PRELIMINARY MANAGEMENT PLAN FOR THE SOUTHAMPTON ISLAND CARIBOU HERD

For

Information: Decision: X

ISSUE:

Proposed options for the management of a rapidly growing caribou population on Southampton Island. Management recommendations require review and approval by the NWMB before changes are implemented.

BACKGROUND:

An introduction of 48 Coats Island caribou onto Southampton Island was undertaken in 1967. The original purpose for the introduction was to provide a local meat source for the residents of Coral Harbor. Caribou numbers have since increased rapidly, in part, because of exceptional range conditions resulting from the absence of caribou on the island for over 20 years. Other reasons for the high rates of increase include the lack of predators (wolves) on the island and the relatively low initial harvest rates. The success of the 1967 introduction was first realized following a population survey in 1978, which estimated 1,200 +/- 340 caribou. Since the 1978 survey, the population has continued to grow rapidly to 4,000 +/- 660 in 1987, 9,000 +/- 3,200 in 1990, 13,700 +/- 1,600 in 1991, 18,275 +/- 1,390 in 1995 and finally 29,146 +/- 1,766 in 1997. The survey results suggest that the herd is growing at a rate of approximately 27 percent per year.

The main concern shared by both RWED and the community of Coral Harbor is that the vegetative communities of Southampton Island will not be able to sustain the caribou population at its present rate of growth. Lichens, thought to be a critical forage item for this population, have very slow growth rates and could be over-grazed to a point where both massive starvation and a long term decline in caribou numbers threatens the population. As a result of these concerns the initiation of both summer and winter (To study forage availability) range studies are gaining a high priority in the growing list of management options.

A quota system was initiated on Southampton Island during the 1977/78 hunting season. The initial quota of 25 males was maintained up to the 1990/91 harvesting season at which time it was increased to 300 males and 100 females. During the 1992/93 season, the Department recommended increasing the commercial harvest to 1000 animals in an effort to control the growth of the herd. It was also recommended that a higher proportion of females taken within the allotted quota would be consistent with proposed management objectives. An exponential growth curve made apparent by

the 1995/96 population survey prompted the commercial quota to be increased to 4000 animals.

There are very polarized views both within the NWT and abroad concerning the use of large-scale harvests to control caribou population fluctuations. Thought must also be given to the effects a large-scale harvest has on a population both during and following the hunt. Elevated levels of stress and associated behavioral changes during a metabolically critical time of the year, (i.e.: being moved away from optimum feeding sites and/or being forced to expend energy during a time of year when the conservation of metabolic resources is often necessary for survival) could negatively effect the general health of the population instead of helping it.

The issue of allowing a wolf population to become established on Southampton Island came to the forefront during the winter of 1994 when the first wolves in over 20 years were observed. The initial approach of the community (During the winters of 1994, 1995, 1996.) was to harvest these wolves before they could establish themselves. The Department, over this same period, has encouraged the community to allow the wolves to become established and as a result play their naturally selected role in the regulation of caribou populations.

CURRENT STATUS:

Populations surveys, flown in both 1995 and 1997, have shown a dramatic increase in the numbers of Southampton caribou from 18,275 +/- 1,450 (1995) to 29,146+/- 1,766 (1997 preliminary results). This magnitude of increase (An addition of 10,871 animals over two years) has catalyzed the concerns of both community members and RWED staff. The main worry centers around whether this population is at or beyond the Islands carrying capacity and is thus likely to crash. The use of high commercial quota's to mitigate the rapid growth of the herd has been and remains the most attractive management option; an option that will also provide jobs to the community of Coral Harbor. We as co-managers, however, must proceed with caution and at the very least be prepared to scale down the commercial operation if on-going studies suggest the population can no longer support such activities. Additional concerns involve a desire to eradicate wolves from the Island thus removing the only natural predator.

Recently, the status of Southampton Island caribou has prompted considerable discussion between the Coral Harbor HTO and RWED managers. During these discussions, participants tabled the following series of management options:

- (a) Maintain 1997 harvest levels into 1998 or, increase commercial quota for 1998 to 5000 caribou. (RWED)
 - (b) Increase commercial quota for 1998 to 6000 caribou. (HTO)

- (a) Priority will not be placed on the establishment of a wolf population on Southampton Island. (HTO)
 (b) Allow wolves to establish a population on Southampton Island. (RWED)
- 3. Monitor winter and summer range conditions, sex and age ratios, pregnancy rates, calf survival and body condition. (RWED)
- 4. Work towards the maintenance of a 5-year population survey rotation. (RWED)
- 5. Work towards developing a 5-year management plan. (RWED & HTO)

RECOMMENDATIONS:

Through these discussions, both RWED staff and the Coral Harbor HTO have agreed that some of the suggested management options should be integrated into the current management practices for Southampton Island. These recommendations are as follows:

- Increase commercial quota for 1998 to 6000 caribou, but maintain awareness that the commercial harvest may at some point have to be scaled down or stopped completely.
- 2. Monitor winter and summer range conditions, sex and age ratios, pregnancy rates, calf survival and body condition.
- Allow wolves to establish a population on Southampton Island.
- 4. Work towards the maintenance of a 5-year population survey rotation.
- 5. Work towards developing a 5-year management plan.

