

Outline and Background for Scoping Report
for the Preparation of a Harvest Management Strategy in
the Canadian Range of the Porcupine Caribou Herd

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Introduction

The Porcupine Caribou herd is a large population of barren ground caribou that ranges across northeastern Alaska, Yukon and northwestern Northwest Territories. It is the eighth largest herd in North America and is an important part of the northern Yukon's environment. The herd also provides an important source of food that contributes substantially to meeting the subsistence needs of aboriginal people living with the range of the herd, as well the needs of non-native hunters.



Range of the Porcupine Caribou Herd

The wellbeing of many northern people and communities is tied to the wellbeing of the Porcupine Caribou Herd, and it is for this reason, perhaps more than any other, that management interest - locally, regionally, nationally and internationally - in this herd has been consistently very high.

The herd remains physically healthy today. However, although its estimated population has varied significantly in number over the last 30 years, a continued

population decline since 1989 has brought heightened management attention to a range of factors affecting herd decline and recovery.

It is generally agreed that over-harvesting could not have played a part in the recent population decline, however, the effects of the harvest on the population are not fully understood.

Porcupine Caribou herd management includes harvest management, and, in the event that there is a continuing population decline, the Porcupine Caribou Management Board (PCMB) seeks to ensure that harvest management strategies are sufficiently developed so that they represent a credible and acceptable management option among others that may be available in the future, if circumstances warrant their introduction.

There are significant challenges in accomplishing this. The international range of the Porcupine Caribou herd is jurisdictionally complex; the Canadian range only is only moderately less so. A multitude of federal, territorial and aboriginal government organizations and agencies have an interest in the management of the herd. The respective interests and preferred population management approaches vary across user communities and user groups. The security of aboriginal hunting rights is an especially highly sensitive interest that reflects on traditional values and contemporary management practices, including harvest management.

This report has been prepared at the request of the Porcupine Caribou Management Board (PCMB) to facilitate discussions and work towards the preparation of a harvest management strategy or plan for the Porcupine Caribou herd (PCH).

The report outlines key elements and matters to be addressed in a Canadian harvest management strategy.

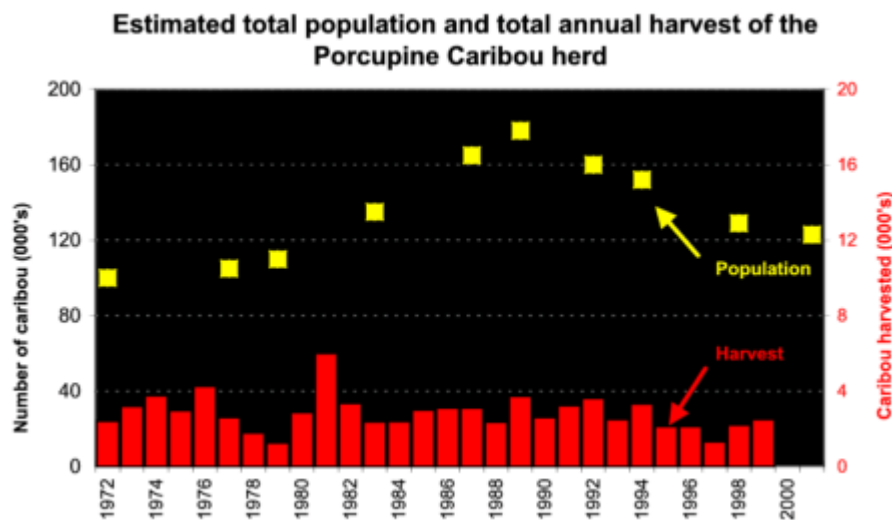
The preparation of a harvest management strategy is an undertaking that will take several years and dedicated commitment on the part of those with an interest and stake in the management and use of the herd. This report identifies some approaches for accomplishing this.

Background

The Porcupine Caribou Herd Population

During the 1980s, the herd grew approximately 4.5% per year, numbering 178,000 by 1989 and almost doubling in size since the early 70s. By 1998 it had declined to 129,000. In 2001 the herd was estimated at 123,000 caribou.

Over the past 30 years, the reported harvest of the herd has ranged from 2,000 to 7,000 caribou with an annual average of about 2,900 per year. This estimate includes all non-Aboriginal and most, but not all, Aboriginal hunting.



