Co-Management Plan for the Cape Bathurst, Bluenose-West, and Bluenose-East Caribou Herds

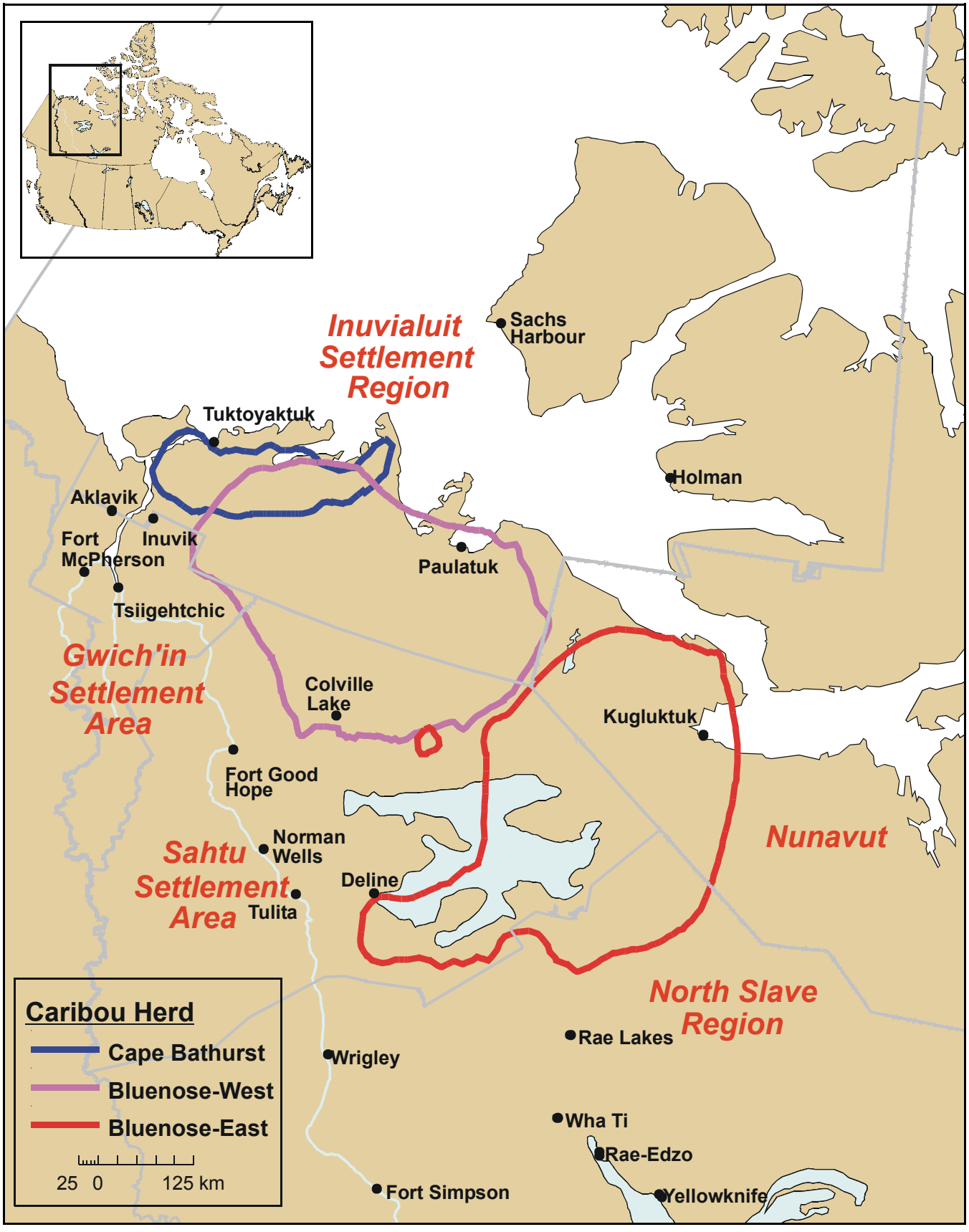
Northwest Territories and Nunavut

DRAFT

with Work Plans for years 1999/2000 to 2003/2004

Yet To Be Recommended By:
Wildlife Management Advisory Council (NWT)
Gwich'in Renewable Resource Board
Sahtu Renewable Resource Board
Nunavut Wildlife Management Board

Ranges of the Cape Bathurst, Bluenose-West, and Bluenose-East Barren-ground Caribou Herds



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The two photographs of caribou on the cover page were provided by Parks Canada Agency, Inuvik.

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THE PLAN

The best way to manage a caribou herd is to make a plan so everybody can agree on what needs to be done and who is going to do it. The Inuvialuit Final Agreement states that there should be cooperative agreements between government and users to manage wildlife populations, including safe harvest levels. The Gwich'in and Sahtu Dene and Metis land claim agreements state that Government and users of the Bluenose caribou herd will establish an agreement to manage the herd. The Nunavut Final Agreement supports the need for effective wildlife management.

THE CARIBOU

Barren-ground caribou (*Rangifer tarandus groenlandicus*) that occupy the northern portion of the Northwest Territories and western Nunavut, Canada, were considered to be part of the Bluenose herd. Recent work completed by the Department of Resources, Wildlife, and Economic Development, GNWT, indicated that there were three herds within that area. For convenience we refer to these as the Cape Bathurst, Bluenose-West, and Bluenose-East caribou herds. In 1992, there were about 88,000-106,000 caribou in the Cape Bathurst and Bluenose-West herds and 14,000 to 19,000 in the Bluenose-East herd.

THE PEOPLE

On the mainland, the Cape Bathurst herd is harvested by 5 Inuvialuit and Gwich'in communities. The Bluenose-West herd is harvested by Inuvialuit, Gwich'in, and Sahtu Dene and Metis in 12 communities. In addition, Inuvialuit from Sachs Harbour on Banks Island rely on caribou from these two herds. Similarly, on the mainland, the Bluenose-East herd is harvested by Sahtu Dene Metis and Inuit from 4 communities. In addition, Inuvialuit from Holman on Victoria Island harvest these caribou. Some non-native resident, non-resident, and non-resident aliens also harvest from these herds for both meat and trophy antlers.

THE DESIGN

The plan has the following sections:

Management Principles - these are the principles under which the herds and their range/habitat will be managed.

Co-management Goals for March 2004 - these are the general goals of the plan.

Current Status - a summary of the information that we now have to manage the herds and their range.

Goals for March 2004 - specific things that we want to accomplish during the period April 1999 to March 2004.

INTRODUCTION

Action Plans For Bluenose Caribou and People - this section lists our concerns and the solutions, and actions required each year, and other actions required during the period April 1999 to March 2004 to address those concerns.

Work Plans for the DRWED/DSD; HTCs/IGC, RRCs, and HTOs; Co-Management Boards; and Parks Canada Agency - this section lists the actions required each year and other action required by the land claim organizations and government agencies responsible for wildlife management during the period April 1999 to March 2004 to address the concerns listed in the Action Plans.

The information in the **Action Plans** and **Work Plans** is organized under the following 7 column headings:

Population Characteristics
Physical Condition
Range Use
Harvest Management
Co-Management
Culture and Education
Industry & Tourism

This plan covers five years from 1999/2000 to 2003/2004. There are work plans that indicate who will do what. At the end of each year we will go through the work plans to find out if everyone has done their tasks and, if we need to, make changes in the work plans for the next year. The plan was designed so that everybody can read it quickly, understand it easily, and most of all, use it regularly.

WHO WILL CO-MANAGE THE HERDS?

The herds will be co-managed under an agreement(s) developed and signed by Inuvialuit, Gwich'in, Sahtu Dene and Metis, and Nunavut land claim wildlife management boards, and Territorial and Federal government agencies. The following agencies and organizations will play a part in the co-management of the herds and their range:

Government of the Northwest Territories: Department of Resources, Wildlife, and Economic Development.

Government of Nunavut: Department of Sustainable Development.

Community HTCs, RRCs, and HTOs and Land Claim Organizations Representing Regional User Interests: including HTCs, RRCs, and HTOs from the communities of Aklavik, Inuvik, Tuktoyaktuk, Paulatuk, Sachs Harbour, Holman, Fort McPherson, Tsiigehtchic, Deline, Tulita, Fort Good Hope, Colville Lake, Norman Wells, Kugluktuk, the Inuvialuit Game Council, and the Kitikmeot Hunters and Trappers Association.

Wildlife Co-Management Boards: including the Wildlife Management Advisory Council (NWT), Gwich'in Renewable Resource Board, Sahtu Renewable Resources Board, and Nunavut Wildlife Management Board.

WHO MANAGES THE LAND BASE AND SCREENS/REVIEWS DEVELOPMENTS PROPOSED FOR LANDS WITHIN THE RANGES OF THE HERDS?

Indian and Northern Affairs Canada

Land Management Boards: including Inuvialuit Land Administration, Inuvialuit Regional Council, Gwich'in Land Administration, Gwich'in Land and Water Board, Gwich'in Tribal Council, Sahtu Secretariat Incorporated, Sahtu Renewable Resources Board, Sahtu District Land Corporations, Sahtu Surface Rights Board, Sahtu Land and Water Board, Sahtu Land Use Planning Board, Nunavut Planning Commission, Nunavut Water Board, Nunavut Impact Review Board, Kitikmeot Inuit Association, and the Department of Resources, Wildlife, and Economic Development.

Parks Canada Agency

Tuktut Nogait National Park Management Board

Environmental Impact Screening and Review Boards: including the Environmental Impact Screening Committee (Inuvialuit), Environmental Impact Review Board (Inuvialuit), Gwich'in Land and Water Board, Sahtu Land and Water Board, Environmental Impact Review Board (Sahtu), the Mackenzie Valley Environmental Impact Review Board, and Nunavut Impact Review Board.

MORE INFORMATION

If you want more information on the Cape Bathurst, Bluenose-West, or Bluenose-East herds please contact:

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Department of Sustainable Development
Box 1340, Iqaluit, Nunavut X0A 0H0
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Gwich'in Renewable Resource Board
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Sahtu Renewable Resources Board
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Nunavut Wildlife Management Board
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Parks Canada Agency, Western Arctic Field Unit
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MANAGEMENT PRINCIPLES

Effective co-management of the Bluenose caribou herd requires participation, cooperation, and consensus among users and governments. We recognize the following principles of management:

1. The herds and their habitat are healthy and viable for the future.

2. The social, cultural, and economic values of the herds and their habitat is recognized.

3. Traditional and scientific knowledge are used to manage the herds and their habitats.

4. Subsistence harvest needs are known and recognized, and the sustainable harvest is allocated fairly.

5. Conservation, wise use, and ethical hunting of the herds are practiced and taught.

6. Research addresses management priorities, considers community concerns, and promotes community involvement.

7. Co-management Boards and government agencies share research and management costs.

8. Research and management results are communicated in a timely and effective way.

9. The size and growth of the herds are affected by a number of factors including: harvest, predation, condition of the range, weather events, human disturbance, and possibly competition with other species.

10. From time to time special management actions may be required to regulate the size or growth of the herds, or to promote recovery of the herds when their numbers are low.

CO-MANAGEMENT GOALS FOR MARCH 2004

Population Characteristics: Current estimates of the herd size, productivity rates, recruitment rates, and fall composition will be available for the Cape Bathurst, Bluenose-West, and Bluenose-East caribou herds. Mortality rates of satellite collared adult female caribou will be known. The final reports on the wolf study (1986 to 1993) done in Inuvialuit Settlement Region will be available.