Details

Tunnuq harvest is setting up 2 abattoir sites in 1998 in order to accommodate the larger quota. The Keewatin Wildlife Federation have expressed support for the proposed quota increase (a copy of motion to be provided). Although the establishment of a wolf population on Southampton Island has been agreed upon in principal, we are still awaiting a formal indication of the same.

Winter research will focus on snow ecology along randomly chosen transects within known blocks of high, low, medium and zero caribou densities. Snow morphological data collected will include snow thickness, vertical hardness and horizontal hardness values which will provide insight into winter forage availability. Summer research will focus on the accumulation of current and historical range data to initiate long-term studies to examine the structure and productivity of plant communities within the

density classes outlined for winter research. The data collected here should provide managers with the ability to understand potential limits to the growth of the Southampton Caribou Herd. During the spring harvest caribou will be periodically taken for necropsy. During the necropsy information pertaining to body condition, reproductive status, disease and age (i.e.: The collection of lower jaws) will be collected. During mid to late February a ground-based classification (Cow/calf, cow, calf, yearling female, yearling male, young bull, mature bull) will be conducted using skidoos and spotting scopes. Efforts will also be made to secure funding, on a five-year basis, to conduct aerial surveys of the island to ultimately determine if we are achieving predicted management goals. It was generally agreed that if the need arose, the commercial operation would be scaled down or stopped. Efforts will be made to establish a 5-year management plan for the Southampton Island Caribou Herd.

attachments:

Keewatin Wildlife Federation motion supporting a quota increase

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Keewatin Wildlife Federation Motion Form

() Annual General Meeting () Regular Meeting () Special Meeting

be increased from For	Thousand to
Moved By: Johning Keleber Seconded By: Mark Kallecal All in Favour () Opposed Date 22/10/97 Signatures of the Mover & the Seconder	Motion # 29/57 () Abstained
MoverSeconder	,. se •

Aiviit Hunters & Trappers' Organization Regular Meeting September 16, 1997

Present:

Sam Emiktowt

President

Charlie Saviakjuk

Vice-President

Potogok Adamie Davidee Noah Secretary/Treasurer

Bernie Matoo

Board Member Board Member

Absent:

Noel Kahidiak

Board Member

Out of town

Moses Nakoolak

Board Member

Out of town

Johnny Kataluk

Board Member

Out hunting

Staff:

Louisa Kudluk

Secretary/Manager

Delegates:

Tim Devine Resources, Wildlife & Economic Development

Mitch Campbell Regional Biologist Leonard Netser Tunnuq Harvest

Call to Order

Sam Emiktowt called the meeting to order at 6:37 p.m.

2. Prayer

Prayer lead by Davidee Noah

Approval of Agenda

Moved by: Charlie Saviakjuk Seconded by: Bernie Matoo "that the agenda be approved."

Motion #085/97 Carried

Conflict of Interest

None declared at this time

Delegates

Tim Devine and Mitch Campbell have 5 items to present to the Board.

A) Mitch Campbell report on caribou census done this year. The census went well, also how the management on scribou will be precented in the near future.

Increase the caribou harvest to 5,000 and recommended to leave the wolves alone because of their impact on caribou herd.

2 . 1

Leonard Netser commercial hunt on caribou for next year might not be enough tags.

There is an increase of crabby eye on herd. Also to have 2 camp sites during the harvest.

Leonard request for 6,000 caribou tags for next year.

Tim mentioned that there might be decline on caribou in the future and harvesting is getting more and more difficult to get funding for it.

Request for 6,000 commercial tags to be presented to Keewatin Wildlife Federation and Nunavut Wildlife Management Board then to logislation for it to be approve.

Discussion follows.....

Moved by: Charlie Saviakjuk
Seconded by: Davidee Noah
"that requisition for 6,000 caribou tags be approved."
Motion # 086/97

Carried

Break for 5 minutes....

B) Tim mentioned to develop caribou management on January or February 1998 with Aiviit Hunters & Trappers' and present to community.

Sam requested for more information of caribou feed.

C) Polar Bear letter regarding Repulse Bay request for 1 tag. Their quota this year is 13 tags but was reduce to 5 tags.

Discussion follows....

No decision made on the top item will notify Tim when they have reach a decision.

- D) Insurance for outfitting sport hunting has establish a policy Keewatin Wildlife Federation to pay \$3,125.00 to Monies & Associates and to notify them for cancellation.
- E) Renewable Resource Officer for Coral Harbour and for Board to view of inuit training in Iqaluit for the position. Currently to open the position for 3 to 6 months.

Board recommended to have an officer here for 6 months.