

Wildlife Telemetry in Nunavut – Barren-Ground Caribou



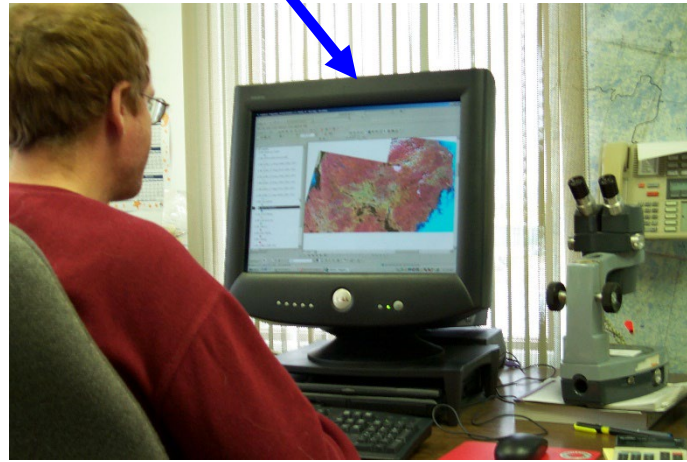
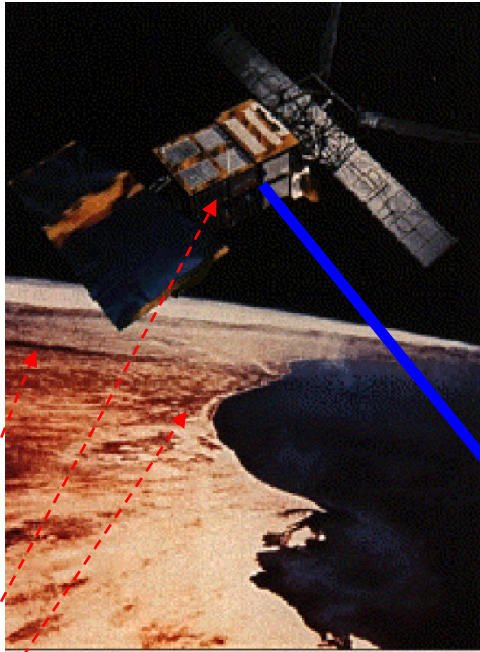
*Prepared by: Mitch Campbell
Kivalliq Wildlife Biologist
Nunavut Department of Environment
P.O. Box 120
Arviat, NU, X0C 0E0
Ph: (867)857-3171*

Some of the contents of this presentation contain draft results and are not to be cited, published or distributed without written permission of the GN ENV.

