

The Agreement on the Conservation of Polar Bears – its History and Future

Thor S. Larsen and Ian Stirling





Rapportserie nr. 127

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Norsk Polarinstitut er Norges sentralinstitusjon for kartlegging, miljøovervåking og forvaltningsrettet forskning i Arktis og Antarktis. Instituttet er faglig og strategisk rådgiver i miljøvernaker i disse områdene og har forvaltningsmyndighet i norsk del av Antarktis.

The Norwegian Polar Institute is Norway's main institution for research, monitoring and topographic mapping in Norwegian polar regions. The Institute also advises Norwegian authorities on matters concerning polar environmental management.

Norsk Polarinstitut 2009

¹ Thor S. Larsen has a PhD on polar bear biology and population dynamics in the Svalbard area. He was member of IUCN's Polar Bear Specialist Group between 1968 and 1985, head of the Biology Department at the Norwegian Polar Institute between 1972 and 1985 and the Institute's Director of Research 1990-91. Current office address is Department of International Environment and Development Studies, Norwegian University of Life Sciences, P.O. Box 5003, N-1432 Aas, Norway. CV at http://www.umb.no/statisk/noragric/staff_cv/larsen.pdf

² Dr. Ian Stirling is an Emeritus Scientist with Environment Canada and an Adjunct Professor in the Department of Biological Sciences, University of Alberta, Edmonton. He has done research on polar bears and polar seals (Arctic and Antarctic) for 43 years. For his work, he has won the Northern Science Award, been made an Officer in the Order of Canada, and elected as a Fellow of the Royal Society of Canada. He has authored or co-authored over 200 scientific articles and 3 books. An abbreviated CV is available at www.ec.gc.ca/scitech/default.asp?lang=En&n=6129ED01-1

Adresse/Address

Norsk Polarinstitutt/Norwegian Polar Institute
Polarmiljøsentret/ Polar Environmental Centre
N-9296 Tromsø
Norway

vongraven@npolar.no

Cover photo: Jørn Henriksen
Techn. editor: Dag Vongraven, Norsk Polarinstitutt
Design/layout: Audun Igesund, Norsk Polarinstitutt
Printed: March 2009
ISBN: 13 978-82-7666-255-9
ISSN: 0803-0421

Summary

Delegates to the First Scientific Meeting on the Polar Bear in Fairbanks, Alaska in 1965, from USA, Canada, Denmark, Norway, Switzerland and the Soviet Union, expressed concerns about the lack of scientific knowledge for effective management of polar bears. The International Union for the Conservation of Nature and Natural Resources (IUCN) was requested to distribute information for effective management and to organise the next meeting on polar bears. IUCN established a Polar Bear Specialist Group (PBSG) under its Survival Service Commission. The PBSG's first meeting in 1968 and subsequent meetings were closed to allow for informal and confidential discussion, which was much needed in a time with political tensions between the East and the West. The need for an international convention or agreement for polar bear conservation surfaced already in 1968, and was pursued at PBSG meetings in 1970 and 1972. The preparations for an agreement were facilitated by close personal contacts between the Group's members, by the members informal communication with their government institutions, and were supported by IUCN and its Commission on Legislation. Norway was asked by IUCN to host the meetings required for preparations of an Agreement. Delegations from USA, Canada, Denmark, Norway and the Soviet Union, and with IUCN and its PBSG as a secretariat, met in Oslo 13-15 November 1973. The delegates were careful about legal language, which could jeopardize the work on a UN Convention on the Law of the Sea, or be in conflict with national legislation. An "Agreement on the Conservation of Polar Bears" was negotiated and finalised, and with ratifications by Canada, Norway and the Soviet Union the Agreement entered into force on 26 May 1976. By December 1977, the Agreement had also been ratified by USA and Denmark. The Agreement was not open for signatures and ratification by other nations.

The Agreement was initially in force for five years, and according to its Article X.5, it should continue unless a Contracting Party requested its termination. Norway, being the Depositary Government for the Agreement, hosted a Consultative Meeting for the Parties 20-22 January 1981. Norway wanted to use this opportunity to explore the interests for an expansion of the Agreement, to cover other aspects of conservation in the Arctic. This was met with reluctance by USA and Canada and was rejected by the Soviet Union. The polar bear Agreement was, however, prolonged, and has been in force ever since. After the Consultative Meeting in 1981, environmental cooperation has been expanded throughout the Arctic via the Arctic Council and other international institutions. Indigenous peoples and aboriginal groups of the Arctic are now recognised as bona fide partners to the Agreement. Traditional ecological knowledge (TEK) is officially considered to be as relevant and important as is scientific information. Environmental challenges, which received little attention when the Agreement was negotiated in 1973 and 1981, may have far-reaching consequences for polar bears and Arctic ecosystems. Transboundary pollutants may affect polar bear reproduction via bio-magnification. Climate warming causes retreating and thinning sea ice, which makes seal hunting difficult and which may prevent pregnant polar bears from getting ashore to dig maternity dens. Pregnant females' reduced physical condition may limit their ability to nurse their cubs, with increased cub mortality as a consequence. Several such factors acting together at the same time may ultimately have negative consequences for polar bear population growth and sustainability. The "Agreement on the Conservation of Polar Bears" is therefore as important and relevant as ever.

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The polar bear – the symbol of the Arctic

The polar bear is, more than any other animal, the symbol of the Arctic. It has a firm place in indigenous peoples' traditions and legends, and it has always been important for their livelihoods. Polar bear hides were considered gifts for the church and the aristocracy in medieval times, and there are countless reports about encounters with polar bears in diaries and books from the Arctic's early explorers. But early research was often scattered and un-coordinated, and management was often based upon anecdotal information.

The interest in this carnivore – by most scientists recognized to be the world's largest – has not abated in modern times. For many tourists to the Arctic, seeing a polar bear is very high on their list of priorities, and in many regions polar bears are still hunted for both their hides and the meat. With increased access to the Arctic after the Second World War and with modern technology and means of transportation, such as aircraft, ice-breaking vessels and snowmobiles, polar bears have been under increasing threats for decades. Effects from transboundary pollution, and also more recently from climate warming, adds to this. The need for better protection (and or preservation) of polar bears has become evident.

