





# SEE TAB3A for a revised version of Appendix C

## Appendix C

### II. 1 to 1 Harvest Option

Rationale and administration of the 1:1 harvest system

#### Rationale:

During the public hearing process regarding the implementation of Nunavut's Polar Bear Co-Management Plan by the Nunavut Wildlife Management Board, many comments by Inuit organizations were brought forward that favoured a new harvest approach. For years, communities have expressed a desire to adopt a harvest regimen that does not penalize communities as sharply as the flexible quota system when females are overharvested, and that allows harvesting at an equal sex ratio. In response, the **1 male for every 1 female harvest option (or 1:1)** was discussed and recommended by the Department of Environment.

Each polar bear subpopulation within Nunavut has a set Total Allowable Harvest (TAH), which is divided among the communities that harvest from the subpopulation, by the appropriate Regional Wildlife Organization(s), as a base allocation. Each harvest season, communities are assigned a harvest quota based on the TAH allocation and any overharvests from previous seasons. Overharvests in one season result in a reduced community quota the following season, unless the community has accumulated sufficient credits to compensate for the overharvest. When a community harvests below their harvest quota they can accumulate sex specific credits to be used in future harvest seasons or shared with other communities.

The updated harvest sex ratio, allowing one female bear harvested for every male bear harvested (1:1 sex ratio) does not constrain communities to adhere to the exact 1:1 sex ratio. Rather, it refers to the maximum proportion of female polar bears in the harvest that is allowed under this system. Specifically, a harvest sex ratio of up to 50% females, per community per harvest season, is allowed without entering into an overharvest situation. Males can be harvested up to the limit of the annual recommended quota. Recommended quota allocations can never exceed a 50% female proportion, even when reductions in quotas occur.

An overharvest situation occurs when:

- 1) the female proportion in the annual harvest is greater than 50% of the recommended quota;
- 2) the male proportion in the annual harvest is in excess of the total recommended quota; or

- 3) a combination of the male and female harvest exceeds the total recommended quota.

An overharvest (males and females combined) over the TAH, or when the number of females taken is over 50%, results in a reduction of the quota the following year either by the number of bears over the TAH or by the number of females that exceed 50% of the recommended quota, whichever is more.

The implementation of the 1:1 harvest system is retroactive and begins with the 2018/2019 harvest season (July 1, 2018). The existing total community annual base allocation (TAH) was divided by two in order to determine the 1:1 sex ratio for each community, representing the 1:1 base allocation for each community for 2018/2019. This process increases the female proportion of the harvest and reduces the male proportion. The annual base allocation will only change when there is a new subpopulation estimate and/or a new determination of the TAH.

If the base allocation is an odd number then the TAH will always have one more male than females in order to implement a protective measure for females.

Annual recommended quotas are calculated using the previous year's harvest data.

Recommended quotas will be calculated based on the sections below.

### **HARVESTING MORTALITY**

1. All human-caused mortality to polar bears will count towards the annual recommended quota of the nearest community.
2. A naturally abandoned cub will be counted as a natural death and not counted against the TAH.
3. Any bear that is found near death, caused by starvation or injury, provided that the injury is not a result of human activity such as hunting or trapping, can be killed as a humane action where the Conservation Officer (CO) will certify that the bear was near death. After certification by the CO the humane kill (euthanization) will not be counted against the TAH.
4. When a Nunavut beneficiary kills a bear, the tag will come from that person's home community if that community has a TAH allocation for the population from which the bear was harvested. Otherwise, the nearest community must provide the tag.
5. Harvesting of a family group, or members of a family group, is illegal in Nunavut; however, there are circumstances where a family group or



4. Subpopulation credits accumulate until a new subpopulation inventory with final abundance estimate results, and in some circumstances, a completed and finalized harvest risk analysis. In those circumstances, all credits are set back to zero because the new TAH is based on the total new population estimate, which incorporates the unrealized credits as living bears that have added to the population, and the entire sustainable take is allocated to the new TAH. Credits are accumulated as described in section 8 after the new TAH is implemented, and during any harvest season.
5. Credits can accumulate for males and females.
6. Credits accumulate for unused portions of the recommended quota or TAH (e.g. a total harvest of 0 for communities with a recommended quota of 0 results in the accumulation of male and female credits respective of the community TAH).
7. Negative credits are possible and represent the number of bears that have been removed from the subpopulation in excess of a community's recommended quota.
8. Credits can be exchanged between communities within the same subpopulation.
  - a) Communities that harvest from the same subpopulation can exchange credits where needed in order to restore their full recommended quota rather than facing a reduction when no community credits are available to cover an overharvest. The existing process for credit exchange between communities will be maintained.
  - b) Requests by communities to use credits to increase their annual recommended quota shall be made to and approved by the responsible RWO. The GN will verify and confirm the number of available credits.

## RECOMMENDED QUOTA ADJUSTMENTS

Reductions caused by an overharvest occur where no credits are available to cover the overharvest. Reductions in the recommended quota and credit administration occur as follows:

