### Census Results for Bluenose-West, Bluenose-East, and Cape Bathurst Barren-ground Caribou Herds, July 2006



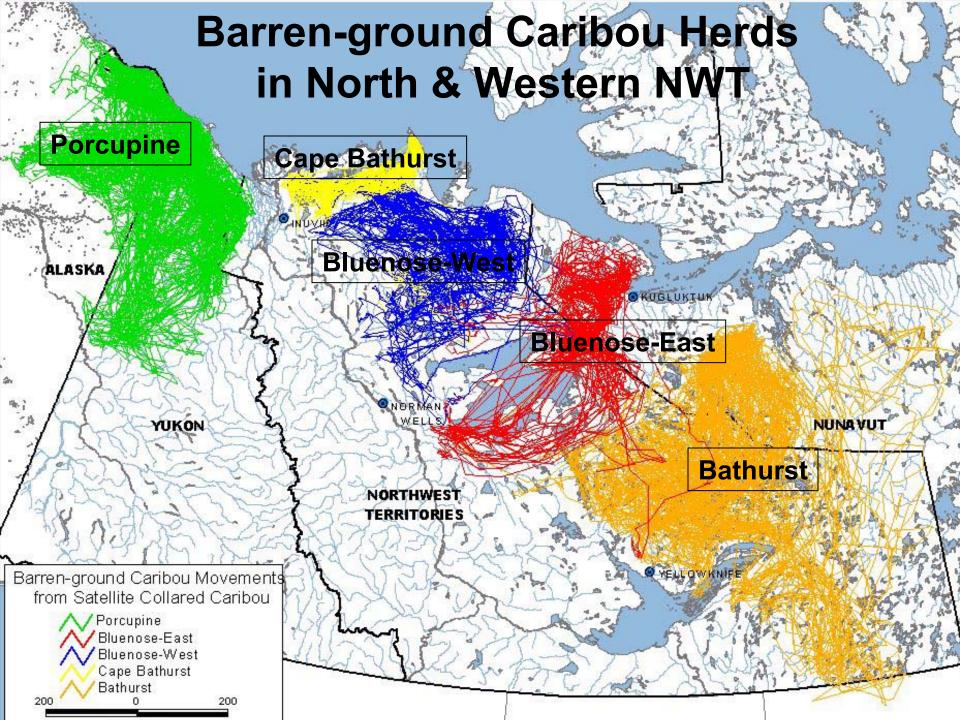
Sahtu Renewable Resources Board Tulita

20 Sep 2006

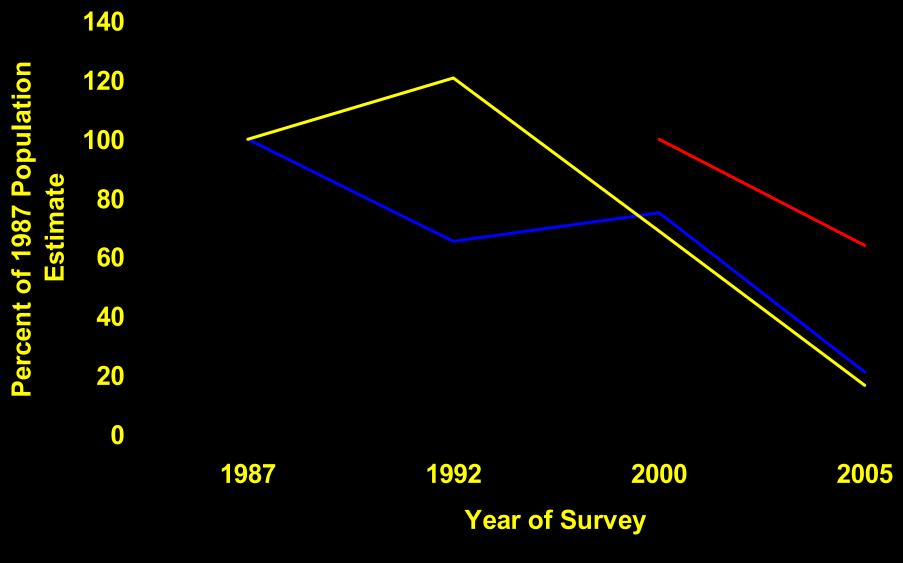
John Nagy, Alasdair Veitch, & Boyan Tracz, ENR, GNWT Mathieu Dumond, Dept. of Environment Gov't of Nunavut