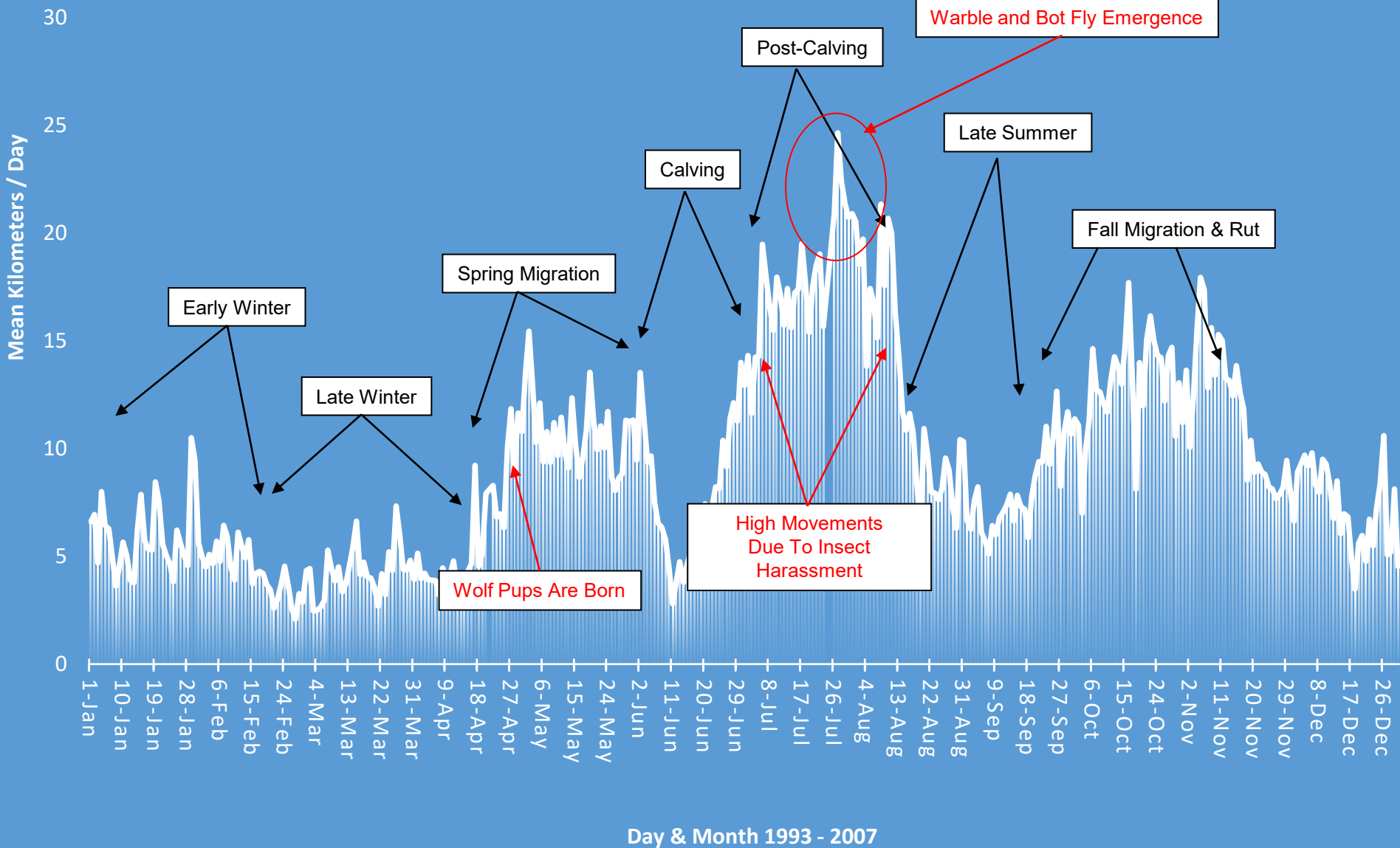
Telemetry Based Studies - Overview





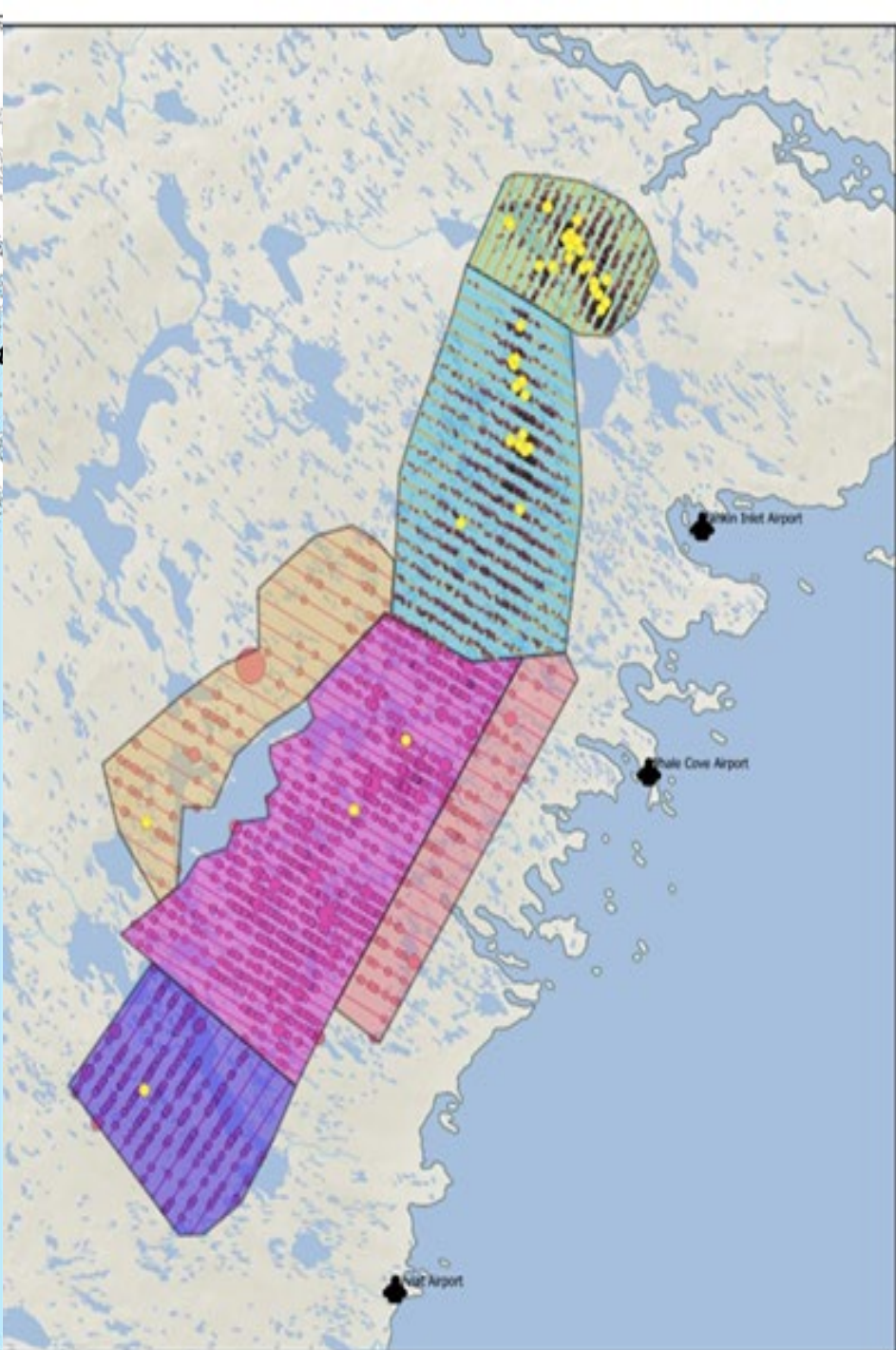
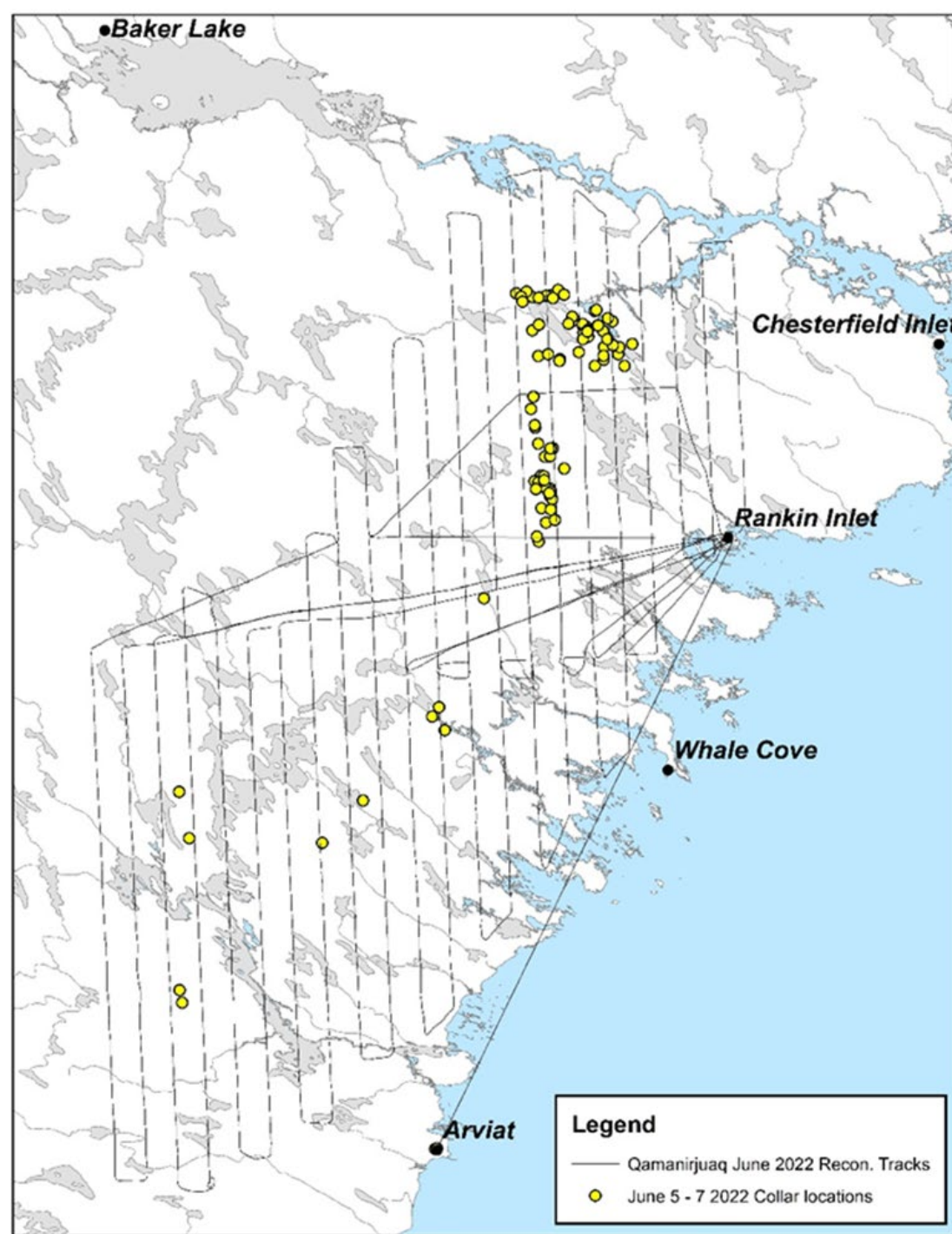


QAMANIRJUAQ CARIBOU MOVEMENTS (KM / DAY)



