Experiences and Observations on Seismic Activities in Greenland





KNAPK – objectives

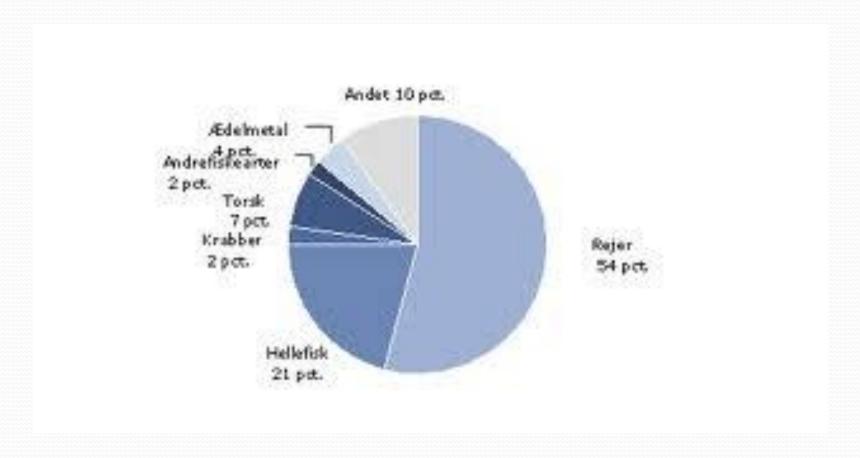
- National organisation of 70+ of fishermen and hunters' associations
- Established in 1953
- Negotiates prices with producers and export companies on behalf of the members for fish, shellfish and sealskins and other species for subsistence use.
- Negotiates and lobbies to improve conditions for its members with the government and members of the Parliament
- Appoints members to committees and other institutions national, regional and international bodies f.i. JCNB, IWC, NAMMCO, NASCO etc.

KNAPK – position on hydrocarbon exploration

- KNAPK is against hydrocarbon activities in our waters because of;
- 90% of our income is from living marine resources
- Threats from Seismic activities and other disturbances
- No existing technology to clean oil spills in ice filled waters

