

The Great Crashing Caribou Hoax



*A Simple Explanation Why the Bathurst Herd
is Disappearing*

The Merriam-Webster Online Dictionary defines the word

“Hoax”

“to trick into believing or accepting as genuine something that is false or often preposterous.”

In 1983, Dr. Anne Gunn, caribou biologist for the Government of the Northwest Territories, writes:

"A strong argument can be made for creating concern about future high levels of exploratory activities for non-renewable resources.....This means that it is necessary to take conservative measures in the absence of biologically sound data to the contrary, and provide the fullest measure of protection to the caribou herds that is possible."

File Report #30, 1983, Caribou Behaviour, Range Use Patterns and Short Term Responses to Helicopter Landings on the Beverly Calving Ground ,1982

Right Person, Right Place

The Environmental Movement has conspired to shut down the timbering industry, stop oil and gas production, close down access to public lands, introduced wolves to stop hunting in the western United States, created a scare campaign to prevent nuclear power plants, banned lead bullets in California because condors were eating them, etc. etc. Simply put, I believe from all the literature I've read, that Dr. Gunn subscribes fervently with the anti-industrial movement. She clearly states her **"research was largely driven by concerns about oil and gas development."***

Working with her longtime colleague, Susan Fleck, now the Director of Wildlife for the Government of the Northwest Territories, Dr. Gunn has had a virtual monopoly on caribou research in the Northwest Territories. None of her work quoted in this presentation has ever been subjected to peer review. Controlling the information in a tiny government, for 25 years she has, as promised back in 1983, been "creating concern about future high levels of exploratory activities for non-renewable resources".**.

For many years, Dr. Gunn did reasonably credible work. But then, in the mid-1990's, faced with a deluge of (successful) exploratory work for diamonds, petroleum, uranium, natural gas, etc., she decided to crash the major caribou herd in the Northwest Territories, the Bathurst Caribou Herd.

And that is why we are here today. It is the reason the outfitting industry has been destroyed, and why the resident hunters, and the First Nation hunters, are not allowed to hunt.

*Extent of Calving for the Bathurst and Ahiak Herds June 2002, Anne Gunn and Adrian D'hont, RWED, GNWT

**See previous page

Caribou: The “Spotted Owl” of the North

“While it is considered the ace in the hole for anti- development activists, the **use of caribou as a sacred cow** gets tiresome. Especially to those, like me, who have lived and worked in the north for many years. There is no evidence that caribou have been or are affected by mineral exploration. **Before caribou became the anti-development poster child**, they grazed around mine sites, wandered through camps, and interacted with human activities with complete indifference. The reality is that they are largely unaffected by exploration and mining activities.” *

*Gordon Clarke, CEO North Arrow Minerals, July 4, 2007 letter to The Honorable Jim Prentice, Minister of Indian and Northern Affairs

The Bathurst Caribou in Decline: What the ENR is Telling the Public

"The Bathurst herd has declined 5% every year since 1986,
from 476,000, down to 128,000. "

ENR Deputy Minister Bob Bailey, January 11, 2007 Press Release



The Bathurst Caribou in Decline: 2006-2009 Nearing the End

The Bathurst Herd has declined by a rate of 37% the past three years, according to ENR. ENR claims the rate is 22-23%, but their math is wrong.



Unprecedented Caribou Crash

The “normal” caribou mortality, according to the 1996 Bathurst Caribou Management Plan, is 8% for cows, 16% for bulls, for an 11% overall mortality rate.

Current Mortality Rate for cows, according to ENR, is over 662% higher than normal.

According to ENR, the Bathurst Herd has lost 145,039 adult caribou in the past three years . This does not include calf mortality.

Additionally, the neighboring Ahiak herd, according to ENR lost 60% since 2006. Since the ENR said the Ahiak herd was steady or increasing in 2008, that means it lost a minimum of 120,000 caribou from 2008 to 2009. Counting recruitment of 46 calves per 100 cows, as reported by ENR, this means The Ahiak herd had 181,272 adult caribou die in the past year.

In the last year alone, the Bathurst and Ahiak herd has had over 216,992 adult caribou die, according to ENR.

Unprecedented Caribou Mortality, But No Dead Caribou?

In fact, the Bathurst herd has had high pregnancy rates, high calf survival rates, and virtually no unhealthy caribou.

Where are the nearly 216,992 dead adult caribou carcasses, just in the past year?

Where are the dying caribou? Healthy caribou don't just drop over dead.

Since 2006, according to ENR, the Bathurst and Ahiak herds have lost 451,000 caribou (assumes a 2:1 bull to cow ratio and an average calf survival rate of 45/100).

451,000 dead adult caribou, and ENR biologists can't find a single one.

No signs of unhealthy caribou

If the caribou herd was dropping at this rate, there would be multiple signs showing up in the ENR Data.

1. Unhealthy cow caribou don't get pregnant. ENR Reports 91% pregnancy rate.
2. Unhealthy caribou aren't fat and vigorous. No one is reporting tens of thousands of emaciated and dying caribou.
3. Caribou dying at over 50% a year , means they are living only two years. 17 % of two year old cows get pregnant, with nearly 100 at three years old. Given this, how can we have such high pregnancy rates.
4. ENR won't tell us what the death rate is of collared caribou, but one would assume it to be over 50% a year. The collaring information doesn't support this unprecedented mortality rate.

“In the late 1990s, we started documenting a decline and the surveys we have done now show a 70% decline in most of the herds.”*

***Susan Fleck, Director of Wildlife Division for the N.W.T.
Government told CBC News on January 26, 2007:**

I have spent over two thousand hours reading government documentation, from the 1950s on. There is no documentation from the late 1990s documenting a caribou decline. In fact, the government said exactly the opposite. Here is what they said and did.

In 1996, Ray Case, of the ENR said:
**"The Bathurst herd and range appear to be in
very good condition." ***

**Why would he say that about a herd that
was (according to the ENR in 2007) dropping
5% a year, ** and at that point in time, had
dropped 50% over the past ten years?**

*The Status and Management of the Bathurst Caribou Herd, Ray Case, Laurie Buckland, and Mark Williams, RWED, 1996

**File Report #163

In 2000, outfitter tag quotas were increased from 132 to 180 tags, per outfitter. That's a 36% increase.

Why would the ENR give out more tags for a herd that has been decreasing 5% every year for 15 years??? Why, if ENR, according to Susan Fleck, had been "documenting decline since the 1990s" did they advocate more harvest?

This is what RWED said in May of 2000, when it increased our tags:

"Given the knowledge RWED has currently respecting the Bathurst caribou herd, the Department is of the view that the increase is within sustainable harvesting levels."*

*Qaivvik, Ltd. Files, letter from RWED.

Dr. Anne Gunn, GNWT Biologist: 2001

Dr. Anne Gunn, in the book Conservation of Exploited Species, printed in 2001, said this on pages 426-427, while speaking of the barren-ground caribou in the Northwest Territories:

“The reality of further declines in the early 1980s was controversial and, by the 1990s, it became obvious that the herds of barren-ground caribou *R.t. groenlandicus* had increased in size up to fivefold. Currently, on the mainland tundra, the four largest herds of barren-ground Caribou (Bathurst, Beverly, Qaminurjuaq, Queen Maud Gulf) totaled 1.4 Million caribou in the mid 1990s, and are probably stable or increasing.”

2001: Anne Gunn: "Caribou Crowding... competing for food supply"

"The responses followed a presentation by NWT biologist Anne Gunn, who talked about the use of collars on 20 Bathurst caribou. Data received via satellite from the collars helped show how the Bathurst herd has shifted its range south through the Thelon Game Sanctuary, as far as Rennie Lake. Always considered strictly Beverly caribou range here, **Gunn said there was concern that animals from the Bathurst, Qamanirjuaq and Ahiak (Queen Maud Gulf) herds were crowding onto the Beverly range**, competing for a food supply that had been made scarcer with numerous forest fires in past years."*

*CARIBOU NEWS IN BRIEF Volume 5 No. 1· August 2001

Brent Patterson, GNWT Wildlife Biologist in 2002*

**“our minimum count alone alleviates most
concerns regarding potential over-harvest of Bluenose-East caribou”***

“This study confirms a minimum population size that far exceeds the previous estimate of total herd size (Nagy et al., 1999) and even exceeds the estimate for all Bluenose caribou in the 1980s (McLean and Russell, 1992). **Present densities of Bluenose-East caribou may represent at least a 25-year high** (Latour et al., 1986; McLean and Russell, 1992; Nagy et al., 1999).”*

*Population Estimate for the Bluenose-East Caribou Herd
Using Post-Calving Photography
BRENT R. PATTERSON,¹ BENJAMIN T. OLSEN² and DAMIEN O. JOLY³

- And yet three years later, right after ENR splits with ITI, we have the outfitters in the Sahtu Region closed down, and huge restrictions on caribou harvest for the Inuvialuit people.
- Not based on science, but on a Political Agenda.

February 2003:

“Caribou biologist Anne Gunn says the Bathurst Herd-common to the central arctic-appears to be doing fine at the moment.

“Judging by what we’ve heard from hunters they seem to be in okay condition,” says Gunn. “We certainly haven’t heard any reports of animals in poor shape.”*

*www.tundrawolves.org/media.htm

Anne Gunn: 2004

"October 2004. "We saw 2 lame caribou among 12,444 caribou observed."**
(That's .0002)

2 lame caribou, in 12,444. Not dead, not dying,
just lame. Go to any meeting in Yellowknife with
100 people (let alone 12,444), and see how many
are lame. How unhealthy can this herd be???

**Calf Survival and Adult Sex Ratio in the Bathurst Herd of Barren-Ground Caribou
2001-2004. Ann Gunn, John Boulanger, and Judy Williams. 2005

What the BQCMB Reported in 2005-2006

Nunavut

“There was a spectacular abundance of caribou in Nunavut’s Kivalliq Region between 2005-2006, with sightings of tens of thousands of animals at a time. What’s more, there were no reports received of unhealthy caribou, said Department of Environment wildlife manager (Kivalliq Region) and BQCMB member **Dan Shewchuk**, and Arviat regional biologist **Mitch Campbell**. BQCMB member **Laurent Angalik** of Arviat found that, as a hunter, these were the **healthiest caribou he had ever seen**, with lots of fat on the animals and good meat....In Nunavut, caribou were so plentiful that some residents said they had never seen so many Qamanirjuaq caribou before”

Tuktu crossing Darrell Greer Northern News Services
Published Wednesday, July 23, 2008 ARVIAT –

“Two large herds of caribou passed by Arviat earlier this month, with one taking a different route than usual. **The first herd was reportedly close to 300,000** strong and was spotted on Nunavut Day... A second herd went by Arviat this past week, coming from the usual northern direction towards the hamlet. The immense herd passed within four kilometres of the community. Suluk said **the second herd also numbered several-hundred-thousand strong** and attracted more attention from local hunters..”

CBC NEWS: January 16, 2007

“Territorial government spokesman Ray Case said climate change is probably the cause of the drop in caribou numbers”

Climate Change Killing Caribou?

The theory, and that's all it is, is that warmer temperatures produce more insects, notably warble flies and mosquitoes. Harassment by these insects reduces feeding time and thus thinner cows.

It's a nice theory, but the data doesn't support any of this. Thinner cows would have low pregnancy rates. Calf survival would be low.

Neither of these is true.

There have been no weather "events", where freezing snow prevented caribou from feeding, and creating mass die-offs.

Caribou have thrived for millions of years in climate as far south as Idaho and Maine, in the, what is now, United States. Small, remnant herds still remain in these states. Caribou clearly can adapt to warmer temperatures.



All through the late 1970s, the 1980s, the 1990s, and up until June, 2003, the biologists of RWED said the caribou are doing just fine. 40 hours a week, 52 weeks a year, dozens of RWED employees, millions of dollars, for over a quarter a century, the caribou show all signs of being just fine. Then, all of sudden, in 2003, Dr. Anne Gunn decides they've been dropping 5% every year since 1986*.

Now, in 2007, they want us to believe they are disappearing due to "Climate Change". ??? The Bathurst caribou have survived and adapted for 6000 years, and now the climate is so bad, they are going extinct?

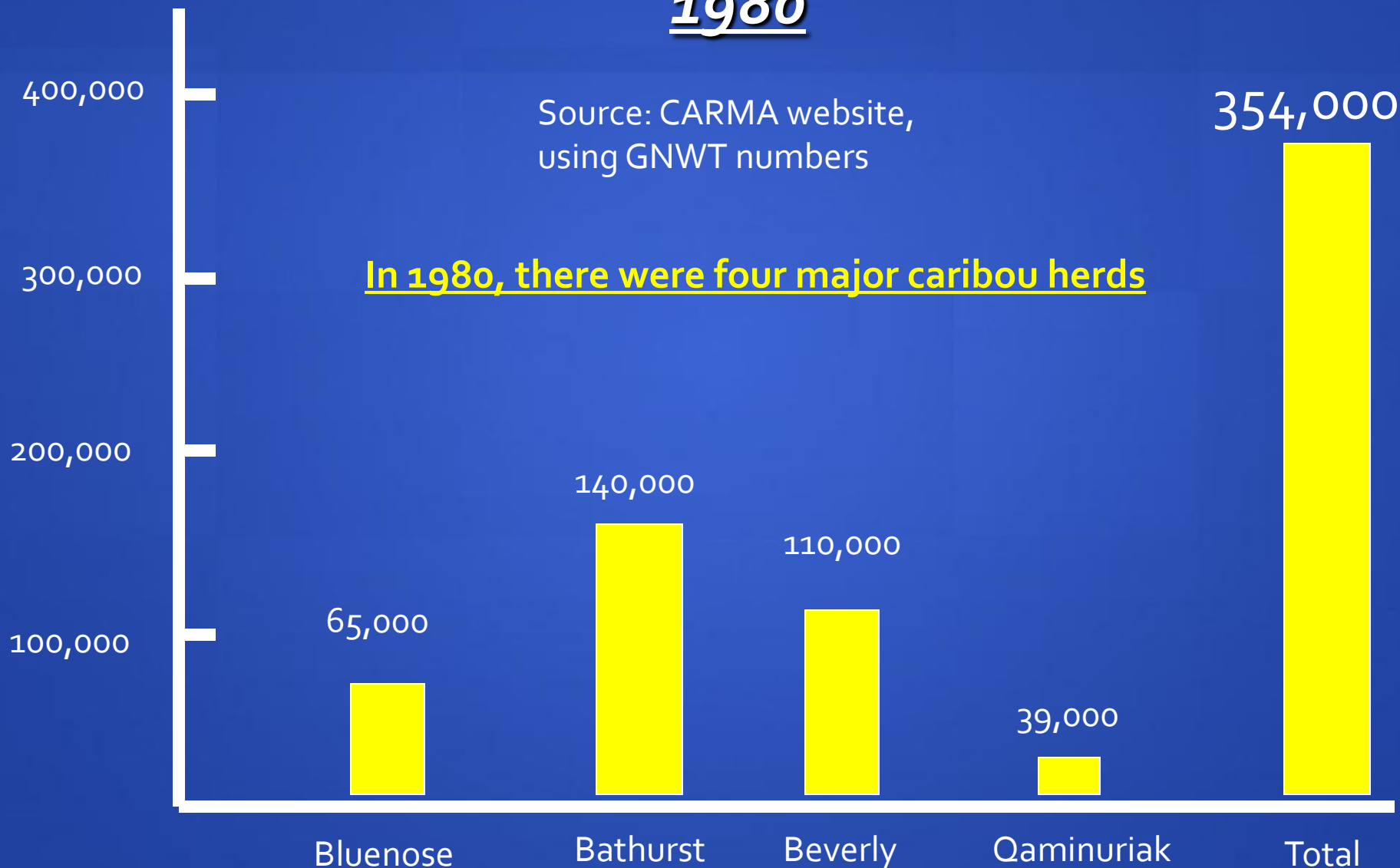
*GNWT File Report #163.

***Herd Numbers for Barren Ground
Caribou in the NWT, according to the ENR***

1980

Source: CARMA website,
using GNWT numbers

In 1980, there were four major caribou herds



**Herd Numbers for Barren Ground
Caribou in the NWT, According to the
ENR
2006**

Source: GNWT Website

In 2006, we had 7 major caribou herds.
Since then, they have added the Tuk
Peninsula herd.

1,000,000

750,000

500,000

250,000

100,000

2000

20000

66,000

128,000

200,000

296,000

496,000

1,188,000

C. Bathurst

Bluenose W.

Bluenose E.

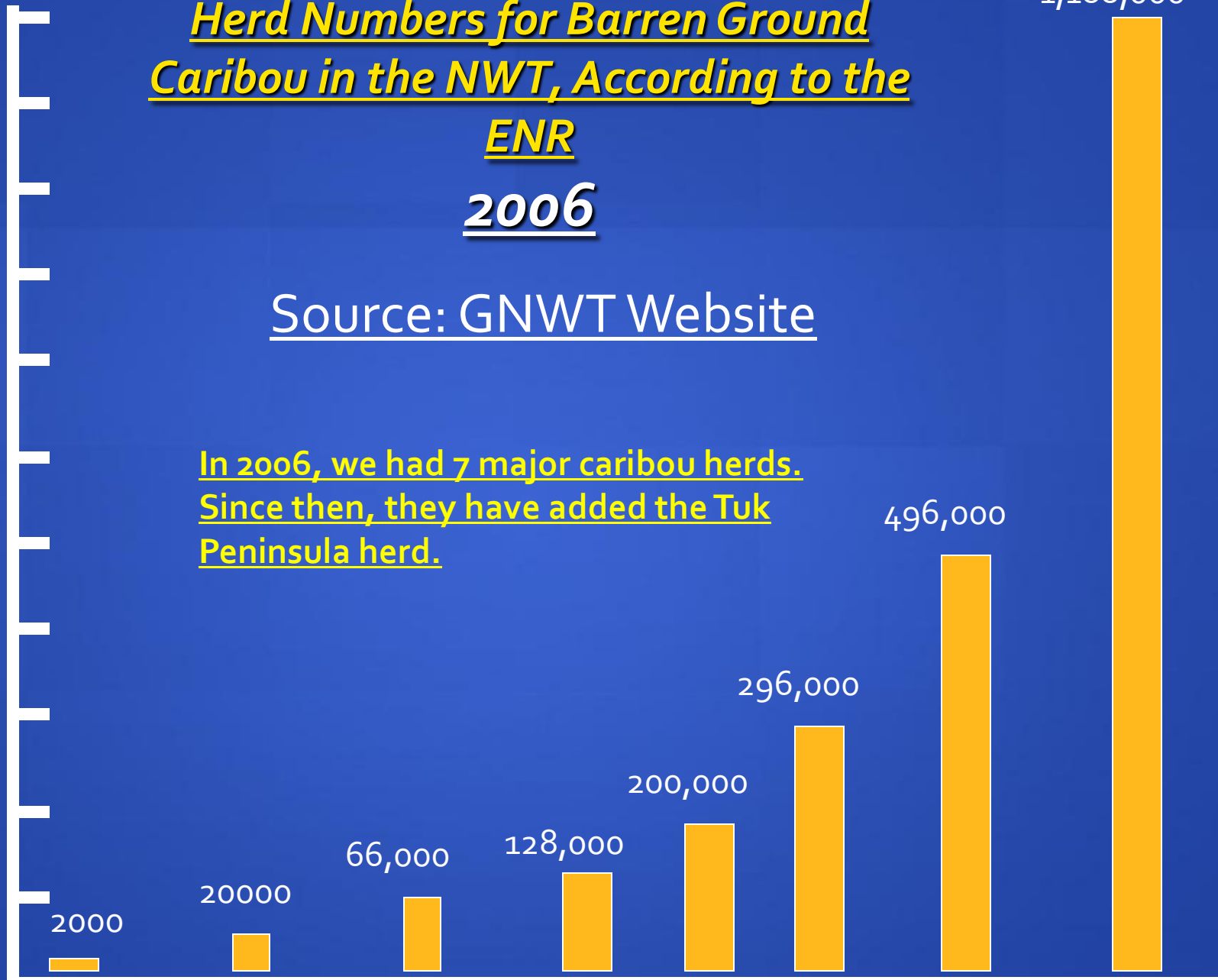
Bathurst

Ahiak

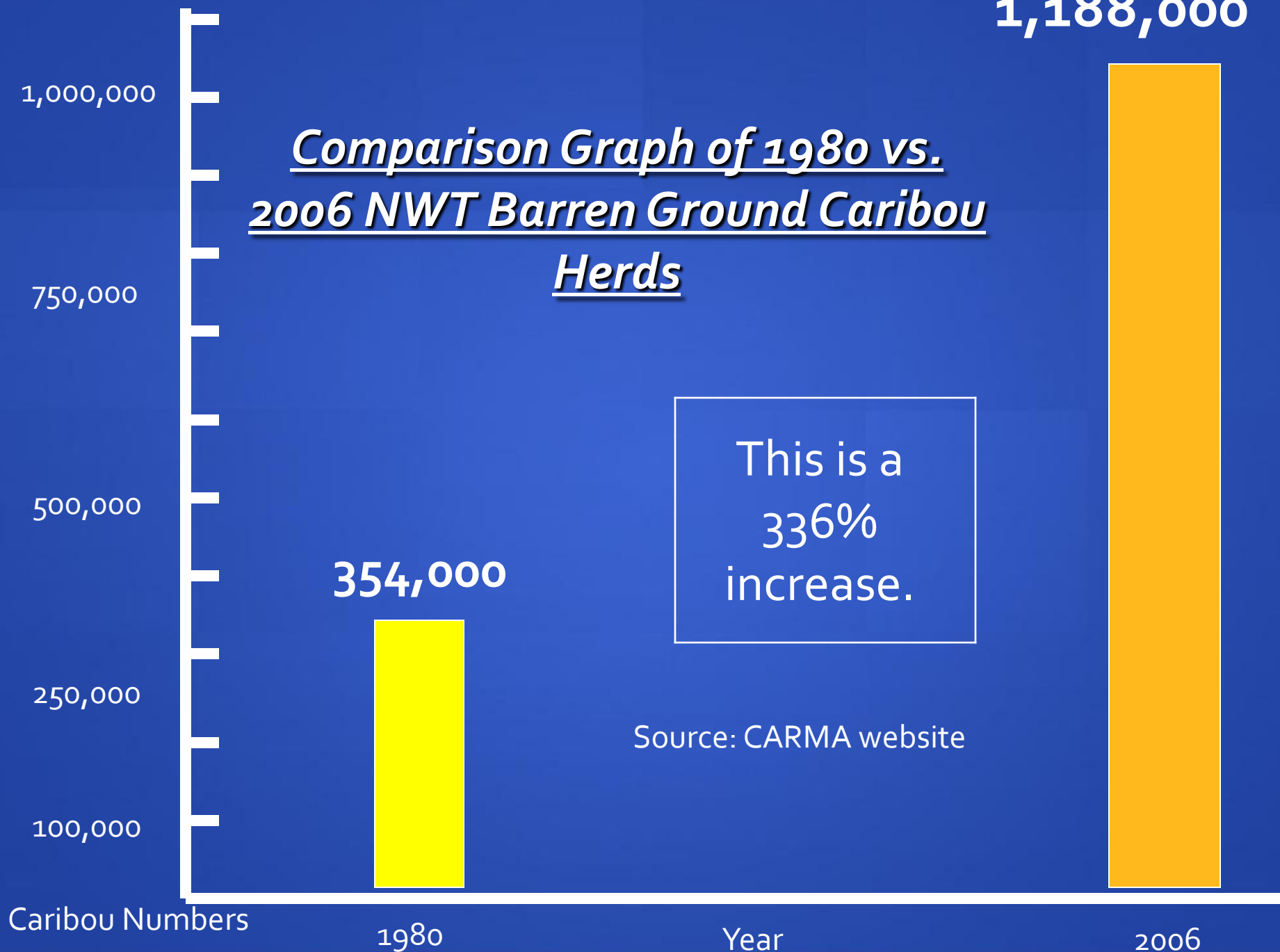
Beverly

Qaminuriak

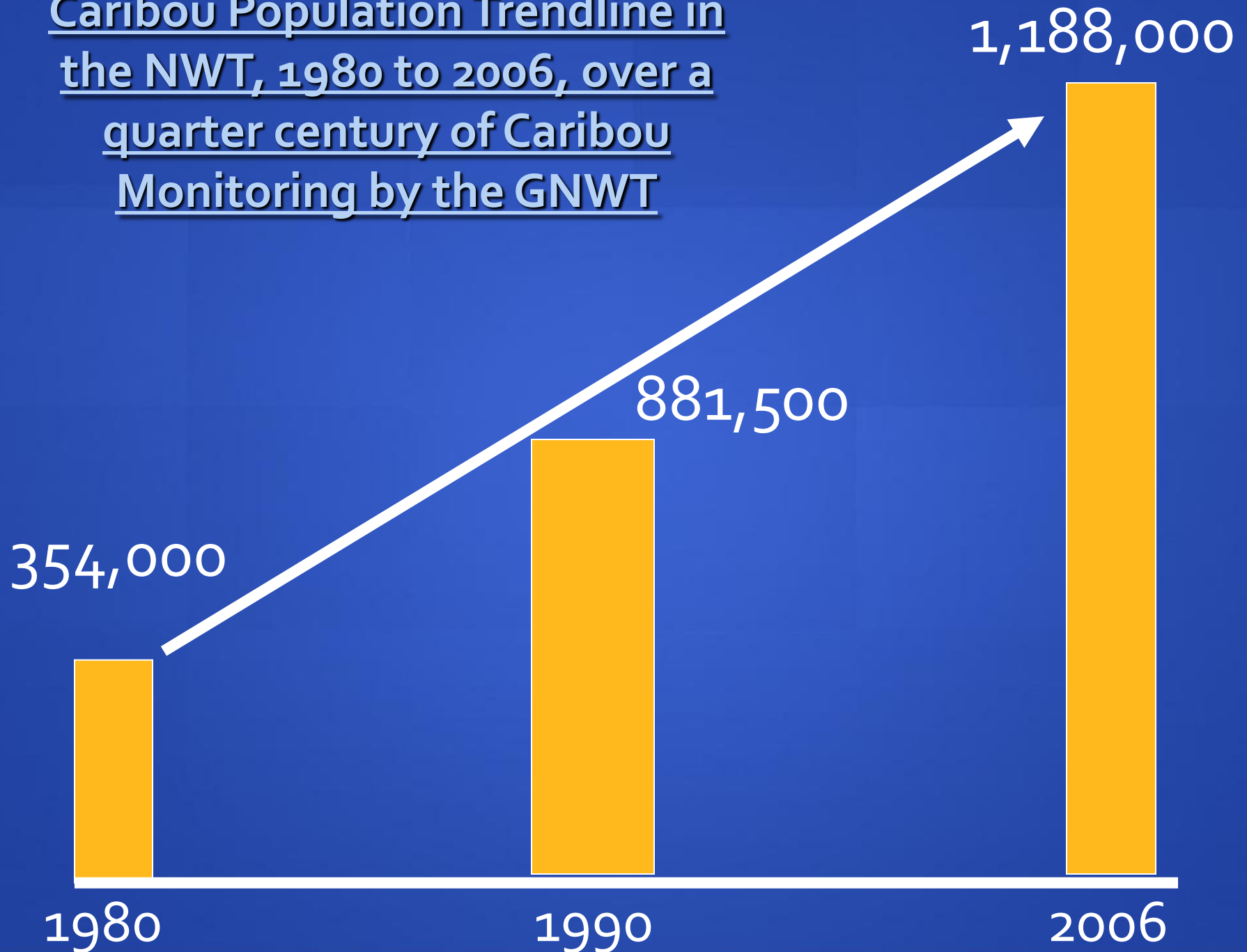
Total



*Comparison Graph of 1980 vs.
2006 NWT Barren Ground Caribou
Herds*



Caribou Population Trendline in
the NWT, 1980 to 2006, over a
quarter century of Caribou
Monitoring by the GNWT



The GNWT independently confirms our numbers in its 2005 report to the federal government.

In 2004/2005 "As part of its work on the National Chronic Wasting Disease Control Strategy, The CCWHC assembled population estimates for wild cervids (deer family) from wildlife agencies across the country." The number that the ENR gave to the agency is:

1,534,000 caribou in the NWT*

We believe the reason for the discrepancy between the 1,188,000 caribou and the 1,534,000 caribou is that the latter number includes Porcupine caribou herd.

* Canadian Cooperative Wildlife Health Centre, Volume 11, Fall of 2005, #1

Why Has The Bathurst Herd Dropped???

It is really quite a simple answer. Ungulate biologist Dr. Anne Gunn, in 1996 simply decided that all the caribou calving east of the Bathurst Inlet, would no longer be called Bathurst Caribou. They would henceforth be called Queen Maud Gulf Caribou, or later the renamed Ahiak Caribou

“Queen Maud Gulf caribou have replaced Bathurst herd caribou on the eastern traditional calving grounds.”* Dr. Anne Gunn

*Page 34, File report #126.

Caribou "Herd"

" Current terminology defines a caribou herd as a group of animals which consistently calve in a specific traditional location distinct from calving areas used by other herds (Skoog 1968, Thomas 1969)."

Source: The Status of Three Tundra Wintering Caribou Herds in Northeastern Mainland Northwest Territories. File Report #18 by the N.W.T. Government. Doug Heard and George Calef

Traditional Calving Ground

“Traditional calving grounds are the areas used by caribou for calving over a period of many years, and are mapped as composites of all known annual calving areas. ...25 years is not a lot compared to the thousands of years caribou have been calving in the area. Calving ground surveys conducted in the future, therefore, may expand the boundaries of traditional calving grounds by documenting caribou calving in areas not observed during previous surveys”*

*Protecting Beverly and Qamanirjuaq Caribou and Caribou Range
www.arctic-caribou.com/parttwo/mapnotes.html

Anne Gunn writes in File Report #125 in 2000, Page 3:

“Conventionally, caribou biologists have followed Thomas (1969) who identified barren-ground caribou herds based on the return of cows to a traditional calving ground”

Clearly, Anne Gunn knows the definition of a caribou herd.

In June, 1996, Dr. Anne Gunn split the traditional Bathurst Calving Ground* into two, calling the caribou on the east side of the Bathurst Inlet the Queen Maud Gulf herd. The Queen Maud Gulf Herd has since been renamed the Ahiak Herd.



“Queen Maud Gulf caribou have replaced Bathurst herd caribou on the eastern traditional calving grounds.” Dr. Anne Gunn**

***1996 Bathurst Calving Ground Survey, File Report #119, Page 9**

****Page 34, File report #126**

Bathurst Calving Grounds



*Source: An Estimate of Breeding Females in the Bathurst Herd of Barren-Ground Caribou June 2003 Ann Gunn, et. al.

In the Years 1996-2006, the ENR “created” four new herds.

1986

There were five “herds” of mainland caribou, based on calving grounds.

- 1. Bluenose Caribou
- 2. Bathurst Caribou
- 3. Beverly Caribou
- 4. Qamanirjuaq Caribou
- 5. Northeast Mainland Herds (Lorrilard, Wager Bay, Melville Herd)

2006

1. Cape Bathurst Caribou
 2. Bluenose West Caribou
 3. Bluenose East Caribou
 4. Bathurst Caribou
 5. Ahiak Caribou
 6. Beverly Caribou
 7. Qamanirjuaq Caribou
 8. Northeast Mainland Herd
 9. Tuk Peninsula Herd
-
- The diagram consists of two white arrows pointing from the list of herds to the right. The first arrow originates from the top of items 1, 2, and 3, and points to the text 'Old Bluenose Herd'. The second arrow originates from the right side of items 4 and 5, and points to the text 'Old Bathurst Herd'. Both target texts are underlined and colored yellow.
- Old Bluenose Herd
- Old Bathurst Herd

If you had five herds in 1986, and 9 herds in the same geographic area 20 years later, you can't compare one herd with another over that same timescale, without re-combining the herds you have split. ENR biologists insist that the Bathurst herd has not been split, but that the Ahiak herd has somehow “taken over” the old Bathurst Calving Ground. This is scientific nonsense. There was no Ahiak herd in 1992, but with the threat of diamond mines, roads to the Bathurst Inlet, the MacKenzie Vally pipeline, etc. etc., Dr. Anne Gunn created the Ahiak herd in 1996. Biologist Mark Fraker, said this about the report justifying the Ahiak herd:

“Let me be perfectly clear: File Report 126 is one of the worst pieces of biological research that I have encountered in >35 years as a practicing biologist.”

*File Report #125 “Abundance and Distribution of the Queen Maud Gulf Herd 986-1996” A. Gunn, B. Fournier, J. Nishi

**Letter January 29, 2009 to Larry Roy, Alberta Research Council

History of the Ahiak Herd

*Basically, there is very little history, until Anne Gunn declared it a herd in 1996. Doug Heard postulated a group of animals on the Northeast Mainland might be part of the Bathurst caribou herd, or a fourth Northeast Mainland herd, (1983, File Report 71, page 9, stratum 7) and decided in 1992 that, due to lack of herd discreteness, the Northeast Mainland herds should all be one herd.** This is confirmed by Figure 1 in the 1996 Bathurst Caribou Management Report, File report #116. Gunn says she did a survey of the herd in 1986, but did not write it up for 14 years. Miraculously, she does not mention in the 1986 report the 102 collared caribou on the Northeast Mainland/Beverly herd at that time..*

*File Report #126.