Northwest Territories Environment and Natural Resources





### Population Trends: 1987-2005



- Bluenose-West - Cape Bathurst - Bluenose-East

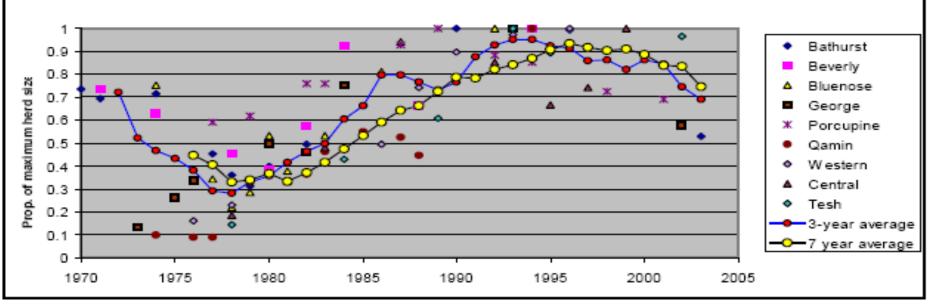
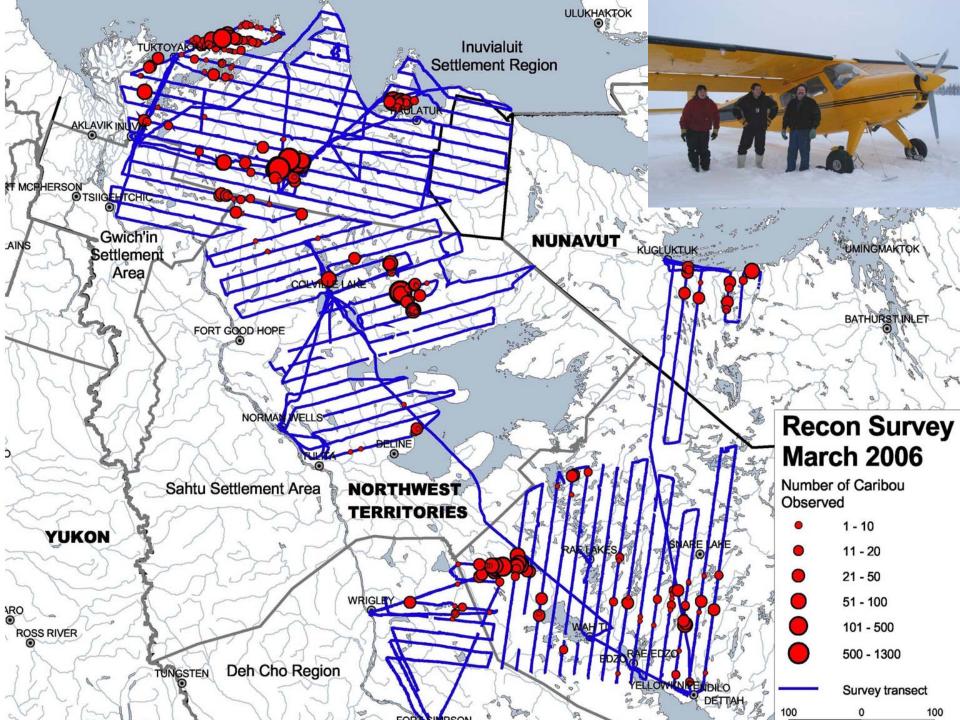


Figure 2.1. Relative sizes of North American migratory caribou, 1970 – 2003.