Starting a process: The First Meeting

In July 1965, the United States Secretary of the Interior Stewart L. Udall and Senator E. L. Bartlett called for "... an international conference of Arctic Nations to pool scientific knowledge on the polar bear and to develop recommendations for future courses of action to benefit this resource of the Arctic region." This initiative led to the First Scientific Meeting on the Polar Bear, which was held 6.-10. September 1965 in Fairbanks, Alaska. The meeting's 46 participants, who came from political, management, conservation and research institutions in USA, Canada, Denmark, Norway, Switzerland and the Soviet Union, issued a "Statement of Accord Approved by the Delegates", which expressed a concern "...about the adequacy of scientific knowledge for the effective management of polar bears..." that "... scientific knowledge of the polar bear is far from being sufficient as a foundation for sound management policies..." and that each nation "...should take such steps as each country considers necessary to conserve the polar bear adequately until more precise management, based on research findings, can be applied..." The meetings also requested, "...that each nation should conduct to the best of its ability a research program on the polar bear within its territory or adjacent international waters to obtain adequate scientific information for effective management of the species..."³



Increasing concern over high hunting pressure in the 1960's, e.g. by polar bear trophy hunters, triggered the first talks in Fairbanks in 1965. Photo: Thor S. Larsen

A proposal to cooperate on research between the participating nations was rejected by the Soviet delegation. Instead, the Russians suggested that, each nation independent of each other and within areas under their jurisdiction, should do their own research (e.g. on polar bear denning areas), and establish protected areas in such areas as required.⁴

The International Union for the Conservation of Nature and Natural Resources (IUCN) made a strong point, that because of IUCN's concerns about the future of the polar bear, the institution was prepared to exchange and disseminate information about polar bear research and management as required, e.g. via an annual international publication of data. IUCN's offer was endorsed by the meeting, which also discussed a possible international agreement for a): the protection of polar bear females with cubs and yearlings, and b): protection of polar bears in international waters.

The First Scientific Meeting on the Polar Bear therefore emphasized the need for "...the prompt exchange of research and management information obtained on polar bears." The Meeting recommended that another international meeting on polar bears be held in 1968 and suggested that "... the International Union for the Conservation of Nature and Natural Resources, or a similar international organization, be invited to receive and distribute information on polar bears submitted to it."⁵

Establishing the Polar Bear Specialist Group (PBSG)

IUCN, being an international NGO with both State and NGO memberships, was already recognized for its professional work on conservation and management, not least through its Commissions and many Specialist Groups.⁶ With scientists and managers from all over the world, who contributed with extensive expertise and experience, the Specialist Groups were able to provide expert advice to a wide range of interested parties, governments and international institutions alike. Being a "Red Cross for conservation", IUCN was commonly allowed to work with bilateral or international conservation across borders. IUCN was not expected to have vested political interests or particular political agendas, other than support of conservation for the common good. The institution was not hampered by national bureaucracy and controversies over sovereignty or resource access. Governments more often than not received positively IUCN's professionalism and expert advice on conservation. IUCN was therefore an ideal institution for a follow-up on the challenges from the meeting in Fairbanks, not least in a situation with political tensions between the Soviet Union and countries in the West, which could create difficulties, and where e.g. UN-institutions were regarded with skepticism by some governments.

³ See under <http://pbsg.npolar.no/>

⁴ Report from the Norwegian delegation (in Norwegian)

⁵ See under <http://pbsg.npolar.no/>

⁶ See <http://www.iucn.org/>



Protection of females with cubs was given high priority at the first meeting in 1965. Photo: Thor S. Larsen

Selecting the Group's members

IUCN therefore took up the challenges from Fairbanks and started preparations for the establishment of a Polar Bear Specialist Group (PBSG) under its Survival Service Commission (later Species Survival Commission). After consultations with various national and international stakeholders, IUCN sent invitations for memberships to the appropriate government institutions, but IUCN also used this occasion to name which experts they wanted for their new Specialist Group. When doing that, IUCN changed its traditional nomination processes. IUCN would normally leave it to the Specialist Groups, via their Steering Committees and Chairs, to nominate and select members from the scientific community and other relevant bona fide institutions. But in this case IUCN wanted to avoid governments – and in particular the Soviet Union – nominating their bureaucrats, who would have less insight in polar

bear research and management challenges than scientists, to the PBSG.⁷ IUCN's clear objective was to obtain the best possible "... scientific knowledge for the effective management of polar bears..." (See statement from the First Scientific Meeting on the Polar Bear, above).

The first meeting of the PBSG in 1968

Open or closed sessions?

The first meeting of the PBSG was held at IUCN's headquarter in Morges, Switzerland in late January 1968, with only two representatives from four of the five Arctic nations (Denmark was unable to participate), plus a small secretariat provided by IUCN. After an official opening of the meeting by IUCN's Vice-President, the group's members decided to address one important topic – if these meeting should have closed

sessions or not. Conservation and management issues related to polar bear populations, which could be shared by two or more nations and/ or in international waters could be politically sensitive, and particularly so because of the political tensions between USA and the Soviet Union at that time. It was also important for the participants to have open and frank discussions about research and management issues, and without concerns for statements which could be regarded as politically sensitive or incorrect. The Group's participants decided therefore to have closed sessions, whereby IUCN staff was asked to leave the room – much to their irritation. Only a Russian/English translator remained in the room.⁸ Consequently, no proceedings were produced after the first meeting of the PBSG, with the explanation that "Some of the subjects discussed were considered to be confidential..."⁹

One or several populations?

The presentations and discussions, which followed after the doors had been closed, were indeed frank and open. The participants, most of whom were active in polar bear research, and who already knew about each other from the scientific literature, from meetings or from working together, used this opportunity to challenge each other about polar bear population size estimates, population growth potentials, harvest pressures in different parts of the Arctic, polar bear migratory patterns, etc. One of the most important – and controversial – issues discussed, was whether the world's polar bears belonged to one common population, which was constantly migrating around the Arctic Basin, or if there might instead be several discrete populations, some of which could be shared between two or three nations. The Russians argued for the first option whilst the other participants were more convinced that there were several discrete polar bear populations. The management implications could be significant: If there was only one common polar bear population in the world, as the Russians claimed, that would mean that national legislation, regulations and management would have to be harmonized, and that an international harvest regime would have to be negotiated and agreed upon in multilateral meetings. But if polar bears belonged to discrete populations, then management of each population would be a national, or possibly bilateral, issue.



The set gun was an efficient hunting method, developed on Svalbard in the 1920's. Photo: Thor S. Larsen

⁷ Thor S. Larsen, personal observations and communication with IUCN HQ

⁸ Thor S. Larsen, personal observation

⁹ See introduction to the Proceedings of the 2nd Working Meeting of the PBSG, 1970 under <http://pbsg.npolar.no/>



Polar bear hides at tannery in Tromsø. Photo: Thor S. Larsen

Lack of data

Because of the almost complete lack of data, no countries were able to provide any reliable data on numbers of polar bears anywhere in the Arctic. According to existing literature, world numbers were thought to range between 5,000 and 19,000 polar bears¹⁰, and numbers as high as 25,000 were mentioned at the meeting¹¹, which above all confirmed that such figures could only be considered as “guestimates.” It soon became clear that high priorities for future research included population estimates, movement and migratory patterns, polar bear range and population discreteness, mapping of denning areas and estimates of recruitment. Data on total harvest and harvest composition from areas where polar bears were being harvested was essential for eventually estimating future sustainable harvests.

The need for an international agreement

The Soviet Union had banned all polar bear hunting as early as 1956, and the Russian participants to the meeting argued that the other Arctic nations should follow suit. That was, however, not regarded as an option for nations where polar bear hunting was part of the culture and economic base of indigenous peoples. The meeting soon concluded that there were inadequate data with which any of these various views or hypotheses could be evaluated. So clearly, new research was urgently required.