Physical Condition: Information on the fall body and diseases of adult female Cape Bathurst, Bluenose-West, and Bluenose-East caribou, collected by harvesters, will be available. Hunters will have information on the occurrence of diseases, parasites, and abnormalities found in harvested caribou. Hunters be able to identify the common disease, parasites, and abnormalities found in caribou, and will know how to handle the meat of animals infected by common diseases and parasites. People in the communities will know the levels of contaminant that are in the caribou that they harvest and if they are safe to eat.

Range Use: Maps will be available that show the seasonal ranges of the Cape Bathurst, Bluenose-West, and Bluenose-East caribou herds, and people will know how important each seasonal range is to the herds. The importance of pre-calving, calving, and post-calving ranges will be known. Muskox and reindeer management plans will be implemented within the range of each herd. People will know how muskox and caribou, and reindeer and caribou interact. The communities will be implementing fire action plans for traditional harvesting areas.

Harvest Management: Current and accurate information on the numbers, sex and age class, and harvest location of caribou harvested by subsistence, resident, and non-resident hunters will be available. Current estimates of wounding loss will be available. The harvest rate for each herd will be known. The co-management boards will be implementing harvest management strategies for each herd. Communities will know when harvesters from other communities are hunting in their areas.

Co-management: The co-management agreement for the herds will have been fully implemented. The advisory committed will have implemented the co-management plan for the herds. The communities, co-management boards, and government agencies will know what is happening with the herds and how they are being managed.

Culture and Education: Work will have been undertaken to document the TK of elders that is relevant to the management of the herds. Traditional and scientific knowledge about the herd will be readily available to people in the communities, co-management boards, government agencies, and researchers . Teachers and students will be using schools kits that provide information about the herds. A caribou camp for students and researcher will have been held.

Industry and Tourism: Developers will know about and consider the seasonal needs of the Cape Bathurst, Bluenose-West, and Bluenose-East caribou herds when undertaking developments. Policies and guidelines for development activities on the seasonal ranges of the three herds will have been developed and implemented. Developers and tourism outfitters will be implementing measures to mitigate the impacts of their activities.

Population Characteristics

a) Number of herds within the 'Bluenose Range'

In 1950, Banfield (1954) described two herds of barren-ground caribou (*Rangifer tarandus groenlandicus*) in the area south of the Arctic coast from the Mackenzie River Delta east to Kugluktuk and north of Great Bear Lake in the Northwest Territories (NWT) and Nunavut, Canada. These he named the Great Bear Lake and Colville Lake herds. In 1967, Thomas (1969) assumed that these two herds were one population, which he called the Bluenose Lake herd. The area around Bluenose Lake was recognized as the calving grounds of the herd (Thomas 1969), although a small portion of the herd was later thought to calve on the Cape Bathurst Peninsula (Hawley *et al*. 1979). This calving area was reported to have been permanently abandoned by 1979 (Brackett *et al*. 1979, Gunn and Miller, 1986). Since the mid-1960s, caribou in this area have been managed as a single unit, the Bluenose herd.

In 1994, as part of this planning process, distribution information from population and telemetry surveys done between 1966 and 1993 were analyzed using a computerized geographic information system (GIS) to define the herd's seasonal ranges. These analyses indicated that there were three distinct calving and two rutting areas within that range. Caribou management has been based on the herd concept, where herds are identified based on their use of traditional calving grounds (Thomas 1969, Gunn and Miller 1986). Applying this approach DRWED hypothesized that there were two, and possibly three, herds within this range (Nagy *et al*. in prep). In March 1996, DRWED began satellite tracking and genetic studies similar to those done to define polar bear populations (Paetkau *et al*. 1995, Bethke *et al*. 1996) to identify the number of caribou herds within the 'Bluenose' range (Nagy *et al*. in prep). Tissue samples were also collected for genetic comparisons from the two well-defined herds to the west and east of the Bluenose range- the Porcupine (*R.t. granti*) and Bathurst (*R.t. groenlandicus*) herds, respectively.

Fifteen adult female caribou (>1 year old) from the 'Bluenose herd' were fitted with radio collars that could be tracked by satellite in March 1996. Collars were deployed in the eastern (n = 5), southern (n = 5), and western (n = 5) portions of the winter range. During 1996, six of the collared caribou died (2 were harvested, 1 was killed by wolves, and 3 died of undetermined causes). These collars were recovered and re-deployed on females in the eastern and central portions of the winter range in 1997. These collars provided information on the movements of caribou between March 1996 and May 1999.

The movement information from the satellite collared cows strongly indicated that there were three separate herds (Figure 1). The annual ranges of those herds, determined through computer analysis of satellite location data (harmonic contouring -50%, 60%, 70%, 80%, and 90% utilization distribution), are shown in Figure 2). For convenience we refer to these herds as the Cape Bathurst, Bluenose-West, and Bluenose-East herds. These herds should be re-named by the appropriate communities and wildlife co-management boards.

Analyses of the DNA from samples (antlers, bone) collected from the calving grounds of the Cape Bathurst, Bluenose-West, and Bluenose-East herds and from Bathurst and Porcupine caribou indicated that all of these herds were genetically different (Nagy *et al*. in prep).

Figure 1. Movements of satellite radio-collared caribou colour-coded based on calving location. June 1996 to May 1999.

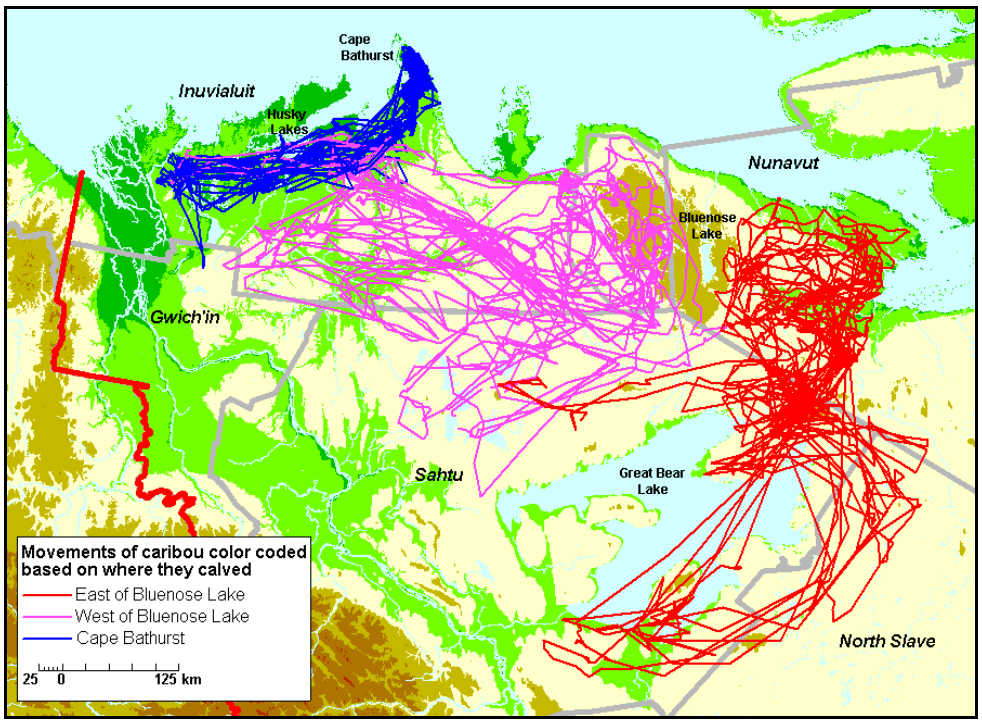
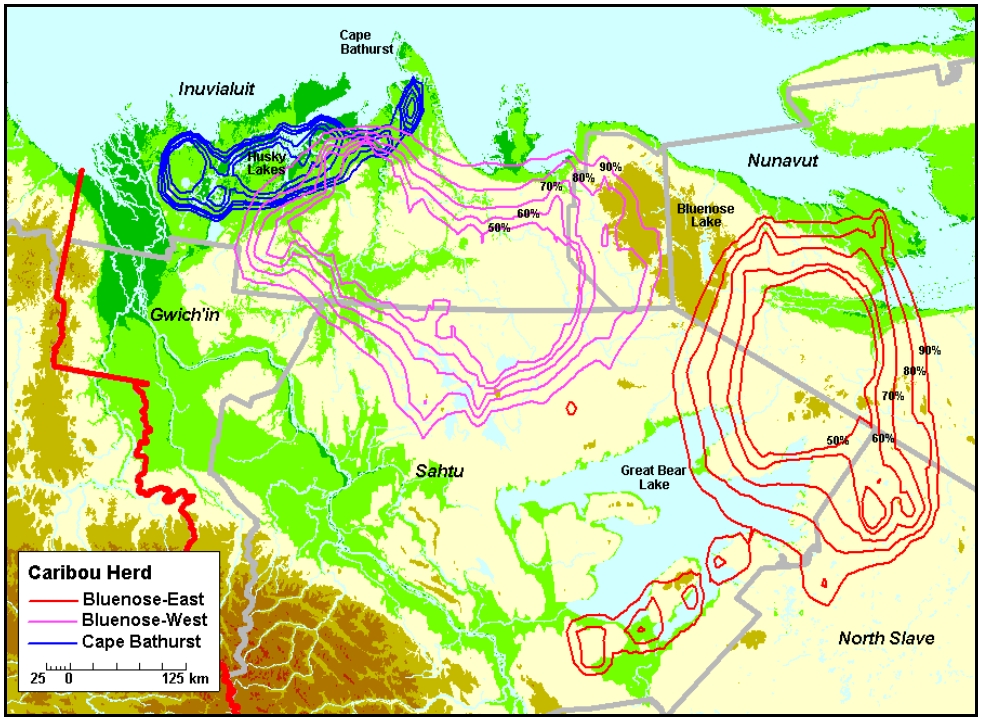


Figure 2. Harmonic contouring (50%, 60%, 70%, 80%, and 90%) of satellite location data for the Cape Bathurst, Bluenose-West, and Bluenose-East caribou herds.



Additional work needs to be done to define the seasonal ranges of each herd by further analyzing satellite tracking data collected to date. We do not have detailed information on the movements of males in each population because only female caribou have been tracked to date using satellite collars.

b) Estimates of herd size

Surveys were done to photocensus the Bluenose herd in late June/early July 1986, 1987, and 1992. Caribou were only radio collared within the ranges of the Cape Bathurst and Bluenose-West herds for photocensus surveys done in 1986 and 1987. In addition to these, caribou were radio collared within the range of the Bluenose-East herd for the survey done in 1992. Female and male caribou were collared so that aggregations including both sexes could be located for the census. Data collected during those surveys were analyzed to estimate the size of each of the three herds.

In 1986 and 1992 aggregations of caribou were found on the Cape Bathurst Peninsula, at the base of the Peary Peninsula, and in the western Melville Hills (Table 1). In 1987 aggregations of caribou were found on the Cape Bathurst Peninsula and in a continuous distribution from the base of the Peary Peninsula to the western Melville Hills (Table 1). Because we do not have detailed information on the movements of males during late June and early July, we do not know to which herd the caribou found at the base of the Peary Peninsula belong.