Pre-Collaring Aerial Surveys March 2006





# Radiocollar Deployment and Response of Caribou to Capture



# Capture and collaring 18 Mar - 1 Apr 2006

### Capture Crews – Inuvik and Sahtu



## **Number of Caribou Captured**

### Total = 85 ( 43 F and 42 M

# **Cape Bathurst**



## **Bluenose-West**

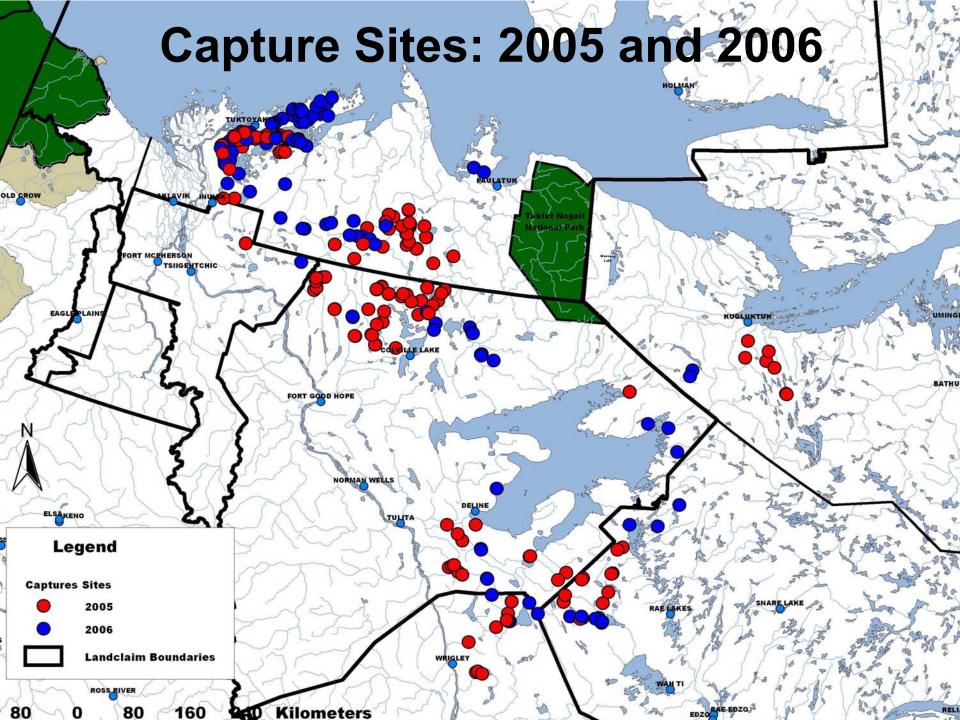
### Total = 29 ( 15 F and 14 M

# 2005: 70 collared (52 F and 18 M)

## **Bluenose-East**

Total = 26 (13 F and 13 M

### 2006: 50 collared (37 F and 13 M)



# Response to Capture

M

DANOT









# How did we track the radiocollared caribou?

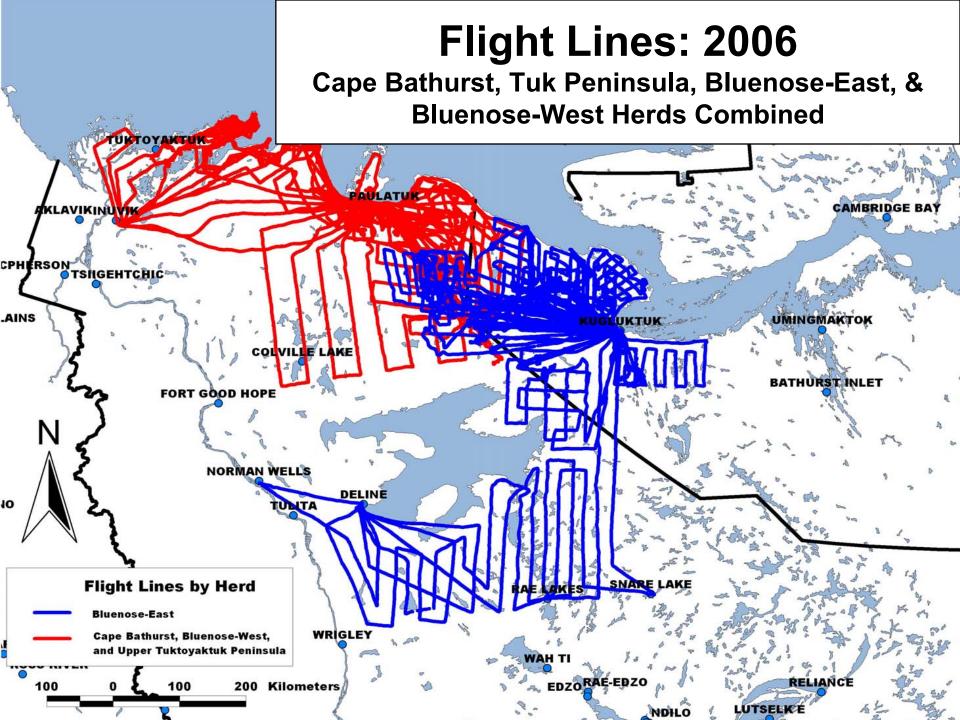




We flew surveys in late June:

- to locate and verify the status of all collared caribou.
  these are the collars available for the photocensus
- to monitor movements of caribou with VHF collars
- to find out when we had good groups for photography

Movements of satellite collared caribou by email to crews in Paulatuk & Kugluktuk



# Where did we find the collared caribou?



### Location of collared cows relative to where they were captured



- Bluenose-East
- **Bluenose-West**
- **Cape Bathurst**

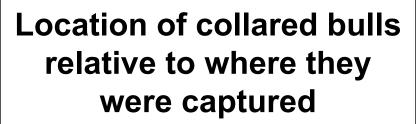
O

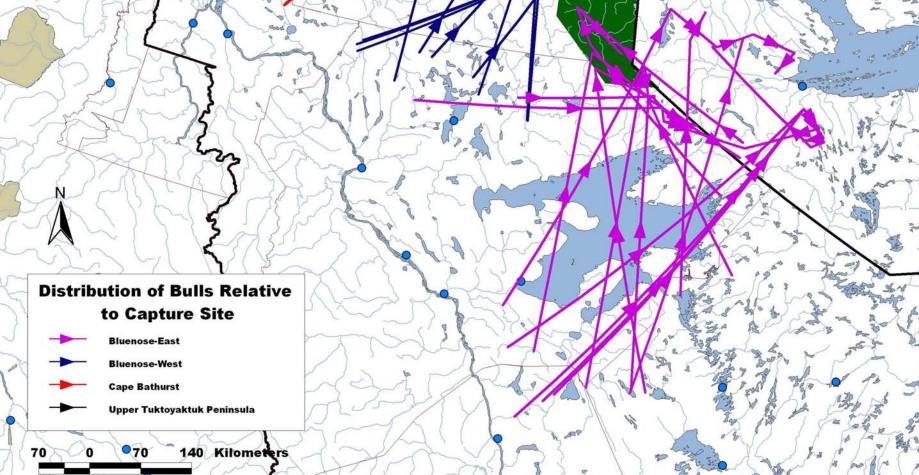
Upper Tuktoyaktuk Peninsula

70

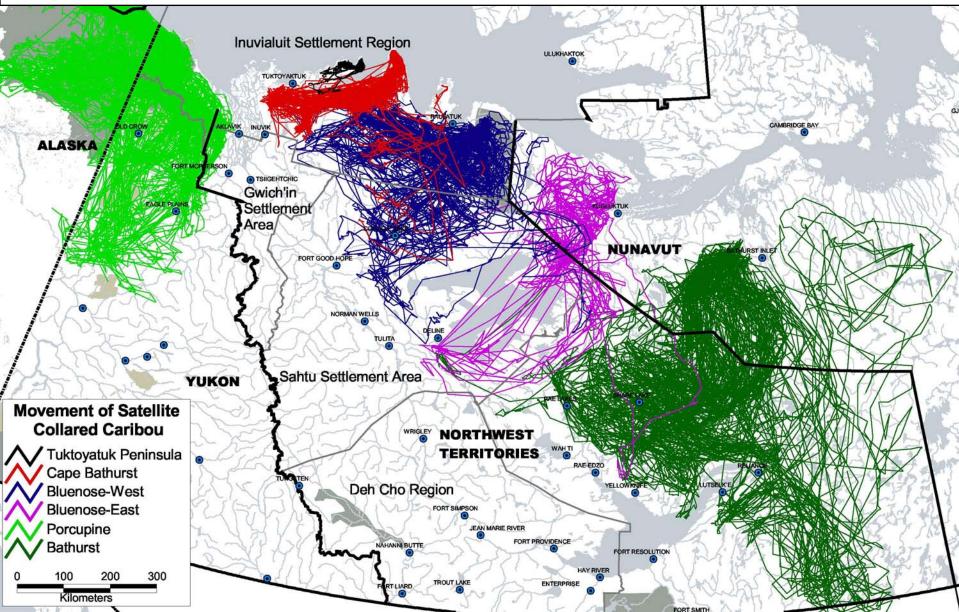
N

Kilometers





### Distribution of Satellite Collared Cows by Herd (Alaska, NWT, Nunavut)



# When and Where we Photographed the Herds



•Bluenose-East -June 22; 5, 8-13 July

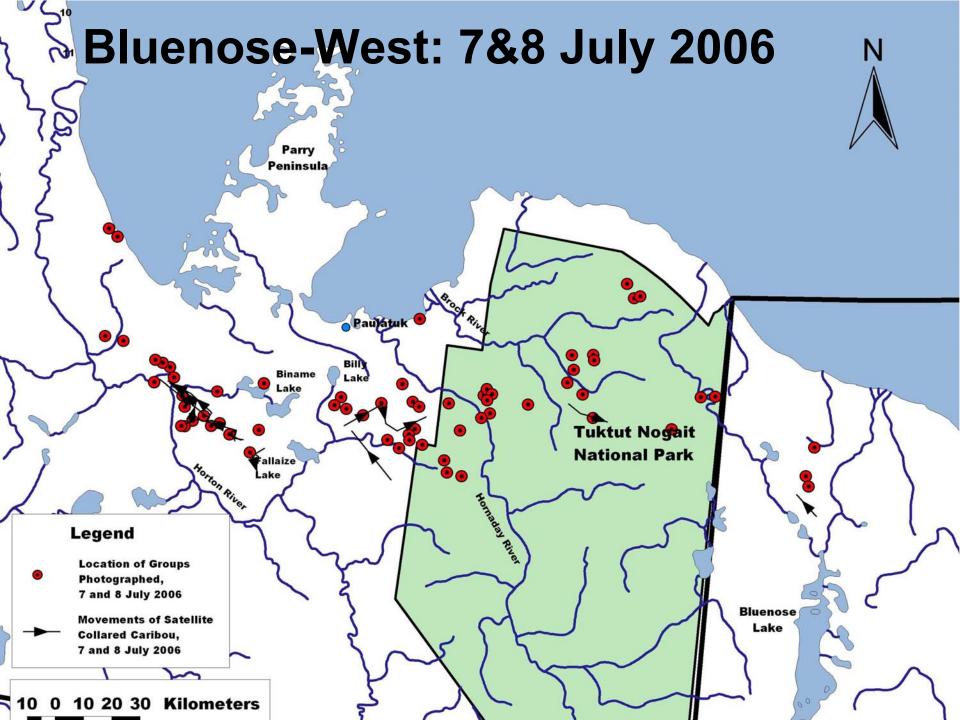
Bluenose-West:

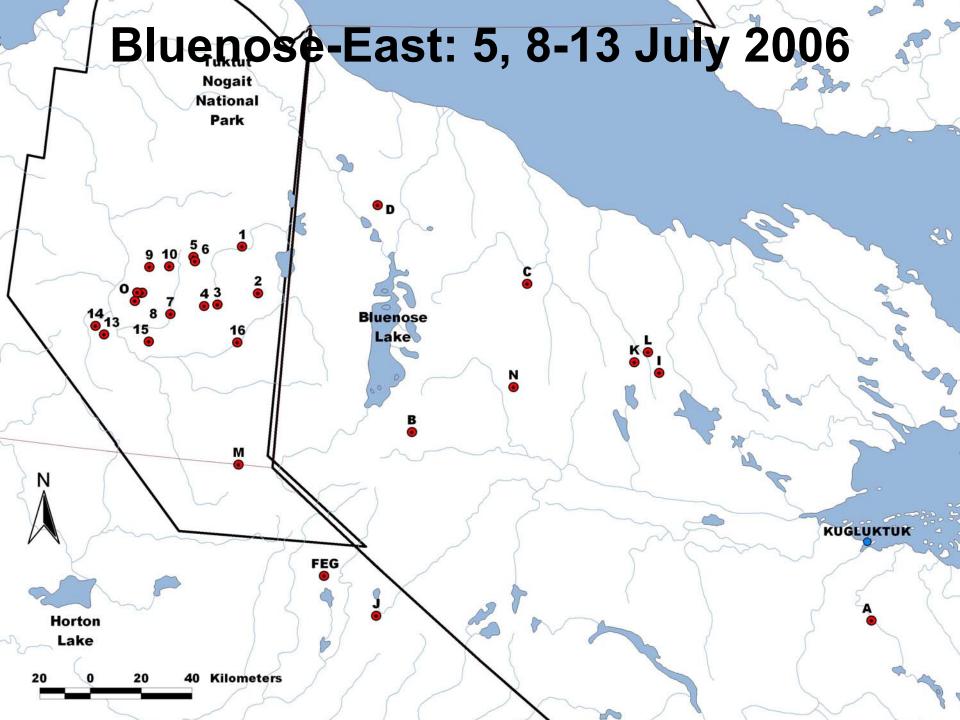
-4,7,&8 July

•Cape Bathurst: - 6, 9, & 13 July









# How Caribou Were Counted on the Photographs



### A computer was used to count caribou on photos



#### Until all the caribou were counted





### 2056 non-calf; 857 calf = 2913



### 3028 non-calf; 947 calf = 3975



173 non-calf; 88 calf = 261





# **Photocensus Results**

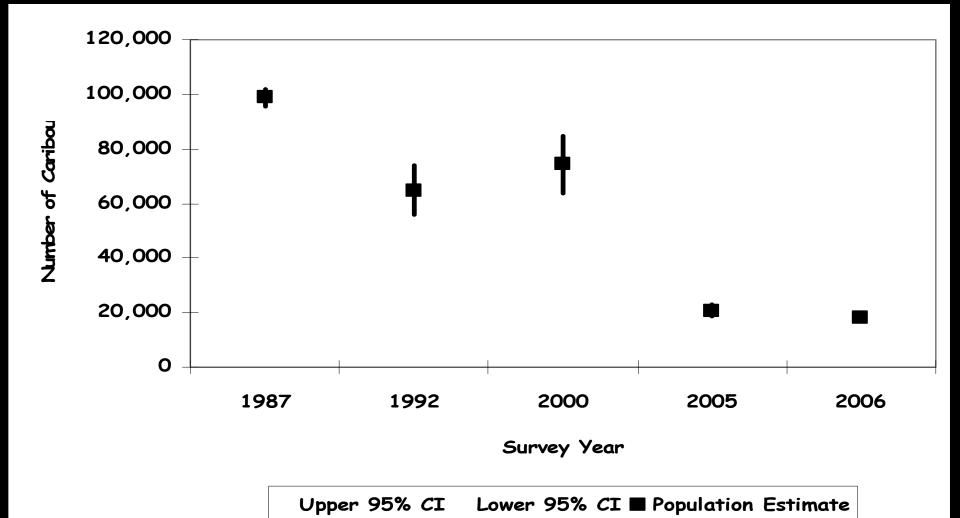
### Best estimate for the Bluenose-West herd in July 2006 (not including calves)

## 18,050 (range 17,523 to 18,577)

65 of 66 radiocollars used to generate estimate



### Population Trend for the Bluenose-West Herd (Non-Calf): 1987-2006



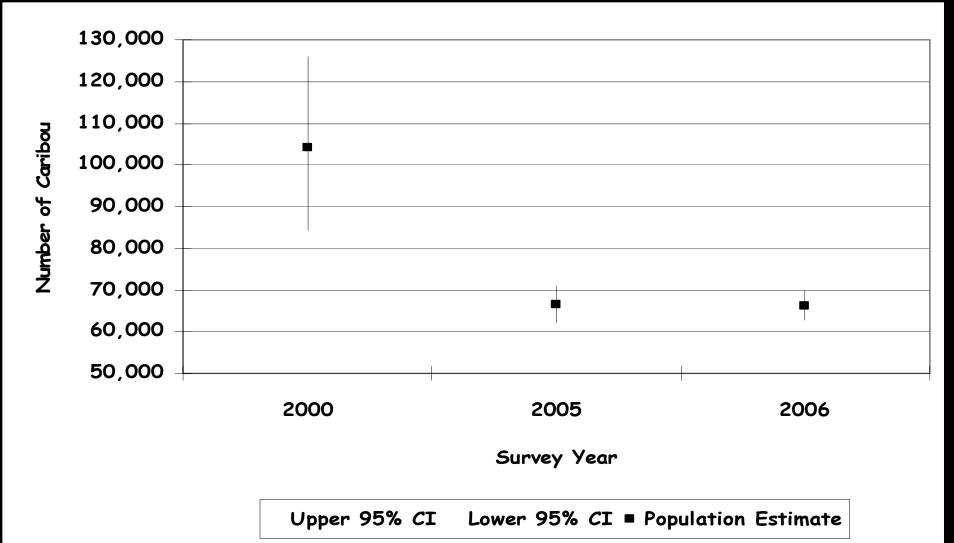
Best estimate for the Bluenose East herd in July 2006 (not including calves)

## 66,186 (range 62,625 to 69,747)

49 of 51 radiocollars used to generate estimate



### Population Trend for the Bluenose-East Herd: 2000-2006



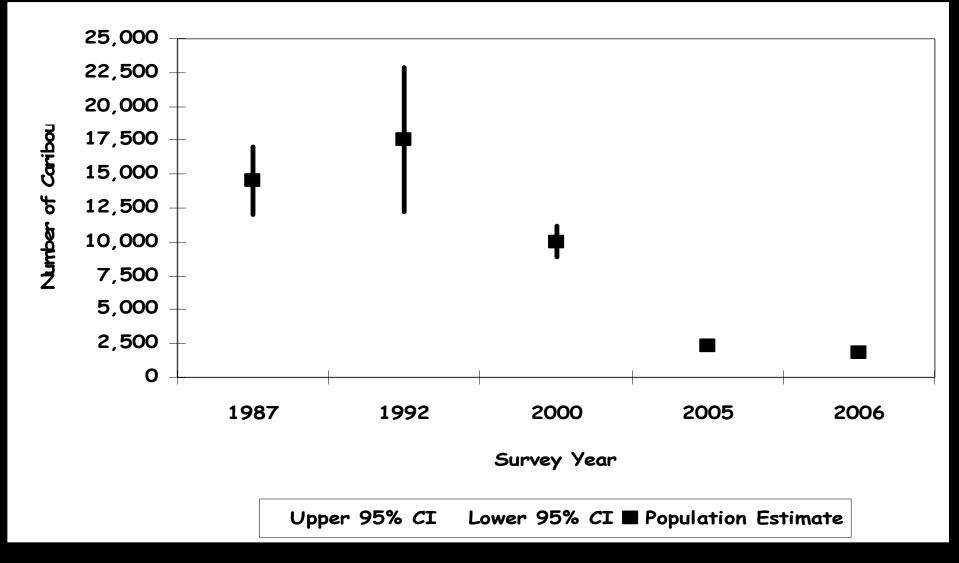
Best estimate for the Cape Bathurst herd in July 2006 (not including calves)

# 1,821 (range 1,672 to 1,970)

31 of 33 radiocollars used to generate estimate



### Population Trend for the Cape Bathurst Herd (Non-Calf): 1987-2006





# Summary

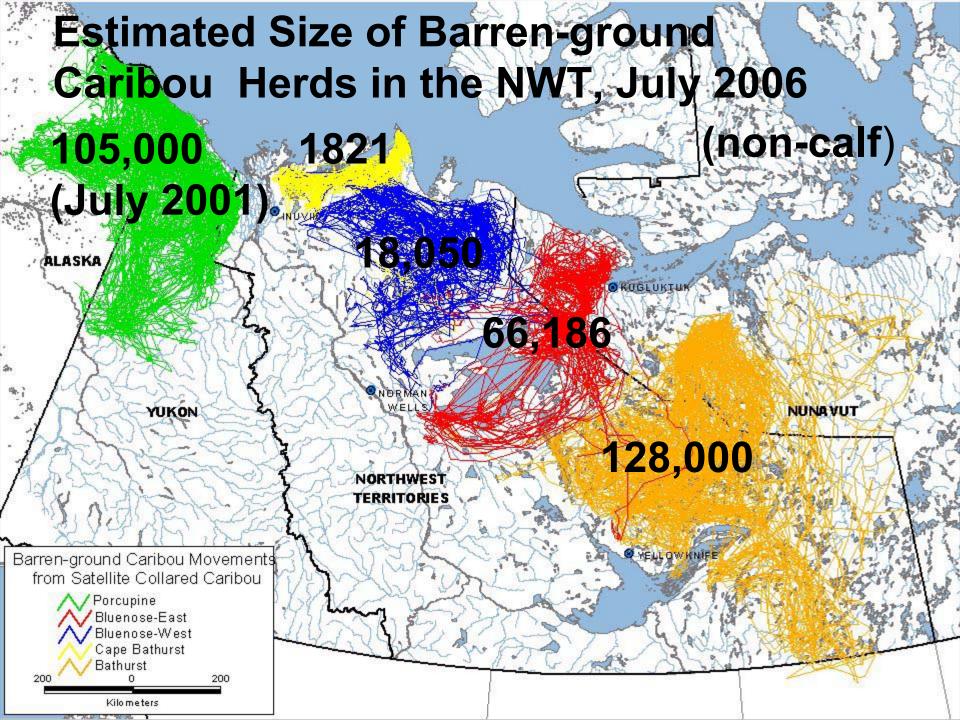
- The Cape Bathurst and Bluenose-West herds were significantly lower in 2006 than in 2005
- The Bluenose-East herd was not significantly lower this year
- A further decline of the Cape Bathurst herd is expected due to the small number of calves observed in July 2006
- Bluenose-West and Bluenose-East herds appear to be in better shape; however, recruitment needs to be maximized during the next few years to recover numbers