However, because of the repeated discussions and concerns over polar bear population discreteness and numbers, and the possibility that some populations were being over harvested, the

possible need for an international convention or agreement to facilitate the conservation of polar bears throughout their range was already being considered at the first meeting of the PBSG in 1968.

Emerging framework for an Agreement

The participants to the first meeting of the PBSG agreed to meet at least every two years in order to review research and management progress, to coordinate the members’ research activities, and to discuss and prioritize future research and management options.

At their second meeting, in February 1970 at IUCN’s headquarter in Morges, new data were presented and discussed. New research on polar bears had been initiated in most areas. Scientists had increased their cooperation in the field and in the laboratories. Canadians and Americans worked together on both sides of their common Arctic border, Norwegian researchers had already worked with Canadians and Americans in Alaska and in Arctic Canada, and American and Canadian scientists had joined their Norwegian colleagues on field expeditions to Svalbard. Danish/Norwegian field cooperation soon to followed in East Greenland and Svalbard.

Development of modern techniques for polar bear research

Techniques for capturing and tagging of live polar bears were developed and refined in the mid-1960s. Researchers also sampled blood for genetic analyses, pulled small premolar teeth from immobilised bears for age determination, and collected blood, milk, fat and hair samples for analyses of persistent organic pollutants (POPs) and heavy metals. Physiological research had started, telemetry techniques were being developed and the sizes and densities of polar bear populations were being studied using mark-recapture methodology and surveys from aircraft and. Surveys of denning areas and counts of females with cubs as they emerged from the maternity dens in early spring, where possible, were considered important for better conservation, and were ongoing in the Soviet Union, Svalbard, Canada and Alaska. The results of the early studies of movements of tagged and radio-collared polar bears and other studies suggested that they did indeed belong to several discrete populations, e.g: (1) Svalbard - Franz Josef Land - East Greenland and adjacent ice covered areas, (2) Hudson Bay in Canada, (3) the Canadian High Arctic, (4) Arctic Canada - eastern Alaska region, and (5) the western Alaska - eastern USSR region. Important denning areas had been identified and delineated.



Early research cooperation between scientists from Canada, USA and Norway at Cape Churchill in Canada, 1968. From left Vagn Flyger, Frank Craighead, Albert Erickson and John Craighead (USA), Charles Jonkel (Canada), Thor Larsen (Norway) and an unknown assistant. Photo: Thor S. Larsen

¹⁰ See e.g. S.M Uspensky 1965. Distribution, number and conservation of the polar bear. *Biulleten Moskovskogo Obschestva Ispitatelei Prirody, Otdel Biologicheskil m.a.* 70 (p.t. 1,2): 18-24 and R.F. Scott, K.W Kenyon, J.L. Buckley and S.T. Olsson 1959. Status and management of the polar bear and the Pacific walrus. *Trans. N. Am. Wildl. Conf.* 24: 366-373

¹¹ Thor S. Larsen, personal observation



Immobilisation of polar bears using dart guns from a helicopter has been the dominating capture technique for many years. Such research activity requires a special permit in all countries. Photo: Jon Aars

The Soviet delegation presented a proposal, which requested IUCN to appeal to the governments of the other four Arctic nations to ban all polar bear hunting for five years. This triggered considerable discussion before the participants endorsed a modified wording of the Russian proposal. Instead of a total ban on polar bear hunting, governments were asked to examine their management programmes "... with a view to drastically curtailing the harvesting of polar bears beginning the next hunting season and extending for the next five years."¹²

As a follow up of another Soviet proposal, for an international protocol on protection of polar bears, the meeting discussed the possibility of an International Convention for Research and Management of the Polar Bear. The Chairman of IUCN's Commission on Legislation was called in to address the issue. He emphasized that the terms of such a convention would have to be developed by IUCN in consultations with the PBSG, and the Group's members in consultation with their respective governments. The delegates agreed to do that and to prepare for more comprehensive discussions on the subject at the next meeting in 1972.¹³

Formal and informal roles for the members of the PBSG

The members of the Polar Bear Specialist Group were participating as professionals and provided contributions to the discussions in their own right, i.e. with their expertise and experience

from polar bear research and management. They were not representing governments and they were not instructed by their institutions about what they could say or what their positions should be on sensitive issues. But because most of them were employed by government research and management institutions, it was possible for them to have informal consultations with relevant ministries and government agencies prior to meetings, about issues which could come up and what sensible positions to possible issues might be. It was also a tradition to have informal debriefings with such institutions after the Group's meetings. On this background, the PBSG discussed if the small membership should be expanded, and if observers should be invited to future meetings. It was agreed that in order to

be efficient, it would be better for the Group to remain small. It was also agreed that membership should be confined to countries with direct responsibilities for polar bear management and protection, i.e. to the five Arctic nations which already were represented in the Group. But the Group also agreed that papers from other specialists would be welcome for consideration.

The Norwegian members of the PBSG had close personal contact with key people in their government institutions, and with the Ministry of Environment (MoE) when that was established in 1972. MoE would have the overall responsibility for Norway's protected areas and for management and conservation of the country's wildlife resources, including Svalbard. When the Norwegian members reported back about the outcome of the 1970 PBSG meeting, the suggested international convention or agreement on polar bears triggered much informal governmental support. The reaction in Canada was similarly supportive.

Further preparations for an international Agreement

The PBSG met for the third time in February 1972 at IUCN's headquarters in Morges, Switzerland. The Group was still small, with one to three representatives from each Arctic country (11 in all). At this meeting, the PBSG members confirmed that the government institutions of all five Arctic nations had expressed informal interests in a convention or agreement. IUCN had already started on the preparations of a draft document for a convention, and the topic was therefore a prioritized item on the agenda at this meeting.



Positions of bears collected from satellite radio collars have been the main tool for delineating population borders. Photo: Andrew Derocher

¹² See <http://pbsg.npolar.no>, Proceedings of the 2nd Working Meeting of the PBSG, 1970

¹³ See <http://pbsg.npolar.no>, Proceedings of the 2nd Working Meeting of the PBSG, 1970



Lip tattoos ascertain that marked bears are recognised on subsequent handling occasions.
Photo: Jon Aars

Roles and responsibilities

The intentions of and the history behind the preparations were presented to the PBSG by IUCN's Deputy Director General. He made it clear that although IUCN had access to important expertise on international law and legislation at its Headquarters and in its Commission on Legislation, they would nevertheless need professional advice and technical assistance from the PBSG. Although it was understood that the Group's members were not empowered to officially speak for their governments, IUCN invited the PBSG, in its capacity as an advisory body to IUCN, to express its collective opinion on the draft and to provide advice to IUCN for further preparations.