In 1992 there were approximately 88,000 to 106,000 caribou in the Cape Bathurst and Bluenose-West herds (combined), and 14,000 to 19,000 caribou in the Bluenose-East herd. The number of caribou radiocollared in the Bluenose-East herd was likely insufficient to get a reliable estimate of the size of that herd. Surveys need to be done to obtain current estimates of herd size and trend.

Now that we have identified three geographically and genetically distinct herds, current estimates of the number of caribou in each herd are required.

c) Productivity

Productivity is the number of calves that are produced at calving in early June. The most recent estimate of productivity was obtained in 1981, or 18 years ago. The productivity rate at that time was 75 calves per 100 cows. This rate was good and is comparable to other herds. Current estimates of productivity are required.

d) Recruitment

Recruitment is defined as the number of calves born that survive to be one-year-old. Composition surveys are done in March to estimate recruitment because calves are not recruited to the population until June when they reach age one.

Eight recruitment surveys were done between 1983 and 1994 within the ranges of the Cape Bathurst and Bluenose-West herds. Recruitment rates between 1983 and 1991 ranged from 17.8 to 27.2% and were 12.4 and 13.7% in 1993 and 1994, respectively. This suggests that recruitment rates declined in the early 1990's; however, surveys were not done range-wide and in some years insufficient caribou were classified to give accurate estimates of recruitment. Current estimates of recruitment are required.

In some populations, calf mortality has been estimated as high as 80% during their first year. The main cause of mortality in some herds is predation by wolves, bears, eagles, and other predators. Disease and poor weather during calving also cause calf mortality. Herds with recruitment rates of over 15% tend to be increasing (Bergerud 1983), although this rule-of-thumb does not factor in adult mortality.

Table 1. Estimates of the number of caribou in the Cape Bathurst, Bluenose-West, and Bluenose-East herds.

Year	Number of Caribou Counted During Photocensus					Estimates of Herd Size	
	Cape Bathurst	Base of Peary Peninsula	Western Melville Hills	Cape Bathurst and Western Melville Hills	East of Bluenose Lake	Cape Bathurst and Bluenose-West	Bluenose-East
	Adults (calves)	Adults (calves)	Adults (calves)	Adults (calves)			
1986[1]	**13,476** (2,774)	**30,713** (4,206)	**52,747** (16,257)	**96,936** (23,237)		**96,936** (23,237)	
1987[2]	**9,681** (1,124)	**105,559** (16,888)		**115,240** (18,012		**115,240** (18,012)	
1992[3]	**15,670** (2,353)	**22,090** (1,154)	**49,959** (10,240)	**87,719** (13,747)	**13,582** (2,010)	**87,719 - 103,545** (13,747 - 16,429)	**13,582 - 19,015** (2,010 - 2,814)

[1]McLean and Russell 1992
[2]McLean and Russell 1992
[3]Fraser and Nagy (unpublished data)

Physical Condition

Fall condition of adult females is linked to productivity and calf survival. At the present time we do not have much information on the physical condition of the herd or about the incidence of diseases in the herd. We are not aware of any major health problems with the herd. Harvesters' concern about diseases and parasites in the herd appears to be low.

Brucellosis is a bacteria caused disease that occurs in caribou, reindeer, elk, and bison, but can also be found in other species. The most common visible symptom is swollen joints, although infected animals do not always have swollen joints. When an infected animal is harvested and butchered you may find pockets of greenish puss between muscles or between muscles and bone. The disease affects calf survival because pregnant cows will often abort, or the calf may die shortly after birth as a result of the disease. The meat must be well cooked if eaten because people can contract *Brucellosis* if they eat raw or undercooked infected meat. Drying, smoking, and freezing do not kill the bacteria that causes *Brucellosis*. If a hunter suspects that an animal they have harvested has *Brucellosis* they should bring a sample of meat to the office of DRWED for diagnosis.

CURRENT STATUS

In recent years samples were collected from caribou harvested within the ranges of the Cape Bathurst and Bluenose-West herds (Rendezvous Lake, 68 animals sampled in 1991; Inuvik,16 animals sampled in 1994; and Tuktoyaktuk, 42 animals sampled in 1995) to find out how many had *Brucellosis*. Between 1.5% to 12.5% of those animals had the disease. The number of caribou in these herds that have the disease may vary from year to year. *Brucellosis* is not as common in barren-ground caribou in the western Arctic as it is in some of the other herds. For example, in 1987 over 35% of the caribou in the Boothia Arctic island caribou herd had *Brucellosis*.

Recent studies done within the winter ranges of the Cape Bathurst and Bluenose-West herds (1993 and 1995) showed that these caribou had less contaminants (e.g., organochlorines and heavy metals) than other herds in the NWT and that they are very safe to eat. However, as a response to community concerns, levels of contaminants should be determined every 5 years. Caribou will be sampled during winter 1999-2000 to determine current levels of contaminants in the Cape Bathurst and Bluenose-West caribou.

Range Use

Distribution information collected during telemetry and population surveys done between 1965 and 1993 were analysed using a Geographic Information System (GIS) and mapped to show the seasonal ranges used by the Bluenose caribou herd. The satellite tracking work done since March 1996 indicates that there are three herds within the "Bluenose" range. These are:

1 Cape Bathurst caribou that calve on the Cape Bathurst Peninsula, rut east of Husky Lakes, and winter in the Tuktoyaktuk Peninsula-Husky Lakes area.
2 Bluenose-West caribou that calve west of Bluenose Lake in Tuktut Nogait National park and adjacent areas to the west, rut in the Anderson River area, and winter in the Tuktoyaktuk Peninsula area south into the Sahtu, and
3 Bluenose-East caribou that calve east of Bluenose Lake in the headwaters of the Rae and Richardson rivers, rut northeast of Great Bear Lake, and winter north, east, and south of Great Bear Lake (Nagy *et al*. in prep).

DRWED is currently analyzing satellite location date for caribou tracked by satellite since March 1996 and where possible distribution data obtained before 1996 to define and map the seasonal ranges of these three herds.

The Porcupine Caribou Technical Committee used 6 criteria to assess and rate the importance of seasonal ranges used by the Porcupine caribou herd using the following criteria including: energy balance, reproductive contribution, tolerance to disturbance, escape requirements, intensity of use, and availability of alternate ranges. They rank in importance as follows:

1 pre-calving, calving, and post-calving ranges (most important; least tolerant to disturbance)
2 early summer and mid summer ranges
3 late summer and fall migration, and spring and spring migration ranges
4 rut and late fall and winter ranges

As recommended by the participants of the Bluenose Caribou Herd Planning Workshop (November 1996), DRWED will use the same importance ratings for seasonal ranges used by the Cape Bathurst, Bluenose-West, and Bluenose-East caribou herds.

The calving and post-calving range of the Cape Bathurst herd falls within Inuvialuit 7(1)a and 7(1)b lands. Any developments proposed for areas within the 7(1)a portion must be reviewed by the Environmental Impact Review Board. Most of the calving and post-calving ranges of the Bluenose-West herd are protected by Tuktut Nogait National Park. The calving and post-calving ranges of the Bluenose-East herd are not currently protected. Once the seasonal ranges of the three herds are defined, areas that require further protection will be identified and necessary protective or mitigative measures will be proposed.

In summer 1998, Parks Canada Agency started to map vegetation types within Tuktut Nogait National Park and adjacent areas using Landsat TM imagery. Vegetation maps of those areas will be completed during 2000. DRWED, in consultation with Parks Canada Agency and the University of Fairbanks, Alaska, is developing a research proposal to assess the types, quality, and abundance of the forage available in the park and adjacent areas, and on the Cape Bathurst Peninsula for caribou during the calving and post-calving period. This work will also help define where important calving and post-calving habitats are in these areas.

In 1998 and 1999, DRWED (Sahtu Region) classified and mapped vegetation within the Sahtu using Landsat TM imagery.

People in Deline are concerned that fires on the north shore of Great Bear Lake have caused a shift in the migration of caribou in that area. DRWED is currently working with communities to prepare community base fire action plans for values at risk and some traditional hunting areas within the ranges of the herds.

Harvest Management

a) Subsistence harvest

On the mainland, the Cape Bathurst is harvested by 5 Inuvialuit and Gwich'in communities. The Bluenose-West herd is harvested by Inuvialuit, Gwich'in, and Sahtu Dene Metis in 10 communities. Animals from the Cape Bathurst and Bluenose-West herds have been shipped to Sachs Harbour and Holman to provide additional caribou meat to these communities. Similarly, on the mainland, the Bluenose-East herd is harvested by Sahtu Dene Metis and Inuit form 4 communities. In addition, Inuvialuit from Holman on Victoria Island travel to the mainland and harvest these caribou. In 1997-98 and 1998-99, people from the North Slave and Deh Cho regions harvested Bluenose-East caribou and shipped them back to their communities.

Harvest data are best obtained through formal harvest studies when hunters are interviewed on a regular basis to determine what species and the numbers and age and sex class of each species they have harvested. Harvest studies, that document subsistence harvest, are currently underway in the Inuvialuit Settlement Region, and in the Gwich'in, Sahtu, Nunavut settlement areas.

b) Resident and Non Resident harvest

Some resident, non-resident, and non-resident aliens also harvest from these herds for both meat and trophy antlers. Resident hunter harvest information is documented by the annual DRWED Resident Hunter Harvest Survey. Non-resident and Non-resident Alien hunters must hunt with an outfitter in the NWT and Nunavut.

Outfitters are required to complete a NWT Outfitter Return on Client Success Form for each hunter that they guide. These are summarized annually by DRWED.

c) Commercial harvest

A total of 950 commercial tags are available each year (Table 2). The tags are normally distributed by the local HTC/RRC/HTO or through the offices of DRWED. In some communities hunters were not retrieving the entire caribou harvested for commercial sale. To prevent wastage of meat, these communities now require hunters to bring the entire carcass to the DRWED office for inspection before a tag is issued. Some communities have allocated a portion of their tags for sport hunts (e.g. Tuktoyaktuk).

Table 2. Number of commercial tags allocated to user communities for Bluenose caribou.

Community	Hunters & Trappers Organizations	Hunters & Trappers Committees	Renewable Resource Councils	Total for Community
Kugluktuk	50			50
Tuktoyaktuk		175		175
Paulatuk		175		175
Inuvik		87.5	87.5	175
Aklavik		87.5	87.5	175
Fort Good Hope			Share 200	200
Deline				
Tulit'a				
Colville Lake				
Norman Wells				
Tsiighetchic				
Total	**50**	**525**	**375**	**950**

d) Estimate of total harvest

The average annual harvest of caribou for communities that are known to harvest the Bluenose-East, Bluenose-East & Bluenose-West, Bluenose-West, and Cape Bathurst & Bluenose-West herds are summarized for the period 1 July 1987 to 30 June 1993 (Table 3 and 4). For these summaries, data for the communities in the Inuvialuit Settlement Region and Kuguluktuk were obtained from the Inuvialuit Harvest Study and Kitikmeot Harvest Study, respectively. Estimates of the number of caribou harvested by communities in the Gwich'in and Sahtu Settlement Areas were obtained by interviewing DRWED staff and people in the communities. Resident hunter harvest information was obtained from the DRWED Resident Hunter Harvest Survey. Non Resident and commercial harvest information was obtained from DRWED records.

Table 3. Average annual harvest of caribou for communities that are known to harvest the Bluenose-East, Bluenose-East & Bluenose-West, Bluenose-West, and Cape Bathurst & Bluenose-West herds, 1 July to 30 June 1987-88 to 1992-93.

