

Draft National Polar Bear Conservation Strategy for Canada

February 2011

1. Summary:

The central goal of the National Polar Bear Conservation Strategy is to contribute to the long-term maintenance of subpopulations of polar bear in Canada by taking into account all of the threats that face the species, and to increase the level of coordination between jurisdictions for the management of polar bear.

The threats and challenges associated with polar bear conservation are complex and wide-ranging. To address these in a meaningful manner, this Strategy is divided into two main parts: first, an over-arching strategy; and second, a series of annexes that provide an overview of how key conservation threats and challenges will be managed.

2. Background:

The polar bear (*Ursus maritimus*), *nanuq* in Inuktitut, has a special significance for northern Aboriginal people in Canada who have been harvesting the species for thousands of years. The polar bear is a top predator in the Arctic marine environment, sharing this role with humans, and it has played a key role in Inuit cosmology and symbolism. The polar bear, like all the wildlife harvested in the North, is considered a renewable resource that provides nourishment and clothing, and that contributes to a deep respect for the land that is woven throughout their culture. In the spirit of this relationship, the role of Aboriginal people in the management of polar bears has also evolved over time, and with changing pressures.

Prior to European arrival, Aboriginal peoples hunted the polar bear for subsistence purposes, with up to 200kg of meat being provided from a single large animal, and with clothes from the skins providing protection from the extreme low temperatures. By the 1940's, interest in the hides of polar bears increased given expansion of the Hudson's Bay Company fur trade operations. At this point, the hunting of polar bears became an important economic by-product of the food hunt, and thereby became one of few traditional resources that provided reliable money to hunters and communities.

Canada has a special obligation with respect to the conservation of polar bear because an estimated two-thirds of the global population occurs in subpopulations that are within, or shared with, Canada. Furthermore, Canada is signatory to the 1973 *Agreement on the Conservation of Polar Bears* (Appendix 1) and Canada's *Letter of Interpretation* upon ratification of the Agreement (Appendix 2). The 1973 international Agreement stipulates that polar bear will be managed "... in accordance with sound conservation practices...". A cooperative approach to research and management is necessary because nine of Canada's thirteen polar bear

subpopulations (Annex 2, Figure 1) are shared between domestic and/or international jurisdictions.

Canada's commitment to a cooperative approach to polar bear research and management began over 40 years ago with the establishment of the Federal/Provincial/Territorial Polar Bear Administrative Committee (PBAC) and the Polar Bear Technical Committee (PBTC). These bodies represent a successful cooperative effort for the management and monitoring of polar bear, respectively, and have been instrumental in facilitating collaborative research and coordinated conservation initiatives. To further support the efforts of these bodies, as well as those of jurisdictions, this Strategy will serve as guidelines for the conservation of polar bear in Canada by all jurisdictions and co-management partners through workplans developed by the PBAC and the PBTC.

Management authority for polar bear lies largely with provincial and territorial governments, in conjunction with wildlife co-management boards established under land claims agreements in much of the species' range. This Strategy does not supersede provisions identified under domestic laws, land claims agreements, and international obligations, but jurisdictional agreement with the advice contained within this Strategy will strengthen overall coordination of conservation actions for polar bear in Canada.

3. Status and Conservation in Canada:

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC), established in 1977, is the independent body responsible for identifying and assessing species considered to be at risk in Canada. COSEWIC uses the best available information, including science, Aboriginal Traditional Knowledge and community knowledge. The assessments made by COSEWIC are the basis for consideration of legal listing under the federal *Species at Risk Act* (SARA).

Polar bear were originally designated as Not at Risk by COSEWIC in 1986. This was changed to a designation of Special Concern in 1991, and this conservation status was reviewed and confirmed in 1999, 2002 and 2008. Consultations concerning listing the polar bear as a species of Special Concern under SARA are underway. As a legislated requirement, COSEWIC reviews species assessments at least every 10 years.

Assessments by the General Status of Species in Canada (a program that operates under the auspices of the Canadian Endangered Species Conservation Council, created in 1997 under the *Accord for the Protection of Species at Risk and Framework for the Conservation of Species at Risk in Canada*) are completed every five years. Assessments done under the General Status framework in 2000, 2005 and 2010 all designated the polar bear as a Sensitive species. In addition, the PBTC assesses the status of polar bear subpopulations on an annual basis.

Provinces and territories have a variety of processes and legislation for conserving species at risk.

Province/Territory	Legislation	Designation	Effective Date
Newfoundland & Labrador	<i>Endangered Species Act</i>	Vulnerable	2002
Manitoba	<i>Endangered Species Act</i>	Threatened	2008
Ontario	<i>Endangered Species Act, 2007</i>	Threatened*	2009
Québec	<i>Loi sur les Espèces Menacées ou Vulnérable</i>	Vulnérable**	2009
Northwest Territories	<i>Species At (NWT) Risk</i>	<i>No listing***</i>	-
Nunavut	<i>Nunavut Wildlife Act</i>	<i>No listing</i>	-
Yukon	Yukon Wildlife Act	<i>No listing</i>	-

* = up-listed from Special Concern in 2009

** = equivalent to Special Concern under SARA

*** = Assessment expected in October 2012

The Federal/Provincial/Territorial systems provide for flexibility and create allowances for attention to be focused where it is most needed.

4. Objectives:

The purpose of the Strategy is to confirm commitment from the jurisdictions regarding polar bear management and conservation, and to ensure adequate coordination of actions across jurisdictions within Canada. By doing this, the Strategy will provide the framework to accomplish the following objectives:

- 4.1 Promote actions towards ensuring that polar bear subpopulations, both within Canada and shared with other countries, remain healthy and abundant in perpetuity.
- 4.2 Minimize threats to polar bear and their habitat resulting from human activities.
- 4.3 Ensure that best practice standards for polar bear management and research are adopted and respected, including the continued development of non-invasive methodologies, and the incorporation of Aboriginal traditional knowledge.

5. Threats to Polar Bear Conservation:

The following is a list of current threats facing polar bear. It is recognized that the relative impact of these threats on polar bear subpopulations may change, and that new threats may be identified in the future.

5.1 Climate change: Environmental change is the most critical long-term threat to polar bear and their habitat. Projected warming over much of the range and the associated reductions in the extent and thickness of multi-year sea ice, and the duration and thickness of annual sea ice will have both direct and indirect effects on polar bear. Direct effects include loss of habitat (i.e. extent and composition of sea ice), while indirect effects include ecosystem level changes on availability in prey species such as seal, separation from terrestrial denning areas and refugia, contaminant transfer, and expansion of human activities. Climate change will be an underlying driver of many of the other threats listed below. As such, there is a need for focused research to understand the ecological conditions that are important to polar bear, and that inform conservation and management actions. Effects of climate change have been observed in some subpopulations (e.g. Southern Beaufort Sea,), and others are expected in coming decades.

5.2 Contaminants: Polar bear are exposed to environmental contaminants including both organic (e.g., organochlorines and brominated flame retardants) and inorganic (e.g., mercury) substances that have effects at both the individual and possibly at the population level. Additional contaminants from marine spills could seriously impact local populations. Emerging contaminants are also a concern. Environmental change may alter contaminant pathways. For example, transport and delivery of contaminants to Arctic ecosystems are likely to be enhanced as contaminants that are currently sequestered in glaciers and permafrost are released. Although the effects of pollutants on polar bear are only partially understood, recent studies suggest that contaminants are likely to have physiological effects, including altered hormone levels, as well as immune system and reproductive effects.

5.3 Resource industry activities: Exploration and development for resource extraction (e.g., metals, minerals, oil and gas) has the potential for direct mortality and disturbance, including habitat alteration and disturbance of bears in maternity dens. Environmental change will likely provide greater industrial access to resources, and together with an increase in industrial activities, the frequency of human-bear conflicts may increase (see point 5.6 below).

5.4 Shipping: Disturbance and the potential for shipping accidents (e.g., spills) associated with increasing levels of shipping activity in the Arctic, including community re-supply, industrial shipping and tourism, present increasing threats to polar bear. Environmental change will likely increase the duration of shipping seasons and open up additional, previously unnavigable, routes.

5.5 Inappropriate Harvest Level: In most jurisdictions, and in the majority of cases in Canada, harvest is well-managed under a quota system. In Québec, there is no formal quota system, on account of the James Bay and Northern Québec Agreement (JBNQA). However, Aboriginal nations of Nunavik are responsible for the long-term preservation of resources on the land, and the JBNQA includes mechanisms toward the conservation of polar bear in this province. Coordinated harvest management, including the assignment of Total Allowable Harvest levels for each subpopulation (or acceptable equivalent mechanisms in Québec), should reduce or remove the threat of unsustainable harvest. In situations where harvest does

not permit the ongoing presence of polar bear, coordinated harvest management between jurisdictions needs to be strengthened.