It was also understood that IUCN, as an international NGO, was not in a position to finalize the processes required for an international convention or agreement of this kind. It would eventually have to be negotiated and endorsed by governments in formal meetings. In due time, it would require the government of one of the Arctic nations to call for and host meetings and negotiations as required to develop an agreement. IUCN was prepared to continue with the technical preparations for a convention as envisaged, and would when appropriate invite the Arctic governments to consider IUCN's work and preparations. Through this process, IUCN acted as a secretariat, whilst the PBSG served as a professional advisory body to IUCN.

The way ahead after the PBSG meeting in 1972

With that, IUCN was prepared to continue with its work for a convention or agreement and to communicate with the PBSG members and other stakeholders in the process. The Group's members would facilitate the process by consulting their appropriate authorities when needed, and thereafter by conveying informal governmental comments and advice to IUCN.

With this, a process with key stakeholders had been identified:

- The PBSG would provide IUCN's headquarter with relevant technical information and advice on polar bears.
- Such information would be fed into IUCN's preparations of a convention or agreement document, to be adjusted with informal feedback from governments and in consultations with the PBSG.
- IUCN would forward drafts to appropriate government institutions in the five Arctic nations for their review and consideration. IUCN would, when needed, re-draft the document for renewed considerations.
- When IUCN's preparations were found to be acceptable, one of the Arctic nations would be asked to host the meetings required for an international convention or agreement on polar bear management and conservation to be negotiated and signed. IUCN's draft document would be the "stepping-stone" for such negotiations.

In order to get this process started, the PBSG prepared a resolution on "Convention and protocol on polar bears"¹⁴ The resolution read:

- " The IUCN Polar Bear Specialist Group,
- Being convinced that an international convention will be required to provide a formal framework for cooperation between Arctic nations in regard to conservation of polar bears;
 - Welcoming the first draft of a Convention on Conservation of Polar Bears prepared by IUCN;
 - Having now enunciated general principles affecting the conservation of polar bears which should form the basis of such a convention;
 - Realizing the delays inevitably involved in concluding a convention;
 - Believing that international action is needed urgently to implement specific recommendations of the Group on management of polar bears;
 - Recommends to IUCN;
 1. That IUCN prepare a new draft of the proposed Convention based on the principles affecting polar bear conservation enunciated by the Group and circulate it to the Group for comment;
 2. That IUCN prepare a draft protocol based on Resolution 1 of the 3rd meeting of the Group and circulate it to the Group for comment;¹⁵
 3. That IUCN, after amending the draft protocol as required in the light of comments from the Group, invite all nations concerned to adhere formally to the protocol."

Prior to 1972 in the United States, polar bear research and management were conducted by both the US Fish and Wildlife Service and the Alaska State Department of Fish and Game. However, following the passage of the Marine Mammal Protection Act of 1972, all responsibility for research and management of polar bears was undertaken by the Federal Government. Thus, for all countries but Canada, responsibilities for polar bear conservation and management were controlled by a single agency or Government which simplified negotiations significantly. However, in Canada, under the Canadian Constitution, management of terrestrial mammals is the responsibility of the Provinces and Territories, and polar bears were defined, legally at least, as terrestrial mammals. This meant that instead of having one agency being responsible for conservation and management of polar bears, as is the case with marine mammals like seals, there are four Provinces, three Territories, and the Federal Government (for things like the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and some other international roles such as signing international agreements). The Provinces and Territories were not happy about the Federal Government negotiating an international Agreement without their representation, so following the 1972 meeting and thereafter, a scientist representing them was added to the Canadian PBSG delegation for all future discussions.

Most of the PBSG's members participated in the IUCN General Assembly Meeting in Banff, Canada in August the same year. A special meeting of the PBSG was held at the same time, with the objective of discussing a second draft for a possible protocol or agreement. There are no minutes or resolutions from this meeting, but the outcome was conveyed informally to IUCN and to the five Arctic governments.

¹⁴ Resolution nr. 5 from the 1972 meeting. See <http://pbsg.npolar.no>

¹⁵ Resolution nr. 1 from the 1972 meeting addressed the need for protection of polar bears on the high seas, i.e. of polar bears in the drift ice in international waters beyond national jurisdiction. See <http://pbsg.npolar.no>



The polar bear is a powerful and curious animal. Photo: Morten Ekker

An agreement on polar bear conservation is becoming a reality

IUCN submitted a revised draft version for an agreement to the Norwegian Government on 13 November 1972, (and presumably also to the other four Arctic nations.) The document was now changed "... from "Protocol" to "Interim Agreement" because it is a more accurate description. The term "protocol" is normally used for amendatory or supplementary document." Changes were also introduced "... to avoid any implication possibly affecting jurisdictional claims to high seas," and "... to avoid potentially contentious issues of "own territory" and questions of ownership of polar bear populations."¹⁶

Legal language fine-tuning

There was an extensive exchange of views between the five Arctic nations at that time, concerning the use of certain words and over definitions. Concerns were raised over the interpretation of "high seas" which was used in the Draft Interim Agreement Article I, and which was meant to cover areas beyond national jurisdiction. Canada warned that it would be difficult to apply the term without raising considerable confusion over interpretation, and that care had to be taken with reference to ongoing discussions and negotiations for an upcoming conference on a UN Convention on the Law of the Sea. The less precise term "at sea" was proposed, or alternatively a specification of areas beyond territorial waters.

With reference to ongoing discussions over the coastal states' rights beyond territorial waters, concerns were also expressed over the term "jurisdiction" when connected with "in accordance with international law" as proposed by U.S.A. Norway suggested "beyond territorial waters" or "at sea beyond its territory", whilst the Soviet Union suggested "in the regions they (i.e. polar bears) inhabit." It became evident that the parties to an agreement on polar bear conservation, in whichever form, should not introduce terms and definitions, which could cause precedence and problems for international negotiations for a UN Convention on the Law of the Sea.

The need for indigenous people to maintain their traditional hunting was also discussed although they were not, at that time, directly represented. Several governments wanted to prevent other nations from using the ports of any of the Arctic nations for hunting polar bears, or their territory when selling or exporting polar bear hides and other parts. Concerns over these and other matters had to be addressed and resolved when the formal meetings were held. IUCN incorporated such comments in new drafts.

Negotiations for an agreement – where and when?

In January 1973, IUCN informed its PBSG and relevant Arctic government institutions, about the U.S. Government's suggestion to negotiate and conclude an Interim Agreement for polar bears "... during the period of the Plenipotentiary Conference to conclude an international convention on trade in certain species of wildlife, to be held in Washington from 12 February to 2 March, 1973."¹⁷ This was evidently rejected by the Soviet Union.

Meanwhile, Norway's MoE, and in particular the Director General of the Ministry's International Department, had taken a strong interest in an international polar bear convention or agreement at an early stage. Norway therefore conveyed to IUCN its willingness to arrange and host the meetings required for development of an Interim Agreement. In early 1973, Norway was formally asked by IUCN to host the meetings required for a protocol on an Interim Agreement.

