Bowhead whales in Northeast Greenland

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Pinngortitaleriffik
Aerial surveys in Greenland >30 yrs

- Millions of km²
- Thousands of kilometers on effort
- Thousands of hours in the plane
- Countless hours
  - Planning
  - Analyzing
  - Presenting
  - Discussing
  - Scientific advice
Aerial surveys in Greenland
Winter survey
Northeast Water (NEW)
March 29 – April 6, 2017

56 transect lines
2622 km on effort
15,230 km²
Winter survey  
Northeast Water  
March 29 – April 6, 2017

25 bowhead whale observations

Chapman estimate

Corrections  
· Perception bias  
· Availability bias*  
· Time-in-view*

N= 103 whales  
N*= 264 (cv=0.51);  
CI= 102-681

*Dive data from satellite-tagged whales from Disko Bay
Winter survey
Northeast Water
March 29 – April 6, 2017

25 bowhead whale observations

Chapman estimate

Corrections
· Perception bias
· Availability bias*
· Time-in-view*

N= 103 whales
N*= 264 (cv=0.51);
CI= 102-681

*Mating

*Dive data from satellite-tagged whales from Disko Bay
Summer survey
Northeast Water
August 24, 2017

8 bowhead whale observations
Incl 3 calves
15 transect lines
756 km effort
5225 km2

Chapman estimate in process

Aerial survey in the NEW from 2009
Nc= 102* whales (CI= 32-329)

*Dive data from satellite-tagged whales from Disko Bay
Summer observations of bowhead whales (1940-2008)
Satellite tagging of Baffin Bay population
Seasonal variations in predictive variables
Best GAM model:
Across seasons
SST -0.5-2°