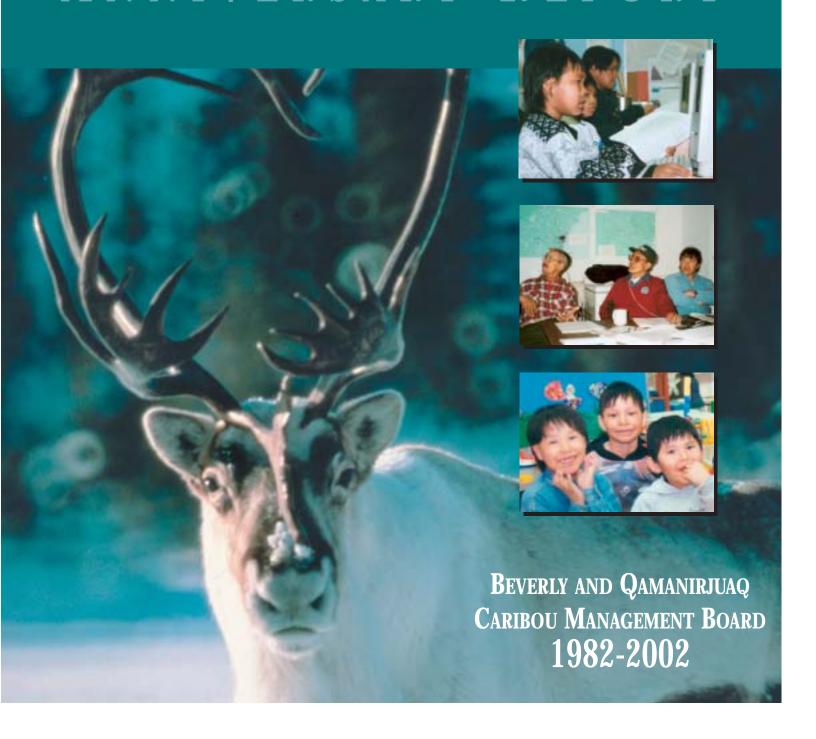
20th

ANNIVERSARY REPORT



Cover photo:

A Beverly caribou bull stares into the camera Doug Heard, GNWT Department of Renewable Resources

Top inset photo:

Hard at work in computer class at Baker Lake's Rachel Arngnammaktiq School, 1994 Caribou News

Middle inset photo:

Nunavut alternate member Noah Makayak (1987 – 2002), and Northwest Territories members August Enzoe (1999 -) and Earl Evans (2001 – 2002), at the board's May 2002 meeting in Baker Lake *Gary Kofinas*

Bottom inset photo:

Sharing giggles in the senior kindergarten Dene immersion class of Black Lake's Father Porte Memorial Dene School, 1995 Caribou News

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Charitable registration no.: 86620 7574 RR001

Web site: www.arctic-caribou.com

This report is available online.

Mission Statement



To safeguard the caribou of the

Beverly and Qamanirjuaq herds for traditional users

who wish to maintain a lifestyle that includes

the use of caribou, as well as for all Canadians

and people of other nations.

Beverly and Qamanirjuaq Caribou Management Board 3565 Revelstoke Drive Ottawa ON K1V 7B9

To:

The Hon. Robert Nault, Minister Indian and Northern Affairs Canada Ottawa, Ontario K1A 0H4

The Hon. Steve Ashton, Minister Manitoba Conservation Legislative Building Winnipeg MB R3C 0V8

The Hon. Jim Antoine, Minister Resources, Wildlife and Economic Development Government of the Northwest Territories Yellowknife NT X1A 2L9 The Hon. Buckley Belanger, Minister Saskatchewan Environment Legislative Building Regina SK S4S 0B3

The Hon. Olayuk Akesuk, Minister Sustainable Development Government of Nunavut Legislative Building Iqaluit NU X0A 0H0

As required by the provisions of the *Beverly-Qamanirjuaq Barren Ground Caribou Management Agreement*, I am pleased to submit our 20th Anniversary Special Report, which includes our Annual Report for 2001-2002. The Agreement stipulates that we provide a summary of caribou harvests by jurisdiction and community. As in previous years, I regret that we have been unable to obtain this information for Saskatchewan and the Northwest Territories.

We are informed that the government of Saskatchewan no longer provides funds for the collection of caribou harvest data; and that in the South Slave region of the NWT, hunters are unwilling to provide this information pending resolution of their land claim.

David Gutterdlik

David Kritterdlik Chairman July 15, 2002

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Chairman's Message



s a board, we may be justifiably proud of the record of success we have enjoyed since the board's creation 20 years ago. Mutual respect, understanding and friendship have developed among the Dene, Inuit and Métis chosen to represent the 20 communities across the range of the Beverly and Qamanirjuag caribou. These feelings also extend between aboriginal hunters and government biologists and officials who represent Canada and the four jurisdictions that the caribou range traverses – Manitoba, Saskatchewan, the Northwest Territories and Nunavut. Many of our members have served for at least 10 years and one member has been on the board for 20. Such continuity has allowed common goals and a strong team spirit to guide the board strong advantages that have helped us meet the challenge of declining core funding in recent years.

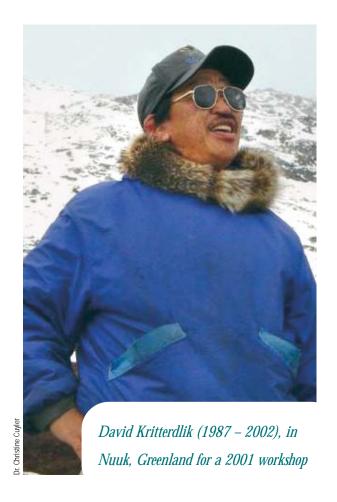
When the Beverly and Qamanirjuaq Caribou Management Board (BQCMB) formed two decades ago, it broke new ground by becoming North America's first co-management board for a major game species. We have been invited to workshops and conferences from Alaska to Finland, and from Greenland to Arizona, to share our experiences about caribou management.

Over the years, board members from diverse backgrounds have made every effort to understand aspects of traditional knowledge and western science. The board now sees these as complementary and takes both into account when forming recommendations. While our role is advisory, we are gratified that governments have generally accepted our advice on overall herd management and continue to see the board as a convenient "single window" for the resolution of caribou-related issues.

The board provides input to governments about a variety of caribou management issues, such as the use of satellite collars to monitor herd movements, the commercial use of caribou, the consequences of proposed hydro lines and roads on the caribou range, and more. A major achievement was the board's fire management study. A multi-year effort, including the collection of traditional knowledge to map out priority caribou hunting areas on the range, led to the publication of *Fire Management Technical Report No. 1* along with the shorter summary, *Management Report No. 1*, in 1995.

The board's core budget is less than it was 20 years ago, yet with prudence and efficiency, it continues to convert a small investment of tax





dollars into a highly effective wildlife management advisory board. We are grateful for the financial support we have received from the governments of Canada, Manitoba, Saskatchewan, the Northwest Territories and Nunavut; and from the Nunavut Wildlife Management Board, the Northern Ecosystem Initiative, and Wildlife Habitat Canada for specific projects.

As we begin our third decade, we are pleased to welcome the return of Indian and Northern Affairs Canada as a full member of our board. We shall spend time developing our vision and the goals that will guide our activities. Among our priorities will be a new management plan, a formula for the allocation of the caribou harvest in the event of a population decline, and a common understanding regarding the need for, and the value of, caribou population surveys. Our board will continue to advise governments on the protection of the Beverly and Qamanirjuaq caribou herds and their habitat, just as it has done since 1982.

David Kritterdlik Chairman, BQCMB



Betł'ás Náyahełtı Dëneba Natıhırí?ą



|'ą dırı xa dełtth'ı sí, t'a huts'élʔį tesu dëne ts'įłe xa begha ?ełk'úuret'á t'at'u hozų de?ą́ąze bet'óreza beseneyatí sí k'e dełtth'ı sí tó hunıdher ts'ı tona ghaye zasi k'e zeghalada ?at'e. Besets'údı, harelyu ?ełkíz ?ełuts'élyą-u, tth'ı zełts'énkui zasí zełk'éch'a k'é zeła zeghalada sí Dëne ts'įzáne Dëne, ?eténa chu Beghárek'ą́ąze harełza ts'į dëne náltsí sí t'at'u tóna háyorıla k'eyághe dahála ts'ı zetthën t'árát'ı dzékëreda sí Beverly chu Qamanırjuaq ts'ı zetthën. Harelyu t'áhenıdhën sí gháré dırı dëne ts'ı?áne dëne t'a nárálze chu ní ts'én k'aldhër ts'ı náídik'órełya dëne ?así k'áúnehtą chu k'áralde t'ą yek'e dełtth'i xél zeghádálana ku zedëri sí dighe záłk'é ts'én háyorıla danech'á chogh zetthen dzékereday -Manıtoba, Saskatchewan, tth'ı Northwest Territories chu Nunavut. Diri k'e dëne deltth'i si betl'ás zasí gha nayahełtı dëne xél senúnı?a xa dëne náiye łóna gháye xa dënexél zeghádálana chu tth'ı zíłaghe dëne nuwe xél t'a k'e zeghálada hereltth'i sí ts'i tóna gháye zat'e dëne ts'éní zeghálana zat'e. Dırı harelyu t'áhedí sí bet'a zasí suhúlye sí dëne ts'éhení dezááze bet'óreza nedhe k'e zeghálada xa zełts'édáredi zeła yek'e herełtth'ı - bet'á dezánóníltsër t'á zasí zełk'éch'a k'e zeghálada sí tth'i senúnidhër hile sí tsamba dëne zunélza ch'á xáadı t'á xaląą gháye bet'áat'ı zat'e.

T'at'u hunıdhër si Beverly chu Qamanırjuaq Carıbou Management Board húlye si dëne yek'e hereltth'ı du tthá t'anáadhër si ts'ı súgha nelt'e gháye rasi k'e reghálada, té harelyu rela relnıyılra t'á rasi bet'órera nedhe k'e reghálada si North America's t'atthe co-management board hulye si harelyu tech'ádiye báadı nuwe náre ghálada t'a xası. Harelyu rats'én rasi relk'éch'á gha náyaheltı xasi té t'a dáiyıdhën si yek'órelya xa hurélrı derááze besenéyaıtı si Alaska ts'ı Fınland, chu tth'ı Greenland tth'ı Arızona, harelyu rats'én reléts'edël t'á rası bet'órera nedhe gha náyaheltı xa retthën xáadı-u tth'ı t'a náheda si báadı.

Dụ súgha nelt'e gháye, t'a yek'e hereltth'ı sí harelyu zelk'ech'a dëne ts'ızáne dëne xél zeghálahena xa yuníz ts'ı zasí k'óreja hubech'ánıyé chu tth'ı that'ın benáadhër t'at'u zasí k'aúneht'a. T'a yek'e hereltth'ı sí dırı zasí seneyaıtı dé t'a zeltth'ı xá harelyu zasí zeluhulchu t'á beghálada xa huts'élzı yek'e la la heheltsı xa. Dırı t'a yek'e hereltth'ı sí t'áhedı sí xate-u, tesu nuwe ní t'á ní ts'én k'álade zasí seneyatı sí nuwe yatı hutun zetthën xáadı -u tth'ı t'a náheda sí báadı ts'ı zasí zelk'ech'a k'e zeghálada sí "zılaghe jık'é lat'u" t'at'u zetthën-xáadı k'áanı xa hunıdhën sí ts'ı zelts'én dáredı bunedı zat'e.

T'a yek'e hereltth'ı si harelyu əasi əelk'ech'a k'e zeghálada si nı ts'én k'álde xél əasi gha náyaheltı t'at'u zetthën k'áanı xa hunıdhën si t'a dáiyıdhën si háihedı huts'éləl əat'e, nıdháa ts'ı satsan t'a zetthën t'ók'e náde si báadı bet'á dezááze nezu xa, t'a zetthën t'árát'ı-u, t'a zetthën dzékëreda ba hunila ch'a xat'ı əasi benáre hulı lì xa net'ı zedıkún tlulé chu tılu nedhe nánıza dé xa, tth'ı yexálne xaza. Dırı əasi bet'óreza nedhe xa t'a yek'e hereltth'ı betl'ás yek'áúneht'a si t'at'u súgha kún báadı xa.

Yunedhe súgha niłtháa yatı néhṛza, xat'u dırı xa dëne t'at'u yuniz ts'ṭ zasi k'óreja hubech'ánıyé bet'á dırı ni ditl'is bet'óreza hunıdhën si begháré t'at'u zetthën xa náhelze-u t'a zetthën dzékëreda sı náre náde sı, ts'ṭ hanırıhtl'is xalṭ si Fıre Management Technical Report No 1 húlye si xalṭ chu tth'ı zeyıle zerihtl'is súgha záilya heheltsı hɨlé, Management Report No1, to xalṭ 1995.

