

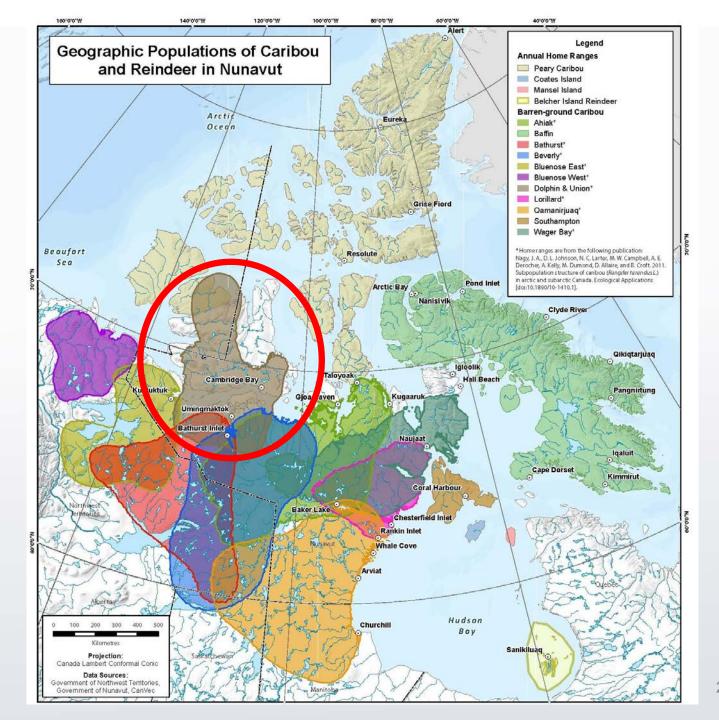
Building Nunavut Together

Nunavuliuqatigiingniq

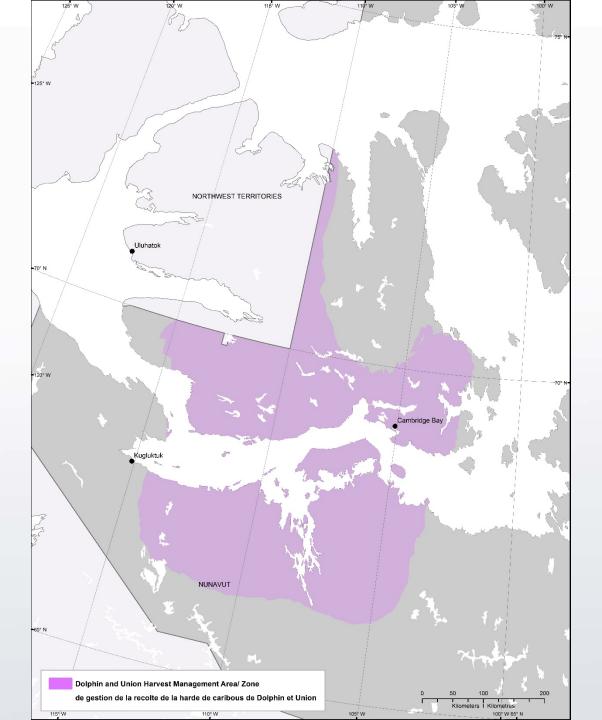
Bâtir le Nunavut ensemble

# DOLPHIN AND UNION CARIBOU RESEARCH AND MANAGEMENT













# Dolphin and Union Caribou Management: A Shared Responsibility

- Many groups share responsibilities to manage Dolphin and Union caribou
  - Government of Nunavut
  - Government of Northwest Territories
  - Inuit and Inuvialuit organizations and co-management partners
  - Government of Canada
- The management authorities are directed by the Nunavut Agreement and the Inuvialuit Final Agreement
- The herd also falls under Federal and GNWT species at risk legislation





