

Wildlife Monitoring in the Wool Bay/Drybones Bay area, Great Slave Lake

Dean Cluff

Regional Biologist

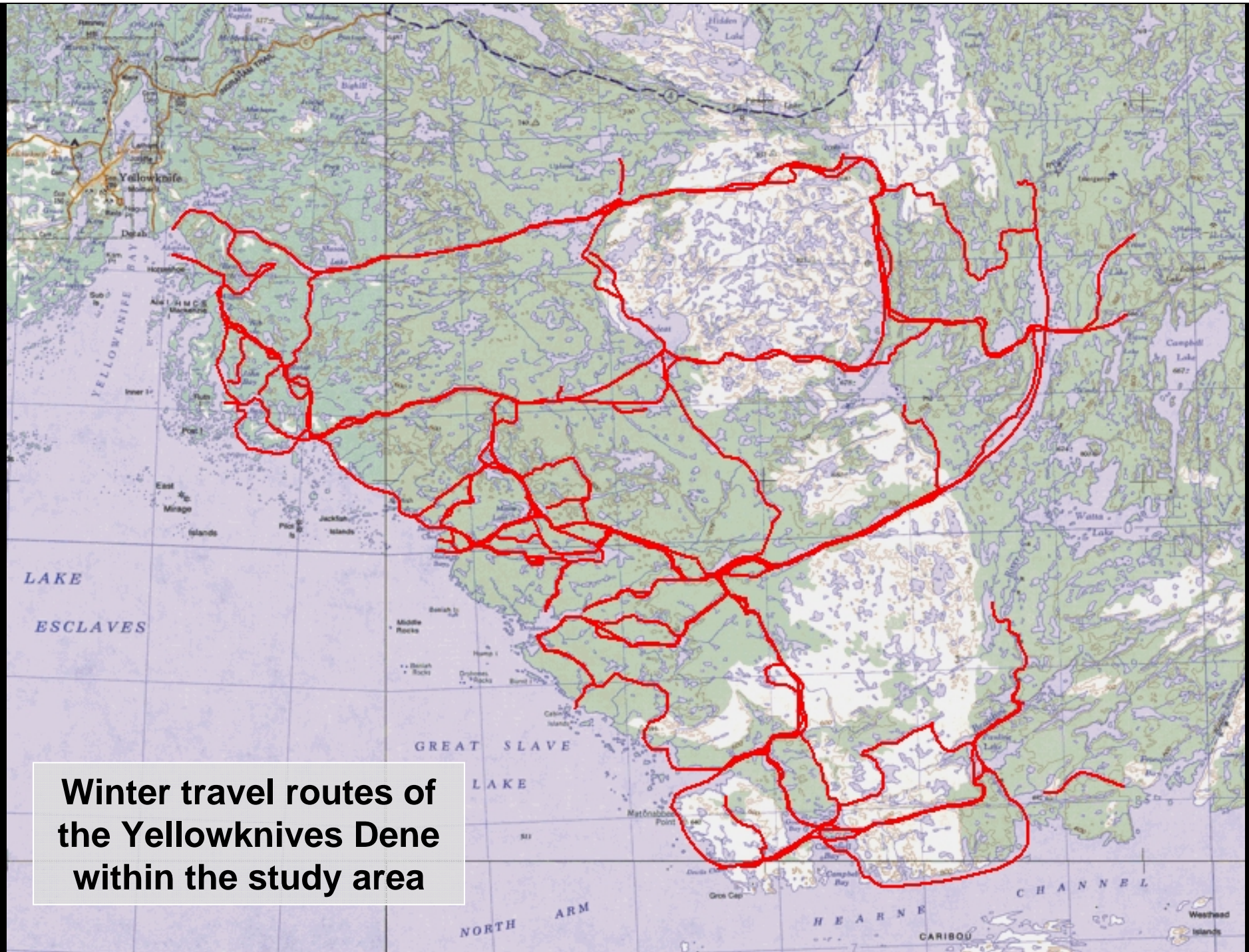
North Slave Region

GNWT – Environment & Natural Resources

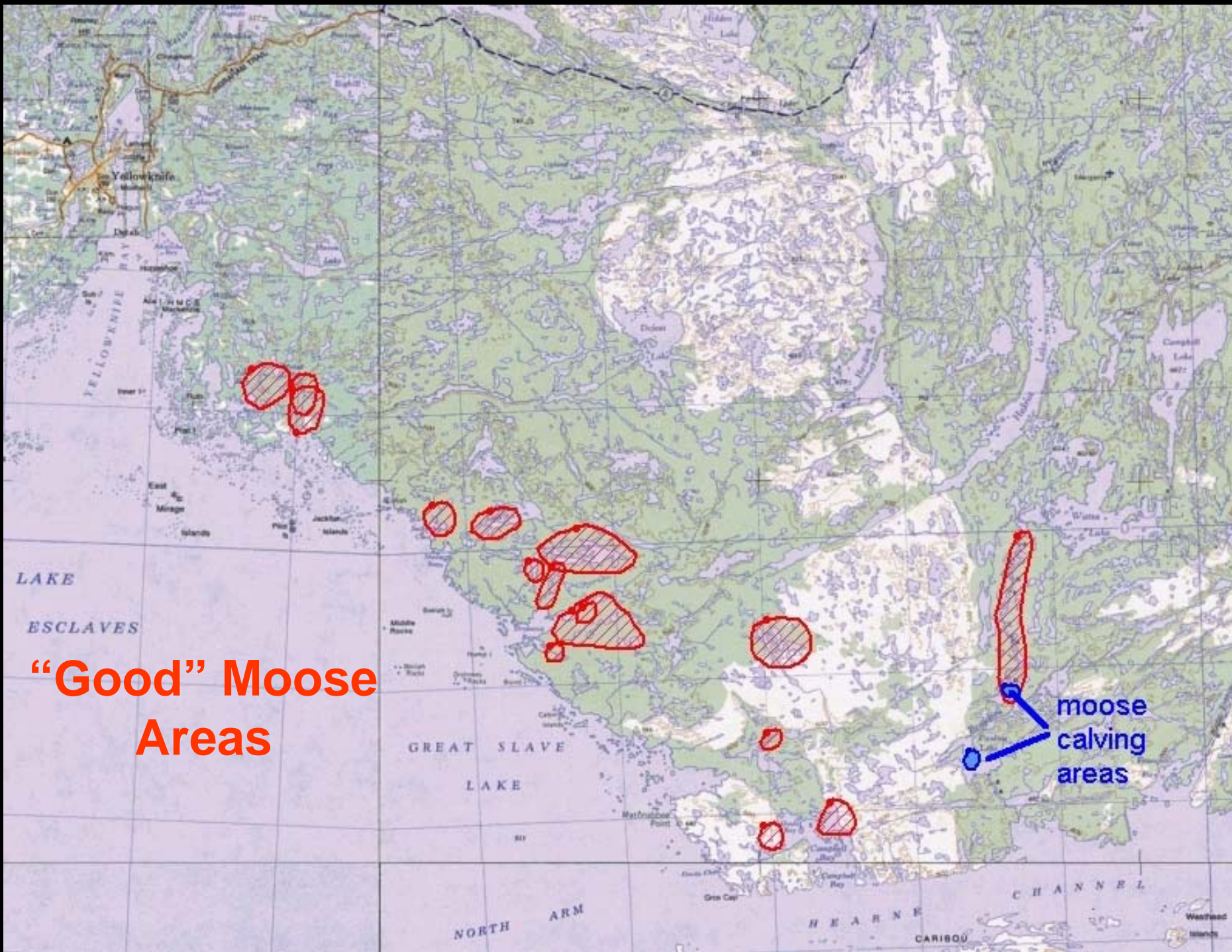


**Yellowknives Dene elders and hunters
– Drybones Bay workshop July 2003**





Winter travel routes of the Yellowknives Dene within the study area



“Good” Moose Areas

moose calving areas

Furbearer Areas

Beaver

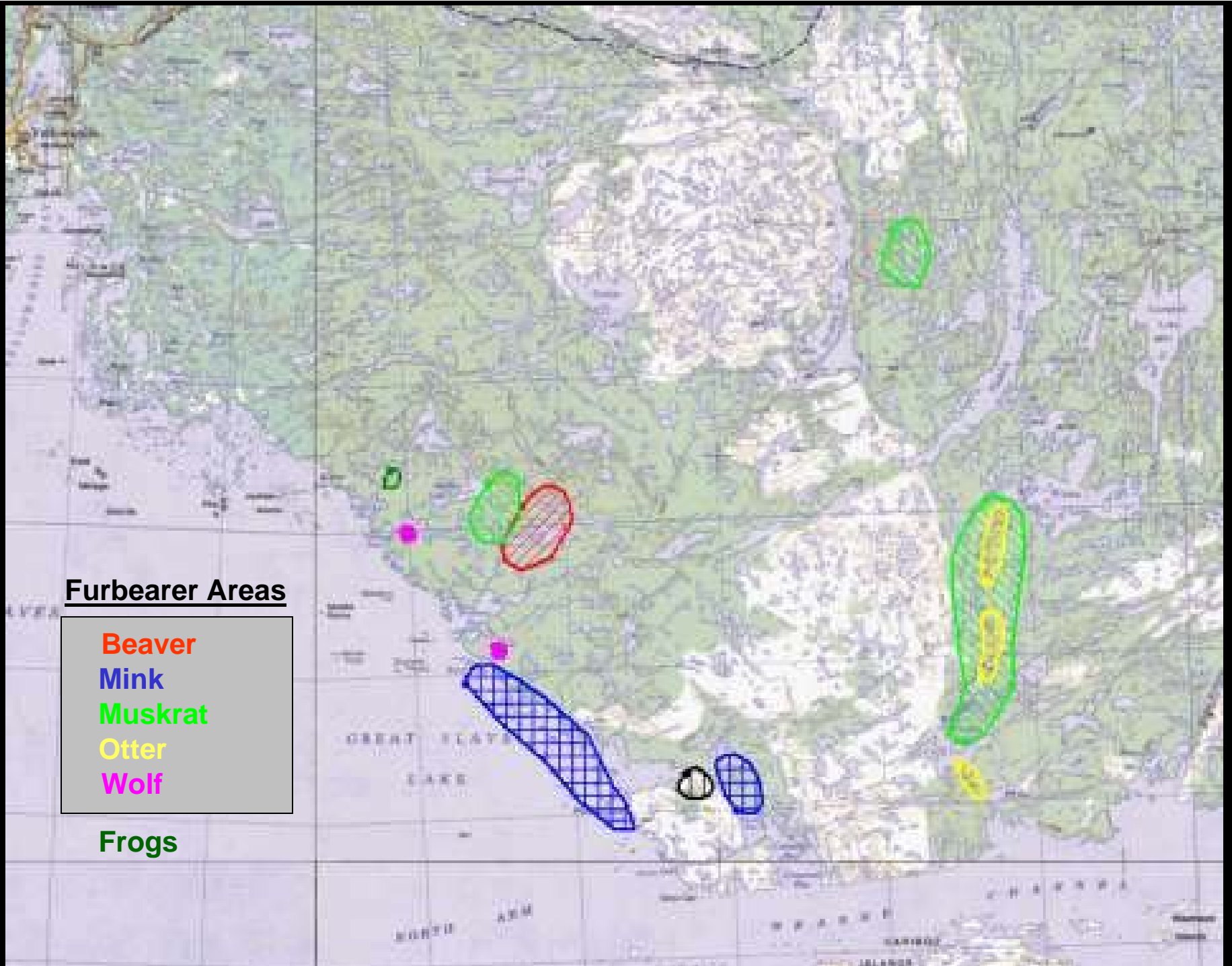
Mink

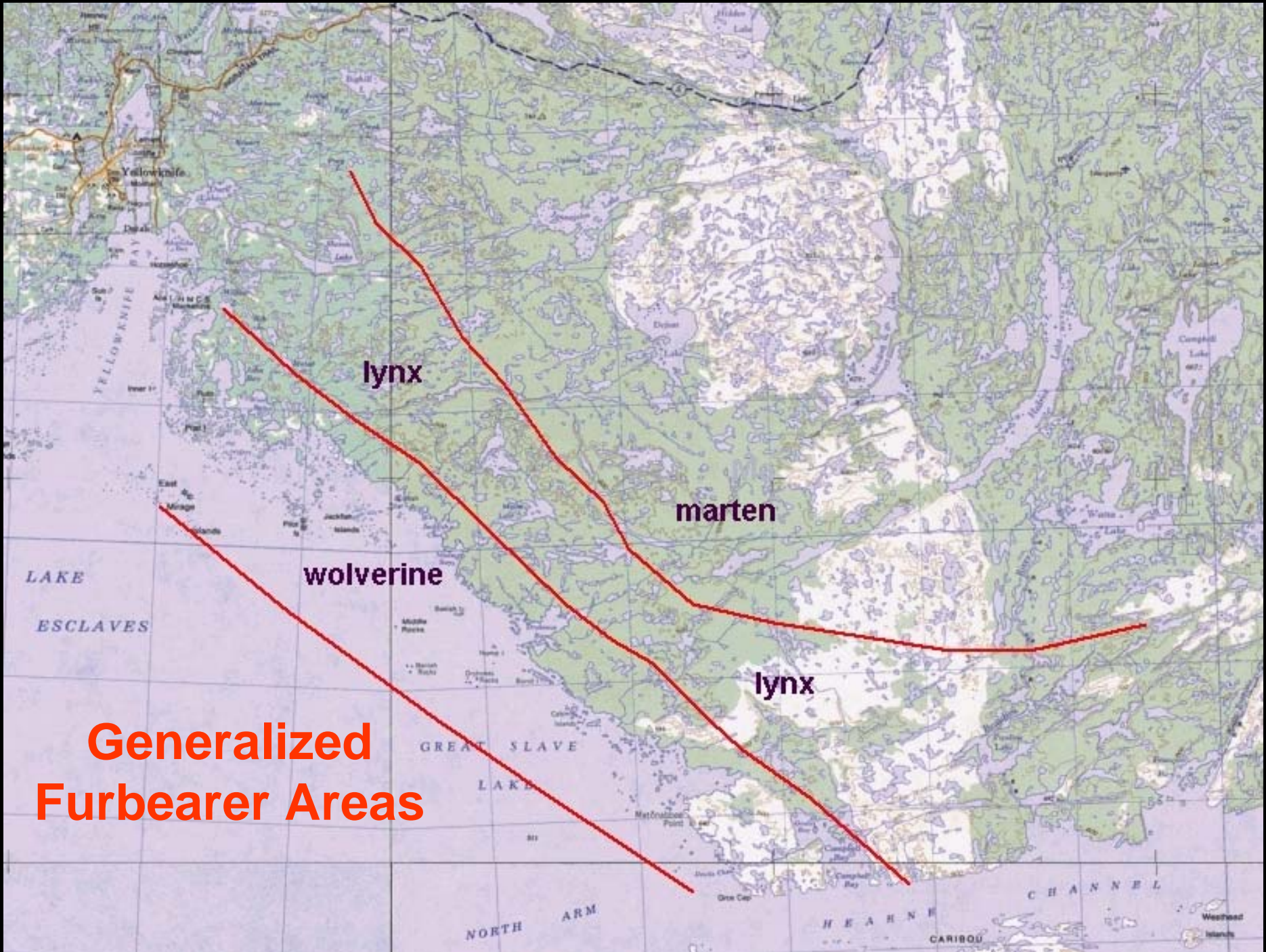
Muskrat

Otter

Wolf

Frogs



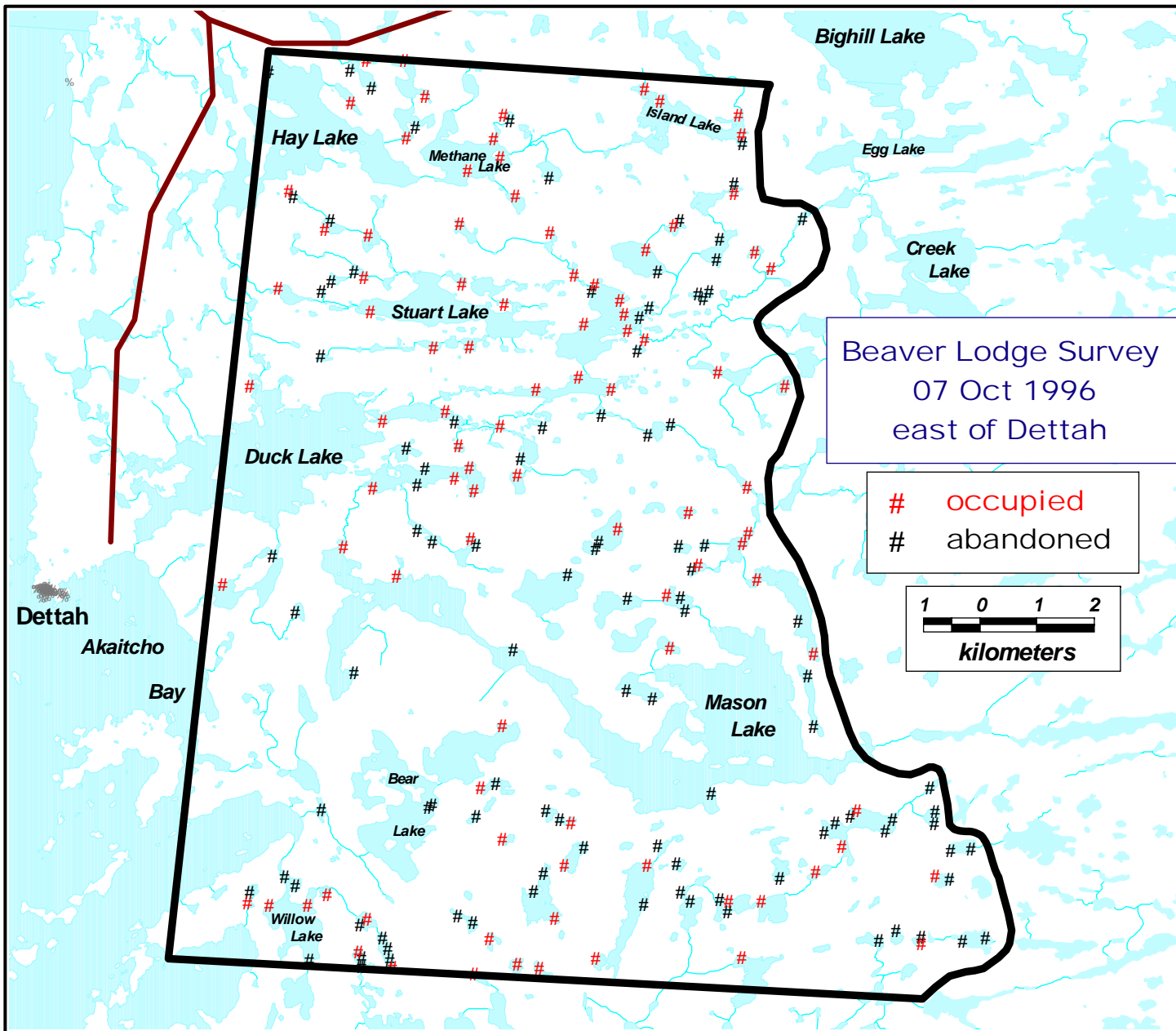


**Generalized
Furbearer Areas**

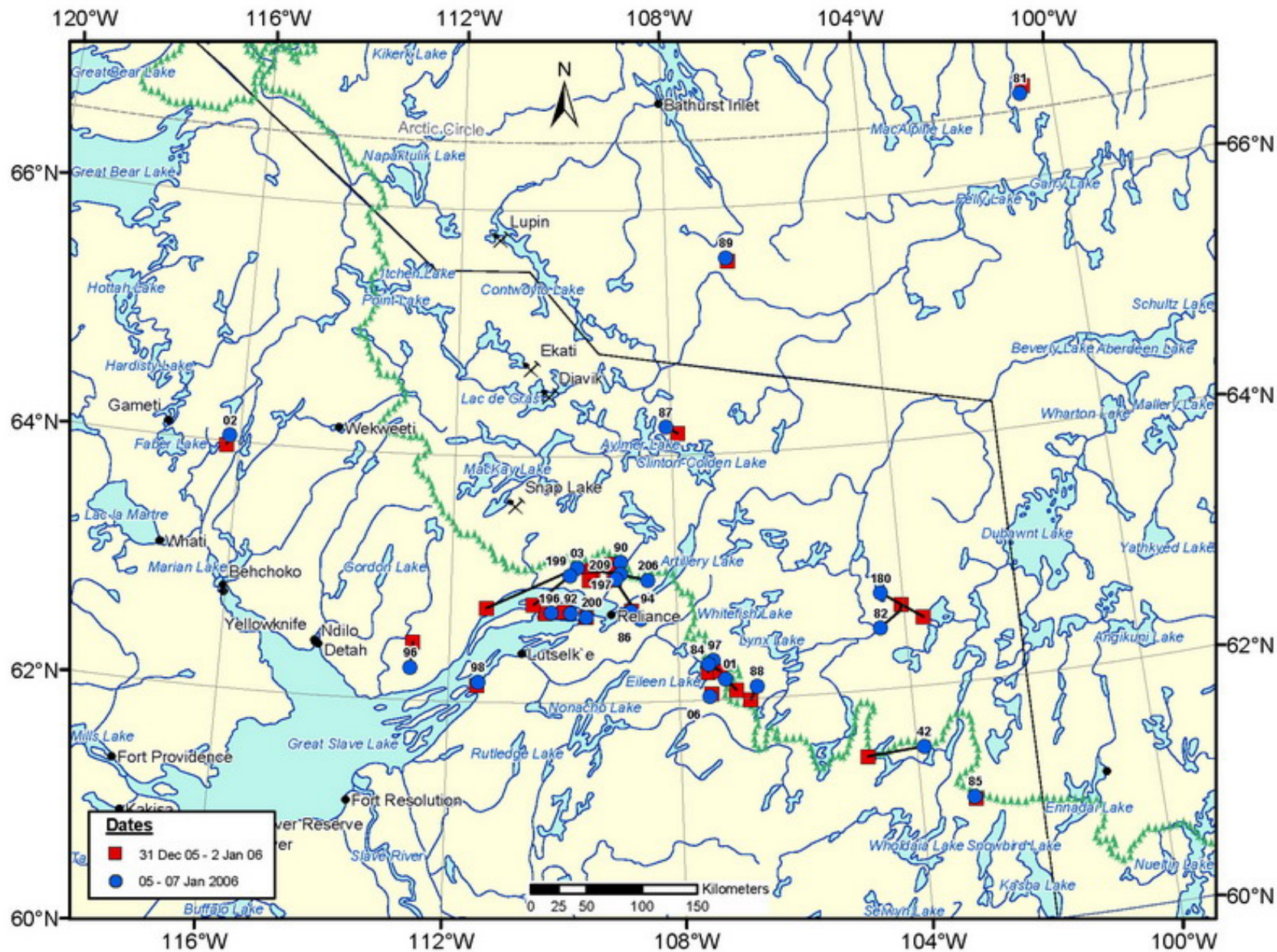
Drybones Bay Field Workshop

Summary

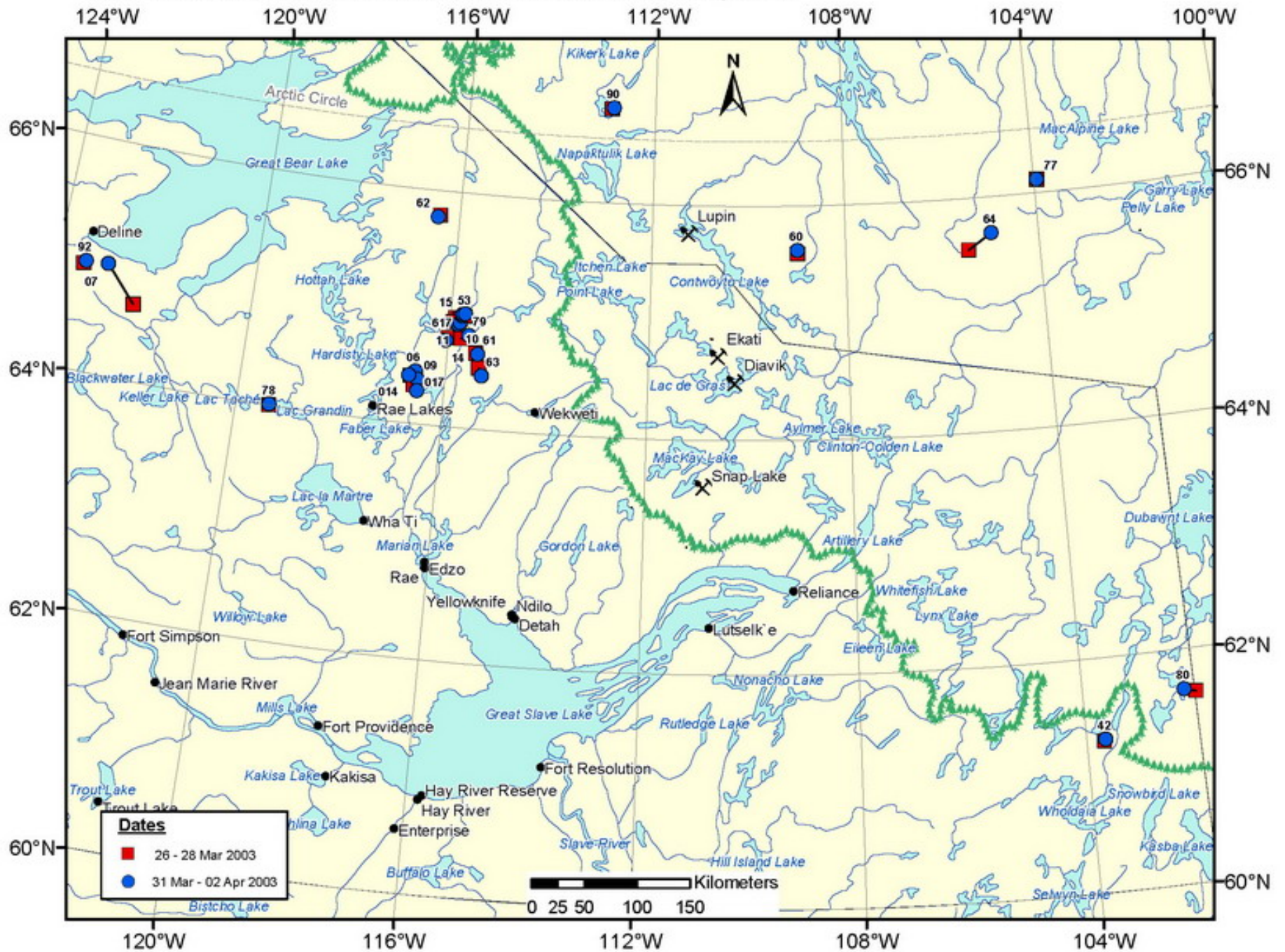
1. The Yellowknives Dene have traveled extensively over the land within the study area and beyond.
2. Repeated moose sightings identified areas of “good” moose areas. Two calving areas were noted.
3. Seasonal migration of moose noted.
4. Sightings and areas frequented were identified for beaver, otter, mink, and muskrat.
5. Less specific information available for wolverine, lynx, and marten abundance.