T'ą yek'e herełtth'ı sí tsamba nuwe tł'átheła sí dụ dek'ezų t'á zasí zełk'ech'a k'e zeghálada t'atthe tóna gháye xat'elé ní, t'at'u dezááze nezų bet'a zeghálada huts'éldzay zat'e, t'at'u tsamba t'áat'ı bek'lını te súgha ts'ën bet'a tsamba bek'e nánanı ts'ı tsamba náiye nuwe ts'ën náhdlé xat'u t'á zasí zełk'éch'a k'e zeghálada sí dırı tech'ádıye xa t'a yek'e hereltth'ı sí zası gha seneyaıtı sí xa zat'e. Tsamba nuwe tł'áthela sí te bet'áat'ı-u dırı sí ní ts'é k'aldhër nedhe Canada





keyaghe ts'į, Manitoba, Saskatchewan, chu Northwest Territories chu Nunavut; chu tth'i t'ą Nunavut Wildlife Management Board húlye sí, tth'i Northern Ecosystem Initiative, chu Wildlife Habitat Canada zasi zełk'ech'á k'e zeghálada xa.

Yunedhe ts'ến tónona gháye hun,dhër, tesu nuwe ní sí t'at'u nuwe xél nán,ltth'i xa Indian chu Northern Affairs Canada húlye sí t'a nezụ dënexél zeghálada xa. Harelyu zasí zelk'ech'a k'e zeghálada xa yunedhe ts'ến t'a dezááze bet'óreza nedhe sí bunedi zat'e. T'at'u dezááz súghá ts'ến suhúlne t'a bet'óreza t'at'u zeghálahena si ts', zerihtl'ís hehegha xa, yunedhe xaza t'at'u zetthën xadi xa hun,dhën sí t'a yet'árat', sí yegha dáhalni t'a yunedhe t'ánelt'e zetthën d,nálti sí bek'óreja xálu dek'ezụ záne ch'á zalz, zat'e, chu tth'i zasí t'á zesát'e dé benuredi xa, chu tth'i bet'óreza t'á besets'údi xaza, zetthën ku t'a náde dólta gháré tánélt'e sí bek'óreja xa.

Alternate member Pierre Robillard (1991 -) raises a point at the board's May 2000 meeting in Churchill, while board member Richard Mercredi (1997 – 2000) and alternate Joe Martin (1992 -) listen

T'ą yek'e dełtth'ı si bedágháré xat'u ʔasi xadı si ni ts'én k'aldhër xél náyahełtı t'at'u ʔetthën k'áanı xa hunıdhën dırı si Beverly chu Qamanırjuaq t'a ʔetthën dzékëreda si náre náde si báadı chu t'a ʔetthën t'árát'ı si xél ʔeghálahena xa, kú 1982 t'anáadhër si ts'ı ʔasi ʔełk'ech'a k'e ʔeghálada.

David Kritterdlik Betł'ás Náyahełti, BQCMB



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(Ctelest Δε-D)Δኄዮ)ጋና ላቸ Ctelest Δε-Dornethe ላጋ፦ሀታራኮራ፣ΔሀΓ፣. ለ-ሊላቴዮበኄር ውየሁንትቦላዮበውታና፣, ህታራንሀና Cteld ሀኖևልና ላጥየበቴልኄፈነራት ህታዮቦኌና ውየሁለሌታናበኄታ ለኄታ CΔLΔበህና ጋንጋታ ላውድናበታጭ ላቸ Δ/LՐታቴልኄፈትህታዮቦኌኄ ሁበLትታት ላይናሔጋበት "ላርውትና ውረቴዮርኄሆንጋና" ላምየተፈረላጭ/በት ጋንጋልና Δድንሀላታት አጭዮጵ/Lላታት.





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A group of Qamanirjuaq caribou head for shore after crossing a river

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The BQCMB



From co-management pioneer to role model

he Beverly and Qamanirjuaq Caribou Management Board (BQCMB) broke new ground when it became Canada's first co-management board for a major game species in 1982. It brought together aboriginal people and government wildlife managers from four different political jurisdictions – the governments of Canada, Manitoba, Saskatchewan and the Northwest Territories – to work toward the common goal of conserving two quite distinct caribou herds in northern Canada, the Beverly caribou herd and the Qamanirjuaq caribou herd.

It was also the first game management body to bring traditional knowledge to the table, to help guide conservation principles. The BQCMB developed action plans to make increased use of traditional knowledge with scientific knowledge in caribou management.

Born from a perceived caribou crisis, the BQCMB has, in the years since its inception, fostered multi-jurisdictional and multi-cultural co-operation as a result of greater understanding and respect for diverse values and points of view. This co-operation has had a positive impact that stretches beyond caribou management issues.

In the Northwest Territories and Nunavut, communities and wildlife managers dealing with other caribou herds are pursuing co-management boards similar to the BQCMB. Such respect underscores the findings of a 1996 report on co-management in Canada by the parliamentary Standing Committee on Aboriginal Affairs and Northern Development. That report called the BQCMB "a co-management model to emulate."

The BQCMB is an advisory board, with a responsibility to make recommendations to governments. But it also conducts projects for the conservation and management of the migratory Beverly and Qamanirjuag barren-ground caribou herds and their habitat. The caribou are hunted by Dene, Inuit, Métis, Cree and non-aboriginal people in Manitoba, Saskatchewan, the Northwest Territories and Nunavut. Over decades, herd size may increase and decrease, and may also undergo small or largescale shifts in distribution. Such changes can result from natural events and human activities. Caribou habitat is especially vulnerable to the changes that accompany development and human access – a critical issue today given the fast-paced mining and road developments that are altering northern Canada.

Governments have generally followed the BQCMB's advice on overall herd management, and view the board as a convenient forum for the resolution of caribou issues.

As it has turned out, board decisions are generally based on consensus. A few issues, such as the commercial use of caribou, have split members into groups with different opinions, but never into government/community factions. Aboriginal people and government representatives alike have become full partners in managing the caribou resource.

It wasn't always so.

In the late 1970s, governments believed that the Beverly and Qamanirjuaq caribou were in serious decline, based on census counts. There was disagreement among biologists about the cause of this decline. Even though not all scientists and managers felt the decline was due mainly to





over-harvesting by aboriginal hunters, most still believed that limiting their harvests would be the most immediate and effective solution.

Dene hunters knew that fewer and fewer caribou were in their region, but attributed this to lack of habitat protection – especially fire control on the winter range – rather than overhunting.

Inuit hunters rejected the biologists' conclusion, claiming among other things that they had not counted all the animals, and that mining exploration and other human activities were affecting caribou distribution. Inuit said that they were encountering large numbers of caribou and seeing no decline.

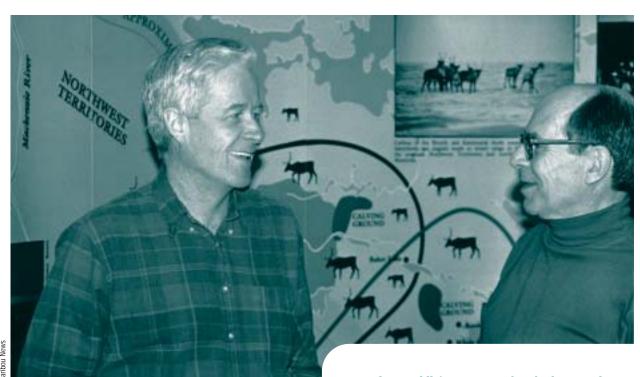
Traditional knowledge helps guide the BQCMB's conservation principles

Subsequent surveys found herd population estimates to be much higher. Looking back, it's now known that the population estimates that sparked the perceived crisis of the late 1970s may have been based on inadequate or inaccurate surveys.

In December 1980, federal, provincial and territorial ministers met in Winnipeg to discuss the problem. They agreed that co-operative action was needed and that a solution to the problem had to fully involve aboriginal people. Negotiations resulted in an agreement to form a management board in which aboriginal people held the majority.







Eight individuals would represent communities on the caribou range, and five individuals would represent the governments of Canada, Manitoba, Saskatchewan and the Northwest Territories.

The Beverly and Kaminuriak – now Qamanirjuaq – Caribou Management Board was born.

Indian and Northern Affairs Canada (INAC) and Environment Canada withdrew their representatives from the board in 1999 when Nunavut officially became a territory and signed on to the Intergovernmental Caribou Management Agreement. The federal government pulled out in part because more local wildlife management responsibility was being assumed by the new Nunavut government,

Canadian Wildlife Service caribou biologist and board member Don Thomas (1988 - 1999) with Gunther Abrahamson, former board member (1982 - 1984) and treasurer (1982 - 1988), and now secretary-treasurer (1988 -)

and partly because the federal government was reducing its deficit. However, INAC continued to support the board with annual contributions and in 2002, it rejoined the board as a full member.

As of 2002, five individuals represent the governments of Canada, Manitoba, Saskatchewan, the Northwest Territories, and Nunavut, and nine individuals represent range communities.

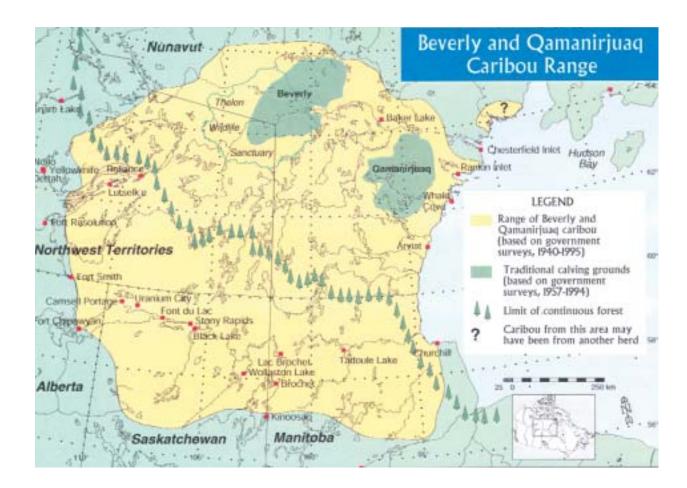
The Qamanirjuaq caribou herd1



One of Canada's largest barren-ground caribou herds

very year for thousands of years,
Qamanirjuaq caribou have migrated from
their calving and post-calving areas on the
Canadian tundra, south to their wintering
grounds, and back north for the next calving season.
Other parts of the herd remain on the tundra
year-round.

This journey spans more than 1,000 kilometres from north of Baker Lake, Nunavut, to south of Brochet, Manitoba. The herd's range stretches 500 kilometres east to west, from the west coast of Hudson Bay inland across the southern Kivalliq (formerly Keewatin) region of Nunavut and northern Manitoba. The range includes part of southeastern NWT and northeastern Saskatchewan.



Adapted from Wakelyn, L. 2001. "The Qamanirjuaq Caribou Herd – An Arctic Enigma," in *Project Caribou – An educator's guide to wild caribou of North America*. Government of the Yukon, Whitehorse, Yukon.





Population

The last population survey done for the Qamanirjuaq herd was in 1994, indicating the herd was at 496,000, with a 90 per cent confidence interval of plus or minus 179,000 (105,400 is the standard error).

The herd wasn't always thought to be so abundant. Surveys in the 1970s indicated a population decline, with estimates of fewer than 50,000 adult animals. Biologists explained the apparent decline as a consequence of over-harvesting, and by the late 1970s, were concerned that the supposed population decline could drive caribou numbers so low that harvesting would no longer be possible. This would have serious consequences for the many hunters and families that depended on Qamanirjuaq caribou as their main source of meat.

Hunters did not agree that the herd was declining, however. They believed that it was actually increasing. We know now that herd size was likely much higher than surveys in the 1970s indicated. No simple explanation for the confusing survey results has been established, although it is likely that the answer has something to do with changes in Qamanirjuaq caribou distribution and wide confidence intervals on caribou survey estimates.

Caribou range

The range use and movement patterns of the Qamanirjuaq caribou herd are neither consistent nor predictable. Variability in range use patterns has caused much concern for biologists and wildlife management agencies over the years, and has frequently meant hunters faced limited access to



Smiling children in Brochet. People are happy when caribou winter close by for easier hunting

caribou from different parts of the range. This caused hardship for aboriginal people dependent on Qamanirjuaq caribou as their primary food source. Before people moved to communities and used snow machines for hunting, famine resulted when the herd did not return to areas in which people had hunted them for many years. Even in modern times, life is difficult when caribou do not winter near communities. For instance, the 1998 Manitoba harvest of Qamanirjuaq caribou was the lowest since 1990. Hunters from northern Manitoba communities had to travel long distances (10 to 22 hours by snow machine) to harvest only a few caribou.

The herd returns to the same general area for calving each year – not to the same specific location. That means the traditional calving grounds, the total area known to be used for calving over many



years, are much larger than the area used in any particular year. The Qamanirjuaq herd's traditional calving grounds are located in the Qamanirjuaq Lake area of Nunavut, extending from about 60 to 240 kilometres inland from the west coast of Hudson Bay, and from Maguse Lake to just south of the east end of Baker Lake. In total, the calving grounds cover about 28,500 square kilometres.