5.6 Human-bear conflicts: Increased interaction between humans and polar bear is already occurring in northern communities; further human-bear conflicts are likely to arise in the future as tourism and other anthropogenic activities increase and sea ice continues to change. Human-bear conflicts may result in the destruction of property, danger to people and danger to bears due to human-caused harassment, or mortality in defense of life or property.

6. Challenges to Polar Bear Conservation:

6.1 Broad nature of threats: There are a variety of challenges to polar bear conservation. In some cases, action to address threats goes beyond polar bear and their habitats and will require national and international cooperation by players beyond those traditionally involved in polar bear management. For example, global action is essential to reduce greenhouse gases in order to address climate change. Similarly, contaminant emissions, shipping and industrial activities are intertwined with global economic markets and involve a variety of international players.

6.2 Difficulty in obtaining information: Effectiveness of polar bear conservation initiatives can only be assessed when there is reliable scientific, traditional and local knowledge on which to determine status, threats, trends, and identify important habitat. Limited capacity, limited funding or inconsistent support for certain research activities all pose challenges to polar bear conservation.

6.3 Habitat conservation: The primary habitat for polar bear is sea ice, because it provides the platform from which bears hunt, travel, mate, and, in some areas, den. Loss of sea ice is already impacting some polar bear subpopulations (e.g., Southern Beaufort Sea), and this trend is expected to continue in coming years. In addition, throughout many parts of the polar bear range, terrestrial habitat is of critical importance for maternal denning, or as a summer refuge and migration corridor. However, while some important habitat areas receive varying degrees of protection as national, provincial or territorial parks or wildlife areas, the vast majority of polar bear habitat currently receives no legal protection, although various initiatives are currently being explored by jurisdictions.

6.4 Interaction of threats: The identified threats cannot be considered as impacting polar bear in isolation from each other, and are not mutually exclusive. For example, in subpopulations where climate-induced habitat loss is causing declines, the concept of a sustainable harvest no longer applies (as *any* harvest would contribute to further declines). As such, one of the biggest challenges will be to manage the harvest and other human influences (e.g. industrial activities, shipping) in declining populations.

6.5 Allocation of harvest: Given a complex jurisdictional environment, challenges may result to consensus building among stakeholders regarding the allocation of Total Allowable Harvest between jurisdictions. This may be the result of differences of opinion and communication challenges in a Northern environment.

7. Guiding Principles:

The following principles guide conservation and management decisions, within their respective legislative frameworks.

7.1 The goal of conserving polar bear for future generations is of paramount importance and will underlie decision making processes, given that this species is of significant social and cultural value, globally, to all Canadians, and particularly to northern Aboriginal peoples.

7.2 Harvesting of polar bear is a vital cultural activity for many northern Aboriginal peoples. Ensuring that the harvest of polar bear continues in a coordinated manner that follows conservation principles is an integral component of the collective Canadian management system.

7.3 Polar bear will be managed at the subpopulation level, and will be assessed regularly to ensure that information is available for timely conservation, and towards long-term sustainability.

7.4 The best available scientific data, along with local and traditional knowledge, will be used to inform conservation and management decisions and actions.

7.5 Conservation and management decisions and actions will take global climate change into account.

7.6 Where there are threats of serious or irreparable damage to polar bear subpopulations, lack of certainty will not be a reason for postponing reasonable or precautionary conservation measures.

7.7 Management frameworks within jurisdictions will be respected; these include co-management regimes, federal, provincial and territorial legislation, land claim agreements, and inter-jurisdictional agreements.

7.8 Research and management of shared subpopulations is a joint responsibility, with accommodation for consultation requirements and legislative processes for the partnering jurisdictions, co-management boards, and agencies,.

7.9 Management actions will be developed and implemented with appropriate collaboration and consultation with Aboriginal governments and communities. These will be based on effective conservation practices and will reflect any relevant Aboriginal land claim or Aboriginal treaty rights.

8. Framework:

8.1 The PBAC is recognized as the advisory body concerning polar bear conservation on matters requiring national coordination in Canada. The PBAC Terms of Reference are included in this document as Appendix 3. As per the PBAC Terms of Reference, the PBTC will provide technical advice to the PBAC. The PBTC Terms of Reference are included in this document as Appendix 4.

8.2 For shared populations, Memoranda of Understanding (MOUs) or user-to-user agreements will be developed in accordance with land claim agreements and respective of jurisdictional protocols or inter-jurisdictional agreements. Such agreements will act as mechanisms to reach concurrence on management objectives, Total Allowable Harvest and allocation. Some such agreements are already in place (e.g. Inuvialuit-Inupiat Agreement for the shared Southern Beaufort Sea subpopulation – 1988; MOU between Greenland, Nunavut and Canada for the shared Kane Basin and Baffin Bay subpopulations - 2009). Jurisdictions will work together through MOUs or equivalents.

8.3 Subpopulations are delineated based on the best available scientific and traditional knowledge related to the movements and genetics of polar bear, as well as management considerations (Annex 2, Figure 1). The term “subpopulation”, as used in this document, is consistent with its use by the PBTC, the International Union for the Conservation of Nature (IUCN)/Species Survival Commission (SSC) Polar Bear Specialist Group (PBSG), and the international community. All jurisdictions affected by subpopulation changes will be involved in the decision process related to boundary changes (Annex 3). In the case of disputes, the matter will be forwarded to the PBAC for advice. Environment Canada may act as a facilitator.

8.4 To assess both the potential risk of given threats to polar bear and the effectiveness of any conservation actions, monitoring data are required. Repeated, long-term monitoring of specific subpopulations is required for detection and understanding of changes in status of polar bear. Jurisdictions and co-management boards, where appropriate, will coordinate efforts to ensure that population inventories of each subpopulation are completed, and will commit to conducting the necessary monitoring. Timelines for inventories and other subpopulation monitoring will take changing threats to polar bear into account, and will be completed on a priority basis, as informed by the PBAC and under advice from the PBTC. This monitoring will be considered an integral part of Canada’s subpopulation inventory cycle.

8.5 The jurisdictions will make every reasonable effort to agree on the interpretation and application of this Strategy. Differences of opinion in the interpretation and application of the Strategy will be resolved, to the extent practicable, at a working level, through reasonable efforts taken in good faith. However, if the difference is not resolved, the relevant jurisdictions may refer the matter to the PBAC for advice. Advice from the PBAC is not binding on the parties.

8.6 Jurisdictions will continue to improve methods of collecting scientific data that minimize the impacts on polar bear and enhance incorporation of traditional knowledge into management decisions.

8.7 Appropriate action will be taken to protect polar bear habitat with special attention given to denning and feeding sites.

9. Implementation:

9.1 Although climate change is the most critical threat facing polar bear and their habitat, mitigation of climate change is beyond the scope of a polar bear conservation strategy. Large-scale climate change actions will instead be pursued through the appropriate regional, national and international fora. Of importance for jurisdictions, is to ensure that polar bear related issues are being addressed at such fora, and that effects of climate change on polar bear are acknowledged and addressed. For the long-term persistence of polar bear, action on climate change is required.

Annexes will focus on the changing threats and challenges to polar bear conservation that can be managed at a national or sub-national level. The format of annexes will be an overview of current practices, current status and rationale, and paths forward. Four annexes have been developed to date. Additional annexes will be developed as soon as possible.

9.1 Specific workplans guiding conservation actions – as outlined in the annexes - will be developed by the PBTC, reviewed by the PBAC, and will be provided to the jurisdictions.

9.2 Jurisdictions will undertake the necessary monitoring and science activities needed for polar bear conservation.

9.3 The implementation of this Strategy is subject to the availability of funding within each jurisdiction.

9.4 This Strategy, including annexes, will remain in effect for five years. After five years the Strategy will be reviewed by the PBAC, and will be amended as necessary. In the absence of PBAC-directed changes, the Strategy will remain in effect.

9.5 This Strategy can be amended at any time by agreement in writing of all PBAC members, on behalf of all signatories.

9.6 This Strategy creates no binding legal obligations on the parties. It is meant as a statement of the intent of the parties to co-operate and is not enforceable in Canadian law.

10. List of Annexes:

10.1 Annex 1: Monitoring: polar bear and their habitat

10.2 Annex 2: Harvest Management

10.3 Annex 3: Subpopulation Boundary Definition and Process for Change

10.4 Annex 4: Glossary of Terms

11. List of Appendices:

11.1 Appendix 1: Agreement on the Conservation of Polar Bears

11.2 Appendix 2: Canada's letter of interpretation of the Agreement

11.3 Appendix 3: Terms of Reference for the Polar Bear Administrative Committee

11.4 Appendix 4: Terms of Reference for the Polar Bear Technical Committee

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Signature Blocks:

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ANNEX 1.