07 Jan 2006, Movements of barren-ground caribou cows collared on winter ranges of Bathurst and adjacent herds.



Movements of satellite collared Bathurst caribou cows, 02 Apr 2003



Why Monitor Moose:

- moose as an indicator of land change
- moose are a secondary food source for North Slave communities
- moose are used as a traditional resource



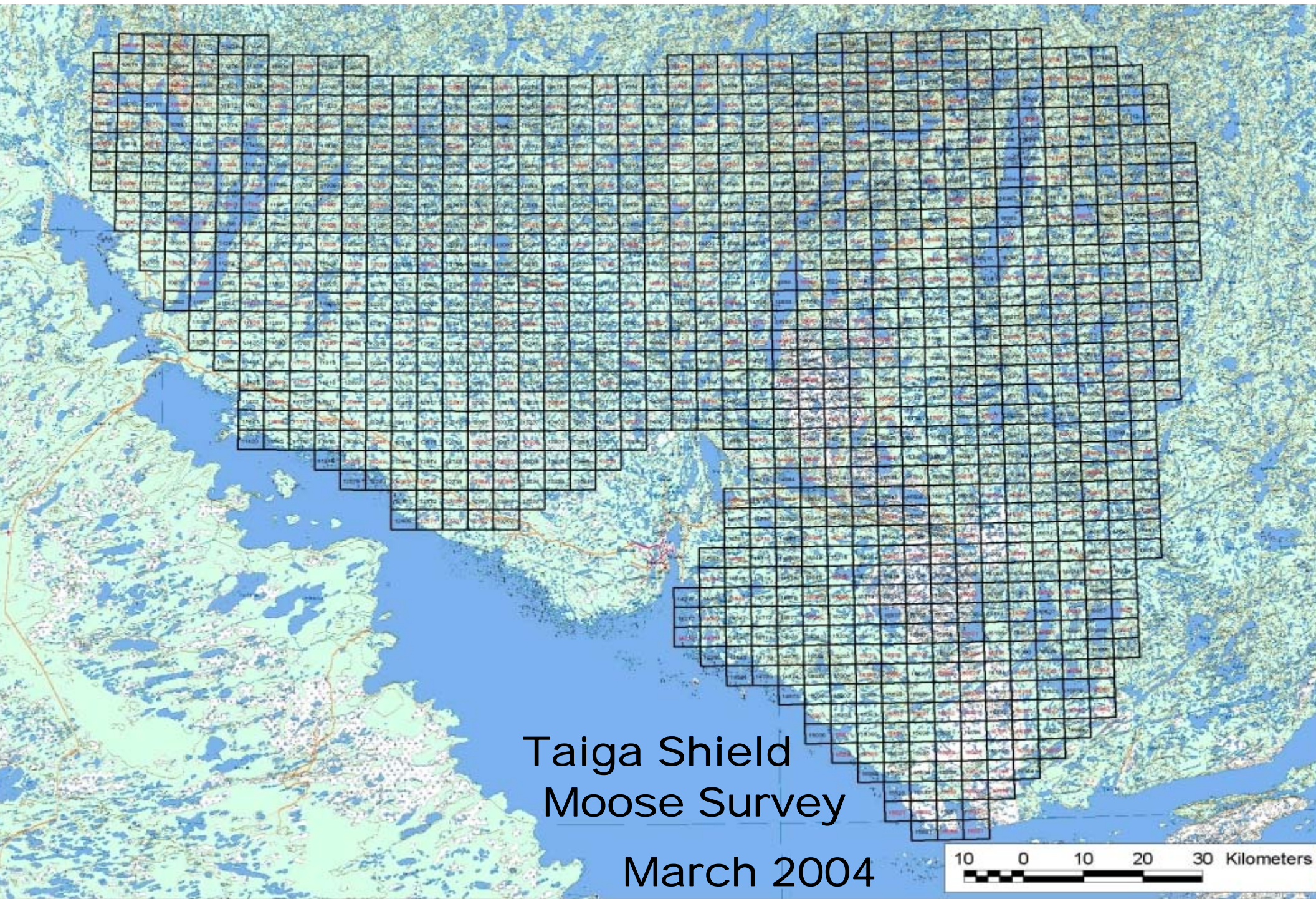
Key Moose Monitoring Indicators

- Population size & trend
- Twinning estimates
- Presence of contaminants
- Areas of recent forest fires
- Presence of diseases & parasites
- Number harvested
- Age structure
- Calf/cow ratio
- Adult sex ratio

What an aerial survey for moose does ...