** Herd Identity and Calving Ground Fidelity of Caribou
in the Keewatin District of the Northwest Territories, Douglas Heard
And Gordon Stenhouse, 1992, File Report 101

1995 Northeast Mainland Survey

- ✓ In 1995, Laurie Buckland, of ENR, surveyed the Northeast Mainland herd, and counted 31,556 caribou (+-4879)*
- ✓ ENR, in its responses to this hearing, claims this survey never took place.
- ✓ The following year, 1996, Anne Gunn says there were 200,000 caribou here, though she only actually saw 4,453.**

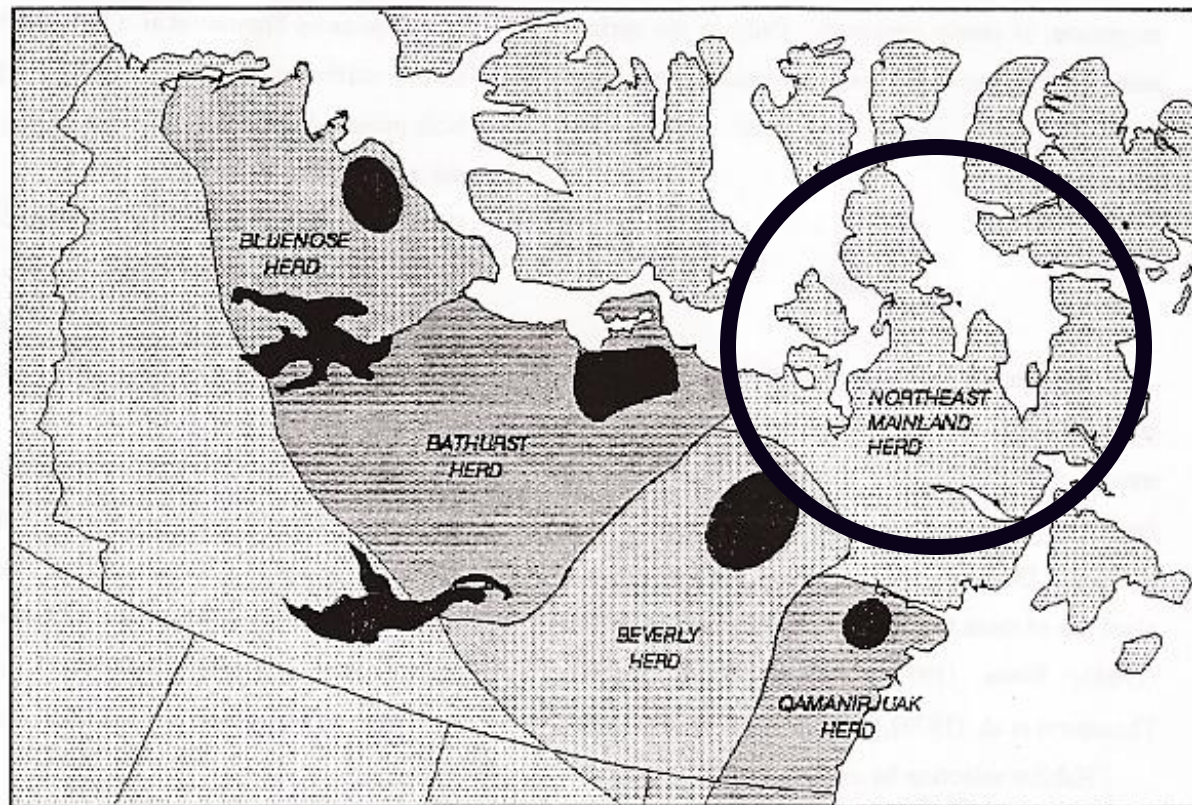
*File Report #125

**File Report #126

History of the Northeast Mainland Caribou

The Northeast Mainland caribou herds are the least studied of any of the caribou herds in the Northwest Territories (now the NWT and Nunavut.) Below is a map showing the geographic area utilized by the Northeast Mainland herds. These are sedentary herds, that do not migrate.

Figure 1. Approximate range of mainland barren-ground caribou herds in the Northwest Territories.



The Northeast Mainland herds are Non-migratory.

“ Although the complete annual movement of these herds are unknown, it is clear that these caribou spend the entire year on the tundra. Barren-ground caribou typically make long migrations twice a year between their winter range and their calving grounds, and summer range. This contrasts with the relatively sedentary behaviour of the tundra wintering herds in the northeastern Northwest Territories.”*

*George Calef & Doug Heard, “The Status of Three Tundra Wintering Caribou Herds in the Northeastern Mainland Northwest Territories”, 1981, File Rport No. 18

Laurie Buckland, NWT biologist, 1995 said this:

"The tundra-dwelling caribou (rangifer tarandus) on the northeastern mainland, Northwest Territories are a mainstay for Inuit from seven communities in the area (342,000 sq. km.) Unlike Bathurst, Beverly and Qamanirjuaq caribou herds which occupy most of the central and eastern mainland, **caribou of the northeast mainland do not migrate between calving areas on the tundra and winter ranges within the boreal forest, but inhabit the tundra year round.**"

*Distribution and Abundance of Caribou on the Northeast Mainland, NWT in May, 1996. Laurie Buckland, Judy Dragon, Anne Gunn, John Nishi, and David Abernethy, GNWT 2000. Manuscript 125, page 1

1983- Possibility of a Queen Maud Gulf Herd

“The Queen Maud Gulf animals possibly constitute a fourth (in addition to the Lorillard, Wager Bay, and Melville Hills herds) **or may have been a segment of the Bathurst Herd**. Radio tracking studies are the only way to determine the annual movements and degree of interchange among the groups of caribou and between them and the adjacent forest wintering populations.”

Please note that a “Precalving” survey could be done because these caribou don’t migrate.

Source: **Precalving** Distribution of Barren-Ground Caribou
On the Northeastern Mainland of the Northwest Territories,
Doug Heard et al, 1987 (1983 Survey)GNWT File Report #71

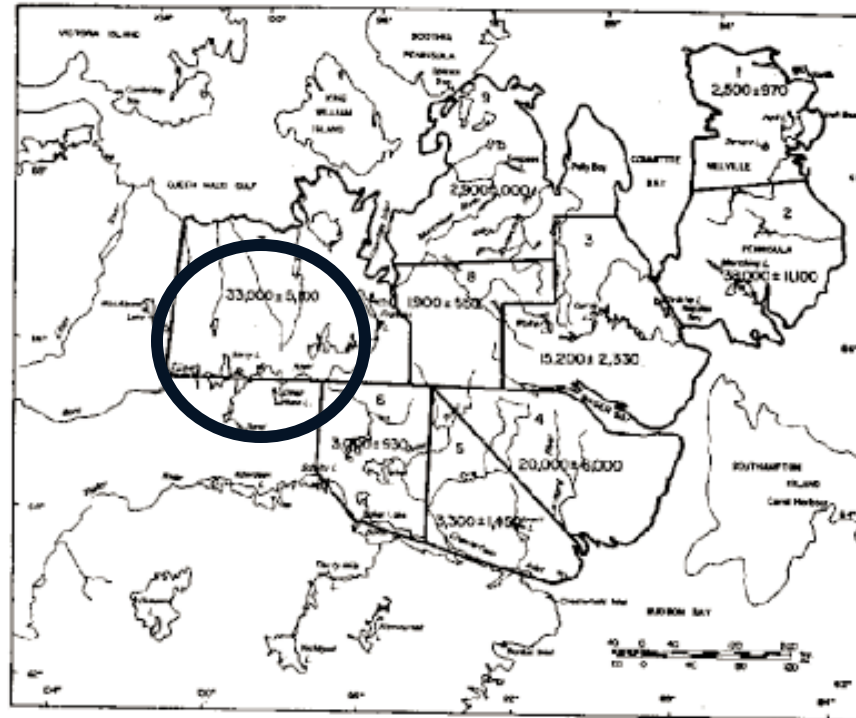
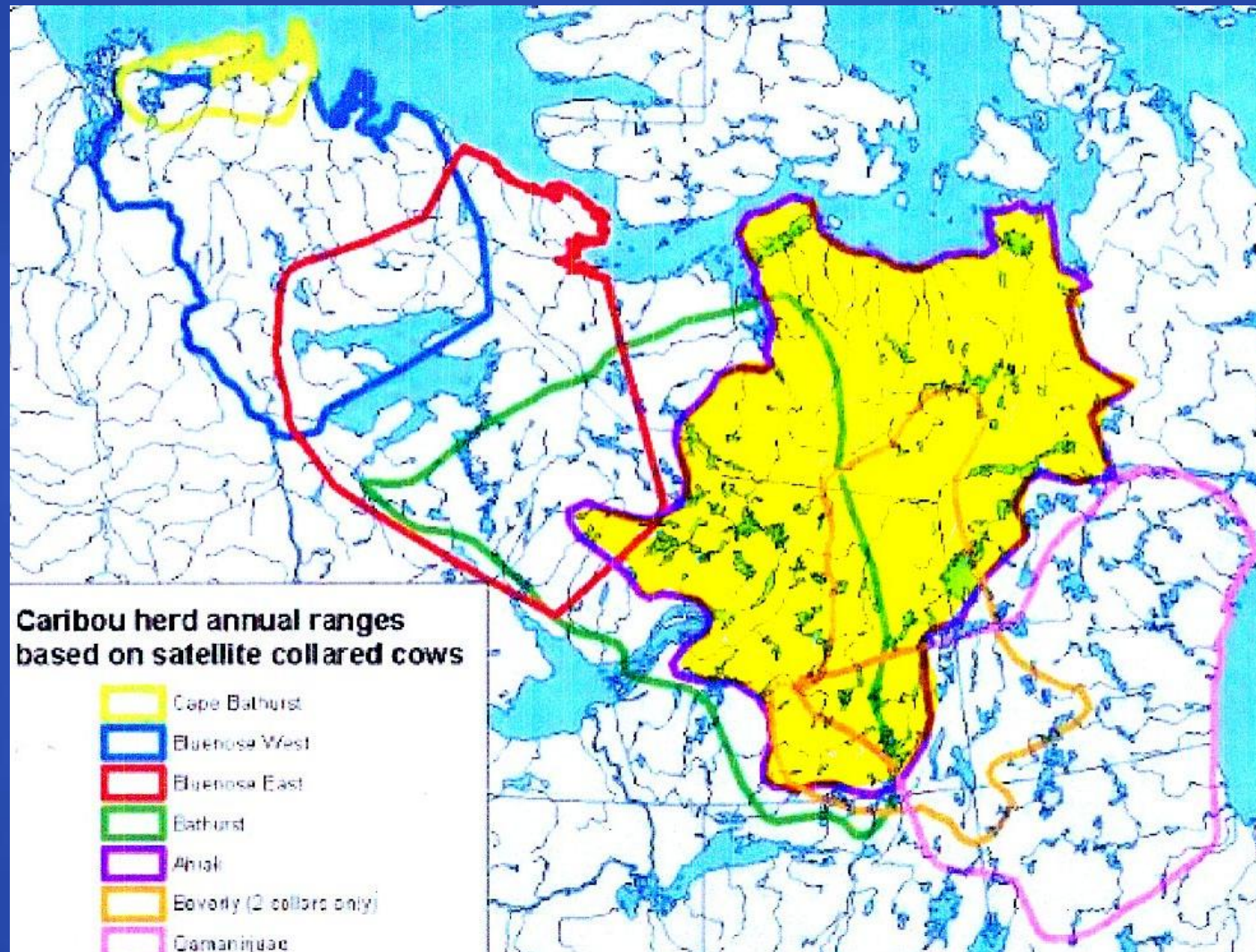


Figure 2. The survey area in northeastern Northwest Territories showing strata and caribou population estimates in May 1983.

The circled area is where Doug Heard postulated the existence of the Queen Maud Gulf caribou. He lacked sufficient data to declare a separate herd, and later rejoined all the caribou herds (Lorrillard, Wager Bay, and Melville Hills herds back into the Northeast Mainland Herd.



The Ahiak herd in yellow, migrating thousands of kilometers a year. These can not possibly be part of the sedentary Northeast Mainland herds. Simply, these are Bathurst Caribou.



1992- No Queen Maud Gulf Herd-RWED
finally concluded it was best to “recombine”
the small herds of the Northeastern
Mainland back into one herds, because the
herds lacked discreteness.



“Calef and Heard (1980) called the calving south of Wager Bay the Lorillard herd, those calving north of Wager Bay the Wager herd, and caribou calving on Melville Peninsula the Melville herd. *Because similar densities of calving caribou were not found in subsequent years, uncertainty about herd discreteness led to the designation of the Northeastern Mainland herd for all the caribou throughout that region (Heard et al. 1986)”**

* Herd Identity and Calving Ground Fidelity of Caribou
in the Keewatin District of the Northwest Territories, Douglas Heard
And Gordon Stenhouse, 1992, File Report 101

Historical Maps of the Bathurst Calving Grounds:

Together, they form the “traditional”
Bathurst Calving Ground

Source: Slides 18-48 can all be found in GNWT File
Report #118, M. Sutherland and Anne Gunn,
Bathurst Calving Ground Surveys 1965-1996

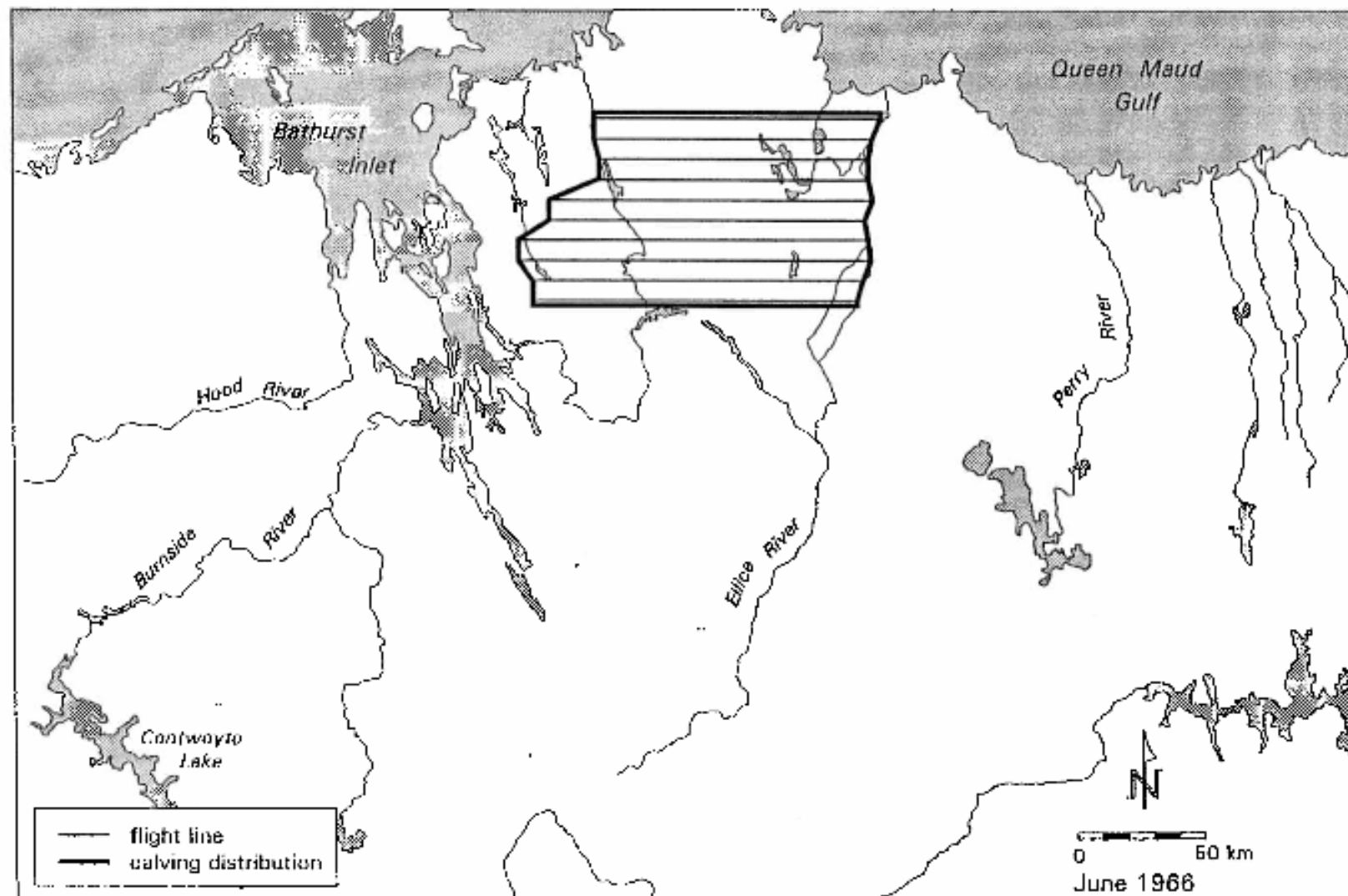


Figure 5. Bathurst calving ground systematic transect survey flight lines, 6 June 1966 (Williams 1966)

Please remember. Each of the maps shown represents months of planning, hundreds of hours of hard work, often in dangerous conditions, and tens of thousands of taxpayer dollars

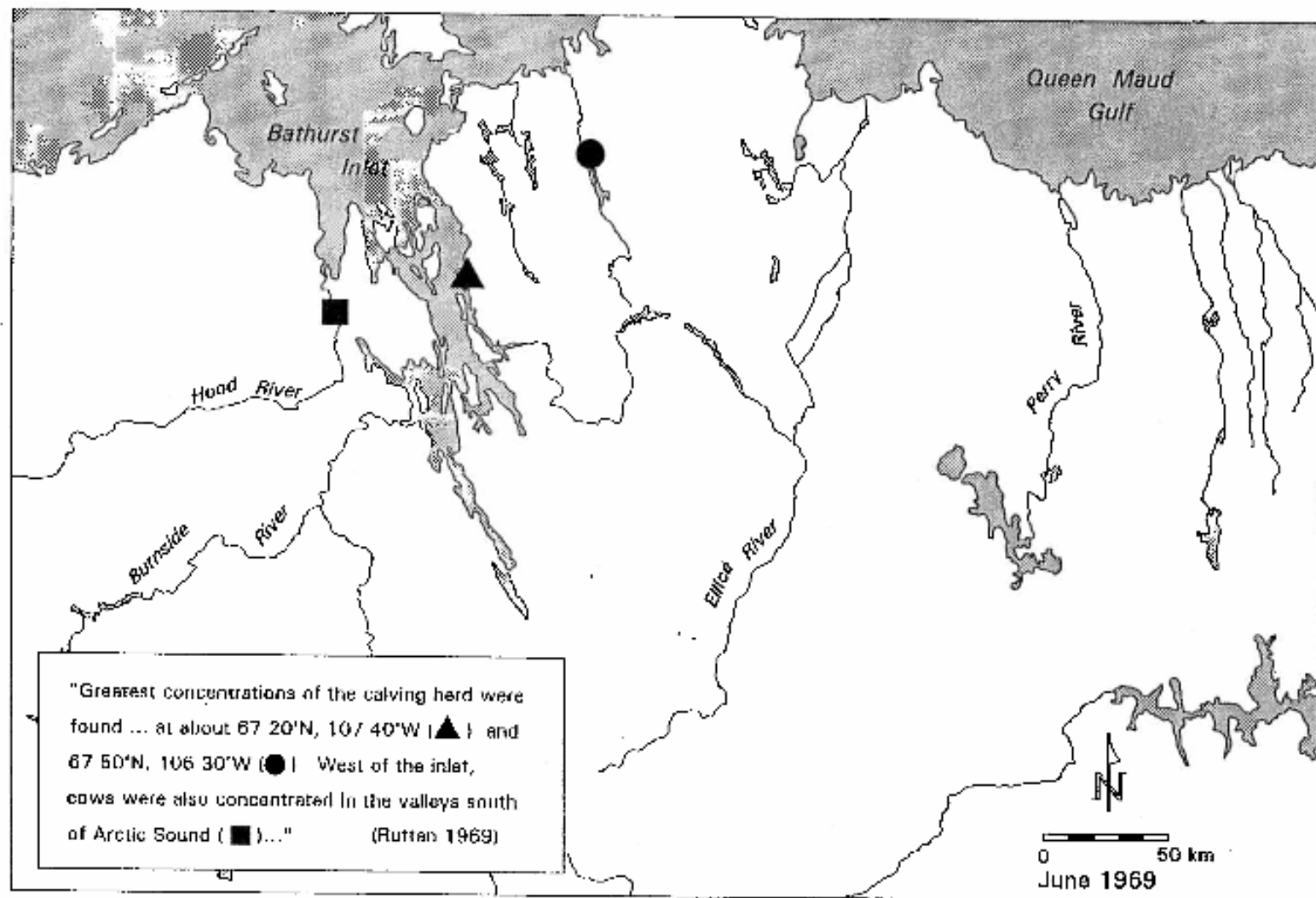


Figure 6. Greatest concentrations of the Bathurst calving herd, 11-14 June 1969

Please note concentrations of caribou calving on both sides of the Bathurst Inlet, with a distinct separation of calving. The concentrations are all on the traditional Bathurst Calving Ground, and so they are all considered Bathurst caribou.

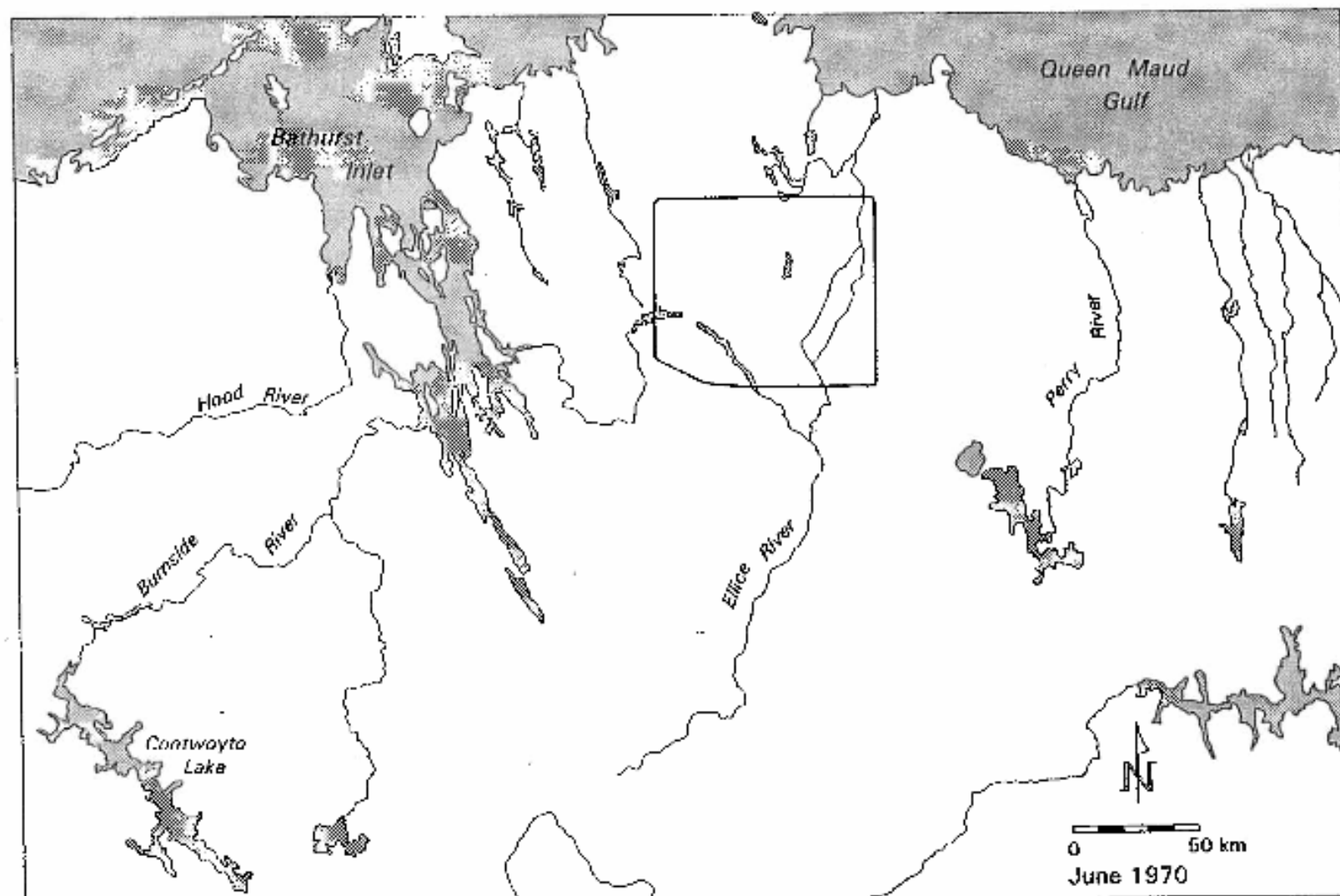


Figure 7. Bathurst calving distribution as delimited during unsystematic reconnaissance flights, 8 June 1970 (Calef and Boxer 1977)

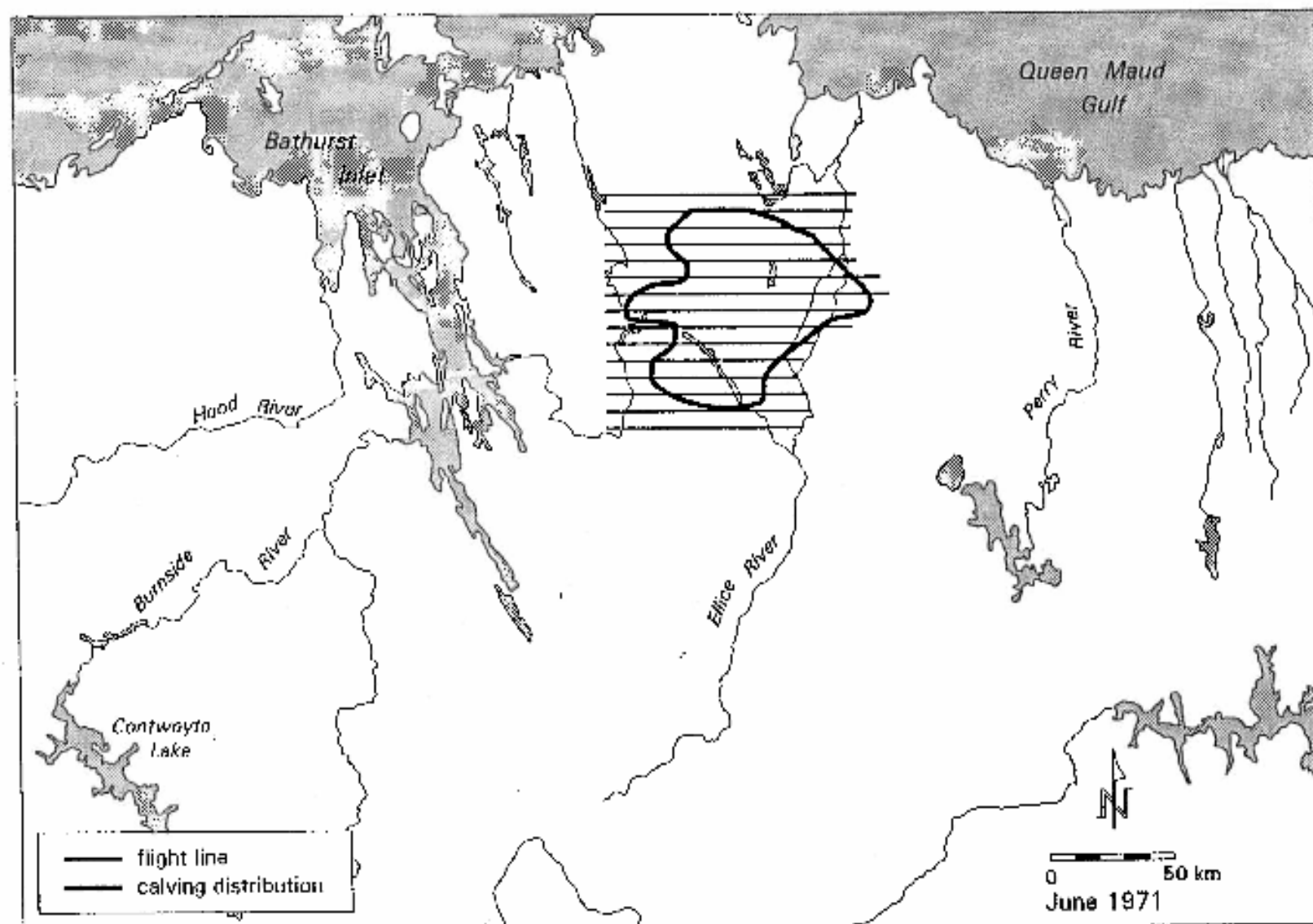


Figure 9. Bathurst calving ground systematic transect survey flight lines, 8-12 June 1971 (Boxer 1971)

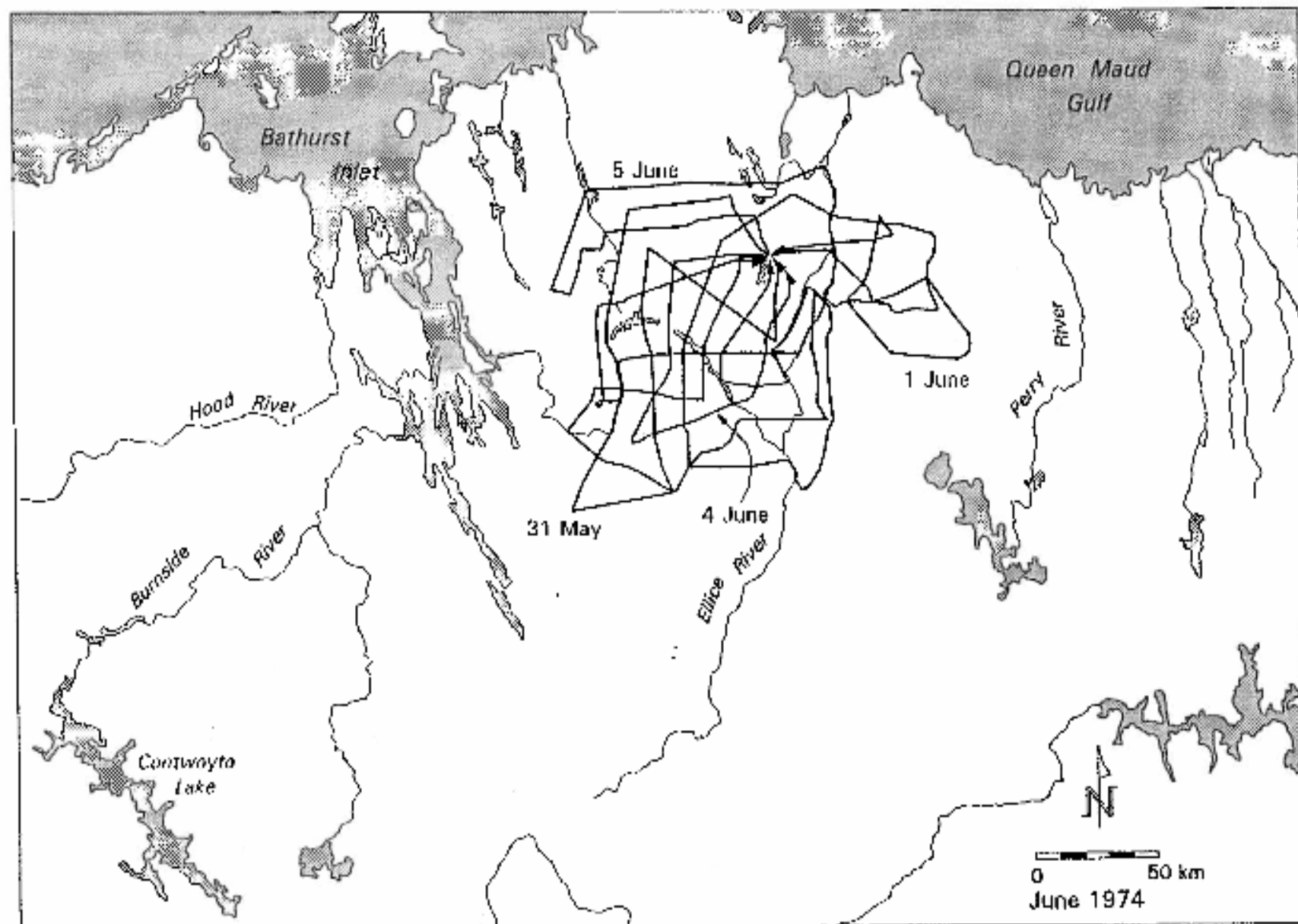


Figure 11. Bathurst calving ground unsystematic reconnaissance flight lines, 31 May - 5 June 1974 (Boxer 1974)