¹⁶ Forwarded by the Norwegian Embassy in Bern to Norway's Ministry of Foreign Affairs 15 November 1972

¹⁷ Memo from IUCN Deputy DG to the Polar Bear Specialist Group of 23 January 1973. This Plenipotentiary Conference led up to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The text of the Convention was agreed at a meeting of representatives of 80 countries in Washington DC, on 3 March 1973, and on 1 July 1975 CITES entered in force. See also <http://www.cites.org/eng/disc/what.shtml>



Tourism affects polar bears in some areas, and the Agreement imposes indirectly on the nations to monitor such factors. Photo: Bjørn Frantzen



Human-bear confrontations can be fatal to both, and are real dangers in many places, here illustrated by a homemade danger sign at Hopen weather station. Photo: Magnus Andersen

In Norway, it was discussed if an Interim Agreement as envisaged could be a first step for the development of more extensive inter-governmental environmental cooperation in the Arctic. No Norwegian government body was a member of IUCN at that time, but a possible State membership was under consideration, not least for the pursuance of such cooperation. The Norwegian government's ambitious goal was the development of an international classification system for Arctic fauna, at a time which would be suitable for all parties, and in close cooperation with IUCN.¹⁸

In June 1973, the Soviet Union sent comments and recommendations to IUCN. It was proposed that IUCN's Draft Interim Agreement should be negotiated with the aim of eventually developing a permanent Agreement. Any references to the temporary character of an Agreement should be avoided. The word "convention" was not used again after this. Norway suggested thereafter an amendment of the Draft Interim Agreement Article VI, with the objective of simplifying the prolonging of an Agreement after five years.

In a letter of 13. September 1972 to the Norwegian Government (and presumably in similar letters to the other four Arctic nations,) IUCN forwarded a first draft for an agreement, called "Protocol on the Conservation of Polar Bears), with a hope that "... the five Governments named in the draft Protocol will take action to conclude the Protocol as soon as possible."¹⁹

Norway expressed its willingness to convene the meetings from 13-15 November 1973 and IUCN was invited to assist in the secretariat and to prepare working documents for such meetings. The four other Arctic nations accepted the invitations from the government of Norway, for meetings to be held as agreed, on the premises of Norway's Ministry of the Environment.

Arctic conservation beyond the protection of polar bears

As mentioned earlier, Norwegian ambitions for an agreement ran higher than only one species. MoE wanted to explore if the delegates to the meeting were interested in and willing to discuss an international agreement, which was much more ambitious, in that it would also incorporate protection of other Arctic wildlife as well, e.g. marine mammals and birds. Norway's ultimate ambition was to have an international agreement, which would describe, delineate and establish large bilateral or multinational protected areas. Such ideas had been explored informally with some of the delegates, e.g. from the Soviet Union and USA prior to the formal meetings. These were immediately rejected, and therefore Norway did not bring these sensitive issues to the table during the negotiations for a polar bear agreement.

The conference in Oslo, Norway in November 1973

The formal meetings and negotiations started in the Norwegian MoE on 13. November 1973. The meetings were chaired by the Director General of the Ministry's International Department. IUCN and its PBSG acted as a secretariat, and provided technical support and advice to the meetings. The Soviet representatives present at the meeting made it clear that they did not have an authorization to sign an agreement, but they did participate in all the meetings and negotiations.

Informal exchanges of views prior to formal meetings

When there were bilateral or international negotiations with the Soviet Union as a stakeholder, it often happened that Soviet delegations hinted about their views and positions in informal private meetings or "under four eyes" prior to formal sessions. During a private dinner held for the Soviet delegation and some of the members of the PBSG the day before the formal meetings for an international agreement on polar bear conservation started in Oslo, the head of the Soviet delegation made it clear that they indeed welcomed an agreement as envisaged. The Soviet delegation said that they were not particularly concerned about polar bears as such – the species was already totally protected in the Soviet Union since 1956 – but they wanted an agreement which told the international community that it was the five Arctic nations; the Soviet Union, Norway, Denmark, Canada and USA, which held sovereignty rights over the Arctic and its resources (Thor S. Larsen, personal observation). These five nations were subsequently referred to as "States of the Arctic Region" during the meetings for what finally came to be known as the "Agreement on the Conservation of Polar Bears."

Possible conflicts with other agreements

Although there was a common understanding, sincere interest, and dedication around the table for an international agreement as envisaged, it soon became evident that the delegations had to be very observant and careful as they struggled to find proper wordings for the agreement's Articles. It was important that the Articles did not come in conflict with existing national or international laws or agreements, or with laws or agreements which were under preparation. One of the major hurdles was legal aspects related to polar bear conservation beyond national boundaries and territorial waters. Polar bears in all Arctic regions migrate and spend much of their life in international ice-covered waters. An international agreement would not be effective unless it gave these bears protection too.

Circumventing the legal language precedence problem

The delegates were particularly concerned not to create an international legal precedence, which could cause problems or even jeopardize the work on a UN Convention on the Law of the Sea, which had been under preparation since the 1960s.²⁰ The problem was finally resolved by avoiding any mention, or attempt to define

¹⁸ Memo from Norway's Ministry for the Environment of 8 March 1973 (in Norwegian)

¹⁹ Forwarded with a memo from the Norwegian Embassy in Bern to Norway's Ministry of Foreign Affairs 28 September 1972

²⁰ The Third United Nations Conference on the Law of the Sea was convened in New York, also in 1973, and the United Nations Convention on the Law of the Sea (UNCLOS) was adopted in 1982. See <http://www.un.org/Depts/los/index.htm>

territorial waters. Article I of the Agreement simply says that “The taking of polar bears shall be prohibited except as provided in Article III.” This means that polar bears were to be protected everywhere, regardless of national or international jurisdiction. The following Articles would then describe exemptions from this clause.

The Parties were requested to manage and to monitor polar bear populations as required for proper conservation and sustainability. Each of the Contracting Parties was to pay particular attention to challenges, which had been identified to be crucial by IUCN and the PBSG, such as denning and feeding areas and polar bears’ migratory routes.

Recognizing local and indigenous peoples’ rights and traditions

Article III specified exemptions from the overall hunting prohibitions under Article I. It addressed local and indigenous people’s traditions in polar bear hunting by saying “by local people using traditional methods in the exercise of their traditional rights and in accordance with the laws of that Party,” and “wherever polar bears have or might have been subject to taking by traditional means by its nationals.” This Article was particularly important for USA and Canada with their large Inuit population, and for Greenland’s indigenous people, whose access to traditional hunting and fishing was important for their livelihood and who’s rights were already recognized in national legislation. The term “local people” instead of a word such as indigenous or aboriginal was settled upon because under the Alaska State Constitution, no wildlife privileges are based on race. However, “local” people who hunted for subsistence could do so regardless of race. Thus, “local” was the term used in the Agreement.

