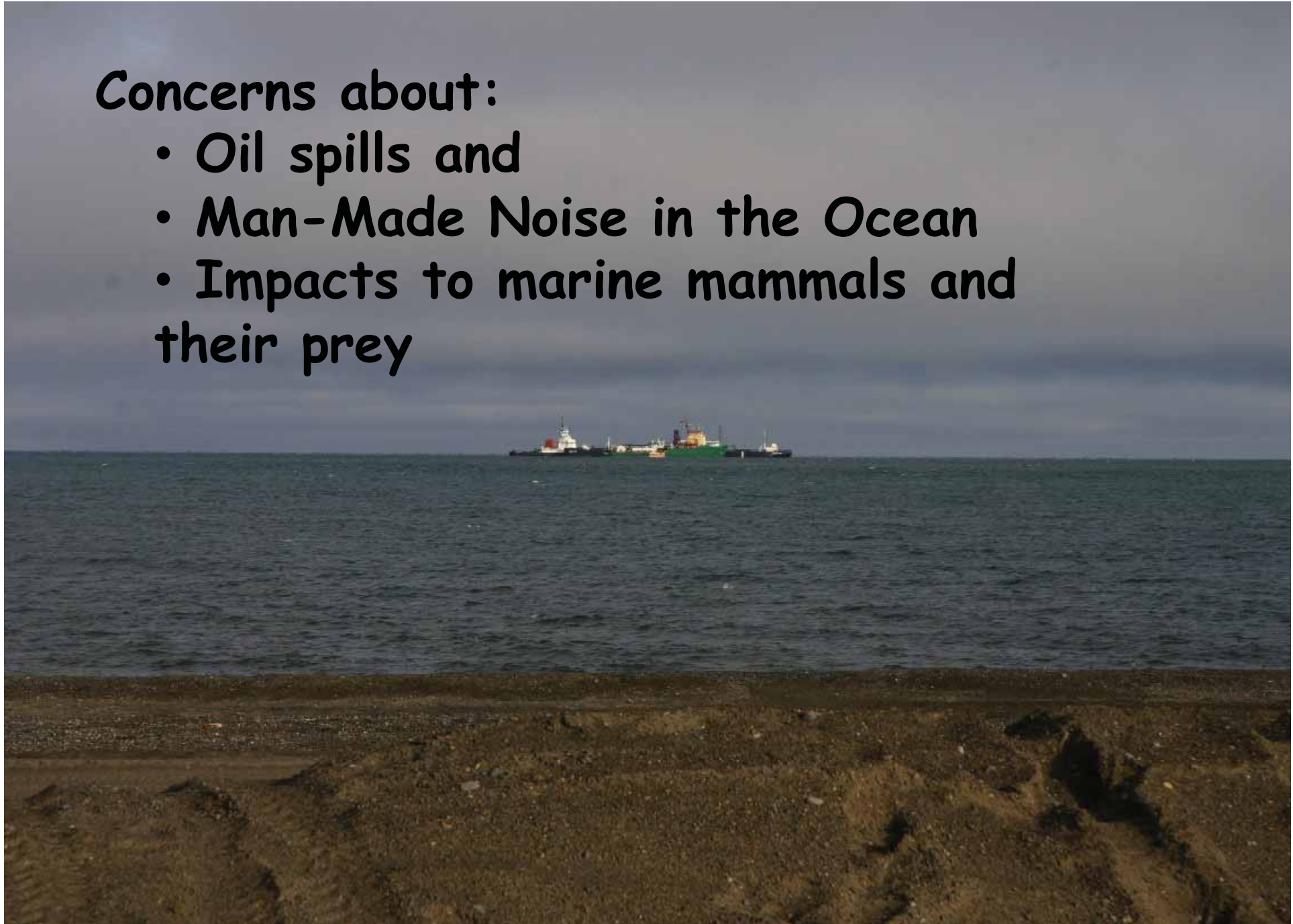
1987





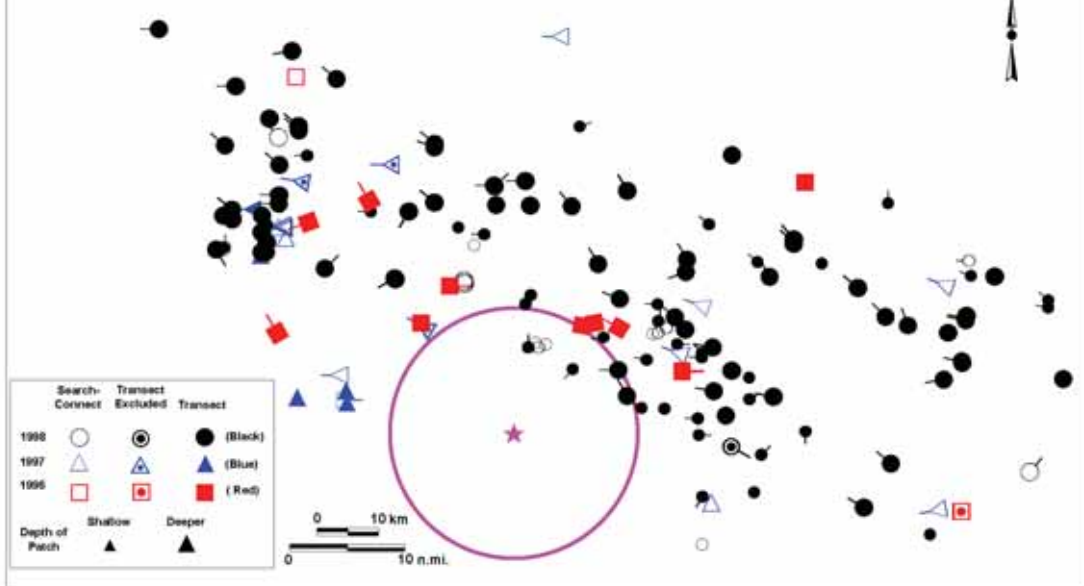
Concerns about:

- Oil spills and
- Man-Made Noise in the Ocean