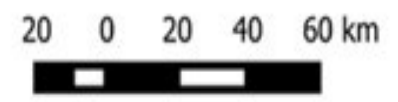
Caribou Research Programs



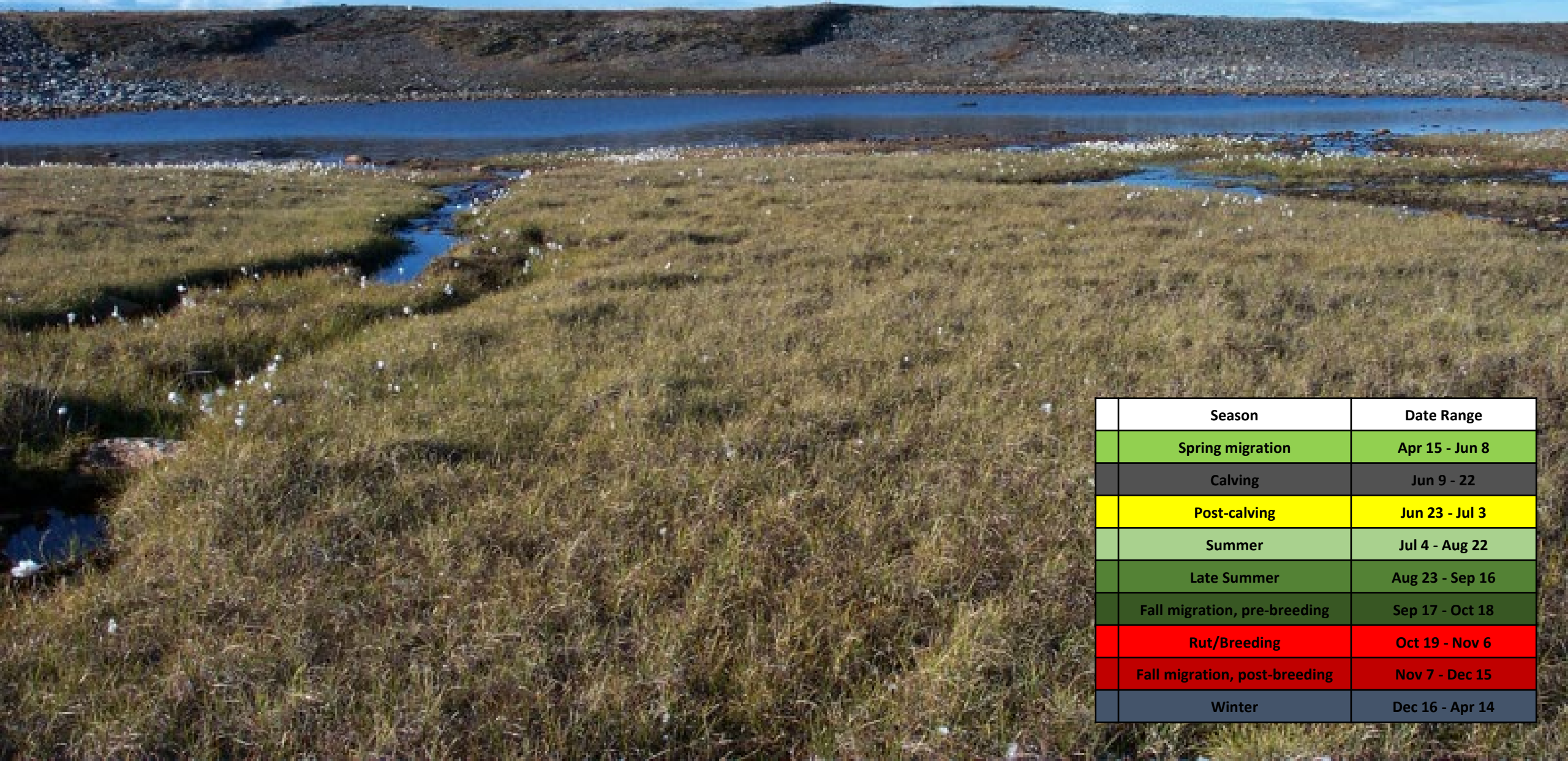


Legend

- Collars locations June 8, 2022
 - caribou counted on photos
- Visual transects (group size)**
- 1 - 16
 - 16 - 32
 - 32 - 47
 - 63 - 79