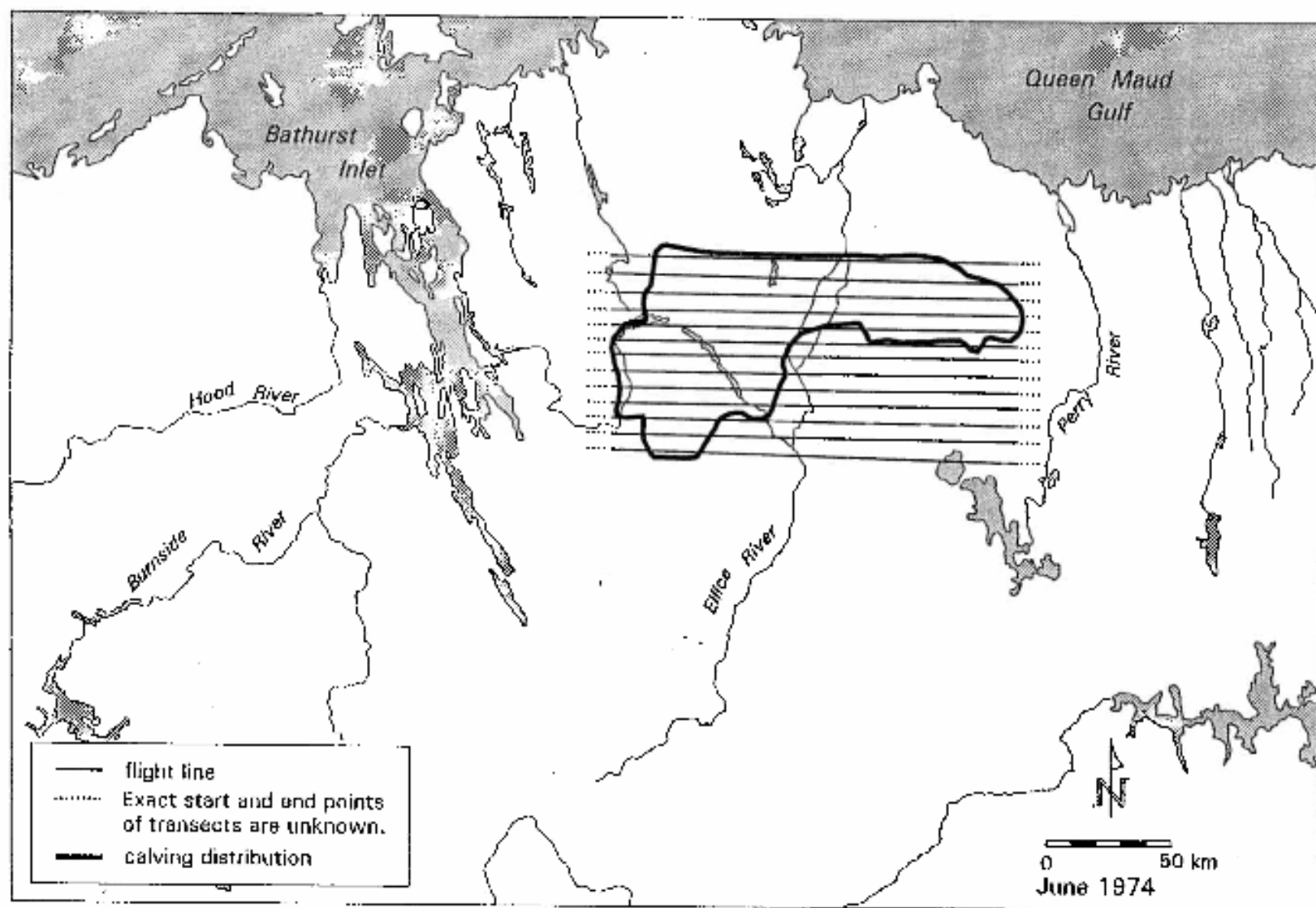


Figure 12. Bathurst calving ground systematic transect survey flight lines, 6-7 June 1974 (Boxer 1974)

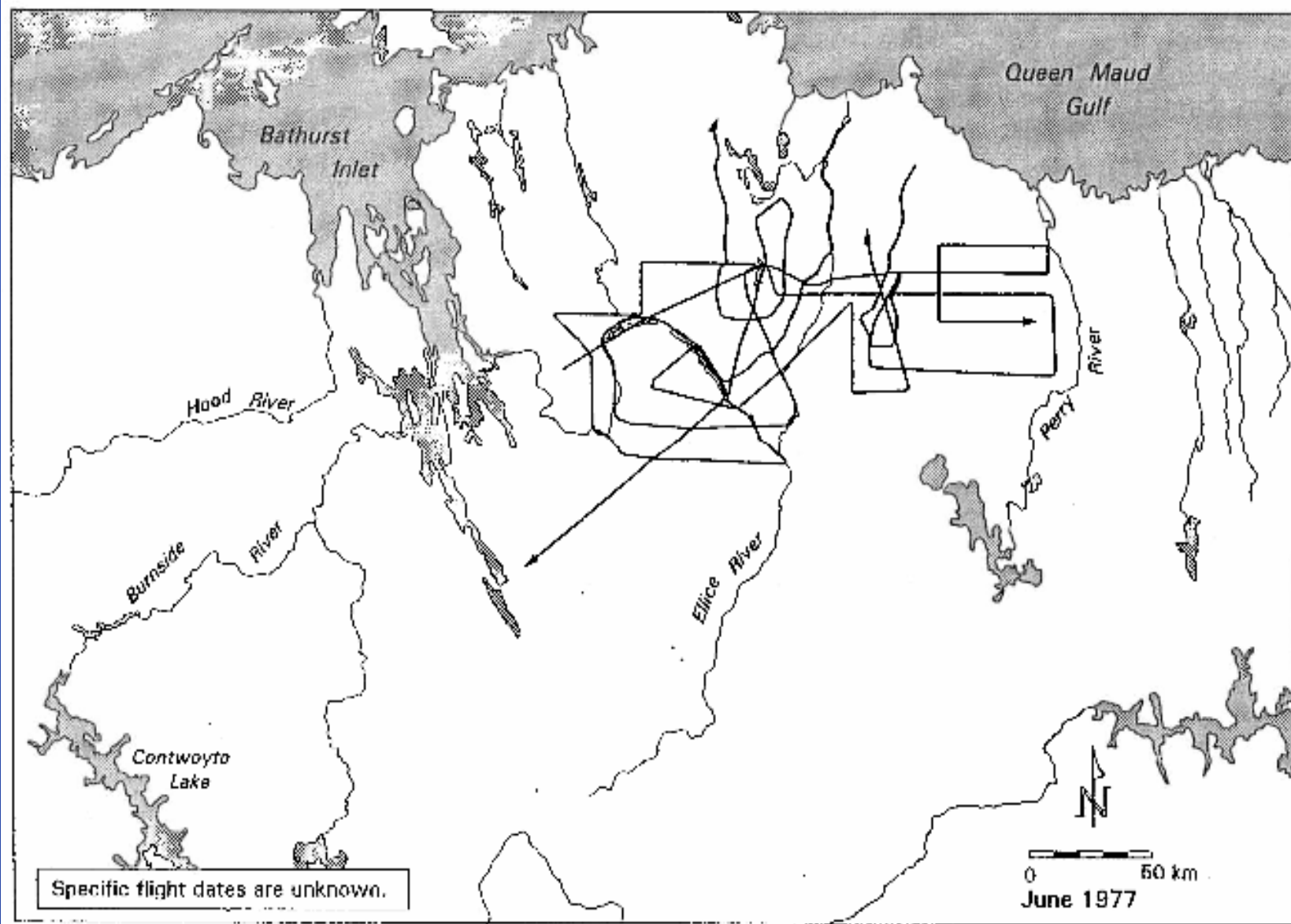


Figure 14. Bathurst calving ground unsystematic reconnaissance flight lines, 1-5 June 1977

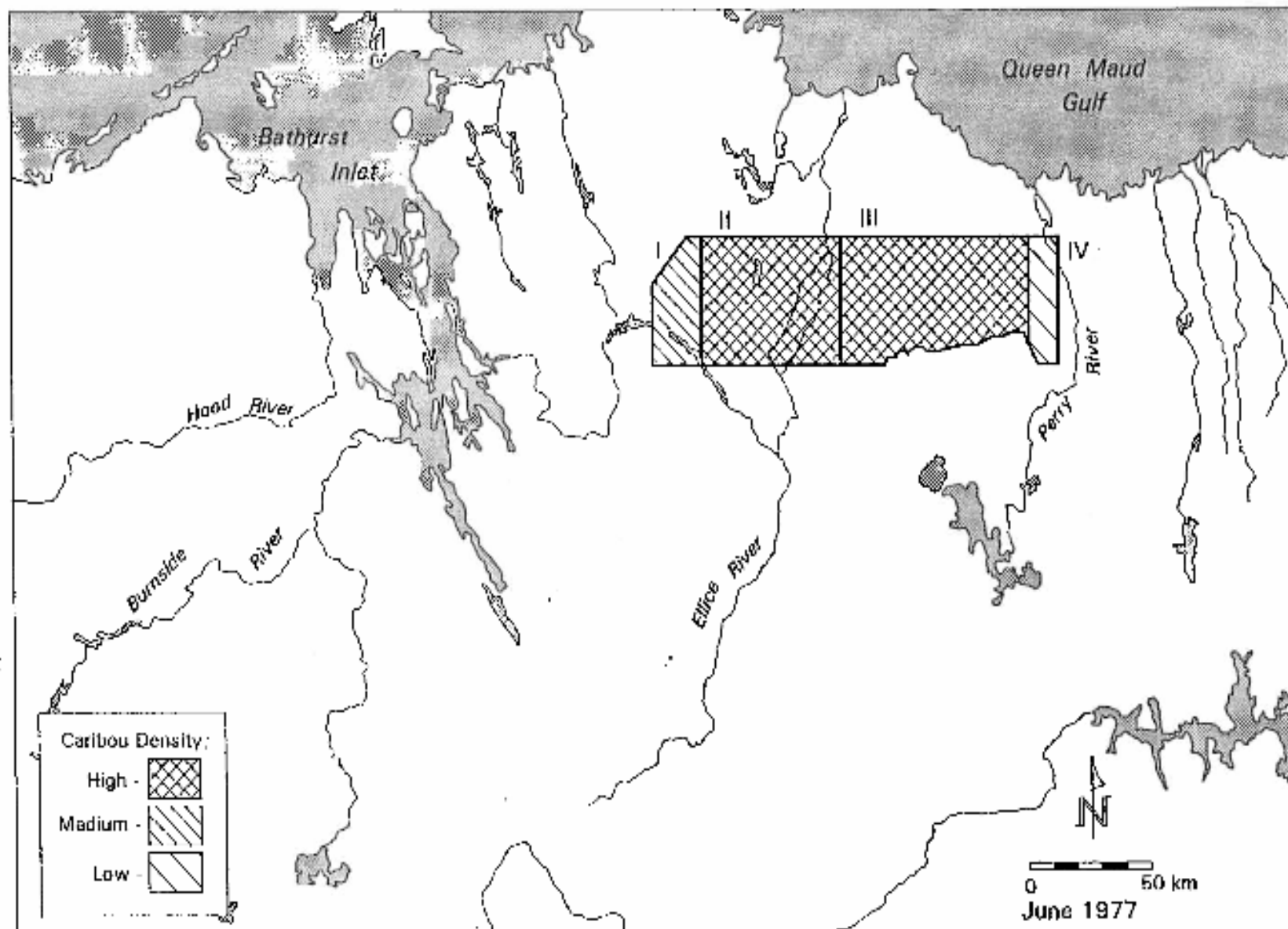


Figure 15. Bathurst calving ground strata, 5-8 June 1977

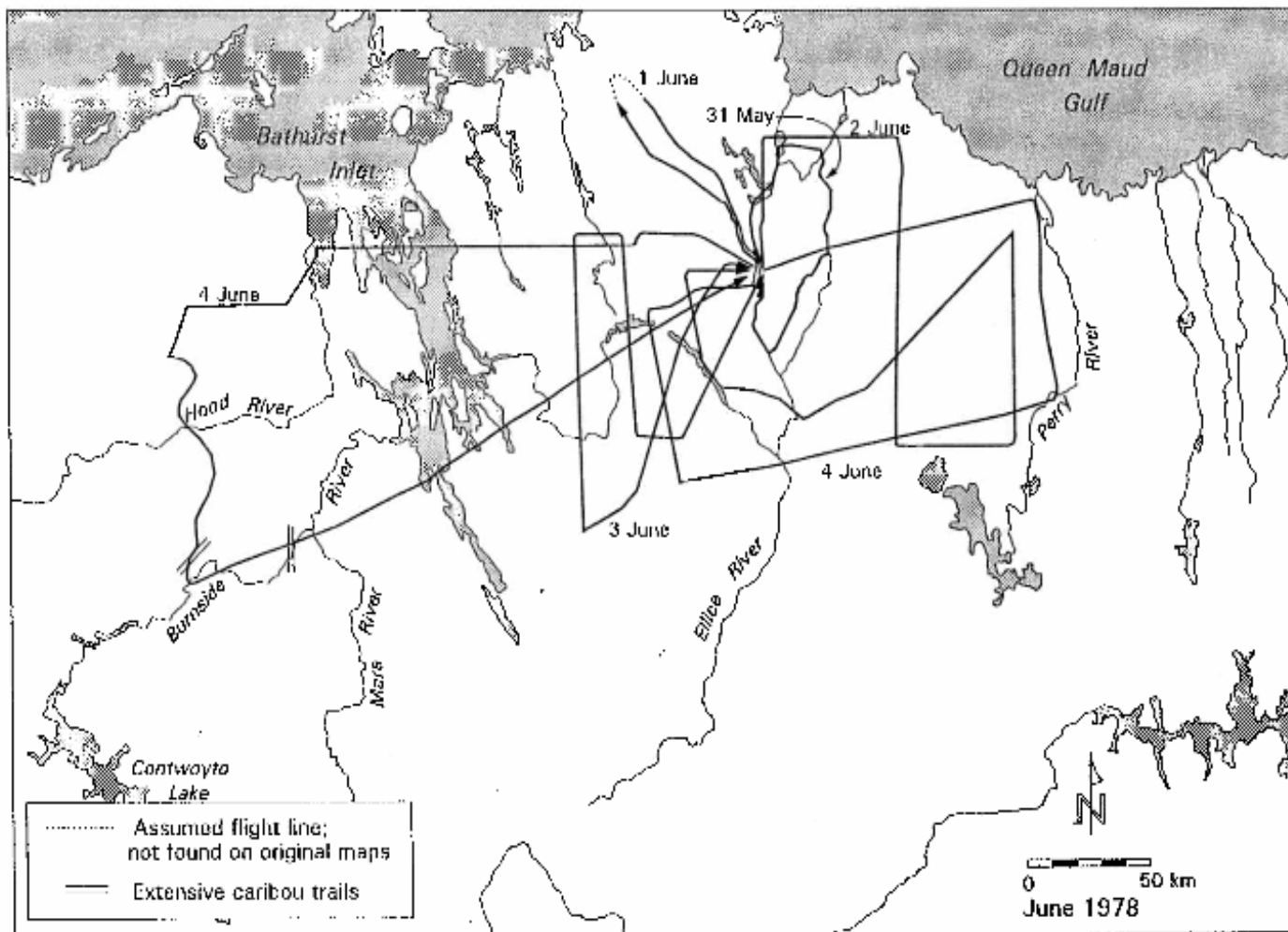


Figure 17. Bathurst calving ground unsystematic reconnaissance flight lines, 31 May - 4 June 1978

Please note here that they flew west of the Bathurst Inlet, but only found calving on the east side of the inlet (next page,) If this survey were done today,, the Bathurst herd would be extinct, because all the caribou calving on the east side would be called Ahik caribou.

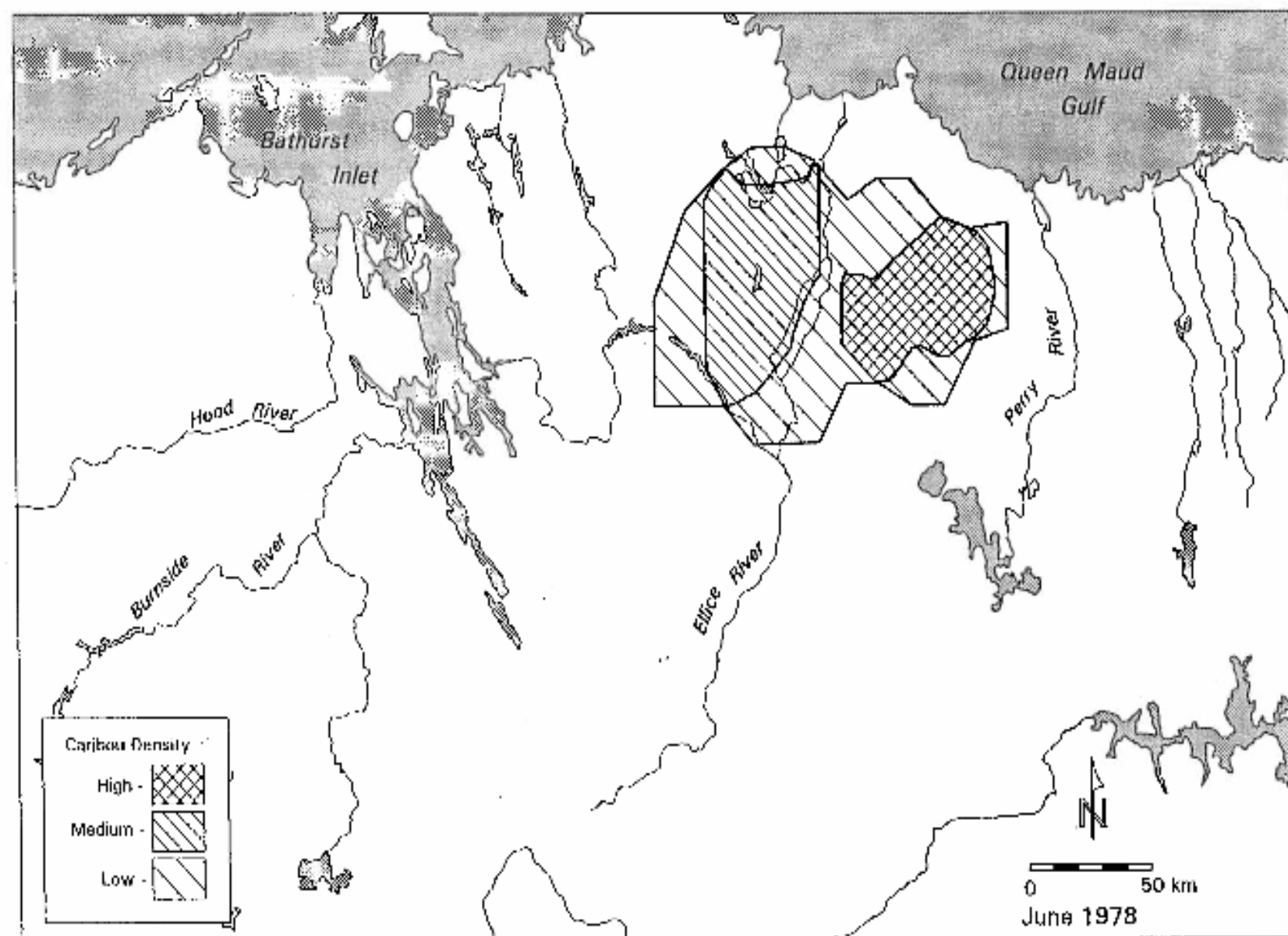


Figure 19. Bathurst calving ground strata, 5-7 June 1978

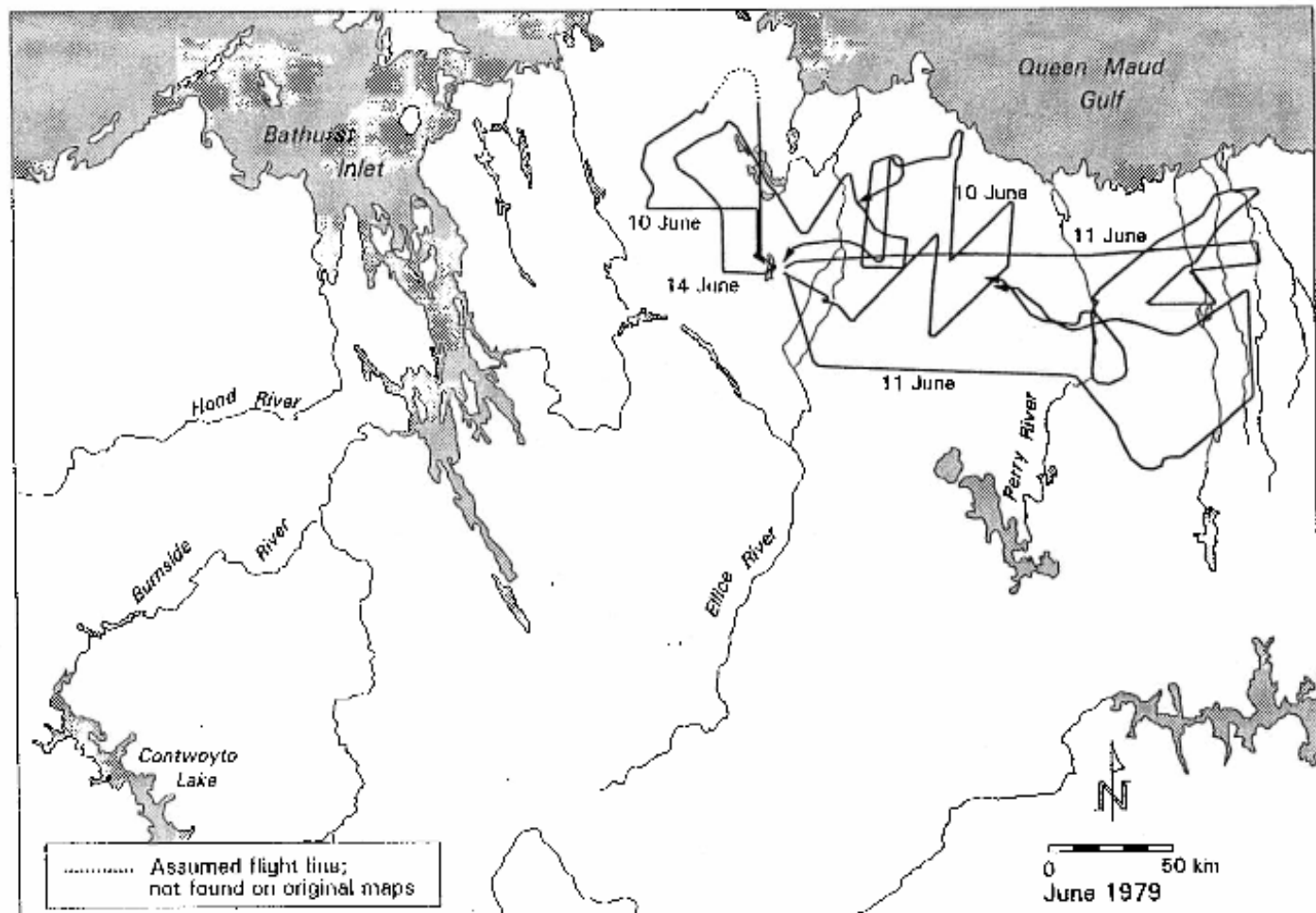


Figure 23. Bathurst calving ground unsystematic reconnaissance flight lines continued, 10-14 June 1979

Please note searching for Bathurst Caribou approximately 75 kms. east of the Perry River. In 1979, if there had been caribou there, as there are in 2009, it would have simply extended the Bathurst traditional calving ground eastward.

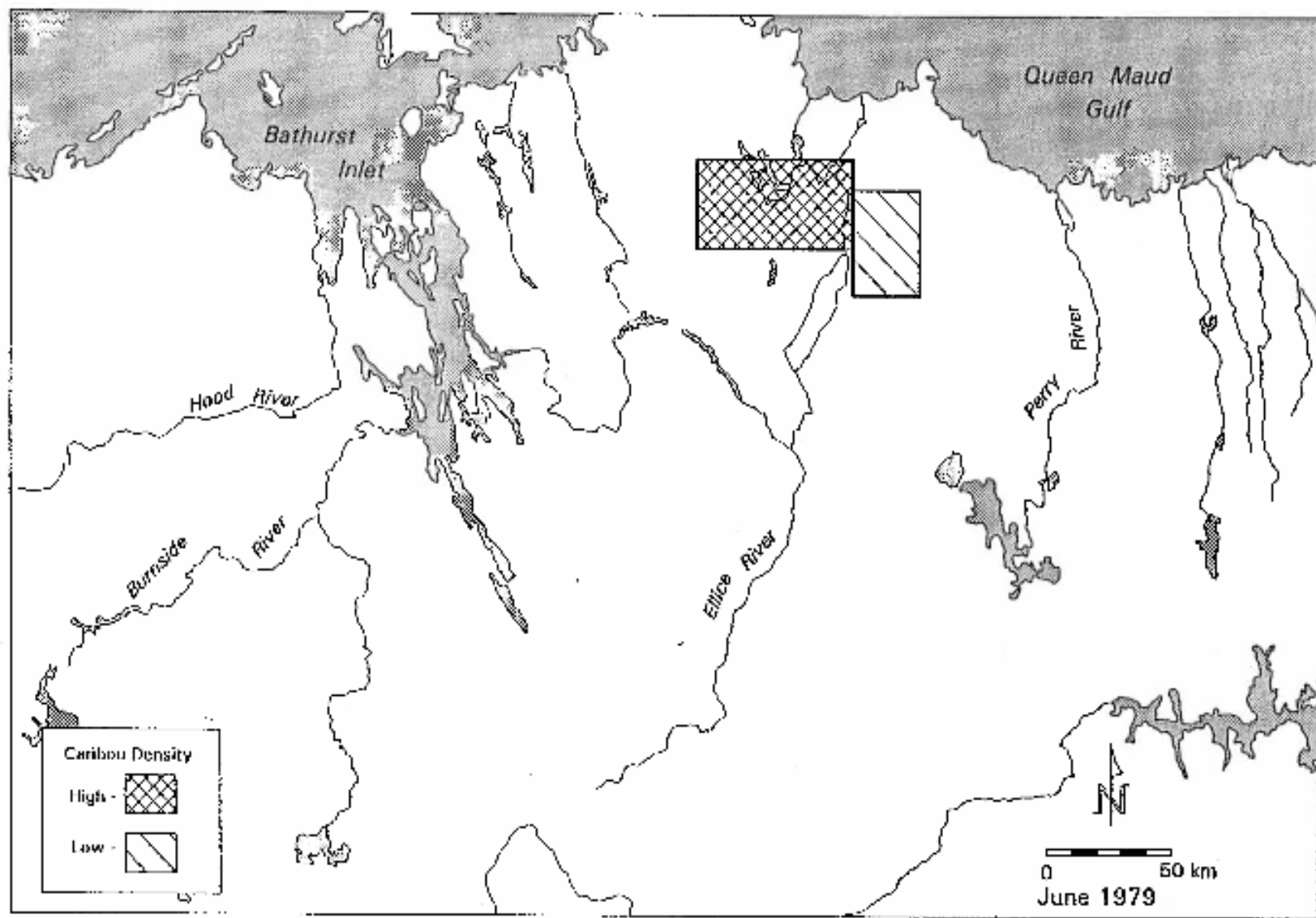


Figure 24. Bathurst calving ground strata based on reconnaissance flight, 14 June 1979

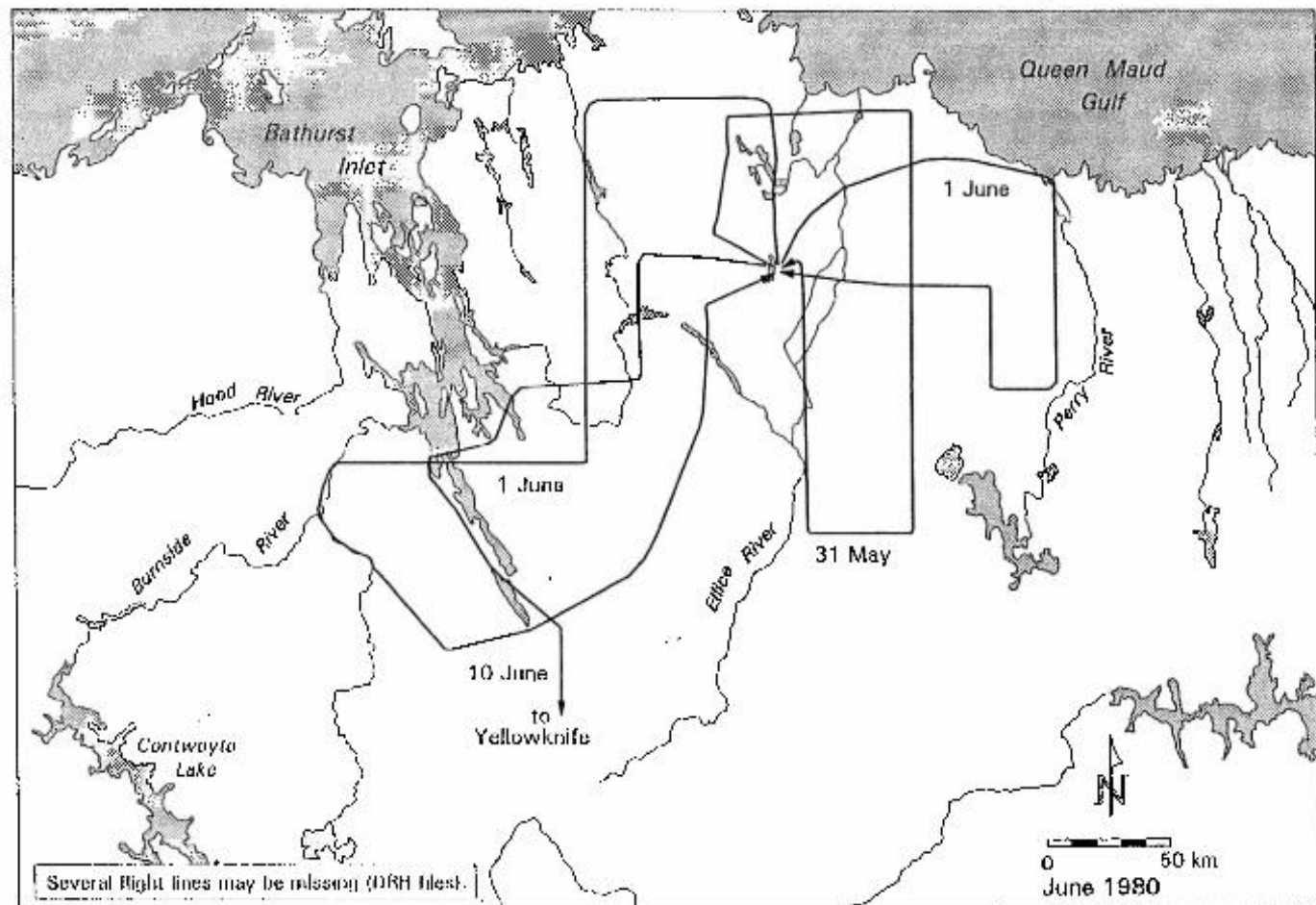


Figure 25. Bathurst calving ground unsystematic reconnaissance flight lines, 31 May - 1 June 1980

Here again, the biologists looked for caribou on both sides of the Bathurst Inlet. Calving was only found on the east side (next page). Again, under the current definitions, the Bathurst herd would have crashed to near zero.

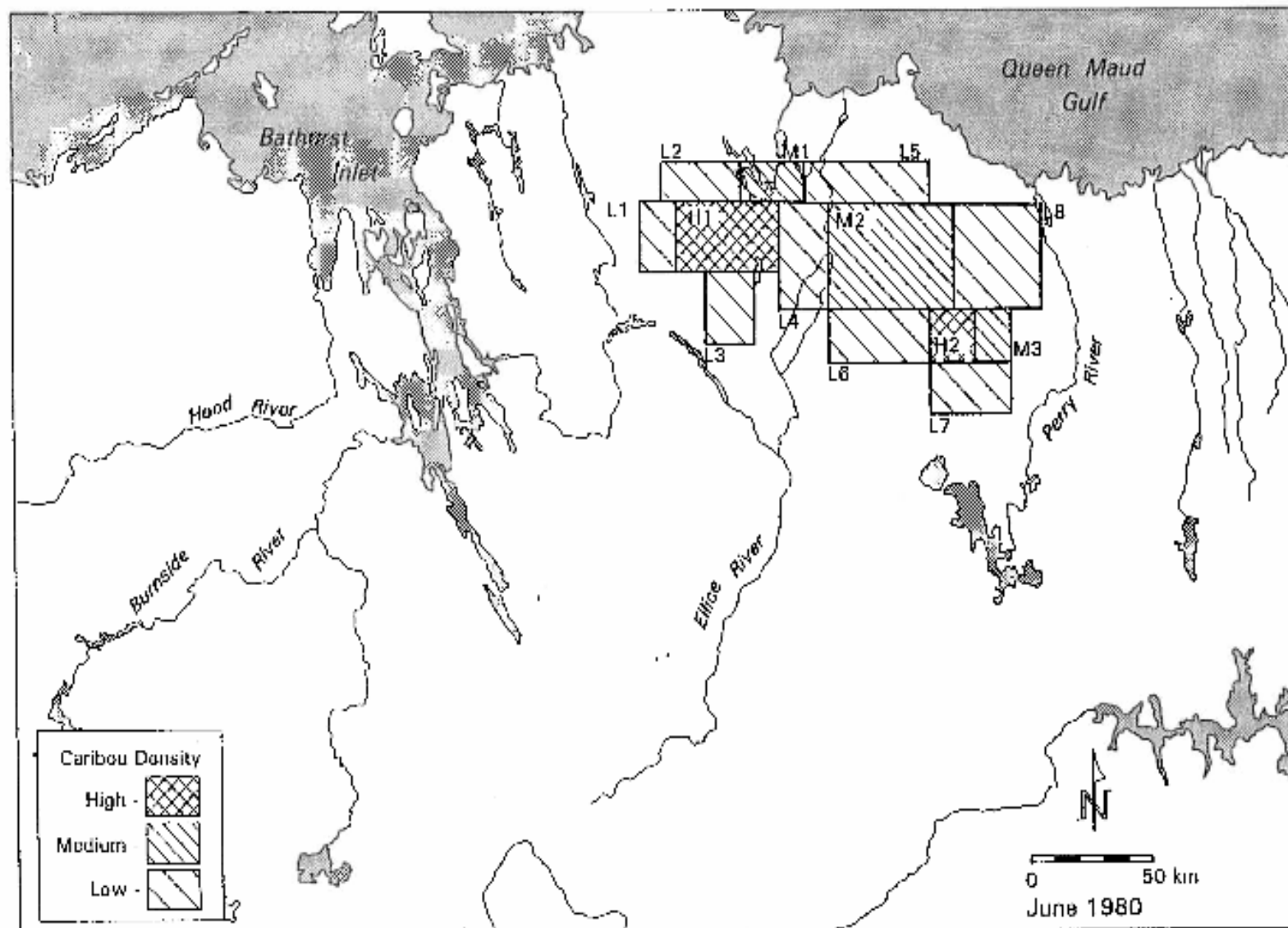


Figure 27. Bathurst calving ground strata, 2 June 1980

Note the two separate areas of high density calving.