# **Survey History**

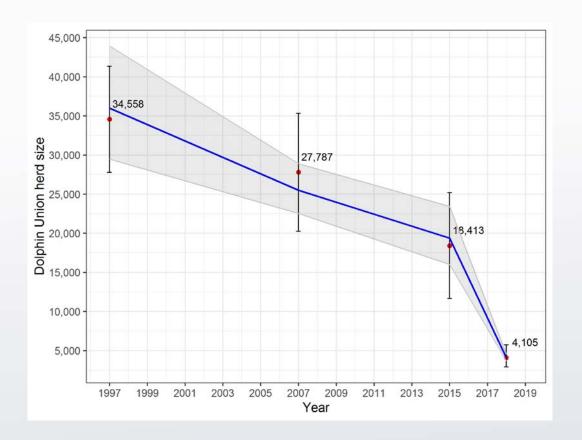
- A survey of western Victoria Island was done in June 1994 which produced an estimate of <u>14,539</u> caribou
  - The survey was unable to delineate the calving distribution for the herd
  - Recommended aerial survey on coastline prior to migration to mainland
- First abundance survey using coastline methodology was done in 1997 and resulted in an estimate of 34,558 caribou
- 2007 abundance survey results estimated **27,787** caribou
- 2015 abundance survey results estimated **18,413** caribou
- 2018 abundance survey results estimated **4,105** caribou



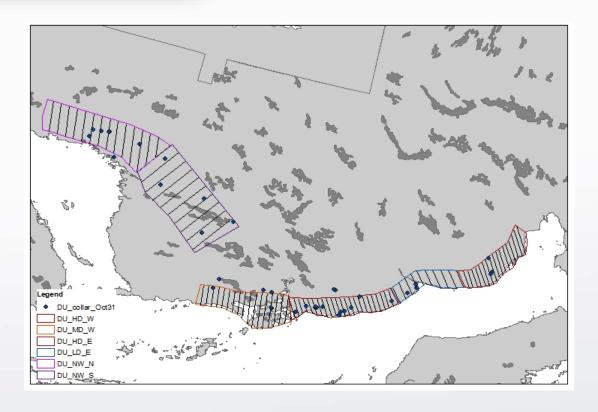


The 2018 survey, which followed the same methodology as the previous three surveys, resulted in an estimate of 4,105 caribou

Confidence Interval (2,931-5,750)





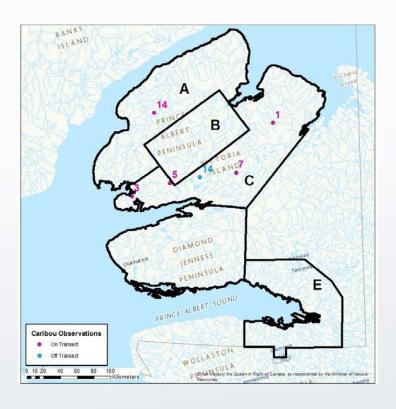


The final proposed survey lines for the 2018 abundance estimate survey









In June 2019, GNWT conducted an aerial survey for Peary caribou and Muskox. The survey block labelled "E" was added and identified as an area where local observers indicated the presence of Dolphin and Union caribou. No caribou were observed in block E during the survey.



# **Demographic indicators**

- Low female survival (62% of collared females survived in 2018)
- While pregnancy rates were high in collared females (94%), the rates were much lower in harvested females (69%).
- Low bull:cow ratio of 15 bulls/100 cows in Fall 2016 composition
- Low calf:cow ratio of 11 calves/100 cows in Spring 2017 composition







#### **Threats**

Population changes have historically been tied to natural cycling. Factors that can accelerate decline and/or hinder recover can be a combination of factors (cumulative effects) and can include:

#### Climate Change

- Timing of sea-ice freeze-up and ice stability/quality
- Can lead to increased or more frequent drowning incidents
- Changes to ecosystem (forage quality and availability)
- Disease, Insects, and Human Activity
  - Diseases such as Brucellosis have an impact on caribou health
  - Insect harassment can cause increased stress on caribou