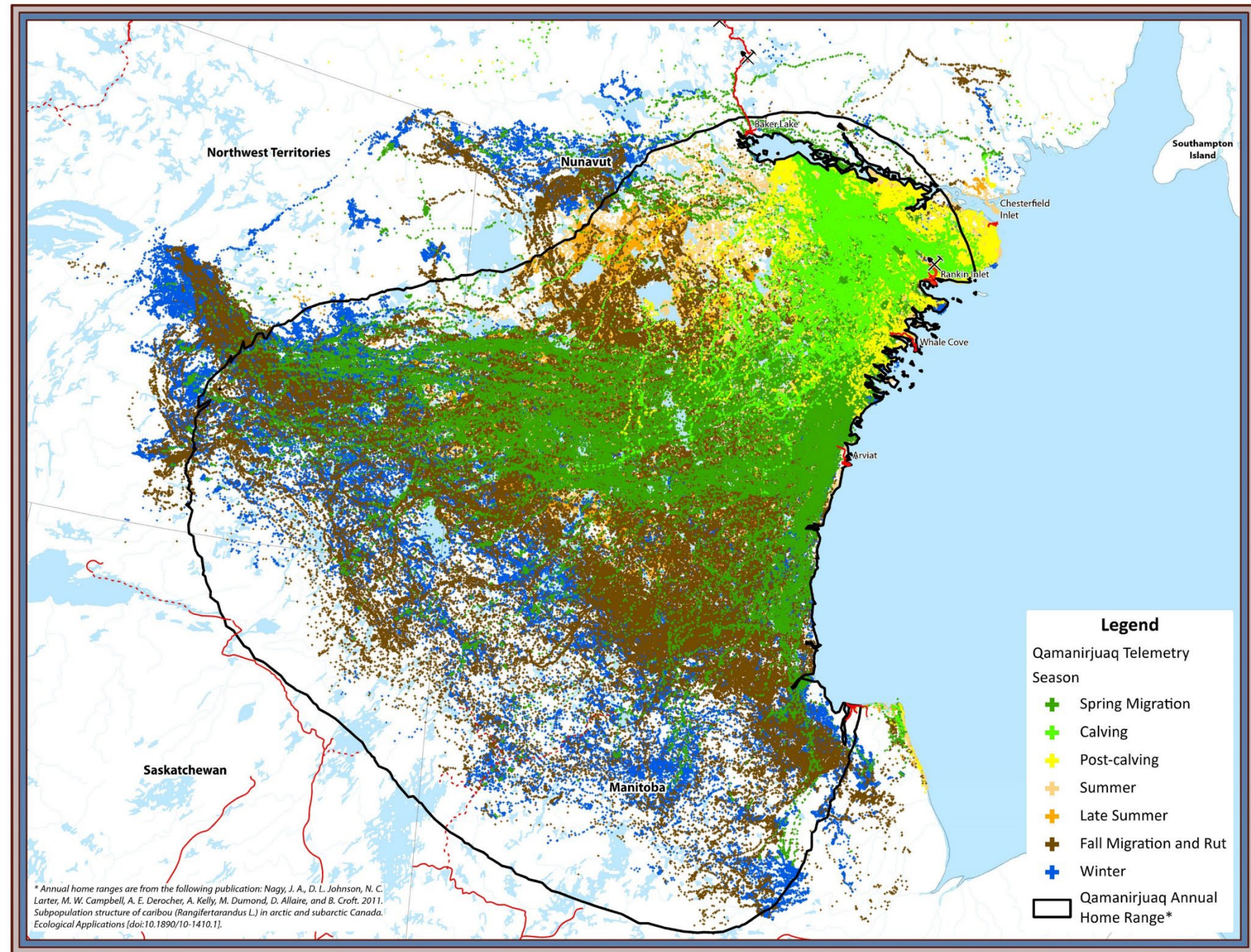


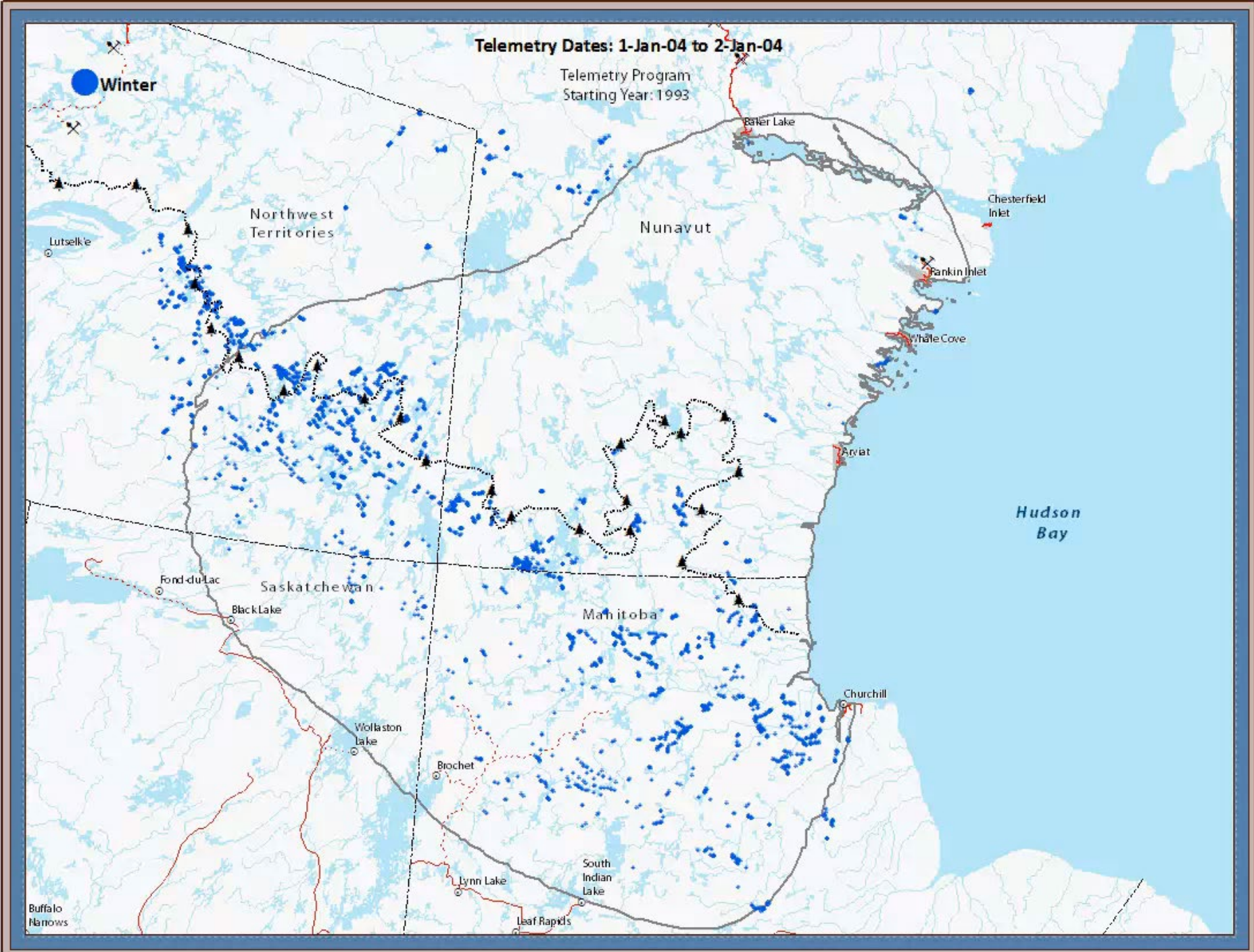
Caribou Range Studies



Season	Date Range
Spring migration	Apr 15 - Jun 8
Calving	Jun 9 - 22
Post-calving	Jun 23 - Jul 3
Summer	Jul 4 - Aug 22
Late Summer	Aug 23 - Sep 16
Fall migration, pre-breeding	Sep 17 - Oct 18
Rut/Breeding	Oct 19 - Nov 6
Fall migration, post-breeding	Nov 7 - Dec 15
Winter	Dec 16 - Apr 14

Qamanirjuaq Caribou Telemetry Based Annual Range





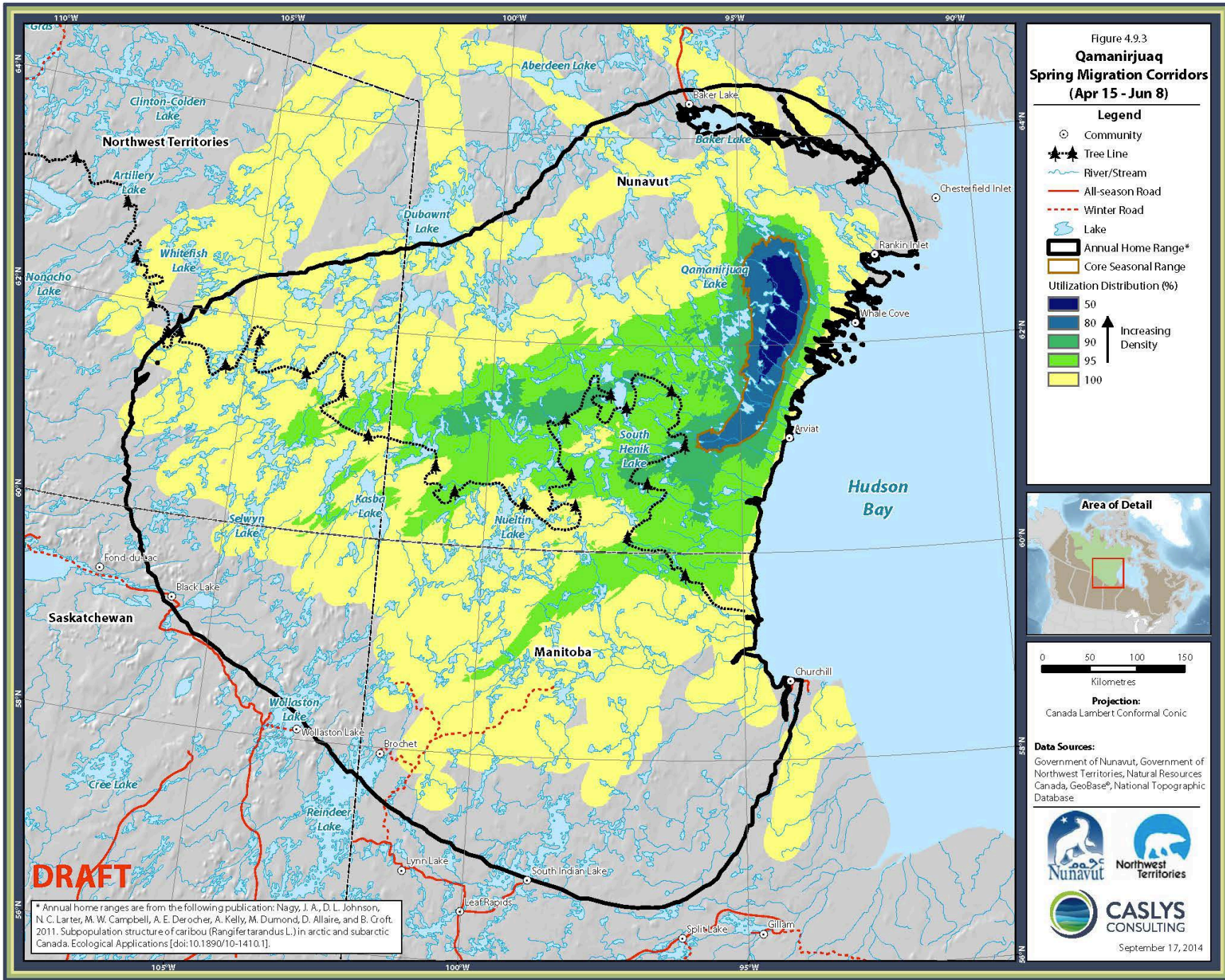


Figure 4.9.4
**Qamanirjuaq
 Calving Density
 (Jun 9 - 22)**

Legend

- ⊙ Community
- ▲ Tree Line
- River/Stream
- All-season Road
- - - Winter Road
- Lake
- ▭ Annual Home Range*
- ▭ Core Seasonal Range

Utilization Distribution (%)