	Average Annual Harvest of Herds by Communities (Range)			
	Bluenose-East	**Bluenose-East & Bluenose-West**	**Bluenose-West**	**Cape Bathurst & Bluenose-West**
Communities	• **Holman** • **Kugluktuk** • **Tulita**	• **Deline** • **Norman Wells**	• **Colville Lake** • **Fort Good Hope** • **Paulatuk**	• **Aklavik** • **Fort McPherson** • **Inuvik** • **Sachs Harbour** • **Tsiigehtchic** • **Tuktoyaktuk**
Subsistence	**1587** (1520-1600)	**183** (150-200)	**1121** (558-1365)	**1934** (1553-2390)
Resident	**12** (6-16)	**40** (1-108)	**18** (0-37)	**132** (92-165)
Non-Resident	-	-	-	**30** (13-55)
Commercial	**8** (0-50)	-	**43** (0-175)	**280** (103-525)
Total	**1607** (1584-1616)	**223** (185-258)	**1182** (648-1393)	**2376** (2011-2643)
% Subsistence	**98.7**	**82.2**	**94.8**	**81.4**
% Resident	**0.7**	**17.9**	**1.6**	**5.5**
% Non-resident	**-**	**-**	**-**	**1.3**
% Commercial	**0.5**	**-**	**3.6**	**11.8**

Approximately 4,300 caribou were harvested from the Cape Bathurst and Bluenose-West herds combined. Using the 1992 population estimates, the estimated harvest rate was less than 5%. That rate does not include wounding loss

Approximately 1,900 caribou were harvested from the Bluenose-East herd. Again using the 1992 population estimate, the estimated harvest rate was between 9 and 14%. Those rates do not include wounding loss.

Table 4. Percent of average annual subsistence harvest taken from the Bluenose-East, Bluenose-West, and Cape Bathurst herds by harvesters by settlement region/area, 1987-88 to 1992-93.

Settlement Region/Area	Percent of Average Annual Subsistence Harvest by Herd			
	Bluenose-East[4]	Bluenose-East & Bluenose-West	Bluenose-West	Cape Bathurst & Bluenose-West
Inuvialuit[1]	-	-	25.6	74.4
Gwich'in[2]	-	-		100
Sahtu Dene and Metis	8.6	18.3	73.1	-
Nunavut[3] (Kugluktuk)	100	-	-	-

[1]The Inuvialuit also harvest Porcupine caribou.
[2]The Gwich'in also harvest Porcupine caribou
[3]The Inuit of Kugluktuk also harvest Bathurst and Dolphin and Union caribou.
[4]The Inuvialuit of Holman also harvest Bluenose-East caribou, although no harvest was reported between July 1987 to June 1993.

e) Wounding loss

Wounding loss is defined as animals that have been shot and hit but not retrieved. Most communities agree that wounding loss occurs. They estimate that wounding loss ranges from near 0% to 25%. It varies with hunting conditions (weather conditions, forest cover, road access, and accessibility of caribou); terrain (hilly vs. flat), and experience of the hunters (young inexperienced hunters more likely to loose wounded animals than older more experienced hunters). The actual number of caribou removed from a population by hunting activities is calculated by adding an estimate of wounding loss to the reported harvest. Surveys need to be done to get estimates of wounding loss. We need to agree on the wounding loss rate that will be used to estimate the total harvest of the herd.

f) Harvest management

Current estimates of the number of caribou harvested from each herd are required.

A harvest management strategy is required for each herd.

Harvest data for the Inuvialuit Settlement Region shows that mostly males are harvested during the calving and summer periods, but only a small proportion of the total annual harvest is taken then. The harvest is made up of mostly females during the rut/fall, winter, and spring- the seasons during which most of the caribou are taken each year. This seasonal pattern of harvesting males and females occurs in other areas of the NWT, northern Canada, and Alaska. We have no information at this time to suggest that this is a problem. However, in the future if the herds start to get smaller, this type of harvest may increase the rate of decline. As a result, management actions may be required to reduce the harvest of females.

Co-management

The territorial governments and co-management boards responsible for managing the Cape Bathurst, Bluenose-West, and Bluenose-East herds are as follows:

	Governments and Co-Management Boards Responsible for Managing Herds		
	Cape Bathurst herd	**Bluenose-West herd**	**Bluenose-East herd**
Territorial Governments	NWT	NWT	NWT
			Nunavut
Wildlife Co-Management Boards	WMAC (NWT)	WMAC (NWT)	NWMB
	GRRB	GRRB	SRRB
		SRRB	

Land claim organizations must be included in all aspects of the management of the herds. Within the land claim areas, separate boards/committees have been established to manage wildlife resources and the land and water. These wildlife and land management boards/committees must work together so that the herds can be managed effectively.

Community organizations are regularly consulted by government agencies and co-management boards when they develop and enforce land use and wildlife management policies. Government agencies regularly hire and train aboriginal people from the NWT and Nunavut to assist on wildlife studies and for wildlife management and enforcement positions. Results of wildlife studies are regularly reported to the co-management boards and communities. However, more communication among communities, co-management boards, and government agencies about the herds and their management is required.

The Tuktut Nogait National Park Management Board, established in 1997, will advise the Minister on all aspects of Park planning, operation, and management. Among other tasks this board will coordinate the preparation and periodic amendment of the Management Plan for the Park, coordinate and integrate advice on policies, regulations, research, research priorities, and trans boundary issues. Because these responsibilities are subject to the jurisdiction of the EISC, EIRB, FJMC, and WMAC(NWT), a good working relationship among all boards is required.

Culture and Education

There are no formal cultural or educational programs about the Cape Bathurst, Bluenose-West, or Bluenose-East caribou. The need for such programs should be identified. Elders' traditional knowledge (TK) and expertise has not always been recognized and used to full advantage in caribou research and management. The value of the Cape Bathurst, Bluenose-West, or Bluenose-East caribou to people in the four land claim areas is not always fully recognized.

CURRENT STATUS

The GRRB has been documenting elders traditional and local knowledge about wildlife, including caribou. The board produce the book:

- **Nanh' Kak Geenjit Gwich'in Ginjik Gwich'in Words About the Land**.

The information collected during interviews done to prepare the book are now part of a Environmental Knowledge Database (GEKP). The database includes hundreds of interviews and texts on the environment and Gwich'in traditional use of the land. The GGRB recently provided the RRCs with the first GEKP database on CD-ROM. This CD contains only a part of the traditional knowledge text collection of the GEKP; a second CD-ROM will be available with the entire collection of the GEKP. The board is continuing to document elders knowledge about a number of fish, wildlife, and waterfowl species.

The traditional knowledge of Inuvialuit elders was documented during interviews taped prior 1984. These tapes are currently being translated and transcribed by the Inuvialuit Cultural Resource Centre. The information translated and transcribed to data is available in computerized database. Parks Canada Agency and DRWED have helped funded that work.

The Dene Cultural Institute collected and documented TK about barren-ground caribou in Fort Good Hope and Colville Lake between 1989 and 1993. The institute published the report:

- **DCI Traditional Dene Environmental Knowledge**

The DRWED has also produced educational materials on barren-ground caribou including:

- **Barren-Ground Caribou of the Northwest Territories, NWT Wildlife Sketches** (pamphlet)
- **People & Caribou in the Northwest Territories** (book)
- **A Field Guide to Common Wildlife Diseases and Parasites in the Northwest Territories and Nunavut** (booklet)

The DRWED, Sahtu Region has adapted the Beverly-Quaminiriaq Schools Kit to include information on the Bluenose caribou herd. Some kits are available for use in the regions. The kits needs to be updated.

In August 1999, Parks Canada Agency held a field camp for 12 Paulatuk students in Tuktut Nogait National Park. Elder, park staff, and a school assistant delivered a program of ecology lessons, hikes, and traditional games. Parks Canada plans to continue its community out reach program.

Industry and Tourism

a) Development activities

The ranges of Cape Bathurst, Bluenose-West, and Bluenose-East herds overlap private lands, Crown Lands, national and territorial parks (Figure 3 and 4). Development activities need to be coordinated to minimize their impact on the herds and their ranges.

Mineral exploration activities are proceeding west of Tuktut Nogait National Park on the western portion of the pre-calving, calving, post-calving, and early summer range of the Bluenose-West herd near Paulatuk (Darnley Bay). Exploration activities for oil and gas are underway in portions of the winter range of the Bluenose-West herd in the Sahtu. There will be more oil and gas exploration on the herd's winter range in

Figure 3. Ranges of the Cape Bathurst, Bluenose-West, and Bluenose-East caribou herds and associated land claim boundaries and private lands.

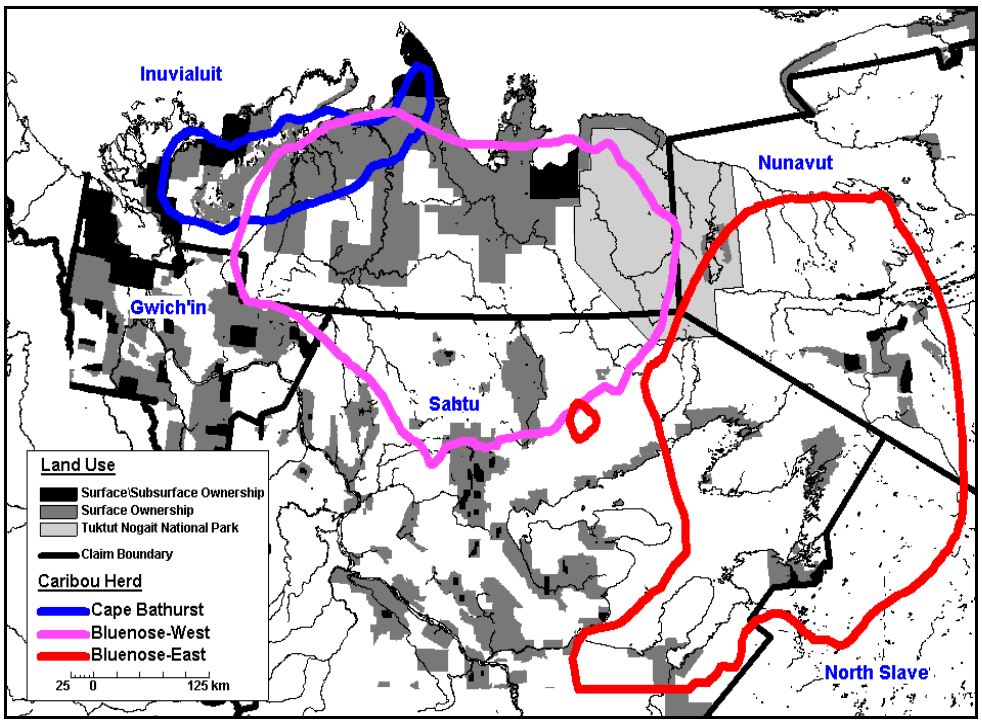
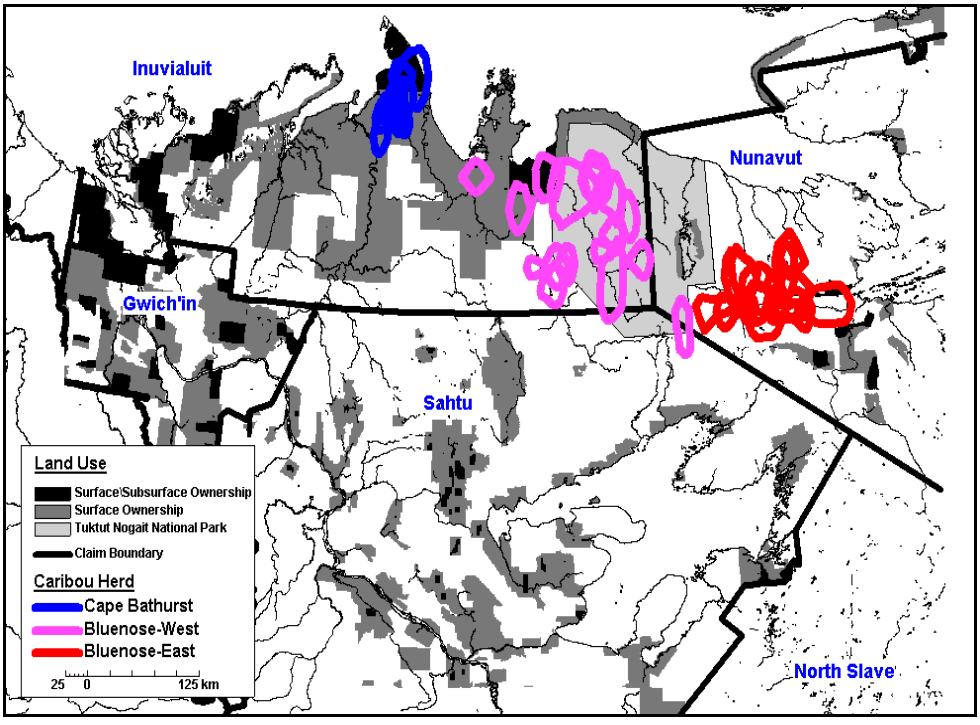