Shortly after the signing of the Agreement, and for several years after that, Norwegians living and working in Svalbard, be it in the coal mines, on the weather stations or if they had been trappers wintering on one of the many traditional outposts, argued that they should be recognized as bona fide local people, and that they too should be allowed to continue with their polar bear hunting. The Norwegian government however, did not recognize such claims. Polar bear hunting by weather station crew or by people who came from the mainland to be trappers for a year or two, or by people who lived in the two settlements in Svalbard for a few years were not considered to “exercise traditional rights”.



Tracks from a bear looking for seals in the snow covering the sea ice. Photo: Magnus Andersen

The importance of continued research and monitoring

IUCN and the PBSG were very concerned that research and monitoring had to receive attention and priority even after the signing of the Agreement. This was recognized by the delegates and addressed in Article VII, which urged national research programmes to continue. Research related to management would be particularly important and such research should be coordinated between the Arctic nations. Article VII furthermore requested that the Parties to the Agreement should consult with each other on management and harvest issues – something which also would be important, as research had shown that the Arctic did indeed have several discrete polar bear populations and that some of these were shared by two or more nations. Management and hunting in one country could therefore have implications for management and hunting in other countries.

The “Agreement on the Conservation of Polar Bears” was signed by Norway, Denmark, Canada and USA at the end of the meetings in Norway, i.e. on 15. November 1973. The Soviet delegation did not have authorization to sign at that time, but did sign it later. Between 16. December 1974 and 26. February 1976, the Agreement was ratified by Canada, Norway and the Soviet Union, whereby it entered into force 90 days later, i.e. on 26. May 1976. By December 1977, the Agreement had also been ratified by USA and Denmark.²¹

Did the polar bear Agreement prevent other nations from hunting polar bears in ice-covered international waters?

With the Agreement in place, signed and in time also ratified, it was only binding for the signatory parties, i.e. for the Soviet Union, Norway, Denmark, Canada and USA. The Agreement would not be available for other nations to sign and ratify.²² The concerns of possible taking of polar bears by non-signatory nations beyond national land and waters, i.e. in ice-covered international waters, or concerns about such nation’s use of Arctic nations’ ports or territory for safari hunting and/or export of polar bear hides and other products, were therefore addressed in the Agreement’s Article VIII, which states: “Each Contracting Party shall take action as appropriate to promote compliance with the provisions of this Agreement by nationals of States not party to this Agreement.”

Nevertheless, the IUCN PBSG addressed its concerns over these issues at its 4th meeting in 1974. The PBSG requested in its Resolution nr. 2 from that meeting that “... IUCN, after the Agreement is in effect, to take necessary steps to contact governments whose nationals might have an interest and capability in harvesting polar bears and dealing in the trade of skins, in particular, Britain, France, the Federal Republic of Germany, the German Democratic Republic, Iceland, Japan, Netherlands, Portugal, and Sweden; inform them of the Agreement; and request that they take necessary steps to ensure that their nationals abide by provisions of the Agreement relating to harvesting of polar bears and traffic and trade in polar bear skins.”²³

²¹ See <http://pbsg.npolar.no/ConvAgree/agreement.htm>

²² See the Soviet position on this under the box “Informal exchanges of information and views prior to the meetings,” above.

²³ See minutes from the PBSG’s 4th meeting under <http://pbsg.npolar.no>

There were, however, no real reasons for concern. Other countries did not at that time have any traditions in polar bear harvesting in any form and, although lucrative safari hunting had a long tradition in Africa and elsewhere, enterprises for polar bear trophy hunting in Arctic international waters were never established by other nations. Over the years, the few bears which from time to time came with the drift ice from East Greenland to Iceland could be killed there. Similarly, various expeditions to the North Pole, or transiting the Arctic basin have killed small numbers of bears they considered to be a threat to life or property. These sources of mortality had, however, no impact upon the sustainability of polar bear populations.



Mapping of and surveys in denning areas have been and still are important when monitoring polar bear populations. Photo: Jon Aars

Consultative Meetings in Norway, 20-22 January 1981 for a continuation of the Agreement

On May 26 1981, the Agreement had remained in force for five years. In early 1980 Norway, being the Depositary Government for the Agreement, therefore started preparations for a Consultative Meeting, which would address a prolongation as of the Agreement's Article X. 5, which says that the 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."

Renewed efforts by Norway to expand environmental cooperation in the Arctic

Norway wanted to use this opportunity to once again explore the interests among the Contracting Parties for an expansion of the international cooperation already established under the polar bear Agreement, to cover other aspects of conservation in the Arctic.²⁴ The justification for this lies in the Agreement's Article II: "Each Contracting Party shall take appropriate action to protect the ecosystems of which polar bears are a part ... in accordance with sound conservation practices based on the best available scientific data," and also in Article VII, which calls for the Contracting Parties to coordinate polar bear research, consult with each other, and exchange information on research and management programmes, research results and data. Because polar bears are a key species and on the top of the food chain in Arctic ecosystems, it was not only reasonable, but also much needed, for research and management to be expanded to other aspects of Arctic environmental conservation.

The polar bear Agreement and the ecosystem approach

The Agreement's Article II requests that "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." This was an early expression for what later came to be known as the now universally accepted "ecosystem approach." The ecosystem approach "... recognizes that humans, with their cultural diversity, are an integral component of ecosystems." and that "... application of the ecosystem approach encompass the essential processes, functions and interactions among organisms and their environment" (quotes from CBD, see <http://www.cbd.int/ecosystem/>). The ecosystem approach is thus a recognition of the interactions between economic, ecological and social systems, and as it is governed by legislation, regulations and institutional competence and capacity. The ecosystem approach is thus a pre-requisite for sustainable conservation and associated development.

Reluctance in U.S.A. and Canada about expansion of Arctic environmental cooperation

When Norway had sought out the U.S. position on this at earlier meetings, the U.S. government had confirmed that the Agreement could serve as a springboard for expanded environmental cooperation, e.g. on seabirds and other animal species in the Arctic.²⁵ Norway sent out, via its Embassies, a preliminary draft agenda to the Contracting Parties in late October 1980, with the suggestion that a meeting should take place in Oslo 20.-22. January 1981. In addition to

polar bear matters, the draft agenda's item 4) suggested "review of conservation status of other arctic species (legislation, protection of species, habitats, etc, reviews of present knowledge concerning population status and trends... organizing of exchange of research results, and evaluation of the need for coordination of further research."²⁶ Canada had already expressed an interest in expansion of environmental cooperation, and in particular for seabirds, but made a reservation now, that it should not cover other Arctic mammals than polar bears. Seal hunting was a sensitive issue in Canada. It also turned out that the U.S. position was more reluctant than had been expected. USA made it clear that an expansion of cooperation should be general and not go beyond the text in the Agreement's Article II: "Each Contracting Party shall take appropriate action to protect the ecosystems of which polar bears are a part..."

The Norwegian Embassy in Moscow had sent a formal invitation for a Consultative Meeting to the Soviet Government in October 1980, which highlighted what already had been discussed with other Governments, and which carefully suggested that the meeting also should "review the conservation status for the eco-system of which polar bears are a part, inter alia with a view to ascertaining the possible need for, and organization of, regular exchange of data and information on results of research."²⁷ The same wording had been conveyed to IUCN, which was invited as observers to the Consultative Meeting.

It was evident that the problem with an expansion of environmental Arctic cooperation was not only with the four Western Contracting Parties, but also with the Soviet Union, which had refused any international cooperation over other Arctic environmental issues ever since the polar bear Agreement was negotiated in 1973.

²⁴ Letter from Norway's MFA to MoE 8 February 1980 (in Norwegian).

²⁵ Memo from Norway's MoE to MFA and other Norwegian government agencies of 27 February 1980 (in Norwegian).

²⁶ Letter from Norway's MFA to its Embassies in Copenhagen, Ottawa and Washington D.C. of 20 Oct. 1980

²⁷ Telefax from the Norwegian Embassy in Moscow to MoE and MFA of 2 October 1980



Without the possibility to immobilise and handle free-ranging polar bears our knowledge about them would have been much less. Photo: Magnus Andersen

At a meeting in Norway's MoE on 18 December 1980, it was discussed who could introduce an agenda item on "the conservation status for the eco-system of which polar bears are a part." It was agreed that IUCN – pending approval from U.S.A, Canada and Denmark (the Russian position on this was still unknown) – should introduce and speak to the topic. It was also agreed that if the agenda item was rejected, then IUCN as a recognized international NGO could take up the challenge at a later stage.²⁸

The Consultative Meeting started in Oslo on 20 January as agreed. Several of the members of IUCN's PBSG were now members of their respective government delegations, and IUCN participated as observer. Only the Soviet and the Canadian delegations were headed by polar bear scientists, and at least the Canadian Head of Delegation lacked Plenipotentiary Powers. Also, for this international re-affirmation of the Agreement, instead of sending a scientist to represent the Provinces and Territories in the Canadian delegation, a senior bureaucrat from the Government of the Northwest Territories (which managed the greatest number of polar bears in Canada) attended.

Shortly before the meeting, on 16 January, the Soviet Union had confirmed its participation via the Norwegian Embassy in Moscow. But they had also made it perfectly clear that the consultations on possible revisions and/or amendments would be strictly limited to the polar bear Agreement. The Soviet delegation requested that the agenda be as precise and specific as possible, and rejected any discussion about expansion of cooperation to cover any other issues than polar bears.²⁹ It turned out that both the U.S and the Canadian delegations were also unable to discuss environmental conservation issues beyond this Agreement.

A call by IUCN to expand the Arctic nations' environmental cooperation

IUCN had, however, prepared a written statement by its Director General Dr. Lee M. Talbot, which was distributed to the meeting's participants. Dr. Talbot referred to the World Conservation Strategy, which had been published jointly by IUCN, WWF and UNEP in 1980³⁰, and which specifically mentioned "the possibility of developing agreements between the Arctic nations on the conservation of the region's vital biological resources, based on the principles and experience of the Agreement on Conservation of Polar Bears." Dr Talbot also referred to Dr. Frank Fraser Darling, an ecologist and former Vice President to IUCN, who at a conference in Canada in 1969 had alluded to the "wholeness" of the Arctic, e.g. by saying: "... I would ask, and put it to you, that in the Arctic with only

five nations concerned, we ought to be able to go very much further in this cooperation than we have done up to now..." Dr. Talbot reminded the meeting in Oslo that the conference in Canada had concluded with a resolution, which called for strong efforts of international coordination of management and associated research. Dr. Talbot pursued the urgency of international conservation cooperation in the Arctic further, when he challenged the participants to "... at least a movement toward some planned and agreed programmes of activities to take stock of such things as progress in national conservation efforts, status and trends related to arctic seabirds and mammals, distribution of critical ecological areas, pollution impacts, adequacy of protected areas, and the like..."³¹

With the firm Soviet, U.S and Canadian positions, it was, however, impossible to discuss an expansion of environmental cooperation in the Arctic at the Consultative Meeting in 1981. The Norwegian delegation responded to the situation by stating Norway's willingness to pursue environmental cooperation in the Arctic in other meetings and at a later stage.

East – West cooperation in the Arctic, before and after the collapse of the Soviet Union

Today, it is easier to understand the Soviet Union's stonewall rejection of any expansion of international cooperation over Arctic conservation issues, other than the need for protection of polar bears. After the Second World War, the Arctic was an arena for tensions and political conflicts between the East and the West and for large-scale militarisation. The Soviet's constant refusal to expand international cooperation on conservation can be explained by a military East/West flank, which lasted until the early 1990s. "Cold war" confrontations were frequent, and the Svalbard area and the Barents Sea were particularly important because of access to the western Soviet Arctic through these waters. Foreigners were not welcome to visit the Soviet Arctic.

Political changes started with Mikhail Gorbachev's "glasnost" in late 1980s. After the collapse of the Soviet Union, the vast Russian Arctic has gradually been opened up for international cooperation.

Foreign researchers now work together with their Russian colleagues in the Russian Arctic and Western enterprises participate in the exploration and development of the resources. Russia participates actively in international institutions such as the Arctic Council and its six working groups. Member States to the Arctic Council now also include government representation from Iceland, Sweden and Finland. The Arctic's indigenous peoples did not take part in the negotiations for the polar bear Agreement in 1973 and 1981, but their institutions are now Permanent Participants in the Arctic Council and are very influential there.

Thus, what was pursued at the meetings over the polar bear Agreement in 1973 and 1981, to expand cooperation on conservation and environmental issues beyond polar bears, is taken good care of today.

(About the Arctic Council and its working Groups, see <http://arctic-council.org>).

²⁸ Thor S. Larsen personal observation

²⁹ Telefax from the Norwegian Embassy in Moscow to MoE of 16 January 1981 (in Norwegian)

³⁰ IUCN, WWF and UNEP 1980: World Conservation Strategy. IUCN, Gland, Switzerland

³¹ Written statement for the Consultative Meeting, by IUCN's Director General Dr. Lee M. Talbot

Lessons learned between 1973 and today

The Agreement on the Conservation of Polar Bears is unique in many respects and is often referred to as a “sunshine story” in international cooperation on conservation. It was the first international agreement between the five Arctic nations; the Soviet Union, Norway, Denmark, Canada and U.S.A. It was carefully prepared over many years by IUCN, which was, and still is, recognized as one of the most relevant and professional international NGOs. IUCN’s PBSG possessed the research and management expertise and experience required for the preparations of an agreement, and played important catalytic roles at meetings. Good personal relationships between members of the PBSG and people in government agencies and ministries allowed for good informal exchanges of views and smooth conveyance of legal concerns and political positions prior to the meetings in Oslo in November 1973 and 1981. The Agreement came into force before it was too late, i.e. before polar bear populations in some countries were at critically low levels because of over-harvest.³² At the conclusion of the Consultative Meeting in Oslo 20-22 January 1981, the five states agreed to extend the Agreement indefinitely.