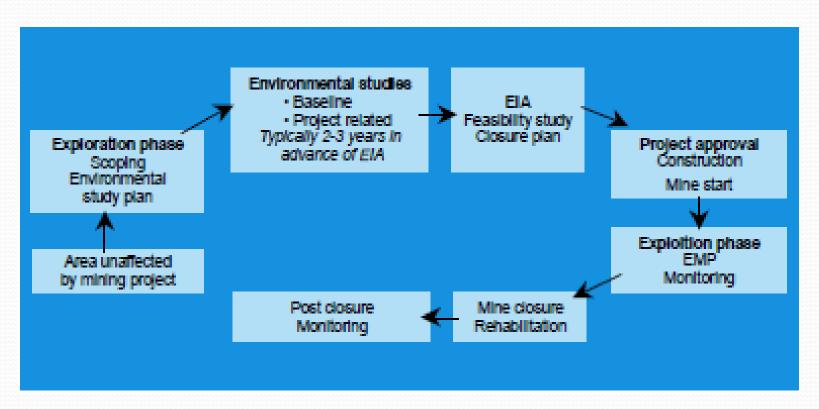


Greenland exports 2009

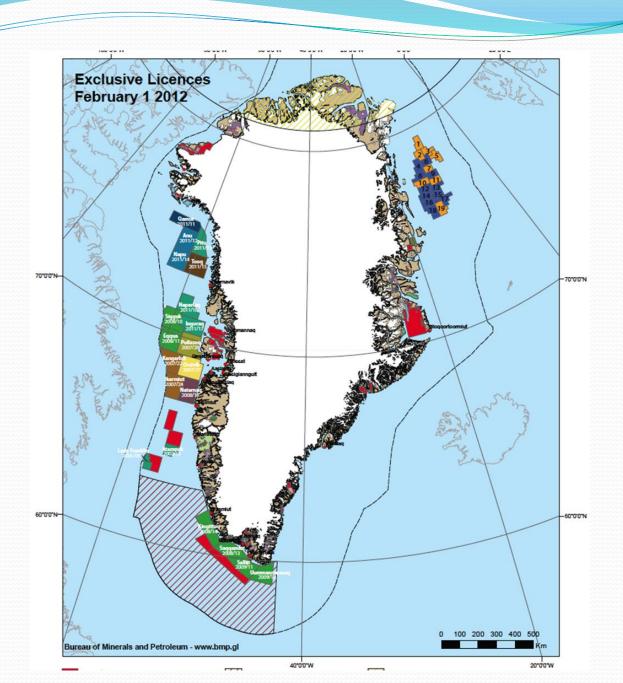




The EIA process in Greenland

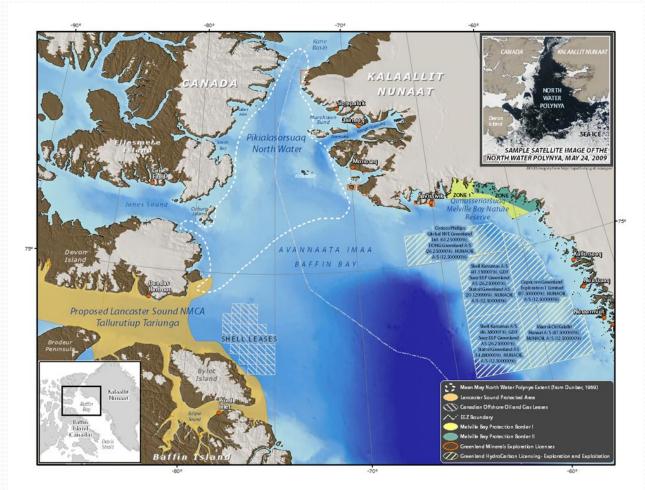








Pikialasorsuaq and Baffin Bay





Pikialasorsuaq cooperation workshop sept. 2013

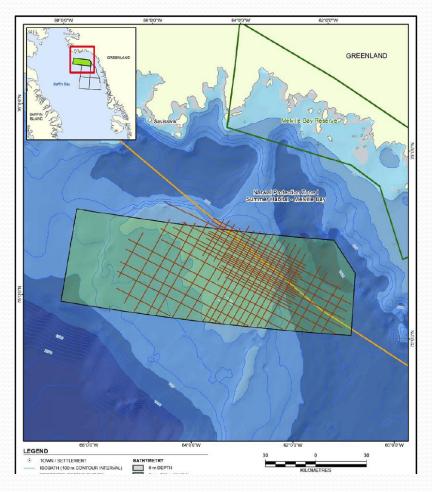




Pikialasorsuaq cooperation workshop sept. 2013

- To strengthen cooperation between Nunavut and Greenland on the protection of the North Water Polynya
- Hosted by ICC Greenland and Oceans North Canada
- Participation from northern Nunavut (QIA) and Northwestern Greenland hunters communities, organizations, scientists and government officials
- Opportunity for hunters to share experiences











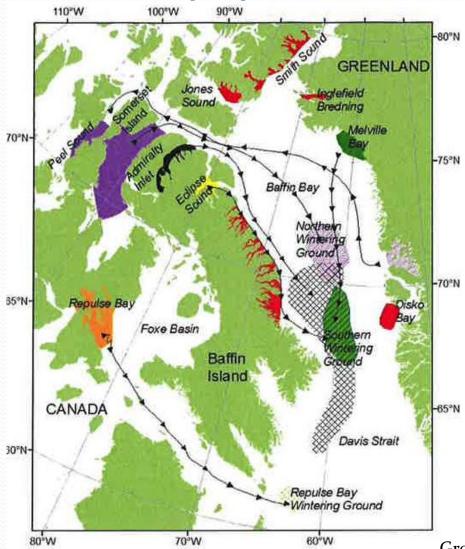
Why narwhal hunting?