Figure 4. Areas use by satellite collared female caribou during the calving and post-calving period (50% harmonic contours) in 1996, 1997, and 1998 in land claim boundaries and private lands.



the north central portion of the Sahtu Settlement Area. The possible effects of human-related disturbances (e.g., oil and gas exploration, mineral exploration and extraction) on the herds and their ranges are not known.

Tuktut Nogait National Park, established in June 1996, includes a portion of the Bluenose-West herds pre-calving, calving, and post-calving ranges. This park may be expanded into the northeastern Sahtu and western Nunavut. Gwich'in Territorial Park is currently under development in the area around Campbell Lake. The potential effects of tourism activities in parks during sensitive time periods for caribou need to be considered in parks operational and tourism outfitting plans.

Some Inuvialuit communities currently guide outfitted sport hunts and tourists. Some Sahtu communities recently received Class B Outfitting licenses to guide outfitted caribou sport hunts. Guiding and outfitting and tourist activity will likely increase in the western Arctic.

b) Harassment of wildlife

In the NWT it is illegal to persistently or repeatedly chase, weary, harass, or molest wildlife without intending to capture or kill it; or, to cause significant disturbance to a significant number or wildlife. DRWED and Parks Canada enforce regulations on wildlife harassment. People can report aircraft that disturb caribou or harvesters to the local Renewable Resource Officer or Park Warden, or **Call 1-800-661-0852 WILDLIFE WATCH**.

c) Environmental impact screening and review

In the **Inuvialuit Settlement Region** all proposed developments that are likely to cause negative environmental impacts are screened by the Environmental Impact Screening Committee (EISC) to determine whether the development could have a significant negative impact on present or future harvesting. The chair of the committee is nominated by IGC and appointed by Canada. The EISC has members nominated by the Inuvialuit, GNWT, Yukon Government, and Canada.

Developments proposed for areas on crown lands are automatically screened; developments on Inuvialuit private lands can be referred for screening either by the Inuvialuit Game Council or the Inuvialuit Regional Council. Activities proposed for national parks are screened internally by Parks Canada under CEAA and also by the EISC.

The traditional/local knowledge of the Inuvialuit members and comments from affected HTCs are considered in all screenings. If the EISC determines that a proposed development could have a significant negative impact on present or future wildlife harvesting, it refers the proposed development to the Environmental Impact Review Board (EIRB) for public review. After its review, the EIRB can recommend terms and conditions to mitigate or minimize negative impacts on wildlife harvesting to the government.

In the **Gwich'in Settlement Area** (GSA) DIAND; and the NWT Water Board are responsible for issuing land and water use permits. With the proclamation of the Mackenzie Valley Resource Management Act, the Gwich'in Land and Water Board (GLWB) is responsible for the use of land and water in the GSA. It issues, amends, or renews land use permits and water licenses on crown and Gwich'in private lands.

The GLWB is the contact group for land use permit or water licenses in the GSA. When a completed application for a land or water use activity is submitted to the GLWB, it will ensure that the land owner has given their consent for the use of the land. On Gwich'in private lands permission is needed from the Gwich'in Tribal Council and on crown land it is needed from the federal government. The GLWB will not consider an application until the land owner has given their permission for the use of the land.

After permission from the land owner is received, the GLWB is responsible for making sure the proposed activity is in conformity with the Land Use Plan. Any applications where conformity is in question are sent to the Gwich'in Land Use Planning Board for a final decision.

Once conformity with the Land Use Plan is established, the GLWB will review the application and circulate it to co-management, government, Gwich'in, and community groups for comments. Proposed activities must be consistent with all other laws and regulations. Government or co-management groups may require other authorizations related to land and water use. For example, a Department of Fisheries and Oceans authorization will be needed when there are potential impacts on fish habitat.

If the GLWB concludes through their review process that there are serious environmental or public concerns with the proposed activity they will not issue a land use permit or water license and will pass the application on to the Mackenzie Valley Environmental Impact Review Board (MVEIRB).

The MVEIRB will look at potential environmental impacts and consider public concerns about proposed activities. The MVEIRB may require a public review and environmental assessment of the proposed activities before making any decisions about the application. The MVEIRB can recommend to the Minister of DIAND that the proposed activity be rejected, approved, or approved with terms and conditions.

In the **Sahtu Settlement Area** there are 3 categories of lands. Sahtu municipal lands are those within local government boundaries. Sahtu settlement lands are those inside the settlement area to which Sahtu organizations have title. The remaining area is crown land. If development is proposed on crown lands, an application for a lease must be made to DIAND. DIAND consults with all potentially affected or interested parties about the development and then makes a decision on whether to award the lease. This consultation may take from 6 months to 1 year. The Sahtu Land and Water Board issues land and water use permits. On Sahtu settlement lands the procedure is not fully established. If access across settlement lands is required to proceed with a development on crown lands, an access agreement and benefits agreement must be negotiated with the local or district Land Corporation.

In the **Nunavut Settlement Area**, persons wishing to carry out land or water activities must have a permit. The proponent must apply to the appropriate permitting agency. For crown lands, the permitting agency is DIAND. For Inuit owned lands, the permitting agency is the appropriate Regional Inuit Association. For national Parks, the permitting agency is Parks Canada. For bird sanctuaries or National Wildlife Areas, the permitting agency is Environment Canada.

The permitting agency forwards proposals to the Nunavut Planning Commission (NPC) to determine if the proposal conforms to the area land use plan. If it does not, and if no variance is granted, the proposal is rejected. If it does conform, or if there is not an approved land use plan, the NPC forwards the proposal to either or both of the Nunavut Impact Review Board (NIRB) and the Nunavut Water Board (NWB) for screening and review.

CURRENT STATUS

The NIRB is an institution of public government formed under the terms of the Nunavut Land Claims Agreement, whose primary purpose is to screen and review land use proposals. The NIRB screens the proposal and makes a decision, which is then conveyed to the regulatory agency. A NIRB decision may be one of the following: i) acceptance of the proposal with or without conditions, ii) the proposal requires a review, iii) the proposal requires further clarification for screening, and, iv) the proposal should be abandoned or modified and re-submitted for screening. Project reviews may be carried out either by NIRB or a Federal Environmental Assessment Panel.

The NWB is an institution of public government formed under the Nunavut Land Claims Agreement. The NWB is responsible for the review and licensing of all uses of water, including disposal of waste into water. The NWB may work in concert with NIRB in the review of development proposals, and will not issue a water licence until a NIRB review has been completed.

ACTION PLAN
1 April 1999 to 31 March 2004

	Population Characteristics	Physical Condition
Concerns	1) We do not know if the Cape Bathurst, Bluenose-West, and Bluenose-East caribou herds are getting bigger, getting smaller, or staying the same. 2) We do not have current estimates of how many calves are born and how many survive the first year; how many cows die each year; and how many bulls, cows, yearlings and calves are in these herds. 3) We have some information about wolves on the ranges of these herds but we are not sure if it is enough for caribou management purposes.	1) We have not documented how healthy Cape Bathurst, Bluenose-West, and Bluenose-East caribou cows are in the fall. 2) People worry about the caribou and their own health when they see animals that have diseases, parasites, or abnormalities. 3) Some people worry about eating caribou because they think they have contaminants in them.
Solutions	1) Find out if the Cape Bathurst, Bluenose-West, and Bluenose-East caribou herds are getting bigger, getting smaller, or staying about the same. 2) Get information about caribou birth rates; survival rates of calves and cows; and the percentage of bulls, cows, yearlings, and calves in these herds. 3) Find out if existing information about wolves within the ranges of the herds is good enough or not for caribou management purposes.	1) Get information from hunters about the health of cows in the fall. 2) Help hunters understand caribou diseases, parasites, and abnormalities. 3) Help establish long-term programs to monitor contaminants in caribou.
Actions	1) Census the Cape Bathurst, Bluenose-West, and Bluenose-East herds in 2000. 2) Survey to estimate productivity in June each year. 2) Survey to estimate recruitment in March each year. 2) Survey to estimate herd composition in October 2000. 2) Estimate mortality rates of satellite collared adult females (1996 to 1999). 3) Finish data analysis and complete reports for ISR wolf study (1986 to 1993).	1) Work with hunters to monitor fall body condition and diseases of adult female Cape Bathurst, Bluenose-West, and Bluenose-East caribou. 2) Report on diseases, parasites, and abnormalities found in harvested caribou that are reported by hunters each year. 3) Collect samples every 5 years to determine levels of contaminants in harvested caribou. 3) Help establish and work with community-based studies that monitor contaminants in caribou