Source: Population estimates are from the Porcupine Caribou Management Board and the harvest data are from the Yukon Department of Renewable Resources.

Human caribou harvest depends on the accessibility of the herd to hunters during the hunting season. At no time has the harvest exceeded 3% of the population, despite a human population increase of 20-30% in nearby communities over the last three decades

The Porcupine Caribou Herd has not grown as quickly as other barren ground caribou herds, despite having a comparable birth rate. This suggests that the Porcupine herd experiences greater mortality than other barren ground caribou herds.

On an annual basis, the main predators on caribou are wolves and humans. Since the local wolf population is relatively low, they do not have a large effect on caribou populations, taking between three and five percent of the herd each year. In total, about 16% of the adult cows die from natural causes each year. Limited body condition studies and measurements do not show that Porcupine Caribou are stressed nutritionally.

The Porcupine Caribou Management Agreements

Two agreements – one national, the other international – exist to facilitate cooperative management of the herd across the various traditional, territorial and international boundaries that divide the 249,000 km² (96,100 square miles) of range land that it migrates across.

Porcupine Caribou Management Agreement

The Porcupine Caribou Management Agreement (PCMA) was signed in 1985. The objectives of the parties to the Agreement are cited below in full because they reference key considerations that should inform the development of a harvest management strategy for the herd. The parties agreed:

1. To co-operatively manage, as a herd, the Porcupine Caribou and its habitat within Canada so as to ensure the conservation of the Herd with a view to providing for the ongoing subsistence needs of native users;
2. To provide for the participation of native users in Porcupine Caribou Herd management;
3. To recognize and protect certain priority harvesting rights in the Porcupine Caribou Herd for native users, while acknowledging that other users may also share the harvest;
4. To acknowledge the rights of native users as set out in this Agreement; and
5. To improve communications between Governments, native users and others with regard to the management of the Porcupine Herd within Canada.

The PCMA established the Porcupine Caribou Management Board (the PCMB) as an important instrument for achieving these objectives through actions that the PCMB determines to be necessary. Eight voting members are appointed by the parties to represent the governments of Canada, Northwest Territories and Yukon, and the user communities of Old Crow, Dawson and Mayo in the Yukon, and Aklavik, Inuvik, Fort McPherson, Arctic Red River, Inuvik and Tuktoyaktuk in the Northwest Territories.

Among its duties, the PCMB may make recommendations to the appropriate responsible Minister regarding a herd management plan. In the 2000 – 2003 Porcupine Caribou Herd Management Plan, the Board recommended the development of a harvest management plan or strategy. It is to include information and recommendations on how to help the herd recover, if it continues to decline.

International Porcupine Caribou Agreement

The 1987 International Porcupine Caribou Agreement between the governments of Canada and the United States established an international board to make recommendations that require international coordination for the conservation of caribou and habitat, including those that will ensure opportunities for customary and traditional uses of the Porcupine Caribou herd by rural Alaska residents , and by native users in Yukon and the Northwest Territories. Among its duties, the Board will “when advisable to conserve the Porcupine Caribou Herd, [make] recommendations on overall harvest and appropriate harvest limits for each of Canada and the United States of America taking into account the Board’s review of available data, patterns of customary and traditional users and other factors the Board deems appropriate.”

In 1993, the International Board outlined areas requiring coordinated action to achieve the objectives of the international agreement in the *Plan for the International Conservation of the Porcupine Caribou Herd*. With respect to harvesting the plan identified the following actions:

- to prepare a report on methods used to collect harvest data;
- to recommend the Parties report annual harvests and data collection methods; and,
- to jointly prepare guidelines for when harvest limits will be considered.

PCMB Discussions on Harvest Management

In 2002, the PCMB participated in organizing a workshop on “Caribou Harvesting Strategies and Sustainability.” The purpose of the workshop was to explore what is known about the effects of harvesting on caribou populations and the various choices available for harvest management. A number of scenarios for caribou harvesting were explored with a view to testing various harvest strategies on a model of herd productivity and abundance.

An outcome of this workshop was acknowledgement by participants from government agencies, user communities and user groups of the need to develop a harvest management strategy on a priority basis, while recognizing that research into herd productivity and predation, and the collection of harvest information remained important ongoing actions.

