

2021 Dolphin and Union Caribou Collaring Program

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Dolphin and Union Collaring Program

Objectives:

- Study the movement patterns of DU caribou over a multi-year program
- Support the deriving of population estimates and trends for the herd
- Identify priority and sensitive habitat
- Investigate non-migratory Dolphin and Union caribou that remain on Victoria Island year-round

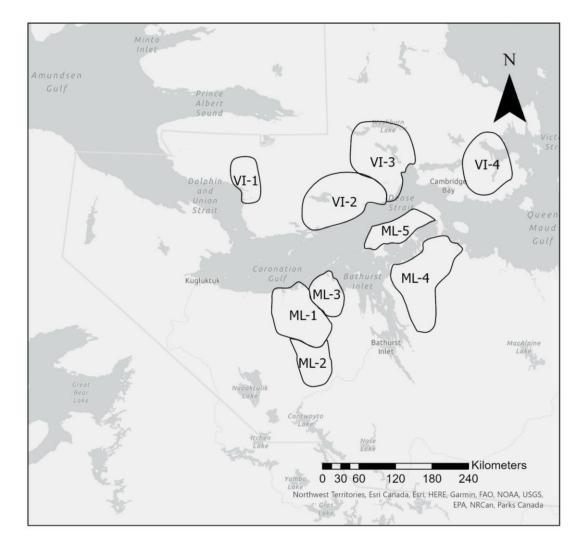


Proposed Activities

- April 1st to April 14th, 2021
- Collar 50 female DU caribou on mainland and Victoria Island performed by experienced capture and collaring crew
- Incorporate HTO/HTC input into collaring locations
- Take samples (blood, feces and hair), assess body condition and take photos (full body, antlers, eyes, incisors)

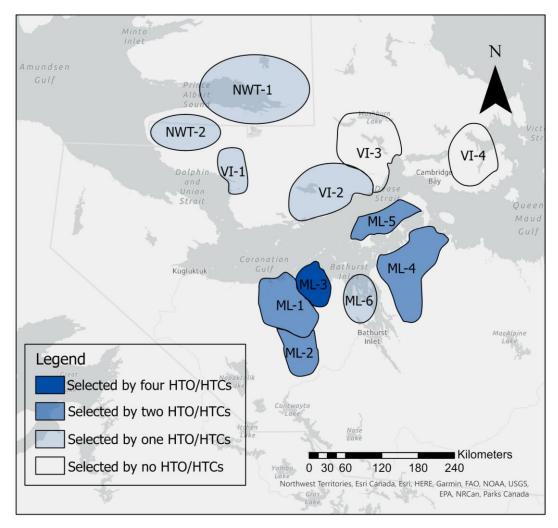


Proposed Collaring Areas



Map with possible collaring locations distributed to affected HTOs/HTCs, and to NTI for input.

Selected Collaring Areas



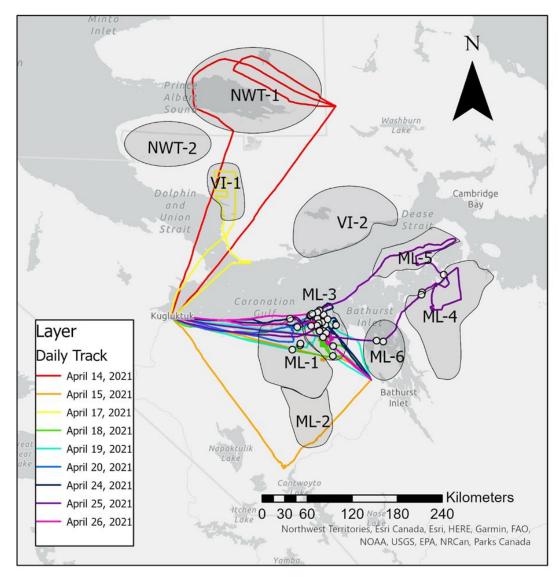
Input received from Kugluktuk Angoniatit Association, Ekaluktutialik Hunter & Trappers, Omingmaktok Hunters & Trappers, Burnside Hunters & Trappers, and Olokhaktomiut Hunters & Trappers.

2021 Collaring

- Start date was delayed due to weather
- Collaring took place April 14th to April 26th 2021
- 8 areas selected by HTOs/HTCs were visited during the program
- 36 animals were collared, 42 were captured
- Samples were taken (blood, feces and hair), body condition determined and photos taken
- HTOs/HTCs were emailed daily to provide project updates
- An HTO observer was present for every capture



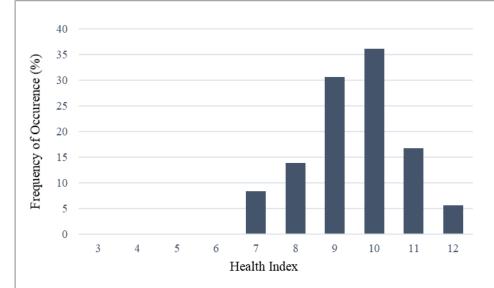
Collar Deployment Locations





Body Condition

- Followed CARMA's Rangifer Health and Body Condition Monitoring Protocol
- Health index on a scale of 3 to 12
- Ribs, shoulders and hip/spine scored and summed
- Mean health index of 9.5 for 2021