# 55,600 breeding females on Bathurst calving ground in June 2006

Down from 203,800 breeding females in June 1986 = 5% decline per year

### 2006 total herd estimate of 128,000



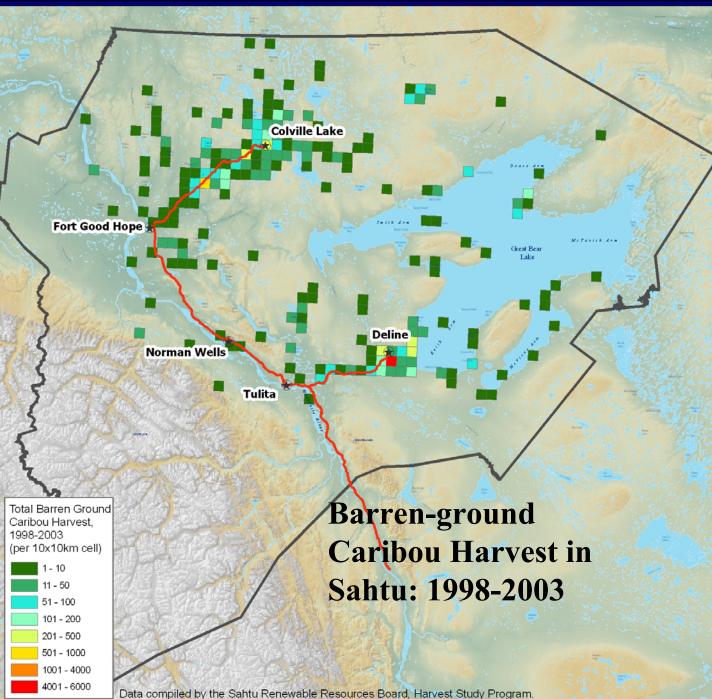






# Harvest





#### Harvest of Barren-ground Caribou By Sahtu Dene & Metis – Sahtu Settlement Harvest Study

Year	Harvest	% Bluenose-East
1999	3098	68.7
2000	2793	66.3
2001	2561	77.7
2002	1895	81.8
	* * *	a da a
2004	1999 *	66.3
2005	1418 *	77.7
Estimated numbers f not all harvesters inte	rom quarterly interviews an crviewed	d

Average - 72.7% Bluenose-East

Year	Harvest	Year	Harvest
1946-47	254	1984-85	214
1951-52	218	1985-86	649
1952-53	99	1986-87	317
1953-54	802	1988-89	268
1954-55	1237	1989-90	445
1956-57	46	1990-91	389
1957-58	341	1991-92	256
1958-59	22	1992-93	68
1960-61	9	1993-94	170
1961-62	34	1994-95	253
1962-63	41	1999	1772
1976-77	407	2000	1470
1977-78	890	2001	1602
1981-82	223	2002	1377
1982-83	589	2003	947
1983-84	905	2004	1006
		2005	645



Year	% Cows
1998*	42.3
1999	47.2
2000	54.0
2001	64.8
2002	67.9
2003	71.4
2004	66.6
2005	65.4

\* only Apr-Dec; does not include Deline

What could be the impact of less barren-ground caribou for harvest in the Sahtu be on other species?

> **Boreal woodland caribou Mountain woodland caribou** Moose Muskoxen **Dall's sheep** Fish **Birds**







# Now what to do??!