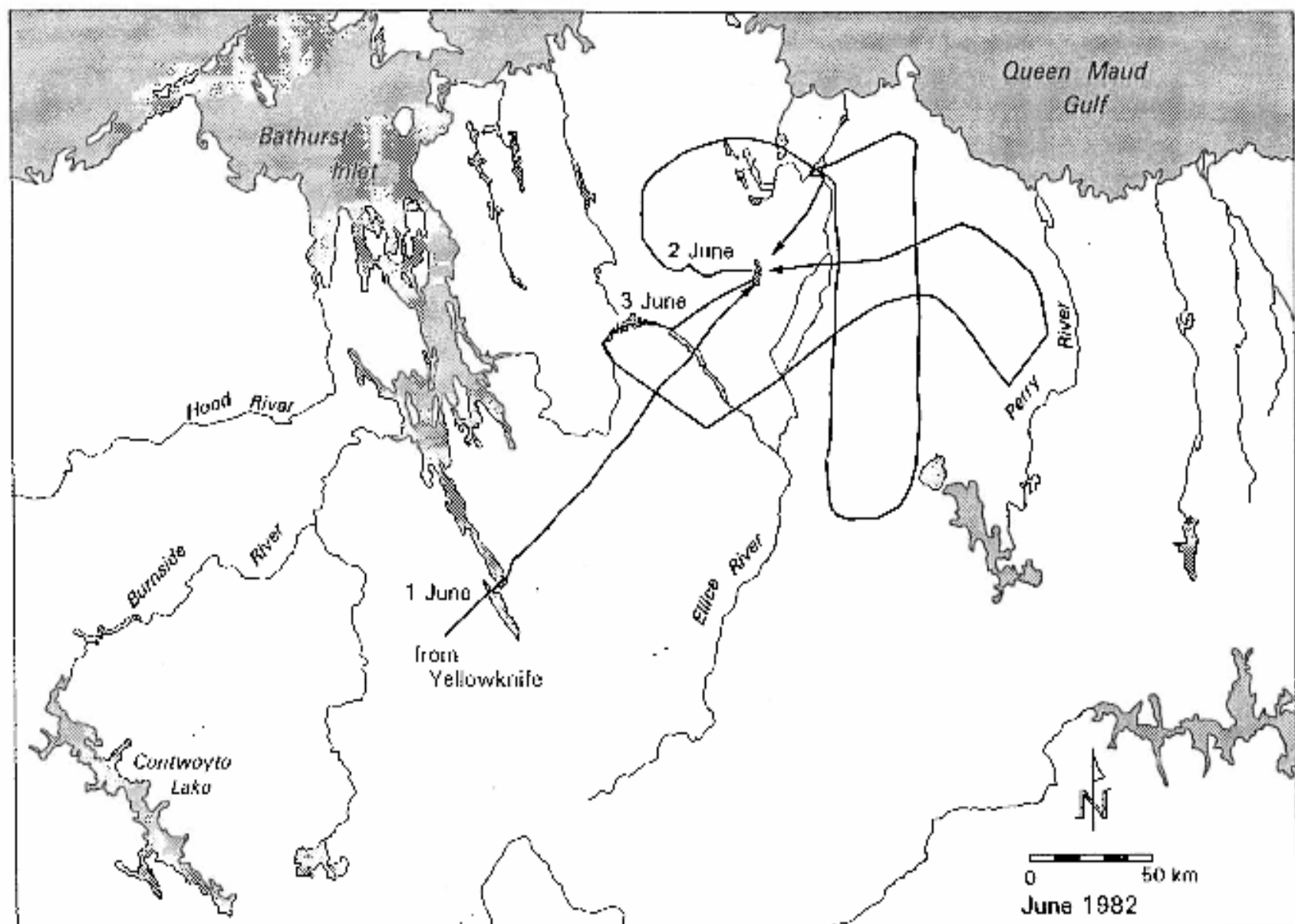


Figure 31. Bathurst calving ground unsystematic reconnaissance flight lines, 2-3 June 1982

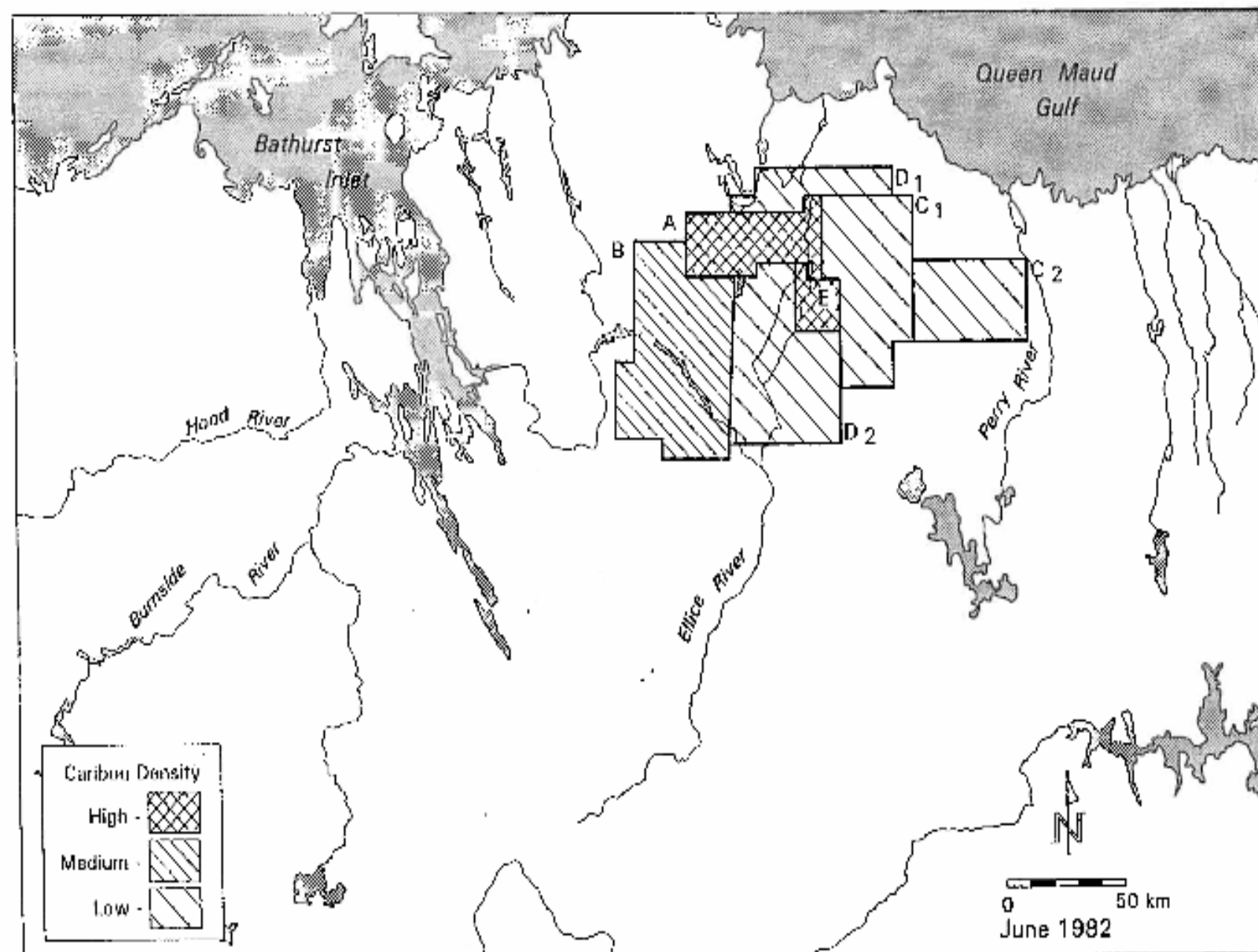


Figure 33. Bathurst calving ground strata, 3-4 June 1982

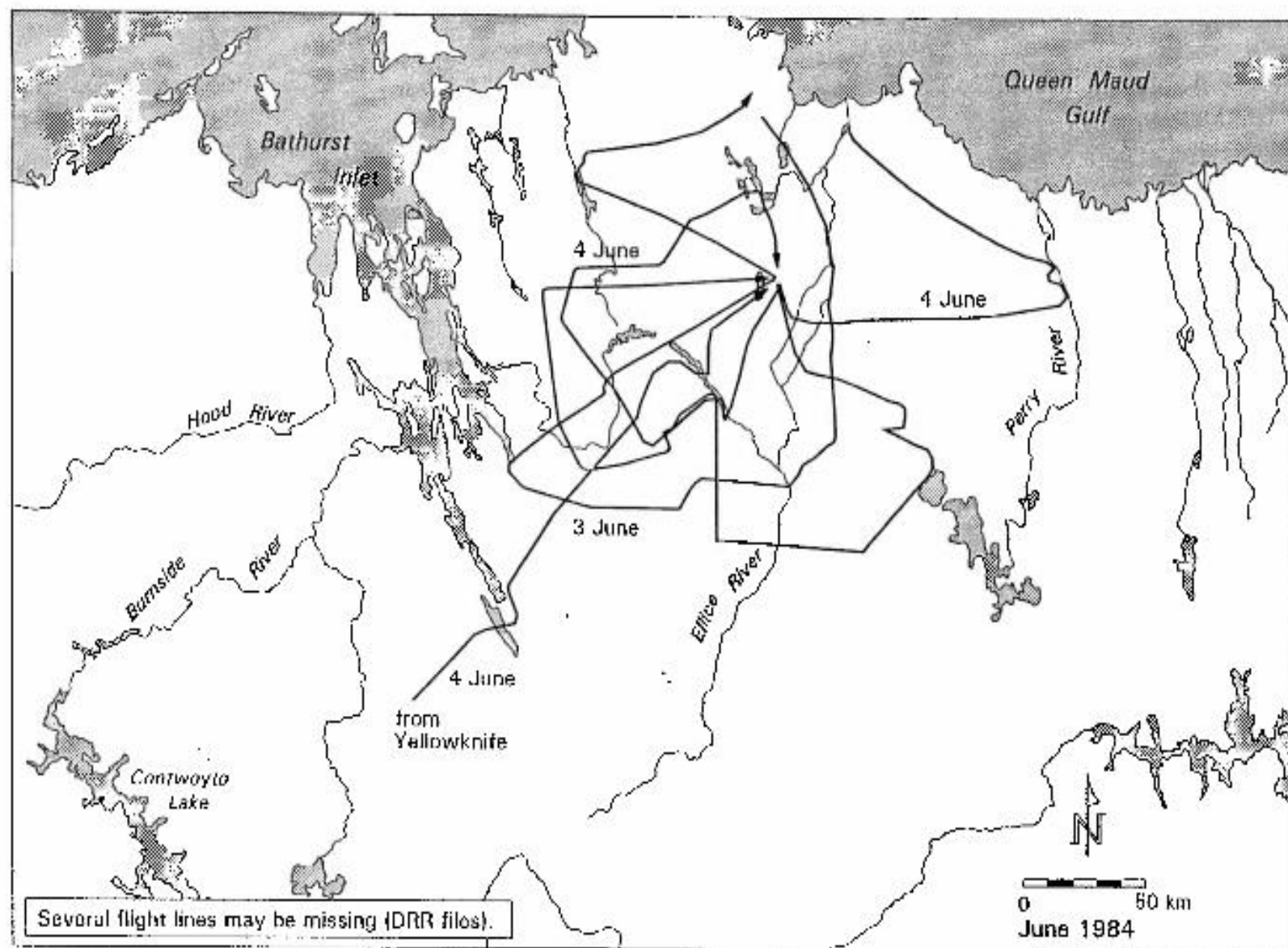


Figure 38. Bathurst calving ground unsystematic reconnaissance flight lines, 3-4 June 1984

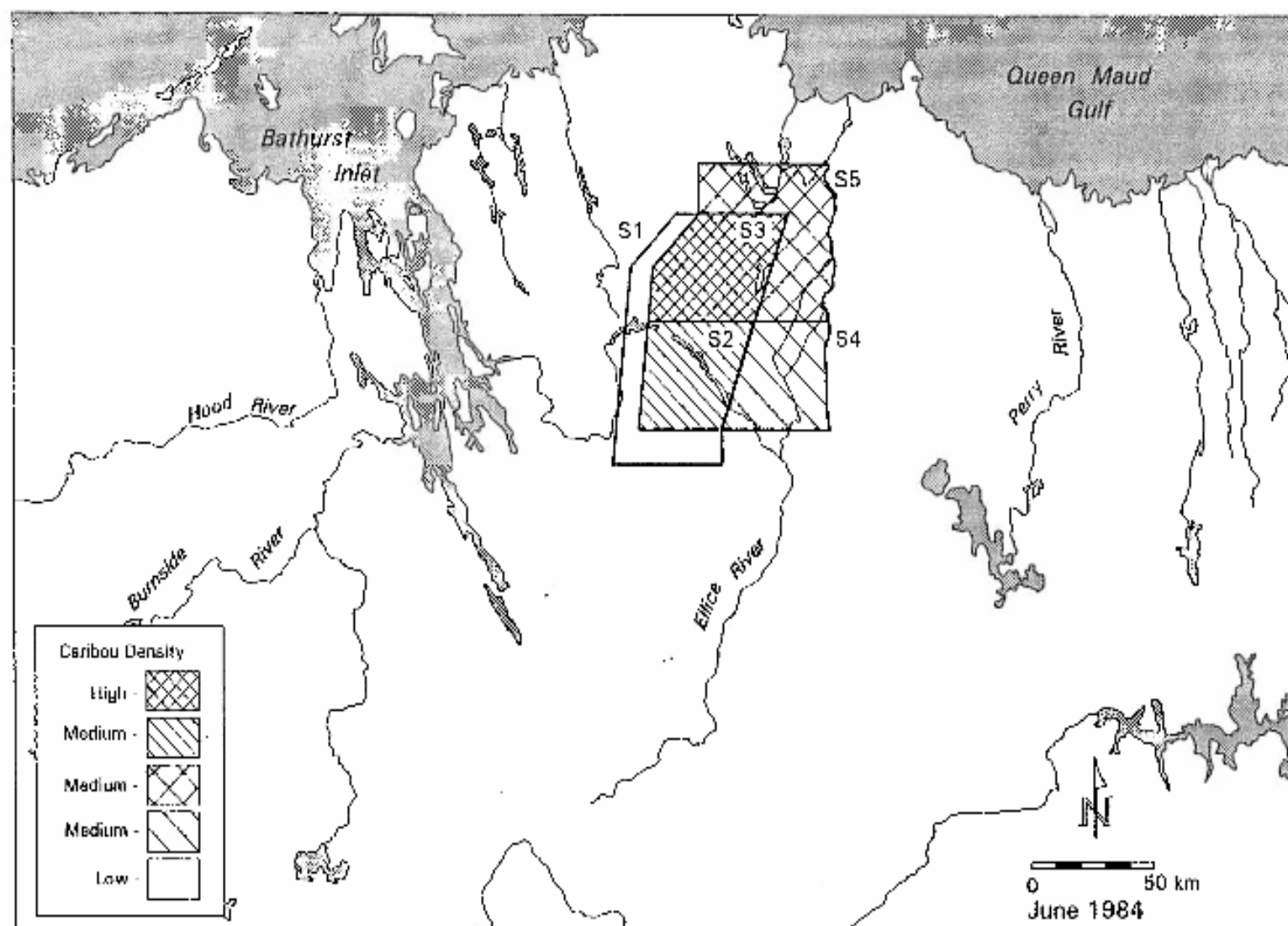


Figure 39. Bathurst calving ground strata, 3-4 June 1984

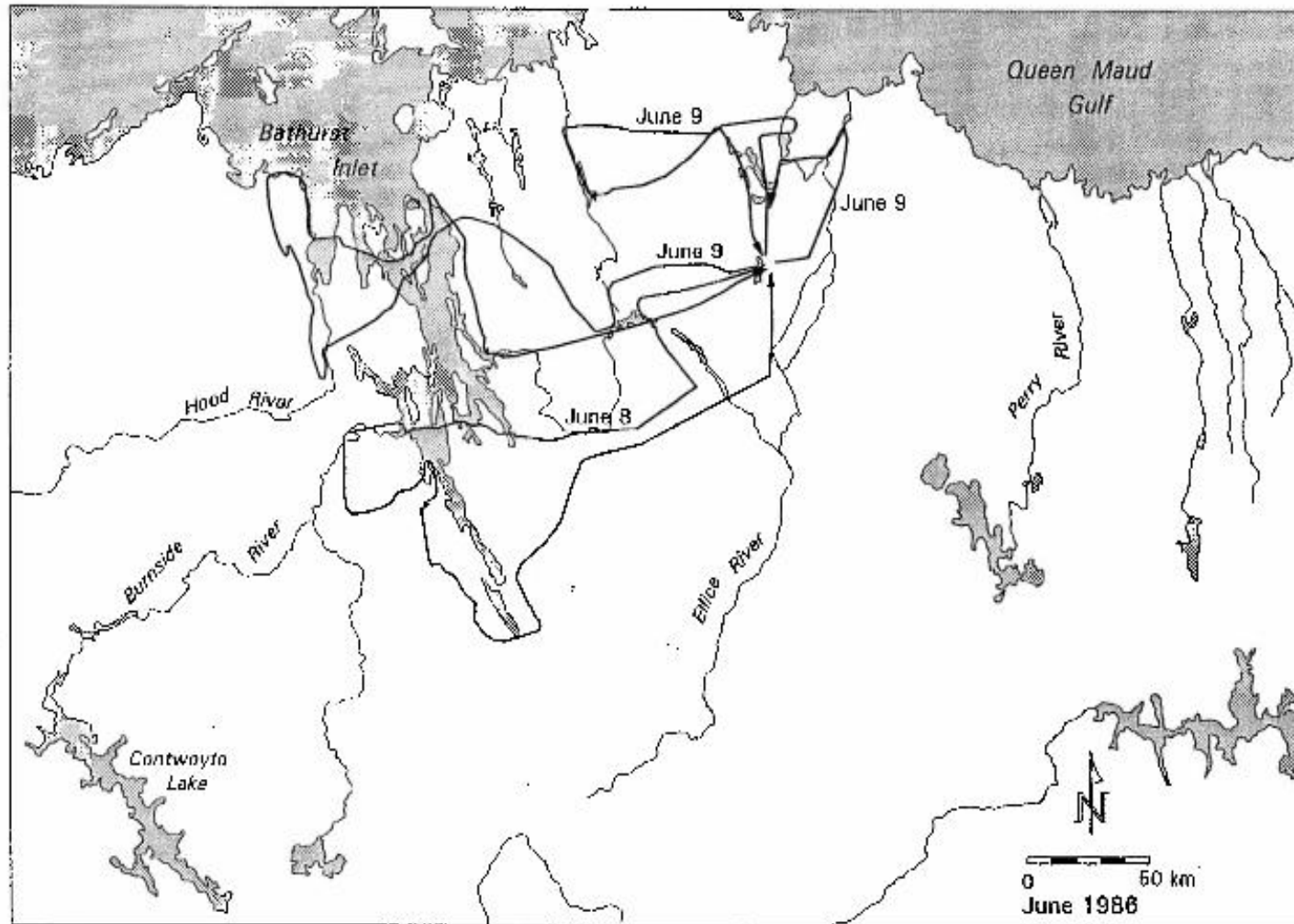


Figure 44. Bathurst calving ground unsystematic reconnaissance flight lines, 8-9 June 1986

Note flying on both sides of the Bathurst Inlet, looking for Bathurst caribou on both sides of the inlet.

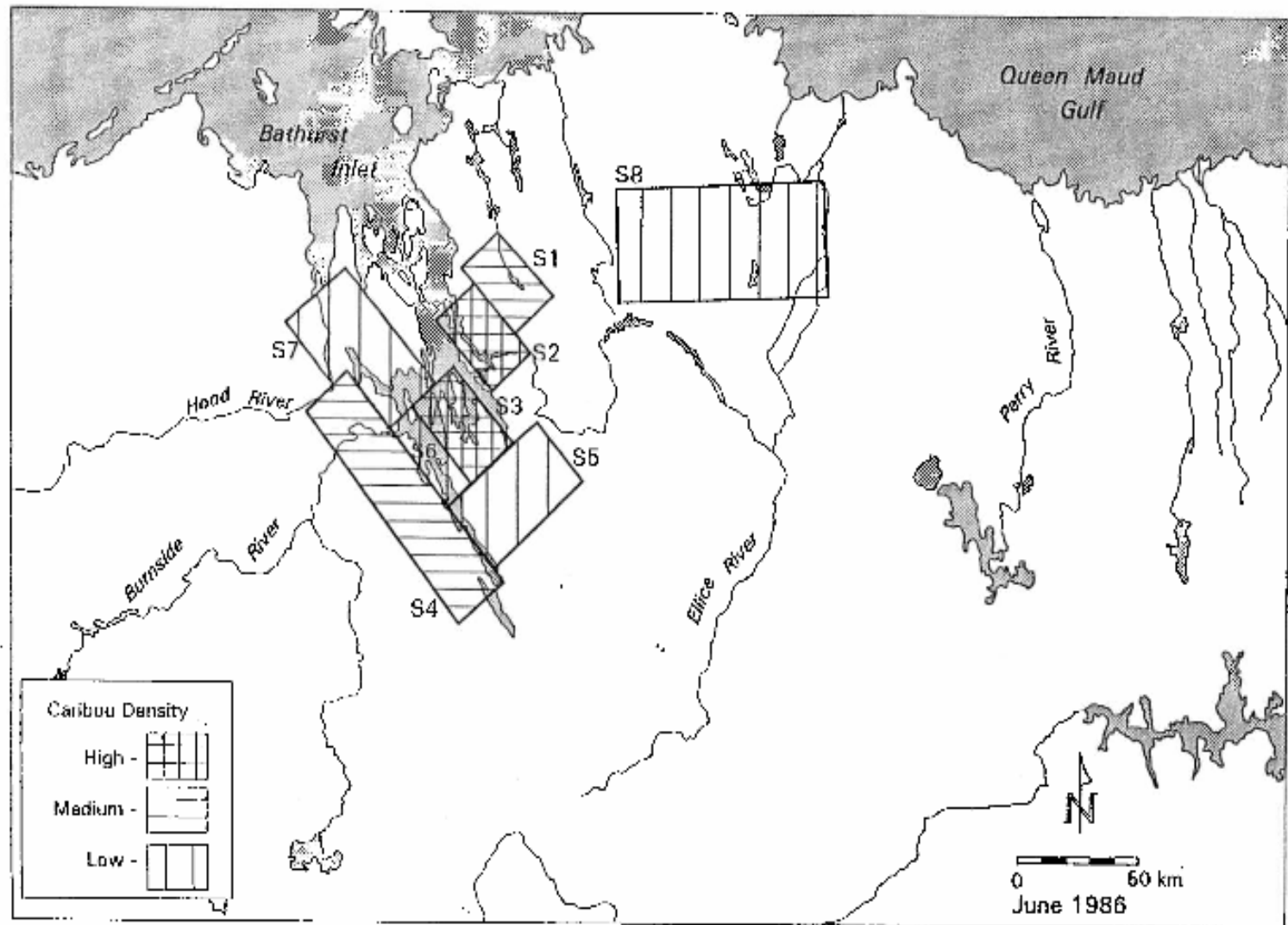


Figure 46. Bathurst calving ground strata, 10-16 June 1986

Note Bathurst caribou on both sides of the Bathurst Inlet. Under the current regime, all the caribou east of the inlet would be Ahik caribou.

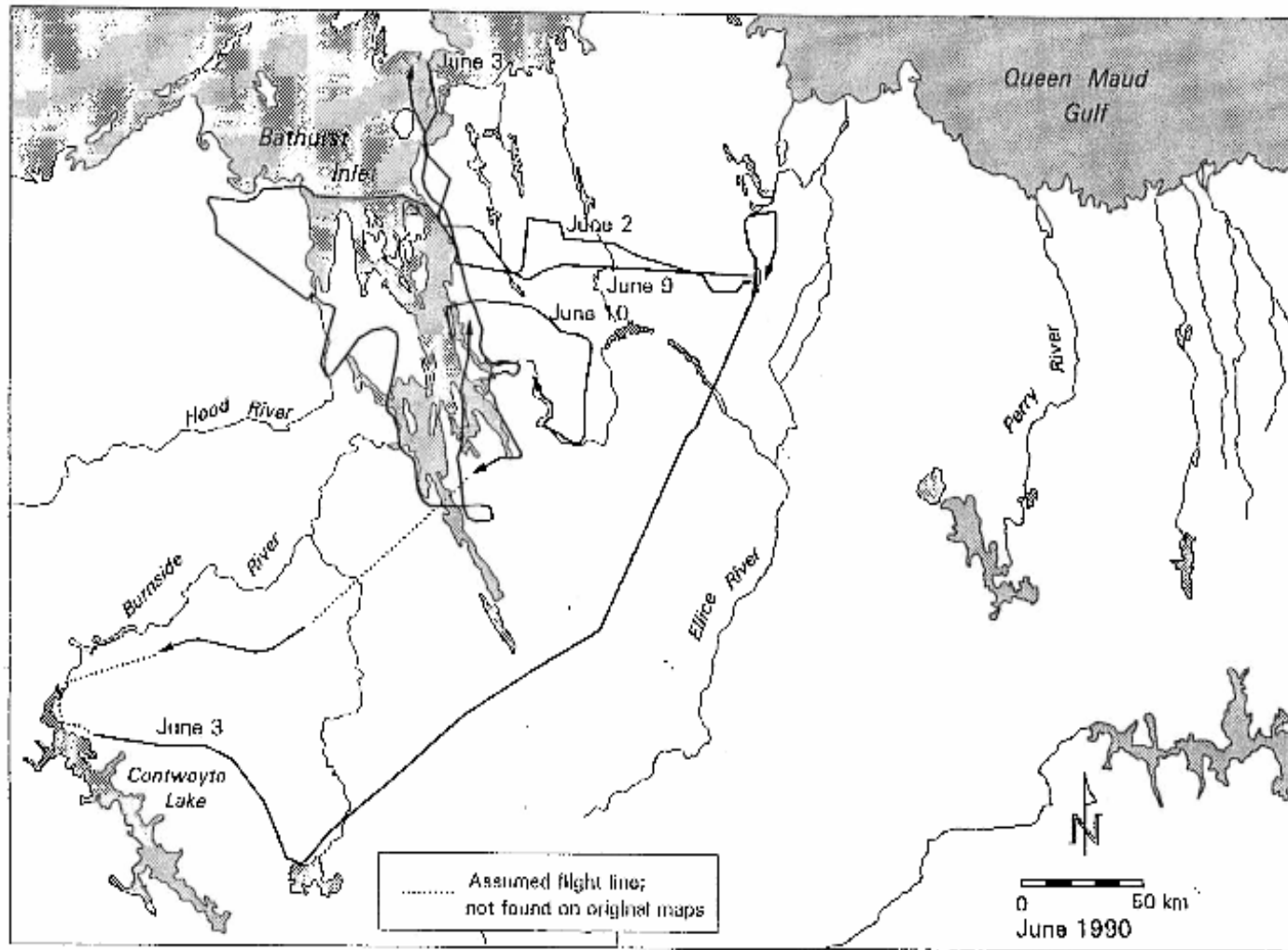


Figure 50. Bathurst calving ground unsystematic reconnaissance flight lines, 2-10 June 1990

Again in 1990, looking on both sides of the Bathurst Inlet, and finding calving caribou, next page (Bathurst Caribou!!) on both sides of the inlet.

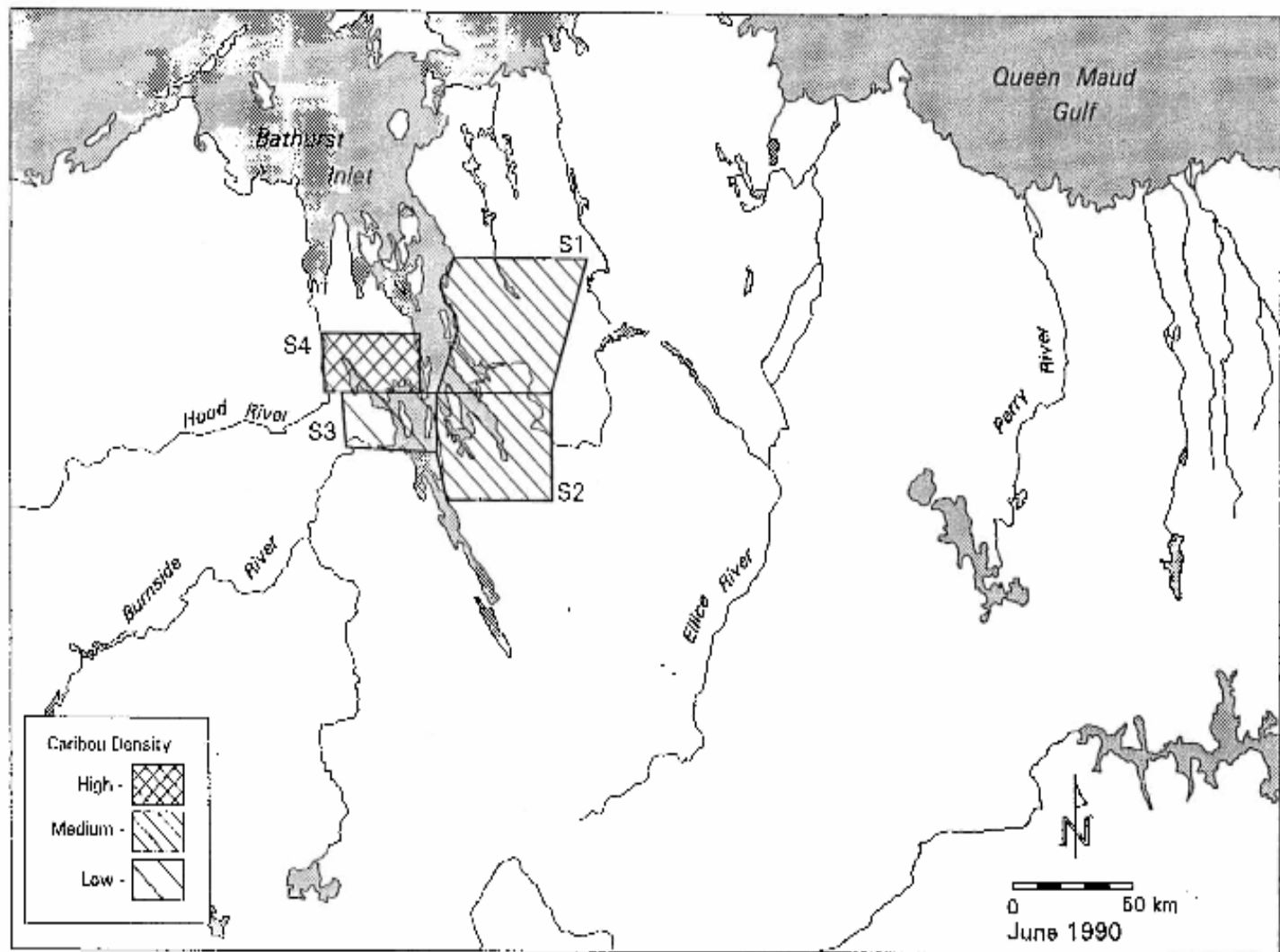


Figure 52. Bathurst calving ground strata, 11 June 1990

Note Bathurst Caribou calving on both sides of the Bathurst Inlet.

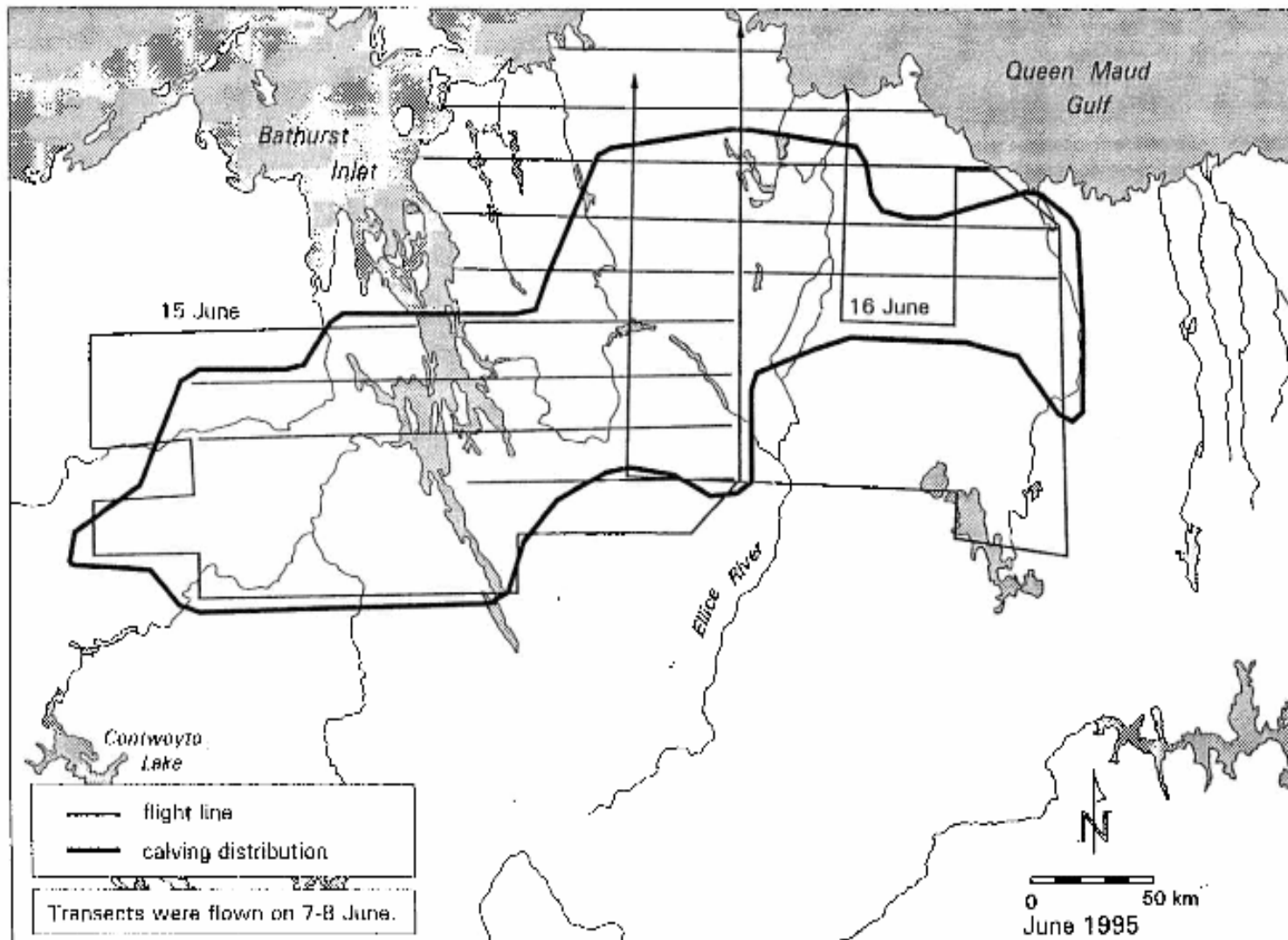


Figure 55. Bathurst calving ground survey flight lines and calving distribution, 7-16 June 1995

1995 Survey. The year before the "creation" of the Ahiak caribou herd. Looking for Bathurst caribou on both sides of the Bathurst Inlet.