Calving ground surveys done between 1989 and 1994 located calving Qamanirjuaq caribou in the east-central portion of the traditional calving grounds, east of Qamanirjuaq Lake. However, most surveys between 1977 and 1988 found many caribou calving west of Qamanirjuaq Lake.

The caribou range's western boundary is not well defined, since there is overlap of Qamanirjuaq and Beverly caribou range, especially winter range. Qamanirjuaq caribou don't use all of their range in any particular year, since their movements and range use patterns vary according to weather and other factors.

Cauara dancing in Pakar Laka

Square dancing in Baker Lake.

Nearby are the calving grounds of
the Qamanirjuaq caribou herd

The winter range consists mainly of forested lands in northern Manitoba, and tundra in Manitoba and Nunavut. Segments of the herd have often wintered on the tundra during the same year that other caribou groups have lived in the forest. Between 1972 and 1982, the majority of the herd often wintered on the tundra in coastal regions of Hudson Bay. In other years, much of the herd has wintered close to communities in northern Manitoba. In the winter of 2001/02, for example, Qamanirjuaq caribou were plentiful near the Manitoba communities of Brochet and South Indian Lake in early winter, moving north to the communities of Tadoule Lake and Lac Brochet by mid-December.

Managing the Qamanirjuaq caribou

The BQCMB's 1987 management plan established an optimum herd size of 300,000 and a crisis level of 150,000 animals. If the Qamanirjuaq herd dips below the crisis level, recommendations for emergency action for management and protection of the herd will be submitted by the BQCMB to the Nunavut and Manitoba governments.

Population surveys provide important information for managing caribou. Knowing the herd's total head count allows wildlife managers to calculate how many caribou can be safely harvested without endangering the size of the herd.

Surveys have normally been scheduled every six years, but the 2000 survey was deferred to permit improvements in survey methodology – in large part due to concerns over the large confidence interval.







Since 1993, up to 10 adult female Qamanirjuaq caribou have been monitored using radio-collars tracked by satellites. The results of this study, which is enthusiastically supported by hunters from Nunavut and Manitoba, have revealed much about the herd's recent distribution and movement patterns, and of the overlap between the Qamanirjuaq and

Beverly caribou ranges.

For instance, one of the caribou collared in April 1995 on Qamanirjuaq winter range, where it overlaps with Beverly winter range, traveled to the Beverly calving grounds each spring from 1995 to 1997 but wintered with the other collared Qamanirjuag caribou in the southern NWT. The

Satellite collaring has revealed much about herd distribution and movement patterns

other collared caribou travelled to the Qamanirjuaq calving grounds with the rest of the Qamanirjuaq herd each spring.

This confirms that caribou from these two herds mix on the winter range. The satellitemonitoring study has also confirmed that the Qamanirjuaq herd travels north of Chesterfield Inlet in some years. Although it was generally believed that Qamanirjuaq caribou may have ranged up to 100 kilometres north of Chesterfield Inlet in historical times, before the satellite-monitoring data were available, no one was sure how far north Qamanirjuaq caribou traveled.



With a view to climate change and inclusion of more information from hunters, the BQCMB is currently conducting a caribou monitoring project. In the fall of 2001 and again in 2002, 20 hunters each from Baker Lake and Arviat were interviewed by local caribou monitors concerning their observations about the distribution, movements, and health of the caribou herds, conditions on the land and water, and ongoing changes. This was the first step in a long-term community-based monitoring system that will provide local and traditional knowledge. This will be particularly useful given the onset of climate change and the effects of man-made developments like mines and roads.

Such a system is also needed to complement the science-based monitoring undertaken by the many agencies across the ranges of the herds. People need to share knowledge and discuss the impacts of change on the land, caribou, and people who depend on caribou.

Threats to the herd

Roads, mineral exploration, mines and proposed hydro-electric developments are today the greatest threats to Qamanirjuaq caribou. Mineral exploration activities continue to increase on the caribou range, including the calving and post-calving areas.

Between 1991 and 1998, five mining companies submitted applications to the federal government for mineral exploration on the Qamanirjuaq herd's traditional calving grounds. With the creation of Nunavut in April 1999, responsibility for screening applications for land use permits and leases passed from the federal govern-



Manitoba board members

Albert Thorassie (1991 -) and,

right, Cam Elliott (1993 - 2002),

share a special interest in the Qamanirjuaq

herd, as does Nunavut board member

Dan Shewchuk (2002 -), seen in

the background

ment to the Nunavut Impact Review Board. To date, there is no co-ordinated strategy or policy to protect caribou calving and post-calving areas in Nunavut. Exploration activities will likely continue in the Qamanirjuaq's traditional calving grounds and other areas on the range, and these will probably lead to proposals for mines. Mineral extraction – including exploration, construction, operation, and abandonment – poses concerns, although it is difficult to predict and assess the possible negative impacts on Qamanirjuaq caribou.

The future holds other possible threats to the herd. Feasibility studies are underway for a transmission line and roads from northern Manitoba







Jerome Denechezhe (1982 -) and Bas Oosenbrug (1992 - 2002)

to communities in Nunavut on the west coast of Hudson Bay, and for hydro generation facilities just north of the Manitoba border. These projects will undergo further assessment before any decision is made to proceed.

If a commitment is secured, however, construction would occur over a five to ten-year period. The proposed roads, transmission line and hydro dam are all located on Qamanirjuaq caribou range, and could have significant consequences for the herd. The proposed roads are of greatest concern, as they could increase unregulated harvest of caribou, act as barriers to caribou movement, and reduce habitat availability. There is a high potential for significantly greater harvest levels resulting from increased access to caribou range that a road would

provide. All-weather roads could affect caribou movements and access to caribou by hunters, as a proposed road corridor intersects with the herd's primary migration corridor between winter range and the calving grounds.

The proposed hydro-electric development will affect caribou movement during spring and fall migration. The herd will need to make long detours if traditional water crossing sites become impassable due to hydro dams changing water levels and stream flow characteristics.

A rapid increase in the number of hunters on the Qamanirjuaq caribou range could mean that unlimited hunting of caribou by resident aboriginal people will not always be possible. Some time in the future, it will probably be necessary to share the caribou resource carefully so that the Qamanirjuaq herd continues to be abundant and productive, and caribou are available for all.

The provincial and territorial governments review applications for land use permits, land leases, and major development projects proposed on the Qamanirjuaq range. They make recommendations intended to protect caribou and caribou habitat. The BQCMB also reviews applications for activities on both the Beverly and Qamanirjuaq range, and make recommendations to the agencies that approve these projects. For the Qamanirjuaq caribou, the regulatory agencies are the Nunavut Impact Review Board and Manitoba Conservation.

Forest fires also diminish foraging area in the winter grounds of both caribou herds. In the case of the Qamanirjuaq herd, the overlap of Beverly and Qamanirjuaq migration routes means the herds are competing for the same food source.

The Beverly caribou herd 2

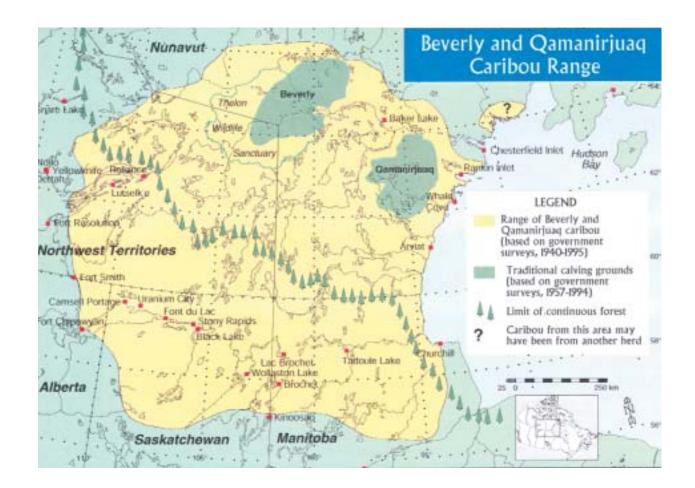


Creatures of inland wilderness

everly caribou have migrated across the northern Canadian landscape for thousands of years, traveling up to 2,000 kilometres each year. Unlike all other mainland barren-ground caribou herds, which spend part of their annual cycle in coastal areas, Beverly caribou remain inland year-round. They traverse wilderness

settings mainly, including hundreds of wild rivers and lakes, and one of the largest protected natural areas in North America, the Thelon Wildlife Sanctuary.

These days, the Beverly caribou range is at least 600 kilometres from west to east, from Great Slave Lake, NWT, to somewhere east of Dubawnt



² Adapted from Wakelyn, L. 2001. "The Beverly Caribou Herd – Continental Wilderness Travelers," in *Project Caribou – An educator's guide to wild caribou of North America*. Government of the Yukon, Whitehorse, Yukon.





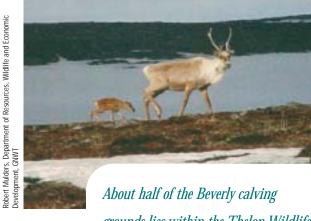
Lake, Nunavut; and from the Slave River in Alberta across northern Saskatchewan to somewhere near Nueltin Lake in Manitoba.

Population

The most recent population survey of the Beverly herd in 1994 indicated that the herd had reached 276,000, with a 90 per cent confidence interval of plus or minus 189,000 (111,000 is the standard error). Government biologists have estimated the herd size numerous times in the past 50 years, but caribou counts on the spring and winter ranges from the late 1940s to the 1960s did not provide adequate information for determining whether the herd was increasing or decreasing. The population was probably higher than estimates based on surveys because caribou were missed during surveys, and the size of caribou groups was often underestimated.

Calving ground surveys from 1971 to 1980 suggested that the herd was declining, with the population estimated at about 105,000 in 1980. Biologists believed that the herd would soon be in trouble if the number of animals harvested was not reduced. However, many Inuit hunters believed that the herd was actually increasing, or that it was using different parts of the range. They didn't agree that hunting was a problem.

Surveys in the 1980s showed increasing herd size, with population estimates of 125,000 in 1982 and 190,000 in 1988.



grounds lies within the Thelon Wildlife
Sanctuary

Caribou range

The range used by the Beverly herd over the past 60 years spans a huge, diverse area: from the boreal forests of Saskatchewan, across the subarctic taiga of the NWT, to the arctic tundra of west-central Nunavut. It stretches almost 1,000 kilometres from south to north, from the Clearwater River and Reindeer Lake areas of northern Saskatchewan, to the Pelly and Garry lakes area of Nunavut. The calving grounds alone cover about 38,400 square kilometres, from the area around the lower Thelon River and Beverly and Aberdeen lakes, north towards the Back River and Pelly and Garry lakes.



In some years, the caribou have remained north of the forested winter range in northern Saskatchewan and Manitoba. Because the herd overlaps with Bathurst caribou on the west, Qamanirjuaq caribou on the east, and Ahiak caribou to the north, the limits of the Beverly range are difficult to determine.

The Beverly herd migrates north each spring to the calving grounds, and then travels back toward the more southerly winter range each summer and fall. Like the Qamanirjuaq caribou, Beverly caribou return to the same general area for calving every year, but not to the same specific location, so the traditional calving grounds are collectively much larger than the area used in any one year.

Calving ground surveys found that most Beverly caribou calved in the southeastern half of the traditional calving grounds between 1957 and 1974. Since 1980, however, calving has taken place mostly in the northern portion.

Managing the Beverly herd

The BQCMB's 1987 management plan established an optimum herd size of 300,000 and a crisis level of 150,000 animals. If the Beverly herd dips below the crisis level, recommendations for emergency action for management and protection of the herd will be submitted by the BQCMB to the Saskatchewan, NWT and Nunavut governments.



no concerns for consumers of Beverly

caribou meat

About half of the traditional Beverly calving ground is protected from development activities because it lies within the boundaries of the Thelon Wildlife Sanctuary. A small part of the winter range along the south shore of Lake Athabasca in Saskatchewan is also protected within Athabasca Sand Dunes Wilderness Park. The rest of the Beverly range is currently unprotected, although the Saskatchewan government has set aside three new protected areas on Beverly caribou winter/early spring range for a 10-year period. Final boundaries and acceptable uses on those sites will be discussed as part of the Athabasca Basin land use planning process.





Target practice in Lutselk'e. Roads are a major threat facing the Beverly herd because they give outside hunters increased access to the caribou

Under Canada's Northern Contaminants
Program, 10 caribou herds across the NWT and
Nunavut were surveyed for contaminant levels,
with plans to retest selected herds at five-year
intervals as part of long-term monitoring of
changes in contaminant exposure and levels. In
the spring of 2001, five-year resampling was done
on the Beverly herd. The resulting levels were very
similar to those seen during the initial survey – well
below any point of concern for animal health or
human consumption.

In the past, the BQCMB and the NWT government have proposed that satellite radio-collars be used to monitor the movements and distribution of Beverly caribou. This would help to identify seasonal ranges, migration routes, and areas used by more than one caribou herd, as well as to locate

caribou for harvesting. They would also improve survey estimates by making allowance for caribou outside the area surveyed. For example, if 2 in 20 (10%) collared cows were not in the surveyed area, then the estimate for all adult cows would be increased by 10%. However, some Beverly range communities do not support satellite collaring. Such an endeavour would not go ahead unless support was unanimous.