- 50
- 80
- 90
- 95
- 100

↑ Increasing Density



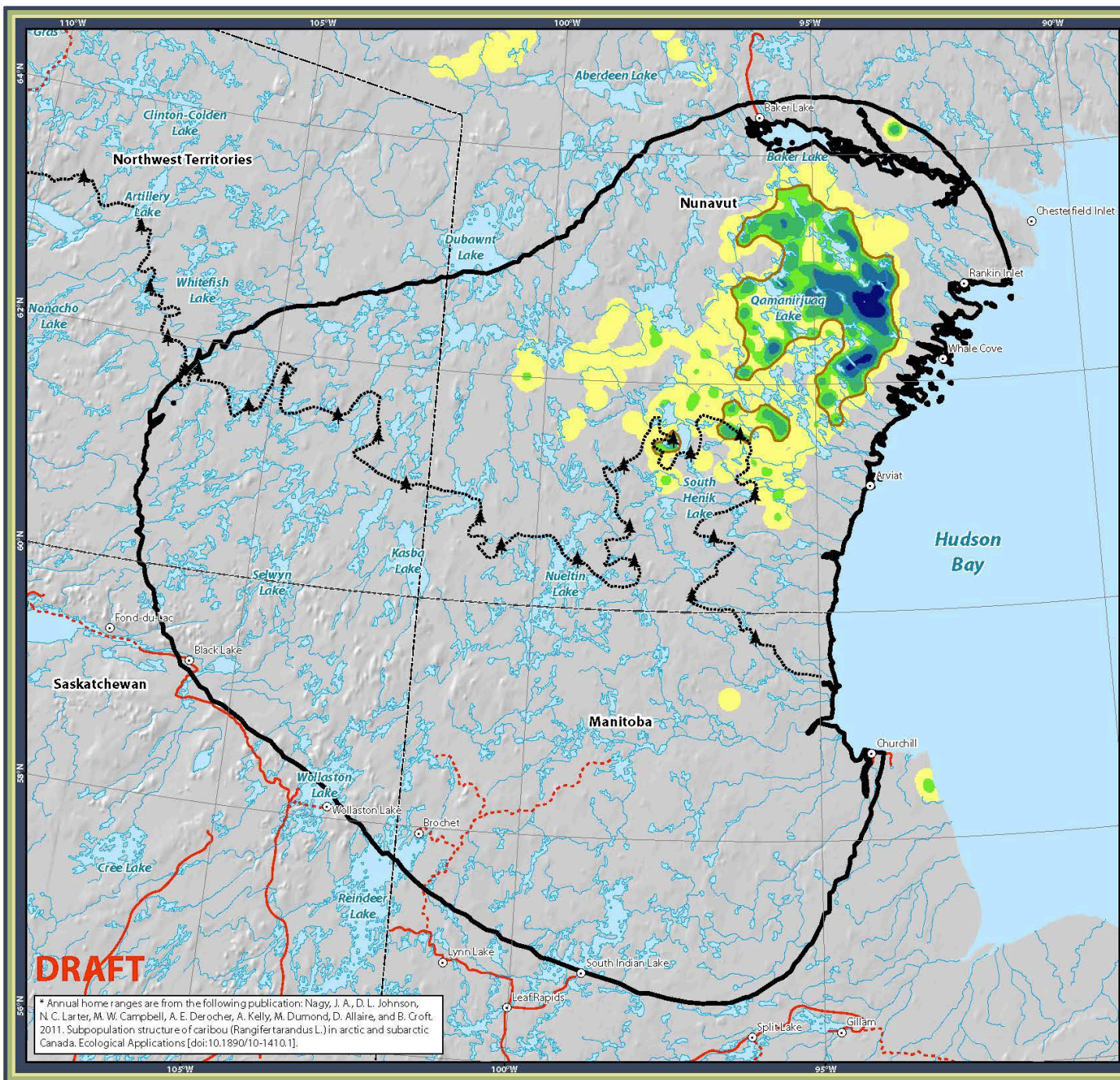
0 50 100 150
 Kilometres

Projection:
 Canada Lambert Conformal Conic

Data Sources:
 Government of Nunavut, Government of Northwest Territories, Natural Resources Canada, GeoBase®, National Topographic Database



September 17, 2014



DRAFT

* Annual home ranges are from the following publication: Nagy, J. A., D. L. Johnson, N. C. Larter, M. W. Campbell, A. E. Derocher, A. Kelly, M. Dumond, D. Allaire, and B. Croft. 2011. Subpopulation structure of caribou (*Rangifer tarandus* L.) in arctic and subarctic Canada. *Ecological Applications* [doi:10.1890/10-1410.1].

Cal'