MONITORING: POLAR BEAR AND THEIR HABITAT

1. Overview:

The objective of polar bear population and habitat monitoring is to obtain the key information needed to assess the population status of polar bear within Canadian subpopulations.

2. Current practices:

Current subpopulation inventories provide quantitative estimates of population sizes and demographic parameters as well as other information used in population viability analyses.

Monitoring within subpopulations is conducted by provincial and territorial governments because they have the primary responsibility for polar bear management, including harvest. In some subpopulations, the federal government (Environment Canada) carries out inventory monitoring in cooperation with provincial and territorial governments.

Research to address broader ecological questions that apply across polar bear populations (e.g., climate change effects, genetic studies, movement patterns, contaminants) are undertaken by various provincial, territorial, and federal governments, as well as academic researchers and other specialists.

In several jurisdictions, particularly those in which co-management processes have been established, traditional and user knowledge is beginning to be formally collected by user groups, co-management boards and jurisdictional governments, and incorporated into management decision making.

3. Current status and rationale:

The frequency of each subpopulation inventory has largely been determined independently by each jurisdiction/agency. While the various jurisdictions have been working towards a unified approach, there is currently not consistent, integrated approach to either the timing or financing of monitoring studies across the various jurisdictions in Canada.

The types of information and samples collected in conjunction with monitoring inventories can vary among studies depending upon the specific questions of interest in each study. Comparisons both within and across populations may be improved by the adoption of standardized sampling and data collection protocols.

The incorporation of traditional and user knowledge into management decisions would be improved by consistent approaches to the collection and documentation of such knowledge.

While studies are ongoing, there is currently limited information on sea ice, habitat, and other environmental characteristics with which to build adequate models at a polar bear-relevant scale in Canada.

4. Path forward: Co-coordinated monitoring:

While progress has been made towards developing coordinated monitoring through Memoranda of Understanding and user-to-user agreements, continued improvement is necessary. For example, coordinated monitoring will provide better population estimates for the 13 polar bear subpopulations in Canada.

The PBTC will recommend the frequency of monitoring for each subpopulation, taking into account current population size, population status (i.e. rate of population change), current and future threats, and acknowledging that these variables will change over time. For shared subpopulations, monitoring actions will be done at the inter-jurisdictional level and will benefit from national coordination and planning.

The following principles will provide for a coordinated timeline, monitoring and sampling protocols for baseline monitoring, using both scientific and traditional user knowledge.

- 1) Various, systematic approaches can be used to inventory the subpopulations. Monitoring surveys will be done using a risk-based approach (i.e. high priority subpopulations will be surveyed more frequently than low priority subpopulations), as advised by the PBTC, reviewed by the PBAC and approved by the jurisdictions.
- 2) As part of monitoring inventories, jurisdictions will collect information in a standardized way that will allow for comparisons within and among subpopulations. The standard methods will be developed by the PBTC, reviewed by the PBAC and will be provided to the jurisdictions.
- 3) From all human-caused bear mortalities, jurisdictions will collect biological samples and information that will be reported annually to the PBTC. The PBTC will develop recommendations regarding harvest data collection including a list of minimum requirements for population monitoring and assessment.
- 4) Jurisdictions and co-management partners will encourage the collection and documentation of relevant traditional and user knowledge about polar bear and their environment to inform management decisions. Such information could include:
 - a.* Location and dates of polar bear sightings
 - b.* Observations of body condition, and sex and age class of bears
 - c.* Location of denning sites and other important bear areas
 - d.* Aspects of polar bear behaviour
 - e.* Polar bear – environment interactions (e.g. information about seals or sea ice)
 - f.* Historical and traditional perspectives on each of these information sources
 - g.* Cultural perspectives and traditional values for managing polar bear

h. Other relevant information.

- 5) Annually, jurisdictions will provide information, as suggested by the PBTC, for each subpopulation to the PBTC in order to provide an updated assessment of population status. The PBTC will develop the protocol for information exchange, to be reviewed by the PBAC and provided to the jurisdictions.
- 6) Important denning habitat will be identified, and measures will be taken to work with the appropriate authorities to protect or manage such areas.
- 7) Methods of collecting data that minimize impacts on polar bear, while providing the information that is required to compare and assess subpopulation status, will continue to be developed.
- 8) Information on relevant environmental factors or environmental impacts that have caused (or could cause) changes in subpopulation status over time will be collected.
- 9) All harvest and bear capture data will be archived by Canada through the PBTC. Recognizing intellectual property rights and Access to Information legislation, data will be protected and ownership respected.

ANNEX 2.

HARVEST MANAGEMENT

1. Overview

The objective of harvest management is to ensure that harvest does not unduly impact subpopulations of polar bear in Canada, and that they remain healthy and abundant in perpetuity.

2. Current practices:

The management of polar bear is the responsibility of the provinces/territories, co-management boards, and Aboriginal communities, guided in many regions by various land claims agreements. Harvest occurs in Newfoundland and Labrador, the Northwest Territories, Nunavut, Ontario, Québec, and the Yukon. No harvest occurs in Manitoba.

In jurisdictions with a harvest of polar bear, the harvest is largely limited to Aboriginal people in accordance with the 1973 *Agreement on the Conservation of Polar Bears* (Appendix 1) and Canada's *Letter of Interpretation* upon ratification of the *Agreement* (Appendix 2) and land claim agreements. In some jurisdictions, Aboriginal people may choose to allocate their hunting tags to non-resident hunters (guided by Aboriginal people on foot or by dog teams).

The harvest of polar bear that occurs in Newfoundland and Labrador, the Northwest Territories, Nunavut, and the Yukon is controlled through a quota system (Total Allowable Harvest, TAH). In Ontario, only First Nations hunters who are Treaty 9 members residing along the Hudson Bay and James Bay coast can legally harvest polar bear. There is a permissible kill of no more than 30 bears per year that is controlled by restricting the annual sale of hides under a trapper's licence to those hides with an official seal attached by the Ontario Ministry of Natural Resources. In Québec, the James Bay and Northern Québec Agreement (1975) restricts the taking of polar bear to Aboriginal peoples and ensures that they have exclusive access to a Guaranteed Harvest Level (GHL) of 62 bears per year, subject to the principles of conservation, before any sport or commercial activity would be permitted.

In jurisdictions with quotas, the TAH levels are set according to jurisdictional processes; in most instances these procedures are laid out in relevant land claims agreements. A general summary is provided below:

- In **Nunavut**, the TAH levels for the Nunavut Settlement Area are set by the Nunavut Wildlife Management Board (NWMB), subject to the final acceptance of the Minister of Environment (Nunavut). Hunting tags are allocated by the Regional Wildlife Organizations.
 - The NWMB considers both scientific information and Aboriginal Traditional Knowledge. This process is the same for subpopulations exclusively within Nunavut (GB, LS, MC, NW) and for the Nunavut portions of the shared subpopulations (BB, DS, FB, KB, NB, SH, WH, VM; Figure 1).

- In the Inuvialuit Settlement Region (**NWT/Yukon**) TAH is determined by the Wildlife Management Advisory Council Northwest Territories [WMAC(NWT)] and the Wildlife Management Advisory Council North Slope [WMAC (NS)], subject to final acceptance of the Government of NWT and the Yukon. Hunting tags are allocated by the Inuvialuit Game Council. All harvest of polar bear within the Yukon and the Northwest Territories occurs in the Inuvialuit Settlement Region.
 - For SB (shared with the Alaska), the WMAC (NWT) and WMAC (NS) consider TAH recommendations developed through the Inuvialuit-Inupiat Agreement. The distribution of tags between Canada and Alaska is achieved through the Inuvialuit-Inupiat Agreement.
 - For NB and VM (shared with Nunavut), the WMAC (NWT) considers TAH recommendations with input from the Inuvialuit-Kitikmeot agreement.
- In **Newfoundland and Labrador**, the provincial Wildlife Act and regulations and the Labrador Inuit Land Claims Agreement provides the legislative framework for polar bear management. Within this framework, the Government of Newfoundland and Labrador (GNL) is responsible for the management of polar bears within the Province. Within the Labrador Inuit Settlement Area the Torngat Wildlife and Plants Co-management Board (TWPCB), in consultation with the Nunatsiavut Government, establishes, modifies and eliminates the TAH for polar bears. This decision of the TWPCB is subject to disallowance or variance by the provincial Minister. Pursuant to provincial legislation and regulations and the annual Polar Bear Hunting Order, the Province issues licenses, establishes the final TAH, seasons and management areas. Within the Labrador Inuit Settlement Area Inuit have the exclusive right to harvest the TAH and the Nunatsiavut Government is responsible for the allocation of licenses.
 - DS is shared with Nunavut, Québec, and Greenland.
- In **Québec**, harvest is allocated exclusively to the Nunavik Inuit, Crees and Naskapis in respect of the James Bay and Northern Québec Agreement (JBNQA), which guarantees an annual harvest level of 62 bears. Harvest in Québec is subsistence-based, and Nunavik Aboriginal communities are obligated, under the JBNQA, to ensure the long-term preservation of resources on the land. Co-management between the Québec Government, Environment Canada and Aboriginal nations is realized under the authority of the Joint Committee on Hunting, Fishing and Trapping. Additionally, the Nunavik Marine Region Wildlife Board is responsible, through co-management with appropriate jurisdictions, for polar bear management in the offshore area immediately surrounding Québec (as described in the Nunavik Inuit Land Claims Agreement).