Threats to the herd

Until recently, Beverly caribou haven't had to contend with many obstacles or man-made disturbances across most of their range. Land use activities such as mineral exploration have been more active elsewhere, including on both of the neighbouring Bathurst and Qamanirjuaq caribou ranges. Beverly caribou have also had the luxury of spending part of their annual cycle feeding and traveling on lands protected within the Thelon Wildlife Sanctuary, a 52,000-square-kilometre reserve established by the government of Canada in 1927.

Furthermore, the lands between the Sanctuary and Saskatchewan are primarily wilderness. Yet there is no certainty that this isolation will continue, given the policies of current governments and ongoing expansion of mineral exploration activities in the Canadian North.

Roads, mineral exploration, and mines pose the greatest threat to Beverly caribou and their habitat. The potential cumulative effects of development activities on Beverly caribou are of particular concern.





Roads are a major threat because they can increase human access, act as barriers to caribou movements, and reduce habitat availability. Roads that provide new access to caribou for unregulated hunters from southern Canada, such as the new Athabasca Road from Points North to Black Lake. Saskatchewan, are the greatest concern. These roads create the potential for significantly increased harvest levels. Restrictions on the use of roads for harvesting are very difficult to establish and enforce. In addition, caribou movements across roads may be blocked by high traffic volume or snow walls created

Consulting biologist Leslie Wakelyn chats with Saskatchewan board members George Tsannie (2002 -), Tim Trottier (1995 -) and Jimmy Laban (1992 -). Laban and Trottier were elected chairman and vice-chairman in 2002

by plows. Roads on the Beverly calving ground and post-calving areas could result in loss of critical habitat, because caribou with calves avoid areas near roads.

Mineral exploration and mines are the most frequent major developments on Beverly caribou range, and the potential for new mines is increasing.





Saskatchewan board member Billy Shott (1991 -)

The exploration and mining of uranium has been the greatest concern in the past for communities that harvest Beverly caribou, and many uranium mines are operating in northern Saskatchewan. Recently, though, gold and diamond exploration has increased throughout the NWT and Nunavut, and exploration for base metals (zinc, copper, and nickel) is also occurring. Although most of the recent exploration boom has occurred northwest of the Beverly range, prospecting permits and mineral claims are active on Beverly range, including the calving ground.

Frequent low-level aircraft flights during mining exploration and development, road and airstrip construction, frequent travel by supply trucks on all-weather and winter roads, mine construction and operation, and pollution of land and water by toxic substances are all mining-related activities that have potential negative effects on Beverly caribou. They can result in loss of habitat, increased human access, and disturbance to caribou. In northern

Saskatchewan, many uranium mines on caribou range are also sources of potential contamination to wintering Beverly caribou.

The possible negative impacts of mineral exploration and mining are difficult to predict and assess because of variability in factors such as caribou movements and weather, and because measurable effects of disturbance may take a long time to develop. Continued climate change has significant potential to affect Beverly and Qamanirjuaq caribou and their habitat. Global warming may result in changes in snow depth and hardness, timing of the spring melt, summer temperatures, and abundance of insects and parasites, which will affect herd size, migration patterns, and seasonal distribution of caribou.

The provincial and territorial governments review applications for land use permits, land leases, and major development projects proposed on the Beverly range. They make recommendations intended to protect caribou and caribou habitat. The BQCMB also reviews applications for activities on both the Beverly and Qamanirjuaq range, and makes recommendations to the agencies that approve these projects. For the Beverly caribou range, the regulatory agencies are the Mackenzie Valley Land and Water Board (for the NWT), NIRB (for Nunavut) and Saskatchewan Environment.

Forest fires also diminish foraging area in the winter grounds of both caribou herds. In the case of the Beverly herd, the overlap of Beverly and Bathurst, Ahiak and Qamanirjuaq migration routes means multiple herds are competing for the same food source.

The people of the caribou range³



Where caribou are key to culture and lifestyle

n the past, the aboriginal people of northern Manitoba, northern Saskatchewan and the neighbouring regions of the Northwest Territories and Nunavut depended on the Beverly and Qamanirjuaq caribou for food, clothing and shelter. For the Dene, Inuit, Cree and Métis of this area, life circled around the caribou. They followed these migratory animals during hunting season, and when caribou were scarce, people starved – and sometimes died.

About 13,250⁴ aboriginal people live on or near the range of the two herds, and depend on them for economic, social and cultural needs. According to statistics compiled in 2001 (Appendix 2), the total harvest for domestic and commercial use, including outfitting, was approximately 18,500 animals.



Board member David Aksawnee (2002 -) points out recent caribou movements near his hometown of Baker Lake. At right, colleague Mitch Campbell (1999 - 2002) looks on The value of the resident caribou harvest is estimated as the total edible food weight multiplied by the cost of an appropriate store-bought food like beef. The average caribou yields 37 kg of edible meat⁵. Using a value of \$17⁶ per kg of beef sold in Kivalliq stores, the replacement value of a caribou is considered to be \$629 or approximately \$11,636,500 for the harvest from both herds in 2001.

This is the minimum gross economic value at the current harvest rate. The economic potential of the resource is considerably larger when meat processing and uses such as outfitting for non-residents are considered (up to \$3,400⁷ per animal harvested).

Additional values are derived from the use of skins for clothing and bedding, and bones and antlers for handicrafts.

Apart from purely economic factors, the use of caribou is important to the culture and traditional lifestyle of aboriginal people. This importance cannot be fully evaluated and quantified using the analytical

³ Adapted from Wakelyn, L. 2001. "The Qamanirjuaq Caribou Herd – An Arctic Enigma" and "The Beverly Caribou Herd – Continental Wilderness Travelers," in *Project Caribou – An educator's guide to wild caribou of North America*. Government of the Yukon, Whitehorse, Yukon.

⁴ Census Canada 2001; and Registered Indian population by sex and residence, Indian Affairs & Northern Development, 2001 Ottawa.

Usher, Peter J. 2000. Standard edible weights of harvested species in the Inuvialuit Settlement Region. Report to the Northern Contaminants Program, Department of Indian Affairs and Northern Development, Peter J. Usher Consulting Services, Box 4815, Station E, Ottawa, Ontario, K1S 5H9, June 2000. 38pp.

⁶ Ashley, Bruce. 2003. Renewable Resource Economist, Investment and Economic Analysis Division, Department of Resources, Wildlife and Economic Development, Government of the NWT, Yellowknife, NWT, personal communication.

Ashley, Bruce. 2000. Economic benefits of outfitted hunts for barren-ground caribou in the Northwest Territories, File Report No.129, Department of Resources, Wildlife and Economic Development, Government of the NWT, Yellowknife, NWT.





Nunavut board member Joe Kaludjak (2002 -)

tools of measuring economic value. Yet the benefits are immense, because caribou confer considerable advantages and strengths upon life in aboriginal communities.

The Dene: *Etthen-eldeli-dene* (caribou eaters)

The Beverly herd is harvested by residents from about 15 communities in Manitoba, Saskatchewan, Alberta, the NWT, and Nunavut that are on or near the range of this herd. Residents of Saskatchewan communities account for much of the harvest, taking the animals for subsistence purposes. In the NWT, caribou are also used commercially for sports hunts.

The traditional lifestyle of the Dene known as *Etthen-eldeli-dene* (caribou eaters) was attuned to the life patterns of caribou. Before the arrival of the fur trade, these Dene were nomadic, following the caribou north to their summering grounds on the tundra, and returning each year to spend winter in the forest. Some families stayed south of the treeline all year, while others spent most of the summer on

the "barren grounds." Although other sources of food were sometimes available when caribou were not, caribou always provided essential materials for clothing and shelter. Tents, for example, consisted of a framework of poles bound together at the top and covered with as many as 70 caribou skins.

The nomadic lifestyle of the Dene ended in the 1940s and 1950s, when people began living in permanent settlements. Several Dene communities were strategically established on a major migration route of the Beverly herd in northern Saskatchewan, where caribou could be harvested during both fall and spring migration between winter range and calving grounds. These two major harvests provided people with a year-round supply of meat, which was eaten fresh during fall and spring, frozen in winter, and dried during summer.

However, this food supply was only available when Beverly caribou wintered around or south of the Dene communities. When Beverly caribou wintered far from these communities, much hardship resulted. Today, snowmachines, aircraft, and modern communication devices have helped make Beverly caribou more accessible to Dene from northern Saskatchewan and Manitoba, although these options are not always affordable. In the winter of 1998, for example, Beverly caribou were found in Saskatchewan only along the Manitoba border and in the northeastern corner of the province. Hunters from communities in northern Saskatchewan traveled up to 200 kilometres north to hunt caribou in the NWT that winter.

The Caribou Inuit

Residents of nine communities in Nunavut, northern Manitoba, and northern Saskatchewan regularly harvest caribou from the Qamanirjuaq herd. Both subsistence





and commercial harvesting of Qamanirjuaq caribou are important to communities on the range. Sports hunts are conducted in Manitoba and Nunavut, and a meat and fish processing plant in Rankin Inlet cuts and processes barren-ground caribou meat for sale in Canada and abroad.

In Nunavut, the inland Inuit of the Kivalliq region used caribou so much that they were given the name "Caribou Eskimo" by Europeans. The people known as the *Ahialmiut* subsisted almost entirely on caribou year-round, unlike other Inuit groups that depended at least partially on harvest of animals from the sea. The ancestors of the Ahialmiut had moved inland from coastal areas in what is now the Kivalliq region of Nunavut. When the Dene joined the fur trade, and stopped

In most northern settlements, such as Tadoule Lake, residents hunt caribou together to provide for the community, as they always have

following caribou onto the tundra each summer, the Ahialmiut moved farther inland, pushing south to the treeline by about 1850. They spent spring and summer inland, where they intercepted caribou traveling north in the spring, and camped in summer on the calving grounds.

Other groups of Inuit lived inland during winter and traveled to the coast in the spring, where they stayed through the summer. In the early fall, they returned inland to hunt caribou and make caches for the winter. Groups of families hunted





Computer skills go hand-in-hand with hunting traditions in Baker Lake

caribou at water crossings during their southward fall migration, and cached caribou and fish under large rock piles on high points of land, in order to easily find them.

These Inuit relied primarily on caribou during the winter months, and winter food supplies that they cached saved many people from starvation when caribou were scarce. These people were successful inland hunters, although they were subject to famine in years when caribou wintered primarily in the southern forest, rather than on the tundra, or when they were unable to cache sufficient food supplies in the fall.

Regular trade between Caribou Inuit and Europeans began in the early 1900s. Inuit lifestyles began to change after that. White fox trapping became popular in the Kivalliq region, as it was easy and profitable to check trap-lines while hunting caribou. The Inuit maintained a lifestyle of hunting and trapping while living in family groups on the land, and continued to rely heavily on harvesting Qamanirjuaq caribou. But after years of hardship

in the late 1940s and 1950s, many people started moving into communities. Government encouraged them to do so to allow their children to attend school, and to have access to medical care at nursing stations.

Communities on the caribou range

Northwest Territories

- Fort Smith
- Fort Resolution
- Lutselk'e

Nunavut

- Baker Lake
- Chesterfield Inlet
- Rankin Inlet
- Whale Cove
- Arviat

Saskatchewan

- Camsell Portage
- Uranium City
- Black Lake
- Stony Rapids
- Fond du Lac
- Wollaston Lake

Manitoba

- Brochet
- Lac Brochet
- Tadoule Lake
- South Indian Lake
- Churchill

Alberta

• Fort Chipewyan

Conserving the barren-ground caribou



f all the strides made by the Beverly and Qamanirjuaq Caribou Management Board, none is more important than the improved level of trust and respect that board meetings have fostered among different aboriginal and government groups.

Before, relations were uneasy as different cultures and knowledge systems collided. But to conserve caribou for the use of future generations, both sides have made tremendous efforts to find common ground. The collective actions and contributions of members demonstrate that the board is greater than the sum of its parts.

The publicly funded BQCMB has flourished despite mounting government budget cuts. Fiscal prudence has been a constant in the board's operations, resulting in 20 years of financial accountability.

Conserving the Beverly and Qamanirjuaq herds is the board's reason for being, but much energy is also devoted to educating others about caribou conservation. The BQCMB's David Kritterdlik, for example, has traveled to conferences in Greenland, Finland, the United States and across Canada to speak about the board's work. The legacy of the BQCMB's conservation and education efforts has taken shape in many other ways, too.

Some Board Recommendations

Limited resident hunting in Manitoba In 1987, the BQCMB recommended that Manitoba establish a limited resident hunting season for barren-ground caribou.

Changes to the Thelon Game Sanctuary

The federal government's Northern Mineral Policy of 1987 suggested mineral exploration and development go ahead inside the Thelon Game Sanctuary, but the following year, the BQCMB recommended against this. The sanctuary contains about half of the traditional calving grounds of the Beverly herd.