- Impacts to marine mammals and their prey

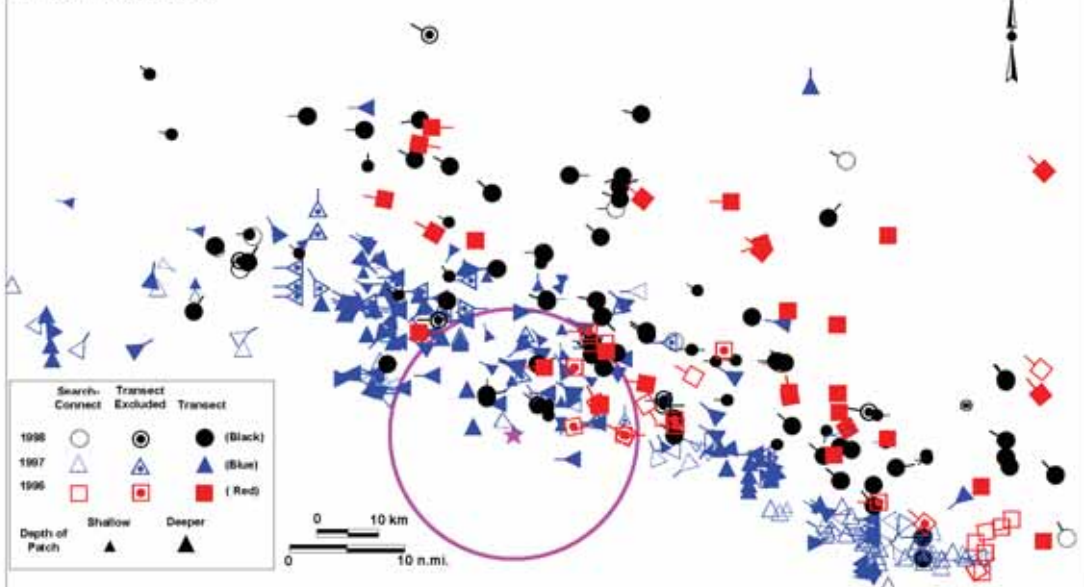


Traditional Knowledge is "ahead" of science. Need to listen to the communities.