Key Moose Monitoring Indicators

- ✓ **Population size & trend**
- Twinning estimates
- Presence of contaminants
- Areas of recent forest fires
- Presence of diseases & parasites
- Number harvested
- Age structure
- ✓ **Calf/cow ratio**
- ✓ **Adult sex ratio**



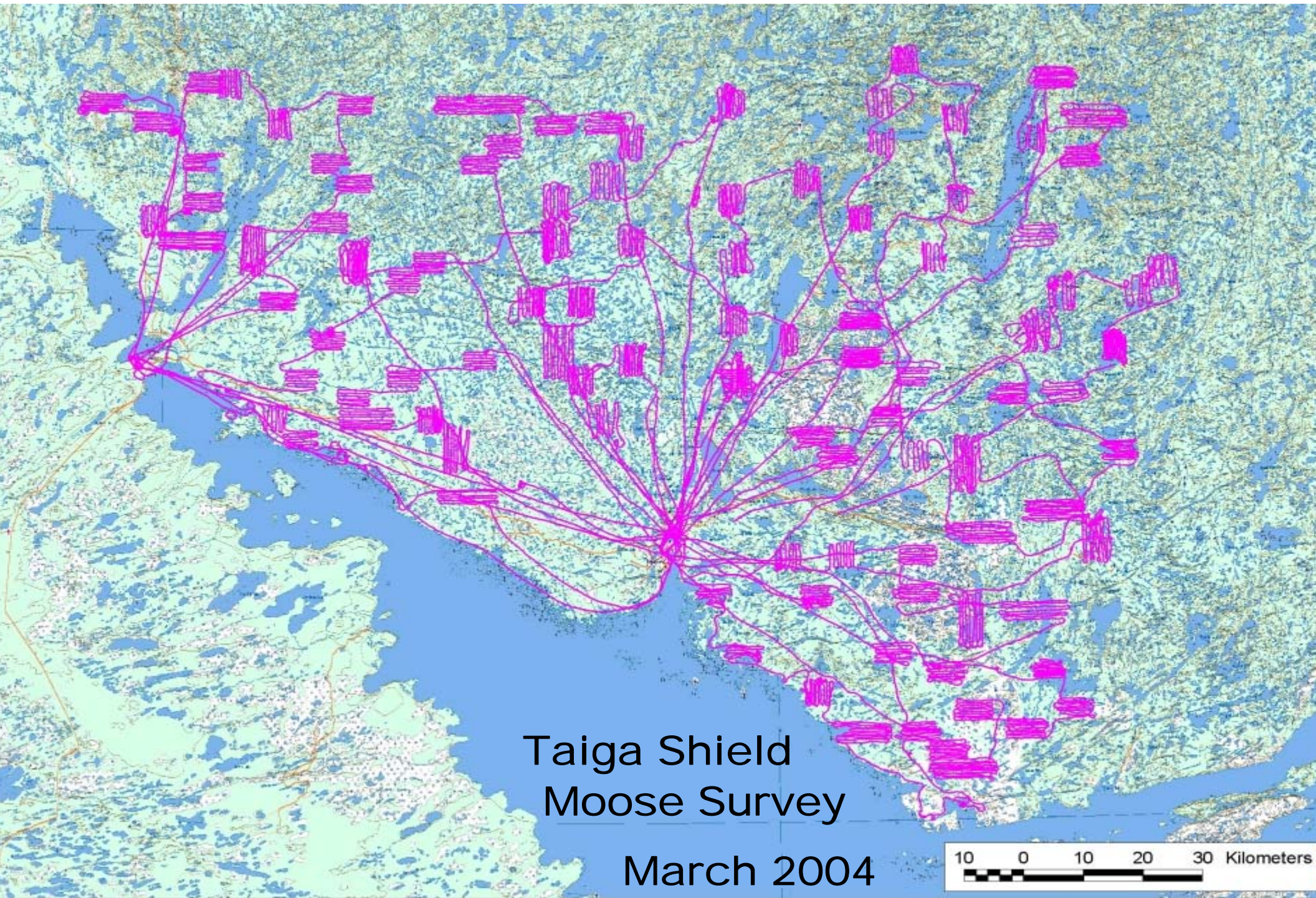
Taiga Shield
Moose Survey

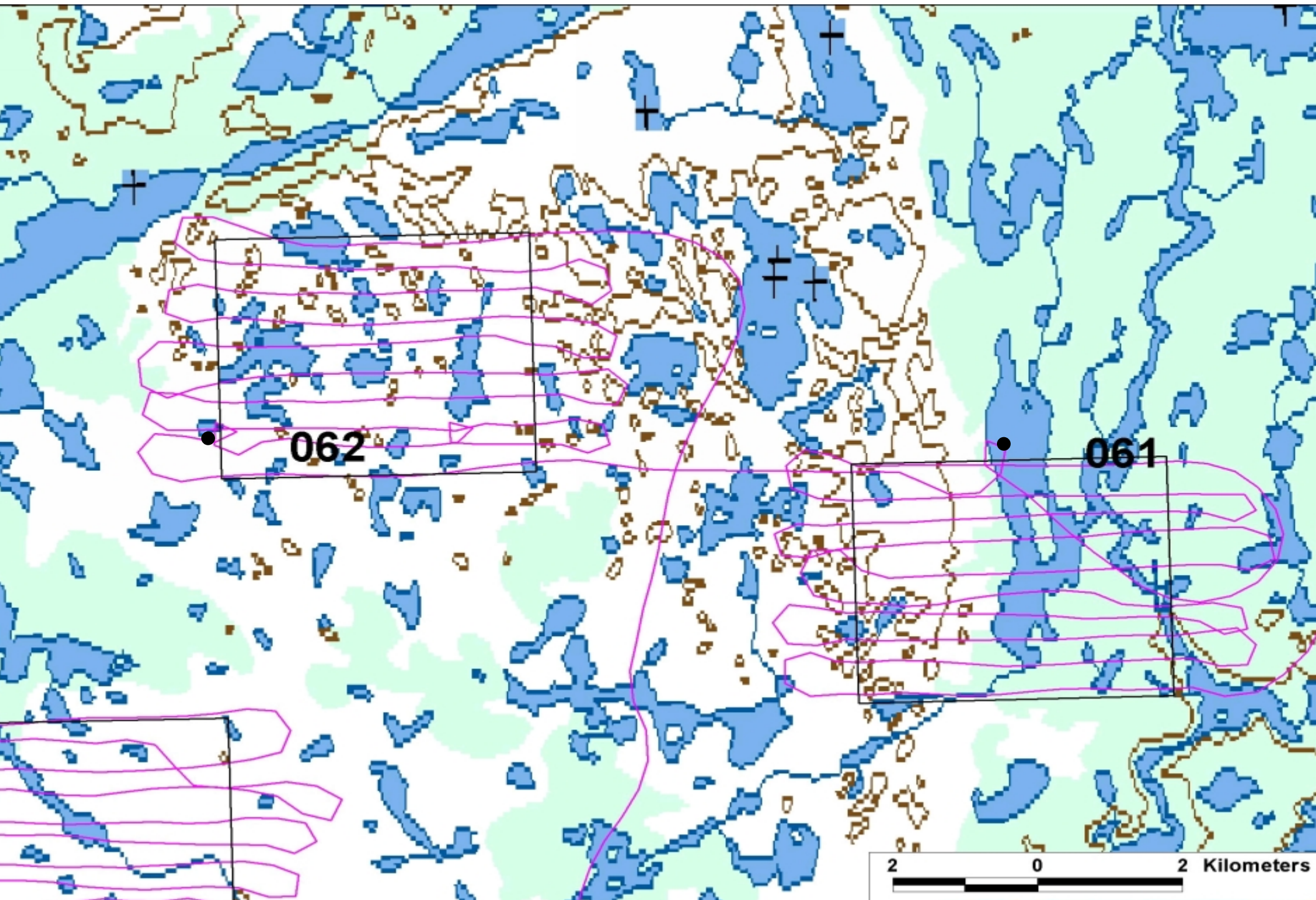
March 2004













Moose Survey Participants

Alfred Baillargeon

Henry Bend

Raymond Bourget

Magnus Bourque

Frank Camsell

Narcisse Chocolate

Dean Cluff

Joe Desjarlais

August Enzoë

Kevin Forrest

Jon Glover

Tracy Hillis

Hiroyuki Izumi

Margaret LeMouel

Anatasia Mackenzie

Morris Martin

George Martin

Joslyn Oosenbrug

Eddie Paul

Narcisse Rabesca

Charlie Sangris

Dave Taylor

Bill Turner

Bob Turner

Leon Weyallon

Janice Ziemann

Moose Survey Results

Taiga Shield Survey (1116 cells)

17,617 km² in area

Surveyed Grid (120 grid cells)

8 bulls, 16 cows, 0 unclassified, 9 calves = 33 moose

50 bulls:100 cows

56 calves:100 cows

All Sightings (149 grid cells)

21 bulls, 29 cows, 0 unclassified, 18 calves = 68 moose

72 bulls:100 cows

62 calves:100 cows

Moose Survey Results

Taiga Shield Survey Area (1116 cells)

All Sightings (149 grid cells)

21 bulls, 29 cows, 0 unclassified, 18 calves = 68 moose

72 bulls:100 cows

62 calves:100 cows

$68 \text{ moose} / 2,384 \text{ km}^2 = 2.9 \text{ moose} / 100 \text{ km}^2$