The identification of sustainable harvest levels relates to target population sizes. For most subpopulations, target population sizes correspond to the scientific estimates of the subpopulation size. In Nunavut, the target population sizes are identified in a series of MOUs between Nunavut communities sharing a given subpopulation. In some instances, the target population has been adjusted based on traditional knowledge and modeling.

Most jurisdictions have protection for females with cubs, bears in dens, and a 2:1 sex-bias in harvesting such that a higher proportion of the harvest is comprised of males.

Jurisdictions report all human-caused mortalities annually to the PBTC. The PBTC uses this information to provide the PBAC with an annual status report for all Canadian subpopulations.

In several jurisdictions, including Nunavut and the Northwest Territories, hunters are required to provide selected information and samples from harvested bears.

3. Current status and rationale:

Although many jurisdictions already have relatively comprehensive harvest management systems, gaps currently remain. In some instances these gaps are directly linked to different provisions identified in specific land claims agreements. These gaps include a lack of formal processes for engaging jurisdictions in harvest management decisions concerning shared subpopulations, different jurisdictional processes for determining TAH and target population sizes, a lack of coordinated timelines for updating TAH, apparent incompatibilities between the systems set up in various land claim agreements, and an absence of dispute resolution mechanisms, particularly for shared subpopulations.

4. Path forward: co-coordinated harvest management:

This Strategy does not supersede the provisions identified under domestic legislation, various land claims agreements, and international obligations. However, adherence to advice contained within this Strategy will strengthen the overall conservation of polar bear.

Some jurisdictions are developing inter-jurisdictional agreements that will provide further details concerning the formal processes for engaging jurisdictions which share subpopulations, including the setting of target population numbers, and the determination and allocation of TAH.

In the event of a dispute concerning a conservation concern, point 8.5 in the “Framework” of the Strategy will apply.

The following principles will improve overall coordination of harvest management in Canada by describing a consistent process and timeline for the determination of TAH.

- 1) Management objectives, and target population sizes specific to each subpopulation will be identified by the relevant jurisdictional authorities according to established processes, including land claim agreement requirements, and taking into account all known threats to subpopulations.
- 2) All human-caused mortality (i.e., harvest, accidental, illegal, and defense of life or property kills) should be monitored and accounted for in population management actions.

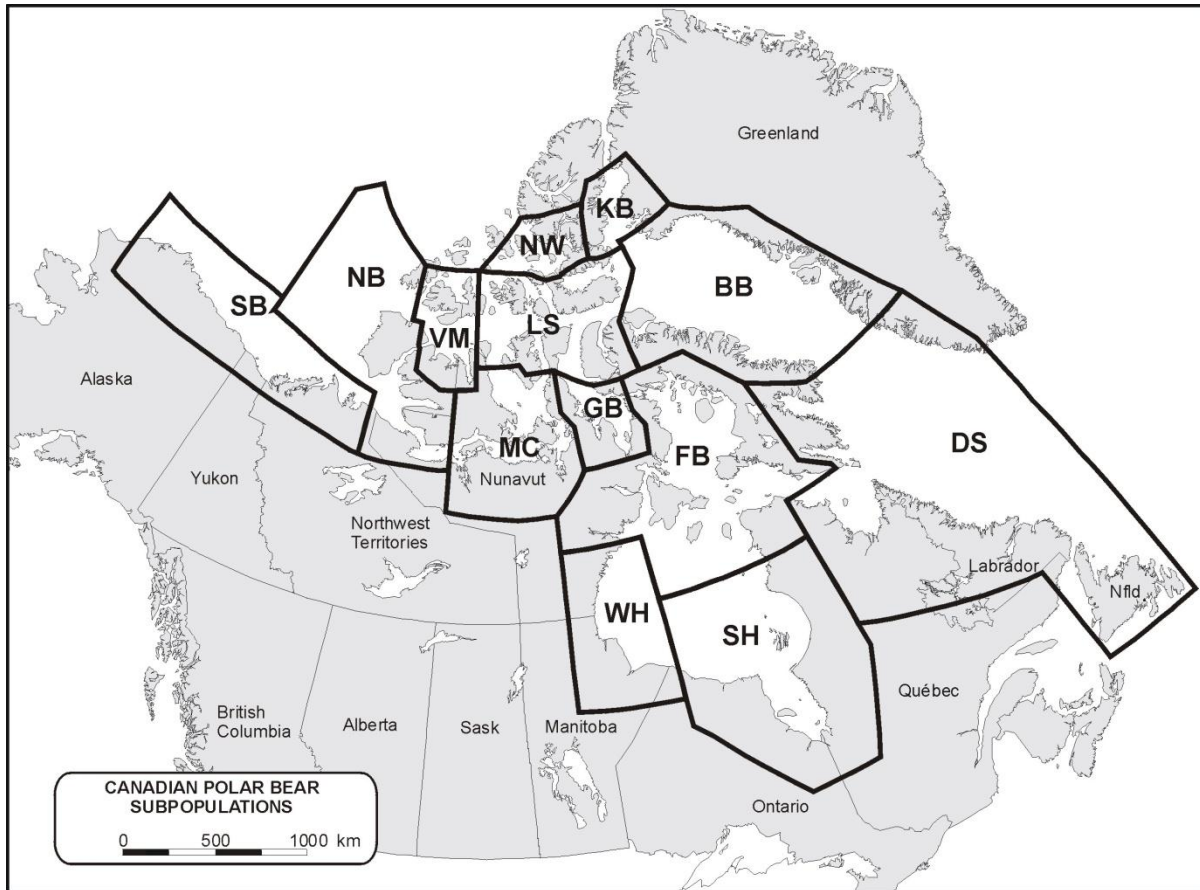
- 3) The Acceptable Annual Harvest Rate of both males and females will be identified and allocated between the jurisdictions that share the subpopulation. This will be done in such a manner that the sum of the annual human-caused mortality for all jurisdictions does not exceed the Acceptable Annual Harvest Rate, as established in accordance with processes set up by the appropriate jurisdictions.
- 4) In the case of subpopulations shared with jurisdictions outside of Canada, international agreements or Memoranda of Understanding (MOUs) will be pursued. In the absence of an international agreement or MOU, the Canadian jurisdictions in question will adhere to the above practices as if an agreement or MOU were in place.
- 5) Cubs, and females with cubs that are occupying or constructing a den, or any bear that is part of a family group in general, shall be protected from harvesting unless otherwise authorized by the relevant authorities within the jurisdiction, as appropriate.

Schedule A: Annual Harvest Rate

The following recommendations identify a consistent protocol for developing an Acceptable Annual Harvest Rate to be used by jurisdictions and co-management partners, and considering processes established by the appropriate jurisdictions, where applicable.

1. The total Acceptable Annual Harvest Rate will be based on population sizes and management goals, using the best available information (western science and Aboriginal Traditional Knowledge) and on monitoring information.
2. Recommendations on the Acceptable Annual Harvest Rate for each of Canada's 13 subpopulations will be identified and consolidated annually at the PBTC meeting based on the best available information and as described in Canada's *Letter of Interpretation* (Appendix 2).
3. The recommendations on Acceptable Annual Harvest Rates will consider environmental impacts, environmental change, and the risks posed by the uncertainty of the demographic information.
4. The consolidated recommendations on Acceptable Annual Harvest Rate, the criteria for these recommendations and a comprehensive population status table will be provided annually to the PBAC by the PBTC for use by jurisdictions and co-management partners.

Figure 1. Map of Canadian polar bear subpopulations. Abbreviations are as follows: BB - Baffin Bay; DS - Davis Strait; FB - Foxe Basin; GB - Gulf of Boothia; KB - Kane Basin; LS - Lancaster Sound; MC - M'Clintock Channel; NB - Northern Beaufort Sea; NW - Norwegian Bay; SB - Southern Beaufort Sea; SH - Southern Hudson Bay; WH - Western Hudson Bay.



ANNEX 3.

SUBPOPULATION BOUNDARY DEFINITION AND PROCESS FOR CHANGE

1. Overview

The objective of delineating polar bear subpopulation boundaries is to ensure that subpopulations are biologically meaningful, and to facilitate effective conservation and management practices. Future changes to the current boundaries may be necessary, taking into account new information, and acknowledging that changes to subpopulation boundaries may affect hunting quotas and allocations.

2. Current practices:

There are 13 defined Canadian polar bear subpopulations, of which one is shared with the United States and three with Greenland. Remaining subpopulations (that exist entirely within Canada) are commonly shared between more than one province/territory (Annex 2, Figure 1). The boundaries as outlined on Figure 1 (Annex 2) are accepted as the official subpopulation delineations. Any future changes will use these subpopulations as a baseline from which adjustments are made.

To date, subpopulation delineations have largely been based on movement patterns of radio-collared female polar bears and recapture/harvest of marked bears. Within most subpopulations, population dynamics appear to be determined from internal birth and death rates, rather than through emigration or immigration, suggesting that definitions are based on biologically meaningful information that are sufficient for management purposes.

Results from genetic studies vary, but often show high levels of gene flow between the various subpopulations (not just those in Canada), although recent data do suggest some degree of genetic structuring (e.g. Hudson Bay). Despite the fact that gene flow indicates that the currently-defined subpopulations are not closed populations, they are useful constructs for referencing bears from one region versus another, both within Canada and throughout the world (e.g. these same subpopulations designations are used internationally by the IUCN/SSC Polar Bear Specialist Group). The high degree of gene flow can likely be attributed to high mobility, large home ranges and the ability to respond to variation in sea ice and seal distributions. However, this connectivity between populations may change as sea ice changes.

COSEWIC designated all 13 polar bear subpopulations as one designated unit for conservation actions. This was determined because, while useful for describing local trends in population growth/decline, demographic parameters, behaviours and for managing popular bears, the identified subpopulations cannot be considered distinct designated units based on the COSEWIC guidelines.

3. Current status and rationale:

There is currently no agreed upon, formalized process for changing polar bear subpopulation boundaries. Questions remain regarding on what criteria changes to subpopulation boundary changes should be based (e.g. science, Aboriginal Traditional Knowledge, harvest management implications). Moreover, there are many implications associated with making changes to subpopulation boundaries, including the loss of ability to make historical comparisons, the need to update inter-jurisdictional agreements, and the implications on the Total Allowable Harvest for a given subpopulation.

4. Path forward: co-coordinated boundary change:

A process will be developed that is based on the following principles:

- 4.1 Any changes to subpopulation boundaries will be made to improve conservation, and using the best available scientific data and traditional knowledge. Changes will reflect current knowledge of the spatial organization and demographic processes of polar bear.
- 4.2 Provisions in land claim agreements relating to polar bear management will be followed.
- 4.3 Consultation with user groups will be undertaken as per land claim agreements.

ANNEX 4.

GLOSSARY OF TERMS

For the purpose of this Strategy, the below terms will require definition:

1. Defense kill
2. Denning habitat
3. Family group
4. Guaranteed Harvest Level
5. Harvest
6. Quota
7. Subpopulation
8. Subpopulation size
9. Target Population Size
10. Total Allowable Harvest

Defense kill

Occurs when a polar bear that has come into contact with humans, their property, or both, and is killed to preserve the life of one or more persons, or when public safety or property are at stake. Bears killed in defense of life or property are counted towards Total Allowable Harvest (TAH) for a jurisdiction. In Manitoba, where there is no TAH, defense kills are considered in the models related to TAH and defense kills for Nunavut (given that the Western Hudson subpopulation is shared between Manitoba and Nunavut).

Denning habitat

Habitat throughout the circumpolar Arctic where female polar bears dig maternity dens within which their cubs are birthed. Dens are dug into snowdrifts either on sea ice or land. In the southern portions of the range they may be dug into frozen peat. Females often show fidelity to general areas, but not specific den sites.

Family group

Generally, a group of polar bears that consists of a mother with a cub/cubs of the year, a mother with a yearling/yearlings, or a mother with a two-year old/olds. Generally a cub-of-the-year is a young polar bear less than one year of age and still with its mother; A yearling cub is a young polar bear that is older than one year of age but less than two years of age and still with its mother; and a two-year-old cub is a young polar bear that is older than two years of age but less than three years of age and still with its mother. However, in NWT the definition of a cub depends on the size of the hide.

Guaranteed Harvest Level

As set out in the James Bay and Northern Quebec Agreement (1975), it is the minimum number of individuals of polar bear that are to be allocated for exclusive use of the First Nations Peoples and Inuit, based upon harvest levels by the First Nations Peoples and Inuit from 1973 to 1980.

Harvest

To take or kill a polar bear. Any harvested bear is included in the Total Allowable Harvest for a given subpopulation/jurisdiction and is therefore counted towards the annual total number of kills.

Quota

The maximum number of polar bear that can be legally killed on an annual basis, based on population estimates, subpopulation boundary definitions, and sound management decisions. Quotas are allocated to communities within jurisdictions.

Subpopulation

A subpopulation is typically defined as the number of polar bear within a geographic region delineated based on the best available scientific and Traditional Knowledge related to the movements and genetics of polar bear, as well as management considerations.

Subpopulation size

The estimated number of polar bear residing within a defined area, and considering both scientific data and Traditional Knowledge.

Target Population Size

Population levels that enable polar bear to be sustained across their range providing as much ecological and socio-cultural benefits as possible while minimizing human-bear conflicts.

Total Allowable Harvest

The amount/number of wildlife that can be lawfully harvested from a population or stock within a set period of time (e.g. a hunting season). Synonymous with harvest quota.

Appendix 1. The Agreement on the Conservation of Polar Bears

THE GOVERNMENTS of Canada, Denmark, Norway, the Union of Soviet Socialist Republics, and the United States of America,

RECOGNIZING the special responsibilities and special interests of the States of the Arctic Region in relation to the protection of the fauna and flora of the Arctic Region;

RECOGNIZING that the polar bear is a significant resource of the Arctic Region which requires additional protection;

HAVING DECIDED that such protection should be achieved through coordinated nation measures taken by the States of the Arctic Region;

DESIRING to take immediate action to bring further conservation and management measures into effect;

HAVE AGREED AS FOLLOWS:

ARTICLE I

1. The taking of polar bears shall be prohibited except as provided in Article III.
2. For the purpose of this Agreement, the term "taking" includes hunting, killing and capturing.

ARTICLE II

Each Contracting Party shall take appropriate action to protect the ecosystems of which polar bears are a part, with special attention to habitat components such as denning and feeding sites and migration patterns, and shall manage polar bear populations in accordance with sound conservation practices based on the best available scientific data.

ARTICLE III

1. Subject to the provisions of Articles II and IV, any Contracting Party may allow the taking of polar bears when such taking is carried out:
 - (a) for bona fide scientific purposes; or
 - (b) by that Party for conservation purposes; or
 - (c) to prevent serious disturbance of the management of other living resources, subject to forfeiture to that Party of the skins and other items of value resulting from such taking; or
 - (d) by local people using traditional methods in the exercise of their traditional rights and in accordance with the laws of that Party; or
 - (e) wherever polar bears have or might have been subject to taking by traditional means by its nationals.

2. The skins and other items of value resulting from taking under subparagraphs (b) and (c) of paragraph 1 of this Article shall not be available for commercial purposes.

ARTICLE IV

The use of aircraft and large motorized vessels for the purpose of taking polar bears shall be prohibited, except where the application of such prohibition would be inconsistent with domestic laws.

ARTICLE V

A Contracting Party shall prohibit the exportation from, the importation and delivery into, and traffic within, its territory of polar bears or any part or product thereof taken in violation of this Agreement.

ARTICLE VI

1. Each contracting Party shall enact and enforce such legislation and other measures as may be necessary for the purpose of giving effect to this Agreement.

2. Nothing in this Agreement shall prevent a Contracting Party from maintaining or amending existing legislation or other measures or establishing new measures on the taking of polar bears so as to provide more stringent controls than those required under the provisions of this Agreement.

ARTICLE VII

The Contracting Parties shall conduct national research programmes on polar bears, particularly research relating to the conservation and management of the species. They shall as appropriate coordinate such research with the research carried out by other Parties, consult with other Parties on the management of migrating polar bear populations, and exchange information on research and management programmes, research results and data on bears taken.

ARTICLE VIII

Each Contracting Party shall take actions as appropriate to promote compliance with the provisions of this Agreement by nationals of States not party to this Agreement.

ARTICLE IX

The Contracting Parties shall continue to consult with one another with the object of giving further protection to polar bears.

ARTICLE X

1. This Agreement shall be open for signature at Oslo by the Governments of Canada,

Denmark, Norway, the Union of Soviet Socialist Republics and the United States of America until 31st March 1974.

2. This Agreement shall be subject to ratification or approval by the signatory Governments. Instruments of ratification or approval shall be deposited with the Government of Norway as soon as possible.