C. Seismic, 1996-98

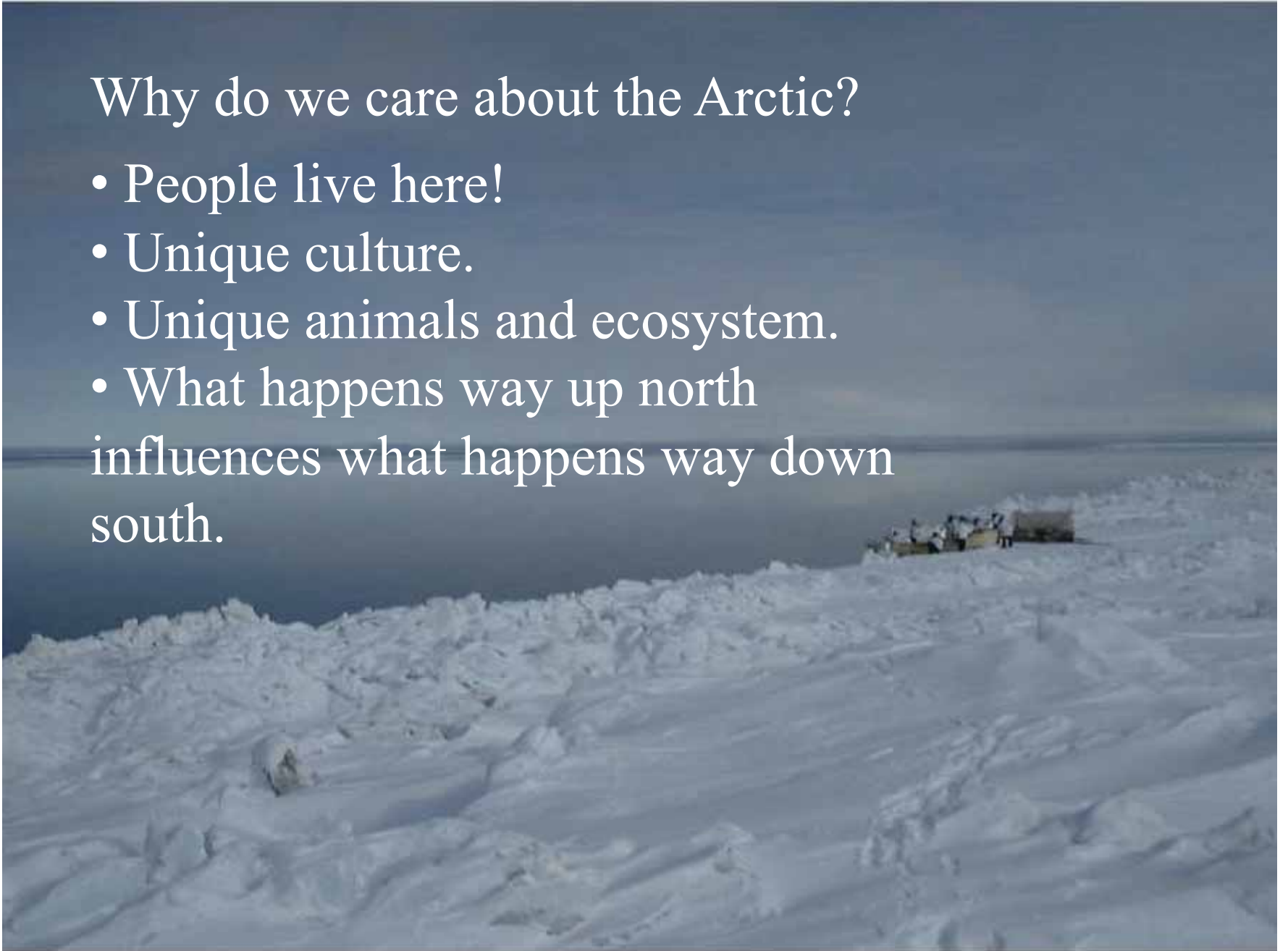


D. No Seismic, 1996-98



Why do we care about the Arctic?

- People live here!
- Unique culture.
- Unique animals and ecosystem.
- What happens way up north influences what happens way down south.



Quyanaqpuk



Bill Hess