

STATUS OF THE SOUTHAMPTON ISLAND CARIBOU HERD

FOR

Information: X

Decision:

ISSUE: Excessive commercial caribou harvesting on in winter 2005 may reduce the number of caribou available for Southampton Island residents use in 2005/2006.

BACKGROUND:

Wolves (*Canis lupus*) and barren-ground caribou (*Rangifer tarandus groenlandicus*) were a common component of Southampton Island ecology until the early 1900's. The decline of these animals became obvious by 1935 and was followed by the local extinction of wolves by 1937. The extirpation of caribou from Southampton was complete by 1952. The absence of this resource was keenly felt by residents of Coral Harbor prompting both the local HTO and government to initiate the re-introduction of caribou onto the Island. In 1967, 14 years following their extirpation, 48 caribou from Coats Island were introduced onto Southampton Island. Caribou numbers have since increased rapidly which is in part due to exceptional range conditions resulting from the 14-year absence of caribou from the Island. The lack of predation and low initial harvest rates also played a role in the overwhelming success of the introduction which was first realized following a population survey in 1978, estimating 1,200 +/- 340 caribou. Since the 1978 survey the Southampton caribou population continued to grow rapidly to 5,400 +/- 1,130 in 1987, 9,000 +/- 3,200 in 1990, 13,700 +/- 1,600 in 1991, 18,275 +/- 1,390 in 1995, 30,381 +/- 3,982 in 1997 and finally 17,981 +/- 2,127 in June 2003. These survey results, suggest a population growth rate of approximately 27 %/year up until 1997 followed by a 40% decline between June 1997 and June 2003. During this six-year period 8,529 adult males and 10,221 adult females were harvested commercially and an estimated 7,000 males and 7,000 females were harvested domestically for an estimated total of 15,529 males and 17,221 females.

The Southampton Island Caribou Herd is extensively utilized both commercially and domestically. The latest estimates for annual domestic use are +/- 2,000 animals. Commercial harvests have seen a general increase from 564 in 1992, to 759 in 1993, 1,554 in 1994, 2,356 in 1995, 1,839 animals in 1996, 3,365 in 1997, 2,956 in 1998, 1,094 in 1999, 2,166 in 2000, 3,696 in 2001, 3,834 in 2002, 5,005 animals in 2003, to 3,200 animals in 2004. Following the June 2003 survey a meeting between the Aiviit HTO and DSD (Department of Sustainable Development) staff was held November 5, 2003. During this meeting the Aiviit HTO discussed with DSD recommendations that the commercial caribou quota be reduced to 2000. Following much discussion and additional information (calving success, apparent nutritional stress, and observed reduced densities

provided by HTO members), both parties agreed to recommend a commercial quota reduction from the 6000 tags currently in place to 3300 tags (300 of which will remain dedicated to Coral Harbour's sport hunting industry). However, based on the number required for commercial viability for the Rankin Inlet meat plant, the final number requested, permitted, and taken was 4000.

CURRENT STATUS:

- Most recent population surveys (June 2003) indicate that the Southampton caribou population had declined to approximately 18,000 animals from an estimated 30,000 animals in 1997.
- The 2004 growing season was shorter than normal and provided for a much-reduced biomass of green vegetation compared to recent years. This reduced biomass likely negatively impacted the ability of caribou to build up fat reserves for the 2005 winter season.
- An icing event occurring mid-November 2004 effectively iced over many caribou winter forage species potentially further reducing caribou condition due to poor forage accessibility.
- Preliminary condition studies indicate that Southampton Island caribou in February 2005 are in fair to poor condition when compared with all other years of data (1995 to 2004). Their condition is expected to decline further as the winter progresses. In addition pregnancy rates have dropped from 90% in February 2000 to approx. 60% in 2004 and further to 25% in February 2005. Samples collected in 2005 are currently being analyzed to determine possible causes.
- Many Coral Harbor hunters have reported, over the 2004 and 2005 harvesting seasons, a scarcity of breeding bulls and have suggested this could be playing a role in the declining pregnancy rates.
- Coral Harbour hunters have reported approximately twenty observations of dead calves and yearlings this winter. An investigation into the deaths of 9 of these animals is currently underway.
- Repulse Bay hunters have reported significant numbers of caribou crossing from White Island to the mainland, which may indicate emigration from Southampton Island.
- Commercial and domestic hunters report that 2005 population densities are much lower, animals are harder to find, and the condition (carcass weights and meat quality) of all animals is poor this year.
- DoE has procured funding to provide training for Coral Harbour hunters for the purposes carrying out annual spring composition surveys using fixed wing

and ground transportation. These surveys will be used to estimate calf over-winter survival and the sex ratio of the herd. The first of these training sessions is scheduled for April 2005.

- In addition the DoE indicated to the Nunavut Development Corporation and the Coral Harbor HTO (July, 2004) that a commitment of \$60,000.00 towards a population estimate in June of 2005 would be made following the proposed 2005 commercial harvest.
- Actual survey costs are estimated to be \$88,000.00 and proposals to Agriculture Canada are pending

INFORMATION:

- Further scientific information such as herd composition studies (scheduled for April 2005 where sex ratios and calf recruitment can be estimated), and a population estimate (June 2005) must be undertaken before DOE can properly assess what impacts the combined events (both commercial and natural) of 2004 and 2005 have had on the Southampton Island caribou herd.
- New total allowable harvest (TAH) recommendations for Southampton Island caribou may be less than the basic needs levels (BNL) due to the combined impacts of commercial harvesting, weather, sex-selective harvesting, and possibly over-grazing.

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