Range Use	Harvest Management
1) We cannot protect the seasonal ranges of the Cape Bathurst, Bluenose-West, and Bluenose-East caribou herds unless we know more about them. 2) We do not know if muskox or reindeer could become a problem for the Cape Bathurst, Bluenose-West, and Bluenose-East caribou herds 3) Recent forest fires may have changed caribou migration patterns in traditional hunting areas along the north shore of Great Bear Lake.	1) We do not know how many Cape Bathurst, Bluenose-West, and Bluenose-East caribou are harvested by subsistence harvesters each year. 2) Some communities feel that more accurate information should be collected on harvest by resident hunters. 3) We cannot estimate the total annual harvest of Cape Bathurst, Bluenose-West, and Bluenose-East caribou because we do not know how many caribou are wounded and lost (wounding loss) by subsistence and resident hunters. 4) There is no harvest management strategy for the three herds. 5) Some people harvest caribou in the hunting areas of neighboring communities without first letting these communities know about it.
1) Describe the seasonal ranges used by the three herds. 2) Make muskox and reindeer management plans for areas within the ranges of the Cape Bathurst, Bluenose-West, and Bluenose-East caribou herds. 2) Do studies to find out about caribou-muskox interactions and caribou-reindeer interactions. 3) Develop community-based fire action and management plans for traditional hunting areas within the ranges of the Cape Bathurst, Bluenose-West, and Bluenose-East caribou herds	1) Find out how many Cape Bathurst, Bluenose-West, and Bluenose-East caribou are harvested by subsistence harvesters each year. 2) Find out if more accurate resident hunter harvest information can be collected cost effectively. 3) Get estimates of wounding loss for subsistence and resident hunters. 4) Develop harvest management strategies for the three herds. 5) Encourage communities to work out a proper way for people to be able to go into neighboring communities areas to hunt.
1) Map the seasonal ranges of the three herds and rank the importance of each the way they do for the Porcupine caribou herd. 1) Revise maps of seasonal ranges of the three herds when new information becomes available. 1) Design and do a study to verify the importance of pre-calving, calving, and post calving ranges used by the three herds. 1) Design and do a study to assess the importance of other seasonal ranges used by the three herds. 2) Review available scientific and local knowledge on how caribou and muskox interact and how caribou and reindeer interact. 2) Do caribou-muskox and caribou-reindeer interactions studies. 2) Make muskox and reindeer management plans for areas within the range of the three herds. 3) Prepare community-based fire action and management plans for traditional hunting areas within the ranges of the three herds.	1) Document subsistence, resident, non resident, and commercial harvest. 1) Summarize harvest information (number, age and sex, month of harvest, and harvest location) reported by the Inuvialuit, Gwich'in, Sahtu, and Nunavut harvest studies, the Resident Hunter Survey, and Outfitter Kill Return forms to find out how many Cape Bathurst, Bluenose-West, and Bluenose-East animals are taken each year. 2) Review current methods for documenting the resident hunter harvest and, if there are ways to collect more accurate information in a cost effective way, recommend these to DRWED. 3) Include a one-time only question about wounding loss for one month in each settlement area/region's subsistence harvest study and in the resident hunter harvest survey questionnaire to obtain estimates of wounding loss. 4) Develop and implement a harvest management strategy for the three herds. 5) Inform other communities when travel or hunting is planned in those communities' hunting areas. 5) Produce and update a list of contact names and addresses for community HTCs, RRCs, and HTOs within the range of the three herds and make it available to each organization.

ACTION PLAN
1 April 1999 to 31 March 2004

	Co-Management	Culture & Education
Concerns	1) There has been a lot of confusion and misunderstandings in the past about the status of the Cape Bathurst, Bluenose-West, and Bluenose-East herds and how they should be managed.	1) Elders' TK and expertise is not always recognized and used to full advantage in caribou research and management. 2) Young people are not taught enough about the traditions, culture, and basic land skills of their region, or scientific and practical knowledge about caribou. 3) The GNWT Traditional Knowledge Policy is not being fully implemented. 4) There are no public information programs on the Cape Bathurst, Bluenose-West, and Bluenose-East herds.
Solutions	1) Communities, co-management boards, land claim organizations, and government agencies should regularly exchange information about the Cape Bathurst, Bluenose-West, and Bluenose-East caribou herds and their management.	1) Recognize and use to full advantage elders' TK and expertise in caribou research and management. 2) Teach young people the traditions, culture, and basic land skills of their region, and scientific and practical knowledge about caribou. 3) Fully implement the GNWT Traditional Knowledge Policy. 4) Produce and present public information programs about the Cape Bathurst, Bluenose-West, and Bluenose-East herds.
Actions	1) Establish an advisory committee to oversee the implementation of the management plans for the herds. 1) Attend meetings about the three herds and their management. 1) Report on meetings attended about the three herds and their management. 1) Report on tasks completed in the management plan. 1) Produce and circulate an annual report on tasks completed in the management plan. 1) Revise annual work plans. 1) Prepare a management plan for next five years.	1) Produce and update a directory of names of elders and their areas of expertise in each land claim area. 1) Design and do a long-term study to document the TK of elders that is relevant to the management of the three herds . 1) Develop ways that people can access elders' TK documented by the long-term study. 2) Summarize traditional and scientific knowledge about the three herds. 2) Prepare schools kits about the three herds. 2) Hold training workshops for educators on the use of the schools kits. 2) Hold caribou traditional and scientific knowledge gatherings. 2) Encourage elders and parents to teach TK about the herds to young people at home and in schools. 2) Encourage caribou researchers to teach scientific knowledge about the herds to young people in schools. 2) Provide "On the Land" schools programs. 2) Encourage and provide opportunities for students to attend meetings and help with studies about caribou. 3) Fully implement the GNWT Traditional Knowledge Policy. 4) Produce and present public information programs about the three herds.

Industry & Tourism

1) Activities associated with developments; mineral, oil, and gas exploration and development; transportation corridors; and in plans for parks, special conservation areas, and tourism outfitting may harm the herds, their habitats, or both.
2) Human activities outside the ranges of the Cape Bathurst, Bluenose-West, and Bluenose-East herds could harm the herds, their habitats, or both.

1) Find out what types of protective measures are currently in place and, if required, recommend additional protective measures.
1) Get proper protection for ranges we already know are important.
2) Track events and activities that occur outside the range of the herd that may harm the herds, their habitats, or both.

1) Review land claim, federal, and territorial legislation to determine if additional measures are required to protect the three herds and their habitats.
1) Review land use and community conservation plans to determine if planned land uses consider the seasonal needs for survival of the three herds and their users.
1) Develop and implement policies and guidelines for development activities on the seasonal ranges of the three herds.
1) Assess cumulative effects of existing and proposed development and tourism activities on the three herds and their habitats and recommend mitigative measures.
2) Make sure that the seasonal needs for survival of the three herds and their users are addressed in proposals for industrial activities outside of the ranges of the three herds.
2) Participate in national and international conventions and agreements that promote biological diversity and sustainable development, regulate trade in wildlife or their parts, and limit pollution.

	Population Characteristics	Physical Condition
Each Year	2) Estimate mortality rates of satellite collared adult females.	2) Promptly send information to the hunters, HTCs, RRCs, and HTOs about diseases, parasites, and abnormalities found in harvested caribou and reported to DRWED/DSD. 2) Prepare an annual report on the diseases, parasites, and abnormalities found in harvested caribou and reported to DRWED/DSD and send it to the HTCs, RRCs, HTOs, and co-management boards. 3) Support and work with community based studies that monitor contaminants in caribou.
Other Actions		
1999/2000	1) Help fund and do the work required to prepare for surveys to estimate the number of caribou in each of the three herds in July 2000. 2) Estimate mortality rates of satellite collared adult females (1996 to 1999). 3) Continue analysis of data from ISR wolf study.	3) Collect samples from caribou harvested in the Tuktoyaktuk-Husky Lakes area, determine the levels of contaminants in them, and report that information to the HTCs/IGC, RRCs, HTOs, and co-management boards.
2000/2001	1) Help fund and do survey to get estimates of the number of caribou in each of the three herds and report results of that survey. 2) Help fund, do, and report results of survey to estimate productivity in June 2000. 2) Help fund, do, and report results of survey to estimate fall composition in October 2000. 2) Help fund, do, and report results of survey to estimate recruitment in March 2001. 3) Finish draft reports on ISR wolf study.	1) Work with the HTCs, RRCs, and HTOs to design a study to monitor fall body condition and diseases of adult female caribou.
2001/2002	2) Help fund, do, and report results of survey to estimate productivity in June 2001. 2) Help fund, do, and report results of survey to estimate recruitment in March 2002. 3) Finish and distribute final reports on ISR wolf study and recommend whether additional work is required.	1) Help fund, coordinate data collection, and report the results of the study monitoring fall body condition and diseases of adult female caribou.
2002/2003	2) Help fund, do, and report results of survey to estimate productivity in June 2002. 2) Help fund, do, and report results of survey to estimate recruitment in March 2003.	1) Help fund, coordinate data collection, and report results of the study monitoring fall body condition and diseases of adult female.
2003/2004	2) Help fund, do, and report results of survey to estimate productivity in June 2003. 2) Help fund, do, and report results of survey to estimate recruitment in March 2004.	1) Help fund, coordinate data collection, and report results of the study monitoring fall body condition and diseases of adult female.

Range Use	Harvest Management
1) Revise maps of seasonal ranges of the three herds when new information becomes available.	1) Summarize harvest data reported by the Inuvialuit, Gwich'in, Sahtu, and Nunavut harvest studies, and reported by resident, non resident, and commercial hunters for the three herds for the previous license (1 July to 30 June) and caribou (1 June to 31 May) years. 1) Report the total harvest (adjusted for wounding loss) to the HTCs/IGC, RRCs, HTOs, and wildlife co-management boards and recommend whether or not the harvest was sustainable.
Other Actions	
1) Map the seasonal ranges of the Cape Bathurst, Bluenose-West, and Bluenose-East herds using distribution and tracking data collected before June 1999, and rank the importance of each the way they do for the Porcupine caribou herd. 1) Design a study to verify the importance to caribou of pre-calving, calving, and post-calving ranges used by the three herds.	
1) Help fund and do study to verify the importance of pre-calving, calving, and post-calving ranges used by the three herds. 2) Review available scientific and local knowledge on how caribou and muskox interact and how caribou and reindeer interact.	2) Review current methods for documenting the resident hunter harvest and, if there are ways to collect more accurate information, implement those changes. 3) Include a one-time only question about wounding loss in the resident hunter harvest survey questionnaire to obtain estimates of wounding loss. 4) Help develop a harvest management strategy for the three herds.
1) Help fund, do, and report the results of the study verifying the importance of pre-calving, calving, and post-calving ranges used by the three herds. 2) Make muskox and reindeer management plans. 2) Design a study to determine how caribou and muskox interact and how caribou and reindeer interact.	3) Compile, by community, the estimates of wounding loss obtained from subsistence harvest studies and the Resident Hunter Harvest Survey. 4) Help implement the harvest management strategy for the three herds.
1) Help fund, do, and report the results of the study verifying the importance of pre-calving, calving, and post-calving ranges used by the three herds. 2) Help fund, do, and report results of caribou-muskox and caribou-reindeer interactions study.	
1) Design a study to verify the importance of the other seasonal ranges used by the three herds. 2) Help fund, do, and report results of caribou-muskox and caribou-reindeer interactions study.	

WORK PLAN
DRWED, GNWT and DSD, Nunavut

	Co-Management	Culture & Education
Each Year	1) Attend meetings about the three herds and their management. 1) Report on tasks completed in the management plan to the HTCs, RRCs, HTOs, IGC, and co-management boards. 1) Review annual work plans and help revise them if required.	2) Encourage and provide opportunities for students to attend meetings and to help with studies on the three herds. 2) Encourage caribou researchers to teach scientific knowledge about the three herds to young people in schools. 3) Fully implement the GNWT TK Policy. 4) Help fund, produce, and present public information programs about the three herds.
Other Actions		
1999/2000	1) Help negotiate a co-management agreement. 1) Help implement the co-management plan for the Cape Bathurst, Bluenose-West, and Bluenose-East caribou herds.	1) Help design a long-term study to document the TK of elders that is relevant to the management of the three herds. 2) Start summarizing scientific knowledge on the three herds.
2000/2001	1) Help implement the co-management agreement.	2) Prepare schools kits about the three herds. 2) Continue to summarize scientific knowledge on the three herds. 2) Help get funding for and help organize the first caribou traditional and scientific knowledge gathering.
2001/2002		2) Update the information on the three herds in the schools kits. 2) Hold training workshops for educators on the use of the schools kits. 2) Continue to summarize scientific knowledge on the three herds. 2) Help fund and participate in the first caribou traditional and
2002/2003		2) Update the information on the three herds in the schools kits. 2) Continue to summarize scientific knowledge on the three herds.
2003/2004	1) Help prepare a management plan for next five years.	2) Update the information on the three herds in the schools kits. 2) Continue to summarize scientific knowledge on the three herds. 2) Help find funding for and help organize the second caribou traditional and scientific knowledge gathering.