Pregnancy

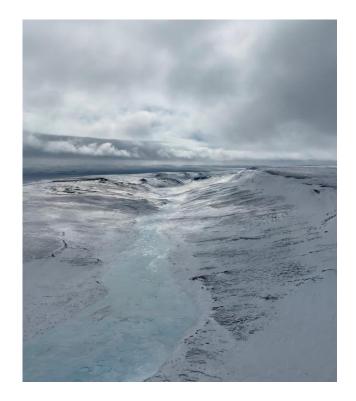
- Fecal samples were analyzed for progesterone levels to determine pregnancy rate
- Progesterone >600 ng/g in feces indicated pregnancy
- In 2021, 87.2% were pregnant

	Year
Status	2021
Pregnant	35
Not Pregnant	5
Pregnancy Rate	87.2%



Program Challenges

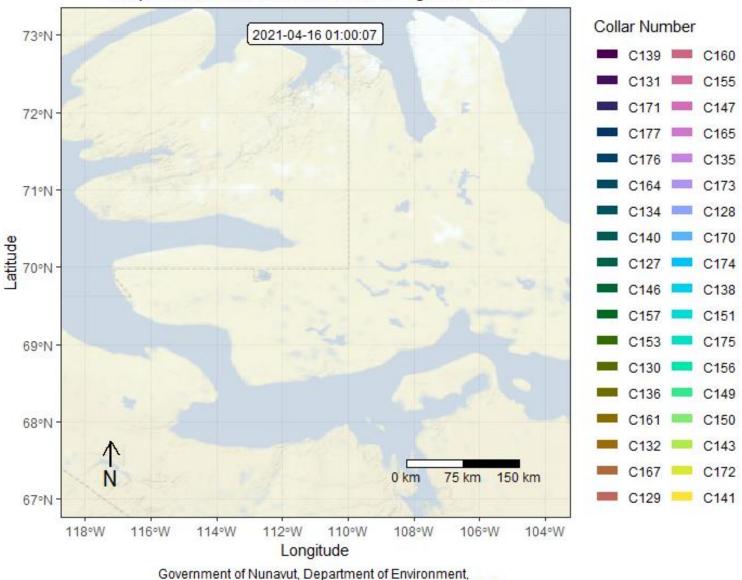
- Adverse weather
 - Delayed start
 - 1/3 days during program unflyable
- Caribou only collared on mainland
- 36/50 collars deployed
- Unable to relocate
- Mortalities during collaring



Identification Number	Mortality Date	Mortality Type	Cause
DU-M1-21	April 19, 2021	During Pursuit	Euthanized, broken leg
DU-M2-21	April 20, 2021	During Capture	Euthanized, injured hip
DU-M3-21	April 24, 2021	During Capture	Heart attack
DU-M4-21	April 24, 2021	During Capture	Euthanized, broken neck
DU-206-21	April 25, 2021	Harvested	Harvested
DU-218-21	August 13, 2021	Natural	Unknown

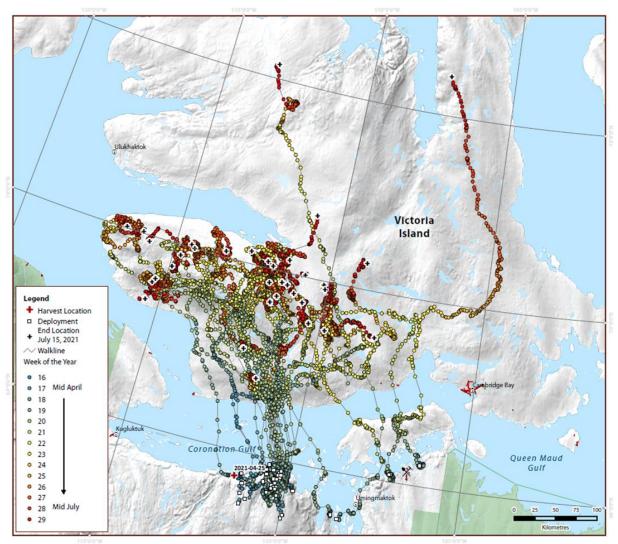
Dolphin and Union Caribou Movement

Dolphin and Union Caribou Collaring Data 2021



Wildlife Reasearch; Projection: Geographic, WGS84

Dolphin and Union Caribou Movement



Movements from 2021 collared caribou from mid-April to mid-July

Future Recommendations

- Collaring on Victoria Island should remain a focus
- On the ground surveys recommended prior to collaring program to increase efficiency
- Continued close collaboration with other stakeholders, specifically HTOs/HTCs



Thank you!



Thank you to the Kugluktuk, Cambridge Bay, Bay Chimo, Bathurst Inlet and Ulukhaktok HTOs/HTCs.

Thank you specifically to Amanda Dumond, Larry Adjun, Beverly Maksagak, Bobby Greenley, Connie Kapolak, Peter Kapolak, Tracy Davison, Bessie Inuktalik, Terry Milton and Lena Davies. Additionally, thank you to Albert Anavilok and Regan Adjun and to Mathieu Dumond. This program was supported by the CWS, GNWT, NWMB and TMAC.

Questions?