The proposed Kiggavik uranium mine

In 1989, after hearing the deep concerns of Baker Lake residents and hunters from other communities about the effects that a uranium mine would have on the Beverly herd, the BQCMB urged governments not to approve Urangesellschaft Canada Limited's proposal for developing the Kiggavik uranium mine near Baker Lake.

Wollaston Lake radioactive leak

The BQCMB called on the Minister of Environment to hold an independent inquiry into a leak of radioactive minewater into Wollaston Lake in 1989.

Satellite collaring of Qamanirjuaq caribou

In 1992, the BQCMB supported the government of the NWT's first satellite collaring of Qamanirjuaq caribou as a two-year pilot project. Since 1993, important information about the herd's distribution and movements throughout the year have been provided by satellite-monitoring of a few collared animals per year. Today, hunters in Manitoba, the Northwest Territories and Nunavut fully support this program and wish to see it continued. Maps showing seasonal movements of collared Qamanirjuag caribou from 1993 to 1997 are available on the





map atlas on CD-ROM produced by the BQCMB, and on the BQCMB web site (www.arctic-caribou.com/cdrom/contents/indexc.htm – see "B. Maps based on satellite-monitoring data"). Maps showing locations of collared Qamanirjuaq caribou have been posted at airports, circulated to band councils, hunters and trappers organizations and others, and uploaded to the BQCMB's web site (www.arctic-caribou.com/satellite.html).

Submission to federal environmental assessment panel

The BQCMB urged the federal environmental assessment panel in 1993 to defer the Rabbit Lake uranium mining project in northern Saskatchewan. The board pointed out that the risks to caribou and their habitat outweighed the benefits of more jobs and increased economic activity.

Fire management on the range

Backed by the BQCMB's extensively researched *Fire Management Technical Report No. 1* and *Management Report No. 1*, the board developed a fire suppression strategy for caribou and made recommendations to the governments of the NWT, Saskatchewan and Manitoba in 1995.

A seasonal road to Black Lake

In order to protect caribou, the BQCMB in 1996 recommended to Saskatchewan's Minister of Environment and Resource Management that the Athabasca Seasonal Road from Points North to Black Lake follow the South Route – more expensive but environmentally friendlier than the popular North Route.

Apportioning the commercial harvest of caribou In 1998, the BQCMB completed a policy paper for apportioning the commercial harvest of caribou based on the total sustainable use of the estimated caribou population. With the policy paper in place, a chart was created to easily calculate the sustainable

caribou supply on which quota recommendations

to ministers are based.

Fire Management
Recommendations
for Forested
Range of the
Beverly and
Qamanirjuaq
Herds of Caribou

the BEVERLY
and QAMANIRJUAQ
CARIBOU
MANAGEMENT
BOARD

MANAGEMENT REPORT 1

Fire management reports used traditional knowledge to map out priority caribou hunting areas on the range



Establishing Categories of Priority Use

The BQCMB updated its methodology for determining allowable harvest of caribou in 1998. The categories are, in descending order of priority:

- 1) Traditional users domestic use
- 2) Residential users domestic use
- Traditional/Residential guiding non-residents
- 4) Commercial, local sales of meat
- 5) Commercial, export sales

Charitable status

The BQCMB was approved as a registered charity by Canada Customs and Revenue Agency in March 2000. Having charitable status facilitates private-sector fundraising to support projects such as caribou monitoring.

Third mandate renewed

By mid-2000, the governments of Manitoba, Saskatchewan, NWT and Nunavut had all agreed to extend the BQCMB's mandate beyond the end of its second 10-year mandate, which ended in June 2002.

INAC returns

In 1999, the new territory of Nunavut replaced the government of Canada on the board. However, Indian and Northern Affairs Canada continued to support the board with annual contributions, and in 2002, it rejoined the board as a full member.

Communications/Public Relations

Caribou News

The BQCMB was born of the need for improved communication. All communities needed information, and the board's independent newspaper, *Caribou News*, provided that by distilling complicated science in matters such as satellite collars, population surveys



For 16 years, Caribou News brought readers articles exploring traditional knowledge and science in an easy-tounderstand format





and forest fires into plain language, in Dene, Inuktitut and English. Traditional knowledge also featured prominently in *Caribou News* articles. First printed in October 1980, *Caribou News* endured until June 1996 when funding ended. The *Caribou News* Index is a handy reference guide to all articles, and can be found on the board's web site at www.arctic-caribou.com

Caribou News in Brief

Continuing budget cuts prompted the creation of a smaller 8-page newsletter to replace *Caribou News*. Entitled *Caribou News in Brief*, the newsletter launched in October 1997 and continues to publish twice a year. It's also online at www.arctic-caribou.com



Caribou News' Marion Soublière, with Jacy (left) and Macy Yooya of Black Lake. Soublière, the editor since 1993, also manages the board's web site

Qamanirjuaq herd film project

With financing from Indian and Northern Affairs Canada and the BQCMB's support, filmmaker Don Snowden undertook the "Kaminuriak Herd Film Project" in the wake of governments' concerns that the Qamanirjuaq caribou population was plummeting in the late 1970s. Finalized in 1981, the videos were used to improve communication throughout the caribou range, and to help change attitudes. In 1995, the project's 33 videotapes were donated to the national Museum of Civilization for research and public use.

Target Poster and Target Competitions

Improved marksmanship leads to fewer caribou being crippled by a poor shot and left behind. So in 1990, the BQCMB produced a life-size target poster to help hunters improve shooting skills, and a short time later began sponsoring shooting competitions in caribou-range communities that made use of the posters and target-shoot rules.

A good working relationship with the Nunavut Wildlife Management Board (NWMB)

In 1993, the Nunavut Land Claims Agreement brought about the creation of the NWMB, the main instrument of wildlife management in the Nunavut Settlement Area that encompasses almost all of Nunavut. With shared concerns for wildlife management, the BQCMB and the NWMB have worked well together. Board members attend each other's meetings, and the NWMB has provided critical financial support for several BQCMB projects.



Video on the BQCMB: *The Beverly and Qamanirjuaq Caribou Management Board:* A Model of Co-Management

The story of the BQCMB was captured in a 1993 video, produced in separate English, Dene and Inuktitut versions. The name of the 22-minute video came from a tribute to the board issued in a report from a parliamentary standing committee examining co-management in Canada. The video, which uses archival footage and interviews with board members, is an honest confession of the perceived crises that spawned the Board, the past tensions between aboriginal people and government employees, and the hard-earned strides made in bringing the two sides closer to understanding.

Conserve caribou: *Hunt Wisely* poster

In 1993, the board funded an Acceptable Harvest Practices survey. The results revealed that hunters face conflicting legislation as they travel from one province or territory to the next. This prompted the BQCMB to begin work with caribou users to draft a hunting code of ethics in 1997, which resulted in the *Hunt Wisely* poster. The poster, dealing with safety and other issues, was targeted to hunters.

The BQCMB Web Site

Visitors who click on www.arctic-caribou.com discover a living reference of the Beverly and Qamanirjuaq herds. The web site, a valuable resource for students and others across North America, features the history of the BQCMB, its mandate, its accomplishments, an extensive links

section and much more, including an explanation of the importance of the caribou resource, both economically and culturally, brief profiles of the Beverly and Qamanirjuaq caribou range communities, the BQCMB map atlas, and a comprehensive Frequently Asked Questions section. Launched in 1997 and regularly updated, the BQCMB's web site has had more than 23,000 hits, and has grown to become a key research tool with many BQCMB publications online.

Iqaluit Wildlife Conference Exhibit

An August 2000 national conference in Iqaluit brought together Canada's federal, provincial, and territorial environment, parks and fisheries ministers. The BQCMB was there in the shape of a public exhibit that provided visitors with past issues of *Caribou News in Brief*, posters and other BQCMB literature.

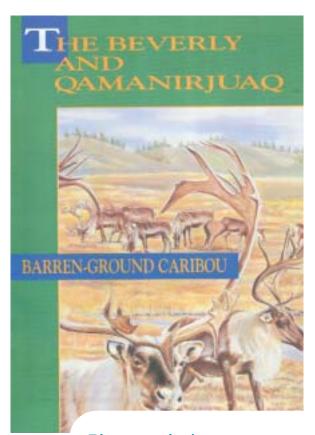
Educational Projects

Barren-Ground Caribou Schools Program
Between 1983 and 1985, the board produced a
four-volume educational kit for teachers in caribourange communities with activity books, videos,
slides and other resource material that introduced
them to the world of caribou management.
Caribou were discussed from the perspective of
traditional as well as scientific knowledge. School
boards in different parts of Canada and Alaska
purchased the Schools Program. In 1992, the
government of Saskatchewan's Department of
Education officially recommended it as part of
its curriculum.





With funds from band councils in northern Saskatchewan, a Dene supplement to the Schools Program was also published in the local dialect.



Educating youth is key to preserving caribou for the future, and the board's illustrated, multilingual booklet on the Beverly and Qamanirjuaq caribou herds aimed to do just that

The Beverly and Qamanirjuaq Barren-Ground Caribou educational booklet

In 1995, the board published a colourful, 20-page illustrated booklet on caribou conservation and the meaning of co-management, aimed at students as young as Grade 2. It was printed in separate English, Inuktitut and Dene versions and distributed to schools throughout the caribou range.

Wild Caribou of North America case studies: The Beverly Caribou Herd — Continental Wilderness Travelers The Qamanirjuaq Caribou Herd — An Arctic Enigma

These two case studies were the Board's contribution to "Wild Caribou of North America," a multi-jurisdictional initiative published by the government of Yukon.

Caribou Management Scholarship Fund

In 1988, the BQCMB established an award to help full-time students whose studies would contribute to the understanding of barren-ground caribou and their habitat. Preference is given to applicants from a caribou-range community and to those examining the Beverly and Qamanirjuaq herds. Since that time, a total of \$30,000 has been awarded to 18 students. Among the topics examined were:

 radio-active contaminants in the lichencaribou-wolf/man food chain



- community perspectives, local/traditional knowledge and the BQCMB
- a bioaccumulation model for organic chemicals in the caribou food chain
- caribou population genetics, and
- the commercial hunting of caribou in the Canadian Arctic.

Caribou Schools Competition and Awards

The Caribou Schools Competition, an annual event until 1999, encouraged schoolchildren living on the caribou range to enter their posters, stories and other creative efforts in a contest that focused on a pivotal aspect of these children's lives: caribou. The program eventually ceased because of funding cutbacks.

Kids' Caribou Camps

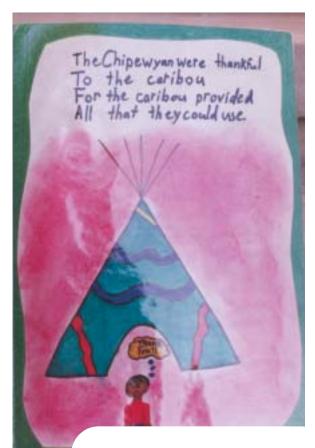
For a number of years, the BQCMB provided financial support to land skills programs that gave kids a chance to camp in the bush under the guidance of community elders. However, budget cuts also ended this program.

Reports/Studies

Beverly and Qamanirjuaq Caribou Management Plan

In 1987, the board published a 10-year management plan following public consultation. A revised version in 1996 addressed the board's second 10-year mandate. The plan provides a detailed

framework for management decisions, and calls upon effective teamwork and patience from all groups involved in order to protect the caribou resource.



Artwork by Christina MacDonald of Fort Smith, NWT. The Caribou Schools Competition and Awards brought out the best in young artists living in range communities





Man and the Biosphere Acceptable Harvest Practices Study

In 1993, the BQCMB guided a University of Alaska research team working under the U.S. "Man and the Biosphere" program on an initiative to gather viewpoints of traditional users and wildlife managers on caribou harvesting practices. This was part of a larger project comparing the management systems of Canada's Beverly and Qamanirjuaq herds with the parallel structure overseeing the United States' Western Arctic herd.

Fire Management Studies

Years of effort led to the publication in 1995 of the BQCMB's *Fire Management Technical Report No. 1* along with the shorter summary, *Management Report No. 1*. The studies examined the ecological role of fire in the boreal forest and how it relates to caribou. Much time in this complex project was spent collecting traditional knowledge to map out priority caribou hunting areas on the range.

Fire History Maps

In creating a fire management plan, the BQCMB also worked with the NWT Centre for Remote Sensing to produce paper maps and digital databases, including:

- a fire management map geared to fire managers
- a 1:1,000,000-scale map showing the ratio of productive caribou range to caribou conservation goals for that range

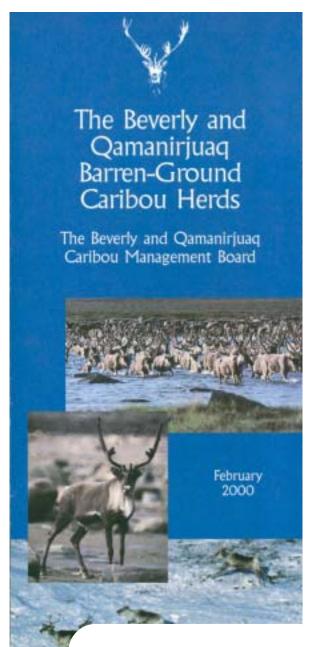
• a series of 1 : 250,000-scale maps showing priority zones identified by the communities.