- Sealskin eksport almost impossible
- Fishery of Greenland halibut (turbot) declines when narwhals are present
- Trade of mattak (whale skin) is the only feasible source of income



Distribution of different narwhal

populations



Greenland Institute of Natural Resources



Qaerngaaq Nielsen





Observations Melville Bay 2013

"The behaviour of the belugas and narwhals is not the same. They seem to be disturbed all the time, as if they get electrical shock and do not surface from the water thus making it very difficult to approach them. So far, I have not been able to catch the number of whales I normally catch at this time of the year."

Qaerngaaq Nielsen



Mads Ole Kristiansen





Observations Inglefield Bredning 2013

- Narwhals less stirred when hunted
- Hunters assume that these are narwhals from other populations



Observations 2014

Melville Bay:

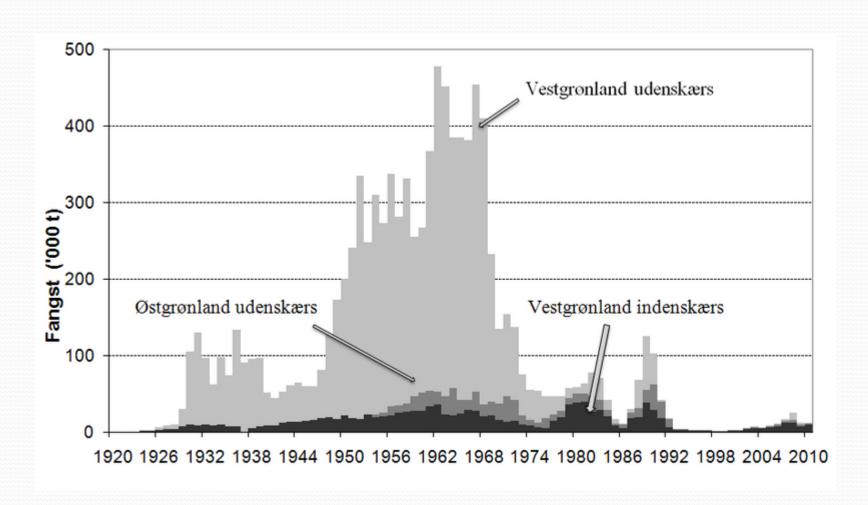
- Less calves
- Otherwise behavior back to normal

Inglefield Bredning:

• Same as 2013

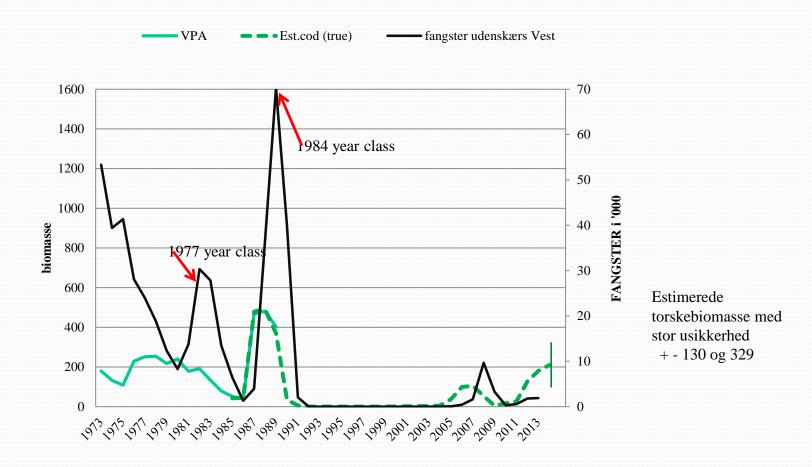






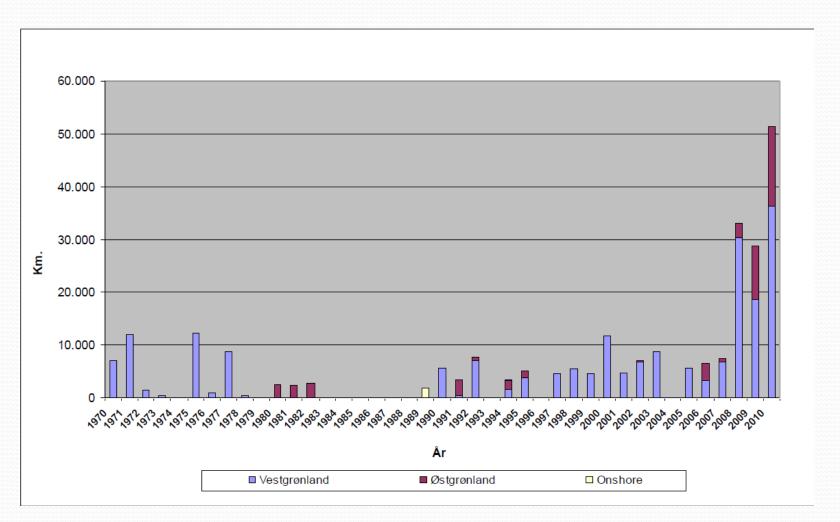


Historical catches of cod in Greenland



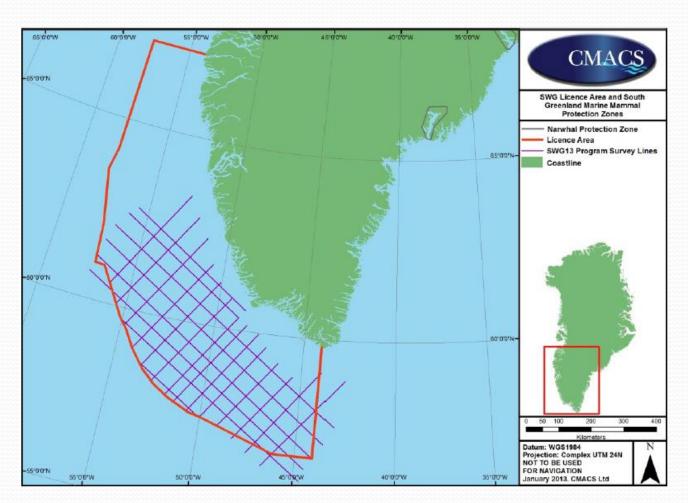


Seismic activities in and off Greenland in line kilometers





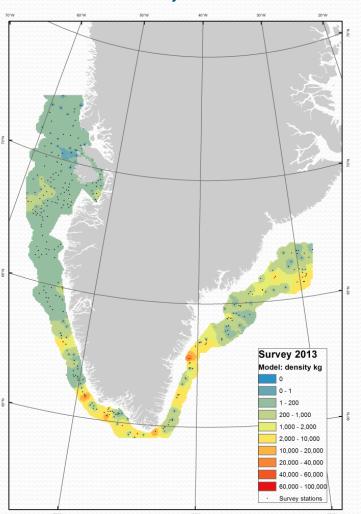
Seismic activities off Greenland 2013



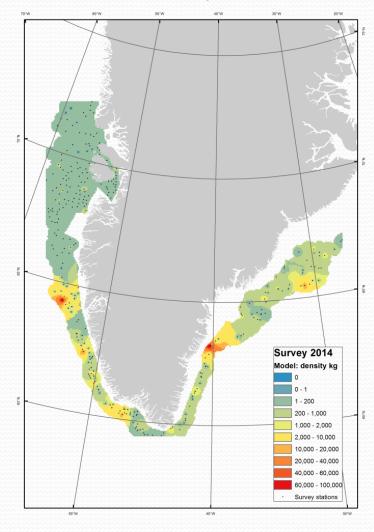


Greenland fisheries survey

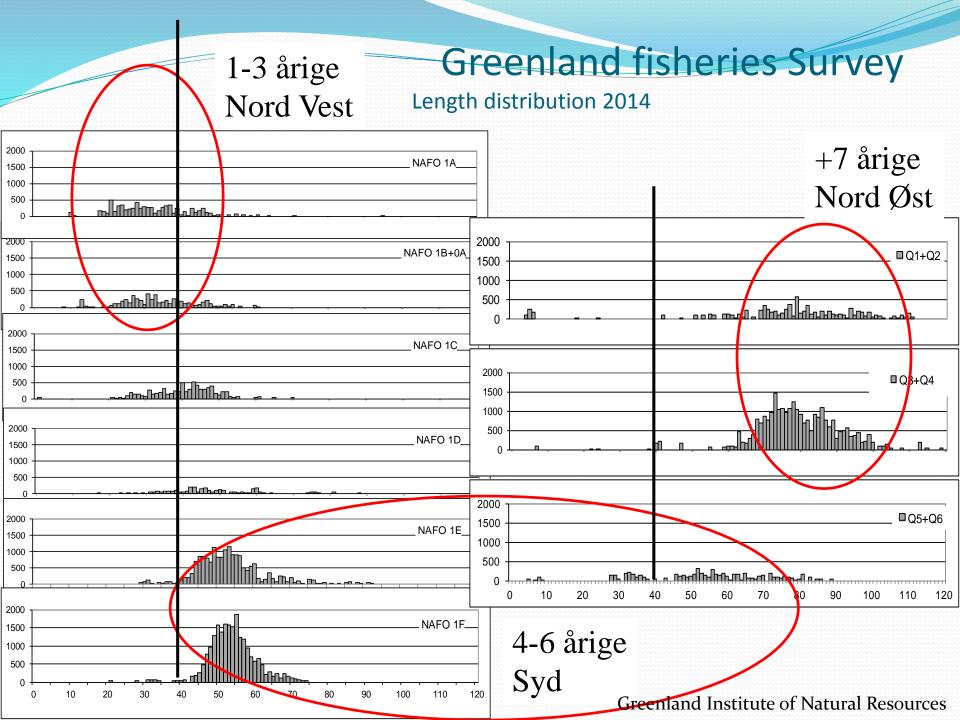
Biomass pr. station 2013, 303 stations



2014, 331 stations



Greenland Institute of Natural Resources