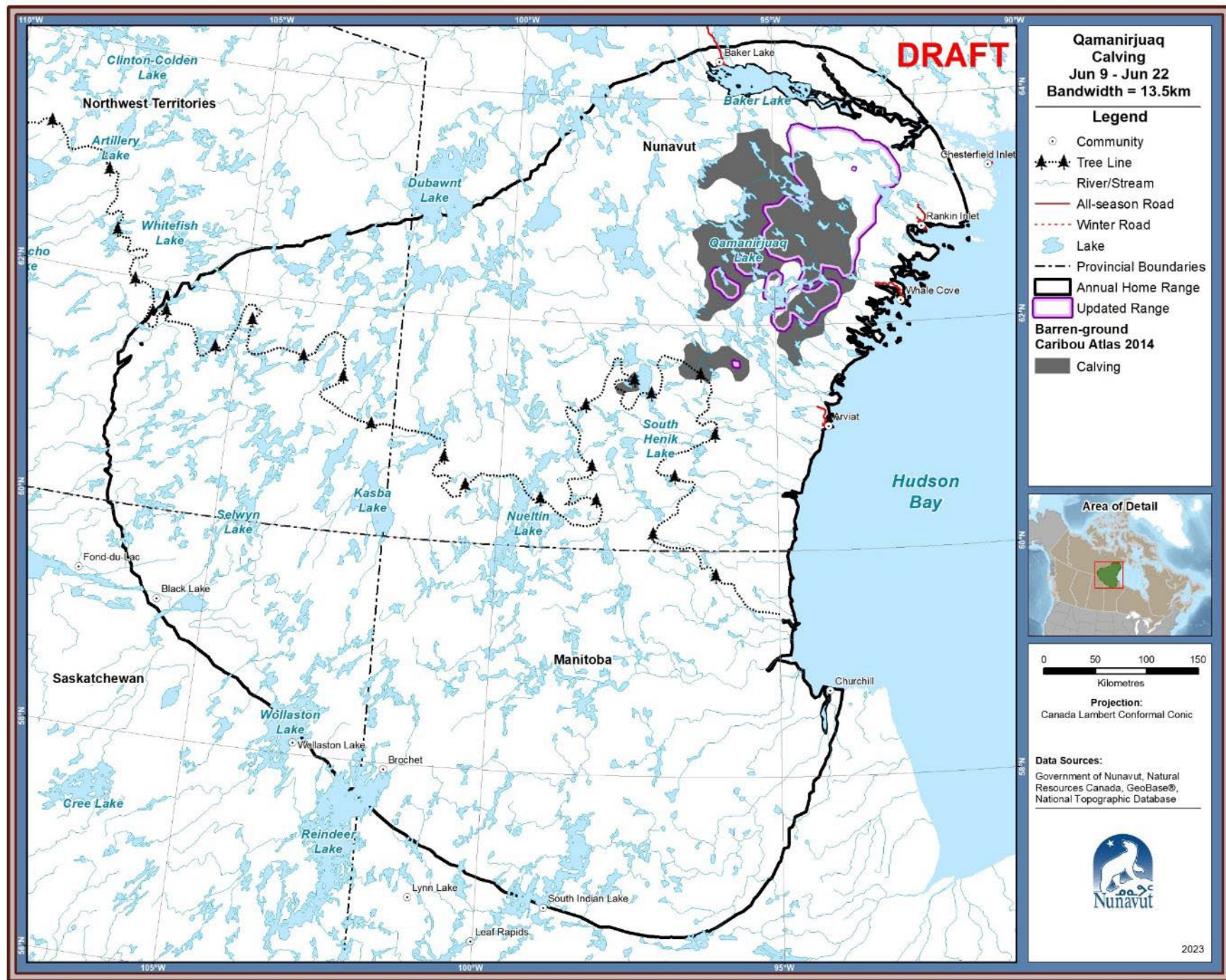
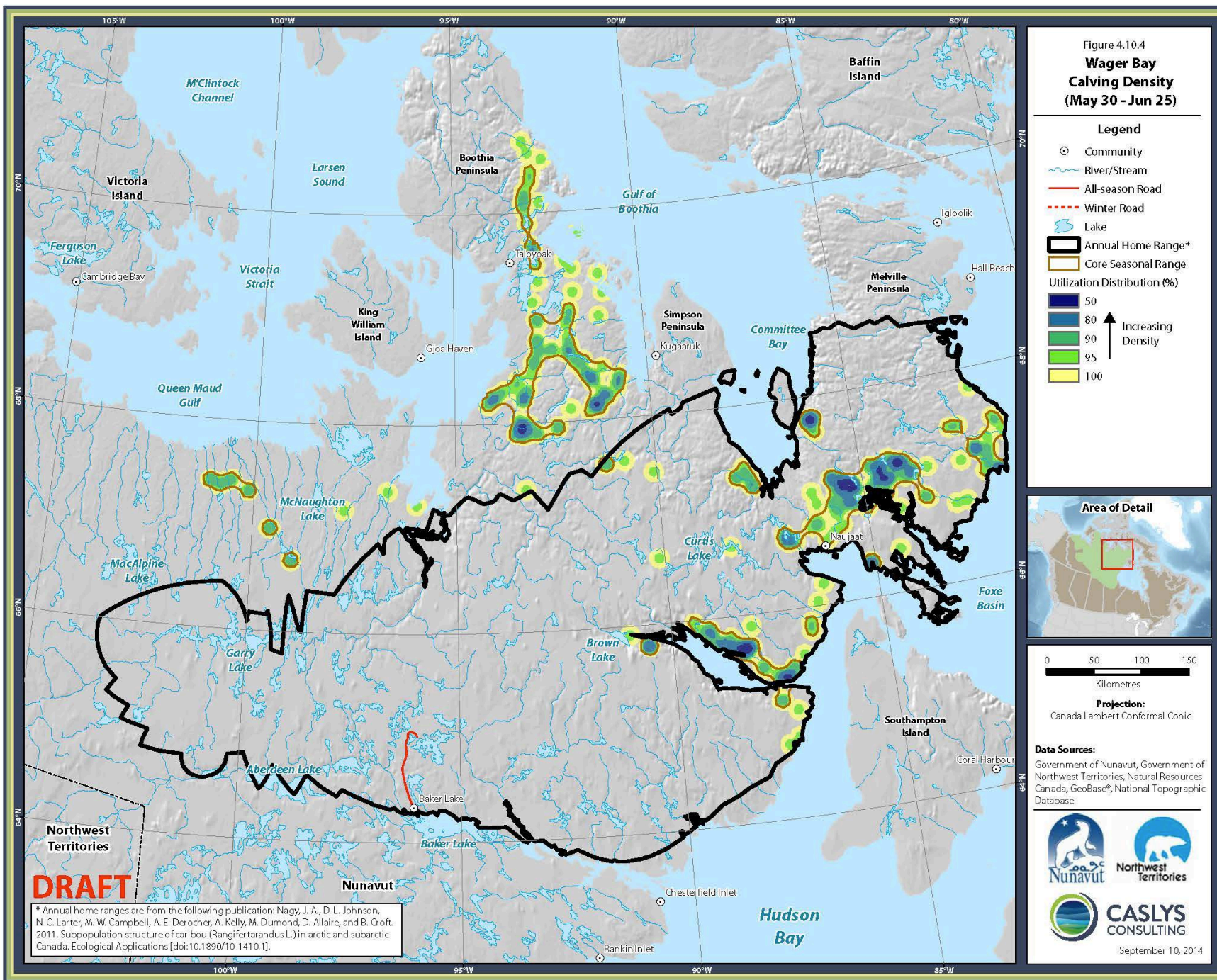
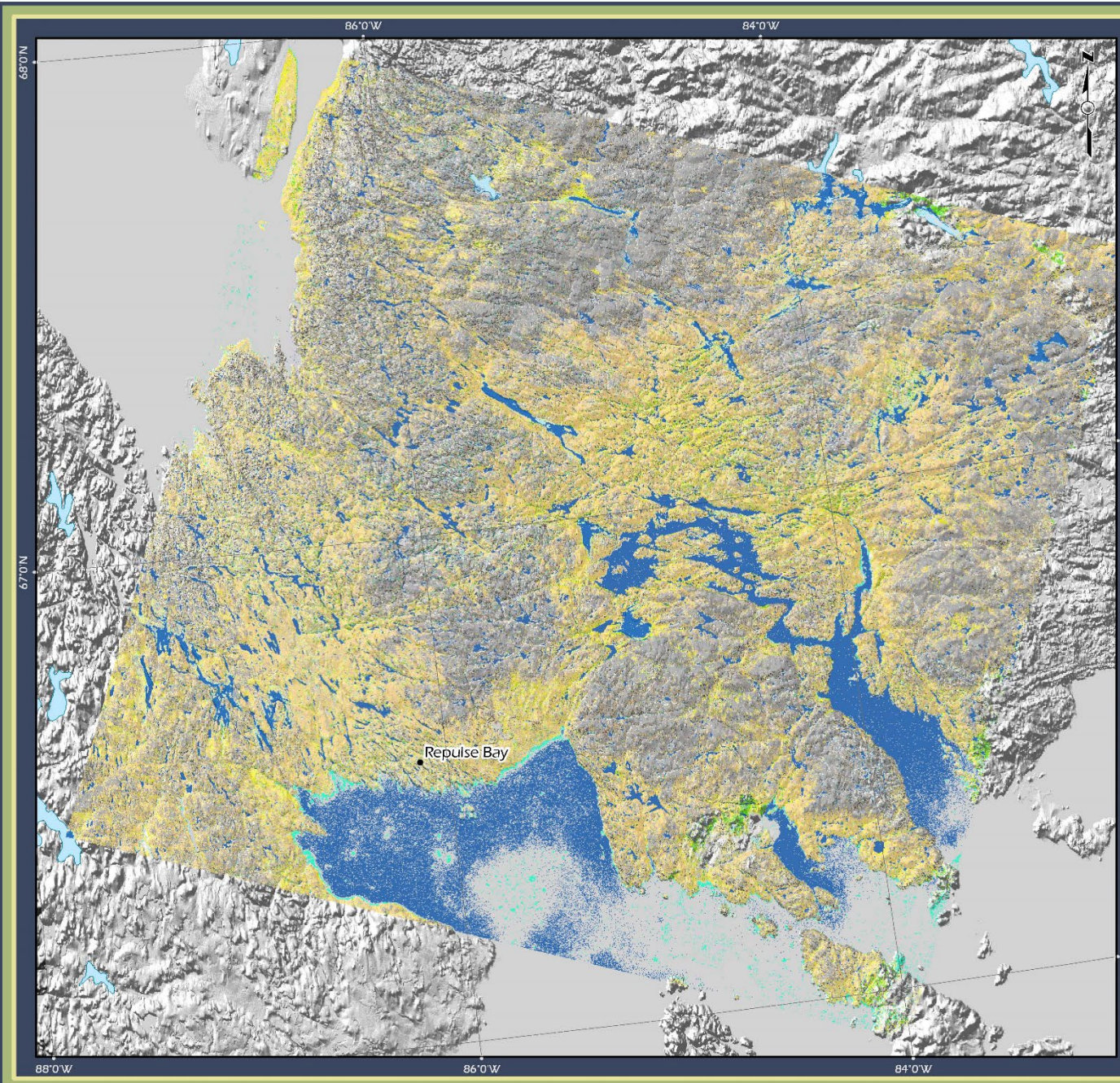


Figure 4.10.4
Wager Bay
Calving Density
(May 30 - Jun 25)



DRAFT

* Annual home ranges are from the following publication: Nagy, J. A., D. L. Johnson, N. C. Larter, M. W. Campbell, A. E. Derocher, A. Kelly, M. Dumond, D. Allaire, and B. Croft. 2011. Subpopulation structure of caribou (*Rangifer tarandus* L.) in arctic and subarctic Canada. *Ecological Applications* [doi:10.1890/10-1410.1].