#### Marine Traffic

Can have impacts on ice crossings and increase drowning incidents





#### **Threats**

- Predation and Competition
  - Wolves are main predators
  - Local knowledge shows and observed increase in grizzly bear abundance
- Harvesting
  - Not a main threat to the herd but when a population reaches a very low level, the risk posed by harvest is more substantial and could result in continued declines and impact recovery



# **Management Initiatives**

- Communities have taken specific actions such as cancelling sport hunting from the Dolphin and Union herd
- DOE has recently completed a project on wolverine density in the Kitikmeot (report being finalized) and is planning a new grizzly bear density assessment to begin in 2021
- Wolf Sample Collection Program
  - 151 samples in Kitikmeot in 2019-20 season (654 territory-wide)







#### **Process Timeline**

- October 2018 survey work completed
- 2019 data analysis for survey
- Fall 2019 Bluenose East and Bathurst consultations while additional analysis added to DU study
- November 2019 Ransomware attack on GN draft reports and email communication lost
- December 2019 NWMB staff released population estimate to public
- Early 2020 emails and files recovered
- May 2020 Final report shared with communities and co-management partners



PROCESS TIMELINE	
October 2018	Survey work completed
Most of 2019	Data analysis
Fall 2019	BNE and Bathurst consultations competed while <u>additional analysis</u> <u>added to DU study</u>
November 2019	Ransomware attack – draft reports and emails lost
December 2019	NWMB staff released population estimate to public
Early 2020	Emails and files recovered
March 2020	Restrictions put in place due to Covid-19 Pandemic
May 2020	Final report shared with communities and co-management partners
June 18, 2020	Teleconference with HTOs and co-management partners
June 22, 2020	Minister sent letter to NWMB requesting Ministerial Management Initiative
July 28, 2020	NWMB responded to Minister and referenced his ability to make an "Interim Decision"





# **Management Initiatives**

- The Minister of Environment sent a letter to the NWMB in June 2020 requesting a Ministerial Management Initiative, as per s.5.3.25 of the Nunavut Agreement. The reason for this were due to the following:
  - The steep decline of the herd between 2015 and 2018
  - Preliminary results from TK study showing observed declines
  - The inability to consult in Spring 2020 as planned due to the Global Pandemic
  - The increased pressures on Dolphin and Union caribou due to declines in adjacent herds of Bathurst and Bluenose East





# **Management Initiatives**

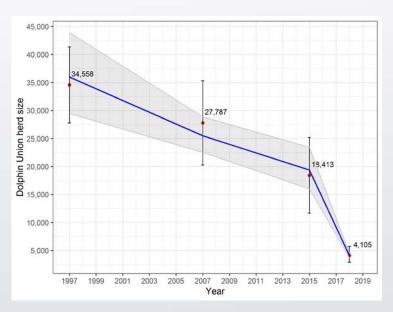
- The NWMB responded and noted the Minister could use his authority under s.5.3.24 of the Nunavut Agreement and make an interim decision
  - Interim decisions can be made when there are <u>urgent</u> (steep decline of herd) and <u>unusual circumstances</u> (inability to follow regular consultation and decision process due to global pandemic)
- An interim Total Allowable Harvest of <u>42 caribou</u> has been approved by cabinet and implemented for the Dolphin and Union caribou herd in the Nunavut Settlement Area
  - A TAH of 42 represents a 1% harvest of the herd



#### For Discussion

- Traditional Knowledge and survey work have identified declines in Dolphin and Union caribou since 1997.
- Based on the population status and community needs, what input can the communities provide on the current harvest level?

- Next Steps:
  - Continued monitoring
  - NWMB process
  - Working with NWT







# **Monitoring**

- The DOE has initiated planning of a continued monitoring program with representatives from all the relevant organizations and co-management partners.
- The initial recommendation was for a large scale fall 2020 survey incorporating local knowledge in the expanded survey area.
- There were discussions on factors impacting survey completion which included: available funding, availability of planes, time available for planning, weather delays, and low number of collars remaining on the herd.
- As a result of a high risk of not being able to complete the original proposed survey, an alternate option of a smaller scale survey that is 5 times larger than 2018 survey was chosen by the planning group.

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