3. This Agreement shall be open for accession by the Governments referred to in paragraph 1 of this Article. Instruments of accession shall be deposited with the Depository Government.

4. This Agreement shall enter into force ninety days after the deposit of the third instrument of ratification, approval or accession. Thereafter, it shall enter into force for a signatory or acceding Government on the date of deposit of its instrument of ratification, approval or accession.

5. This Agreement shall remain in force initially for a period of five years from its date of entry into force, and unless any Contracting Party during that period requests the termination of the Agreement at the end of that period, it shall continue in force thereafter.

6. On the request addressed to the Depository Government by any of the Governments referred to in paragraph 1 of this Article, consultations shall be conducted with a view to convening a meeting of representatives of the five Governments to consider the revision or amendment of this Agreement.

7. Any Party may denounce this Agreement by written notification to the Depository Government at any time after five years from the date of entry into force of this Agreement. The denunciation shall take effect twelve months after the Depository Government has received this notification.

8. The Depository Government shall notify the Governments referred to in paragraph 1 of this Article of the deposit of instruments of ratification, approval or accession, for the entry into force of this Agreement and of the receipt of notifications of denunciation and any other communications from a Contracting Party specially provided for in this Agreement.

9. The original of this Agreement shall be deposited with the Government of Norway which shall deliver certified copies thereof to each of the Governments referred to in paragraph 1 of this Article.

10. The Depository Government shall transmit certified copies of this Agreement to the Secretary-General of the United Nations for registration and publication in accordance with Article 102 of the Charter of the United Nations.

(Supplementary Note, not part of the Agreement: The Agreement came into effect in May 1976, three months after the third nation required to ratify did so in February 1976. All five nations ratified by 1978. After the initial period of five years, all five Contracting Parties met in Oslo, Norway, in January 1981, and unanimously reaffirmed the continuation of the Agreement.)

Appendix 2. Canada's letter of interpretation

CANADA

Treaty Series 1976 No. 24 p. 10

CONSERVATION

Agreement on the Conservation of Polar Bears
Done at Oslo, November 15, 1973.

Canada's Instrument of Ratification deposited December 14, 1974.

Entered into force, May 26, 1976.

In depositing this Instrument of Ratification, the Government of Canada declared as follows:

The Government of Canada interprets the phrase "scientific purposes" in Article III, paragraph 1(a) as including scientific "research" and scientific "management" and considers that the term "taking" in Article III, paragraph 1, includes the capturing and killing of polar bears by use of various means including "aircraft and large motorized vessels" in order to meet the requirements of Article VII, despite the general prohibition of such means contained in Article IV.

2. As regards the hunting rights of local people, protected under Article III, paragraph 1, sub-paragraphs (d) and (e), Canadian practice is based on the following considerations:

(a) Research data, compiled annually by the Federal-Provincial Polar Bear Technical Committee, indicate that there is, in Canada, a harvestable quantity of polar bears. On the basis of these biological data the Committee recommends annual management quotas for each management unit.

(b) The polar bear hunt in Canada is an important traditional right and cultural element of the Inuit (Eskimo) and Indian peoples. In certain cases this hunt may extend some distance seaward. Traditional methods are followed in this hunt.

(c) In the exercise of these traditional polar bear hunting rights, and based on the clause "in accordance with the laws of that Party", the local people in a settlement may authorize the selling of a polar bear permit from the management unit quota to a non-Inuit or non-Indian hunter, but with additional restrictions providing that the hunt be conducted under the guidance of a native hunter and by using a dog team and be conducted within Canadian jurisdiction.

The Government of Canada therefore interprets Article III, paragraph 1, sub-paragraphs (d) and (e) as permitting a token sports hunt based on scientifically sound settlement quotas as an exercise of the traditional rights of the local people.

3. The Government of Canada interprets the requirement to "consult" in Article VII as applying only when any other Party requests such consultation, not as imposing a requirement to hold consultations annually.

DRAFT

Appendix 3. Terms of Reference for the Polar Bear Administrative Committee

TERMS OF REFERENCE

Federal-Provincial Administrative Committee for Polar Bear Research and Management in
Canada

BACKGROUND

1.0 ESTABLISHMENT

The International Agreement on the Conservation of Polar Bears and Their Habitat was done at Oslo, November 15, 1973; ratified by Canada December 14, 1974 and entered into force May 26, 1976. Article VI of the Agreement states:

1. "Each contracting Party shall enact and enforce such legislation and other measures as may be necessary for the purpose of giving effect to this Agreement.
2. Nothing in this Agreement shall prevent a Contracting Party from maintaining or amending existing legislation or other measures or establishing new measures on the taking of polar bears so as to provide more stringent controls than those required under the provisions of this Agreement."

In Canada, the management authority for polar bears lies mainly with the Provinces and Territories although some aspects are also affected by other international agreements (e.g. CITES). Because international agreements are signed by the Government of Canada on behalf of all jurisdictions, it was necessary to have a mechanism through which all interests could be considered and represented by consensus. The Polar Bear Administrative Committee (PBAC) was originally formed in 1969; original guidelines as to function and membership were fairly informal and little was written down..

Formation of the PBAC was probably an outcome of the formation of the IUCN Polar Bear Specialist Group (PBSG) in 1968 to facilitate coordination of polar bear research and management internationally and to work toward the development of an international agreement on the conservation of polar bears. As noted above, this agreement was signed by the five polar bear countries (Canada, Denmark, Norway, United States, Soviet Union) in 1973 and came into effect in 1976.

The Federal-Provincial Technical Committee for Polar Bear Research and Management in Canada (hereafter referred to as the Technical Committee) was established in 1970 by the Federal-Provincial Administrative Committee for Polar Bear Research and Management in Canada (hereafter referred to as the Administrative Committee).

The Federal-Provincial-Territorial Technical and Administrative Committees for Polar Bear Research and Management (PBTC and PBAC respectively) meet

annually to discuss research results and to make management recommendations directly to the constituent jurisdictions as well as through the Canadian Wildlife Directors' Committee.

The Canadian Wildlife Directors' Committee (CWDC) is composed of the wildlife directors representing the 14 jurisdictions with responsibility for wildlife conservation in Canada. Its role is to provide leadership in the development and coordination of policies, strategies, programs and activities that address wildlife issues of national concern and contribute to the conservation of biodiversity, and to provide advice and support to appropriate Deputies' and Ministers' Councils on these matters.

The CWDC works as a collegial partnership of the jurisdictions and with stakeholders to affect wildlife conservation on the landscape. Working within the CWDC (1) facilitates a harmonized approach to national programs affecting wildlife, (2) provides a forum for development of national policy frameworks, (3) facilitates development of national strategies affecting wildlife, (4) and promotes co-operative management and information sharing among wildlife agencies in Canada.

1.1 Original Guidelines for the Administrative Committee

There were no formal terms of reference for the functions of or membership in the Administrative Committee at the time of inception. Reviews of past minutes of the meetings of Administrative Committee and of published references to this committee suggest that original guidelines were informal and not well documented. The Administrative Committee was broadly directed to:

- to facilitate coordination of polar bear research and management internationally;
- to make coordinated decisions on the management of polar bears in Canada;

The original members were the Wildlife Directors from the Provinces and Territories that had management authority for polar bears. Currently, three territories (Northwest Territories, Nunavut and the Yukon Territory), four provinces (Manitoba, Newfoundland and Labrador, Ontario and Québec), as well as the Government of Canada are members of the PBAC. More recently, membership has expanded to include representatives from six co-management boards/resource user groups (Inuvialuit Game Council; Labrador Inuit Association; Makivik Corporation; Nunavut Tunngavik Incorporated; Nunavut Wildlife Management Board; Wildlife Management Advisory Council (NWT)).

1.2 Development of Terms of Reference

Recently, members of the Technical and Administrative committees have questioned the role and authority of the committees. As a consequence, the issue of adopting formal terms of reference to clarify the functions of, and membership in, the committees was brought before the CWDC.

Therefore, the CWDC has asked that formal *Terms of Reference* be developed for the both the Technical and Administrative Committee, to clarify for all affected jurisdictions the forums and process for management of polar bears in Canada.

TERMS OF REFERENCE

1.0 PURPOSE

The purpose of the Administrative Committee is to:

- provide a forum for provincial, territorial and federal jurisdictions to work together to manage polar bears in Canada,
- ensure that Canada fulfills its obligations as a party to The International Agreement on the Conservation of Polar Bears and Their Habitat, as well as any other agreement involving polar bears.

2.0 FUNCTIONS

The Administrative Committee will meet annually to review Technical Committee recommendations and help facilitate close coordination among all Canadian jurisdictions that have polar bears, as well as Alaska and Greenland, in support of Canada's national and international conservation responsibilities under *The International Agreement on the Conservation of Polar Bears and Their Habitat*.