Lyon Inlet ELC Mapping

Legend

- Towns/Villages
- Lyon Inlet ELC Groups**
- | | |
|-----------------------|---------------------|
| Lichen Association | Dry Peat |
| Shrub | Rock |
| Shrub Association | Rock Association |
| Moss | Boulder |
| Moss Association | Boulder Association |
| Carex | Gravel |
| Carex - wet | Sand |
| Carex - dry | Snow |
| Graminoid | Water |
| Graminoid Association | |



Data Sources:
 Natural Resources Canada
 Department of Environment (Gov't of Nunavut)
 Caslys Consulting Ltd.



Prepared for:



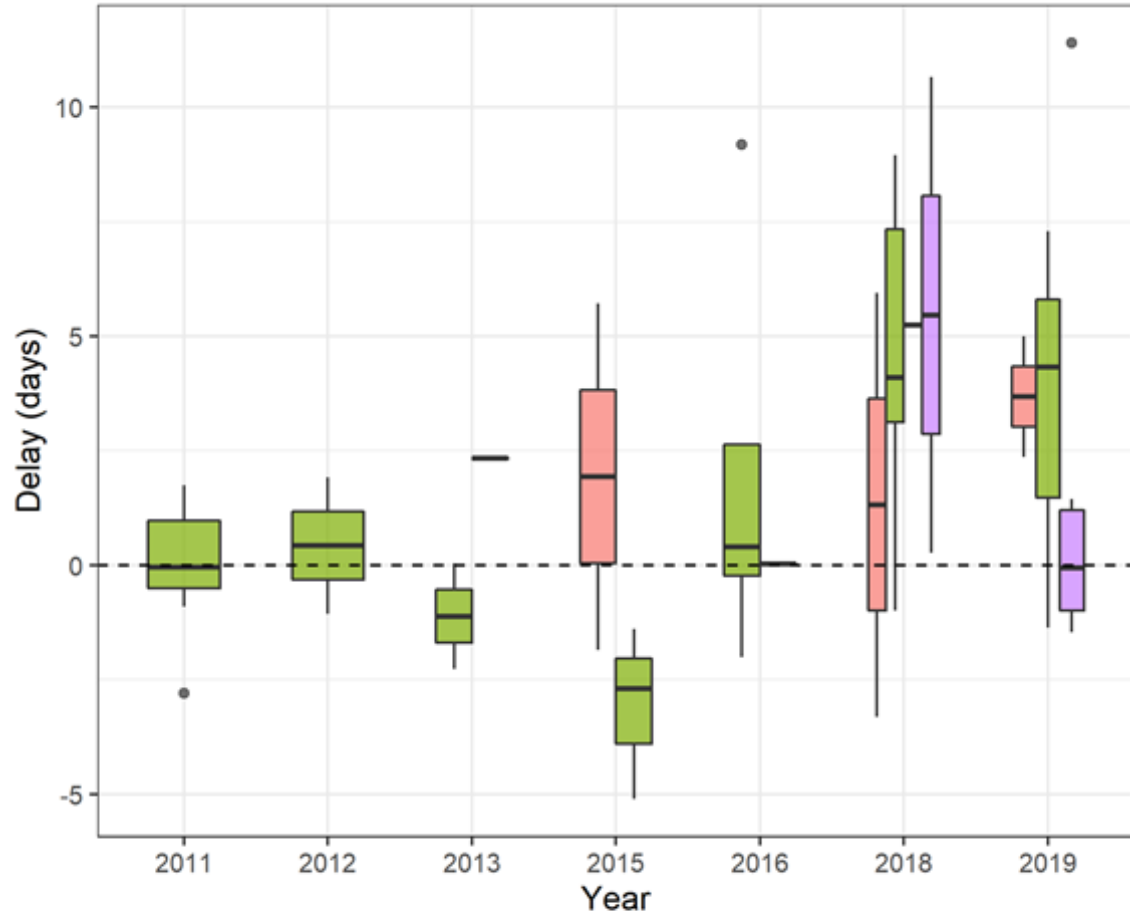
By:
CASLYS Consulting Ltd.

Oct 2006

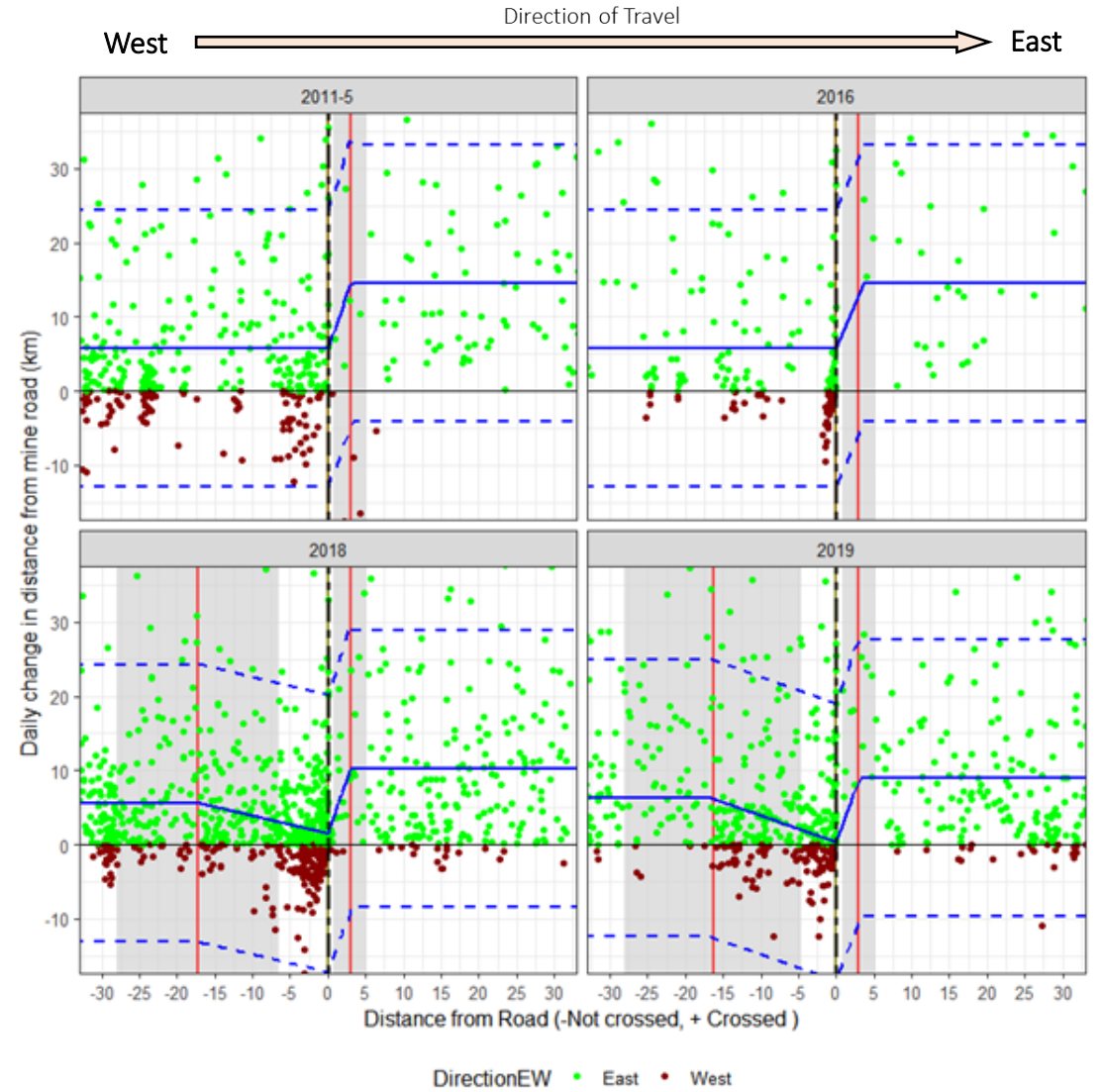
Land Use Planning



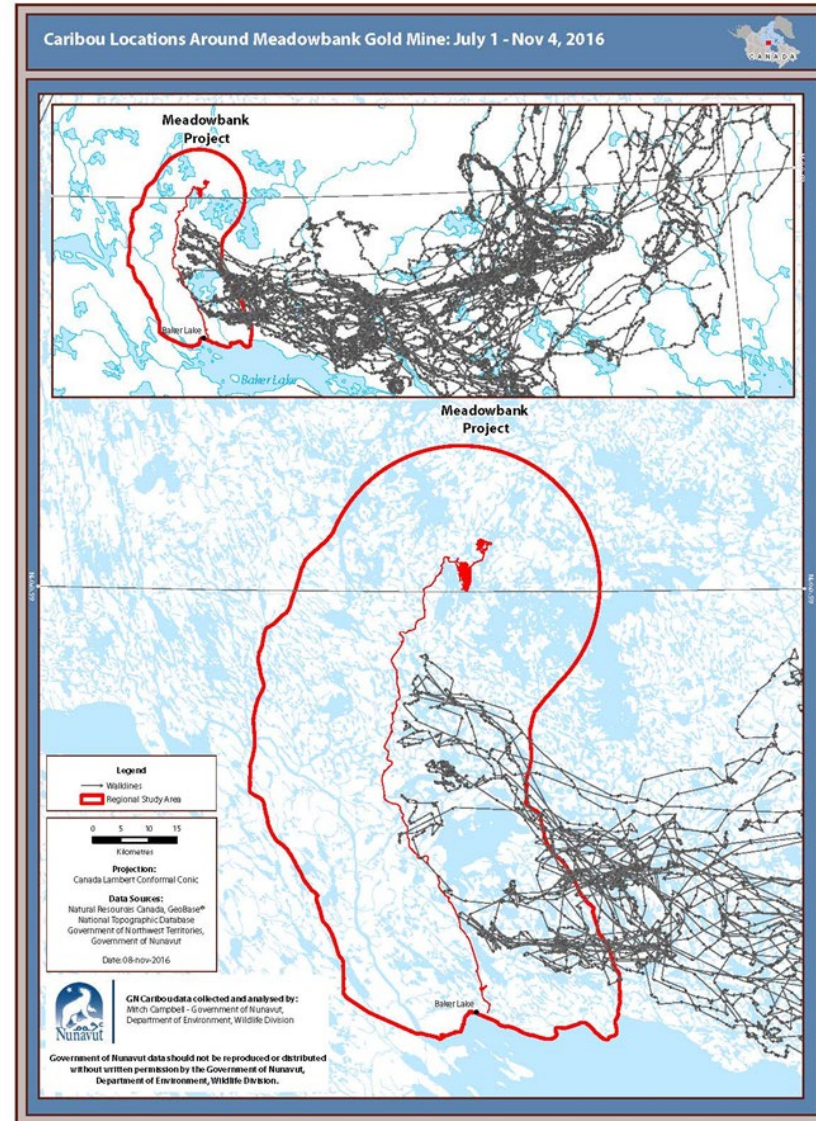
Significant Impacts Found

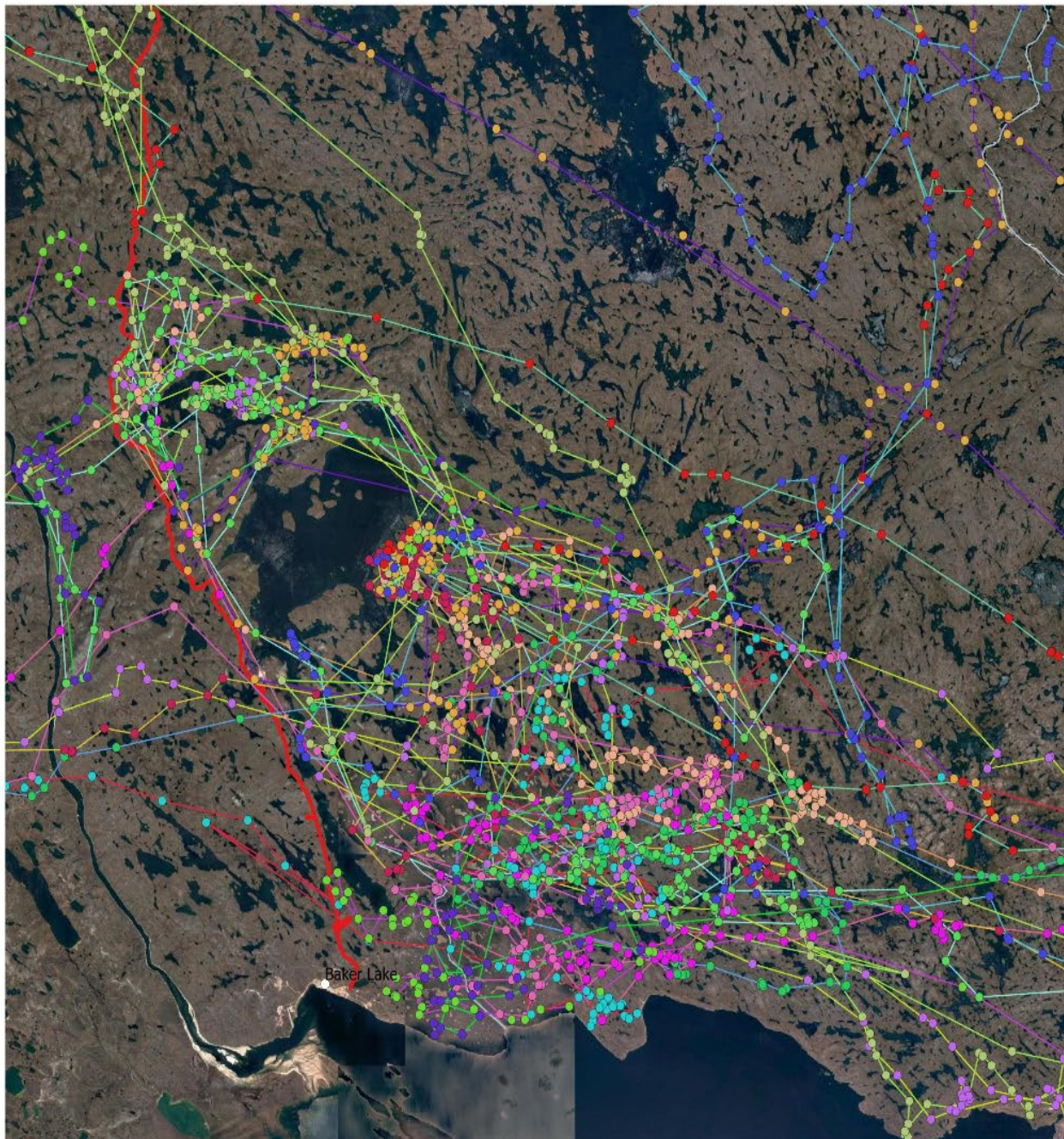


Herds Ahiak Lorillard Unknown Wager Bay



Impacts of Roads on Migration





Legend

Caribou collars

- BL0600415
- BL0640415
- BL0730416
- BL0750416
- BL0760416
- BL201733
- BL2018002
- BL2018003
- BL2018004
- BL2018005
- BL2018011
- BL2018013
- BL2018016
- BL2018017
- BL2018020
- BL2018024
- BL2018054

**August 15th through
November 17th,
2018**

10 0 10 km

