

Porcupine Caribou Harvest Management Plan Annual Harvest Meeting 2016

Porcupine Caribou Management Board Recommendations to the Parties February 2016

A. PREAMBLE

In accordance with the Harvest Management Plan (HMP), the Porcupine Caribou Management Board (Board) held the sixth Annual Harvest Meeting (AHM) February 8 and 10, 2016 in Dawson, Yukon. The Board convened a meeting to gather input and deliberate on the harvest management recommendations for the Porcupine Caribou Herd (PCH).

This report presents the Board's recommendations and rationale to the Parties regarding the harvest management zone and associated management actions that should apply to the herd over the coming year. Also included are other related concerns raised during the meeting and the recommendations from the Board regarding those concerns.

B. RECOMMENDED HARVEST MANAGEMENT ZONE AND HARVEST MANAGEMENT ACTIONS

The Board recommends that the Porcupine Caribou Herd be considered in the Green Zone (above 115,000 caribou).

Consistent with the Green Zone harvest management actions (HMP, page 20), the Board recommends that:

- Harvest only the amount needed;
- Licensed hunters receive a maximum of two bull tags;
- Shooting will be accurate and wounded animals will be retrieved; and
- Parties will collect rigorous and verifiable harvest data, to be provided for the Annual Harvest Meeting.

C. RATIONALE FOR BOARD RECOMMENDATIONS

The HMP identifies a suite of indicators that the Board should consider in determining the status of the herd (see HMP, page 19). The following provides an overview of the available information used to support the Board's deliberations regarding the harvest management assessment, and determination of the Colour Zone, and the associated harvest management recommendations.

1. Harvest Management Assessment — Review of Indicators

1.1 Population Size and Trend

1.1.1 Population Size by Photocensus (survey): The primary consideration is the population estimate. A photocensus (survey) was successfully conducted in 2013 and found 197,228 (95% CI = 168,667 to 225,789). This is well above the threshold for the Green Zone. The photocensus was not possible in 2015 due to herd overlap with the Central Arctic Herd. The next photocensus (survey) is scheduled for summer 2016.

1.1.2 Estimated population based on computer program: We were unable to generate an estimate this year as harvest data was not available prior to the Annual Harvest Meeting.

1.1.3 Population trend: An increasing trend is fairly apparent from 2010 to 2013 when the population increased from 169,000 to 197,000.

1.2 Harvest

1.2.1 Total harvest: The Porcupine Caribou Technical Committee (PCTC) was able to estimate a total harvest for the herd in Canada with data submitted by the Parties; however, there is still some data missing. Based on the information provided by the Parties, Canadian harvest for 2014-15 was estimated by communities to be 753 caribou. No harvest data was available from Inuvik and Tuktoyatuk (Inuvialuit); however, IGC reported that Tuktoyktuk harvest was considered negligible and Inuvik Inuvialuit harvest occurred at a level comparable to Aklavik Inuvialuit. Vuntut Gwitch'in First Nation's data was a reported harvest also representing a minimum harvest.

This total estimated harvest is a decrease from the estimated 2,920 caribou harvested in the previous year. While there continue to be challenges in harvest data collection in some communities, overall improvements are being made in community harvest-reporting programs. The estimated Canadian harvest is less than 1% of the 2013 population estimate. Based on the information provided, it was felt current Canadian harvest is not a major concern.

1.2.2 The percentage of cows in the harvest: Results from harvest data reporting indicate harvesters continue to reduce cow harvest and are primarily selecting bulls. Cows made up 38% (286 cows), up from 17% (490 cows) of the estimated harvest in 2013-14. This increase is not considered a concern when the herd is in the Green zone.

1.2.3 Hunters' needs met: Arctic Borderlands Ecological Knowledge Co-op (ABEKC) data indicates only 39% of respondents range-wide met their needs in 2013-14. This is a significant decrease in this measure and this is below the five-year average of 58%. This result is likely the result of limited access to caribou.

1.3 Population dynamics

1.3.1 Adult cow survival: The PCTC reported that there was no estimate of adult survival in 2015. For 2011-12, it was reported that 87.9% of cows survived, which is higher than the 2003 to 2006 period (82.5%). The herd's population trend is sensitive to small changes in cow survival and our current monitoring program will detect only large changes. The PCTC is assessing how to monitor cow survival and make this indicator more useful for annual monitoring.

1.3.2 Calf birth rate and calf survival: No estimate of the calf birth rate or survival was available this year due to bad weather during the calving period. This rate will continue to be monitored and if consecutive years of low ratios are found, greater concern is warranted.

1.3.3 Peak of calving: As surveys were not possible in 2015, no date of peak calving is available.

1.3.4 Bull ratio: In 2010, the rut count results showed 57 bulls per 100 cows. Another rut count was conducted in 2012 but results were biased and unreliable. The survey was cancelled in 2013 due to PCH mixing with the Central Arctic Herd. The next survey is planned for fall of 2017.