The Administrative Committee will discharge these functions by:

- 1) Referring all research needed to conserve polar bears and their habitat in Canada to the Technical Committee;
- 2) Evaluating the recommendations of the Technical Committee, and, when necessary making recommendations to the Canadian Wildlife Directors' Committee;
- 3) Responding to requests for information from jurisdictions, boards, agencies and the CWDC;
- 4) Referring all national policy issues to the CWDC; and,
- 5) Periodically reviewing the *Terms of Reference* and revising them as necessary or as instructed by the CWDC.

Meetings of the Administrative Committee are not open forums for public participation, lobbying by special interest groups, debate of policy issues, or any other agenda not related to the specific functions of the Administrative Committee. Any jurisdiction, group or individual

wishing to raise issues beyond the scope of the Administrative Committee is directed to the CWDC.

3.0 ADMINISTRATIVE COMMITTEE STRUCTURE

3.1 Membership

In compliance with the intent of the Administrative Committee and in order to comply with both the purpose and functions of the Administrative Committee, members represent jurisdictions, boards or agencies that have legal responsibility for polar bear management in Canada.

3.1.1 Members

The Administrative Committee shall consist of one [or designate] representative from each of the Provinces and Territories that have the management authority for polar bears (Manitoba, Newfoundland and Labrador, Northwest Territories, Nunavut, Ontario, Québec, and Yukon); the Canadian Wildlife Service; Parks Canada Agency; and co-management committees or boards that share legal responsibility for polar bears on behalf of aboriginal people. Currently, these include the Inuvialuit Game Council, the Labrador Inuit Association, Makivik Corporation, and the Nunavut Wildlife Management Board.

3.1.2 Invited Guests

Individuals who have expertise in some aspect of polar bear management or would otherwise inform members on an agenda item, may attend and participate in a given Administrative Committee meeting upon the suggestion of a Member and subsequent invitation by the Chair, in order to provide benefit to the Committee by such participation. Members suggesting the names of potential guests are encouraged to provide contact details and rationale far enough in advance of a scheduled meeting to allow for sufficient time to consult with all members if necessary and extend the invitation.

The Administrative Committee reserves the right to prohibit the attendance of anyone not formally invited by the Chair, after consultation with the members. The CWDC may request permission for a person of their choosing to attend the Administrative Committee meeting.

3.1.3 Observers

A limited number of observers may attend an Administrative Committee meeting upon the suggestion of a Member and subsequent invitation by the Chair. Observers cannot actively participate in the meeting unless given permission to do so by the Administrative Committee. Members suggesting the names of potential observers are encouraged to provide contact details and rationale far

enough in advance of a scheduled meeting to allow for sufficient time to consider and extend the invitation. As the Committee has no budget, attendance by all parties is at their own expense or that of the member who invited them.

The Member suggesting an observer, and the Chair extending the invitation, must explain to the observer the intent of the Administrative Committee, and the purpose and functions of the Administrative Committee. In particular, the observer must be made aware that should they wish to make a presentation or question anything to do with the way in which polar bears are managed in Canada that they would normally be expected to do so through their jurisdictional member of the Administrative Committee.

The Administrative Committee reserves the right to prohibit the attendance of any observer not formally invited by the Chair, in order to facilitate the business of the committee.

3.2 Tenure of Membership

Providing they continue to represent the authority of their jurisdiction, co-management board or committee, there shall be no restriction on the length of tenure of Administrative Committee members.

3.3 Vacancy of Office

Should a Administrative Committee member identified in *Section 3.1.1* resign or cease to be a member for any other reason, the affected agency should notify the current Chair as soon as they have filled the vacancy.

3.4 Chair

The Administrative Committee shall have one (1) Chair who is elected or re-elected by the Administrative Committee from among the members present at the end of each meeting. Duties of the Chair include: chairing the following annual meeting; overseeing such business as needs to be acted upon during the year between meetings; attending the annual meeting of the CWDC to report on the work of the Administrative Committee and oversee planning for and agenda of the next annual meeting. The term of appointment shall be from the beginning [or end?] of one annual meeting until the beginning [or end?] of the next annual meeting.

Although it is desirable that the Chair rotates among Administrative Committee members, there shall be no limits with respect to length of tenure.

3.5 Secretary

The Administrative Committee shall have one (1) Secretary who is selected by the Administrative Committee from among the members present. Selection shall occur at

the beginning [or end?] of the Administrative Committee's annual meeting. The term of appointment shall be from the beginning [or end?] of one annual meeting until the beginning[or end] of the next annual meeting.

Although it is desirable that the Secretary rotates among Administrative Committee members, there shall be no limits with respect to length of tenure. Should a Secretary not be chosen, the Chair will directly appoint an individual to act for that meeting and through the coming year.

4.0 MEETINGS

4.1 Annual Meetings

The Administrative Committee shall meet once each year at a time and location normally chosen to coincide with the spring meeting of the CWDC. The time and location of the next meeting should be made known to the members as far in advance as possible.

4.1.1 *Confidentiality and Minutes of the Meeting*

No information presented or issues discussed at Administrative Committee meetings shall be considered confidential unless agreed to in advance by the Administrative Committee membership. A summary of all information and discussion may appear in the minutes, excluding any agreed-upon confidential matters.

4.1.2 *Technical or Traditional Knowledge Opinion and Support of the Administrative Committee*

Should a member wish to request the formal support or rendering of an opinion by the Administrative Committee that requires extensive review of new material, the member must circulate all necessary information to all Administrative Committee members at least one month in advance of the annual meeting to allow sufficient time for a detailed review by each member. If this requirement is met, the Administrative Committee will be expected to address the request during the annual meeting, within the limits of the capabilities of the members. If necessary, and agreed upon by the members, an administrative, technical or traditional knowledge expert may also be asked to provide review of a document and present his or her findings to the Administrative Committee.

Formal support for issues that do not require extensive review of background material shall be addressed at the meeting.

4.1.3 *Assumption of Support of the Administrative Committee*

Excluding the provisions of *Section 4.1.2*, no member shall promote, suggest, or assume formal Administrative Committee support of any issue discussed or presented at the annual meeting or appearing in the minutes of the meeting.

4.1.1 *Formal Voting Process*

The intent of the Administrative Committee is to operate by consensus because of the desire that all members work co-operatively for the conservation of polar bears. Therefore, no formal voting will be done. Unresolved issues will be referred to the CWDC for resolution. Should the CWDC not be able to arrive at a consensus, or the gravity of the issue warrant, such an issue may be forwarded to the Deputies' or Ministers' Councils for resolution.

4.2 Other Administrative Committee Business

Administrative Committee business that arises after the annual meeting shall be discussed and addressed by electronic mail, fax, phone, or regular mail.

5.0 RECORD KEEPING

5.1 Agenda

The Chair and Secretary shall prepare a meeting agenda and circulate a copy to all members well in advance of the annual meeting.

5.2 Minutes

The Secretary shall prepare draft minutes of the annual meeting, distribute a copy to all attending members for review, and produce final minutes within two months of the annual meeting. Administrative Committee members are expected to facilitate the production of final minutes of the annual meeting by providing an electronic copy of reports or related material to the Secretary at the meeting and timely reviews of the draft minutes when they are circulated. The Secretary shall give a deadline for comments; after which a lack of response shall be interpreted as concurrence.

The Secretary shall ensure that final minutes are subsequently provided to all members of the Administrative Committee.

Minutes cannot be cited as a reference in publications or reports. If the information in question has not been published or is not in press, the person wishing to cite the

information should seek permission to cite it as a personal communication.

5.3 Membership List

The Secretary shall keep and make available an up-to-date contact list of all Administrative Committee members. The current list of members will be appended to the final minutes of each meeting.

6.0 AMENDMENTS TO THE TERMS OF REFERENCE

As per the functions (*Section 2.0*) of the Administrative Committee, the *Terms of Reference* will be reviewed and revised as necessary. The Chair will forward proposed amendments to the Administrative Committee for review and possible approval at least one month before the next annual meeting.

Once approved by the Administrative Committee, the amended *Terms of Reference* will supersede all others.

DRAFT

Appendix 4. Terms of Reference for the Polar Bear Technical Committee

TERMS OF REFERENCE

Technical Committee for Polar Bear Research and Management in Canada

1.0 PURPOSE

The purpose of the Technical Committee is to provide technical advice and recommendations to the Polar Bear Administrative Committee ("Administrative Committee"), as required, on:

- design, collaboration, and conduct of polar bear research in Canada,
- harvest and population trends,
- the need for management actions.

2.0 FUNCTIONS

The Technical Committee will meet annually to review research and traditional knowledge necessary to meet defined management needs and help facilitate close coordination of research activities among all Canadian jurisdictions that have polar bears, as well as Alaska and Greenland, in support of Canada's national and international conservation responsibilities under the international *Agreement on the Conservation of Polar Bears and Their Habitat (1973)*.