Community Moose Monitoring Project- North Slave Region

EXAMPLE

Name: _____

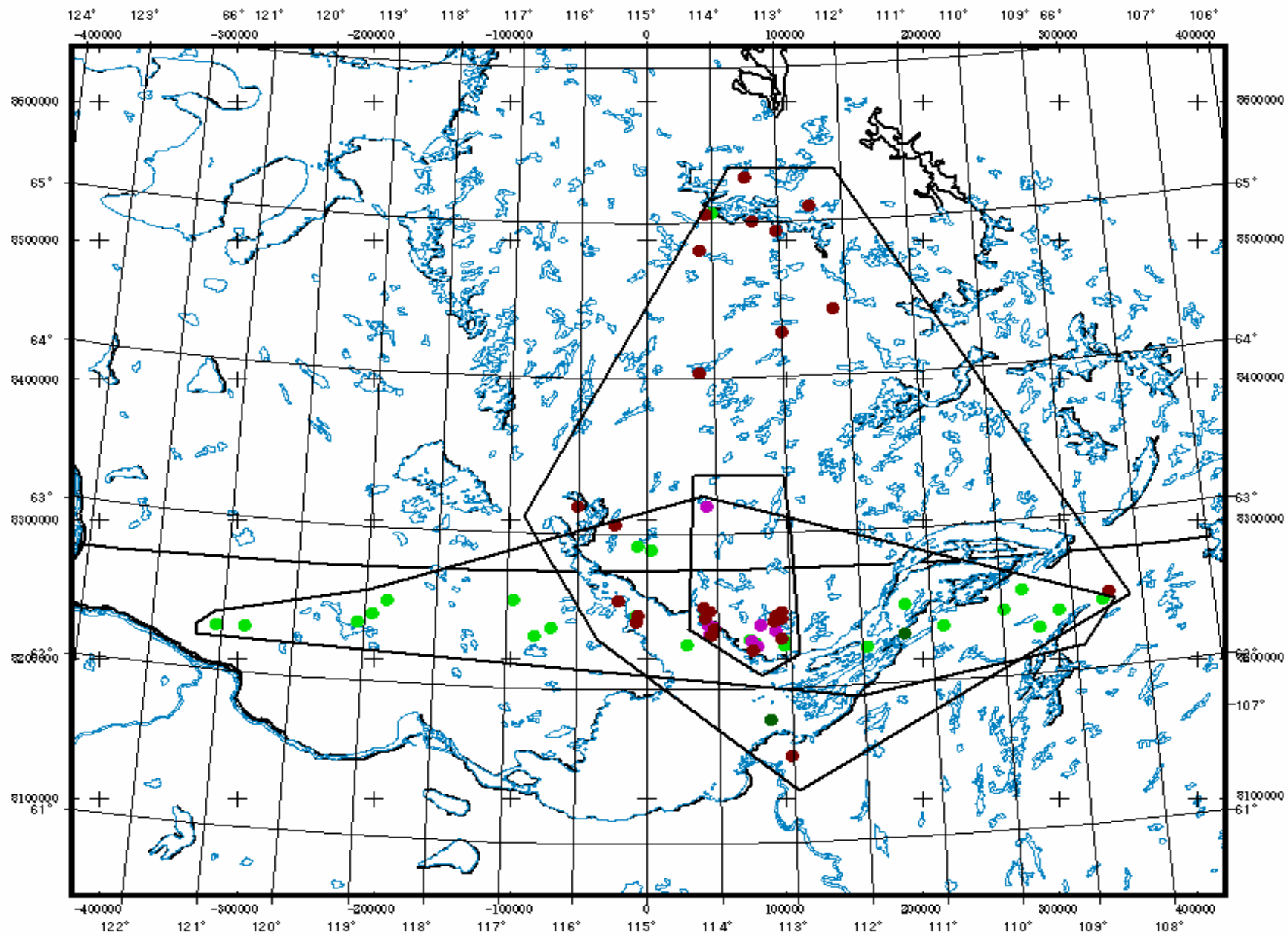
Address: _____

List Each Observation Separately

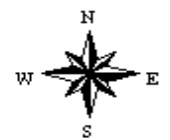
| Date | Total Number of Moose | Number of Adult Bulls | Number of Yearling Bulls | Number of Adult Cows | Number of Yearling Cows | Number of Calves | Location Description or Location Number on Map |
|---|-----------------------|-----------------------|--------------------------|----------------------|-------------------------|------------------|--|
| Sept. 6 | 2 | | | | 1 | 1 | Watson Lake |
| Comments: On the lakeshore. I think this cow and calf are the same ones I saw yesterday | | | | | | | |
| Sept. 25 | 1 | | | 1 | | | N 65.348/W 114.765 |
| Comments: In a burn on the hill. Young cow. Might be a yearling. | | | | | | | |
| Oct. 1 | 3 | 2 | | 1 | | | Grid number |
| Comment: bulls were calling back and forth. The ground and bushes were all torn up. Smelled like urine. | | | | | | | |
| Oct. 4 | 2 | | | | | | |
| Comment: Wading in wetland. Too far away to tell sex or age. Location marked on the map. | | | | | | | |
| | | | | | | | |

Community Moose Survey Response

- **2003-04** **20 participants 108 observations**
20 % return of the forms.
- **2004-05** **9 participants 19 observation**
9 % return of forms.
- **2005-06** **23 participants 62 observations**
15.3 % return of the forms.