Polar bear research and management challenges in a fast-changing Arctic

Nobody could foresee future environmental impacts upon polar bears when the Agreement on the Conservation of Polar Bears was signed in 1973 and re-negotiated in 1981. Environmental deterioration is now evident as it is caused by expanded exploration for oil, gas and other minerals and associated industrial activities, habitat fragmentation, pollution and climate change.



Thinning and disappearing sea ice cover – the main threat to polar bears. Photo: Marte Lundberg

Effects from transboundary pollution and climate change

Recent research has shown that many parts of the Arctic are severely polluted by air- and seaborne transboundary pollutants such as heavy metals and persistent organic pollutants (POPs). Such pollution may have far-reaching negative effects upon Arctic ecosystems, and upon polar bear reproduction via bio-magnification.³³ Scientists are equally concerned about climate change, which has caused retreating and thinning sea ice in many Arctic regions, and which may affect polar bears in many ways^{34,35} Less sea ice makes bears’ seal hunting difficult, and may also reduce seal numbers. Pregnant polar bears seek remote shores in late autumn in order to dig maternity dens in snowdrifts, but when waters around traditional denning areas are ice-free they may have great difficulties in getting ashore. Some pregnant females, which are stranded on shore may have little access to food when the sea ice disappears in spring and summer. Although polar bears can fast on their stored fat reserves for months, pregnant females’ overall condition will be reduced when they dig their maternity dens in late autumn. Her two or three cubs weigh about half a kilo each when they are born in mid-winter. The females’ lack of fat reserves may limit her ability to nurse them for three to four months until the cubs should weigh 10 kg each. Cub mortality may therefore increase in the den or after the small family has left for the pack ice. There are thus several factors, each of which may have a negative effect on the body condition and reproductive success of polar bears, and which cumulatively will have consequences for population growth and sustainability.

Forty years ago, the participants to the first meeting of the IUCN’s PBSG discussed the total number of polar bears in the World, but the data were not reliable at that time. According to estimates today, which are based upon extensive modern research and a very large number of surveys and population assessments, it appears there are now probably between 20.000 and 25.000 bears in the World. There are probably around 20 more or less discrete polar bear populations in the Arctic, of which some are stable and a few may be increasing. But several are known to be decreasing, whilst there are others for which population trends are simply not known.³⁶

IUCN’s PBSG is still important

IUCN’s PBSG had only a few members up to the meetings in Oslo in 1973, and even some years after that, but then things changed. The number of participants to the PBSG meetings has increased over the years, as membership was expanded and observers were allowed to participate. The PBSG meeting in Edmonton in 1985 had 20 participants, and at its meeting in Seattle in 2005 the number had grown to 40.³⁷

In the years leading up to the signing of the Agreement in 1973, and its renewal in 1981, political involvement in international agreements by aboriginal groups in Canada and elsewhere was still developing. Although aboriginal participants were not involved in either the negotiations for the 1973 Agreement, or the 1981 Consultation, their interests were represented and protected, in particular by the

³² In Svalbard, the status of polar bears was critical before the Agreement was signed in 1973. Up to 1970, bears had mainly been killed with the use of set-guns, which did not discriminate between males or single bears and females with cubs. More than 300 bears were killed annually in average between 1945 and 1970, and the population was declining rapidly.

³³ Bio-magnification occurs when contaminant levels are increased with each step in the food web. Predators consume and store contaminants already stored in their prey animals, which leads to accumulation of contaminants in fat and tissue in each step up in food chains.

³⁴ See: Derocher, A.E., Lunn, N.J., and Stirling, I. 2004. Polar bears in a warming climate. *Integrative and Comparative Biology* 44:163-176

³⁵ See: Stirling, I., and Parkinson, C.L. 2006 Possible Effects of Climate Warming on Selected Populations of Polar Bears (*Ursus maritimus*) in the Canadian Arctic. *Arctic* 59: 261-275.

³⁶ Born E.W. 2008. Grønlands hvide bjørne. Ilinni-usiorfik undervisningsmidelforlag, ISBN 978-87-7975-403-4, and <http://www.worldwildlife.org/species/finder/polarbear/WWFBinaryitem11352.pdf>

³⁷ See under <http://pbsg.npolar.no/>.

Canadian Letter of Interpretation that was submitted with the Instrument of Ratification following the signing of the Agreement. Within a few years, Inuit from Canada, Greenland, and Alaska became actively involved with the PBSG. More recently, “traditional ecological knowledge” (TEK) has come to the political forefront, especially in Canada, but also in Alaska and Greenland. In Nunavut, TEK is now being treated as being equal to science. In some cases, there are conflicting opinions about population trends of polar bears in some areas, between scientific information and TEK, which is still under discussion. Also, largely on the basis of TEK information that polar bear populations were increasing, quotas for several populations shared with other jurisdictions were unilaterally raised by Nunavut, a process that is not consistent with the sense of the Agreement and creates further challenges that need to be addressed in the interest of the long-term conservation of polar bears. Similarly, Greenland, which shares two populations with Nunavut, had never observed

any quotas until the first limits (100 for West Greenland and 50 for East Greenland) were applied in 2006, albeit without consultation with Nunavut, to determine a sustainable total harvest from shared populations by both jurisdictions. More recently, the quotas in Greenland have been reduced slightly but again unilaterally and without reference to scientific information. In contrast, the “Inuvialuit-Inupiat Polar Bear Management Agreement in the Southern Beaufort Sea” is an example of the kind of cooperation on management of a shared population envisioned by the language of the Agreement. These aboriginal user groups from Canada and Alaska meet annually to consult on research and management data on polar bears from the entire Southern Beaufort Sea Region in order to ensure sustainable management that shared population.³⁸ Clearly, the intent of the Agreement is for all jurisdictions to consult with each other to negotiate sustainable shared quotas and to continue to collaborate on other issues related to the long-term conservation of polar bears.

In light of the dramatic environmental changes over the last few decades, the requirements under the polar bear Agreement’s Article II, that the Contracting Parties should “... take appropriate action to protect the ecosystems of which polar bears are a part, ...” are as valid and appropriate as ever and are constantly addressed by today’s polar bear scientists and managers. They are acutely aware of the many environmental challenges which pose threats, not only to the bears, but also to the ecosystem of which polar bears are a part. The PBSG is therefore, now as then, cooperating and coordinating research, and advising IUCN, governments and other stakeholders about management and conservation needs for polar bears and Arctic ecosystems. An independent PBSG is as needed by IUCN today as it was more than 40 years ago in order to meet conservation challenges in a fast-changing Arctic.

³⁸ C.D. Brower, A. Carpenter, M.L. Branigan, W. Calvert, T. Evans, A.S. Fischbach, J.A. Nagy, S. Schliebe and Ian Stirling 2002. The Polar Bear Management Agreement for the Southern Beaufort Sea: An Evaluation of the First Ten Years of a Unique Conservation Agreement. *Arctic*, Vol. 55, No. 4, pp. 362–372