The NWT Forest Fire Management Division now provides annual updates to the fire maps, directing information to the board and research scientists working on projects of interest to the board. The database from which the maps are drawn also includes updates regularly furnished by the governments of Manitoba and Saskatchewan.

Protecting Beverly and Qamanirjuaq Caribou and Caribou Range Part 1: Background Information

The BQCMB has compiled much of the available information concerning distribution and movements of Beverly and Qamanirjuag caribou that resulted from government surveys and satellite-monitoring studies between 1940 and 1995. In 1999, the board published a report that provided seasonal range maps and other information for impact assessment and land use planning on Qamanirjuaq and Beverly caribou range, including the relative sensitivity of caribou to disturbances at different times of the year, on different parts of the range. The report makes previously inaccessible information available to board members, schools, governments, public and government libraries, hunters and trappers organizations and band councils on the Beverly and Qamanirjuaq ranges. It is also available to industry and agencies responsible for land use planning,





The goal of this ambitious project was to improve decision-making to ensure the Beverly and Qamanirjuaq caribou habitat is managed wisely.

Protecting Beverly and Qamanirjuaq
Caribou and Caribou Range

resource management and environmental assessment.

Caribou and Caribou Range
Part 2: Map Atlas and Documentation
A CD-ROM including more than 75 maps of Payorly and Companying range was released

A CD-ROM including more than 75 maps of the Beverly and Qamanirjuaq range was released in 2000. It features about 150 pages of text, photographs and maps showing seasonal caribou ranges, information about the data used to create the maps, the report released in 1999 (as Part 1), and rating systems for sensitivity of caribou and caribou range to land use activities during annual life cycle periods, including a system developed by the board for rating water and ice crossings used by caribou during seasonal migration.

Traditional Knowledge Pilot Project

In 1999, with funding from the BQCMB, four Tadoule Lake high school students interviewed elders about nearby caribou habitat. Their answers helped the students plot a highly detailed map onto a computerized GIS, courtesy of Manitoba Natural Resources. The elders' knowledge of caribou distribution, migration routes, water crossings, and seasonal habitat use could all be mapped, illustrating that traditional knowledge fits well with science.





Caribou Monitoring Project

The BQCMB's community-based caribou monitoring project began in Baker Lake and Arviat, Nunavut, with multi-year financial support from the Nunavut Wildlife Management Board and Environment Canada's Northern Ecosystem Initiative. Community-based work in 2001 and 2002 focused on interviews of active hunters conducted by local people ("caribou monitors"), who asked questions about hunters' observations of caribou (distribution, movements, condition), weather, land use activities, and recent changes occurring on the caribou range. The onset of climate change in the North, twinned with the effects of man-made developments like mines and

roads, prompted the BQCMB to create a long-term monitoring system that uses local/traditional knowledge as well as science. The overall goal of the project is to establish a range-wide caribou monitoring system that will operate over the long-term to improve the information base and the exchange of information upon which wildlife and land use management decisions are made. The results of the community-based monitoring project will facilitate knowledge transfer between communities and researchers, and will help to fill knowledge gaps about the impacts of climate change and development activities on northern ecosystems and communities.

Report for 2001 – 2002



The year in review

he Beverly and Qamanirjuaq Barren Ground Caribou Management Agreement (1999) requires the board to submit an annual report that shall include:

- a) a summary of board activities, recommendations and responses by governments and traditional users;
- b) a review of the state of the Beverly and Qamanirjuaq herds and their habitat;
- c) a summary of harvests by jurisdiction and community; and
- d) a financial statement for the operation of the board.

The board met twice during the year – in Black Lake, Saskatchewan in June 2001 and in Yellowknife, Northwest Territories in November 2001.

Board Officers

David Kritterdlik Chairman
Sebastian Oosenbrug Vice-Chairman
Gunther Abrahamson Secretary-Treasurer

Board Members

Manitoba

Representing the communities of Northern Manitoba:

Jerome Denechezhe (Lac Brochet) Date appointed: June 3, 1982

Alternate: Adam Nalge (Lac Brochet)

Albert Thorassie (Tadoule Lake) Date appointed: Aug. 22, 1991 Representing the Government of Manitoba:

Cam Elliott (Thompson)
Date appointed: June 3, 1993
Alternate: Don Cook (Thompson)

Saskatchewan

Representing the communities of Northern Saskatchewan:

James Laban (Black Lake) Date appointed: Dec. 3, 1992

Alternates: George Tsannie (Hatchet Lake), Pierre Robillard (Black Lake), Joe Martin (Fond du Lac)

Billy Shott (Uranium City)
Date appointed: March 14, 1991

Alternate: Daniel Augier (Uranium City)

Representing the Government of Saskatchewan:

Tim Trottier (La Ronge)
Date appointed: June 4, 1995
Alternate: Dave Brewster (Regina)

Northwest Territories

Representing the Métis Nation: Matthew Fraser (Fort Smith) Date appointed: March 26, 1998 Later replaced by Earl Evans (Fort Sr

Later replaced by Earl Evans (Fort Smith) Date appointed: Nov. 22, 2001

Representing the Dene Nation: August Enzoe (Lutselk'e)

Date appointed: Jan. 11, 1999

Representing the Government of the NWT:

Sebastian Oosenbrug (Yellowknife) Date appointed: Nov. 12, 1992





Nunavut

Representing the Kivalliq Wildlife Board: David Kritterdlik (Whale Cove) Date appointed: April 2, 1987

George Kuksuk (Arviat)

Date appointed: Aug. 19, 1994

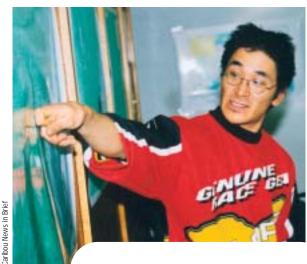
Alternates: Noah Makayak (Rankin Inlet), Jacob

Ikilnik (Baker Lake)

Representing the Government of Nunavut: Mitch Campbell (Arviat) Date appointed: Oct. 1, 1999

Summary of Board Activities, Recommendations and Responses

- The board met at Black Lake with the Athabasca Land Use Planning Interim Advisory Panel to exchange information and discuss options for future co-operation on projects of common interest.
- Board representatives attended the August 2001
 Dene Gathering in Wollaston, Saskatchewan to make a presentation on community-based caribou monitoring.
- The board's chairman accepted invitations to speak about co-management at conferences and workshops in Arctic Quebec, Baffin Island, Greenland and Arizona.
- The board met with the executive directors of the Nunavut Impact Review Board and the Mackenzie Valley Land and Water Board to determine how the BQCMB can work with these agencies to increase the effectiveness of board input into processes for permitting land use activities on caribou range.



Arviat caribou monitor Mike Curley points to a map while explaining to board members the observations of local hunters interviewed during the BQCMB's caribou monitoring project

- The board obtained funding commitments for the caribou monitoring project, including community-based caribou monitoring in Nunavut, from the Nunavut Wildlife Management Board and the Northern Ecosystem Initiative, Environment Canada.
- The board held a public meeting in Black Lake with delegates from Athabasca communities to discuss the use of satellite collars on the Beverly herd.





Board member Steven Traynor of
Indian and Northern Affairs Canada
(2002 -) talks shop with Leslie Wakelyn,
far left, and board member Deb Johnson
(2002 -) of the GNWT

- The board's project co-ordinators met with the Baker Lake and Arviat Hunters and Trappers Organizations to explain aspects of communitybased caribou monitoring. They trained local caribou monitors and launched the project in those communities.
- The board's project co-ordinators worked with the Baker Lake and Arviat Hunters and Trappers Organizations to interview hunters about their observations of caribou, weather conditions, and recent changes occurring on the caribou range.
- The board published two issues of *Caribou News in Brief* and periodically updated the board's web site.

Review of the State of the Beverly and Qamanirjuaq Herds

Population surveys for both herds were last conducted in 1994. At that time, the Qamanirjuaq herd numbered 496,000 and the Beverly herd was 276,000. Surveys were normally scheduled every six years, and the next survey to determine herd size was due in 2000. However, it was deferred to permit improvements in survey methodology.

Spring classification surveys have been staged in the past to determine annual herd recruitment. Calf production and survival rates are a strong indicator of the overall health of the herd. Classifications of the Beverly herd have not been done since March 1995. At that time, the calf: cow ratio was approximately 40:100 (based on 1,451 animals surveyed).

For the Qamanirjuaq herd, spring classification surveys were held regularly throughout the 1990s, with the calf:cow ratio for the most recent survey in March 1999 being 30:100 (based on 16,831 animals surveyed). That compares with a calf:cow ratio of 42:100 in 1996 (based on 13,488 animals surveyed), 47:100 in 1995 (based on 5,167 animals surveyed), 48:100 in 1994 (based on 10,248 animals surveyed) and 46:100 in 1993 (based on 6,702 animals surveyed). A spring classification survey has been proposed for the spring of 2003.

Herd migrations

According to elders from Arviat, for the first time since the late 1960s, Qamanirjuaq caribou began their spring migration where the Seal River flows into the Hudson Bay. An April 2001 reconnaissance





flight estimated the staging of 80,000 to 100,000 animals inland from, and at, the mouth of the Seal River. ("Staging" is the gathering of large groups of caribou.)

Since the 1960s, Qamanirjuaq caribou have been moving out of their winter range in northwestern Manitoba, northeastern Saskatchewan, southeastern NWT, and southwestern Nunavut into staging areas near Cullaton Lake, Seal Hole Lake and Ennadai Lake in late March/early April.



Indian and Northern Affairs Canada
Minister Robert Nault, flanked by
BQCMB secretary-treasurer Gunther
Abrahamson and Nunavut's Member of
Parliament Nancy Karatek-Lindell,
signs the 2002 - 2012 Beverly and
Qamanirjuaq Barren Ground Caribou
Management Agreement

Previous hunter reports and satellite collar location data suggest that tens of thousands of caribou occupy these areas in April, prior to their spring migration east as far as the Hudson Bay coast, then north to their calving grounds.

However, during March and April 2001, Arviat hunters reported few to no caribou there – something not witnessed in about 30 years. During this same period, hunters from Tadoule Lake and Lac Brochet, Manitoba, reported groups of thousands of caribou moving east past their communities in northern Manitoba.

This change in spring movements concerned Arviat hunters and in response to these concerns, Nunavut's Department of Sustainable Development initiated a reconnaissance flight east of Tadoule Lake and along the Hudson Bay coast where Arviat hunters were just starting to see what appeared to be large groups of caribou. The successful collaring of 10 animals during the reconnaissance flight later revealed the migration of these caribou north along the Hudson Bay coast past Nunella and Maguse lakes to the Banks Lake/Qamanirjuaq Lake area in mid-May.

In Manitoba, the main caribou migration in the fall of 2001 was about two weeks later than normal. The community hunts had to adjust timing and location as there were fewer caribou in traditional areas in early September. By late September, the migration was filling the Manitoba tundra with caribou, which in turn spread into the southern part of the forested winter range. As a result, the communities of Brochet and South Indian Lake had access to large numbers of caribou while Tadoule Lake and Lac Brochet had very few



in their areas in November and early December. By mid-December, the caribou began moving north to winter range near these communities.

The northward spring migration of cows began in April. Large groups of yearlings and cows were seen in traditional migration corridors making their way back to the calving areas throughout the month. The bulls did not vacate their winter range until May. On May 21, 2002, there were still large groups of bulls passing through Tadoule Lake.

In Saskatchewan's Wollaston Lake area, a small number of bulls spent the entire summer of 2001 along the shores of Kasba Lake, NWT. Hunters from Wollaston flew to Nueltin Lake in September to hunt large numbers of caribou there. A moderate concentration of caribou from Manitoba entered Saskatchewan in the Nunim Lake area in mid-October, apparently dispersing or swinging back east by Christmas. Caribou were also reported within five kilometres of the Fond du Lac River at the southwest edge of Newnham Lake. During the early winter, there were other reports of caribou in the Bannock, Kingston and Burnet lakes areas of the Cochrane River watershed northeast of Wollaston Lake. Hunters were active from late winter to early May as caribou appeared to have returned to areas immediately north of Wollaston Lake, or moved out of heavy cover onto the lakes and coalesced.

In the Northwest Territories, the Beverly herd wintered far east of Fort Smith in 2001, too great a distance for Fort Smith hunters. Instead, hunters travelled north to harvest animals from the Bathurst herd that were wintering close to Yellowknife. Lutsel K'e hunters primarily harvested caribou north of Great Slave Lake from the

Bathurst and Ahiak herds. As few caribou were sighted south and east of Lutselk'e, the total harvest of Beverly caribou from NWT residents was almost negligible during the winter.