- Community survey data.txt
- 2003
 - 2004
 - 2005
 - 2006
 - Waterbody.shp
 - Nwt8lake.shp

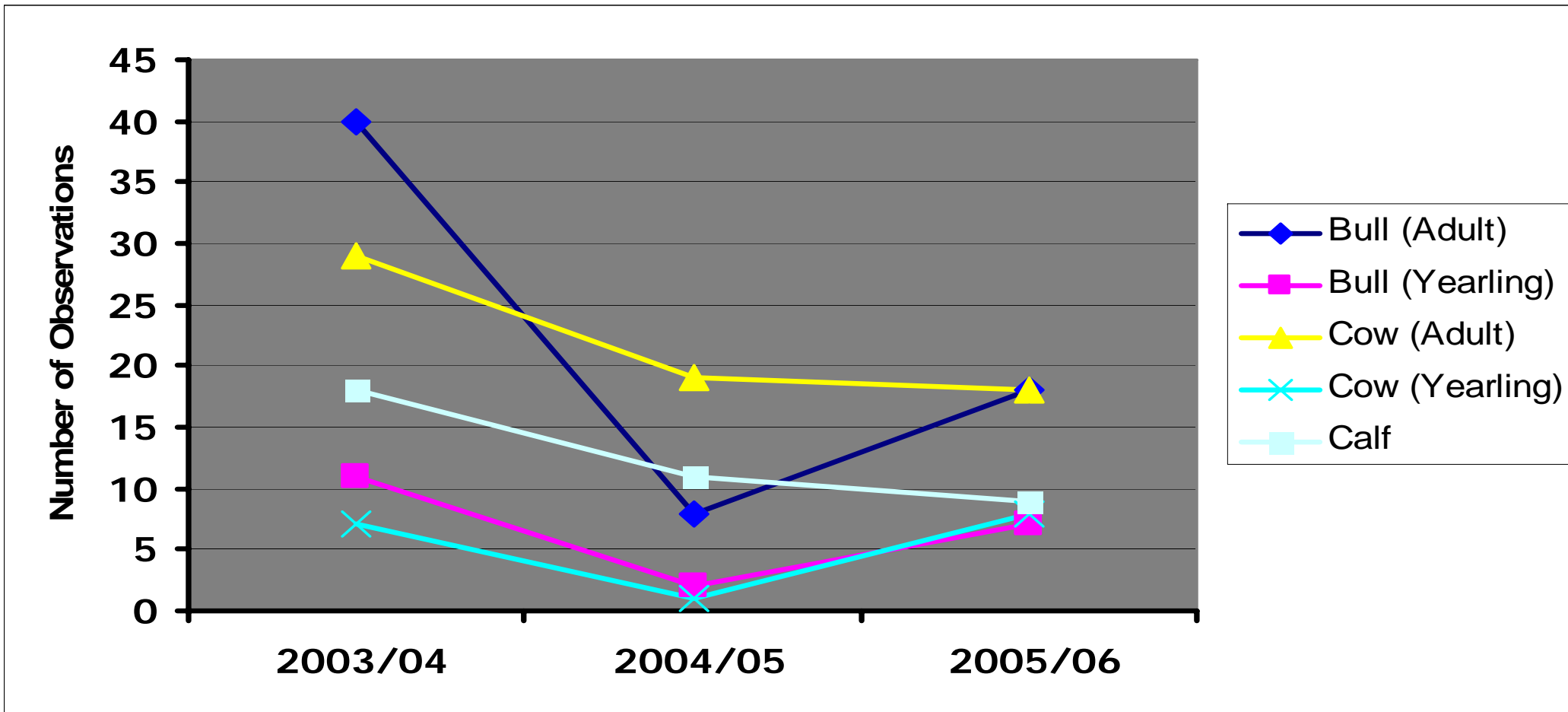


50 0 50 100 150 200 250 300 350 400 450 500 Kilometers

Table 1: Age and Sex of moose observed during the survey.

| SEX | AGE CLASS | 2003/04 | 2004/05 | 2005/06 |
|---------|-----------|---------|---------|---------|
| Bull | Adult | 40 | 8 | 18 |
| | Yearling | 11 | 2 | 7 |
| Cow | Adult | 29 | 19 | 19 |
| | Yearling | 7 | 1 | 8 |
| Calves | Unknown | 18 | 11 | 10 |
| Unknown | Unknown | 3 | 0 | 0 |

Figure 1. Observations of bulls, cows and calves for the past three years of the survey.



Wildlife Sighting – North Slave Region, NWT

Species:

Number Seen:

(exact or estimated)

Location:

(be as specific as possible; or mark on a map in a GNWT Wildlife office)

Date: *(include year)*

Time of Day: *(include AM or PM)*

What was it doing when you saw it:

(not in great detail; however “running south along the road, then into the bush on the west side” is better than just “running”)

Other Comments / Interesting markings?:

(may be anything interesting about the sighting – Was it feeding on something? Did the animal appear to have a limp? etc.)

Name of Person(s) who saw it (and contact #):

Please return to: Regional Biologist, North Slave Region, Environment & Natural Resources,
Government of the NWT, 3803 Bretzlaff Drive (Forestry Building), Yellowknife, NT X1A 2P9
Tel: 867-873-7783 Fax: 867-873-6230 Email: dean_cluff@gov.nt.ca

Summary

- 1. A moose survey in March 2004 provided baseline population data for the Taiga Shield ecozone.**
- 2. A follow-up moose survey in the Taiga Shield has been proposed for November 2007.**
- 3. Community moose monitoring program established.**
- 4. Barren-ground caribou are occasional visitors in winter.**
- 5. Furbearer info mostly limited to harvest & sighting records.**