The Technical Committee will discharge these functions by:

- 1) Identifying, conducting, collaborating and coordinating research needed to conserve polar bears and their habitat in Canada;
- 2) Sharing information on polar bear populations that occur wholly within or are shared by Canada;
- 3) Evaluating the results of this research, exchanging technical information and traditional knowledge, and making recommendations to the Administrative Committee;
- 4) Responding to requests for technical information and traditional knowledge from the Administrative Committee;
- 5) Evaluating impacts of management actions, including harvest, and make recommendations to the Administrative Committee or any member agency that requests advice;
- 6) Referring all policy issues to the Administrative Committee;

- 7) Periodically reviewing the *Terms of Reference* and revising them as necessary or as instructed by the Administrative Committee; and,
- 8) Preparing an annual status report on Canadian polar bear populations, including harvest, based on scientific information and traditional knowledge provided by member agencies.

3.0 TECHNICAL COMMITTEE STRUCTURE

3.1 Membership

To fulfill the purpose and functions of the Technical Committee, members will have recognized scientific or traditional knowledge of polar bear biology and habitat.

3.1.1 Members

The Technical Committee shall consist of one representative from each of the Provinces and Territories that have the management authority for polar bears (Manitoba, Newfoundland and Labrador, Northwest Territories, Nunavut, Ontario, Québec, and Yukon); Environment Canada; Parks Canada Agency; and management committees, councils or boards established by land claim agreements that have management authority for polar bears. As of February 2007, these include the Wildlife Management Advisory Council (NWT), Inuvialuit Game Council, the Torngat Wildlife and Plants Co-management Board, Makivik Corporation, Nunavut Tunngavik Incorporated and the Nunavut Wildlife Management Board.

Members may designate an alternate to take their place when they are unable to attend a meeting. Members and alternates must be named by their respective agency.

3.1.2 Ex-officio Members

In addition to those members identified in *Section 3.1.1*, representatives from 1) agencies in the United States and Greenland/Denmark that have the management authority for polar bears from populations that are shared with Canadian jurisdictions and 2) other institutions (*e.g.*, universities) may be *ex-officio* members of the Technical Committee provided that these individuals are active polar bear specialists – subject to agreement by consensus of Committee members.

3.1.3 Invited Specialists

Individuals who have expertise in some aspect of polar bear biology may attend and participate in a given Technical Committee meeting upon the suggestion of a Member and subsequent invitation by the Chair, in order to provide benefit to the Committee by such participation. Examples include, but are not limited to, individuals who have expertise in areas such as mathematics, statistics, population modelling, genetics, contaminants, or traditional knowledge. Members suggesting the names of potential specialists must provide contact details and rationale far enough in advance of a scheduled meeting to allow for sufficient time to consult with all members if necessary and extend the invitation.

The Technical Committee reserves the right to prohibit the attendance of anyone not formally invited by the Chair, after consultation with the members. The Administrative Committee may request permission for a person(s) of their choosing to attend the Technical Committee meeting.

3.1.4 *Observers*

A limited number of observers may attend a Technical Committee meeting upon the suggestion of a Member and subsequent invitation by the Chair, provided there would be a recognized benefit to the conservation of polar bears achieved by their attendance. Observers cannot actively participate in the meeting unless given permission to do so by the Technical Committee. Members suggesting the names of potential observers must provide contact details and rationale far enough in advance of a scheduled meeting to allow for sufficient time to consider and extend the invitation. As the Committee has no budget, attendance by all parties is at their own expense or that of the member who invited them.

The Member suggesting an observer, and the Chair extending the invitation, must provide a copy of the Technical Committee Terms of Reference to the observer and explain the intent, purpose and functions of the Technical Committee. In particular, the observer must be made aware that should they wish to make a presentation or question anything to do with the way in which polar bears are managed in Canada that they would normally be expected to do so at the meetings of the Administrative Committee.

The Technical Committee reserves the right to prohibit the attendance of any observer not formally invited by the Chair, after consultation with the members

3.2 Tenure of Membership

Providing they continue to officially represent their jurisdiction, co-management board or committee, there shall be no restriction on the length of tenure of Technical Committee members.

3.3 Vacancy of Office

Should a Technical Committee member identified in *Section 3.1.1* resign or cease to be a member for any other reason, the affected agency should fill the vacancy according to the provisions of *Section 3.1* and notify the current Chair of the new representative.

3.4 Chair

The Technical Committee shall have one (1) Chair who is elected or re-elected by the Technical Committee from among the members present at the beginning of each meeting. Duties of the Chair include: chairing the annual meeting; overseeing such business as needs to be acted upon during the year between meetings; attending the annual meeting of the Administrative Committee to report on the work of the Technical Committee; be the Secretary to the Administrative Committee; and oversee planning for and agenda of the next annual meeting. The term of appointment shall be from the beginning of one annual meeting until the beginning of the next annual meeting.

Although it is desirable that the Chair rotates among Technical Committee members, there shall be no limits with respect to length of tenure.

3.5 Secretary

The Technical Committee shall have one (1) Secretary who is selected by the Technical Committee from among the members present. Selection shall occur at the beginning of the Technical Committee's annual meeting. The term of appointment shall be from the beginning of one annual meeting until the beginning of the next annual meeting.

Although it is desirable that the Secretary rotates among Technical Committee members, there shall be no limits with respect to length of tenure. Should a Secretary not be chosen, the Chair will directly appoint an individual to act for that meeting and through the coming year.

4.0 MEETINGS

4.1 Annual Meetings

The Technical Committee shall meet once each year at a time and location chosen by the members. As far as is possible, the time and location of the next meeting should be chosen at the end of the current meeting.

4.1.1 Confidentiality and Minutes of the Meeting

No information presented or issues discussed at Technical Committee meetings shall be considered confidential unless agreed to in advance by the Technical Committee membership. A summary of all information and discussion may appear in the minutes, excluding any agreed-upon confidential matters.

4.1.2 *Technical or Traditional Knowledge Opinion and Support of the Technical Committee*

Should a member wish to request the formal support or rendering of an opinion by the Technical Committee that requires extensive review of new material, the member must circulate all necessary information to all Technical Committee members at least one month in advance of the annual meeting to allow sufficient time for a detailed review by each member. If this requirement is met, the Technical Committee will be expected to address the request during the annual meeting, within the limits of the capabilities of the members. If necessary, and agreed upon by the members, a technical or traditional knowledge expert may also be asked to provide review of a document and present his or her findings to the Technical Committee.

Formal support for issues that do not require extensive review of background material may be addressed at the meeting, as the agenda permits.

4.1.3 *Assumption of Support of the Technical Committee*

Excluding the provisions of *Section 4.1.2*, no member shall promote, suggest, or assume formal Technical Committee support of any issue discussed or presented at the annual meeting or appearing in the minutes of the meeting.

4.1.4 *Consensus Process*

The intent of the Technical Committee is to operate in a consensus manner because of the desire that all members work co-operatively for the conservation of polar bears. Should consensus not be reached by the members defined in 3.1.1 on an issue, it shall be referred to the Administrative Committee along with the reasons why consensus could not be reached.

4.2 Other Technical Committee Business

Technical Committee business that arises after the annual meeting shall be discussed and addressed by electronic mail, fax, phone, or regular mail.

5.0 RECORD KEEPING

5.1 Agenda

The Chair and Secretary shall prepare a meeting agenda and circulate a copy to all members well in advance of the annual meeting.

5.2 Minutes

The Secretary shall prepare draft minutes of the annual meeting, distribute a copy to all attending members as defined in 3.1.1 for review, and produce final minutes within two months of the annual meeting. Technical Committee members, ex-officio members, invited guests or observers are expected to facilitate the production of final minutes of the annual meeting by providing an electronic copy of reports or related material to the Secretary at the meeting and timely reviews of the draft minutes when they are circulated. The Secretary shall give a deadline for comments; after which a lack of response shall be interpreted as concurrence.

The Secretary shall ensure that final minutes are subsequently provided to all members of the Administrative Committee.

Minutes cannot be cited as a reference in publications or reports. If the information in question has not been published or is not in press, the person wishing to cite the information should seek permission to cite it as a personal communication.

5.3 Membership List

The Secretary shall keep and make available an up-to-date contact list of all Technical Committee members. The current contact list of members will be appended to the final minutes of each meeting.

6.0 AMENDMENTS TO THE *TERMS OF REFERENCE*

As per the functions (*Section 2.0*) of the Technical Committee, the *Terms of Reference* will be reviewed and revised as necessary. The Chair will forward proposed amendments to the Administrative Committee for review and possible approval at least one month before the next annual meeting.

Once approved by the Administrative Committee, the amended *Terms of Reference* will supersede all others.