Caribou did not enter Saskatchewan until mid to late winter, and then only in small numbers. During the fall/early winter, some animals wintered in the Ena Lake area and further east, but Uranium City residents had to travel north into the NWT to hunt caribou. Huntington Lake was a popular hunting location for Camsell Portage and Uranium City residents. In late winter, hunters travelled to Abitau Lake, NWT, where concentrations of bulls, cows and young animals could be found well into May.

Caribou were spotted at the treeline (Rennie Lake, NWT) in November, at Ivanhoe Lake by early December, and in the Scott Lake area of northern Saskatchewan by Christmas. Gradually throughout the early to mid-winter period, caribou wandered further south in small mixed herds and dispersed, making hunting within 30 kilometres of Fond du Lac possible but challenging. There were still mixed herds of caribou in Saskatchewan at the end of April. Most of the hunting was done by Saskatchewan Dene in the NWT.

Moderate concentrations of mixed herds used the Snowbird-to-Selwyn Lake area from early November through the entire winter and early spring period. Caribou also moved in from the north and west to areas southeast of Scott Lake and south of Dodge Lake in northern Saskatchewan, but not in large concentrations. Hunting began in NWT and the western edge of Nunavut (near Kasba Lake) in early winter, and moved to the



Saskatchewan border near Selwyn Lake and into the NWT for the rest of the winter. People from Black Lake and Stony Rapids were still hunting small numbers of caribou in mixed herds within 15 kilometres north of Stony Rapids in late April/early May. Herds of caribou also appear to have entered the province from Manitoba and moved west to an area north of Pinkham Lake. Hunting was light compared to average winters.

In mid-March 2002, the NWT's Department of Resources, Wildlife and Economic Development conducted a survey of the late winter distribution of the Beverly herd on their traditional winter range. The first two days of the survey were staged out of Stony Rapids in northern Saskatchewan. Caribou were seen in low numbers just north of Stony Rapids, and in larger quantities approaching the NWT/Saskatchewan border. The main concentration of caribou was found west of Selwyn Lake to Dunvegan Lake, north of Dunvegan Lake to Hurricane Lake and east of Hurricane Lake to Anaunethad Lake and south to Selwyn Lake. Small numbers of caribou were seen near Snowbird and Kasba lakes, and northwest along the Snowdrift River just west of Tent Lake. From the location of satellite-radio collared caribou from the Ahiak. Bathurst and Qamanirjuaq during mid-March, it is evident that winter range overlap occurs between these three herds and the Beverly.

Condition of caribou and range

Nunavut hunters reported that the Qamanirjuaq caribou they harvested during mid-May 2001 had lots of fat and appeared to be in excellent condition. Manitoba hunters likewise indicated that animals

were generally in very good shape. Apart from the warble fly larvae commonly found in caribou, hunters did not find many parasites or evidence of disease. The usual anomalies reported can be traced to injuries that a caribou has recently suffered. There were no reports of thin caribou or caribou without normal amounts of fat.

According to Saskatchewan hunters, caribou that were hunted in the western part of the Beverly winter range were skinny and undersized. One theory is that these caribou were in fact "impoverished" Bathurst caribou. Reports of caribou from the eastern part of the Beverly range were generally favorable, with plenty of fat on the animals, for example.

The 2001 fire season in Saskatchewan saw 65 fires on the caribou wintering range, burning a total of 1,256 square kilometres. In the Stony Rapids Forest Protection Area, 47 fires razed an area of 333 square kilometres. Four large fires accounted for most of the area burned. Two of these were south of Lake Athabasca in places the caribou have not visited in over 30 years. Around the Wollaston area, 18 fires together burned 923 square kilometres. Most damage took place at the north end of Reindeer Lake and extended north for quite a distance. There were several other significant fires further north in area commonly frequented by caribou of the past few years.

In the NWT, fires were moderate in both size and number in the summer of 2001. Twelve fires were recorded on the winter caribou range, resulting in 747 square kilometres burnt. Three of the fires, all located around the Thoa River, were more than 100 square kilometres while the rest ranged from 4 to 64 square kilometres each.

Financial Statements



Auditor's Report

To the Board Beverly and Qamanirjuaq Caribou Management Board

We have audited the balance sheet of the Beverly and Qamanirjuaq Caribou Management Board as at March 31, 2002 and the statement of revenue and expenditure for the year then ended. These financial statements are the responsibility of the board's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the board as at March 31, 2002 and the results of its operations for the year then ended in accordance with Canadian generally accepted accounting principles.

Collins Barrow Ottawa LLP

Collins Parrow OHAmse LES

Chartered Accountants

May 22, 2002

301 Moodie Drive

Suite 400

Ottawa, ON K2H 9C4





Beverly and Qamanirjuaq Caribou Management Board

Balance Sheet	March 31, 2002		
ASSETS			
Current			
Cash in bank	\$ 15,356.94		
Accounts receivable - Canada	1,350.00		
	\$ 16,706.94		
Deferred revenue – Nunavut Wildlife Management Board NET ASSETS	\$ 10,200.00		
Unrestricted net assets			
As at March 31, 2001	1,018.11		
Plus: Excess of revenue over expenditures for the year	5,488.83		
	6,506.94		
Total liabilities and net assets	\$ 16,706.94		

On behalf of the Board

Daniel Gritterellich

Vice Chairman





Beverly and Qamanirjuaq Caribou Management Board

Statement of Revenue and Expenditure For the year ended March 31, 2002

REVENUE		
Core funding		
Canada	\$13,500.00	
Manitoba	13,500.00	
Saskatchewan	13,500.00	
Northwest Territories	13,500.00	
Nunavut	13,500.00	
INUIIAVUL	13,300.00	\$67,500.00
Nunavut Wildlife Management Board		30,000.00
Northern Ecosystem Initiative		18,200.00
Sales		56.50
Other revenue		2,643.15
Other revenue		118,399.65
Less: Deferred revenue		10,200.00
Total revenue		108,199.65
Total revenue		100,100.00
Expenditures		
Administration		
Secretariat fees		14,280.00
Secretariat travel		2,571.26
Office expenses		1,978.30
Meeting expenses		1,676.86
		20,506.42
Programs		
Public relations and education		21,582.17
Studies and reports		1,645.00
Caribou monitoring		51,900.10
		75,127.27
Miscellaneous		
Audit fees and bank charges		1,344.50
Aviation gas (Note 2)		5,732.63
		7,077.13
Total expenditures		102,710.82
Excess of revenue over expenditures for the year		\$ 5,488.83





Notes to Financial Statements

1. Significant Accounting Policies

Nature of Business

The board is a not-for-profit registered charity.

Revenue and Expenditure

The board uses the accrual basis of accounting for revenue and expenditure and follows the deferral method of accounting for contributions.

2. Aviation Gas

Expenditures include \$5,732.63 of costs that the Board is attempting to recover from the Northwest Territories and Nunavut. At March 31, 2002 the amount has not been recorded as receivable, as the likelihood of recovery is not certain. The recovery will be reflected in the financial statements at the time of collection.



Beverly and Qamanirjuaq Caribou Management Scholarship Fund

Balance Sheet

December 31, 2001

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Current

Guaranteed investment certificates

Montreal Trust Company, 5.65%, due August 9, 2002

Bank of Nova Scotia, 5.50%, due October 15, 2002

Less: Discount on Bond

S20,000.00

(68.00)

19,932.00

Interest accrued to December 31, 2001

Interest accrued to December 31, 2001 680.67 Mutual Funds – Scotia Money Market Fund 4,264.00

Fund balance, end of year

\$44,876.67

Statement of Sources of Financing For the year ended December 31, 2001

Financing available from previous year \$44,512.67

Interest earned 2,364.00
Less grants distributed (2,000.00)

Total financing available for the year

\$44,876.67

Auditor's Report

To the Trustees

Beverly and Qamanirjuaq Caribou Management Scholarship Fund

We have audited the balance sheet of the Beverly and Qamanirjuaq Caribou Management Scholarship Fund as at December 31, 2001 and the statement of sources of financing for the year then ended. These financial statements are the responsibility of the fund's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the fund as at December 31, 2001 and the results of its operations for the year then ended in accordance with Canadian generally accepted accounting principles.

Collins Barrow Ottawa LLP Chartered Accountants

Collins Parrow OHAmse LLP

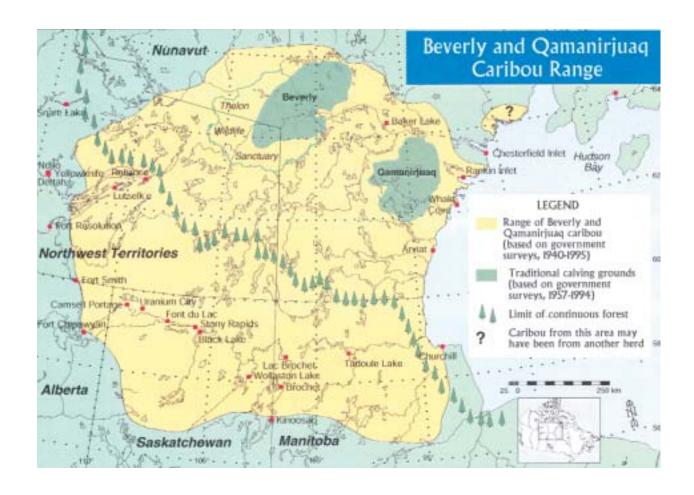
May 22, 2002

301 Moodie Drive, Suite 400, Ottawa, ON K2H 9C4



Map of the caribou range





Appendix 1

Papers received

Research and other Papers

Among the studies and papers presented to the Board during the year were:

Standard Edible Weights of Harvested Species in the Inuvialuit Settlement Region, by Peter J. Usher. Report to the Northern Contaminants Program, Department of Indian Affairs and Northern Development, Ottawa, June 2000

Dempster Highway Disturbance Study, by D. Cooley, Government of Yukon, Whitehorse, YT, April 2001

Cumulative Impacts and the Bathurst Caribou Herd: Proposed Tools for Assessing the Effects, by Anne Gunn et al, INAC, Department of Indian Affairs and Northern Development, Ottawa, February 2001

Caribou Co-Management and Cross-Cultural Exchange, a progress report, Ph.D. project, by Anne Kendrick, University of Manitoba, August 2001

Genetic and Geographic Distances among Caribou Populations, a progress report, Ph.D. project, by Keri Zittlau, University of Alberta, September 2001

Canadian Resource Co-Management Boards and their Relationship to Indigenous Knowledge: Two Case Studies, Ph.D. thesis, by Stella Spak, University of Toronto, 2001

Commercial Use of Caribou (Rangifer tarandus) in the Canadian Arctic, Ph.D. thesis, by Joseph I. D. Dragon, University of Alberta, 2002

Analysis of the Current State of Knowledge of the Bathurst Caribou Herd: Recommendations for Incorporating Traditional Ecological Knowledge, GeoNorth, Yellowknife, N.W.T. March 2002

En partenariat avec l'Etat: L'expérience de cogestion des Autochtones du Canada, par Thiery Rodon, Les Presse de l'Université Laval, Québec



Appendix 2



Harvest tables

Qamanirjuaq Caribou Herd Harvest July 1, 2000 to June 30, 2001

Currently being updated.



Beverly Caribou Herd Harvest

July 1, 2000 to June 30, 2001

Currently being updated.



Appendix 3



Beverly and Qamanirjuag Barren Grounds Caribou Management Agreement

THIS AGREEMENT made on the 1st day of April 2002

BETWEEN:

THE GOVERNMENT OF CANADA, as represented by the Minister of Indian Affairs and Northern Development (hereinafter referred to as "Canada");

-and-

THE GOVERNMENT OF MANITOBA, as represented by the Minister of Conservation (hereinafter referred to as "Manitoba");

- and -

THE GOVERNMENT OF SASKATCHEWAN, as represented by the Minister of Environment (hereinafter referred to as "Saskatchewan");

- and -

THE GOVERNMENT OF THE NORTHWEST TERRITORIES, as represented by the Minister of Resources, Wildlife and Economic Development (hereinafter referred to as "Northwest Territories");

- and -

THE GOVERNMENT OF NUNAVUT, as represented by the Minister of Sustainable Development (hereinafter referred to as "Nunavut")

WHEREAS the Beverly herd and Qamanirjuaq herd of barren ground caribou historically migrate across provincial and territorial boundaries;

AND WHEREAS the continued well-being of these herds and requires coordinated management, goodwill and co-operation amongst the above governments and the TRADITIONAL USERS of these caribou;

AND WHEREAS the parties hereto recognize that, as well as the value of the caribou to all Canadians generally, a special relationship exists between TRADITIONAL USERS and the caribou:

NOW THEREFORE THIS AGREEMENT WITNESSETH that the parties hereto under the authority of:

- (a) The Northwest Territories Act (1985), The Nunavut Act (1993)
- (b) The Manitoba Wildlife Act section 84:
- (c) The Saskatchewan Wildlife Act. section 9:
- (d) The Northwest Territories Wildlife Act section 27;
- (e) The Nunavut Act section 73 agree that:

A. Definitions In this Agreement:

- 1. "Beverly herd" means that herd of barren ground caribou which utilizes range in Manitoba, Saskatchewan, the Northwest Territories and Nunavut and regularly bears its young near Beverly Lake in Nunavut, and historically migrates into Saskatchewan, and Manitoba and the Northwest Territories.
- 2. "Qamanirjuaq herd" means that herd of barren ground caribou which utilizes range in Manitoba, Saskatchewan, the Northwest Territories and Nunavut and regularly bears its young near Qamanirjuaq Lake in Nunavut and historically migrates into Saskatchewan, and Manitoba and the Northwest Territories.
- 3. "TRADITIONAL USERS" means those persons recognized by communities on the caribou range as being persons who have traditionally and currently hunted caribou for subsistence.
- 4. "HABITAT" means the whole or any part of the biosphere upon which the Beverly and Qamanirjuaq caribou herds depend, including all of the land, water and air that they inhabit, cross or utilize at any time.