Scoping Report Approach

In preparing this report, several tasks were undertaken:

- The following agreements were reviewed:
 - the Porcupine Caribou Management Agreement (1985)
 - the International Porcupine Caribou Agreement (1987)
 - the Inuvialuit Final Agreement (1984)
 - the Gwich'in Comprehensive Land Claim Agreement (1992)
 - the Vuntut Gwitchen Final Agreement (1993)
 - the Nacho Nyak Dun Final Agreement (1993)
 - the Little Salmon Carmacks Final Agreement (1997)
 - the Trondek Hwech'in Final Agreement (1998)
- Several reports were reviewed:
 - Draft Background Information to Prepare Porcupine Caribou Harvest Plan
 - G. Kofinas, C. Nicholson, M. Berman, and P. McNeil. "Caribou Harvesting Strategies and Sustainability Workshop Proceedings, held in Inuvik, Northwest Territories, April 15 – 16, 2002." NSF Sustainability of Arctic Communities Project (Phase II). 2002.
- Consultations with the following persons were conducted:
 - Art Christiansen (Trondek Hwech'in First Nation / PCMB)
 - Carl Charlie (past PCMB member)
 - Robert Charlie (Gwich'in Renewable Resource Board / PCMB)
 - Peter Clarkson (Gwich'in Renewable Resource Board)
 - Dorothy Cooley (Fish and Wildlife Branch, Environment, YTG / PCMB)
 - Tim Devine (Resources, Wildlife and Economic Development, GNWT / PCMB)
 - Alan Fehr (Parks Canada Agency / PCMB)
 - William Josie (Vuntut Gwich'in First Nation)
 - Doug Larsen (Fish and Wildlife Branch, Environment, YTG / PCMB)
 - John Nagy (Resources, Wildlife and Economic Development, GNWT / PCMB)
 - Norman Snowshoe (Gwich'in Tribal Council / PCMB)
 - Joe Tetlich (Porcupine Caribou Management Board)

The consultations took the form of open-ended interviews that focussed on several questions:

- What are the key issues that a PCH harvest management plan should address?
- What are some of the challenges in addressing these issues?
- What is required for user groups and user communities to participate in the development of a harvest management plan?
- What is required for user groups, user communities and PCMB members to support and recommend a harvest management plan?

The consultations were not intended to be exhaustive, but to provide a representative sample of views and interests that should inform the development of a harvest management plan. All of the comments were recorded without attribution to individuals or organizations.

Identified Issues to be Addressed in a Harvest Management Strategy

The following issues represent a summary of topics that were identified through consultation with a select cross-section of individuals with a management interest in the Porcupine Caribou herd.

Scope of a Harvest Management Strategy

Harvesting Rights and Management

PCMB Mandate, Role and Responsibilities

Governmental and Organizational Relationships

User Conflicts

Dempster Management

Harvest Practices

Conservation Thresholds

Harvest Restrictions

Harvest Allocation

Regulation and Enforcement

Harvest Information

Amendment of the PCMA

PCH Harvest Management Plan or Harvest Management Agreement

Planning Process Issues and Opportunities

PCH Harvest Management Strategy Tools (options)

1. Harvest Management Planning Protocol (establish commitments)

- Establish commitments to: (a) conservation; (b) harvest management
- Establish commitment to harvest management planning process
- Establish institutional relationships between PCMB, governments, and representative user community organizations
- Signatories to protocol

2. PCH Harvest Management Plan Outline

Objectives

Principles

Ecological Context

Harvest Rights and Management

Management Roles and Responsibilities of Partners

Information and Communication

Conservation Limits

 Determination of conservation thresholds

Community Needs

 Determination of community needs

Harvest Strategies and Use

 General harvest practices

 Efficient use

 Application of Total Allowable Harvest

Harvest Allocation and Distribution

 Native and non-native user allocation

 Native user sub-allocation

3. *PCH Harvest Management Agreement Outline*
(for Application of Total Allowable Harvest by User Communities)

Statement of User Communities

Statement of Principles

Statement of Objectives

Statement of Definitions

List of Regulations pertaining to (egs.):

Conservation measures and protections (e.g. cow/calf, seasonal,
etc.)

Harvest methods

No commercial use

Determination of annual allowable harvest by PCMB

User community allocation agreements (annual, biannual etc.)

Quota application and implementation

Other special provisions

Collection of Harvest Data and Sharing of Information

Duration of Agreement

Signatories to Agreement

PCMB

Appropriate representative authorities for user communities