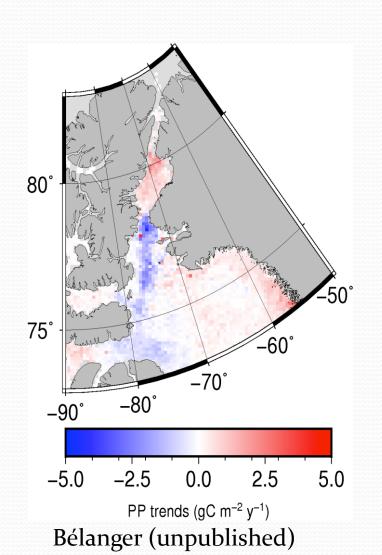








Other changes in Pikialasorsuaq and Baffin Bay



North Water Polynya a 100% Sea ice area (10³ km²) 0 0 0 1982-1991 average 1992-2001 average 2002-2011 average 2009 2010 Jun 1 Jul 1 Mar 1 Apr 1 May 1 Baffin Bay b 700 E 100% Sea ice area (10³ km²) Sea ice area (%) 1992-2001 average 100 E 2002-2011 average Jul 1 Mar 1 Apr 1 May 1 Jun 1

Heide Jørgensen et al 2012



Messages

- Make use of all the knowledge available
- Consider both best and worst case scenarios in EIAs and SIAs





Employment in Greenland