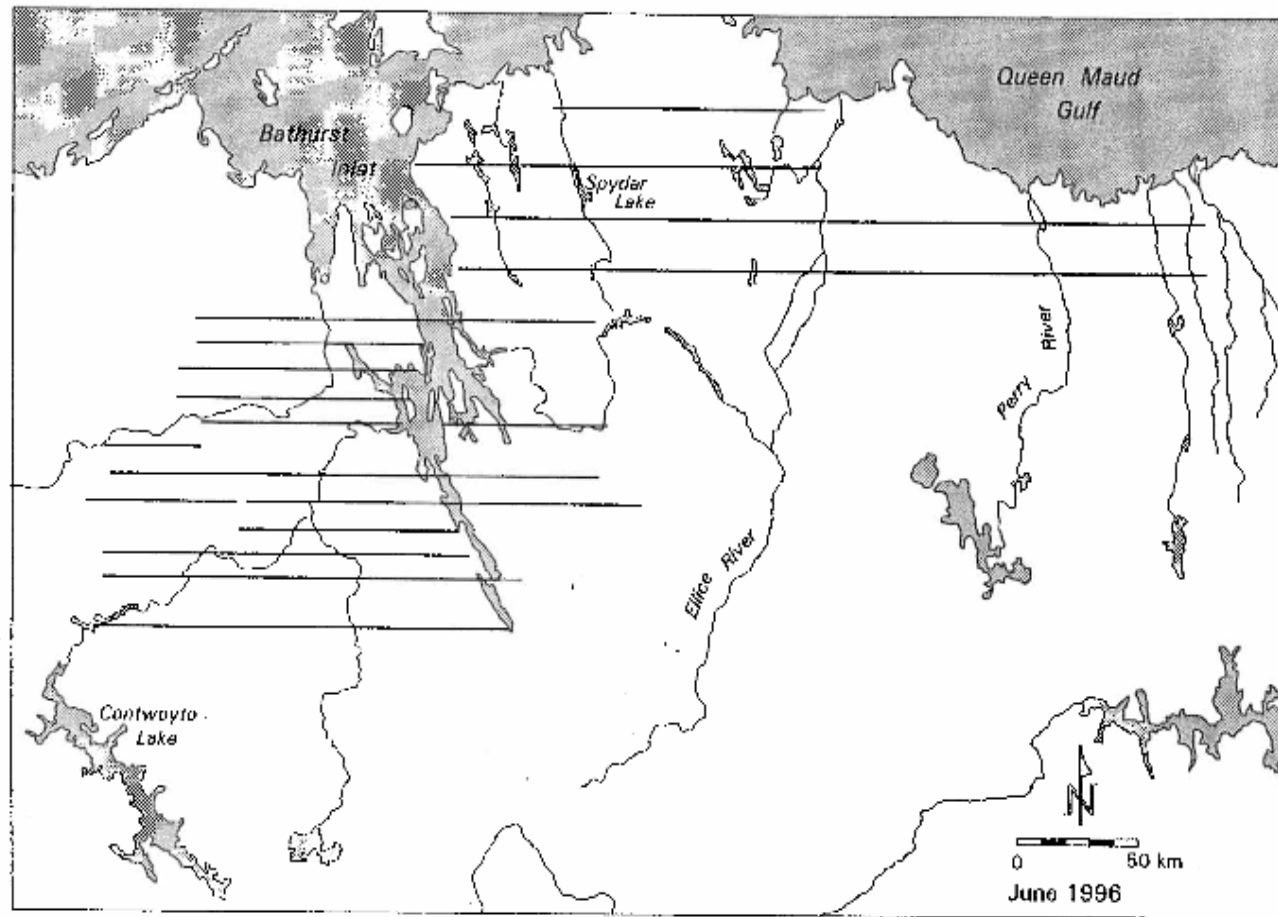


Figure 58. Bathurst calving ground systematic reconnaissance flight lines, 6-8 June 1996

Here are the flight lines flown for the 1996 Bathurst Caribou Survey. Note looking on both sides of the inlet. 4 days later, Anne Gunn "interprets" the caribou on the east side of the Bathurst Inlet to be Queen Maud Gulf Caribou. She bases this, so she says, on Keri Zittlau's nuclear DNA research (which didn't begin until the year 2000) and the locations of four collared cows, collared 7 weeks earlier. This throws away the research of the previous 40 years, and archaeological evidence showing the Bathurst herd has calved here for 6000 years.

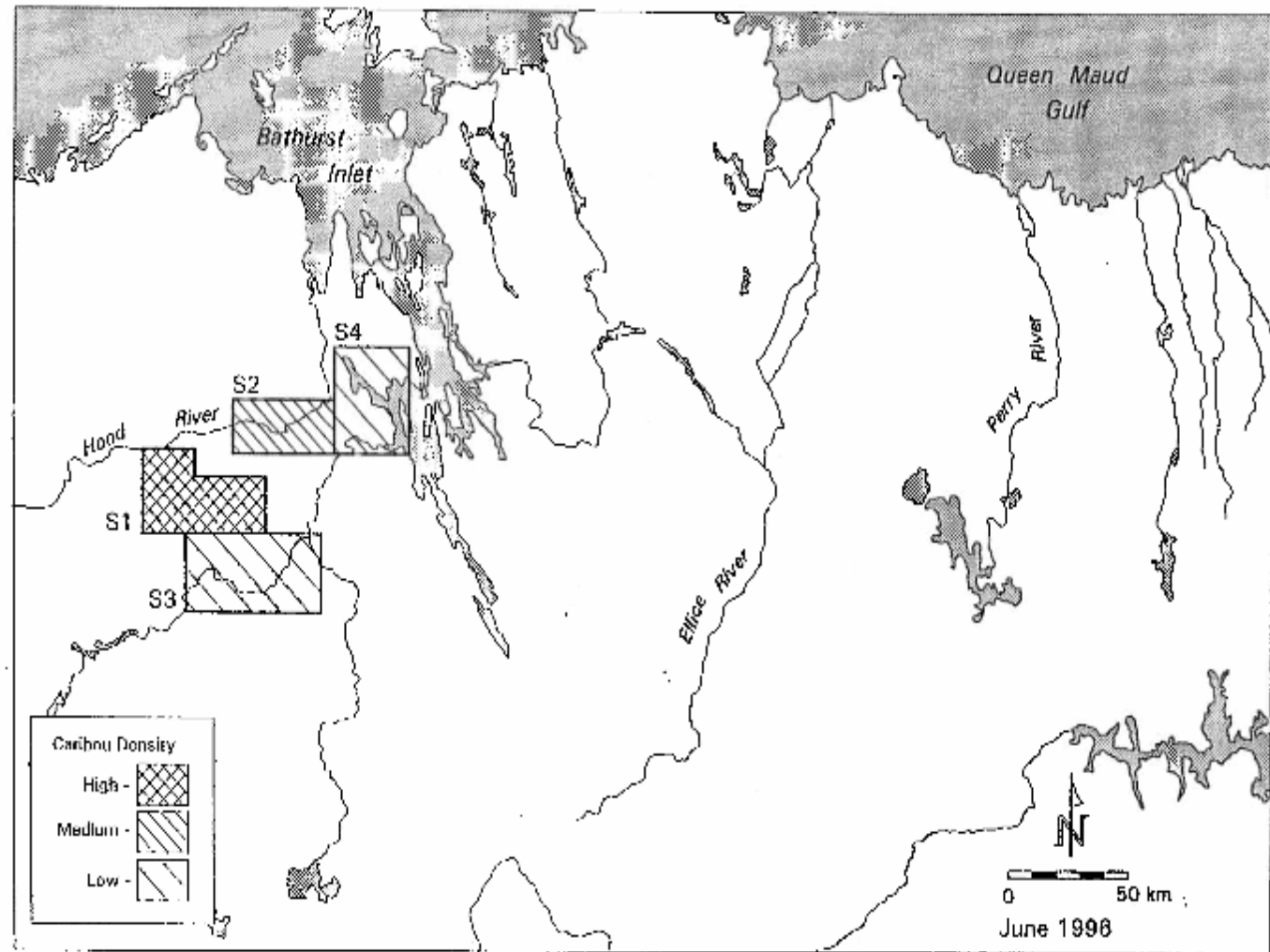


Figure 58. Bathurst calving ground strata, 6-11 June 1996

Note no Bathurst herd east of the Inlet. Whatever caribou were there, were now Queen Maud Gulf caribou. Anne Gunn counted 4453 caribou east of the Inlet. She reported 200,000 caribou in File Report #126.

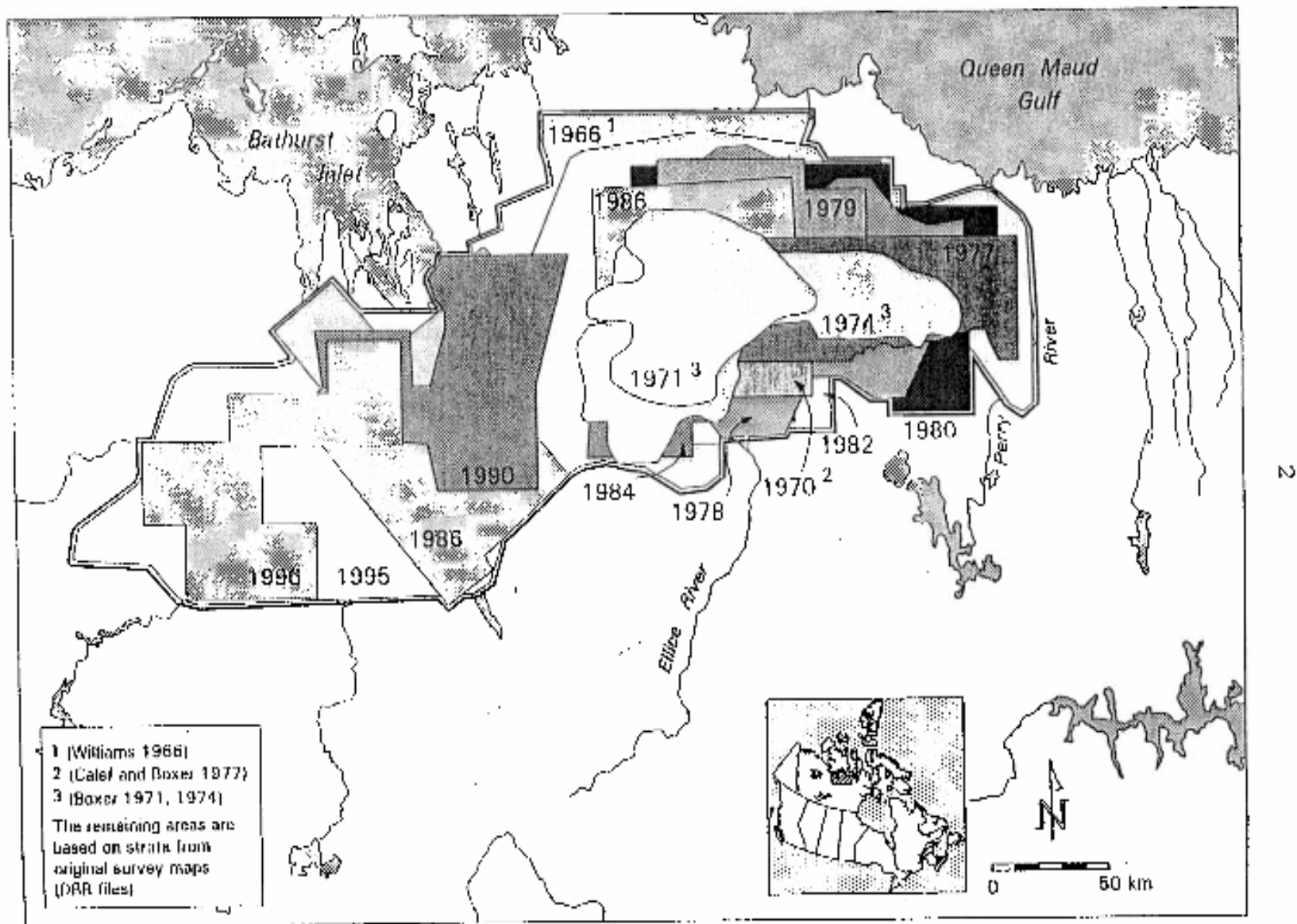


Figure 1. Superimposed annual calving grounds delimited during systematic and unsystematic reconnaissance surveys on the Bathurst calving grounds, 1966-1996

This composite map then forms the "traditional" Bathurst Calving Ground

40 Years and 23 Surveys not enough

- “Experience with the Bathurst herd’s calving ground over four decades also reveals a shift in the location of annual calving grounds. The **traditional calving grounds** comprise the areas known to be used for calving over many years and 23 surveys during four decades may not be an adequate sample.”*

*Surveys of the Beverly Caribou Calving Grounds 1957-1994. A. Gunn & M. Sutherland, RWED, GNWT, 1997, Page 17

The Ahiak Herd "Creation"

Ahiak Herd Justification

This is what Anne Gunn said in 2002:*

★ “Relatively little has been reported about the Ahiak herd but the justification for identifying it as a separate herd from the Bathurst herd (Gunn et al. in prep.) was based on 1996–98 satellite telemetry and that caribou from the Ahiak herd are genetically distinct from both the Beverly and Bathurst herds based on nuclear DNA (K. Zittslau unpubl. data). “ ★

Anne Gunn declared four collared caribou on the Bathurst calving ground to be Queen Maud Gulf caribou in 1996.** DNA research didn't even begin until 2000.

*Extent of Calving for the Bathurst & Ahiak Caribou Herds June 2002, Anne Gunn & Adrian D'hont GNWT

**1996 Bathurst Caribou Survey, File Report #119, Page 9

In fact, in 1996, when Dr. Anne Gunn declared the Ahiak herd a separate herd, and up to at least the year 2000, there were no DNA samples of the Ahiak herd available.*

“Genetic samples are available for the Bathurst herd (unpublished data) but not for either the Beverly or Queen Maud Gulf herd.”

*File Report #126, 2000, Abundance and Distribution of the Queen Maud gulf HERD, 1986-1996. Page 27

Keri Zittlau completed her work * and found
No Genetic Evidence

Website of the Beverly and
Qamanirjuaq Caribou Management Board

Can DNA solve caribou mysteries?

University of Alberta PhD student Keri Zittlau won awards in 2000 and 2002 to see whether microsatellite DNA analysis would unravel the case of genetic variation, gene flow and herd range boundaries of the Beverly, Qamanirjuaq, Bathurst and Ahlak caribou herds. Microsatellites are short DNA sequences that reveal extensive genetic differences between individuals and populations. Since caribou migrate over huge distances, it's hard to determine their range boundaries. But it's important to know where migration routes are so that resource development doesn't interfere with caribou movements, and so that caribou-dependent northerners know where the animals are.

Zittlau eventually concluded that, because the continental herds are so large, some herds have not yet developed features that are distinct from their neighbours.**

* Population Genetic Analyses of North American Caribou (Rangifer tarandus) Keri Ann Zittlau, University of Alberta 2004

** www.arctic-caribou.com/scholarship.html

1. There is no genetic evidence to substantiate the Ahiak herd as a separate herd from the Bathurst herd.

2. Is the collared caribou information sufficient to declare a new herd?

Following is the research. Judge for yourself.

Source: GNWT File
Report #126
next 5 slides.
(Collaring locations
marked in orange by
author, to make it
easier to read.)

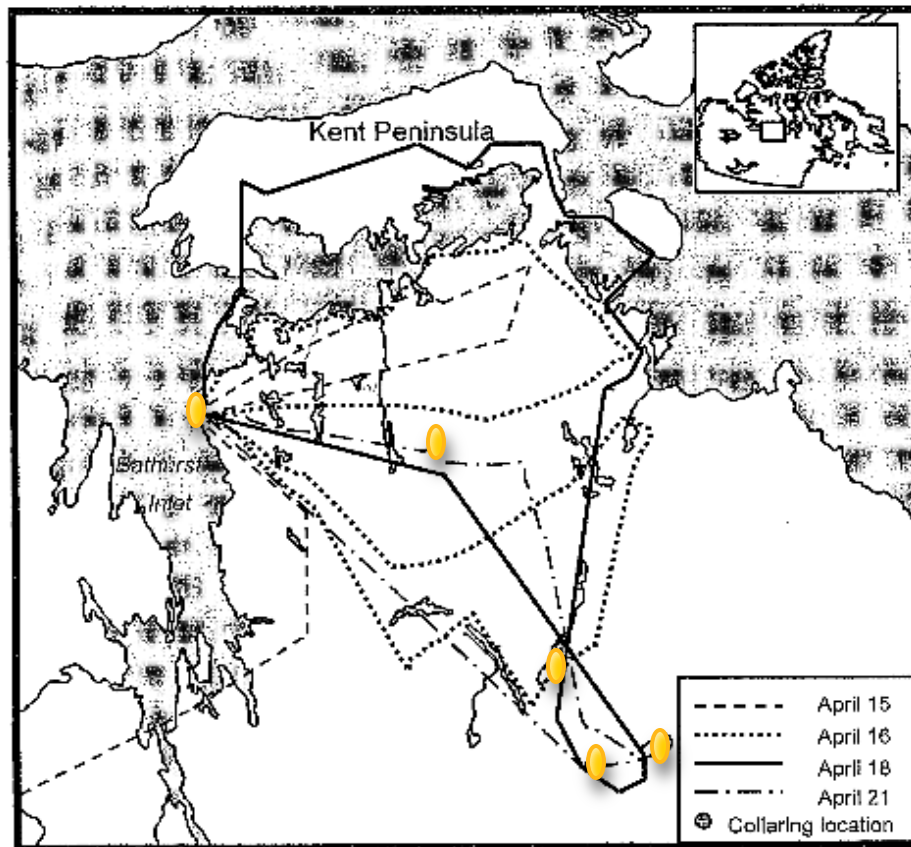


Figure 2. Flightlines and locations near Bathurst Inlet where caribou were fitted with satellite transmitters, April 1996.

April 15-21, 1996. 5 Cows are collared on the traditional Bathurst calving ground. It was mid-April, so these cows probably wintered there. Bathurst Caribou are known to winter near Bathurst Inlet. *

*1986 and 1996 Bathurst Caribou Management Plans

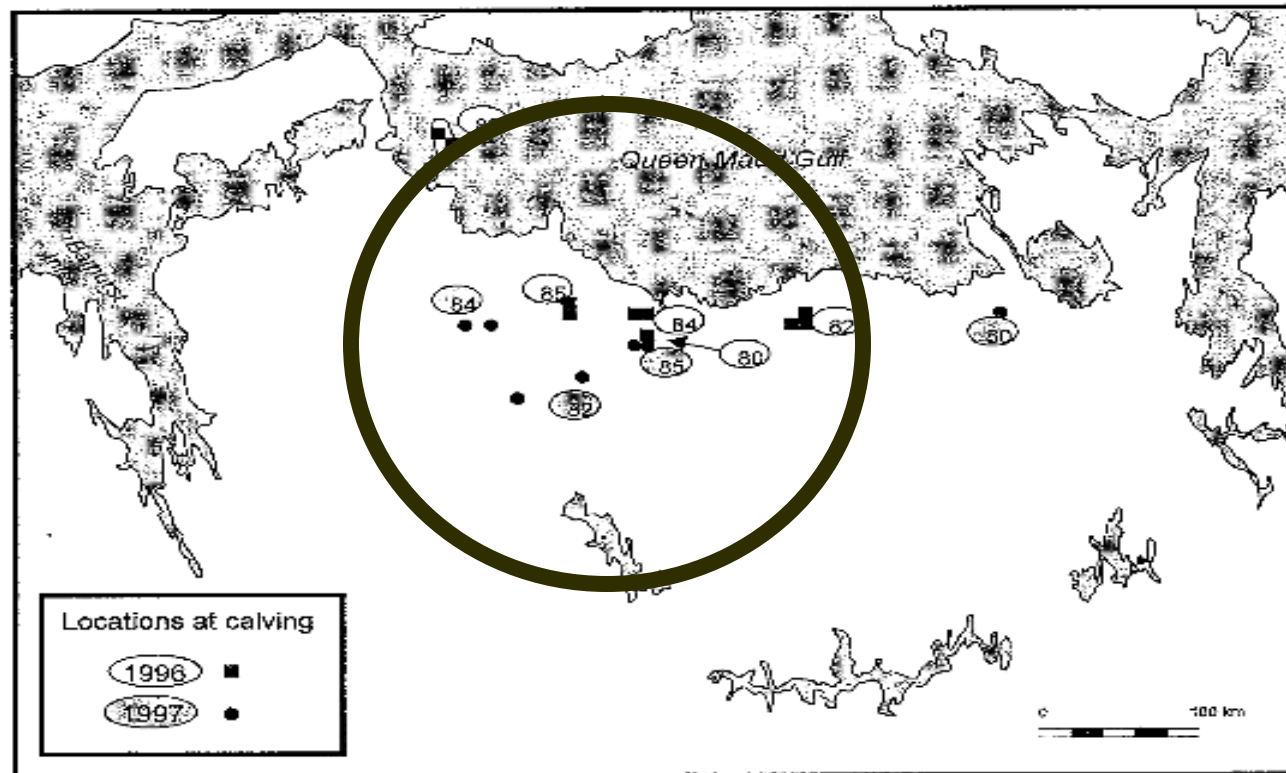


Figure 3. Locations during calving in June 1996 and 1997 for caribou cows fitted with satellite transmitters, Queen Maud Gulf area, Nunavut/NWT.

Most collared caribou calved on the traditional Bathurst Calving Ground. Note collar #80, that calved one year farther east of the known traditional Bathurst Calving ground. This cow may have been "unfaithful" to the calving ground, may not have been pregnant, or it may be that the traditional Bathurst Calving ground was extending farther east.

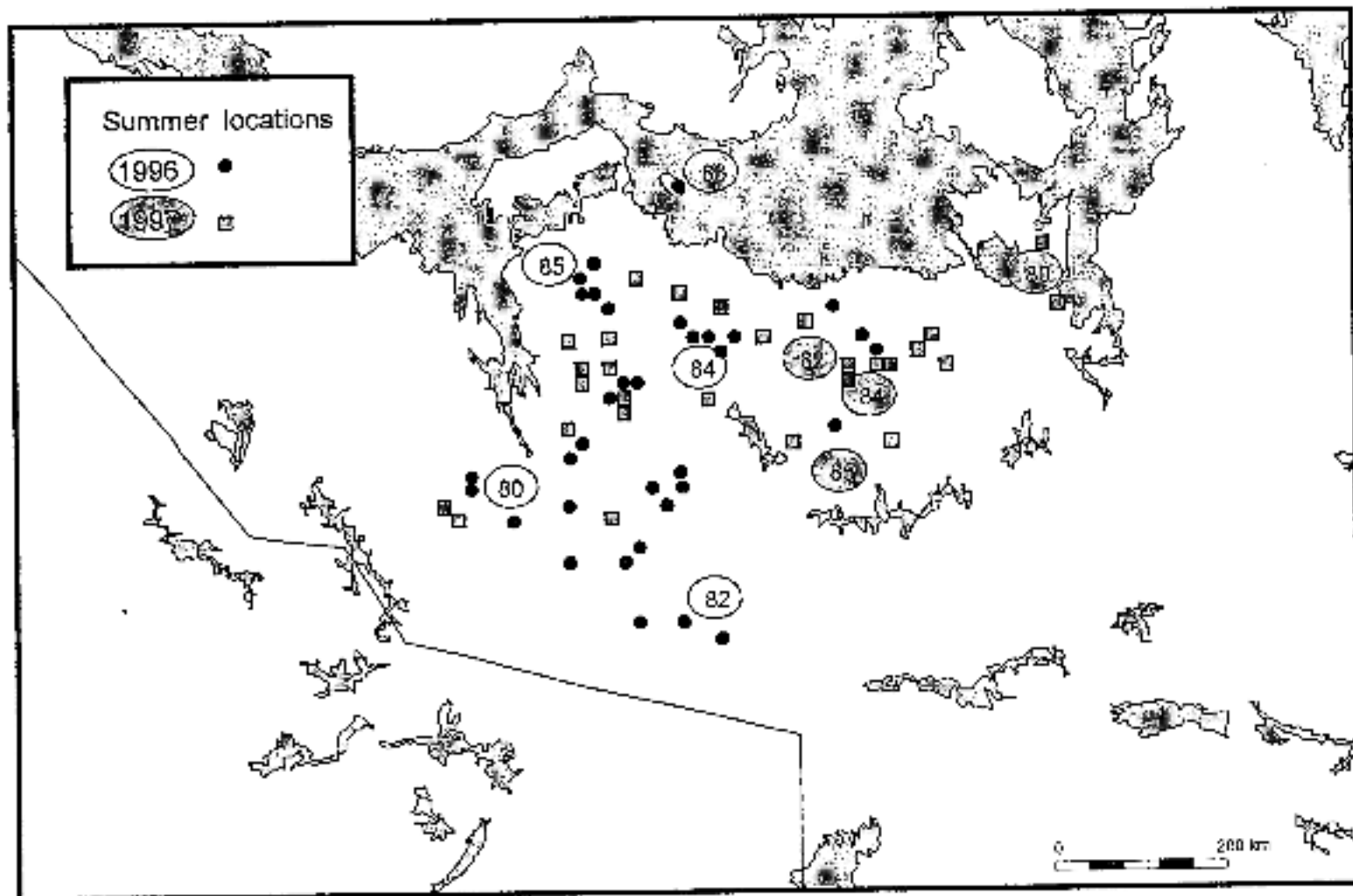


Figure 6. Locations in summer 1996 and 1997 for caribou cows fitted with satellite transmitters, Queen Maud Gulf area, Nunavut/NWT.

Caribou summered on the normal Bathurst Summer Range

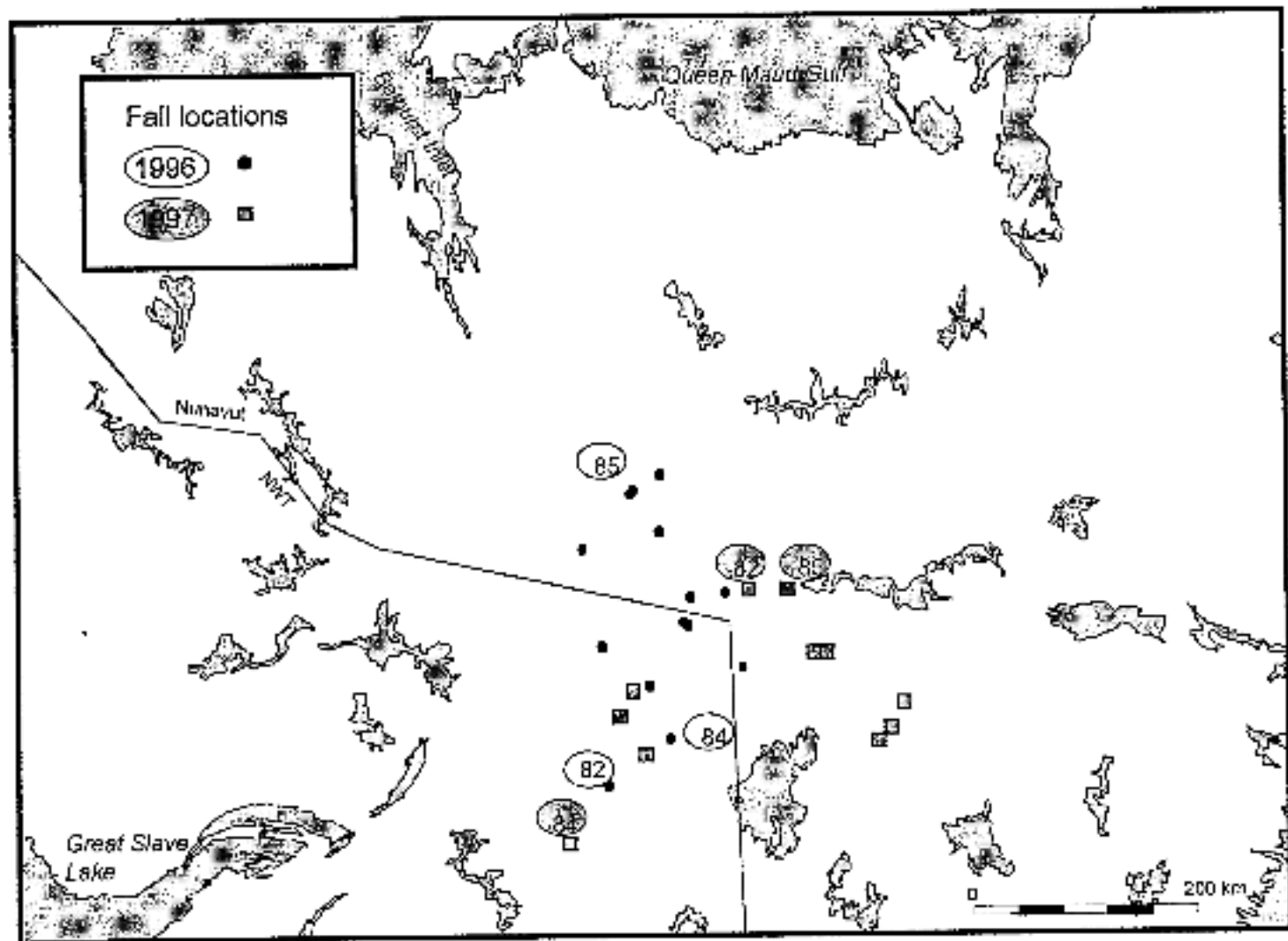


Figure 4. Locations in October 1996 and 1997 for caribou cows fitted with satellite transmitters, Queen Maud Gulf area, Nunavut/NWT.

Collared caribou then rutted on the normal Bathurst Rutting area.