Industry & Tourism

1) Help assess cumulative effects of existing and proposed development and tourism activities on the three herds and their habitat and recommend mitigative measures.
2) Track events and activities that occur outside the ranges of the three herds that may harm the herds, their habitat, or both.
2) Make sure that the seasonal needs for survival of the three herds and their users are addressed in proposals for industrial activities outside of the range of the BNCH.
2) Participate in national and international conventions and agreements that promote biological diversity and sustainable development, regulate trade in wildlife or their parts, and limit pollution.

Other Actions

1) Start reviewing land claim, federal, and territorial legislation to determine if additional measures are required to protect the three herds and their habitats.
1) Start reviewing land use and community conservation plans to determine if planned land uses consider the seasonal needs for survival of the three herds and their users.
1) Start working on policy and guidelines for development activities on sensitive seasonal ranges of the three herds.

1) Review land claim, federal, and territorial legislation to determine if additional measures are required to protect the three herds and their habitats.
1) Start reviewing land use and community conservation plans to determine if planned land uses consider the seasonal needs for survival of the three herds and their users.
1) Continue working on policy and guidelines for development activities on sensitive seasonal ranges of the three herds.

1) Complete review of land claim, federal, and territorial legislation to determine if additional measures are required to protect the three herds and their habitats, and if required, develop and implement additional protective measures that are consistent across the range of the three herds.
1) Complete review of land use and community conservation plans, and if required, recommend changes to those plans to ensure that planned land uses consider the seasonal needs for survival of the three herds and their users
1) Finish policy and guidelines for development activities on sensitive seasonal ranges of the three herds.

1) Implement policy and guidelines for development activities on seasonal ranges of the three herds.

WORK PLAN
HTCs/IGC, RRCs, and HTOs

	Population Characteristics	Physical Condition
Each Year		2) Encourage hunters to report diseases, parasites, and abnormalities that they find in the caribou that they harvest to DRWED/DSD. 2) Review annual report on diseases, parasites, and abnormalities found in harvested caribou. 3) Participate in community based studies that monitor contaminants.
Other Actions		
1999/2000	1) Support the work required to prepare for surveys to estimate the number of caribou in each of the three herds in July 2000.	3) Support and assist with the collection of samples from caribou harvested in the Tuktoyaktuk-Husky Lakes area to determine levels of contaminants in them
2000/2001	1) Support and assist with the surveys required to estimate the number of caribou in each of the three herds in July 2000 and review the results of the surveys. 2) Support, assist with, and review results of the June 2000 productivity survey. 2) Support, assist with, and review results of the March 2001 recruitment survey. 2) Support, assist with, and review results of the October 2000 composition survey.	1) Work with the DRWED/DSD to design a study to monitor fall body condition and diseases of adult female caribou.
2001/2002	2) Support, assist with, and review results of the June 2001 productivity survey. 2) Support, assist with, and review results of the March 2002 recruitment survey. 4) Review final reports on ISR wolf study.	1) Support, assist with data collection, and review results of the study monitoring fall body condition and diseases of adult female caribou.
2002/2003	2) Support, assist with, and review results of the June 2002 productivity survey. 2) Support, assist with, and review results of the March 2003 recruitment survey.	1) Support, assist with data collection, and review results of the study monitoring fall body condition and diseases of adult female caribou.
2003/2004	2) Support, assist with, and review results of the June 2003 productivity survey. 2) Support, assist with, and review results of the March 2004 recruitment survey.	1) Support, assist with data collection, and review results of the study monitoring fall body condition and diseases of adult female caribou.

Range Use	Harvest Management
	1) Encourage harvesters to participate in land claim based subsistence harvest studies. 1) Review report on total annual harvest for previous. 5) Inform other communities when travel or hunting is planned in those communities' hunting areas.
Other Actions	
1) Help design a study to verify the importance of pre-calving, calving, and post-calving ranges used by the three herds.	5) Produce list of contact names and addresses of community HTCs, RRCs, and HTOs and make it available to all harvesters.
1) Support and assist with the study verifying the importance of pre-calving, calving, and post-calving ranges used by the three herds. 2) Provide local knowledge on how caribou-muskox and caribou-reindeer interact. 3) Prepare fire action plans for traditional hunting areas.	3) Provide estimates of wounding loss as part of subsistence harvest study. 4) Help develop harvest management strategies for the three herds. 5) Update list of contact names and addresses of community HTCs, RRCs, and HTOs and make it available to all harvesters.
1) Support and assist with the study verifying the importance of pre-calving, calving, and post-calving ranges used by the three herds. 2) Help make muskox and reindeer management plans. 2) Help design a study to determine how caribou and muskox interact and how caribou and reindeer interact. 3) Update fire action plans for traditional hunting areas.	3) Review estimates of wounding loss obtained from subsistence harvest studies and recommend what estimate should be used to estimate total harvest. 4) Help implement the harvest management strategies for the three herds. 5) Update list of contact names and addresses of community HTCs, RRCs, and HTOs and make it available to all harvesters.
1) Support and assist with the study verifying the importance of pre-calving, calving, and post-calving ranges used by the three herds. 2) Support, assist with, and review the results of the caribou-muskox and caribou-reindeer interactions studies. 3) Update fire action plans for traditional hunting areas.	5) Update list of contact names and addresses of community HTCs, RRCs, and HTOs and make it available to all harvesters.
1) Help design a study to verify the importance of the other seasonal ranges used by the three herds. 2) Support, assist with, and review results of the caribou-muskox and caribou-reindeer interactions studies. 3) Update fire action plans for traditional hunting areas.	5) Update list of contact names and addresses of community HTCs, RRCs, and HTOs and make it available to all harvesters.

WORK PLAN
HTCs/IGC, RRCs, and HTOs

	Co-Management	Culture & Education
Each Year	1) Attend community meetings about the three herds and their management. 1) Report on tasks completed in the management plan to the co-management boards. 1) Review annual work plans and help revise them if required.	1) Let people know how they can access elders' TK about the three herds. 2) Summarizing traditional knowledge on the three herds. 2) Encourage elders and parents to teach TK about the three herds to young people at home and in schools. 2) Encourage caribou researchers to teach scientific knowledge about the three herds to young people in schools. 2) Help with "On the Land" schools programs. 2) Encourage and provide opportunities for students to attend meetings and help with studies on the three herds. 4) Help produce and present public information programs about the three herds.
Other Actions		
1999/2000	1) Help negotiate a co-management agreement. 1) Help implement the co-management plan for the Cape Bathurst, Bluenose-West, and Bluenose-East caribou herds.	1) Start work on a directory of names of community experts, including elders, and their areas of expertise in each land claim area. 1) Design a long-term study to document the TK of elders that is relevant to the management of the three herds. 2) Help identify a theme for and a place to hold the first caribou traditional and scientific knowledge gathering.
2000/2001	1) Help implement the co-management agreement.	1) Update directory of names of community experts, including elders, and their areas of expertise in each land claim area. 1) Help start a long-term study to document the TK of elders that is relevant to the three herds. 2) Help organize the first caribou traditional and scientific knowledge gathering.
2001/2002		1) Update directory of names of community experts, including elders, and their areas of expertise in each land claim area. 1) Help continue a long-term study to document the TK of elders that is relevant to the three herds. 2) Participate in the first caribou traditional and scientific knowledge gathering.
2002/2003		1) Update directory of names of community experts, including elders, and their areas of expertise in each land claim area. 1) Help continue a long-term study to document the TK of elders that is relevant to the three herds. 2) Help identify theme and place to hold the second caribou traditional and scientific knowledge gathering.
2003/2004	1) Help prepare a management plan for next five years.	1) Update directory of names of community experts, including elders, and their areas of expertise in each land claim area. 1) Help continue a long-term study to document the TK of elders that is relevant to the three herds. 2) Help organize the second caribou traditional and scientific knowledge gathering

Industry & Tourism

2) Track events and activities outside the range of the herd that may harm the three herds, their habitats, or both.
2) Make sure that the seasonal needs for survival of the three herds and their users are addressed in proposals for industrial activities outside of the ranges of the herds.

Other Actions

2) Help review land claim, federal, and territorial legislation to determine if additional measures are required to protect the three herds and their habitats.
2) Help review land use and community conservation plans to determine if planned land uses consider the seasonal needs for survival of the three herds and their users.
2) Help work on policy and guidelines for development activities on sensitive seasonal ranges of the three herds.

2) Help review land claim, federal, and territorial legislation to determine if additional measures are required to protect the three herds and their habitats.
2) Help review land use and community conservation plans to determine if planned land uses consider the seasonal needs for survival of the three herds and their users.
2) Help work on policy and guidelines for development activities on sensitive seasonal ranges of the three herds.

2) Help complete review of land claim, federal, and territorial legislation to determine if additional measures are required to protect the three herd and their habitats, and if required, develop and implement additional protective measures that are consistent across the ranges of the herds.
2) Help complete review of land use and community conservation plans, and if required, recommend changes to those plans to ensure that planned land uses consider the seasonal needs for survival of the three herds and their users.
2) Help finish policy and guidelines for development activities on sensitive seasonal ranges of the three herds.

2) Help implement policy and guidelines for development activities on seasonal ranges of the three herds.

WORK PLAN
WMAC(NWT), GRRB, SRRB, NWMB, TNNPMB

	Population Characteristics	Physical Condition
Each Year		2) Encourage hunters to report diseases, parasites, and abnormalities found in caribou that they harvest to DRWED/DSD. 2) Review annual report on diseases, parasites, and abnormalities found in harvested caribou. 3) Support and work with community based studies that monitor contaminants in caribou.
Other Actions		
1999/2000	1) Support the work required to prepare for surveys to estimate the number of caribou in each of the three herds in July 2000.	3) Support the collection of samples from caribou harvested in the Tuktoyaktuk-Husky Lakes area to determine levels of contaminants in them.
2000/2001	1) Support the surveys required to estimate the number of caribou in each of the three herds in July 2000 and review the results of the surveys. 2) Support and review the results of the June 2000 productivity survey. 2) Support and review the results of the March 2001 recruitment survey. 2) Support and review the results of the October 2000 composition survey.	1) Review proposal for the study designed to monitor fall body condition and diseases of adult female caribou.
2001/2002	2) Support and review the results of the June 2001 productivity survey. 2) Support and review the results of the March 2002 recruitment survey. 4) Review final report on ISR wolf study.	1) Support and review the results of the study monitoring fall body condition and diseases of adult female caribou.
2002/2003	2) Support and review the results of the June 2002 productivity survey. 2) Support and review the results of the March 2003 recruitment survey.	1) Support and review the results of the study monitoring fall body condition and diseases of adult female caribou.
2003/2004	2) Support and review the results of the June 2003 productivity survey. 2) Support and review the results of the March 2004 recruitment survey.	1) Support and review the results of the study monitoring fall body condition and diseases of adult female caribou.