1.4 Body Condition

1.4.1 Average backfat: No data were available for 2014-15 due to low harvest. In 2013-14, we had some of the highest reporting rates for this measure. Both males and females are reported, although sample size was very small for females (n=3). Male backfat decreased from the previous three years to 2.77 cm; however, this was still within the five-year average of 3.1 cm.

1.4.2 Hunter assessment: Few hunters participated in the caribou sampling initiative (CSI) program this year due to low harvest. In 2013-14, hunters reported that harvested caribou are generally in very good shape. The sample size continues to be low; therefore, harvester participation should continue to be encouraged.

1.4.3 Health: ABEKC data from 2014 indicate overall body condition was good in winter, spring and fall. However, the majority of respondents reported that caribou were in fair condition in the summer.

1.5 Habitat

1.5.1 Snow conditions: Snow depth in northern Yukon was above average in 2014-15. Recent data doesn't show any significant trends or large deviations from long-term averages. Snow depth was moderate where caribou overwintered in Alaska.

1.5.2 Major fires: No major fires were reported in the range in 2014. Mapped data from 2015 was not yet available; however, there were no large fires.

1.5.3 Weather and Climate: Based on ABEKC data, there was a significant increase in the percent of people interviewed that reported that there was “more snow than normal” in 2014. Fewer people reported icing events in the fall and winter of 2014 than average.

1.5.4 Human activity: No major projects occurred in 2014-15. The only major project to occur in the range in 2013-14 was the Northern Cross Yukon 3D Seismic program south of Eagle Plains. This represents a total footprint of 5.35 km², and linear disturbances of 2,124 km (seismic lines between 1.75 and five metres in width) and 228 km of access roads (three to five metres).

2. MANAGEMENT ACTIONS

The Board recommends management actions consistent with the Green Zone, as outlined in the HMP (page 20) as follows:

- Harvest only the amount needed;
- Licensed hunters receive a maximum of two bull tags;
- Shooting will be accurate and wounded animals will be retrieved; and
- Parties will collect rigorous and verifiable harvest data, to be provided for the Annual Harvest Meeting.

2.1 Harvest only the amount needed: In the Green Zone, Aboriginal harvest is not restricted. Cows and bulls may be harvested (HMP, page 13). Consistent with the HMP, the Board recommends no restrictions be placed on caribou harvesting by Aboriginal hunters.

Although cows may be taken under the recommended management actions, the Board continues to encourage a bull-dominated harvest where possible since harvesting bulls has less of an impact on the herd than harvesting cows (see HMP, page 24).

2.2 Licensed hunters receive a maximum of two bull tags: Management of licensed harvest is clearly laid out in the HMP. The Board, therefore, recommends no changes.

2.3 Shooting will be accurate and wounded animals will be retrieved: The Board recommends the continuation of hunter education and awareness programs conducted by the Parties as outlined as Essential Requirements of the Plan on pages 27 and 32 of the HMP. To this end, the Board intends to continue to work in a coordinating role with the Parties on communication and hunter education initiatives, including promoting the use of rifle scopes while hunting.

2.4 Parties will collect rigorous and verifiable harvest data, to be provided for the Annual Harvest Meeting: The Board was encouraged with the

significant progress in harvest data collection and reporting. Once again, all Parties submitted some harvest data to the Board. As collecting harvest data under the HMP is still a relatively new activity for some Parties, it is understandable that there will be challenges to overcome to ensure the data is rigorous, verifiable, analyzed and reported consistently. The Board will work with the Parties on training for harvest data program administrators to facilitate consistent collection and timely reporting using the current harvest-reporting database.

D. RECOMMENDATIONS REGARDING OTHER CONCERNS

1. Incorporate local hunter and traditional knowledge into process: The Board values both scientific and local hunter and traditional knowledge to inform its deliberations. The Board notes a lack of local hunter and traditional knowledge available for consideration during this process; therefore, user communities and appropriate Parties are urged to provide more local hunter and traditional knowledge for the Board to consider in its recommendations (see Appendix B to AHM Operating Procedures). The Board encourages Parties to use the suggested outline forwarded by the Board to provide local hunter and traditional knowledge to be considered at the AHM. The Board appreciates that some Parties have brought a small delegation of community members to the AHMs who provide traditional knowledge.

2. Encourage hunter participation in programs: Low hunter participation in some communities reduces confidence in harvest estimates and trend in caribou body condition. The Board recommends that Parties encourage their hunters to participate in harvest-data collection and body-condition monitoring programs.

3. Hunter education: Concerns were raised about hunter ethics and behaviours, including gutting caribou on the highway. The Board will continue to work with Parties to address these issues through appropriate hunter education and communications.