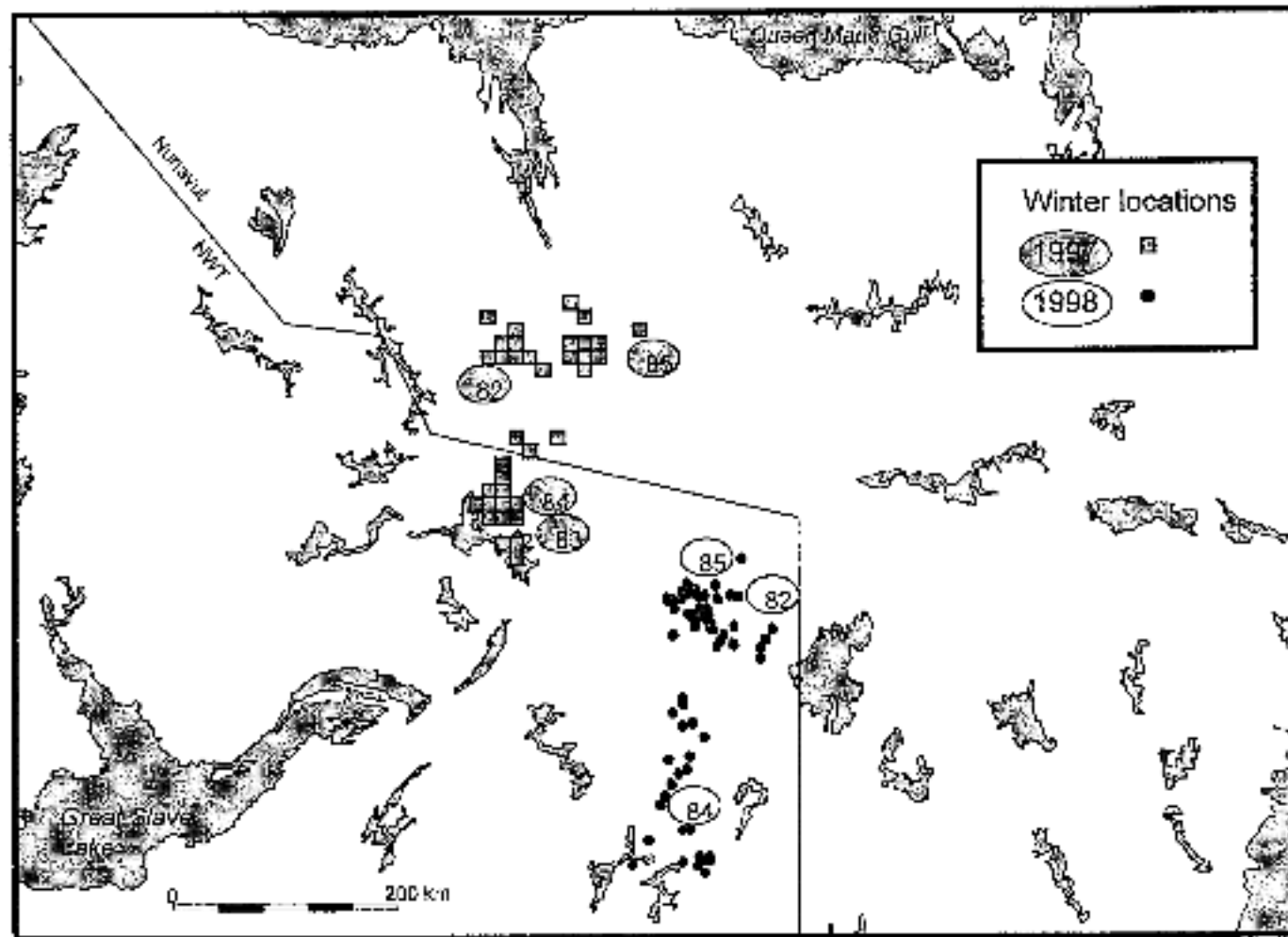
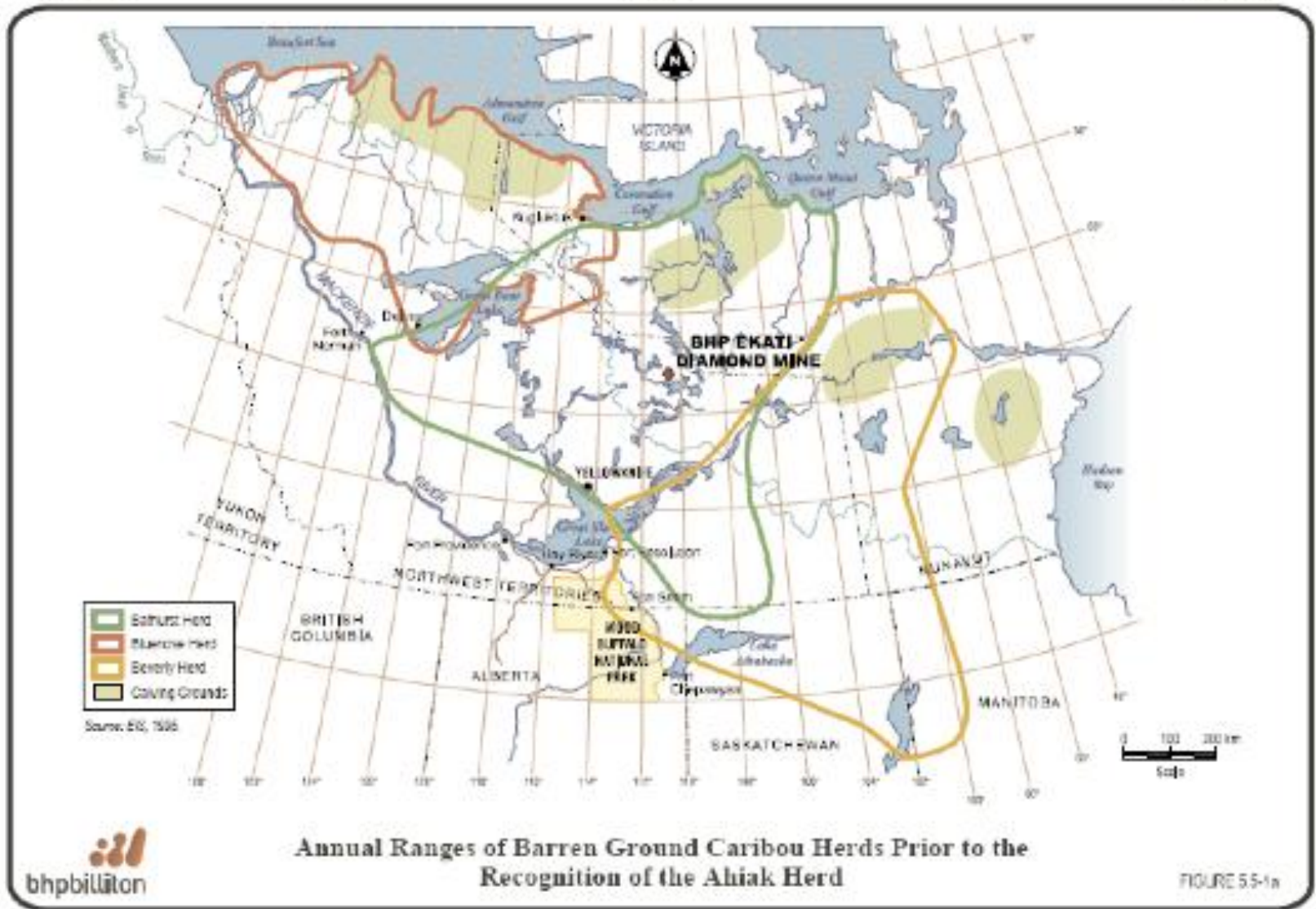


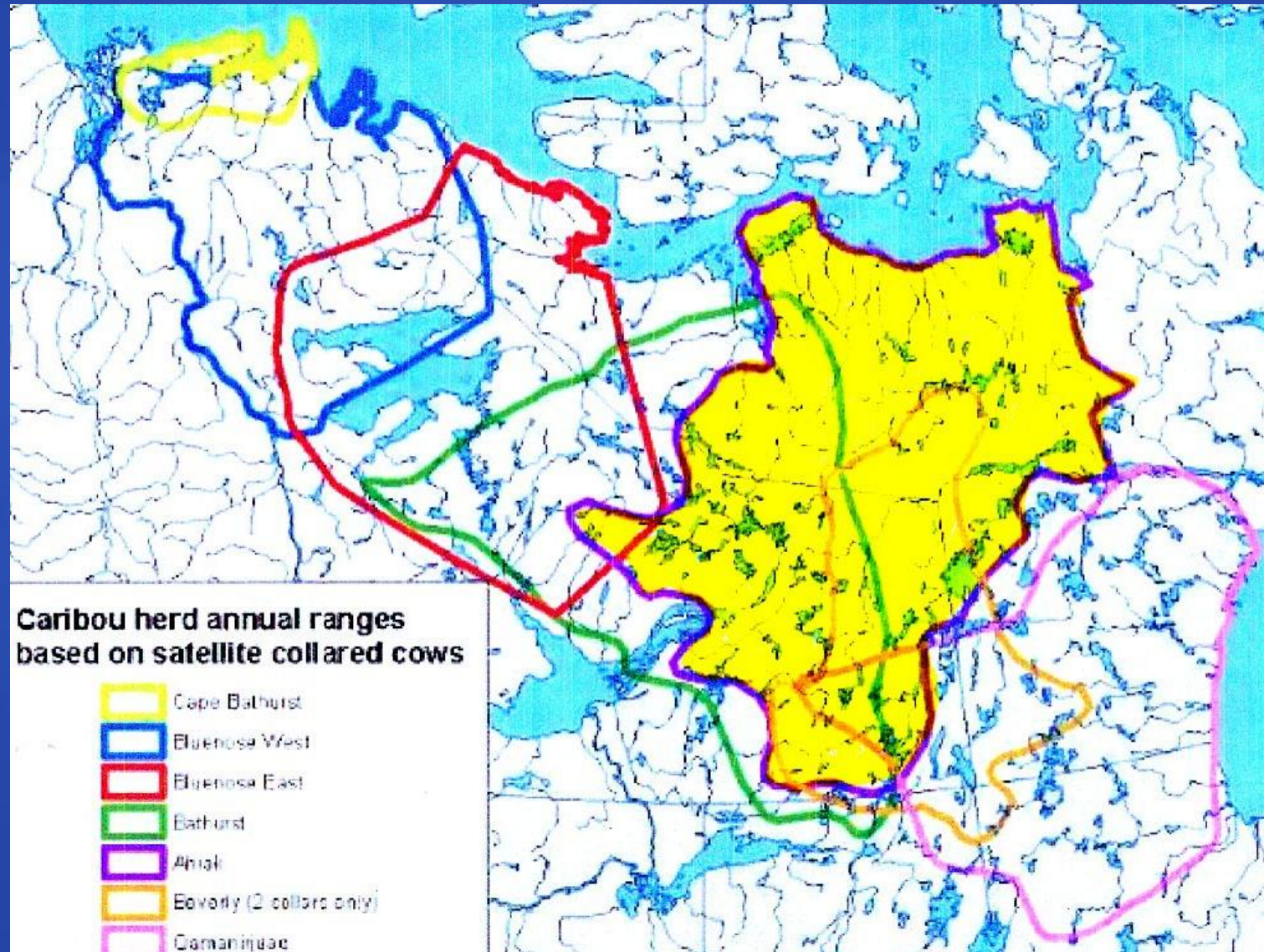
Figure 5. Locations in winter 1997 and 1998 for caribou cows fitted with satellite transmitters, Queen Maud Gulf area, Nunavut/NWT.

Caribou then wintered on the normal Bathurst Wintering Ground



Please compare where the 3-5 collared caribou went, and you will see they are all on traditional Bathurst Range (outline in green. Map courtesy of Chris Hanks.

The Ahiak Herd, migrating from Bathurst Inlet to Saskatchewan.
Source: GNWT Website Map (JRA provided the yellow coloration for clarity.)



Collared caribou migrated over 2000 kilometers. Does this fit the definition of a sedentary caribou herd???

ENR collars five caribou on the traditional Bathurst Calving Ground. Two of the collars don't work well enough to include the data. Three of the collared caribou were dead within two years.*

- 1. Caribou calved on the traditional Bathurst Calving Ground
- 2. Caribou summered on the normal Bathurst summer range.
- 3. Caribou rutted on the normal Bathurst rutting ground.
- 4. Caribou wintered on the normal Bathurst wintering ground.
- 5. Caribou migrated over 2000 *kilometers. Clearly, these are not the sedentary Northeast Mainland caribou.

*File Report #126

Traditional Calving Ground

“Traditional calving grounds are the areas used by caribou for calving over a period of many years, and are mapped as composites of all known annual calving areas. ...25 years is not a lot compared to the thousands of years caribou have been calving in the area. Calving ground surveys conducted in the future, therefore, may expand the boundaries of traditional calving grounds by documenting caribou calving in areas not observed during previous surveys”*

*Protecting Beverly and Qamanirjuaq Caribou and Caribou Range
www.arctic-caribou.com/parttwo/mapnotes.html

1996 Bathurst Calving Survey

The four satellite collared cows from the Queen Maud Gulf herd were in the vicinity of this coastal calving area between the Ellice and Perry rivers. The two calving areas east and west of the Inlet were separated by a distinct zone with only scattered caribou and we interpreted the distribution as the Bathurst herd calved west of the Inlet and the Queen Maud Gulf herd calved east of the Inlet.

Page 9, File Report #119, 1996 Bathurst Calving Ground Survey



This is the exact moment that the Bathurst herd is split.



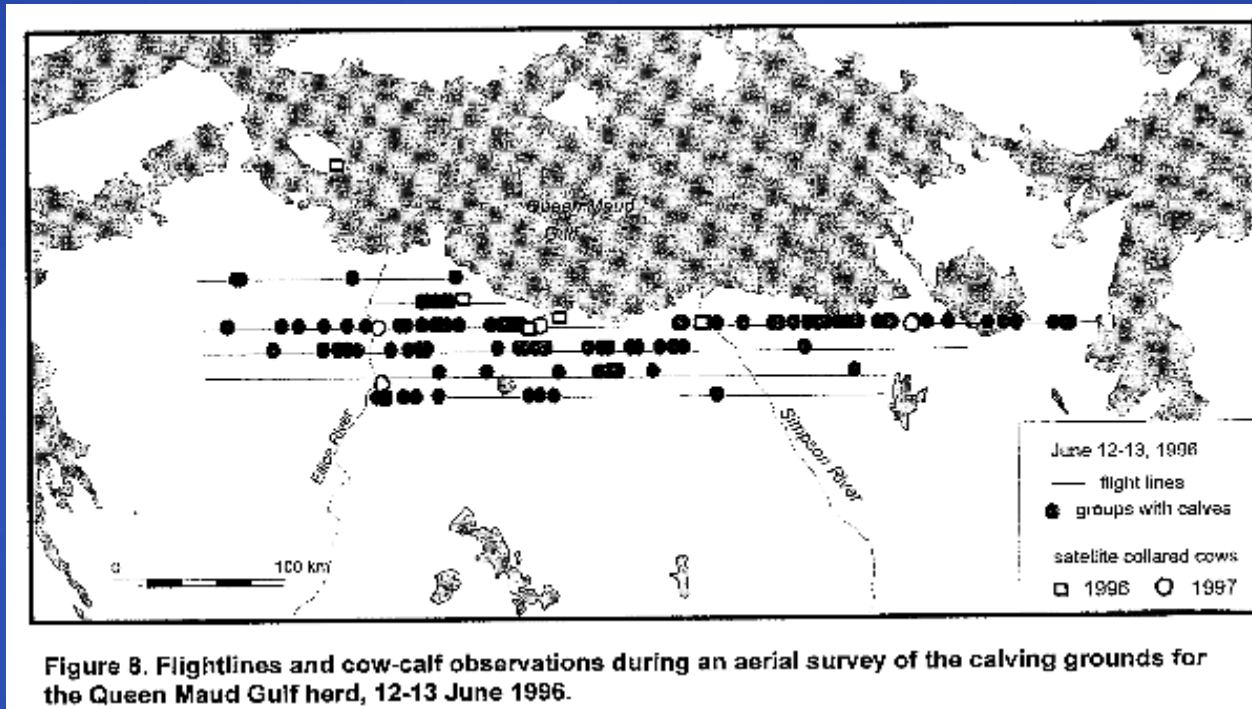
In mid April, 1996, ENR collars five caribou cows on the traditional Bathurst calving grounds. Two of the collars malfunction (Page 5, File Report #119.)

Based on following three cows for less than two months (April 15, 1996 to June 10, 1996), ENR decides that caribou calving east of the Bathurst Inlet are now Queen Maud Gulf or Ahiak Caribou.

This effectively threw away over 50 years of research by former government biologists. Millions of dollars in research, and tens of thousands of man-hours, thrown away, because she “interprets” caribou east of the Bathurst Inlet are now from a different herd, even though they are clearly on the traditional Bathurst Calving Ground. **No traditional calving ground had ever been established for the Queen Maud Gulf Caribou herd.** She then declared it the fourth largest herd in the NWT, despite only counting 4453 caribou.

Page 34, File report #126. “Queen Maud Gulf caribou have replaced Bathurst herd caribou on the eastern traditional calving grounds.”

Was this even a Calving Ground in 1996?



Gunn describes the above as the 1996 Ahiak Calving Ground. In 1986, she observed 2855 caribou, with 2475 calves, or 87% of the caribou with calves. In 1996, pictured above, 4453 caribou had 573 calves, or only 13%.* Normal expected pregnancy rates are 72%**.

Why would Anne Gunn decide this was a calving ground? With a 13% observation of calves, and 4453 total caribou (including bulls), how did she conclude there were 200,000 caribou there?

The flightlines above, were, in fact, a muskox survey.

*File Report #126

** File Report # 116, 1996 Bathurst Caribou Management Plan

3 Working Caribou Collars, for 7 Weeks, and a new caribou herd is declared. Here is what Anne Gunn said in 1997:*

40 Years and 23 Surveys not enough

- “Experience with the Bathurst herd’s calving ground over four decades also reveals a shift in the location of annual calving grounds. The traditional calving grounds comprise the areas known to be used for calving over many years and 23 surveys during four decades may not be an adequate sample.”*

*Surveys of the Beverly Caribou Calving Grounds 1957-1994. A. Gunn & M. Sutherland, RWED, GNWT, 1997, Page 17

June 6-8, 1996
Bathurst Caribou

Four days apart,
and the Bathurst
herd becomes the
Queen Maud Gulf
herd.

June 12-13, 1996
Queen Maud Gulf
Caribou

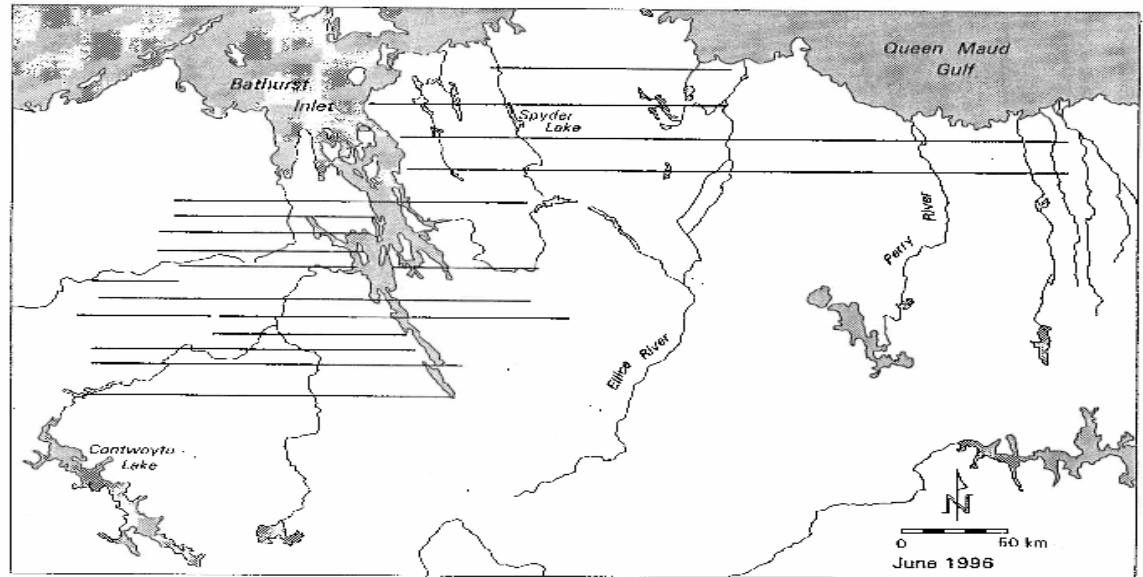


Figure 56. Bathurst calving ground systematic reconnaissance flight lines, 6-8 June 1996

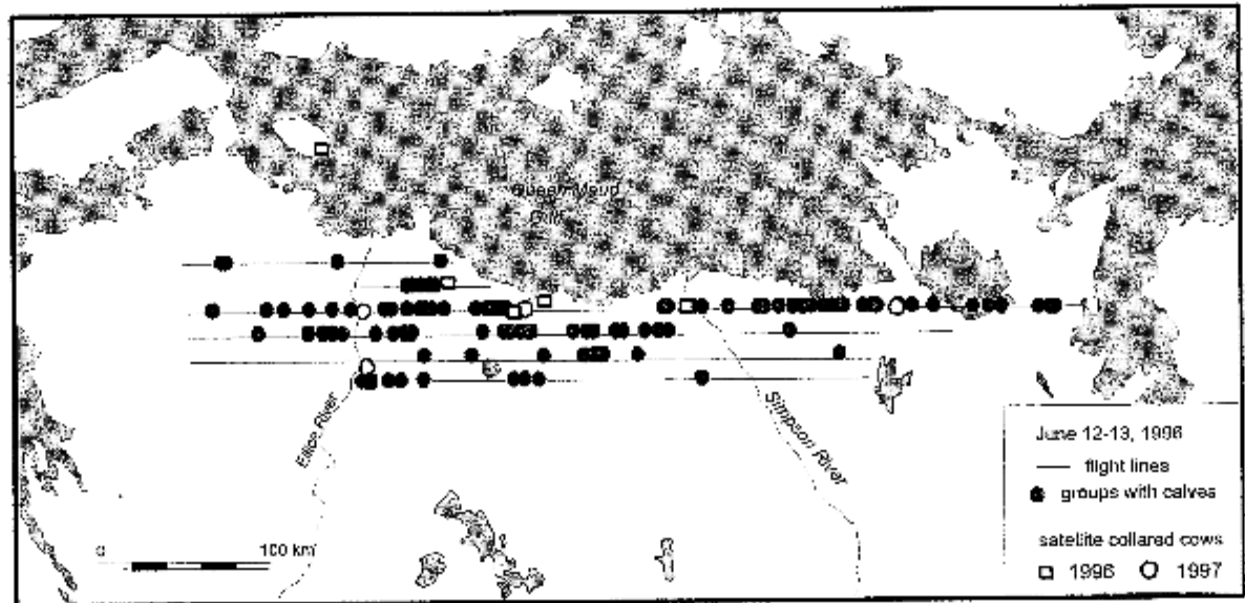


Figure 8. Flightlines and cow-calf observations during an aerial survey of the calving grounds for the Queen Maud Gulf herd, 12-13 June 1996.

This survey, was, in fact, a Muskox survey of Muskox Unit N/MX/16

Map of 1996 Queen Maud Gulf Muskox Survey. Page 5, File Report #121, entitled Muskox Numbers And Distribution in The Northwest Territories, 1986-1997. Author: B. Fournier & A. Gunn.

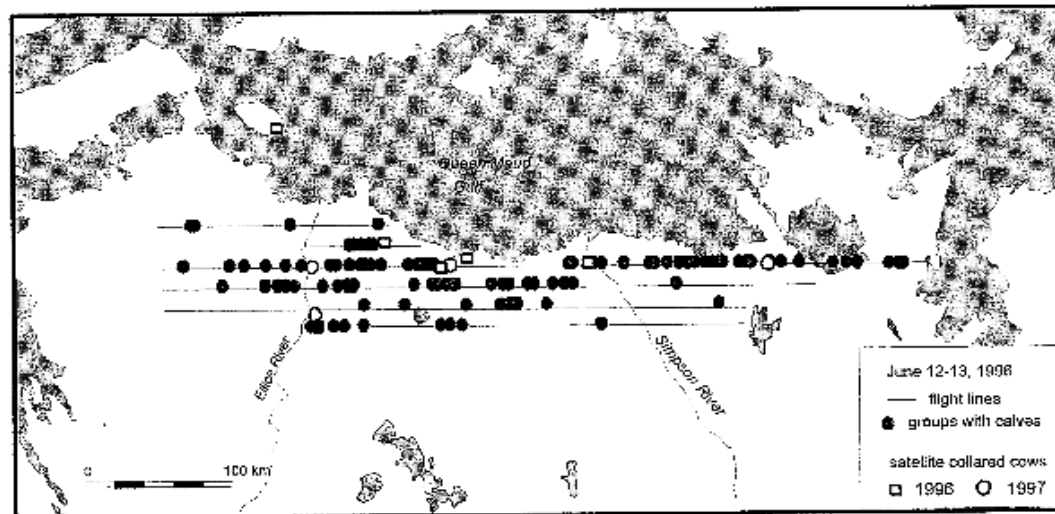
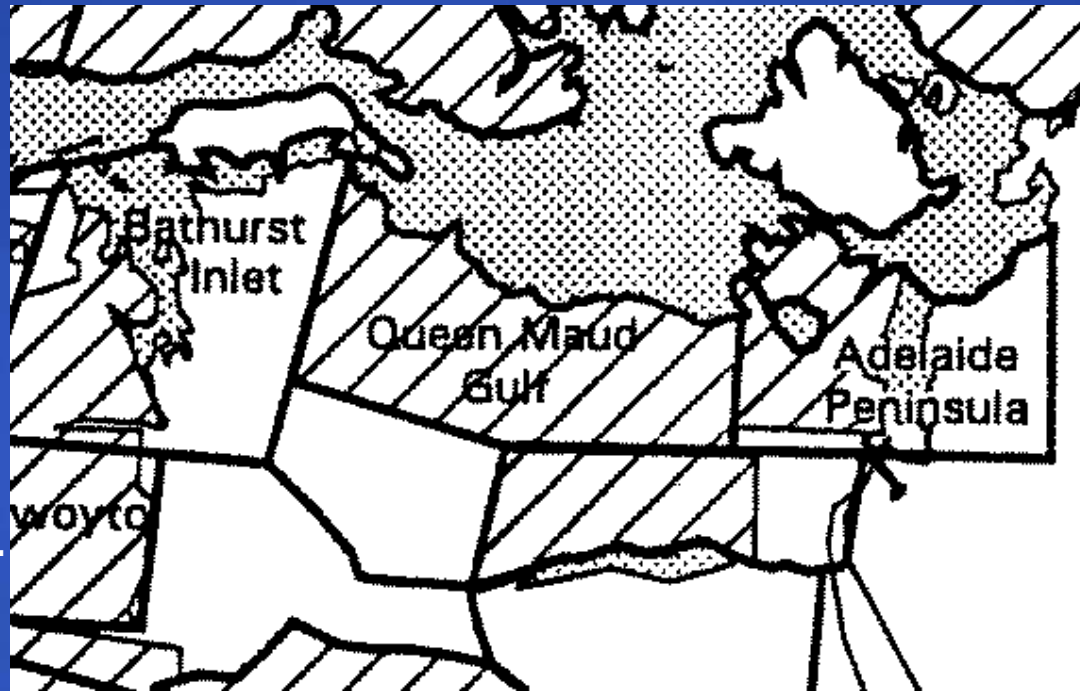


Figure 8. Flightlines and cow-calf observations during an aerial survey of the calving grounds for the Queen Maud Gulf herd, 12-13 June 1996.

Chart from
Page 6, Muskox
File Report 121.
Note the Queen
Maud Gulf
Survey, 1996.



Area surveyed	Survey year	Estimated population $\pm$ SE	Quota	Management zone
Sahtu Settlement Region	1997	1457 $\pm$ 919	11	S/MX/01
S. Paulatuk	1987	3040 $\pm$ 1296	50	I/MX/06
W. Kugluktuk	1994	974 $\pm$ 336	20	N/MX/12
N. Contwoyto	1991	1400	60	N/MX/19
N.E. Contwoyto	1986	1216 $\pm$ 353	60	N/MX/19
Bathurst Inlet	1986	2192 $\pm$ 494	40	N/MX/14
Queen Maud Gulf	1996	4255 $\pm$ 680	170	N/MX/16
Adelaide Peninsula	1992	1165 $\pm$ 380	55	N/MX/17
Boothia Peninsula	1995	555 $\pm$ 205	10	N/MX/09
C. Keewatin	1991	1048 $\pm$ 141	25	N/MX/21
Aylmer Lake	1991	161 $\pm$ 39	4	U/MX/01
Artillery Lake	1989	563 $\pm$ 154	14	U/MX/02
Thelon Game Sanctuary	1994	1095 $\pm$ 281	-	-
mainland total:		19 121 $\pm$ 1944		
Banks Island	1994	64 680 $\pm$ 2009	10 000	I/MX/02
Prince Patrick Island	1997	124 $\pm$ 65	-	-
Bathurst Island	1997	126 $\pm$ 45	40	N/MX/01
Byam Martin Island	1997	0	-	-
Melville Island	1997	2230 $\pm$ 308	6	I/MX/01
Eglington Island	1997	37 $\pm$ 21	-	-
Axel Heiburg Island	1995	156(count)	-	-
S. Ellesmere Island	1991	2020 $\pm$ 285	60, 10, 4	N/MX/02, N/MX/03, N/MX/04
Devon Island	1990	400	15	N/MX/05
Prince of Wales Island	1995	5259 $\pm$ 414	12, 20	N/MX/08, N/MX/06
Somerset Island	1995	1140 $\pm$ 260	20	N/MX/06
N.E. Victoria Island	1992	6720 $\pm$ 790	100	N/MX/07
N.W. Victoria Island	1994	19 989 $\pm$ 3786	250, 750	I/MX/03, I/MX/04
S.E. Victoria Island	1993	13 180 $\pm$ 1279	1000	N/MX/11
S.W. Victoria Island	1994	3934 $\pm$ 1225	100	N/MX/10
island total:		119 995 $\pm$ 4749		
NWT total:		139 116 $\pm$ 5131		

Caribou "Herd"

" Current terminology defines a caribou herd as a group of animals which consistently calve in a specific traditional location **distinct** from calving areas used by other herds (Skoog 1968, Thomas 1969)."

Source: The Status of Three Tundra Wintering Caribou Herds in Northeastern Mainland Northwest Territories. File Report #18 by the N.W.T. Government. Doug Heard and George Calef

Please note the overlapping Bathurst and Ahiak Calving Grounds (Circled). The Bathurst calving ground is the only one of 14 calving grounds overlapping. In other instances, such as the Wager Bay, Lorillard, and Melville Hills herds, when traditional calving grounds overlapped, the herds were combined as one. The definition of a herd is its calving ground must be distinct from other herds. Overlapping is not distinct. This should be one herd, the Bathurst Herd.

File
Report
#123

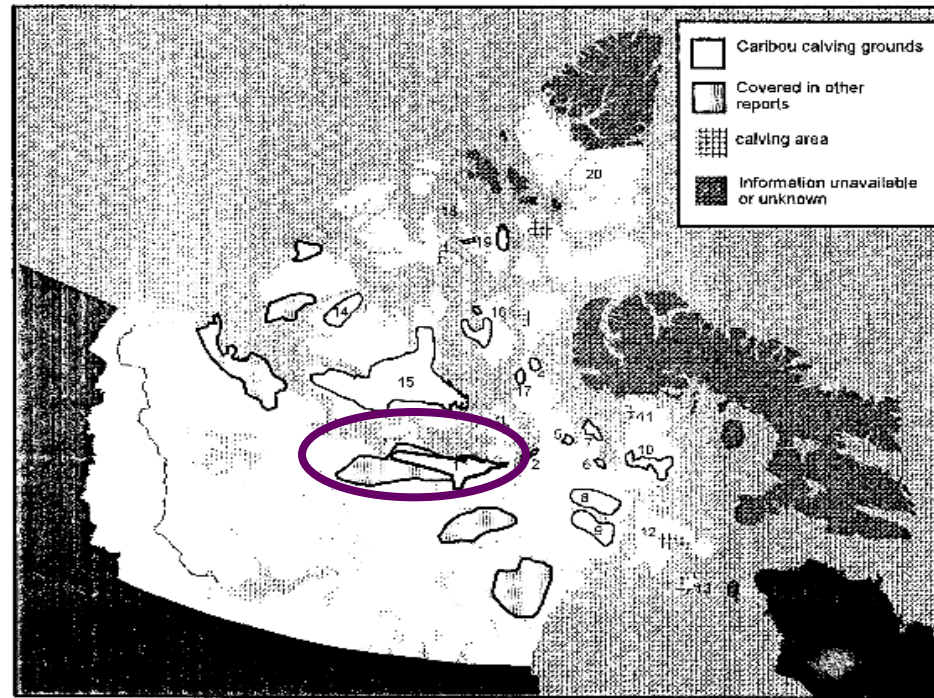


Figure 1. Caribou calving grounds and calving areas identified and substantiated in this report.

Gunn describes 14 calving grounds (in addition to the four usual herds.)* Elsewhere, Gunn says there are forty two known calving grounds in the NWT.**

* File Report #123

** http://www.taiga.net/nacaribou/abstracts_all.html

42 Calving Grounds in the NWT

- “Our knowledge for most of the 42 identified caribou calving grounds in the Northwest Territories is fragmentary but is sufficient to reveal the diversity of landscapes and vegetation communities used for calving. And in the face of uncertainty, the precautionary principle should apply to management of caribou calving grounds. ”*

Dr. Anne Gunn

Now, Dr. Gunn says there are 42 calving grounds, and since our knowledge is “fragmentary”, we need to apply the precautionary principle to all of them. This is designed to shut down most of the Northwest Territories and Nunavut to development.