Range Use	Harvest Management
	1) Collect accurate subsistence harvest data (including age-class, sex, location, and month of harvest). 1) Encourage subsistence hunters to participate in harvest studies. 1) Give harvest data for the previous license and caribou year to DRWED/DSD. 1) Review report on total annual harvest for previous year and recommend whether it was sustainable. 4) Promote communication among communities about access and activities on neighboring communities' areas.
Other Actions	
1) Review and comment on the proposal for the study designed to verify the importance of pre-calving, calving, and post-calving ranges used by the three herds.	
1) Support and review the results of the study verifying the importance of pre-calving, calving, and post-calving ranges used by the three herds.	3) Include a one-time only question about wounding loss for one month as part of subsistence harvest study. 4) Develop a harvest management strategy for the three herds.
1) Support and review the results of the study verifying the importance of pre-calving, calving, and post-calving ranges used by the three herds. 2) Help prepare muskox and reindeer management plans. 2) Review the proposal for the study designed to determine how caribou and muskox, and caribou and reindeer interact.	1) Implement harvest management strategy for the three herds.
1) Support and review results of the study verifying the importance of pre-calving, calving, and post-calving ranges used by the three herds. 2) Support and review results of caribou-muskox and caribou-reindeer interactions studies.	
1) Review the proposal for the study designed to verify the importance of the other seasonal ranges used by the three herds. 2) Support and review the results of the caribou-muskox and caribou-reindeer interactions studies.	

WORK PLAN
WMAC(NWT), GRRB, SRRB, NWMB, TNNPMB

	Co-Management	Culture & Education
Each Year	1) Hold community meetings about the three herds and their management. 1) Report on tasks completed in the management plan. 1) Produce and circulate an annual report that includes information on tasks in the management plan completed by the NWT, Nunavut, HTCs/IGC, RRCs, HTO's, co-management boards, and Parks Canada Agency. 1) Review annual work plans and help revise them if required.	1) Help fund and work on a directory of names of elders and their areas of expertise in each land claim area. 1) Let people know how they can access elders' TK about the three herds. 2) Encourage elders and parents to teach TK about the three herds to young people at home and in schools. 2) Encourage caribou researchers to teach scientific knowledge about the three herds to young people in schools. 2) Encourage and provide opportunities for students to attend meetings and help with studies on the three herds. 4) Help fund, produce, and present public information programs about the three herds.
Other Actions		
1999/2000	1) Help negotiate a co-management agreement. 1) Help establish a co-management advisory committee.	1) Help design a long-term study to document the TK of elders that is relevant to the management of the three herds. 2) Identify a theme for and a place to hold the first caribou traditional and scientific knowledge gathering.
2000/2001	1) Help implement the co-operation agreement.	1) Help fund the long-term study to document the TK of elders that is relevant to the management of the three herds. 2) Help fund work required to prepare schools kits about the three herds. 2) Help fund and organize the first caribou traditional and scientific knowledge gathering.
2001/2002		1) Help fund the long-term study to document the TK of elders that is relevant to the management of the three herds. 2) Help fund work to update the schools kits about the three herds. 2) Help fund and participate in the first caribou traditional and scientific knowledge gathering.
2002/2003		1) Help fund the long-term study to document the TK of elders that is relevant to the management of the three herds. 2) Help fund work to update the schools kits about the three herds.
2003/2004	1) Prepare a management plan for the next five years.	1) Help fund the long-term study to document the TK of elders that is relevant to the management of the three herds. 2) Help fund work to update the schools kits about the three herds. 2) Help find funding for and help organize the second caribou traditional and scientific knowledge gathering.

Industry & Tourism

1) Help assess the cumulative effects of existing and proposed development and tourism activities on the three herds or their habitats and recommend mitigative measures.
2) Track events and activities that occur outside of the ranges of the three herds that may harm the herds, their habitats, or both.
2) Make sure that the seasonal needs for survival of the three herds and their users are addressed in proposals for industrial activities outside of the range of the herds.
2) Participate in national and international conventions and agreements that promote biological diversity and sustainable development, regulate trade in wildlife or their parts, and limit pollution.

Other Actions

2) Help review land claim, federal, and territorial legislation to determine if additional measures are required to protect the herds and their habitats.
2) Help review land use and community conservation plans to determine if planned land uses consider the seasonal needs for survival of the herds and their users.
2) Start working on policy and guidelines for development activities on sensitive seasonal ranges of the three herds.

2) Help review land claim, federal, and territorial legislation to determine if additional measures are required to protect the herds and their habitats.
2) Help review land use and community conservation plans to determine if planned land uses consider the seasonal needs for survival of the herds and their users.
2) Work on policy and guidelines for development activities on sensitive seasonal ranges of the three herds.

2) Complete review land claim, federal, and territorial legislation to determine if additional measures are required to protect the herds and their habitats.
2) Complete review land use and community conservation plans to determine if planned land uses consider the seasonal needs for survival of the herds and their users.
2) Complete policy and guidelines for development activities on sensitive seasonal ranges of the three herds.

2) Implement policy and guidelines for development activities on seasonal ranges of the three herds.

WORK PLAN
Parks Canada Agency

	Population Characteristics	Physical Condition
Each Year		2) Review annual report on diseases, parasites, and abnormalities found in harvested caribou. 3) Work with and support community based studies that monitor contaminants in caribou.
Other Actions		
1999/2000	1) Help fund and assist with work required to prepare for surveys to estimate the number of caribou in the Bluenose-West herd in July 2000.	
2000/2001	1) Support and assist with the surveys required to estimate the number of caribou in the Bluenose-West herd in July 2000 and help report the results of the survey. 2) Help fund and assist with the survey to estimate productivity in June 2000 and help report results. 2) Help fund and assist with the survey to estimate fall composition in October 2000 and help report results. 2) Help fund and assist with the survey to estimate recruitment in March 2001 and help report results.	
2001/2002	2) Help fund and assist with the survey to estimate productivity in June 2001 and help report results. 2) Help fund and assist with the survey to estimate recruitment in March 2002 and help report results. 3) Review final reports on ISR wolf study.	
2002/2003	2) Help fund and assist with the survey to estimate productivity in June 2002 and help report results. 2) Help fund and assist with the survey to estimate recruitment in March 2003 and help report results.	
2003/2004	2) Help fund and assist with the survey to estimate productivity in June 2003 and help report results. 2) Help fund and assist with the survey to estimate recruitment in March 2004 and help report results.	

Range Use	Harvest Management
Other Actions	
1) Help design a study to verify the importance of pre-calving, calving, and post-calving ranges used by the Bluenose-West herd.	
1) Help fund and assist with the study verifying the importance of pre-calving, calving, and post-calving ranges used by the Bluenose-West herd. 2) Help review available scientific and local knowledge on how caribou and muskox interact.	
1) Help fund and assist with the study verifying the importance of pre-calving, calving, and post-calving ranges used by the Bluenose-West herd. 2) Help prepare a muskox management plan. 2) Help design a study to determine how caribou and muskox interact.	
1) Help fund and assist with the study verifying the importance of pre-calving, calving, and post-calving ranges used by the Bluenose-West herd. 2) Help fund and assist with the caribou-muskox interactions study.	
1) Help design a study to verify the importance of the other seasonal ranges used by the Bluenose-West herd. 2) Help fund and assist with the caribou-muskox interactions study.	

WORK PLAN
Parks Canada Agency

	Co-Management	Culture & Education
Each Year	1) Attend community meetings about the Bluenose-West herd and its management. 1) Report work completed in the management plan to the HTCs, RRCs, HTOs, and co-management boards. 1) Review annual work plans and help revise them if required.	2) Encourage and provide opportunities for students to attend meetings and to help with studies on the Bluenose-West herd. 2) Encourage caribou researchers to teach scientific knowledge about the Bluenose-West herd to young people in schools. 4) Help fund, produce, and present public information programs about the Bluenose-West herd.
Other Actions		
1999/2000	1) Help negotiate a co-management agreement. 1) Help establish a co-management advisory committee.	1) Help design a long-term study to document the TK of elders that is relevant to the management of the Bluenose-West herd. 2) Start summarizing scientific knowledge on the three herds.
2000/2001	1) Help implement the co-management agreement.	2) Help prepare schools kits about the Bluenose-West herd. 2) Continue to summarize scientific knowledge about the Bluenose-West herd. 2) Help get funding for and help organize the first caribou traditional and scientific knowledge gathering.
2001/2002		2) Help update the information on the Bluenose-West herd in the schools kits. 2) Help hold training workshops for educators on the use of the schools kits. 2) Continue to summarize scientific knowledge on the Bluenose-West herd. 2) Help fund and participate in the first caribou traditional and scientific knowledge gathering.
2002/2003		2) Help update the information on the Bluenose-West herd in the schools kits. 2) Continue to summarize scientific knowledge about the Bluenose-West herd.
2003/2004	1) Help prepare a management plan for next five years.	2) Help update the information on the Bluenose-West herd in the schools kits. 2) Continue to summarize scientific knowledge about the Bluenose-West herd. 2) Help find funding for and help organize the second caribou traditional and scientific knowledge gathering.

Industry & Tourism

2) Assess cumulative effects of existing and proposed development and tourism activities on the Bluenose-West herd and its habitat and recommend mitigative measures.
5) Track events and activities outside the range of the herd that may harm the Bluenose-West herd, its habitat, or both.
5) Make sure that the seasonal needs for survival of the Bluenose-West herd and its users are addressed in proposals for industrial activities outside of the range of the Bluenose-West herd.
5) Participate in national and international conventions and agreements that promote biological diversity and sustainable development, regulate trade in wildlife or their parts, and limit pollution.

Other Actions

2) Start reviewing land claim, federal, and territorial legislation to determine if additional measures are required to protect the Bluenose-West herd and its habitat.
2) Start reviewing land use and community conservation plans to determine if planned land uses consider the seasonal needs for survival of the Bluenose-West herd and its users.
2) Start working on policy and guidelines for development activities on sensitive seasonal ranges of the Bluenose-West herd.

2) Start reviewing land claim, federal, and territorial legislation to determine if additional measures are required to protect the Bluenose-West herd and its habitat.
2) Start reviewing land use and community conservation plans to determine if planned land uses consider the seasonal needs for survival of the Bluenose-West herd and its users.
2) Continue working on policy and guidelines for development activities on sensitive seasonal ranges of the Bluenose-West herd.

2) Complete review of land claim, federal, and territorial legislation to determine if additional measures are required to protect the herd or its habitat, and if required, develop and implement additional protective measures that are consistent across the range of the Bluenose-West herd.
2) Complete review of land use and community conservation plans, and if required, recommend changes to those plans to ensure that planned land uses consider the seasonal needs for survival of the Bluenose-West herd and its users
2) Finish policy and guidelines for development activities on sensitive seasonal ranges of the Bluenose-West herd.

2) Implement policy and guidelines for development activities on seasonal ranges of the Bluenose-West herd.

2) Implement policy and guidelines for development activities on seasonal ranges of the BNCH.

Report People Who Harass or Kill Wildlife Illegally!!!

Call

Wildlife Watch

Report Violations To

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in the

Northwest Territories