B. The Beverly and Qamanirjuaq Caribou Management Board

- 1. A joint management board shall be established to be known as the Beverly and Qamanirjuaq Caribou Management Board, hereinafter referred to as the "Board", having the following objectives:
 - (a) to co-ordinate management of the Beverly and Qamanirjuaq herds in the interest of TRADITIONAL USERS and their descendants, who are residents on the range of the caribou, while recognizing the interest of all Canadians in the survival of this resource;

- (b) to establish a process of shared responsibility for the monitoring of the herds and for the development of management programs between the parties hereto and the TRADITIONAL USERS of the Beverly and Qamanirjuaq herds;
- (c) to establish communications amongst TRADITIONAL USERS, between TRADITIONAL USERS and the parties hereto, and amongst the parties hereto in order to ensure coordinated caribou conservation and caribou HABITAT protection for the Beverly and Qamanirjuaq herds;
- (d) to discharge the collective responsibilities for the conservation and management of caribou and caribou HABITAT within the spirit of this Agreement.
- 2. Support shall be provided by the parties hereto to the Board in its efforts to achieve coordinated management of the Beverly and Qamanirjuaq herds by responding promptly to recommended measures.

C. Board Responsibilities

Without restricting the generality of clause B of this Agreement, the parties agree that the Board shall have the following duties and responsibilities:

 To develop and make recommendations to the appropriate governments and to the groups of TRADITIONAL USERS for the conservation and management of the Beverly and Qamanirjuaq herds of barren ground caribou and their HABITAT in order to maintain the herds, as far as reasonably possible, at a size and quality which will sustain the requirements of TRADITIONAL USERS. Such recommendations may include, but are not necessarily limited to:





- (a) limitations on the annual harvest of the Beverly and Qamanirjuaq herds and the allocation of that harvest amongst the Northwest Territories, Nunavut ,and the provinces of Saskatchewan and Manitoba;
- (b) criteria for regulating the methods of harvest;
- (c) methods of TRADITIONAL USER participation to assist in the management of the Beverly and Qamanirjuaq caribou herds;
- (d) caribou research proposals;
- (e) recommended standardized data collection and presentation;
- (f) a herd management plan for the Beverly and Qamanirjuaq herds which will include consideration of traditional knowledge, where available; and will take into account the maintenance of the natural balance of ecological systems; the protection of wildlife HABITAT; and the maintenance of vital, healthy wildlife populations capable of sustaining lawful harvesting needs.
- To monitor the caribou HABITAT over the entire ranges of the Beverly and Qamanirjuaq herds so as to facilitate the maintenance and protection of productive caribou HABITAT.
- To conduct an information program and hold such public meetings as are necessary to report on and discuss with TRADITIONAL USERS its responsibilities, findings and progress.
- To assess and report on the operation of its herd management plan to appropriate governments and TRADITIONAL USER groups.
- 5. To submit to the parties hereto annual reports which shall include:
 - (a) a summary of Board activities, recommendations and responses by governments and TRADI-TIONAL USERS;

- (b) a review of the state of the Beverly and Qamanirjuaq caribou herds and their HABITAT;
- (c) a summary of harvests by jurisdiction and community;
- (d) a financial statement for the operation of the Board.
- 6. To consider any other matters respecting the management of barren ground caribou that are referred to the Board by the parties hereto or Board members. The Board may also consider any other matters respecting the management of the Beverly and Qamanirjuaq herds referred to the Board by any other person or organization.

D. Membership of the Board

- Up to fifteen members shall be appointed to the Board as follows:
 - (a) The Minister of Indian Affairs and Northern Development, Government of Canada; The Minister of Conservation, Government of Manitoba; the Minister of Environment, Government of Saskatchewan; the Minister of Resources, Wildlife and Economic Development, Government of the Northwest Territories; and the Minister of Sustainable Development, Government of Nunavut shall each appoint one senior official from their respective ministries for a total of five members.
 - (b) the Minister of Conservation, Government of Manitoba, shall appoint two residents from the communities of Northern Manitoba for a total of two members;
 - (c) the Minister of Environment, Government of Saskatchewan, shall appoint two residents from the communities of Northern Saskatchewan for a total of two members; and may appoint a third resident from the communities of Northern Saskatchewan;



- (d) the Minister of Resources, Wildlife and Economic Development, Government of the Northwest Territories shall:
 - (i) where recommended by the Dene Nation, appoint one resident from the communities in the South Slave Region of the Northwest Territories:
 - (ii) where recommended by the Métis Nation of the Northwest Territories, appoint one resident from the communities in the South Slave Region of the Northwest Territories; for a total of two members;
- (e) the Minister of Sustainable Development, Government of Nunavut shall, where recommended by the Kivalliq Wildlife Board, appoint two residents from the communities in the Kivalliq [Keewatin] region of Nunavut and may appoint a third resident from the communities of the southern Kivalliq [Keewatin] region of Nunavut.
- 2. The members of the Board shall be appointed for a term of five years, subject to the right of the parties to terminate the appointment of their respective appointees at any time and reappoint Board members in accordance with the above.

E. Board Rules and Procedure

- 1. The Board shall establish in writing from time to time rules and procedures for its functioning, provided however that:
 - (a) the Chairman and Vice-Chairman shall be elected from amongst the members of the Board by secret ballot;
 - (b) the election and replacement of the Chairman and the Vice-Chairman shall be by simple majority:
 - (c) thirty days notice of meeting shall be given by mail, telephone or telegram, as appropriate;

- (d) eight members shall constitute a quorum;
- (e) decisions of the Board shall be by consensus wherever possible, and shall always require a majority voting in favour, with each member having one vote;
- (f) no voting by a proxy shall be allowed;
- (g) the Board shall hold formal meetings twice yearly or more often as necessary at the call of the Chairman;
- (h) the Board shall keep summary minutes and records of all its meetings and circulate them amongst its members;
- (i) the Board may establish or dissolve standing committees as it deems necessary to carry out its functions, and set the terms of reference for such standing committees. , and
- (j) the Board members unable to be present at Board meetings shall receive notice of Board recommendations thirty (30) days in advance of submission to any minister for action, except where there is consent of all Board members in which case recommendation to the Minister(s) can be made forthwith.

F. Finances

- 1. Subject to the terms and conditions of this Agreement and to funds being appropriated by the legislative authority in respect of each party on an annual basis, the parties hereto shall annually provide funds necessary to ensure the Board functioning in a manner herein before stated provided, however, that all costs for the Board shall not exceed \$75,000.00 annually and that all such annual costs shall be shared equally amongst the parties to this Agreement in accordance with section F-2 below.
- 2. Prior to the administrative costs for the Board being eligible to be shared by the parties hereto, the Board shall be required to submit to each party an annual





estimate of the financial administrative costs, not exceeding \$75,000.00 in each year, and each party shall in writing within thirty days of receipt thereof, indicate its approval or disapproval for such budget and provide reasons therefore. In the event that a majority of the parties hereto approve the annual budget for the administrative costs, the budget shall be shared equally by all parties hereto.

- 3. Administrative costs to be shared amongst the parties hereto shall include expenditures related to:
 - (a) a secretariat to provide for and follow up on meetings, record and distribute minutes, provide members with informational support, maintain the operation of the Board between meetings, and undertake such other organizational arrangements as the Board may require;
 - (b) the production of an annual report and its distribution;
 - (c) a modest independent research review capability;
 - (d) the production of a newsletter, and other informational and educational material; and
 - (e) such other costs as the parties may agree upon.
- 4. Each party shall be responsible for funding the expenses for salaries or honoraria and other incidental travel expenses, including transportation, meals, accommodation related to Board members appointed or confirmed by that party. The provisions for said expenses shall be in addition to the annual administrative costs provided in section F.1 above.
- 5. The Board shall annually account for all monies received and disbursed and said records shall be available to any of the parties for inspection upon thirty days written notice to the Chairman.

G. General

- 1. All reports, summaries or other documentation prepared or otherwise completed under the terms of this Agreement shall become the joint property of all parties hereto and any and all income derived therefrom shall be jointly shared amongst the parties in proportion to expenditures incurred by each party in generating such income.
- 2. The parties are committed to taking all actions under this Agreement in a way that respects any treaty rights or Aboriginal rights of Aboriginal peoples relating to the hunting of Beverly and Qamanirjuaq barren ground caribou.
- 3. This Agreement shall take effect on the 1st day of April, 2002, and and shall terminate on the 31st day of March, 2012, unless sooner terminated, for any reason, by any of the parties hereto upon six month's notice in writing to the other parties.
- 4. In recognition of the importance of the Beverly and Qamanirjuaq herds and their HABITAT, the withdrawal of any of the parties from this Agreement shall not preclude the remaining parties from continuing with the objectives and processes set out in this Agreement.
- This Agreement may be amended at any time by an exchange of letters following unanimous approval by the parties hereto.
- This Agreement supersedes the Beverly-Qamanirjuaq Barren Ground Caribou Management Agreement made between Manitoba, Saskatchewan, the Northwest Territories and Nunavut on the 1st day of April, 1999.



IN WITNESS WHEREOF the parties hereto have executed and delivered this Agreement as of the day and year first above written.

WITNESSES TO THE AGREEMENT	Signed on behalf of the Government of Canada represented herein by the Honourable Minister of Indian Affairs and Northern Development:				
Witness	Signed on behalf of the Government of Manitoba represented herein by the Honourable Minister of Conservation:				
Witness	Signed on behalf of the Government of Saskatchewan represented herein by the Honourable Minister of Environment:				
Witness	Signed on behalf of the Government of the Northwest Territories represented herein by the Honourable Minister of Resources, Wildlife and Economic Development:				
Witness	Signed on behalf of the Government of Nunavut represented herein by the Honourable Minister of Sustainable Development:				
Witness					



Appendix 4



Board meetings held from 1982 - 2002

1	August	1982	Saskatoon	Sask	28	August	1991	Prince Albert	Sask
2	January	1983	Edmonton	Alta	29	December	1991	Fort Smith	NWT
3	March	1983	Lutselk'e	NWT	30	April	1992	Arviat	Nunavut
4	June	1983	Yellowknife	NWT	31	December	1992	Uranium City	Sask
5	September	1983	Black Lake	Sask	32	April	1993	Winnipeg	Man
6	January	1984	Winnipeg	Man	33	September	1993	Prince Albert	Sask
7	April	1984	Rankin Inlet	Nunavut	34	January	1994	Winnipeg	Man
8	August	1984	Fort Smith	NWT	35	April	1994	Baker Lake	Nunavut
9	November	1984	Saskatoon	Sask	36	September	1994	Winnipeg	Man
10	April	1985	Baker Lake	Nunavut	37	January	1995	Prince Albert	Sask
11	August	1985	Whitehorse	Yukon	38	April	1995	Black Lake	Sask
12	November	1985	Edmonton	Alta	39	September	1995	Thompson	Man
13	April	1986	Thompson	Man	40	February	1996	Whale Cove	Nunavut
14	August	1986	Arviat	Nunavut	41	June	1996	Lutselk'e	NWT
15	April	1987	Saskatoon	Sask	42	November	1996	Winnipeg	Man
16	August	1987	Winnipeg	Man	43	June	1997	Wollaston	Sask
17	November	1987	Fort Smith	NWT	44	November	1997	Thompson	Man
18	April	1988	Winnipeg	Man	45	May	1998	Tadoule Lake	Man
19	August	1988	Stony Rapids	Sask	46	November	1998	Fort Smith	NWT
20	November	1988	Winnipeg	Man	47	May	1999	Arviat	Nunavut
21	April	1989	Baker Lake	Nunavut	48	November	1999	Winnipeg	Man
22	August	1989	Lac Brochet	Man	49	May	2000	Churchill	Man
23	December	1989	Winnipeg	Man	50	November	2000	Winnipeg	Man
24	April	1990	Fond du Lac	Sask	51	June	2001	Black Lake	Sask
25	August	1990	Lutselk'e	NWT	52	November	2001	Yellowknife	NWT
26	December	1990	Winnipeg	Man	53	May	2002	Baker Lake	Nunavut
27	March	1991	Yellowknife	NWT	54	November	2002	Winnipeg	Man