*http://www.taiga.net/nacaribou/abstracts_all.html

Anne Gunn goes on to decide there was 200,000 caribou east of the Bathurst Inlet in 1996. Rightfully, these should have been Bathurst caribou. Fact is, she only counted 4453 caribou, and using statistics, decided there were 200,000 caribou in the Queen Maud Gulf herd, and it was the fourth largest herd in the Northwest Territories.*

The previous year, Laurie Buckland had surveyed the Queen Maud Gulf area, and counted 31,556 caribou.**

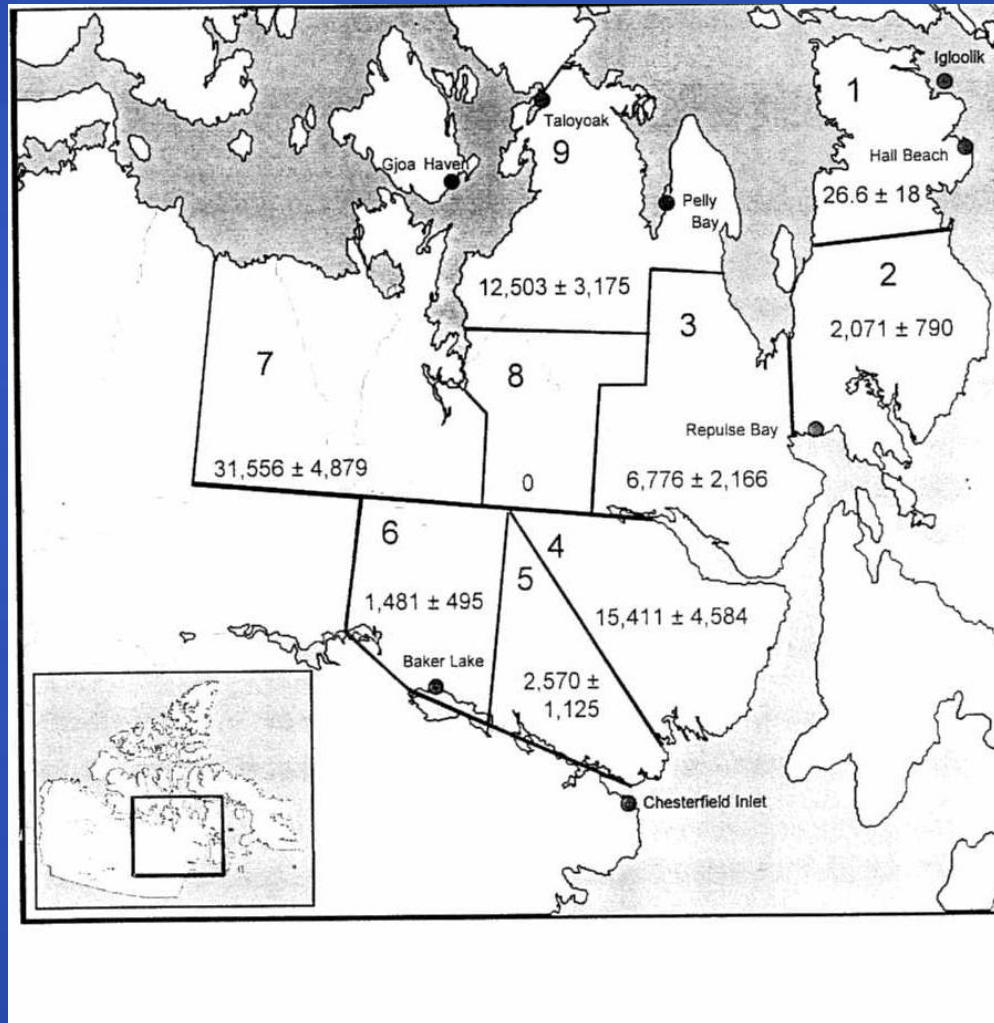
31,556 caribou in 1995, to 200,000 caribou in 1996!

Now, ENR denies that Laurie Buckland did a survey in 1995.

*File Report #126

** Manuscript Report # 125

31,556 Caribou in 1995*



This is the map on Page 10, GNWT File Report #125, which ENR says, now, never happened.



No Genetic Evidence for the Ahiak Herd



The collaring of three cows for 7 weeks is not enough evidence to override 40 years of ENR research and 23 surveys of the Bathurst Caribou Herd.

The fact is, the Ahiak herd are Bathurst Caribou, and they must be counted as such, if ENR insists on comparing surveys from the 1980s and 1990s with surveys done in 2009.

Biologists Dr. Rick Page & Mark Fraker, who have looked at this Ahiak/Bathurst question extensively said this:

“It appears to us that the Bathurst and Ahiak herds have always been, and continue to be, one herd. Scientists have determined that there is no genetic difference between the herds and both herds calve on the traditional calving grounds of the Bathurst Herd.” *

***Letter to the WRRB for this hearing**

Anne Gunn, 1996, said this:

“In 1969 and after 1986, calving was concentrated further west along the east and west shores of Bathurst Inlet. This is consistent with historical records which report that both sides of Bathurst Inlet were used for calving.”*

In the same year (1996) Anne Gunn splits the Bathurst Herd, she acknowledges in the above statement that historical records show them calving on both sides of the inlet.

*File Report #118 Bathurst Calving
Ground Surveys 1965-1996. M. Sutherland and A. Gunn 1996

1996 Bathurst Caribou Management Report

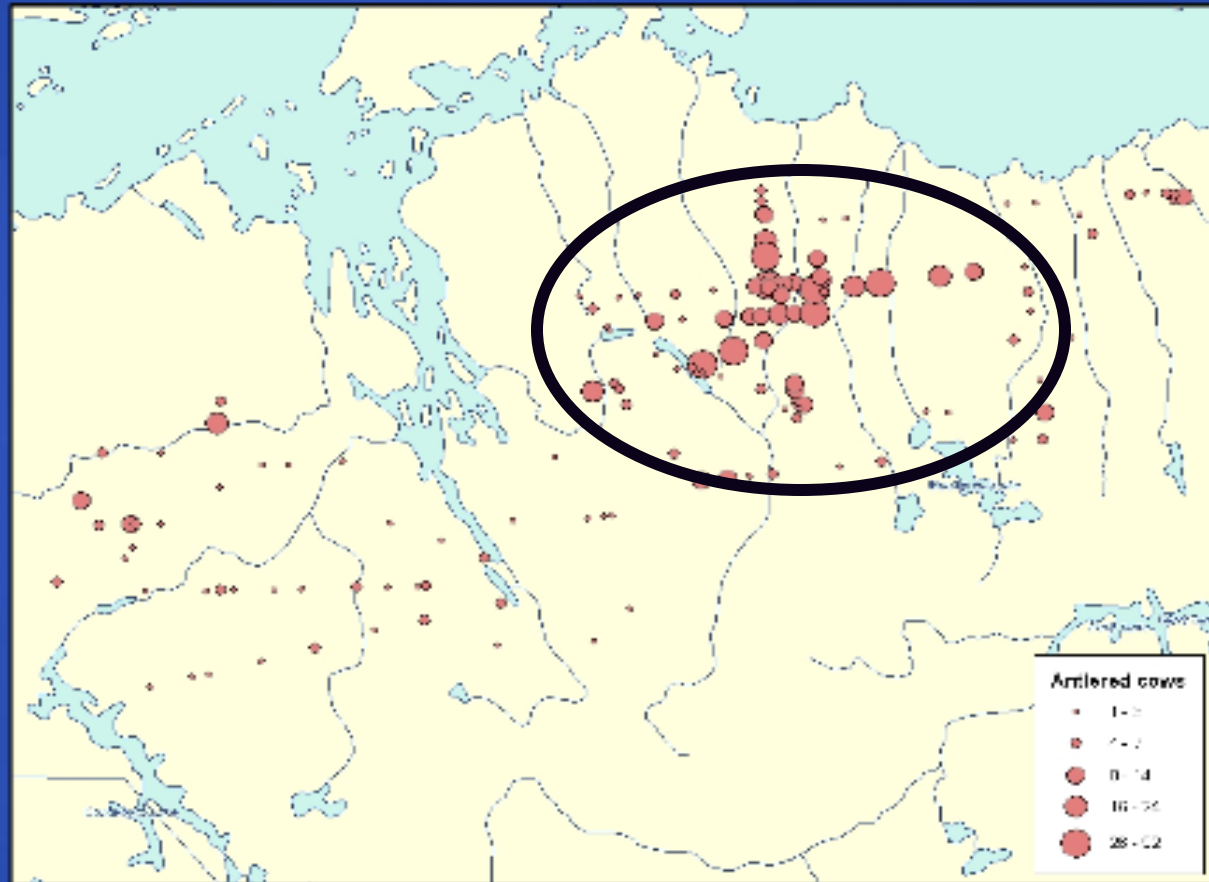
“Historically, the Bathurst calving ground is located around the south end of Bathurst Inlet. However, in some years, including most of the early 1980s, the area east of Bathurst Inlet may be used.The location of the Bathurst calving ground has remained around or just east of the Bathurst Inlet since it was first described in 1950. (Kelsall 1953). Archaeological evidence suggests that the caribou have calved in this area for the past 6000 years, since the area after the last ice age (Fleck and Gunn 1982).”



2001 Collared caribou going to both sides of the Bathurst Inlet

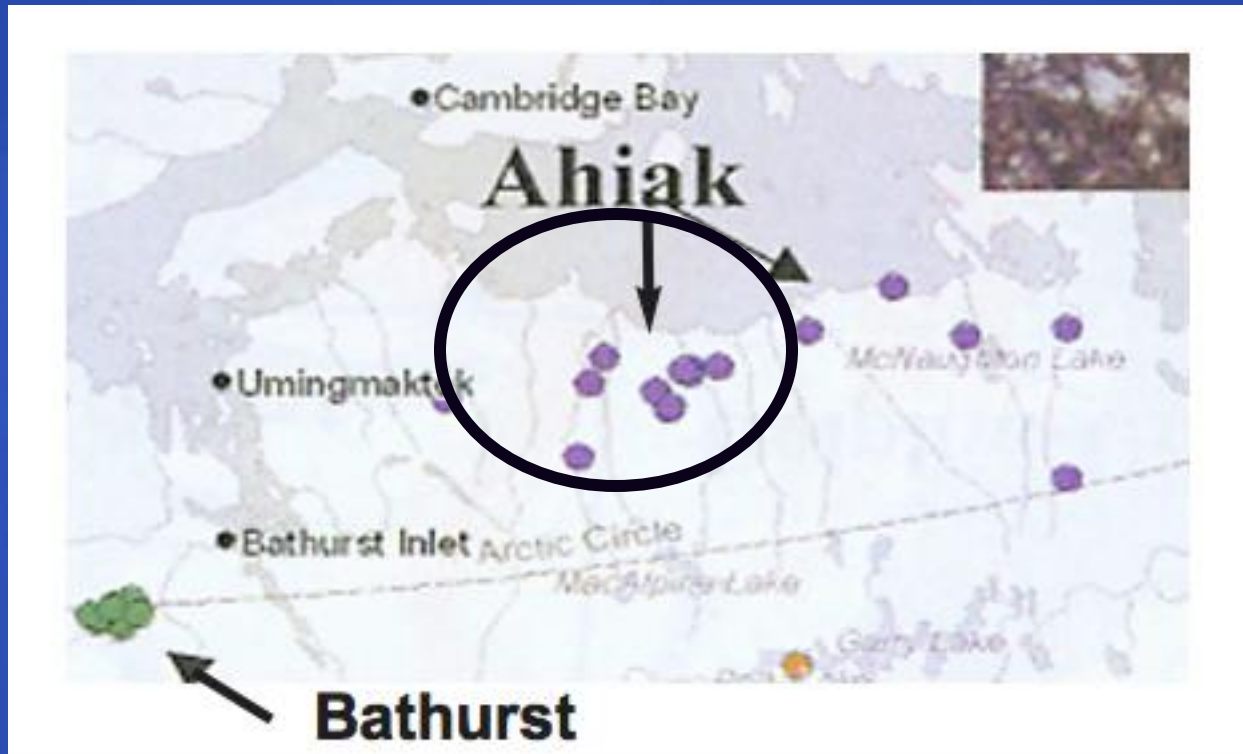
This map clearly shows the collared cows, wintering in the normal Bathurst caribou wintering range, returning to both sides of the Bathurst Inlet.

Title: Observations of Antlered Cows on the 2002 Bathurst and Ahiak Calving Ground.
Caribou in the circle should all be Bathurst Caribou.



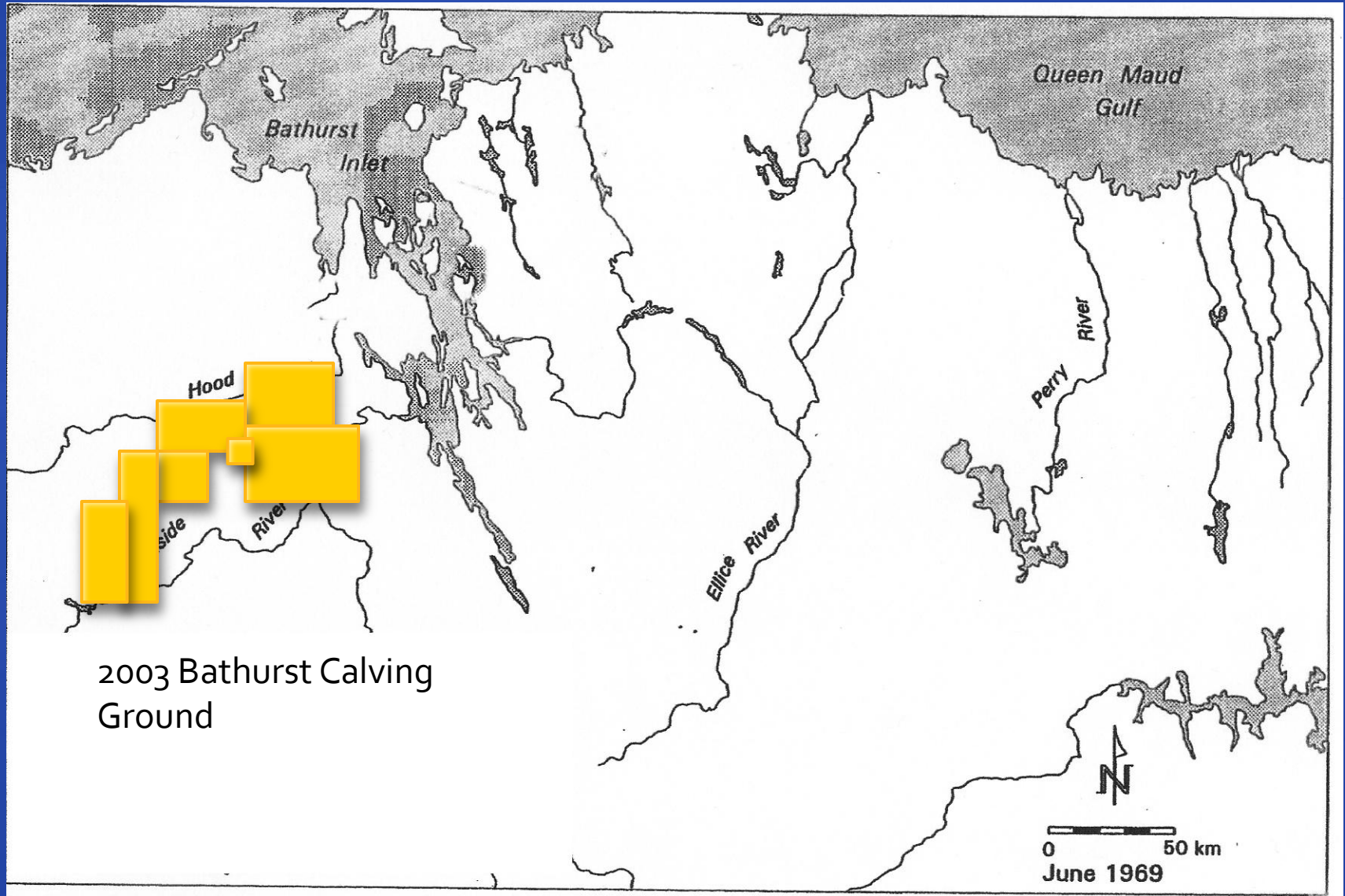
The fact of the matter is, majority of the caribou to the east of the Bathurst Inlet are on the traditional Bathurst calving ground. The should be Bathurst caribou, not Ahiak caribou, plain and simple.

Circled Collar Cows are on the Traditional Bathurst Calving Ground



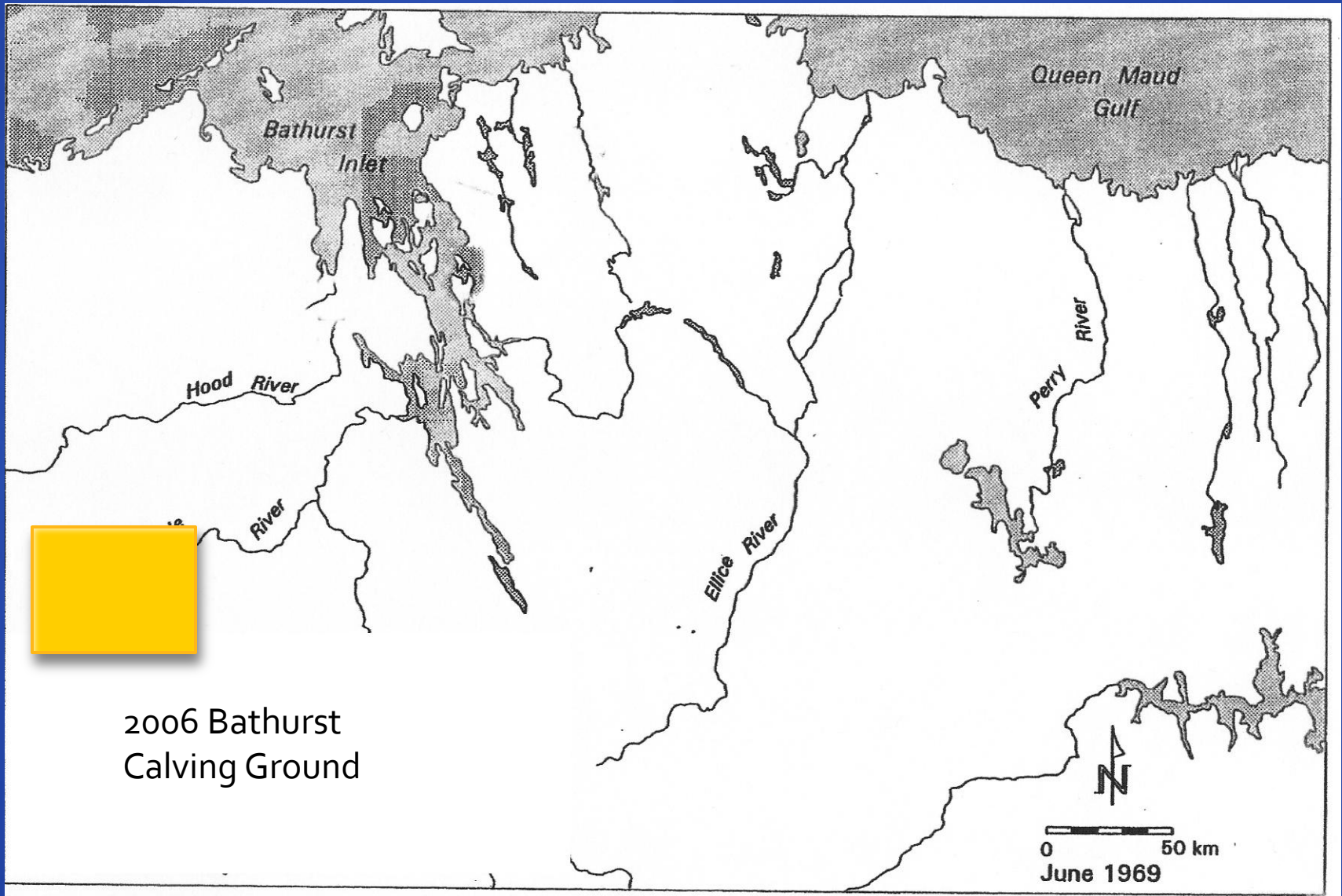
2006 Calving Ground Collars At least 8 of the Ahiak collars are on the traditional Bathurst Calving Ground.

2003 Bathurst Calving Grounds



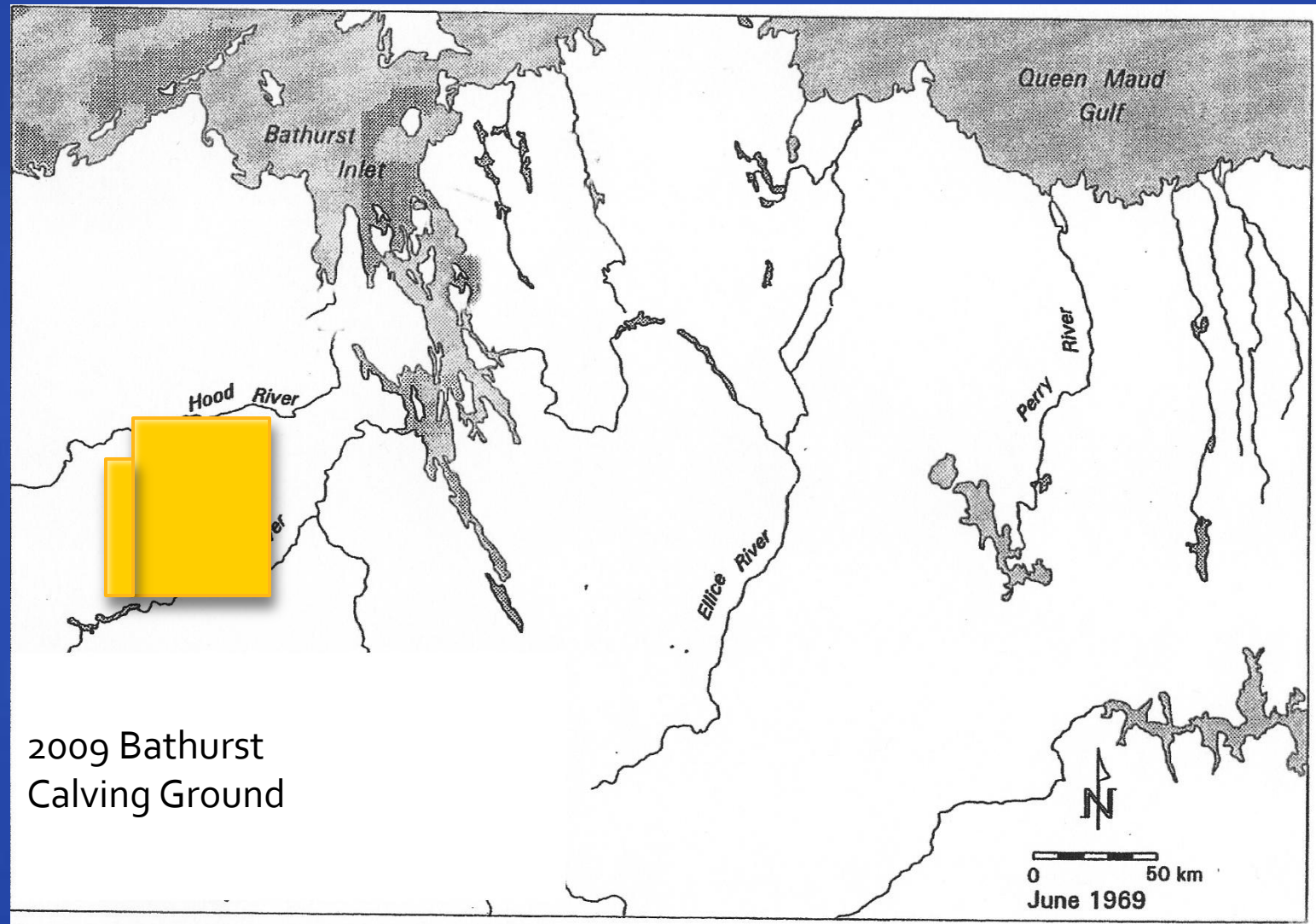
2003 Bathurst Caribou Survey: No caribou counted east of the Bathurst Inlet. (Source: 2003 Bathurst Caribou Survey, map transposed to earlier exhibit map for clarity.)

2006 Bathurst Calving Ground



Source: Bruno Croft slideshow. Area approximate, transposed to same maps used in earlier exhibits for reader clarity. No caribou counted on the east side.

2009 Bathurst Caribou Survey



Again, 2009, Bathurst Calving Ground Survey, ignoring the traditional Bathurst Calving Ground to the east. Source: Map from Bruno Croft, transposed to earlier map for clarity.

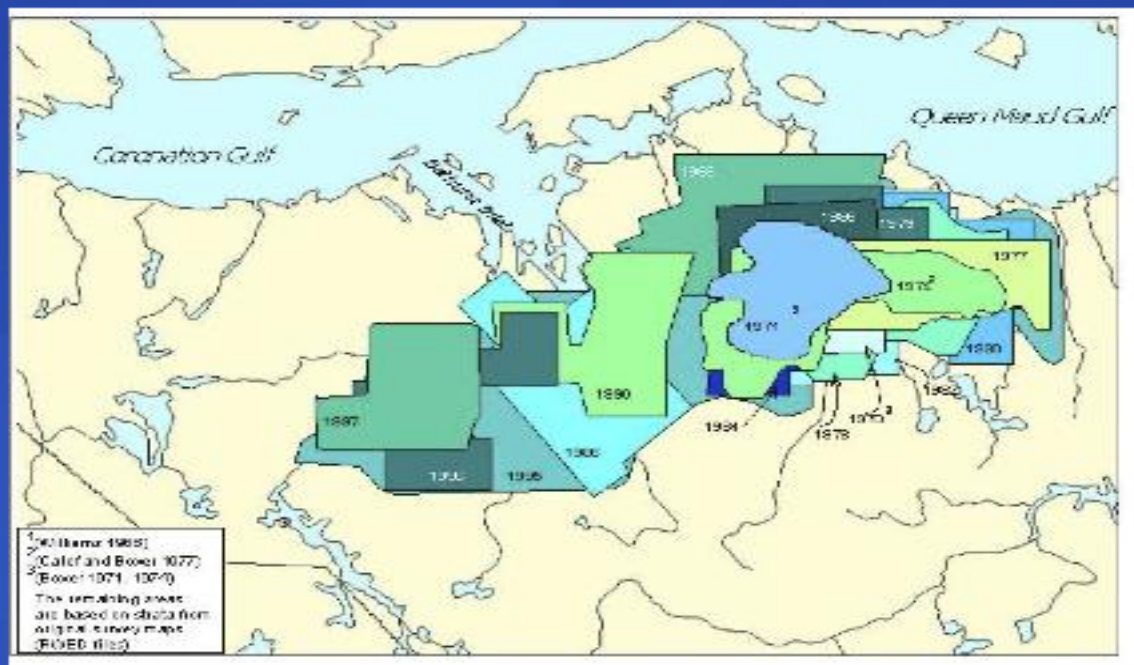
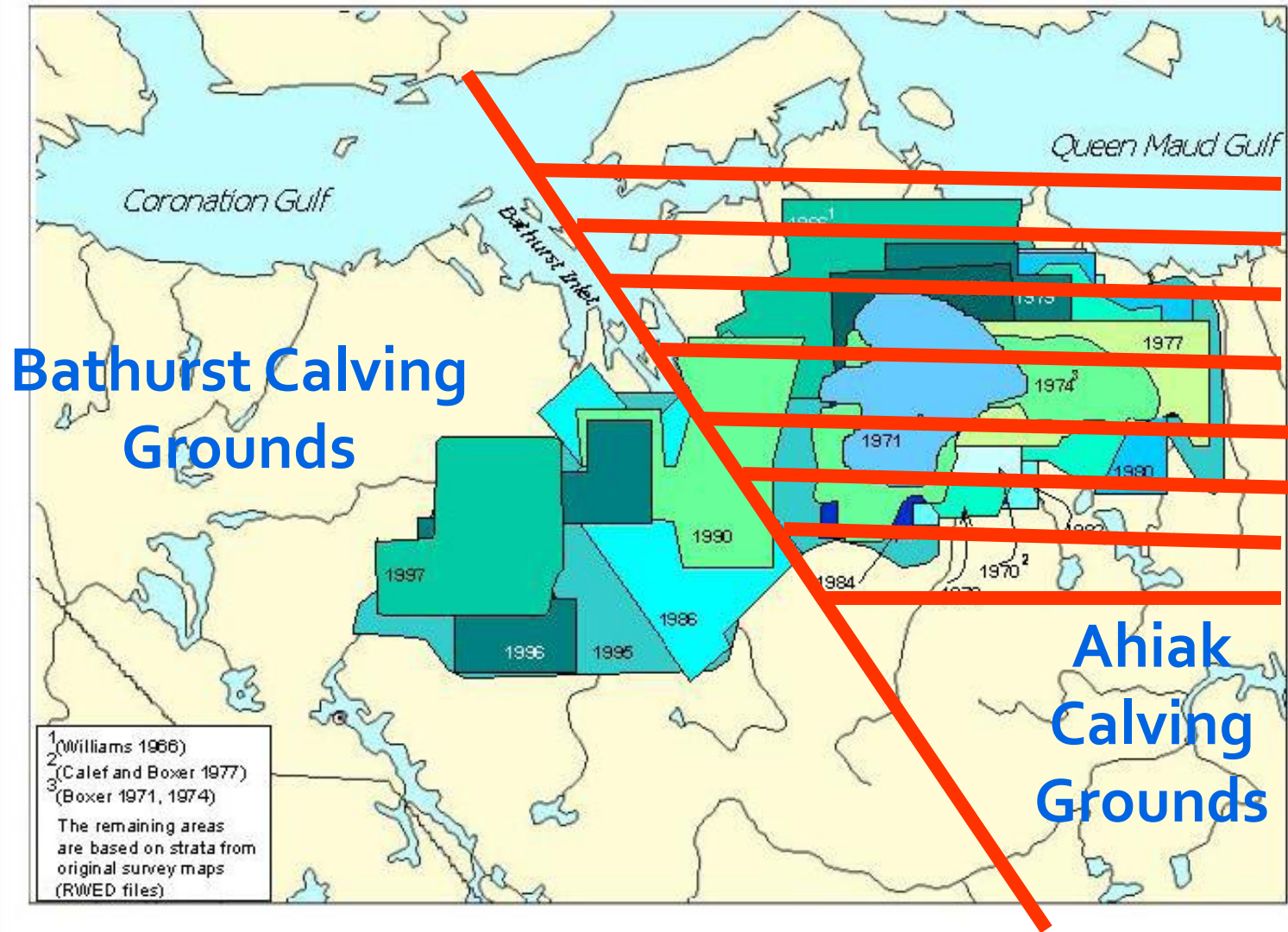


Figure 1. Distribution of caribou at or close to the peak of calving for the Bathurst

herd in the Beaufort Sea, 1987-1997.

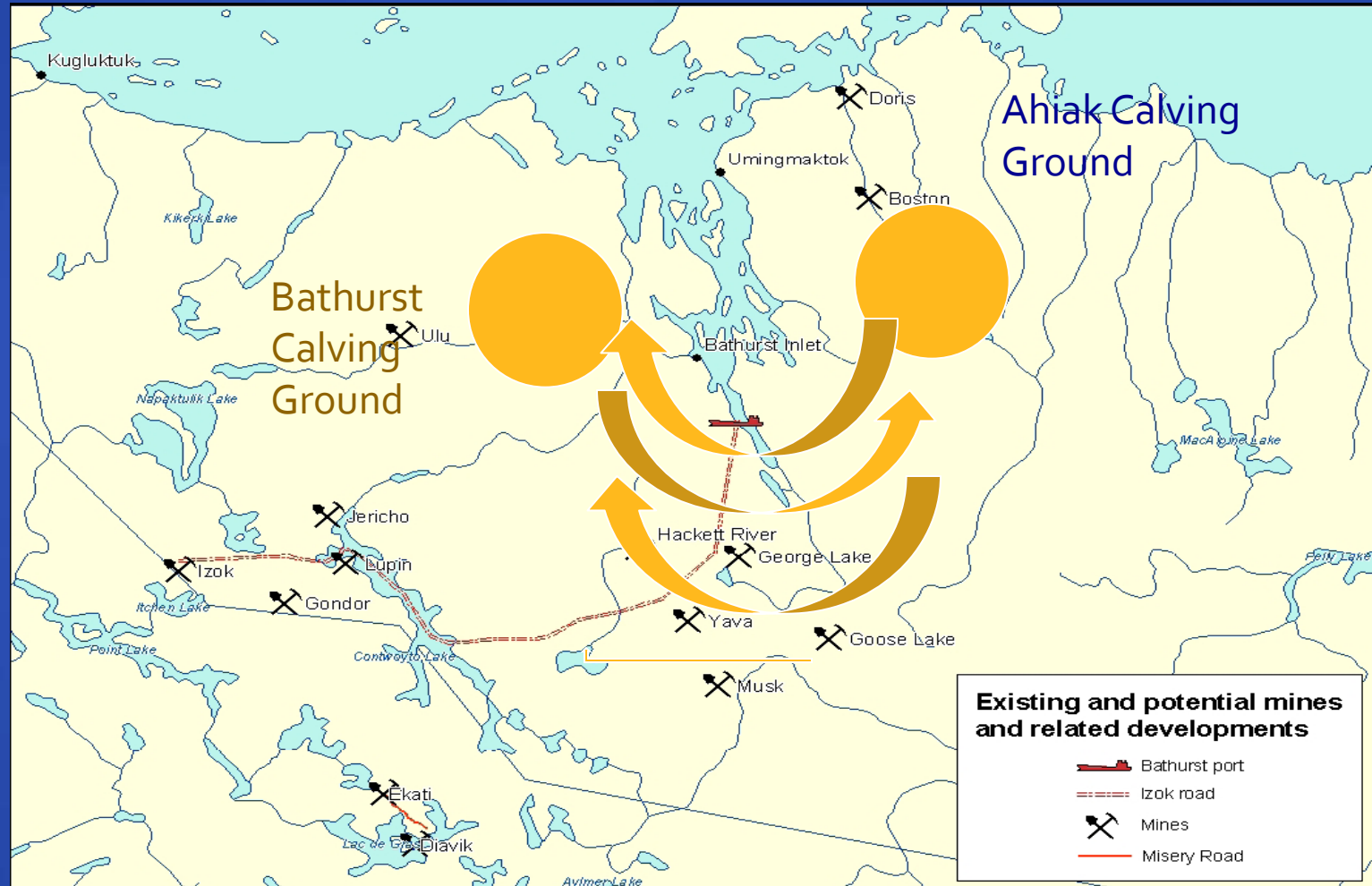
If you want to know how many caribou are in the Bathurst herd in 2009, you have to count all the caribou on the traditional Bathurst Calving Ground. Jan Adamczewski, ENR ungulate biologist, said in a meeting with ENR on July 22, 2009, that he had never seen a map of the traditional Bathurst calving ground. He also said that traditional calving ground was a concept utilized only for the Beverly and Qaminurjuaq herds. I asked ENR to let Bruno Croft and Jan sit down with me and go over this research. They refused, and forbade me to contact either man in the future. I then gave went to Gary Bohnet on August 17, 2009, and showed him this slideshow. He immediately set up a meeting with Jan and Bruno. Two days later, my meeting with Jan and Bruno becomes a meeting with Susan Fleck. I showed Susan this slideshow. She said I was taking things "out of context." I asked her to show me where, and she could not. She then said she had additional information. What additional information, I asked? "We talk to people" was her response.

