

3 March 2010

**Report of the IUCN/SSC Polar Bear Specialist Group (PBSG) action plan workshop, Oslo, Norway - February 8-10, 2010.**

The Final Report from the “Meeting of the Parties to the 1973 Agreement on the Conservation of Polar Bears” (March 2009) requested the following:

*Parties request of the PBSG an outline or identification of topics that should be included in all national plans for action. Furthermore, the PBSG should identify elements that could benefit from international cooperation.*

To meet this request, an extraordinary workshop of the IUCN/SSC Polar Bear Specialist Group (PBSG) was hosted by the Norwegian Polar Institute and was held in Oslo from February 8 – 10, 2010.

Present at the meeting were members of the PBSG, representing the five polar bear nations. The meeting was chaired by Dr. Erik Born, Chairman of the PBSG, and was rapporteured by Dr. Rachel Vallender from Environment Canada.

The IUCN/SSC PBSG extended its thanks to Norway for arranging and hosting the workshop and to Canada for offering staff assistance for the meeting.

Key discussions concentrated on variables of critical importance to polar bears that focused on their environment, potential threats, and the identification of research and management elements that can contribute to the conservation of polar bears.

The outcome report from the Oslo meeting was reviewed by all members of the IUCN/SSC PBSG. Hence, the present report represents the views of the entire PBSG.

The PBSG regards the 1973 Agreement on the Conservation of Polar Bears as the cornerstone and basis for all action plans.

All points identified here, for inclusion into all national polar bear action plans have been identified and discussed in more detail at recent working meetings of the Polar Bear Specialist Group. Questions regarding the foundations of these recommendations, therefore, can be answered by reference to the proceedings from these meetings (see PBSG website).

**ESSENTIAL HABITAT**

Article II of the Agreement commits the Parties to protect ecosystems of which polar bears are a part, especially habitats related to denning and feeding sites, and migration patterns.

After thorough discussion the Group identified components of essential habitat for polar bears. “Essential habitat” was defined as “habitat of overall importance for the continuation of viable polar bear populations”.

- Feeding areas
  - a) sea ice over continental shelves

- Mating areas
  - a) sea ice over continental shelves
- Denning areas
  - a) terrestrial;
  - b) multi-year and fast sea ice
- “Migration patterns” or “migration corridors” (meaning connectivity between essential habitats)
- Summer refugia
  - a) terrestrial;
  - b) off-shore multi-year ice

### **POPULATION DYNAMICS AND INDICATORS**

Article II of the Agreement states that Parties shall manage polar bear populations in accordance with sound conservation practices based on the best available scientific data.

The Group considered the life history and population dynamics of polar bears, and identified key parameters of those traits. The Group then considered how natural and human-caused environmental changes may impact the identified population dynamics and life history traits.

Key population dynamic parameters identified were:

- Physical condition
- Reproductive rates
- Mortality rates
- Population delineation and size/trend
- Population structure (age and sex class)
- Distribution of populations
  - a) within populations;
  - b) among populations
- Diet
- Disease

## **THREATS**

The Group further considered and identified major threats to polar bear populations that should be considered when developing action plans. It was recognized that the major threat to polar bears is the decrease of sea ice caused by global warming.

- Habitat loss and fragmentation
  - a) extent and composition of sea ice;
  - b) food availability (i.e. decrease in food availability);
  - c) separation from terrestrial denning areas and terrestrial refugia
- Human-caused direct mortality
  - a) harvest (including trophy hunting);
  - b) illegal take/poaching;
  - c) defense kills
- Oil and gas activities (exploration and exploitation)
- Toxic chemicals (local sources and global circulation)
- Shipping
- Tourism
- Mining

## **TOPICS AND ELEMENTS TO BE INCLUDED IN ALL NATIONAL PLANS FOR ACTION**

To meet the requests of the Parties as outlined in the Final Report from the “Meeting of the Parties to the 1973 Agreement on the Conservation of Polar Bears” (March 2009) as follows:

*Parties request of the PBSG an outline or identification of topics that should be included in all national plans for action. Furthermore, the PBSG should identify elements that could benefit from international cooperation.*

The PBSG offers this advice to the Parties for their consideration on two major topics (research and management) that should be included in action plans.

## **RESEARCH ELEMENTS**

Article VII of the Agreement states that the Parties shall conduct national research programs on polar bears, in particular research related to the conservation and management of the species.

The Group identified these research elements to be included in all action plans:

- Assessment of population size and/or trend /and projection of future status

- Monitoring harvest and other removals
- Understanding movements and distribution patterns and how they are changing with ongoing habitat changes
- Establishing trends in physical condition and why they are changing
- Documenting human-bear conflicts
- Documenting trends in habitat use, availability and trends
- Documenting trends in pollution and disease
- Vital rates estimation, evaluating trends and projection

The Group emphasized the need for continued scientific research and monitoring to detect, understand, and anticipate trends in populations.

Article VII of the Agreement further states that the Parties shall coordinate research with research carried out by other parties.

The Group recognized that particular elements (for example, monitoring of pollution and sea ice habitat) are of inter-jurisdictional concern and would benefit from multi-jurisdictional cooperation.

### **MANAGEMENT ELEMENTS**

Article VII of the Agreement states that the Parties shall consult with other each other on the management of migrating polar bear populations, and exchange information on research and management programs. The Group reiterated earlier conclusions from previous meetings of PBSG (e.g. Proceedings of the 14<sup>th</sup> Meeting of the PBSG) that all management actions be made in accord with the best scientific information.

The Group then identified these management elements to be included in all action plans:

- Protection of essential habitats
- Use of scientific evidence
- Prevention and sound management of human-bear conflicts by non-lethal measures
- Development of inter-jurisdictional agreements for shared populations
- Development of management strategies to minimize impacts of human activities (e.g. mining, shipping, oil and gas activities, tourism and other human-caused disturbance)
- Management of sustainable harvest

- Ensure the active involvement of the local public living in polar bear areas in developing and achieving the goals of the action plan

The Group recognized that particular elements (for example, mitigation of human-bear conflicts and development of management strategies to minimize impacts of human activities) may be of inter-jurisdictional concern and may therefore benefit from multi-jurisdictional cooperation.