Bathurst Calving Grounds after Ahiak Herd Creation*



*Source: An Estimate of Breeding Females in the Bathurst Herd of Barren-Ground Caribou June 2003 Ann Gunn, et. al.

The Bathurst Herd, as Currently Defined, will Crash



The Bathurst calving ground has swung east and west, like a pendulum, for thousands of years. Now, when the pendulum swings back east, the Bathurst Herd could go to zero, because now, these will be called Ahiak caribou, and there will be no caribou to the west. **Goodbye Bathurst herd.**

2002 Caribou Calving Ground Workshop

“Over the years, the annual calving ground of the Bathurst herd has moved from the western side of Bathurst Inlet in the 1950s (based on information from the local Inuit) to the east (1960s-mid 80s) then in recent years back into the west. Reasons for this rotational use of calving areas may include the need to find fresh forage, or to escape from parasite-infested pasture. However, it appears that Ahiak herd may have moved into the abandoned area in the east, which contradicts both possible reasons. “ Dr. Anne Gunn*

*Barren-Ground Caribou Calving Ground Workshop Report of Proceedings, Technical Report Series 390, 2002, Page 13

1996 Anne Gunn *

“Recommendations”

“1. In order to ensure that no calving areas are missed, reconnaissance flights should cover the entire traditional calving grounds.”

* File Report #118, Page 82

“The location of the Bathurst Calving Ground has remained around or just east of Bathurst Inlet since it was first described in 1950. (Kelsall 1953).

Archaeological evidence suggests that the caribou have calved in this area for the past 6000 years, since the glaciers retreated from the area after the last ice age (Fleck and Gunn 1982).”*

Susan Fleck and Anne Gunn clearly know the Bathurst Caribou have calved here, according to archaeological records, for 6000 years. 6000 years of evidence, being thrown away after seven weeks of collared caribou on the traditional Bathurst Calving Ground. This is deliberate hoax, not good science.

*File Report 116, 1996 Bathurst Caribou Management Report

In 1983 Anne Gunn says:

"A strong argument can be made for creating concern about future high levels of exploratory activities for non-renewable resources.....This means that it is necessary to take conservative measures in the absence of biologically sound data to the contrary, and provide the fullest measure of protection to the caribou herds that is possible."

File Report #30, 1983, Caribou Behaviour, Range Use Patterns and Short Term Responses to Helicopter Landings on the Beverly Calving Ground
,1982



Anne Gunn, 1995

“Current mining activity is focusing attention on the Bathurst caribou herd’s calving grounds where we have limited information on annual calving distribution. Effective protection depends on understanding where caribou calve and how predictable the use of those areas is from year to year.....Protecting calving grounds is a wildlife management and community priority. “ **

Anne Gunn 2000

“ Mining exploration is underway east and south of Bathurst Inlet and baseline studies describe seasonal changes in caribou numbers. The herd designation of those caribou will be necessary to assess implications of any development of those properties.”*

*“Abundance and Distribution of the Queen Maud Gulf Caribou, 1986-98. A. Gunn et al. 2000, File Report #126, page 2

**GNWT File Report #87. Anne Gunn 1995

2003 Anne Gunn, speaking to the Canadian Arctic Resources Committee

"She described how the existing mining roads, near the Ekati and Diavik mines, are affecting the caribou. Built up on piles of large rock, the roads present an unusual challenge for the migrating herd. Caribou are being found with cut, swollen and infected feet and broken legs in the vicinity of the mines. It is also thought that they are more vulnerable to predation by wolves and hunters when in the vicinity of road crossings. Caribou cows show signs of feeding less near the mine sites, which may be affecting their ability to conceive and to nourish calves."*

There is no research to support the above statement. Here is what her 2004 observations said:

"October 2004. "We saw 2 lame caribou among 12,444 caribou observed."**
(That's .00016)

*http://www.carc.org/sustainable_dev/bathurst_inlet_study_tour_trip_diary.php

**Calf Survival and Adult Sex Ratio in the Bathurst Herd of Barren-Ground Caribou 2001-2004. Ann Gunn, John Boulanger, and Judy Williams. 2005

2003 Anne Gunn/CARC and the Bathurst Port All Winter Road

July 2003

“The focus of the trip was to gather information about a proposal to build a deep-sea port in the calving grounds of the Bathurst Caribou herd, and an all-weather road connecting the port to some of the most mineral-rich territory in the North.”

RWED Biologist Ann Gunn gave us an excellent presentation on caribou, demonstrating both her vast experience and her passion for her work. Aerial photography of the Bathurst caribou herd had just been completed. The photos now need to be analysed to give a rough count of the size of the herd. RWED caribou biologist, **Ann Gunn advised that her impression is that she saw nothing to indicate that the herd's numbers are increasing.**

The question is: Why hasn't Dr. Gunn and ENR simply told everyone that the traditional Bathurst Calving Ground has been split?

[http://www.carc.org/sustainable dev/bathurst inlet study tour trip diary.php](http://www.carc.org/sustainable_dev/bathurst_inlet_study_tour_trip_diary.php)

2004 Miningwatch Website: Dr. Anne Gunn on Science Panel, fighting the
Tulsequah Mine in British Columbia.

www.miningwatch.ca/updir/Tulsequah_CEEA_comment.pdf



MiningWatch Canada

Mines Alerte

*Suite 508, 250 City Centre Avenue, Ottawa, Ontario, Canada K1R 6K7
tel. (613) 569-3439 — fax: (613) 569-5138 — info@miningwatch.ca — www.miningwatch.ca*

February 8, 2005

Our members are: Bathurst Sustainable Development, the Canadian Arctic Resources Committee (CARC), the Canadian Auto Workers (CAW) Social Justice Fund, the Canadian Environmental Law Association (CELA), the Canadian Nature Federation (CNF), the Canadian Parks and Wilderness Society (CPAWS), the Citizens' Mining Council of Newfoundland, Development and Peace, the Environmental Mining Council of British Columbia (EMCBC), the Innu Nation, Inter Pares, Kairos (a coalition of churches), Northwatch, the Sierra Club of Canada, the Steelworkers Humanity Fund, and the Yukon Conservation Society (YCS).

MiningWatch Canada is a coalition of groups listed above.

The choice is yours.

Which future would you choose?

Healthy vibrant northern communities exist. Rivers run clean. Caribou populations flourish. A diversified economy ensures northerners benefit from development.

OR

Land is damaged. Rivers are polluted. Northern communities benefit little. Ecosystems are fragmented, causing a decline in caribou populations.

Both scenarios are real possibilities. The choice is yours.

We looked at three areas in the North — the Northwest Territories, Mackenzie Delta and Colville Hills and the Thelon/Peel Plateau. We created maps that showed what these areas would look like over the next 30 years if all gas reserves are developed.

Our study found that gas development is a real threat to caribou in northern Canada. The large scale gas development would cause far more harm to northern caribou and their ecosystems than benefits.

There's nothing needed to do now to stop the gas to know what would happen. Gas development projects in the North. With that said, we can know what the specific impacts of different gas development projects could have in the North. By understanding these impacts, we can make more informed choices to ensure a healthy vibrant future for northern communities.

For more information, please visit our website at www.pembina.org. To request a copy of the complete study, visit www.pembina.org.

Achieving your Vision

You have an opportunity to personally shape the future of the North.

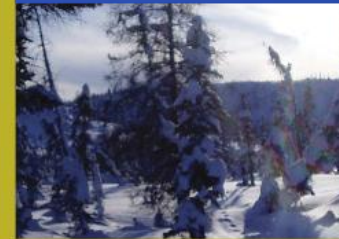
Northerners can still choose where oil and gas development can occur and which areas will be free of development. In the places open to development, you can decide how it proceeds. In much of southern Canada this is no longer possible.

Encourage completion of protected areas planning and land use planning before large scale development comes to your backyard.

Find out what development is planned for your area. Learn more about the potential of gas development and its environmental impacts. Get involved in the decision-making process about gas development projects in your area. Examine how lower impact practices can reduce the footprint of development.

Communities can find ways to balance both the economic opportunities of gas development and the social and environmental risks.

Now that we can envision where potential gas development may be headed, you can begin to plan for your vision of the future.



A PEAK into the future:

Potential Landscape Impacts of Gas Development in Northern Canada



THE PEMBINA
INSTITUTE



200, 606 7th Street SW, Calgary AB T2P 1Z2

This project was carried out by the Pembina Institute in partnership with the Canadian Arctic Resources Committee (CARC) and Canadian Parks and Wilderness Society (CPAWS), Yukon Chapter and Northwest Territories Chapter.

The information in this brochure is based on a detailed study. To download a free copy of the complete study, visit the Pembina Institute Web site at www.pembina.org.



Classic scare tactics of the Environmental Movement. Frightening the First Nations that the caribou will disappear, so that they stop development. The fact is, good jobs save caribou.

2004 Bathurst Caribou Management Report

“For almost three decades, between 1960 and 1990, the Bathurst herd calved east of Bathurst Inlet. Beginning in the late 1980s, the cows gradually shifted west again and were calving back in the same areas used in the 1950s, west of Bathurst Inlet.”

So why now are caribou east of the Bathurst Inlet Ahiak caribou???



**“Queen Maud Gulf caribou have replaced
Bathurst herd caribou on the eastern traditional
calving grounds.”**

Caribou are not rival gang members, where one herd battles with another, taking over its calving grounds. These are all the same species, *Rangifer tarandus groenlandicus*, not cattle taking over where the buffalo once roamed. There is no collaring information, saying caribou moved into the Bathurst calving area from the east. There is no genetic information. In sum, there is not anywhere near enough data to support the creation of this new herd, when balanced against the nearly 60 years of research on the Bathurst Caribou Herd.

The Bathurst Caribou Herd-What Dr. Anne Gunn said in 2007*

“1. How can the ENR compare the Bathurst Herd in the 1980s and 1990s, to the Bathurst Herd in 2006, when the definition of the herd has changed?

Comment: The definition of herd has not changed and is based on the return of cows to their traditional calving ground. The calving ground of the Bathurst herd has been known since the 1960s and 1970s. Although it has shifted location periodically, it has remained a distinct calving ground, hence a distinct herd, from the earliest studies onwards.”

How can a “distinct” calving ground overlap with another (Ahiak) calving ground?

*File Report #178, Page 95 “Outfitter Concerns, etc. “

Dr. Anne Gunn, in 2000, says the Ahiak and Bathurst Traditional Calving Grounds “overlap.”*

“The Queen Maud Gulf herd’s traditional calving ground overlaps with the Bathurst herd’s traditional (but not current) calving grounds.”*

By definition, a **“distinct”** calving ground, cannot **“overlap”** with another herd’s calving ground. This violates the very definition of a caribou herd.

*File Report #126, Page II, Abstract

2004 Bathurst Caribou Management Plan

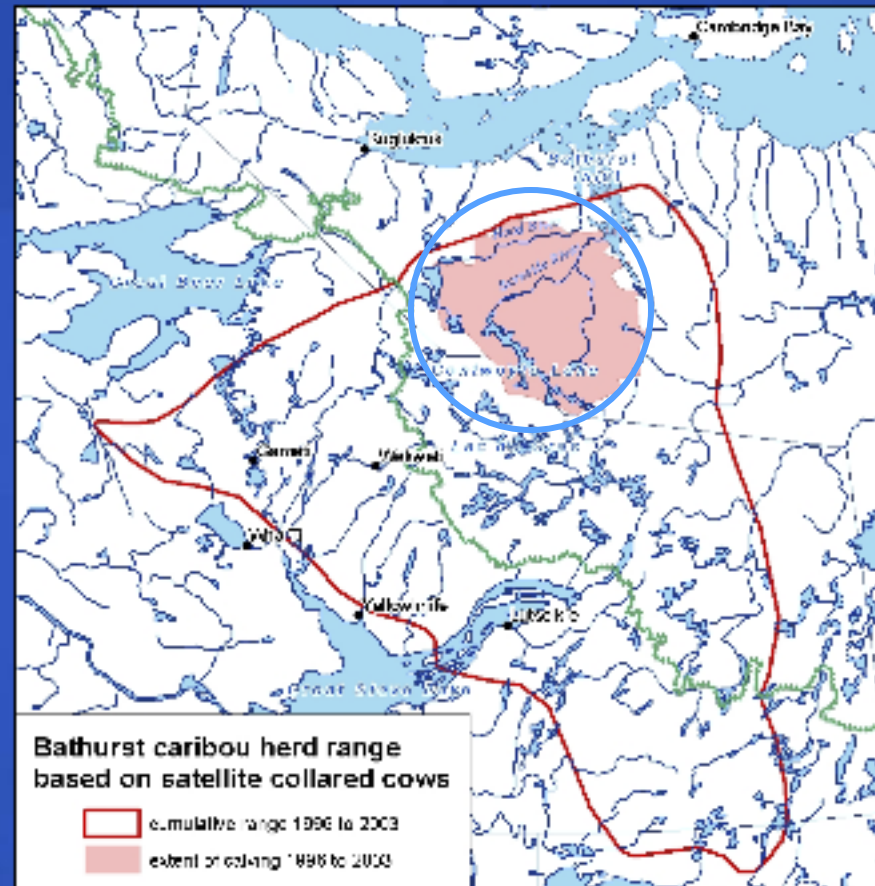


Figure 2.

Please note the “new” Bathurst Calving Ground. For 6000 years the caribou calved on both sides of the inlet, but, with six years of collars, now they calve on the west. The above map may be technically correct, but it is deliberately misleading, and ignores 60 years of good research by ENR scientists, and, more importantly, thousands of years of aboriginal knowledge.



Bathurst Herd Definition: 2004 Bathurst Caribou Management Plan

“Bathurst herd: The herd of barren ground caribou that currently calves on the west side of Bathurst Inlet, Nunavut. The herd generally remains on the barrens for the summer and early fall and moves south into the Northwest Territories for the winter.”



The 2004 Bathurst Caribou Management Plan is one of the worst documents ever produced by ENR. It deliberately sets up a scenario to destroy the outfitting industry. The outfitters were not allowed to participate in the process. Instead, we were told our interests were being represented by ENR personnel.



The Tlicho Nation, who had won the right to manage the Bathurst Caribou herd, was also set up. If the Bathurst herd shrinks or disappears, what do they have to manage??

Harvesting Information

The central barren-ground caribou in the Northwest Territories are the least harvested caribou in North America.

Harvesting has dropped from a minimum of 100,000* in 1950, to less than 20,000 today.**

*1950 A.W.F. Banfield, The Barren-Ground Caribou

**GNWT and Nunavut statistics combined



In the winter of 2005, ENR went out to all the villages and told everyone the caribou herds were down, way down. They said they needed to get a handle on the aboriginal harvest, which they felt might be too high. In 2006, they reduced resident permits from 5 caribou to 2 bulls. They proposed reducing the outfitters by 95%, which would have eliminated the industry, and dozens of First Nation jobs. Here are the harvesting facts:

In the 1996 Bathurst Caribou Management Plan, it says this:

"GHL holders in communities around the Bathurst Range harvest up to 16,800 caribou per year. Many of these hunters also have access to caribou from the Bluenose, Beverly, Victoria Island, or Northeast Mainland herds, or to Woodland caribou. Thus, some of the reported harvest may no come from the Bathurst herd... Since 1987, the resident harvest has remained between 1500 and 2000.... Non-resident harvest was 574."

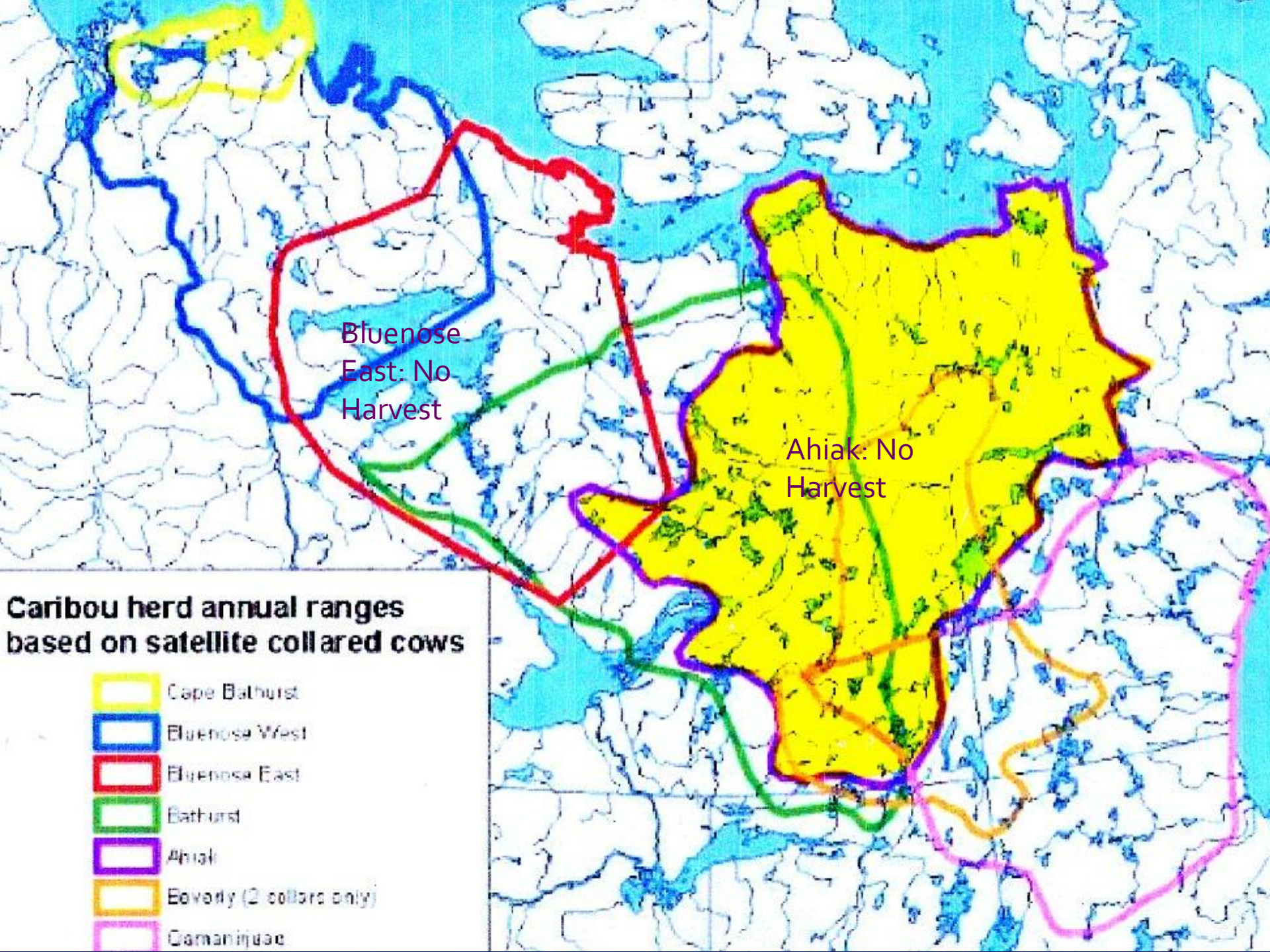
Total Harvest 1996: Approximately 19,300 Caribou a Year



1996 Bathurst Caribou Management Plan

“A main management objective for the Bathurst herd is to maintain a population level high enough to sustain a harvest of at least 16,000 annually. A population of between 300,000 to 600,000 has been identified as the range which will meet this objective. The total allowable harvest based on current information and the 1990 census (352,000) is approximately 23,000 caribou.”





**Caribou herd annual ranges
based on satellite collared cows**

- Cape Bathurst
- Bluenose West
- Bluenose East
- Bathurst
- Ahiak
- Bovery (2 collars only)
- Camaniguc

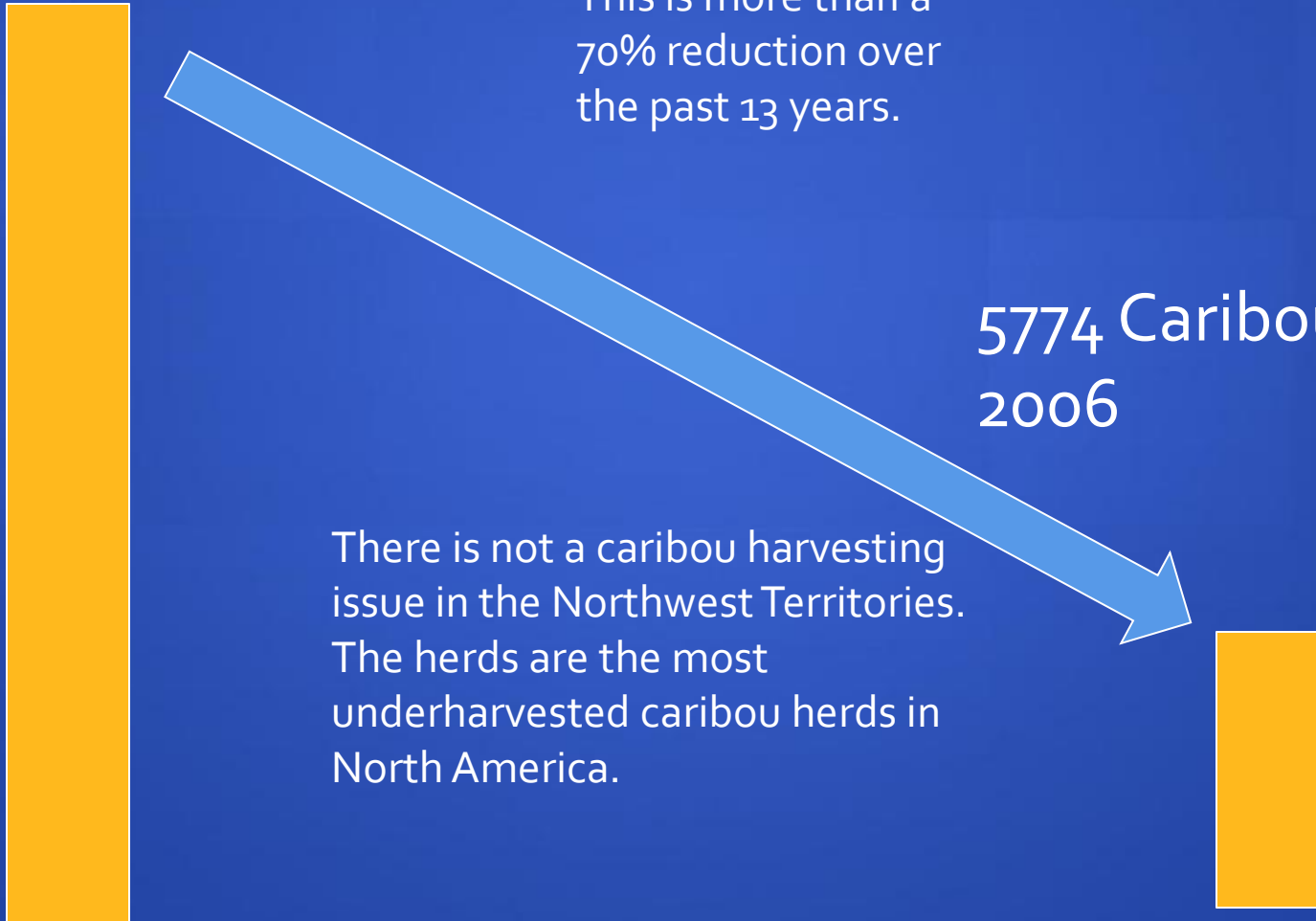
Overall Harvest Trend in Wek'eezhi

19,300 Caribou
in 1996

This is more than a
70% reduction over
the past 13 years.

5774 Caribou in
2006

There is not a caribou harvesting
issue in the Northwest Territories.
The herds are the most
underharvested caribou herds in
North America.



What is happening with the caribou???

As pointed out earlier, the overall herd numbers of caribou have increased from 354,000 in 1980 to about 1,200,000 today. Calf survival counts, pregnancy rates, and overall health of the caribou have been excellent the last couple of years. In 2001-2004, the calf survival rates were down from the 1990s, although they were still showing a steady or slightly increasing caribou herd. Basically, a stable herd. In 2005-2006, the calf survival rate dropped below 10/100 cows. This is a low number, and assuming the data was good, it would point to excessive wolf and grizzly predation. In 2007 and 2008, the calf survival rate went back up, to about 40/100. It is my understanding that Parvo virus went through the dog population in Yellowknife in 2005, and probably knocked down the wolf population as well. ENR has reported very high pregnancy rates, and the bulls we have harvested have been very fat and healthy. Reports from hunters harvesting cows have said the same to us.

The Past 60 Years

There is an old, weathered manuscript at the library at ENR. It was written by A.W.F. (Frank) Banfield in 1950, entitled simply The Barren-Ground Caribou. Mr. Banfield went from village to village, documenting aboriginal harvesting and harvesting practices. It was a controversial document, because some of the practices were considered, by white culture, to be wasteful. As the Indians followed the caribou north and the Eskimos followed them south, they would harvest and stack huge piles of caribou carcasses, knowing, on their return, there might not be caribou in the area. This was done to ensure food for their dog teams. Mr. Banfield calculated that there were about 100,000 caribou being harvested a year, primarily to feed the ravenous dog teams, but also for meat and skins for human consumption.

With the advent of better jobs and a changeover to a cash vs. a subsistence economy, the overall caribou harvest today in the NWT/Nunavut is less than 20,000 (GNWT and Nunavut statistics combined.)

Why the Increasing Caribou Herds?



As snowmobiles improved, they quickly replaced the use of sled dog teams as the winter mode of transportation. In the old days, there were thousands of caribou harvested to feed the dog teams.

This transition began in the 1970s, and as the dog teams were traded in for snowmobiles, the need to harvest caribou for dog food declined. With the reduced harvest, many of which were cows, the caribou herds started to grow.



Caribou harvest down 80%

100,000 caribou a year*

20,000 caribou a year**

1950s

*Frank Banfield

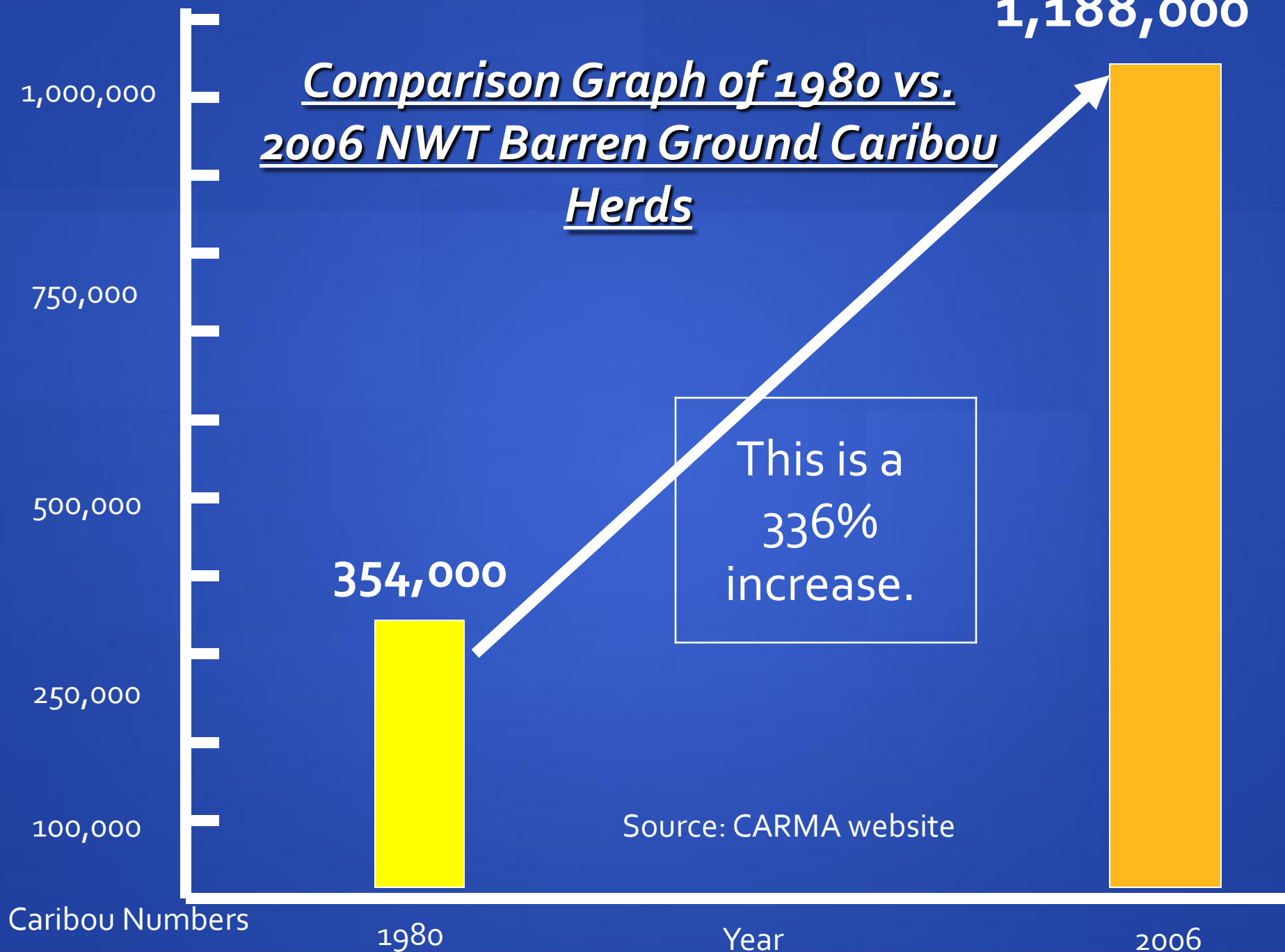
** GNWT and Nunavut Government Statistics

2009



The Results of the Reduced Harvest?

*Comparison Graph of 1980 vs.
2006 NWT Barren Ground Caribou
Herds*



Closing the Trap on the Outfitters and Industry

1. In 2005, the governmental department Resources, Wildlife, and Economic Development split into two. Free to act, the new Department of Environment and Natural Resources almost immediately (2006) came after the outfitting industry, proposing to cut each outfitter to a maximum harvest of 22 caribou, down from 180 tags. With no outfitters on the land, and very few First Nation people, who could bear witness to what was happening with the caribou?

2. The new Species at Risk Act, which ENR and its minister are trying to push through the legislature, defines a "Species" as almost any group of animals ENR wishes, even if they are not biologically or geographically distinct. It then exempts the minister from the Freedom of Information Act. This gives unprecedented power to the ENR minister.

SARC Trap for Stopping all Hunting and Development

1. "species" means the species, subspecies and distinct populations to which this Act applies, as set out in section 8; (*espèce*)
2. "distinct population" means a geographically or biologically distinct population of a species, or a distinct population identified by the Conference under subsection 26(2); (*population distincte*)
3. (2) The Conference may identify a distinct population, other than a geographically or biologically distinct population, for referral to SARC under subsection (1).

Minister Exempt from Access to Information Act

146. Notwithstanding Part 1 of the *Access to Information and Protection of Privacy Act*, the Minister may direct that information not be disclosed under that Act, or under any provision of this Act that permits or requires information in any form to be provided or made available, if

- (a) the Minister considers that disclosure of the information could result in an additional risk to, or could be detrimental to, the survival or recovery of a species that SARC has, in an assessment, categorized as a data deficient species, a species not at risk, a species of special concern, a threatened species, an endangered species, an extirpated species or an extinct species; or
- (b) the information is traditional knowledge and a Management Authority requests that it not be disclosed.

Competing Theories or a Combination of Both?

Theory 1. Dr. Anne Gunn, and her longtime colleague, Director of Wildlife Susan Fleck, want to stop or slow down all industrialization of the north. Its a simple strategy. Divide the herds, and compare old herd definitions with new ones. Frighten the First Nation groups that the caribou are in danger, and they will shut down new development every time. Pretty classic environmental movement tactics, being employed all across Canada.

Theory 2. This theory was presented to me by a news reporter, much more knowledgeable about NWT politics than I am. He believes it is a governmental battle between the Tlicho government, and the GNWT. The Tlicho fought hard to maintain wildlife management rights in its land claim agreement. The Tlicho Government specifically has the right to manage the Bathurst Caribou. In 1996, right after the Tlicho settled, Anne Gunn changes the definition of the Bathurst herd. If the Bathurst herd disappears, what do the Tlicho have to manage? If the Tlicho are managing the wildlife, why do we need ENR and its 60 million dollar a year annual budget?

Hunting outfitters are just as interested in protecting caribou and caribou habitat as anyone else. It must however, be done with good data and good science. Mines come and go, while the caribou, properly managed, should be with us forever. ENR controls access to hundreds of thousands of square miles of public land, owned by all Canadians. It also controls all the information, which it continually refuses to share with the public, despite statements to the contrary. If outfitters are put out of business, sportsmen from around the world will be denied access to a public resource, and witnesses on the land will be gone. Much needed natural resources, and jobs for Canadians are also at stake. Most importantly, the Tlicho, Metis, and all First Nation people are being denied their treaty rights to hunt, and the ability to feed their people.

As I said at the last WRRB hearing, I hope this board will seek the truth.

Conclusion

All of the above research is simply using ENR's research and applying some basic critical thinking skills and a 25 year career of working with wildlife populations around the world. The theoretical "crash" of the Bathurst herd simply doesn't hold up.

The Merriam-Webster Online Dictionary defines the word

"Hoax"

"to trick into believing or accepting as genuine something that is false or often preposterous."

**What we have here is the Greatest
Wildlife Hoax in the History of
Canada.**

John Andre: Contact Information

Comments, questions, criticism, and additional information or perspectives are encouraged. I may be reached at the following:

Office Telephone: 406-375-8400

Cell Phone: 406-360-1159

e-mail: john@shoshonewilderness.com

Mailing address:

Shoshone Wilderness Adventures

P.O. Box 520

1555 Skalkaho Highway

Hamilton, MT 59840